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Draft Environmental Assessment for the Five-Year Capital Improvement Program at Easton/ Newnam Field Airport

Easton, Maryland

May 2018

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DRAFT
ENVIRONMENTAL ASSESSMENT

EASTON / NEWNAM FIELD AIRPORT
EASTON, MARYLAND

MAY 2018

PREPARED FOR: **TALBOT COUNTY**

This Environmental Assessment becomes a Federal document when evaluated and signed by the responsible Federal Aviation Administration official.

_____ _____

Federal Aviation Administration Date

AECOM

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SECTION 1.0
INTRODUCTION AND PROPOSED ACTION

1.1 INTRODUCTION

Talbot County (referred to in this document as "the County" or "Airport Sponsor") proposes to undertake development projects listed in their Five-Year Capital Improvement Program (CIP) at Easton / Newnam Field Airport (ESN) in Easton, Maryland. This Environmental Assessment is being prepared in accordance with the National Environmental Policy Act of 1969 (NEPA), 42 United States Code (USC) 4321 et seq.; the Council on Environmental Quality (CEQ) implementing regulations, 40 Code of Federal Regulations (CFR) 1500-1508; Federal Aviation Administration (FAA) Order 1050.1F, *Environmental Impacts: Policies and Procedures*, and FAA Order 5050.4B: *National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions*.

1.2 EASTON / NEWMAN FIELD AIRPORT

ESN currently occupies a 525.83-acre site in central Talbot County, Maryland (see **Exhibit 1.2-1**). The Airport has a listed elevation of 72 feet above mean sea level (MSL) and is located approximately two miles north of the center of the Town of Easton (the Town), which is the location of the Talbot County seat. Easton is located 59 miles southeast of Baltimore, Maryland and 73 miles east of Washington DC. ESN is owned and operated by Talbot County.

The Airport was originally constructed in 1941 on property designated as a military training facility for transport aircraft. An agreement with the military called for government use of the airfield during World War II with the subsequent return of the facility to the local municipality. Following World War II, the Airport was first owned by the Town of Easton, then jointly by both Talbot County and the Town. In 1993 the ownership was transferred to the County, and the name was changed in honor of the late William Newnam, who had managed the facility for over 40 years.

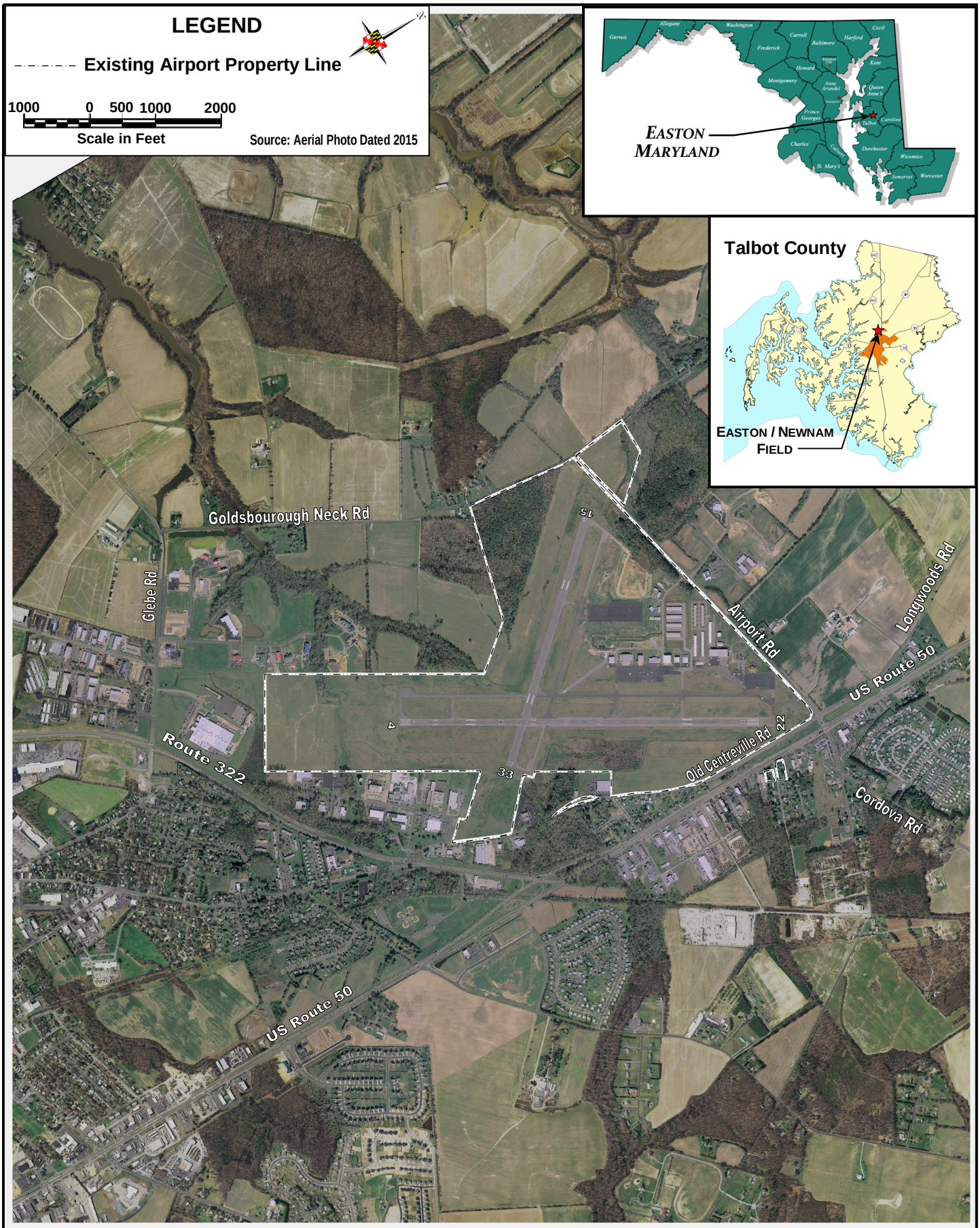
ESN is classified as a General Aviation (GA) airport in the National Plan of Integrated Airport Systems (NPIAS). The Maryland Aviation System Plan (2008) recommends the role of General for the Airport. ESN serves a variety of aviation needs including, but not limited to, flight school/flight training, private recreation operations, air cargo, avionics, flight charter service, aircraft rentals and sales, military, and emergency transport services (approximately 10,000 annually). Military activities include those from air, national, and coast guard forces of multiple branches of the US military. These military activities typically include training exercises; at this time, there are no based military aircraft at ESN.

1.3 DESCRIPTION OF PROPOSED ACTION

The Proposed Actions, which are the focus of the Environmental Assessment, and will be subject to the analysis of purpose and need, alternatives, and environmental consequences (see **Exhibit 1.3-1**), are as follows.

Proposed Projects

- Acquisition of avigation easements and removal and lighting of obstructions to within 10 feet of the 14 CFR Part 77 surfaces for Runway 15-33 and Runway 4-22
- Acquire property interests within Runway Protection Zones (RPZs) of Runway 15-33
- Construct aircraft storage facilities (T-hangars, tie downs, conventional hangars) and associated aprons
- Construct an Airport Service Road
- Shift and extend Runway 4-22 to the south for a total length of 6,400 feet
    - Extend Runway 4 to the south 1,900 feet



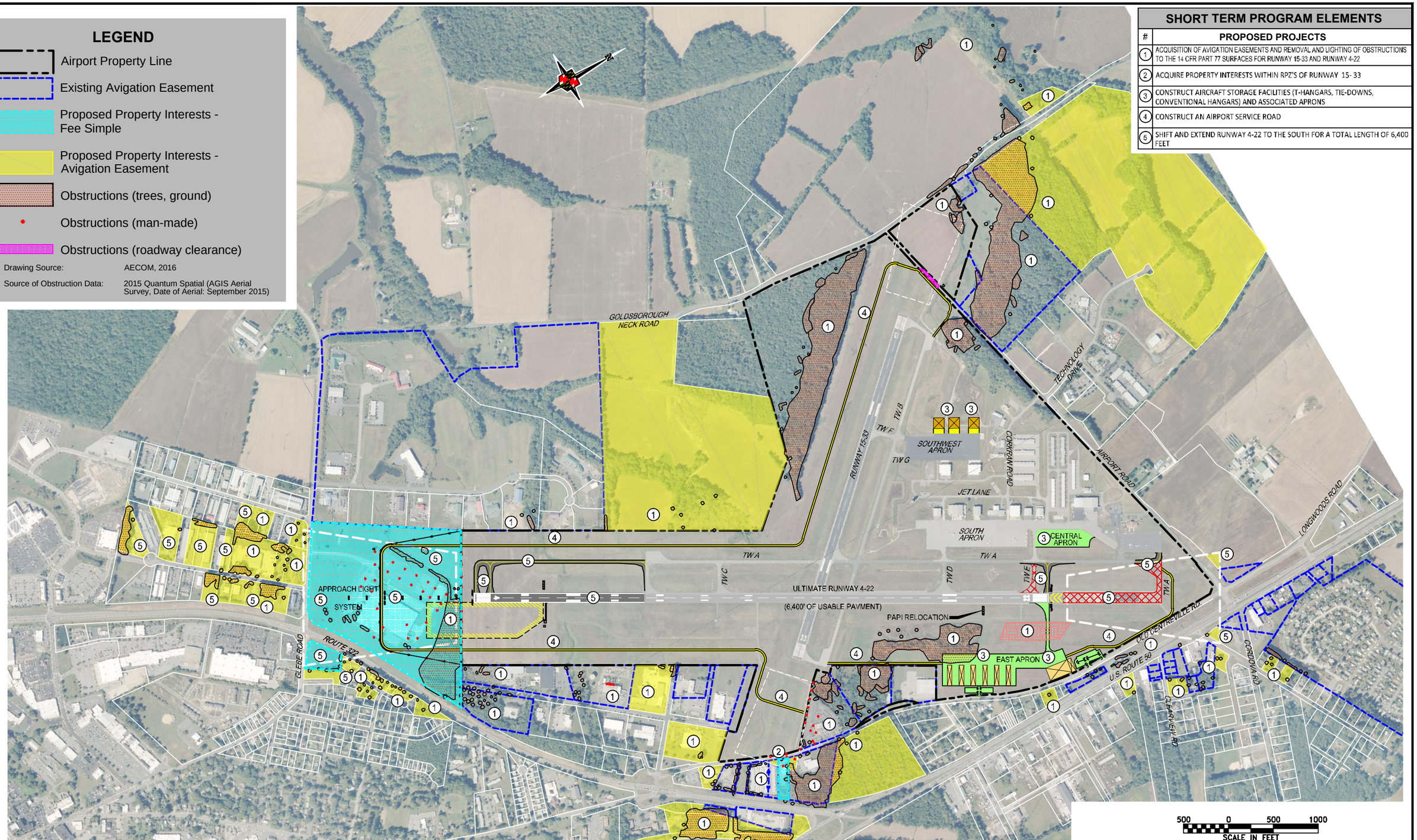
EASTON/NEWNAM FIELD AIRPORT
EASTON, MARYLAND

AECOM

LOCATION MAP

EXHIBIT

1.2-1



LEGEND

- Airport Property Line
- Existing Avigation Easement
- Proposed Property Interests - Fee Simple
- Proposed Property Interests - Avigation Easement
- Obstructions (trees, ground)
- Obstructions (man-made)
- Obstructions (roadway clearance)

Drawing Source: AECOM, 2016

Source of Obstruction Data: 2015 Quantum Spatial (AGIS Aerial Survey, Date of Aerial: September 2015)

SHORT TERM PROGRAM ELEMENTS

#	PROPOSED PROJECTS
1	ACQUISITION OF AVIGATION EASEMENTS AND REMOVAL AND LIGHTING OF OBSTRUCTIONS TO THE 14 CFR PART 77 SURFACES FOR RUNWAY 15-33 AND RUNWAY 4-22
2	ACQUIRE PROPERTY INTERESTS WITHIN RPZ'S OF RUNWAY 15-33
3	CONSTRUCT AIRCRAFT STORAGE FACILITIES (T-HANGARS, TIE-DOWNS, CONVENTIONAL HANGARS) AND ASSOCIATED APRONS
4	CONSTRUCT AN AIRPORT SERVICE ROAD
5	SHIFT AND EXTEND RUNWAY 4-22 TO THE SOUTH FOR A TOTAL LENGTH OF 6,400 FEET

500 0 500 1000
SCALE IN FEET

EASTON/NEWNAM FIELD AIRPORT
EASTON, MARYLAND

AECOM

NOTE:
1. THE TYPE OF APPROACH LIGHTING SYSTEM, ASSOCIATED RPZ, AND SUBSEQUENT REQUIRED LAND ACQUISITION VARY WITH EACH BUILD ALTERNATIVE. FOR GRAPHICAL PURPOSES, THE PROJECT ELEMENTS SHOWN REPRESENT THE SPONSOR'S PREFERRED ALTERNATIVE.

PROPOSED ACTION

EXHIBIT 1.3-1

FILE NAME: U:\Projects\EASN\60423280\CAD\CIVIL\ESN EA EXHIBITS NOV 2016\ESN-EA-1.3-1.dwg LAYOUT NAME: PROPOSED ACTION 1.3-1 PLOTTED: Tuesday, February 27, 2018 - 2:02pm

- Extend Taxiway A to the south 1,900 feet
- Discontinue use of 1,000 feet of the northern end of Runway 4-22 and Taxiway A and demolish pavement
- Construct connecting and bypass taxiways to the new Runway 4 threshold
- Construct new taxiway connector to the new relocated Runway 22 end threshold and demolish existing Taxiway E connector
- Rehabilitate Runway 4-22 and Taxiway A
- Remove Runway 4-22 Shoulder Pavement
- Construct a standard Runway Safety Area (RSA), Runway Object Free Area (ROFA), Taxiway Safety Area (TSA), and Taxiway Object Free Area (TOFA) for Runway 4-22 and Taxiway A.
- Acquisition of avigation easements and removal and lighting of obstructions to the 14 CFR Part 77 surfaces for future Runway 4-22
- Acquire property interests within the future Runway 4 RPZ and Runway 22 RPZ
- Install airfield fence
- Revise Instrument Flight Rules (IFR) approach procedures to account for the shift and extension
- Install and/or relocate navigational aids:
    - Install an Approach Lighting System (ALS) on Runway 4
    - Install medium-intensity runway and taxiway edge lights along the new sections of runway and taxiway
    - Relocate Runway 4 and Runway 22 threshold lights and Precision Approach Path Indicator (PAPI) lights for Runway 4 and Runway 22
    - Install airfield directional signs for the new sections of runway and taxiway
    - Install Runway End Identifier Lights (REILs) on Runway 22
    - Relocate existing Runway 4 Glideslope to coincide with new approach threshold

1.4 REQUESTED FEDERAL ACTION

The requested federal action(s) considered in this Environmental Assessment include the following:

- Unconditional approval of the conditionally approved 2016 Airport Layout Plan (ALP) that depicts the proposed projects contained in this Environmental Assessment that are ripe for decision
- Determination that the airport development is reasonably necessary for use in air commerce or in the interests of national defense.
- Determination of eligibility for federal assistance under the federal grant-in-aid program
- FAA and FAA Air Traffic coordination and approval of revised IFR approach procedures depicting the shifted and extended Runway 4-22

FAA acceptance of a NEPA analysis document and issuance of a decision document or finding is only a determination that the document satisfies applicable environmental statutes and regulations. Similarly, FAA approval of an ALP does not indicate the FAA will participate in the cost of any proposed development. ALP approval indicates that all existing and proposed airport development shown on the plan meets current FAA Airport Design Standards or a current FAA-approved Modification of Airport Design Standards and that the proposed development is useful and efficient.

1.5 TIMEFRAME OF THE PROPOSED PROJECTS

Development of the proposed projects included in the Five-Year CIP would begin during Calendar Year (CY) 2018 with land acquisition. Land acquisition (fee simple and avigation easements) will consist of properties required for obstruction removal to the existing and future 14 CFR Part 77 surfaces of Runway 4-22 and existing 14 CFR Part 77 surfaces of Runway 15-33 as well as those required for the RPZs of Runway 4-22 (future) and Runway 15-33 (existing); this phase is expected to be complete around CY 2020. Following, the County plans to complete environmental mitigation, design, and construction for the removal of obstructions for both Runway 4-22 and Runway 15-33; this phase is expected to be complete around CY 2022. Following, the County plans to complete the environmental mitigation, design, and construction for the extension of Runway 4-22; this phase is expected to be complete around CY 2026 (a more detailed phasing approach to the extension of Runway 4-22 is provided in Section 5.9.1.2, Interim Action). Then, the County plans to complete the phased approach of the projects with the environmental mitigation, design, and construction of the airport service road to serve the Runway 4-22 extension project as well as the East Apron and T-Hangars with connector taxiway to the relocated Runway 22 threshold by CY 2030. Simultaneously, between CY 2017 and CY 2030, the County intends to commence and complete environmental mitigation, design, and construction of aircraft storage facilities and associated aprons. For planning purposes, it is projected that development of all the proposed projects as described by the above phasing of the proposed action included in the Five-Year CIP would be complete in CY 2030.

SECTION 2.0
PURPOSE AND NEED

2.1 INTRODUCTION

This chapter of the Environmental Assessment states the need for and purpose of the requested federal actions.

2.2 PURPOSE AND NEED

The purpose of the proposed actions is to develop airfield and aviation related facilities at ESN to meet the needs of the aviation community consistent with the County's approved Five-Year CIP and to meet FAA design criteria. The proposed improvements are needed to:

- Protect public safety and preserve the existing arrival and departure procedures
- Provide adequate control over property interests in RPZs
- Provide adequate aircraft storage facilities to meet demand
- Provide airport service road to support maintenance activities
- Provide adequate runway length to serve existing and forecasted fleet

2.2.1 PROTECT PUBLIC SAFETY AND PRESERVE THE EXISTING ARRIVAL AND DEPARTURE PROCEDURES

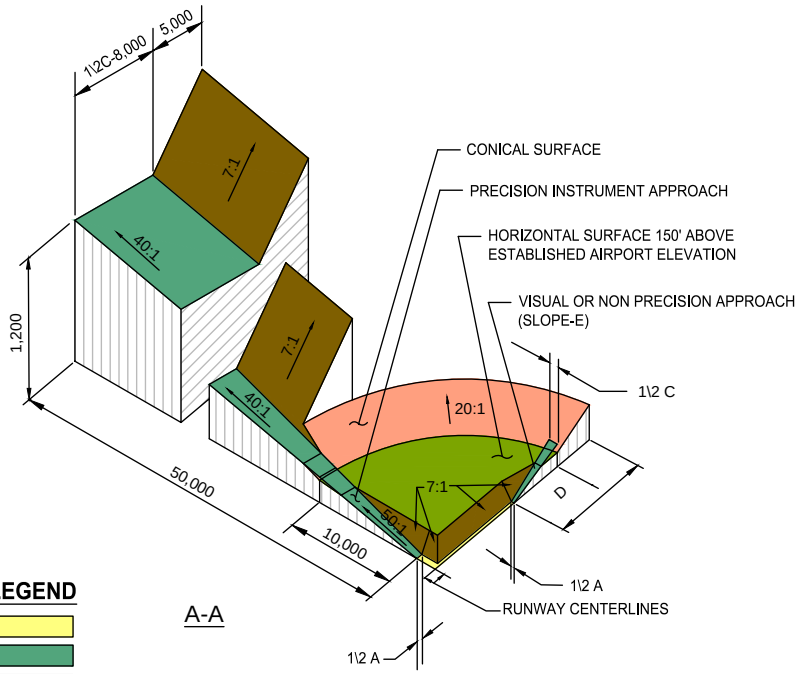
As described in 14 CFR Part 77, *Safe, Efficient Use, and Preservation of the Navigable Airspace*, and FAA Advisory Circular 150/5300 13A, Change 1, surfaces are established in relation to an airport and each runway end in order to identify those objects that may affect airport planning and flight procedures (see **Exhibit 2.2-1**). The size of the surfaces depends upon the type of approach planned for that runway (i.e., visual, non-precision instrument, and precision instrument). The five principal surfaces defined in 14 CFR Part 77 are as follows:

- **Primary surface**: a surface longitudinally centered on a runway that extends 200 feet beyond each end of the runway with a width of 500 feet for Runway 15-33, and 1,000 feet for Runway 4-22. Its elevation is the same as that of the runway centerline elevation at its closest point.

- **Approach surface**: a surface longitudinally centered on the extended runway centerline and extending outward and upward from each end of the primary surface. The width and elevation of the inner ends conform to that of the primary surface; while the slope, length, and width of the outer end are governed by the runway service category and existing approach procedures. The approach surface for Runway 4 (precision approach) extends for a horizontal distance of 10,000 feet at a slope of 50:1 and an additional 40,000 feet at a slope of 40:1. The Runway 4 approach has an outer width of 16,000 feet. The remaining three approaches (non-precision) for Runways 22, 15 and 33 all extend out for a horizontal distance of 10,000 feet at a slope of 34:1 and have an outer width of 3,500 feet.

- **Transitional surface**: a surface that extends outward and upward at right angles to the runway centerline and the extended runway centerline at a slope of 7:1 from the sides of the primary surface and from the sides of the approach surfaces. Transitional surfaces for those portions of the precision approach surface, which project through and beyond the limits of the conical surface, extend a distance of 5,000 feet measured horizontally from the edge of the approach surface and at right angles to the runway centerline.

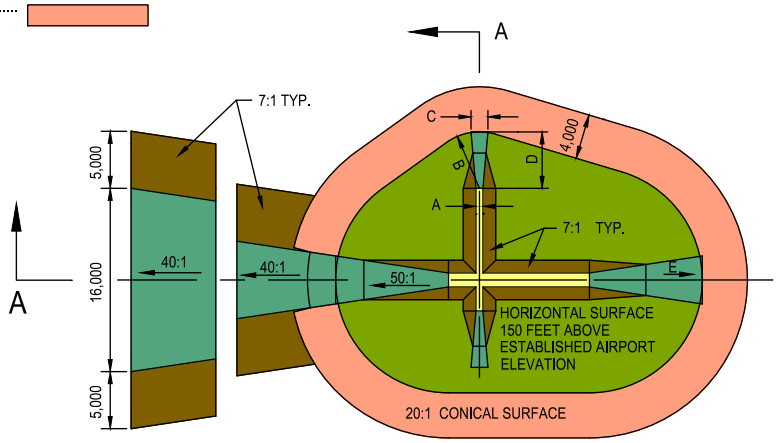
- **Horizontal surface**: a horizontal, rounded shaped area situated 150 feet above the established airport elevation, which is currently 72 feet MSL at ESN. Its dimensions are determined by swinging 10,000-foot arcs from a point centered 200 feet beyond each runway end of Runways 4-22 and 15-33, which are then connected by a line tangent



ISOMETRIC VIEW

14 CFR PART 77 SURFACES LEGEND

- PRIMARY SURFACE.....
- APPROACH SURFACE.....
- TRANSITIONAL SURFACE.....
- HORIZONTAL SURFACE.....
- CONICAL SURFACE.....



PLAN VIEW

DIM	ITEM	DIMENSIONAL STANDARDS (FEET)					
		VISUAL RUNWAY		NON-PRECISION INSTRUMENT RUNWAY			PRECISION INSTRUMENT RUNWAY
		A	B	A	B		
					C	D	
A	WIDTH OF PRIMARY SURFACE AND APPROACH SURFACE WIDTH AT INNER END	250	500	500	500	1,000	1,000
B	RADIUS OF HORIZONTAL SURFACE	5,000	5,000	5,000	10,000	10,000	10,000
		VISUAL APPROACH		NON-PRECISION INSTRUMENT RUNWAY			PRECISION INSTRUMENT APPROACH
					B		
		A	B		C	D	
C	APPROACH SURFACE WIDTH AT END	1,250	1,500	2,000	3,500	4,000	16,000
D	APPROACH SURFACE LENGTH	5,000	5,000	5,000	10,000	10,000	*
E	APPROACH SLOPE	20:1	20:1	20:1	34:1	34:1	*

A- UTILITY RUNWAYS
B- RUNWAYS LARGER THAN UTILITY
C- VISIBILITY MINIMUMS GREATER THAN 3\4 MILE
D- VISIBILITY MINIMUMS AS LOW AS 3\4 MILE
* PRECISION INSTRUMENT APPROACH SLOPE IS 50:1 FOR INNER 10,000 FEET AND 40:1 FOR AN ADDITIONAL 40,000 FEET

14 CFR PART 77 IMAGINARY SURFACES

NOT TO SCALE

EASTON/NEWNAM FIELD AIRPORT
EASTON, MARYLAND

AECOM

14 CFR PART 77 SURFACES

EXHIBIT
2.2-1

FILE NAME: U:\Projects\E\ESN\60423280\CAD\CIVIL\ESN EA EXHIBITS NOV 2016\ESN-EA-2.3-1.dwg PLOTTED: Monday, November 21, 2016 - 9:38am USER: kenneth.brazeau

to those arcs.

- **Conical surface**: a surface that extends outward and upward from the periphery of the horizontal surface at a slope of 20:1 vertical for horizontal distances of 4,000 feet. ESN's conical surface extends up to an elevation of 350 feet above the established Airport elevation.

Existing and near penetrations to the 14 CFR Part 77 surfaces to Runway 4-22 and Runway 15-33 at the Airport were identified in 2016 (see **Exhibit 2.2-2**). That analysis shows existing 14 CFR Part 77 surfaces incorporating 34:1 RNAV GPS approaches to Runways 15, 33, and 22 and a 50:1 Instrument Landing System (ILS) precision approach to Runway 4. Obstructions, including trees, shrubs, grasses, ground, and man-made objects, to the existing 14 CFR Part 77 surfaces are located on-Airport as well as on numerous privately-owned parcels and right-of-ways.

In addition, there are 14 CFR Part 77 roadway clearance requirements. Except for traverse ways on or near an airport with an operative ground traffic control service furnished by an Airport Traffic Control Tower (ATCT) or by the airport management and coordinated with the air traffic control service, the standards listed below apply to traverse ways used or to be used for the passage of mobile objects only after the heights of these traverse ways are increased by:

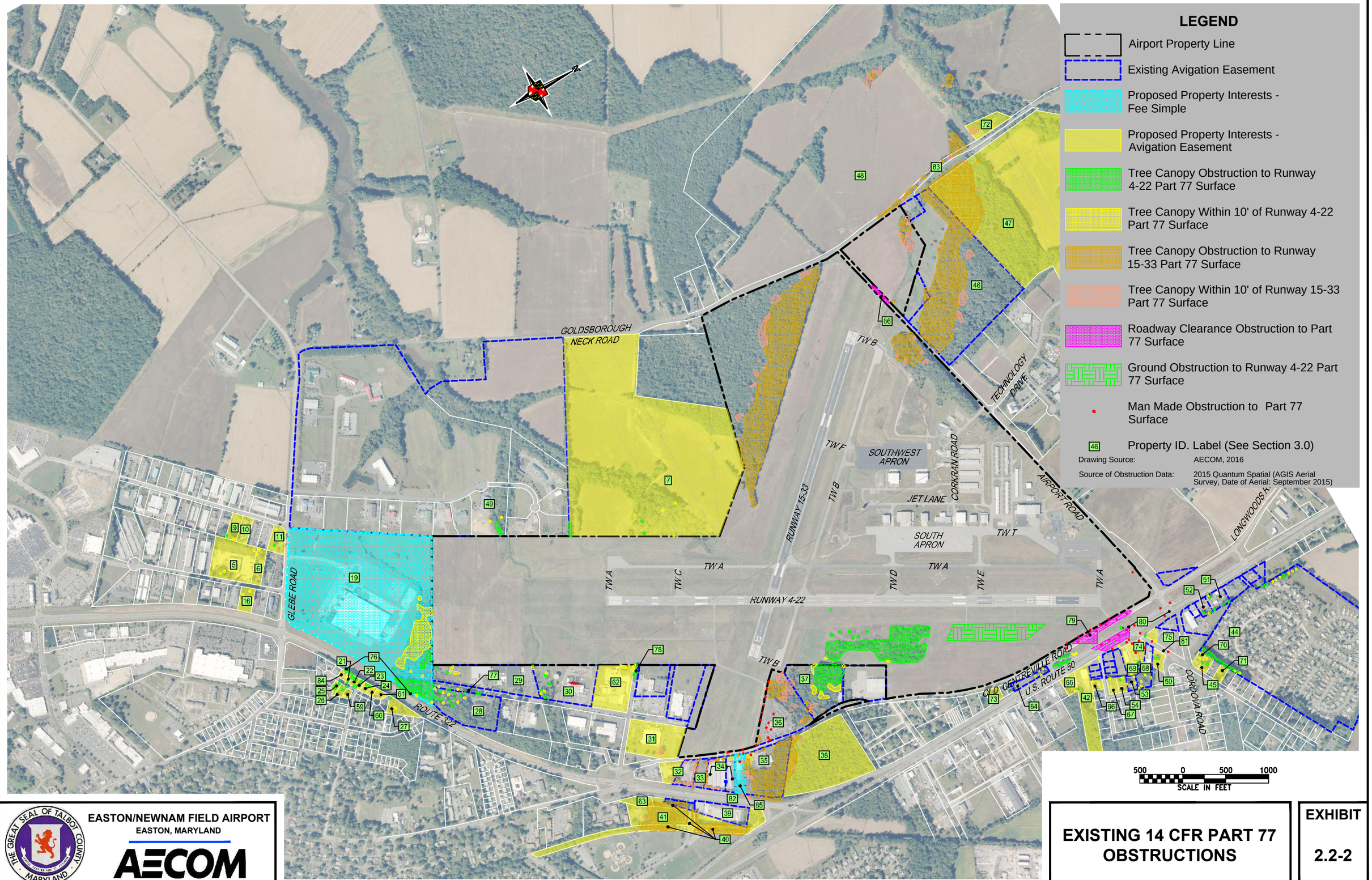
- 17 feet for an Interstate Highway that is part of the National System of Military and Interstate Highways where over crossings are designed for a minimum of 17 feet vertical distance;
- 15 feet for any other public roadway;
- 10 feet or the height of the highest mobile object that would normally traverse the road, whichever is greater, for a private road;
- 23 feet for a railroad, and,
- For a waterway or any other traverse way not previously mentioned, an amount equal to the height of the highest mobile object that would normally traverse it.

Currently, the primary surface of the Runway 22 end extends off Airport property and encroaches onto Centreville Road. Also the existing approach surface to Runway 22 does not clear Old Centreville Road or US Route 50 by the required 15 feet. Additionally, the approach surface to Runway 15 end does not clear Airport Road by the required 15 feet. Therefore, all three roads are currently penetrations to the existing 14 CFR Part 77 imaginary surfaces (see **Exhibit 2.2-2**).

As discussed above, there are several existing penetrations to the 14 CFR Part 77 surfaces to Runway 4-22 and Runway 15-33. The proposed project is needed in order to protect public safety, preserve the existing published arrival and departure procedures, and be in compliance with FAA provisions defined in 14 CFR Part 77.19, *Civil Airport Imaginary Surfaces,* and FAA Advisory Circular 150/530013A Change 1, as well as federal grant obligations. By accepting FAA Airport Improvement Program funds for the Airport, the County has assured the FAA in Grant Assurance 20, *Hazard Removal and Mitigation*, that the County will take appropriate action to assure that the airspace required to protect operations to the Airport will be adequately cleared and protected. Talbot County, as Airport Owner, is required to remove, relocate, or lower objects to preclude their penetration of the primary surface, approach surface, and associated 7:1 transitional surface unless an object is fixed by function (e.g., a navigational aid) and/or the object is designated by the FAA to be impractical to remove, relocate, or lower.

2.2.2 PROVIDE ADEQUATE CONTROL OVER INTERESTS IN RUNWAY PROTECTION ZONE

The function of an RPZ, as defined in FAA Advisory Circular 150/5300-13A Change 1, is to "enhance the protection of people



EASTON/NEWNAM FIELD AIRPORT
EASTON, MARYLAND

AECOM

EXISTING 14 CFR PART 77 OBSTRUCTIONS

EXHIBIT 2.2-2

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and property on the ground." An RPZ consists of two components: the central portion and the Controlled Activity Area. The central portion of the RPZ extends from the beginning to the end of the RPZ, centered on the runway centerline. Its width is equal to the width of the ROFA. The Controlled Activity Area is the remainder of the RPZ that lies beyond and to the sides of the central portion. According to FAA Advisory Circular 150/5300-13A Change 1 "it is desirable to clear all objects from the RPZ" although some uses are permitted provided they do not attract wildlife, are outside the ROFA, and do not interfere with navigational aids (NAVAIDs). Examples of land uses prohibited within the RPZ include fuel storage facilities, places of public assembly (i.e., religious institutions, schools, hospitals, etc), and residences.

The FAA recommends that the Sponsor have adequate control over interests in the RPZ, in that the FAA encourages Sponsors to have this control through Fee Simple ownership. Currently, 7.58 acres of the RPZ for Runway 22 fall outside of the Airport property (see **Exhibit 2.2-3**). A temporary Modification of Standards (MOS) has been issued for this condition and is noted on the current conditionally approved ALP (2016). It should be noted that if Runway 4-22 is extended and the threshold is relocated (further discussed in Section 3), the required property interests within the Runway 22 RPZ are reduced to 0.84 acres. In addition, portions of the RPZ for Runway 15-33 fall outside of the Airport property. To date, no MOS has been applied or issued for this non-standard condition. Thus, in order for the Sponsor to have adequate control over property in the RPZ, acquisition of these parcels is proposed through fee simple or, given the small size of what is needed, avigation easements.

2.2.3 PROVIDE ADEQUATE AIRCRAFT STORAGE FACILITIES TO MEET DEMAND

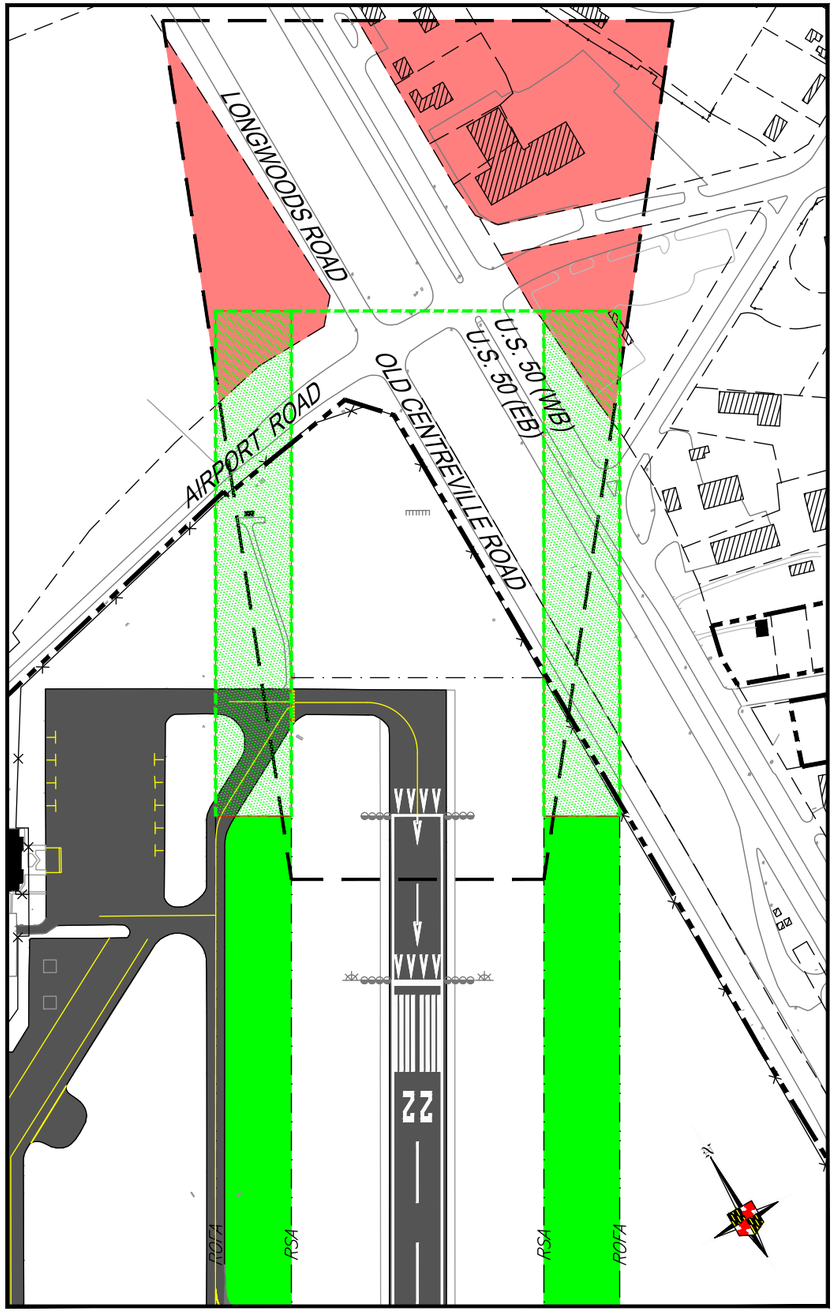
There are three separate types of aircraft storage currently available at ESN:

- **Conventional hangars**: A clear-span hangar ranging in width and depth from approximately 50 feet by 60 feet up to approximately 120 feet by 200 feet. Conventional hangars can typically store multiple small aircraft or one to two larger jet aircraft. Generally speaking, corporate users prefer to house their aircraft in a conventional hangar. There are currently 13 conventional hangars in use at ESN.

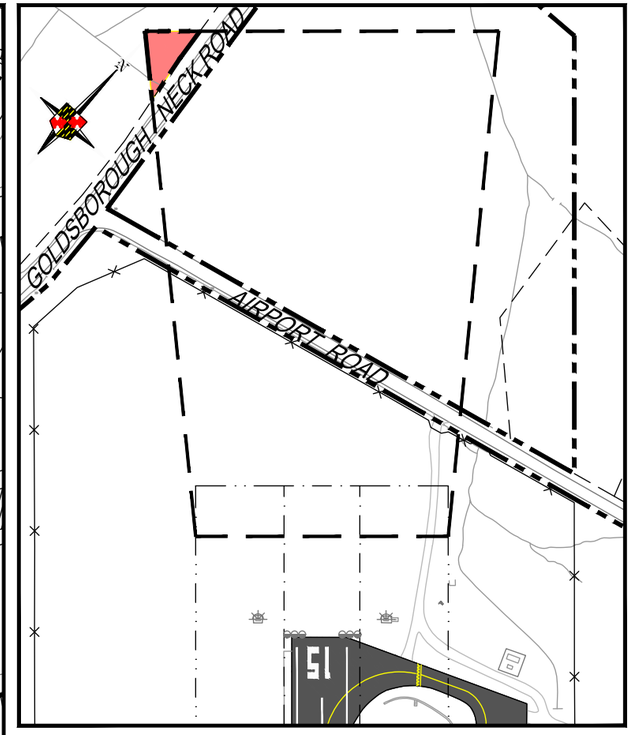
- **T-hangars**: T-hangars provide storage to aircraft generally no larger than a light twin-engine. The T-hangars at ESN are nested and range from an 8-unit building up to a 12-unit building. There are currently 90 T-hangars at ESN.

- **Tie-downs**: A typical aircraft tie-down provides a three-point tie-down for the aircraft with no protection from the elements. Prior to the South Apron project (completed in 2010) there were approximately 72 tie-downs available at ESN. However, as part of the South Apron project in 2010, six tie-down spaces were lost on the South Apron through bringing the apron into compliance with Group II standards.

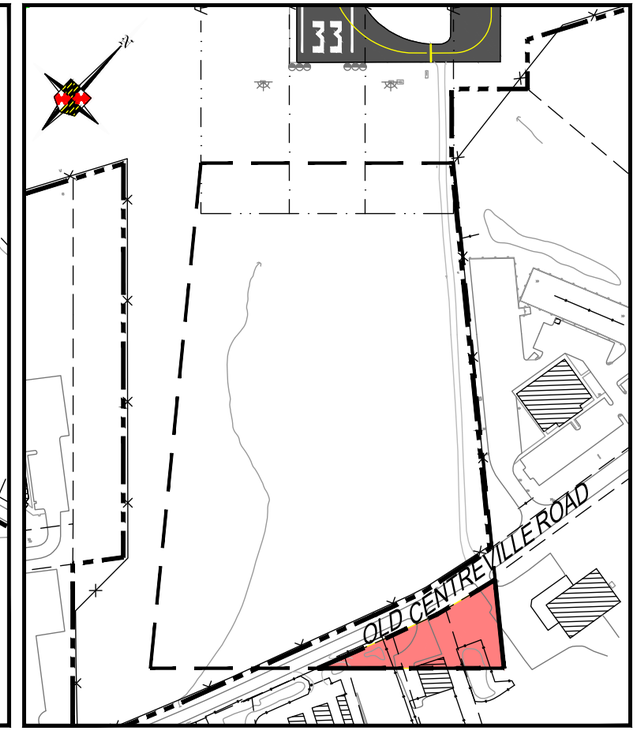
There is currently a waiting list of 32 aircraft owners who have expressed interest in storing their aircraft at ESN in T-hangars and 4 aircraft owners who have expressed interest in conventional hangars; however, there is currently no T-hangar space available for their aircraft, and only three areas on the Southwest Apron and one on the South Apron are currently available for conventional hangars. As shown by the waiting list of aircraft owners, there is currently a hangar deficiency at ESN. To meet this existing need, the Airport Sponsor is proposing to construct three conventional hangars and associated apron on the existing Southwest Apron, a central apron with associated tie downs located between Taxiway E and the Terminal Apron, and an east apron with a conventional hangar and six 10-unit T-hangar buildings.



RUNWAY 22 END OBJECT FREE AREA AND PROTECTION ZONE PROPERTY INTERESTS



RUNWAY 15 END PROTECTION ZONE PROPERTY INTERESTS



RUNWAY 33 END PROTECTION ZONE PROPERTY INTERESTS

LEGEND:

- AVAILABLE RUNWAY OBJECT FREE AREA
- REQUIRED RUNWAY OBJECT FREE AREA
- REQUIRED PROPERTY INTERESTS WITHIN CURRENT RPZs (ONCE RUNWAY 22 END IS SHIFTED SOUTH 1,000' THIS AREA WILL BE REDUCED CONSIDERABLY, SEE EXHIBIT 1.3-1)

MODIFICATIONS OF DESIGN STANDARDS

NO.	STANDARD MODIFIED	FAA STANDARDS	EXISTING CONDITIONS	PROPOSED ACTION	DATE APPROVED
1	INTERIM RUNWAY 4-22 OBJECT FREE AREA	800' X 1,000'	800' X 350'	TEMPORARY WAIVER	7-13-2008
2	INTERIM RUNWAY 22 PROTECTION ZONE	AIRPORT INTEREST/OWNERSHIP	PARTIAL EASEMENT/OWNERSHIP	TEMPORARY WAIVER	7-13-2008

150 0 75 150 300
SCALE IN FEET

EASTON/NEWNAM FIELD AIRPORT
EASTON, MARYLAND
AECOM

EXISTING NON-STANDARD OBJECT FREE AREAS AND RUNWAY PROTECTION ZONES

EXHIBIT 2.2-3

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2.2.4 PROVIDE AIRPORT SERVICE ROAD TO SUPPORT MAINTENANCE ACTIVITIES

ESN does not currently have an airfield service road for its maintenance activities in order to support access to the necessary locations on the airfield. In the existing operating condition, maintenance vehicles operate on taxiways and must cross active runways in order to reach the other side of the airfield. Operating in these movement areas of the airfield for access requirements (outside of emergency response requirements) is not a recommended operational scenario in accordance with FAA Advisory Circular 150/5210-20, *Ground Vehicle Operations to include Taxiing or Towing an Aircraft on Airports*. Runway incursions are a serious safety concern in which these concerns significantly impact safe operations at any airport. Accordingly, due to the potential operational issues, a full service road (20-foot wide by 18,760 linear feet) is needed at ESN to provide maintenance access to the airfield without crossing active movement areas, thereby reducing the risk of a ground vehicle incursion.

2.2.5 PROVIDE ADEQUATE RUNWAY LENGTH TO SERVE EXISTING AND FORECASTED FLEET

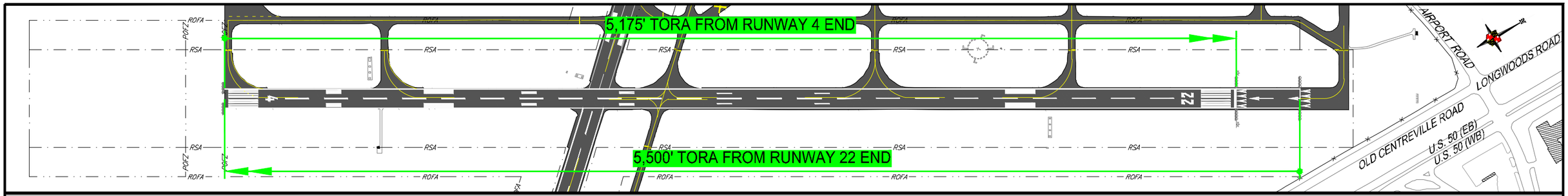
There are two runways at ESN, Runway 4-22 and Runway 15-33. Runway 4-22 serves as the primary runway, is 5,500 feet long, and utilizes declared distances. Runway 15-33 is a crosswind runway and is 4,003 feet long. As part of the ALP Update in February 2009, the FAA approved the use of declared distances through a MOS in order for the RSA of Runway 4-22 to meet FAA design standards (see **Exhibit 2.2-4**).

When displacing a runway threshold, the operation limitations are defined through Declared Distances. Declared Distances represent the maximum distances available and suitable for meeting takeoff, aborted takeoff, and landing distances performance requirements for turbine powered aircraft. The declared distances are Take Off Run Available (TORA) and Take Off Distance Available (TODA), which apply to takeoff; Accelerate Stop Distance Available (ASDA), which applies to an aborted takeoff; and Landing Distance Available (LDA), which applies to landing. A clearway may be included as part of the TODA, and a stopway may be included as part of the ASDA. By treating these distances independently, declared distances are a design methodology that results in declaring and reporting the TORA, TODA, ASDA and LDA for each operational direction.

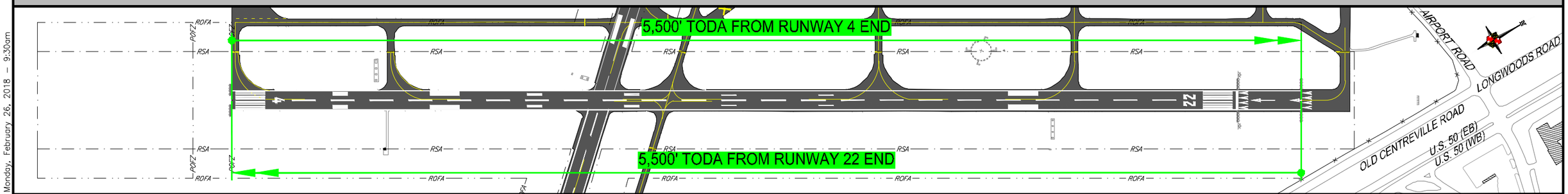
Declared distances may be used to obtain additional RSA and/or ROFA prior to the runway's threshold (the start of the LDA) and/or beyond the stop end of the LDA and ASDA, to mitigate unacceptable incompatible land uses in the RPZ, to meet runway approach and/or departure surface clearance requirements, in accordance with airport design standards, or to mitigate environmental impacts. Declared distances may also be used as an incremental improvement technique when it is not practical to fully meet these requirements. However, declared distances may only be used for these purposes where it is impracticable to meet the airport design standards or mitigate the environmental impacts by other means, and the use of declared distances is practical.

Declared distances may limit or increase runway use. The use of declared distances may result in a displaced runway threshold and may affect the beginning and ending of the RSA, ROFA, and RPZ. For runways without published declared distances, the declared distances are equal to the physical length of the runway unless there is a displaced threshold. In such a case, the LDA is shortened by the length of the threshold displacement

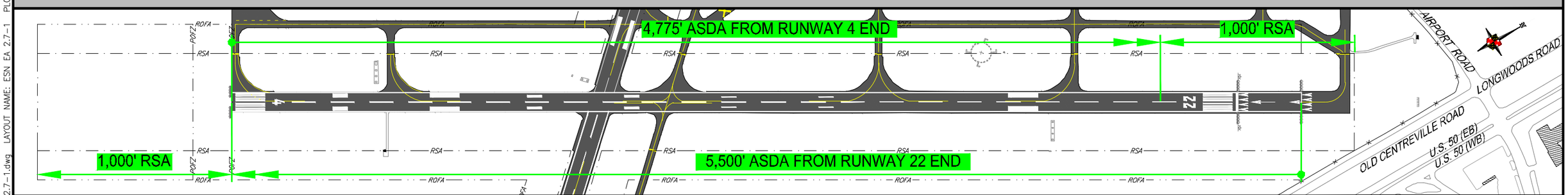
Except when a stopway exists as part of the ASDA, the LDA ends at the same location as the end of the ASDA. A stopway cannot be part of the LDA. Note that except for the case of a landing to a displaced threshold, an aircraft is not prohibited from occupying any portion of the runway.



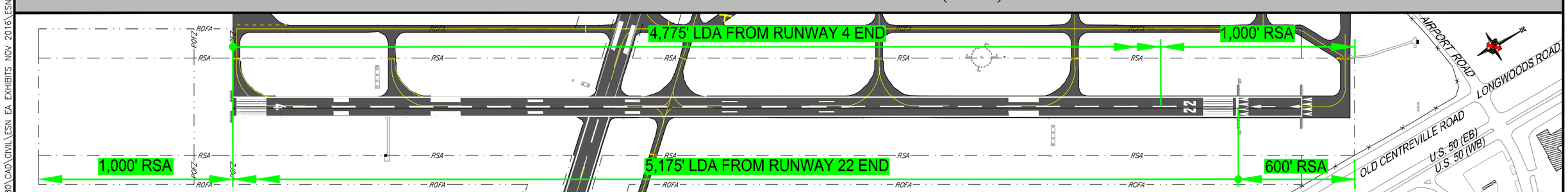
TAKEOFF RUN AVAILABLE (TORA)



TAKEOFF DISTANCE AVAILABLE (TODA)



ACCELERATE STOP DISTANCE AVAILABLE (ASDA)*



LANDING DISTANCE AVAILABLE (LDA)*

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EASTON, MARYLAND

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EXISTING DECLARED DISTANCE DATA

RUNWAY	TORA (FT)	TODA (FT)	ASDA (FT)	LDA (FT)
4	5,175'*	5,500'	4,775'	4,775'
22	5,500'	5,500'	5,500'	5,175'

* THE RSA IS LOCATED IN REFERENCE TO THE ASDA AND LDA ONLY.

250 0 125 250 500
SCALE IN FEET

EXISTING DECLARED DISTANCES APPROVED BY THE FAA ON JULY 13, 2007 (*REVISED AND APPROVED FEBRUARY 4, 2009).

RUNWAY 4-22 RUNWAY SAFETY AREAS USING DECLARED DISTANCES

EXHIBIT 2.2-4

FILE NAME: U:\Projects\E\ESN\60423280\CAD\CIVIL\ESN EA EXHIBITS NOV 2016\ESN-EA-2.7-1.dwg LAYOUT NAME: ESN EA 2.7-1 PLOTTED: Monday, February 26, 2018 - 9:30am

In summary, declared distances involve the following:

- **Takeoff Run Available (TORA)** – distance from beginning of ground roll to gear-up rotation point;
- **Takeoff Distance Available (TODA)** – distance from beginning of ground roll to end of pavement;
- **Accelerated-Stop Distance Available (ASDA)** – distance from beginning of ground roll to either the RSA or 1,000 feet from the far end of pavement (whichever is greater); and
- **Landing Distance Available (LDA)** – distance from landing threshold to either RSA or 1,000 feet from the far end of pavement (whichever is greater).

The declared distances for existing Runway 4-22 are as follows:

RUNWAY	TORA (FT)	TODA (FT)	ASDA (FT)	LDA (FT)
4	5,175	5,500	4,775	4,775
22	5,500	5,500	5,500	5,175

2.2.5.1 Prior Planning Studies

Runway Safety Area Study: The County conducted a comprehensive Runway Safety Area (RSA) Study in accordance with FAA Order 5200.8, *Runway Safety Area Program* in December 2003. This Study presented a series of alternatives that would allow the Airport to achieve RSA dimensions in compliance with FAA design guidelines (per the standards at that time). Given the location of US Route 50 and Airport Road in relation to Runway 22, a standard RSA for Runway 4-22 within its configuration in 2003 was not possible. Therefore, the only practicable alternative to providing a standard RSA was to reduce the length of Runway 4-22 on the northeast end from 5,500 feet to 4,300 feet. However, this reduction in length of the primary runway would not have accommodated the existing and future demand at ESN. As a result, a Master Plan Update (2006) was prepared which determined that Runway 15-33 would become the primary runway and would need to be extended up to a length between 6,200 feet and 6,900 feet from its current length of 4,003 feet. The Talbot County Council approved the recommended alternative to correct the non-standard RSA in 2003.

Airport Layout Plan / Master Plan Update*:* In August 2006, the County completed a Master Plan Study and an Airport Layout Plan (ALP) Update, both of which were approved by the FAA, to identify the need and timing of future airport development. The primary goal of this Study was based on the decision by the Talbot County Council to convert the existing crosswind Runway 15-33 to the primary runway in order to compensate for the non-standard condition of the RSA on Runway 22. This recommendation was based on the RSA Study completed by others in 2003. As noted in the Master Plan Update, the critical family of aircraft for runway length was the medium sized business jets similar to the Gulfstream IV. However, the Master Plan further noted that due to the growing itinerant traffic and diversity of business jets at ESN, operational requirements for a broader range of aircraft should be analyzed. The Master Plan then stated that the critical family of aircraft at ESN was the medium business jet similar to the Gulfstream, Hawker 700/800, and Lear 60 type aircraft. Thus, the Gulfstream IV was the critical aircraft for airport geometry because it has the widest wingspan; however, the Hawker 800 was the critical aircraft for runway length. Based on an analysis of performance curves used to determine field length requirements, the Hawker 800 needed a runway length of 6,900 feet assuming on the following conditions: mean sea level, 86 Degrees F, dry runways, and aircraft flaps set at 15 degrees.

Runway 4-22 Extension Analysis*:* As a result of the Master Plan Update, a Scope of Work was prepared for an Environmental Assessment for the Five-Year CIP, which included the extension and conversion of Runway 15-33 to the primary runway at ESN. However, it was then discovered that the Eastern Shore Land Conservancy, along with the Maryland

Environmental Trust as co-grantee, hold a conservation easement on the property previously owned by Mary and Charlotte Fletcher. This property was designated for acquisition on the ALP, which was approved by the FAA in August 2006 in order to accommodate the extension of Runway 15-33 to the northwest. Due to the inability to revise the conservation easement to allow for the prior proposed runway extension, Talbot County decided to no longer pursue any future plans for Airport expansion onto the Fletcher property, essentially precluding any extension to Runway 15-33.

As a result, supplemental planning services were required to revisit alternatives involving an extension to Runway 4-22, which were initially evaluated in the RSA Study completed in 2003. A study entitled *Runway 4-22 Alternatives Analysis* was completed in 2008 (see **Appendix A**). Six runway extension alternatives were generated as part of this analysis. The six alternatives were evaluated with respect to the following Tier 1 criteria: Runway Visibility Zone (RVZ); roadway clearance (14 CFR Part 77 requirements); Airport Traffic Control Tower (ATCT) visibility; primary surface; and localizer critical area. Three of the alternatives (Alternatives 1, 2, and 5) passed the Tier 1 evaluation. These were then evaluated using Tier 2 criteria: safety considerations; development costs; environmental considerations; runway length requirements; flexibility; land acquisition needs; strategic airport goals; and 14 CFR Part 77 obstruction considerations. Based on these criteria, Alternative 2 was then the recommended alternative. Alternative 2 provided a 6,400 foot runway through the use of declared distances on the Runway 4 end with a Medium Intensity Approach Lighting System with Runway Alignment Indicator Lights (MALSR). The Runway 4 end would be extended 1,896 feet, with an 800 foot displaced threshold. The 1,100 feet of pavement before the displaced threshold would be available for use during takeoff. The Runway 22 end would be relocated 1,000 feet in order to create a 1,000 foot RSA off the Runway 22 end. Through the use of declared distances, 6,400 feet would be available for takeoff on Runway 4 and 22, 6,400 feet will be available for landing on Runway 22, and 5,600 feet will be available for landing on Runway 4. The RSA, ROFA, and RPZ for both runways ends would meet FAA design criteria. Talbot County approved the recommended alternative from this analysis involving an extension of Runway 4-22 to be placed on the ALP.

ALP Update: As a result of the *Runway 4-22 Alternatives Analysis* recommendation, appropriate sheets of the ALP plan set were updated in October 2008. This ALP was approved by the FAA on February 4, 2009. As part of this ALP Update, the FAA approved the use of declared distances in order for the RSA of the extended Runway 4-22 to meet FAA design standards. The use of declared distances required an approval of a Modification of Standards (MOS) from the FAA. The ALP approval (February 2009) included the approval of the MOS.

Runway Length Re-Justification Analysis: As mentioned above, the Environmental Assessment was being prepared concurrent to the above referenced planning analysis and ALP Update. In 2010, a Draft Environmental Assessment was prepared with Alterative 2, as discussed above, as the Preferred Alternative. A draft EA was made available for public comment from June 29, 2010 – August 20, 2010. A Public Informational Open House was held concurrent with a Public Hearing for the EA on August 5, 2010. The County also held another Public Hearing on September 28, 2010.

Comments were received from the FAA in 2013; at that time, the FAA requested that an additional planning analysis be completed prior to restarting the Environmental Assessment given the lapse in time since publication of the Draft document and the FAA's review of the document. This analysis included a review and update to the forecast of aircraft operations (Task 1); a review of the aircraft fleet mix and confirmation of the critical aircraft (Task 2); and confirmation of the runway length requirements (Task 3) (see **Appendix A**). Tasks 1 and 2 were then approved by the FAA on August 6, 2014; the FAA approved the Task 3 Memorandum on July 1, 2015. A runway length of 6,400 feet was accepted.

- **Task 1 (Forecast of Aircraft Operations)**: A review of monthly aircraft operations during 2013 versus 2012 was conducted to assess recent growth trends at the Airport. This task also included a review of the FAA's most recent Terminal Area Forecast (TAF). Sources of data used to complete this task included the FAA's Air Traffic Activity

System (ATADS) and the TAF. On August 6, 2014, the FAA approved the fleet mix forecast included in **Table 2.2-1** (see **Appendix A**).

TABLE 2.2-1:
FLEET MIX FORECAST (BY OPERATIONS)

CATEGORY	2012	2018	2023	2028	2033
Single-Engine	27,904	34,656	34,083	33,509	32,945
Multi-Engine	2,232	2,720	2,596	2,477	2,364
Turbo Prop	3,229	4,403	4,471	4,508	4,515
Jet	7,534	11,414	12,652	13,927	15,226
Rotor	292	422	450	477	502
Subtotal	41,191	53,616	54,252	54,898	55,551
Military	1,361	1,827	1,827	1,827	1,827
Total	42,552	55,443	56,079	56,725	57,378

Source: Table 10, Fleet Mix Forecast (By Operations), contained in Task 4 Briefing Memo, URS Corporation, August 2014.

- **Task 2 (Aircraft Fleet Mix and Confirmation of Critical Aircraft):** The above referenced planning analysis also included analysis of the Airport's historical aircraft fleet mix and an identification of the Airport's critical aircraft. The analysis of the historical fleet mix was conducted using the FAA's Traffic Flow Management System Counts (TFMSC) and Aviation System Performance Metrics (ASPM). The forecast of the future fleet mix was prepared using a variety of sources including the FAA TAF, Table 28 from the FAA's Aerospace Forecast, data from the General Aviation Manufacturers Association's Statistical Databook and Industry Outlook, and data from various aircraft manufacturers. On August 6, 2014, the FAA approved the fleet mix (see **Appendix A**). In addition, the FAA approved the existing critical aircraft as the Hawker 800 as well as the future critical aircraft, which is expected to be the Challenger 300/350 series aircraft (see **Appendix A**).

- **Task 3 (Runway 4-22 Length Analysis):** The planning analysis then included a review of the historical length of haul data for the existing and future critical aircraft (the Hawker 800XP and the Challenger 300) at the Airport as well as an assessment of runway length requirements for these aircraft considering a wide range of variables (temperatures, altitude, and aircraft seating capacity) utilizing FAA Advisory Circular AC 150/5325-4B, *Runway Length requirements for Airport Design, Chapter 2*. On July 1, 2015, the FAA approved the runway length requirements (see **Appendix A**). The estimated runway length requirements were determined to be as follows (see **Table 2.2-2**):

TABLE 2.2-2:
RUNWAY 4-22 LENGTH REQUIREMENTS

AIRCRAFT	RUNWAY LENGTH (FEET)	ELEVATION CHANGE (FEET)	TOTAL LENGTH (FEET)
Challenger 300	5,870	36	**6,230**
Hawker 800 XP	6,640	36	**7,000**
Hawker 900 XP	5,626	36	**5,986**

The planning analysis generally showed that the operations of the Hawker 800 XP and 900 XP to be decreasing over time and the operations of the Challenger 300 to be increasing over time. Thus, the FAA stipulated the use of an approximate average of the three aircraft runway lengths required, as referenced above. This resulted in a determination of the required Runway 4-22 length to be 6,400 feet.

SECTION 3.0
ALTERNATIVES

3.1 INTRODUCTION

CEQ regulations implementing NEPA require that the Federal decision-makers perform the following tasks when preparing an Environmental Assessment:

- Evaluate all reasonable alternatives, including alternatives not within the jurisdiction of the federal agency, and for alternatives that were eliminated from further study, briefly discuss the reasons for their having been eliminated.
- Devote substantial treatment to each alternative considered in detail, including the Proposed Action and the No Action Alternative, so that reviewers can evaluate their comparative merits.

This chapter describes the Proposed Action and alternatives to the Proposed Action, including the No Action Alternative to the following separate projects that comprise the Five-Year CIP at ESN, as shown on the current conditionally approved ALP (December 2016) and on **Exhibit 3.1-1**:

- Removal of obstructions and associated avigation easements to the 14 CFR Part 77 Surfaces of Existing Runway 15-33 *(Section 3.2)*
- Removal of obstructions and associated avigation easements to the 14 CFR Part 77 Surfaces of Existing Runway 4-22 *(Section 3.3)*
- Acquisition of property interests within the RPZs of Runway 15 and Runway 33 *(Section 3.4)*
- Construction of aircraft storage facilities *(Section 3.5)*
- Construction of an Airport Service Road *(Section 3.6)*
- Extension of Runway 4-22 and associated projects *(Section 3.7)*

In addition, this chapter evaluates the ability of each alternative to accomplish the project's objectives as discussed in Section 2, Purpose and Need. The Proposed Action Alternative would fulfill the purpose and need for the project. The No Action Alternative would not meet the purpose and need; however, it is analyzed in this Environmental Assessment pursuant to the requirements of FAA Order 5050.4B, FAA Order 1050.1F, CEQ, and NEPA.

This Environmental Assessment was prepared to identify and evaluate all reasonably foreseeable potential adverse impacts on the human and natural environments that are expected to result from the implementation of the Proposed Action and No Action Alternative.

3.2 REMOVAL OF OBSTRUCTIONS AND ASSOCIATED AVIGATION EASEMENTS TO THE 14 CFR PART 77 SURFACES OF EXISTING RUNWAY 15-33

Based on the nature of the hazards posed by trees obstructing the airspace, alternatives for addressing these obstructions are limited. Talbot County, as Airport Owner, is required to remove, relocate, or lower objects to preclude their penetration of the primary surface, approach surface, and associated 7:1 transitional surface unless an object is fixed by function (e.g., a navigational aid) and/or the object is designated by the FAA to be impractical to remove, relocate, or lower. For the vegetative obstructions, the most desirable method of mitigation is removal from the airspace. Trees would be flush cut to the ground; stumps and roots would remain. For manmade objects, obstruction lighting may be considered an acceptable alternative for mitigation.

For those off-Airport parcels that contain obstructions, avigation easements would be obtained to provide the County with a perpetual nonexclusive height restriction easement over the parcel which would preclude the property owner

MODIFICATIONS OF DESIGN STANDARDS

NO.	STANDARD MODIFIED	FAA STANDARDS	EXISTING CONDITIONS	PROPOSED ACTION	DATE APPROVED
1	INTERIM RUNWAY 4-22 OBJECT FREE AREA	800' X 1,000'	800' X 350'	TEMPORARY WAIVER	7-13-2008
2	INTERIM RUNWAY 22 PROTECTION ZONE	AIRPORT INTEREST/OWNERSHIP	PARTIAL EASEMENT/OWNERSHIP	TEMPORARY WAIVER	7-13-2008

OBSTACLE FREE ZONE (OFZ) DIMENSIONS

RUNWAY OBSTACLE FREE ZONE (EX. AND FUTURE RUNWAYS 15/33 & 4/22)	
LENGTH BEYOND STOP END	200'
WIDTH	400'
FUTURE RUNWAY 4 INNER-APPROACH OFZ	
INNER-APPROACH SLOPE	50:1
INNER-APPROACH WIDTH	400'
INNER-APPROACH LENGTH BEYOND APPROACH LIGHT SYSTEM	200'
INNER-APPROACH LENGTH BEYOND RUNWAY OFZ END	2,400'
FUTURE RUNWAY 4 INNER-TRANSITIONAL OFZ	
INNER TRANSITIONAL HEIGHT (H)	42.65
DISTANCE (Y) FROM RWY C/L TO END OF 5:1 SLOPE	524.45'
TRANSITIONAL SURFACE HEIGHT AT END OF 5:1 SLOPE	107.54
DISTANCE BEYOND (Y) TO INTERCEPT HORIZ AT 6:1 SLOPE	212.29'
OVERALL DISTANCE FROM RWY C/L AT ROFZ STOP END TO THE IT-OFZ AT THE INTERSECTION OF THE HORIZONTAL SURFACE	736.74'

FACILITIES TABLE

EXISTING			FUTURE		
#	FACILITY NAME	TOP ELEV.	#	FACILITY NAME	PHASE
1	GENERAL AVIATION TERMINAL (TBR)	98.0'	40	CONVENTIONAL HANGAR	I
2	EAST COAST FLIGHT SERVICES	92.0'	41	CONVENTIONAL HANGAR	I
3	AIR REPAIR	98.6'	42	EASTON HANGAR, LLC	I
4	AERO SERVICES	86.3'	43	T-HANGAR	I
5	HANGAR ASSOCIATES (SAFARI JET)	95.1'	44	T-HANGAR	I
6	SPITFIRE	84.6'	45	T-HANGAR	I
7	TAMERA	91.5'	46	T-HANGAR	I
8	EASTON JET SERVICES	91.1'	47	T-HANGAR	I
9	STATE POLICE	82.9'	48	T-HANGAR	I
10	EAST COAST FLIGHT SERVICES (OFFICES)	87.6'	49	AVIATION MUSEUM / HANGAR	I
11	TALBOT AVIATION, LLC	83.7'	50	T-HANGAR	I
12	T-HANGAR A (10 UNIT)	74.8'	51	CONVENTIONAL HANGAR	I
13	T-HANGAR B (12 UNIT)	75.6'	52	CONVENTIONAL HANGAR	I
14	T-HANGAR C (10 UNIT)	76.9'	53	CONVENTIONAL HANGAR	I
15	T-HANGAR D (10 UNIT)	76.0'	54	CONVENTIONAL HANGAR	I
16	T-HANGAR E (10 UNIT)	76.9'	55	CONVENTIONAL HANGAR	I
17	T-HANGAR F (8 UNIT)	77.0'	56	FUTURE GA TERMINAL	III
18	T-HANGAR G (10 UNIT)	74.4'	57	CONVENTIONAL HANGAR	III
19	T-HANGAR H (10 UNIT)	74.2'	58	T-HANGAR (10 UNIT)	ULT
20	T-HANGAR I (10 UNIT)	73.8'	59	T-HANGAR (12 UNIT)	ULT
21	EMS HANGAR	75.5'	60	AIR SERVICE TERMINAL BUILDING	ULT
22	EMS FACILITY	71.9'	61	CONVENTIONAL HANGAR (1 OF 2)	ULT
23	EMS STORAGE	72.3'	62	CONVENTIONAL HANGAR (2 OF 2)	ULT
24	AIRFIELD MAINTENANCE	67.2'	63	CONVENTIONAL HANGAR	ULT
25	MAINTENANCE SHED	67.2'			
26	FUEL FARM	83.4'			
27	AIR TRAFFIC CONTROL TOWER	125.5			
28	CONVENTIONAL HANGAR	87.3'			
29	CLARK HANGAR	85.0'			

LEGEND

EXISTING	DESCRIPTION	FUTURE
	AIRPORT PROPERTY LINE	
	AIRFIELD PAVEMENT	SHADED FOR PHASE
NA	PAVMENT/BUILDINGS TO BE REMOVED	
RSA	RUNWAY SAFETY AREA (RSA)	RSA
ROFA	RUNWAY OBJECT FREE AREA (ROFA)	ROFA
POFZ	PRECISION OBSTACLE FREE ZONE (POFZ)	POFZ
	RUNWAY PROTECTION ZONE (RPZ)	
TOFA	TAXIWAY OBJECT FREE AREA (TOFA)	TOFA
	PROPERTY INTEREST	
NA	LAND ACQUISITION	
	ROTATING BEACON	N/A
RVZ	RUNWAY VISIBILITY ZONE	RVZ
ARP	AIRPORT REFERENCE POINT	ARP
	AIRPORT BUILDINGS	SHADED FOR PHASE
	AIRPORT FENCING	
	GLIDESLOPE/LOCALIZER CRITICAL AREA	
60	GROUND ELEVATION CONTOURS	N/A
	REILS	
4 BOX 2 BOX	PAPI	4 BOX
	THRESHOLD LIGHTS	
	OBSTRUCTION LIGHTS	N/A

DRAWING ABBREVIATIONS

ADG	AIRPORT DESIGN GROUP
AGL	ABOVE GROUND LEVEL
ARC	AIRPORT REFERENCE CODE
ARP	AIRPORT REFERENCE POINT
AW	ALL WEATHER
AWOS	AUTOMATED WEATHER OBSERVATION SYSTEM
C/L	CENTERLINE
DME	DISTANCE MEASURING EQUIPMENT
EL	ELEVATION
GA	GENERAL AVIATION
IMC	INSTRUMENT METEOROLOGICAL CONDITIONS
IA-OFZ	INNER APPROACH - OBSTACLE FREE ZONE
IT-OFZ	INNER TRANSITIONAL - OBJECT FREE ZONE
MALSR	MEDIUM-INTENSITY APPROACH LIGHTING SYSTEM WITH RUNWAY ALIGNMENT INDICATOR

DRAWING ABBREVIATIONS (CONTINUED)

MSL	MEAN SEA LEVEL
OFZ	OBSTACLE FREE ZONE
PAPI	PRECISION APPROACH PATH INDICATOR
POFZ	PRECISION OBSTACLE FREE ZONE
REIL	RUNWAY END IDENTIFICATION LIGHT
ROFA	RUNWAY OBJECT FREE AREA
RPZ	RUNWAY PROTECTION ZONE
RSA	RUNWAY SAFETY AREA
RVZ	RUNWAY VISIBILITY ZONE
SM	STATUTE MILE
TBR	TO BE REMOVED
TOFA	TAXIWAY OBJECT FREE AREA
TSA	TAXIWAY SAFETY AREA
TL	TAXILANE
TW	TAXIWAY

MAGNETIC DECLINATION: 11.302° W
ANNUAL RATE OF CHANGE: 0.001° E/YEAR
EPOCH YEAR: JANUARY 2010
SOURCE: NATIONAL GEOPHYSICAL DATA CENTER (NGDC)

RUNWAY DATA TABLE

DESCRIPTION	RUNWAY 4/22 EXISTING RWY 4	RUNWAY 4/22 EXISTING RWY 22	RUNWAY 4/22 FUTURE RWY 4	RUNWAY 4/22 FUTURE RWY 22	RUNWAY 15/33 EXISTING RWY 15	RUNWAY 15/33 EXISTING RWY 33	RUNWAY 15/33 FUTURE RWY 15	RUNWAY 15/33 FUTURE RWY 33
RUNWAY END COORDINATES (NAD 83)	38° 47' 50.63"N 76° 04' 19.06"W	38° 48' 37.47"N 76° 03' 43.80"W	38° 47' 34.45"N 76° 04' 31.24"W	38° 48' 28.96"N 76° 03' 50.21"W	38° 48' 30.85"N 76° 04' 34.95"W	38° 48' 01.64"N 76° 04' 00.84"W	SAME	SAME
DISPLACED THRESHOLD COORDINATES (NAD 83)	N/A	38° 48' 34.70"N 76° 03' 45.88"W	N/A	N/A	N/A	N/A	N/A	N/A
APPROACH VISIBILITY MINIMUMS (AGL-SM)	200 - 3/4	300 - 1	200 - 3/4	SAME	CAT A-C: 400-1 CAT D: 400-1 1/4	CAT A-B: 500-1 CAT C: 500-1 1/4 CAT D: 500-1 1/2	SAME	SAME
CFR PART 77 CATEGORY	PRECISION	NON-PRECISION	SAME	SAME	NON-PRECISION	NON-PRECISION	SAME	SAME
APPROACH SURFACE SLOPE	50:1	34:1	SAME	SAME	34:1	34:1	SAME	SAME
RUNWAY LENGTH X WIDTH	5,500' X 100'		6,400' X 100'		4,003' X 100'		SAME	
PAVEMENT TYPE	ASPHALT		SAME		ASPHALT		SAME	
PAVEMENT DESIGN STRENGTH (LBS)								
SINGLE WHEEL	40,000		SAME		40,000		SAME	
DUAL WHEEL	60,000		SAME		60,000		SAME	
DUAL TANDEM	100,000		SAME		100,000		SAME	
RUNWAY LIGHTING	HIRL	HIRL	SAME	SAME	MIRL	MIRL	SAME	SAME
RUNWAY MARKING	PRECISION	NON-PRECISION	SAME	SAME	VISUAL	VISUAL	NON-PRECISION	NON-PRECISION
EFFECTIVE GRADIENT (%)	0.65		0.48		0.46		SAME	
MAXIMUM GRADE (%)	1.00		SAME		0.55		SAME	
RUNWAY LINE OF SIGHT VIOLATIONS	NONE		SAME		NONE		SAME	
WIND COVERAGE	16 KNOTS CROSSWIND 98.95% IMC / 98.36% AW		SAME		13 KNOT CROSSWIND 91.58% IMC / 95.31% AW		SAME	
VISUAL APPROACH AIDS	PAPI-4L	PAPI-4L; REILs	MALSF; PAPI-4L	SAME	PAPI-2L, REILs	PAPI-2L, REILs	SAME	SAME
INSTRUMENT APPROACH AIDS	ILS, LOC/DME, GPS	GPS	SAME	SAME	GPS	GPS	SAME	SAME
AIRPORT REFERENCE CODE (ARC)	D-II		SAME		B-II		SAME	
CRITICAL AIRCRAFT	HAWKER 800XP		SAME		KING AIR B-200		SAME	
CRITICAL AIRCRAFT STAGE LENGTH	2,256 MILES		SAME		1,800 NM		SAME	
RUNWAY SAFETY AREA (RSA) DIM.	6,750' X 500'		8,400' X 500'		4,603' X 150'		SAME	
RUNWAY OBJECT FREE AREA (ROFA) DIM.	6,500' X 800'		8,400' X 800'		4,603' X 500'		SAME	
OBSTACLE FREE ZONE (OFZ) DIM.[1]	5,900' X 400'		6,800' X 400'		4,403' X 400'		SAME	
RUNWAY END ELEVATIONS (MSL)	36.0 (LOW POINT)	71.8 (HIGH POINT)	36.0 (LOW POINT)	66.8 (HIGH POINT)	32.6 (LOW POINT)	51.0 (HIGH POINT)	SAME	SAME
DISPLACED THRESHOLD ELEVATIONS (MSL)	N/A	69.9	N/A	N/A	N/A	N/A	N/A	N/A
TOUCHDOWN ZONE ELEVATIONS (MSL)	57.6	71.8	41.1	66.8	46.8	51.0	SAME	SAME
THRESHOLD DISPLACEMENT LENGTH	N/A	325'	N/A	N/A	N/A	N/A	N/A	N/A
EFFECTIVE RUNWAY LENGTH	4,775'	5,175'	6,400'	6,400'	4,003'	4,003'	SAME	SAME

[1] SEE THE OFZ DIMENSION CHART ON THIS SHEET FOR THE RUNWAY 4 INNER-APPROACH AND INNER TRANSITIONAL OBSTACLE FREE ZONE DIMENSIONS.

EXISTING DECLARED DISTANCE DATA

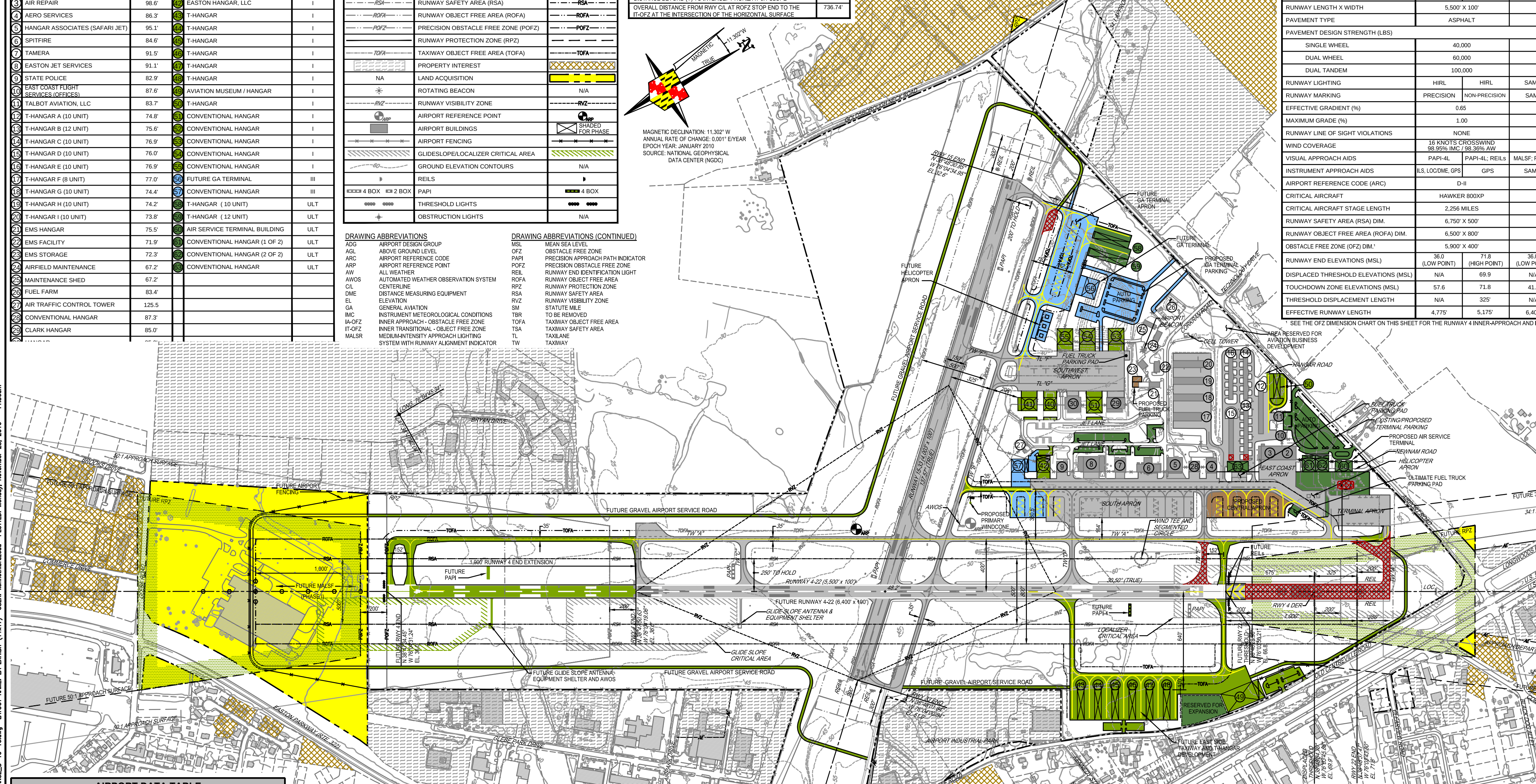
RUNWAY	TORA (FT)	TODA (FT)	ASDA (FT)	LDA (FT)
4	5,175'*	5,500'	4,775'	4,775'
22	5,500'	5,500'	5,500'	5,175'

EXISTING DECLARED DISTANCES APPROVED BY THE FAA ON JULY 13, 2007 (*REVISED JANUARY 21, 2009).

FUTURE DECLARED DISTANCE DATA

RUNWAY	TORA (FT)	TODA (FT)	ASDA (FT)	LDA (FT)
4	6,400'	6,400'	6,400'	6,400'
22	6,400'	6,400'	6,400'	6,400'

TORA = TAKEOFF RUNWAY AVAILABLE
TODA = TAKEOFF DISTANCE AVAILABLE
ASDA = ACCELERATE-STOP DISTANCE AVAILABLE
LDA = LANDING DISTANCE AVAILABLE



AIRPORT DATA TABLE

AIRPORT DATA	EXISTING	FUTURE
AIRPORT ELEVATION (MSL)	71.8	66.8
AIRPORT REFERENCE POINT (NAD 83)		
LATITUDE	38° 48' 14.97" N	38° 48' 07.33" N
LONGITUDE	76° 04' 08.36" W	76° 04' 13.46" W
MEAN MAX. TEMPERATURE OF HOTTEST MONTH	87° F	SAME
AIRPORT TERMINAL AREA NAVAIDS	GS, LOC, DME, GPS	SAME
MAGNETIC VARIATION	11.302° W	CHANGE 0.001° E/ YEAR
DATE OF MAGNETIC VARIATION	JANUARY 2010	-------
NPIAS SERVICE LEVEL	GA	SAME
STATE EQUIVALENT SERVICE ROLE	PUBLIC USE	SAME
COMBINED WIND COVERAGE		
ALL WEATHER	99.93% (16 KNOTS)	SAME
IMC	99.81% (16 KNOTS)	SAME
AIRPORT REFERENCE CODE	D-II	SAME
TAXIWAY OBJECT FREE AREA WIDTH (ADG-II)	131'	SAME
TAXILANE OBJECT FREE AREA WIDTH (ADG-II)	115'	SAME
TAXIWAY SAFETY AREA WIDTH (ADG-II)	79'	SAME
RUNWAY / TAXIWAY HOLD LINE DISTANCE	RW 4-22: 250' RW 15-33: 200'	SAME
TAXIWAY LIGHTING	MITL	SAME

RUNWAY PROTECTION ZONE DATA

EXTENDED ROFA — CENTRAL PORTION OF THE RPZ — CONTROLLED ACTIVITY AREA — A — B — C

DIMENSIONS	A	B	C
EXISTING RWY 15-33 RPZs	500'	700'	1,000
EXISTING RWY 4 RPZ	1,000	1,510'	1,700'
EXISTING RWY 22 APPROACH RPZ	500'	1,010'	1,700'
RWY 4-22 EXISTING AND FUTURE DEPARTURE RPZs	500'	1,010'	1,700
FUTURE RWY 4 APPROACH RPZ	1,000	1,750'	2,500'

NOTES

1. FAA'S APPROVAL OF THIS AIRPORT LAYOUT PLAN (ALP) REPRESENTS ACCEPTANCE OF THE GENERAL LOCATION OF THE FUTURE FACILITIES DEPICTED. DURING THE PRELIMINARY DESIGN PHASE, THE AIRPORT OWNER IS REQUIRED TO SUBMIT FOR APPROVAL THE FINAL LOCATIONS, HEIGHTS AND EXTERIOR FINISHES OF STRUCTURES. FAA'S CONCERNS ARE OBSTRUCTIONS, IMPACT ON ELECTRONIC AIDS AND ADVERSE EFFECT ON CONTROLLER VIEW OF AIRCRAFT APPROACHES AND GROUND MOVEMENTS, WHICH COULD ADVERSELY AFFECT THE SAFETY, EFFICIENCY OR UTILITY OF THE AIRPORT.
2. ALL ELEVATIONS ARE IN FEET ABOVE MEAN SEA LEVEL.
3. ALL ELEVATIONS ARE IN ACCORDANCE WITH NATIONAL MAP ACCURACY STANDARDS. SPOT ELEVATIONS AND GROUND CONTOURS ARE DERIVED FROM AERIAL PHOTOGRAMMETRY AND ARE APPROXIMATE. GROUND SURVEYS ARE RECOMMENDED TO VERIFY ACCURACY.
4. ALL LATITUDE AND LONGITUDE COORDINATES ARE NAD 83. A VERTICAL DATA IS PROVIDED IN NAVD 88.
5. BUILDING RESTRICTION LINE (BRL) IS DEPICTED ON THE TERMINAL AREA PLAN (TAP) DRAWING.
6. THERE ARE NO KNOWN PENETRATIONS TO THE EXISTING THRESHOLD SITING SURFACES AND OBSTACLE FREE ZONES.
7. ALL TREES THAT OBSTRUCT THE ATCT LINE OF SIGHT TO THE EXISTING AND FUTURE MOVEMENT AREAS AND 14 CFR PART 77 APPROACH SURFACES WILL BE MITIGATED.
8. ALP REVISION NO. 2 WAS COORDINATED VIA AIRSPACE CASE 2016-AEA-350-NRA.
9. FUTURE HANGARS 57 AND 42 WILL BE OUTSIDE OF THE 500' AWOS CRITICAL AREA BUT WITHIN THE 1000 FT. RADIUS. AT THE PROPOSED DISTANCES, THE HANGARS SHALL NOT EXCEED 50 FEET AGL PER ORDER 6560.20B SECTION 2.5 DUE TO ADVERSE EFFECTS TO THE AWOS WIND SENSOR.

DEVELOPMENT PROGRAM

PHASE I DEVELOPMENT (0-5 YEARS)	
PHASE II DEVELOPMENT (6-10 YEARS)	
PHASE III DEVELOPMENT (11-20 YEARS)	
ULTIMATE DEVELOPMENT (BEYOND 20 YEARS)	

400 0 400 800
SCALE: 1"=400' FEET

FEDERAL AVIATION ADMINISTRATION	
APPROVED	DATE
MARYLAND AVIATION ADMINISTRATION	
APPROVED	DATE
TALBOT COUNTY COUNCIL	
APPROVED	DATE

NO.	REVISIONS	BY	APP.	DATE
1	PEN AND INK CHANGE #1 - ADDED SOUTH APRON DEVELOPMENT AS EXISTING, ADDED ACQUIRED AVIGATION EASEMENTS AND UPDATED OBSTRUCTION AREAS.	KEB	JML	6/25/14
2	PEN AND INK CHANGE #2 - ADDED PREFERRED RUNWAY 4-22 CONFIGURATION FOR FUTURE 6,400' RUNWAY ADJUSTED ALL ASSOCIATED NAVAIDs AND SITED WINDCONE	KEB	JML	3/9/16

AIRPORT LAYOUT DRAWING

EASTON AIRPORT
EASTON, MARYLAND

URS CORPORATION
4 NORTH PARK DRIVE, SUITE 300
HUNT VALLEY, MD 21030
TEL: 410-785-7220
FAX: 410-785-6818

SHEET 2 OF 20

DRAWN BY: KEB SCALE: AS SHOWN
CHECKED BY: KEB DATE: JANUARY 2009

THE GREAT SEAL OF TALBOT COUNTY MARYLAND — TEMPUS PRAETERITUM ET FUTURUM

EASTON/NEWNAM FIELD AIRPORT
EASTON, MARYLAND

AECOM

AIRPORT LAYOUT DRAWING

EXHIBIT 3.1-1

from constructing any improvements or planting anything on site that would impede the navigational system at the Airport. The easement would grant the County the right to enter the property and remove the obstruction that goes above the height restriction imposed by the easement.

3.2.1 ALTERNATIVE 1 – CLEAR TO EXISTING SURFACES

Alternative 1, as depicted on **Exhibit 2.2-2** and **Table 3.2-1**, would result in the clearing of approximately 20.25 acres of trees on-Airport, 31.79 acres of trees off-Airport, and the lighting and/or removal of 13 manmade obstructions, including the linear AOA fence and Airport Road. Off-Airport obstructions are located on 16 parcels and within 4 roadway rights-of-way.

Of the 16 off-Airport parcels that contain obstructions, avigation easements are proposed on 9 parcels; the remaining 7 identified with obstructions have existing avigation easements which allow the County to remove the obstructions. For those obstructions within the roadway rights-of-way, the Airport would coordinate with the respective regulating entity for permission to remove the obstructions.

3.2.2 ALTERNATIVE 2 – CLEAR TO WITHIN 10 FEET OF SURFACES

Alternative 2 includes clearing vegetative obstructions 10 feet below the controlling 14 CFR Part 77 elevation for existing Runway 15-33. This 10 foot buffer is used to account for tree growth between the time airspace data is collected and when the trees are physically removed—a process that typically takes several years. Clearing to within 10 feet of the controlling elevation would require the additional clearing of approximately 1.79 acres of trees on-Airport and 2.98 acres of trees off-Airport. One additional off-Airport parcel contains obstructions as described above that would not be required for Alternative 1; that parcel would require an avigation easement.

Thus, when combined with the clearing of obstructions to the controlling elevation (Alternative 1), Alternative 2, as depicted on **Exhibit 2.2-2** and **Table 3.2-1**, would result in the clearing of approximately 22.04 acres of trees on-Airport, 34.77 acres of trees off-Airport, and the lighting and/or removal of 13 manmade obstructions, including the linear AOA fence and Airport Road. Off-Airport obstructions are located on 17 parcels and 4 roadway rights-of-way. Avigation easements would be required on a total of 10 off-Airport parcels (9 parcels with clearing to existing surfaces and 1 parcel with clearing within 10- eet).

TABLE 3.2-1:
PARCELS WITH OBSTRUCTIONS TO THE 14 CFR PART 77 SURFACES OF EXISTING RUNWAY 15-33

PROPERTY ID#	TAX MAP/PARCEL/LOT	EXISTING AVIGATION EASEMENT (YES OR NO)	TREE CANOPY AREAS THAT PENETRATE EXISTING RW 15-33 PART 77 SURFACE (ACRES)	MANMADE OBJECTS THAT PENETRATE EXISTING RW 15-33 PART 77 SURFACE	TREE CANOPY AREAS WITHIN 10' OF EXISTING RW 15-33 PART 77 SURFACE (ACRES)
AIRPORT		AIRPORT	20.25	1 (FENCE)	1.79
31	100/43	NO	0.01	0	0.06
32	100/46	NO	0.05	0	0.33
33	100/47/1	YES	0.06	0	0.02
34	100/47/2	YES	0.11	0	0.13
35	25/238/1	YES	4.31	1	0.12
36	25/238/2	YES	0.89	7	0.67
37*	25/238/3	YES	0.13	0	0.17
38	25/140	NO	0.80	0	0.10
39	100/48	NO	0.52	0	0.00
40	100/4724C	NO	1.72	0	0.01
41	100/1A	NO	2.07	0	0.01
46	25/161	YES	12.43	0	0.60
47	25/92	NO	6.58	0	0.03
48	25/192	NO	1.12	0	0.43
63	100/SHA	NO	0.06	0	0.00
72	25/218	NO	0.00	0	0.12
79	CENTREVILLE ROAD ROW	NO	0.00	3	0.00
82	ROUTE 322 ROW	NO	0.25	0	0.07
83	GOLDSBOROUGH NECK ROAD ROW	NO	0.67	0	0.11
85	100/47/5	YES	0.01	1	0.00
86	AIRPORT ROAD ROW	NO	0.00	ROADWAY CLEARANCE	0.00

*Parcel ID 37 is also required for both existing obstructions and obstructions within 10 feet of the 14 CFR Part 77 surfaces to Runway 4-22.

3.2.3 NO ACTION ALTERNATIVE

Under the No Action Alternative, obstructions to the 14 CFR Part 77 surfaces of existing Runway 15-33 would remain and the purpose and need of meeting the FAA design standards would not be met. No ground disturbance or impacts to environmental resources would occur. A reduction of approach minimums and/or a shortening of the usable pavement could also be incurred. In addition, under the No Action Alternative, the Airport would not be in compliance with their Grant Assurances.

3.3 REMOVAL OF OBSTRUCTIONS AND ASSOCIATED AVIGATION EASEMENTS TO THE 14 CFR PART 77 SURFACES OF EXISTING RUNWAY 4-22

This alternative is based upon the current configuration of Runway 4-22 without the extension of the runway or relocation of the threshold (see Section 3.7).

3.3.1 ALTERNATIVE 1 – CLEAR TO EXISTING SURFACES

Alternative 1, as depicted on **Exhibit 2.2-2** and **Table 3.3-1**, would result in the clearing of approximately 6.64 acres of trees on-Airport, 4.42 acres of ground on-Airport, 6.09 acres of trees off-Airport, and the lighting and/or removal of 22 manmade obstructions, including the linear AOA fence, Route 50, and Centreville Road. The off-Airport obstructions are located on 26 parcels and within 6 roadway rights-of-way.

Of the 26 parcels that contain obstructions, avigation easements are proposed on 16 parcels; 9 parcels have existing avigation easements, which allow the County to remove the obstructions, and 1 parcel (Tax Map 25, Parcel 58) is owned by the County; this parcel is also slated for fee simple acquisition. Note: this parcel (Tax May 25, Parcel 58), which was the former Black & Decker facility, was purchased by the County in January 2017. It is the County's intention to transfer the title from the County to the Airport as this parcel is also needed for the extension of Runway 4-22. For discussion purposes in this environmental evaluation, this transfer will be referred to as fee simple acquisition. Current tenants include the County, Sheriff's office, and various private businesses; all tenant leases are written as to not preclude the County from demolishing the building when funding is available for the extension of Runway 4-22. In addition, all current leases are set to expire by 2022; this is in advance of the current schedule for demolition of the building. Therefore, due to the restrictions placed on the current leases advising tenants of the proposed development, date of expiration, and need to vacate at the County's discretion, no relocation of businesses would be required and the requirements set forth in the Uniform Relocation Assistance and Real Property Acquisition Act would not be triggered.

For those obstructions within the roadway rights-of-way, the Airport would coordinate with the respective regulating entities for permission to remove or light the obstructions.

3.3.2 ALTERNATIVE 2 – CLEAR TO WITHIN 10 FEET OF SURFACES

Alternative 2 includes clearing vegetative obstructions 10 feet below the controlling 14 CFR Part 77 elevation for existing Runway 4-22. This 10 foot buffer is used to account for tree growth between the time airspace data is collected and the time that the trees are physically removed—a process that typically takes several years. Clearing to within 10 feet of the controlling elevation would require the additional clearing of approximately 0.13 acres of trees on-Airport and 4.97 acres of trees off-Airport. These obstructions are located on 18 additional parcels as compared to Alternative 1. Of these 18 additional off-Airport parcels, 2 parcels have existing avigation easements. Thus, 16 avigation easements would be required in addition to those required under Alternative 1.

Thus, when combined with the clearing of obstructions to the controlling elevation (Alternative 1), Alternative 2, as depicted on **Exhibit 2.2-2** and **Table 3.3-1**, would result in the clearing of approximately 6.77 acres of trees on-Airport, 4.42 acres of ground on-Airport, 11.06 acres of trees off-Airport, and the lighting and/or removal of 22 manmade obstructions, including the linear AOA fence, Route 50, and Centreville Road. Off-Airport obstructions are located on 44 parcels and within 6 roadway rights-of-way. Avigation easements would be required on a total of 32 off-Airport parcels (16 parcels with clearing to existing surfaces, 16 parcels with clearing within 10 feet) and 1 fee simple acquisition would be required.

TABLE 3.3-1:
PARCELS WITH OBSTRUCTIONS TO THE 14 CFR PART 77 SURFACES OF EXISTING RUNWAY 4-22

PROPERTY ID#	TAX MAP/PARCEL/LOT	EXISTING AVIGATION EASEMENT (YES OR NO)	TREE CANOPY AREAS THAT PENETRATE EXISTING RW 4-22 PART 77 SURFACE (ACRES)	MANMADE OBJECTS THAT PENETRATE EXISTING RW 4-22 PART 77 SURFACE	GROUND AREAS THAT PENETRATE EXISTING RW 4-22 PART 77 SURFACE (ACRES)	TREE CANOPY AREAS WITHIN 10' OF EXISTING RW 4-22 PART 77 SURFACE (ACRES)
AIRPORT		AIRPORT	6.64	2 (1 is NORTHEAST FENCE)	4.42	0.13
5	101/4/3	NO	0.00	0	0.00	0.05
6	101/4/2	NO	0.00	0	0.00	0.03
7	25/138	NO	0.16	0	0.00	0.07
9	101/3670/25	NO	0.01	0	0.00	0.02
10	101/3670/26	NO	0.00	0	0.00	0.02
11	101/3670/29	NO	0.01	0	0.00	0.02
16	101/4/28	NO	0.00	0	0.00	0.03
19	25/58	NO	1.78	0	0.00	2.86
21	101/142/13	NO	0.05	0	0.00	0.00
22	101/142/14	NO	0.06	0	0.00	0.00
23	101/142/15	NO	0.03	0	0.00	0.00
24	101/142/16	NO	0.03	0	0.00	0.00
25	101/142/5	NO	0.04	0	0.00	0.00
26	101/142/4	NO	0.03	0	0.00	0.00
27	100/147	NO	0.01	0	0.00	0.02
28	100/38	YES	0.29	0	0.00	0.12
29	100/40	YES	0.03	0	0.00	0.10
30	100/41	YES	0.09	4	0.00	0.07
37*	25/238/3	YES	2.05	0	0.00	0.53
42	25/48	NO	0.01	0	0.00	0.00
44	25/13	YES	0.43	0	0.00	0.08
45	25/207/13	NO	0.03	0	0.00	0.02
49	25/46/8	YES	0.16	0	0.00	0.03
50	25/214/13	NO	0.04	0	0.00	0.00
51	25/207/3	YES	0.06	0	0.00	0.01
52	25/207/5	YES	0.04	0	0.00	0.02
53	25/232/1	YES	0.00	0	0.00	0.06
54	25/232/2	NO	0.02	0	0.00	0.02
59	101/142/3	NO	0.00	0	0.00	0.02
60	101/142/17	NO	0.00	0	0.00	0.02
61	101/142/18	NO	0.00	0	0.00	0.04
62	100/42	NO	0.00	0	0.00	0.05
64	25/19	YES	0.00	0	0.00	0.10
65	25/168	NO	0.00	0	0.00	0.02
66	25/232/10	NO	0.00	0	0.00	0.02
67	25/232/3	NO	0.00	0	0.00	0.02
68	25/103	YES	0.02	0	0.00	0.12
69	25/16	NO	0.00	0	0.00	0.06
70	25/207/12	NO	0.00	0	0.00	0.02
71	25/207/15	NO	0.00	0	0.00	0.02
73	25/22	NO	0.00	0	0.00	0.02

PROPERTY ID#	TAX MAP/PARCEL/LOT	EXISTING AVIGATION EASEMENT (YES OR NO)	TREE CANOPY AREAS THAT PENETRATE EXISTING RW 4-22 PART 77 SURFACE (ACRES)	MANMADE OBJECTS THAT PENETRATE EXISTING RW 4-22 PART 77 SURFACE	GROUND AREAS THAT PENETRATE EXISTING RW 4-22 PART 77 SURFACE (ACRES)	TREE CANOPY AREAS WITHIN 10' OF EXISTING RW 4-22 PART 77 SURFACE (ACRES)
74	25/95	NO	0.00	4	0.00	0.00
75	25/18	NO	0.02	0	0.00	0.02
76	Route 322 ROW	NO	0.15	0	0.00	0.03
77	Glebe Park Drive ROW	NO	0.07	0	0.00	0.04
78	Airpark Drive ROW	NO	0.10	0	0.00	0.04
79	Centreville Road ROW	NO	0.00	1 plus ROADWAY CLEARANCE	0.00	0.00
80	Route 50 ROW	NO	0.25	9 plus ROADWAY CLEARANCE	0.00	0.13
81	Cordova Road ROW	NO	0.01	2	0.00	0.00
84	101/142/12	NO	0.01	0	0.00	0.00

Source: AECOM, 2016
*Parcel ID 37 is also required for both existing obstructions and obstructions within 10 feet of the 14 CFR Part 77 surfaces to Runway 15-33.

3.3.3 NO ACTION ALTERNATIVE

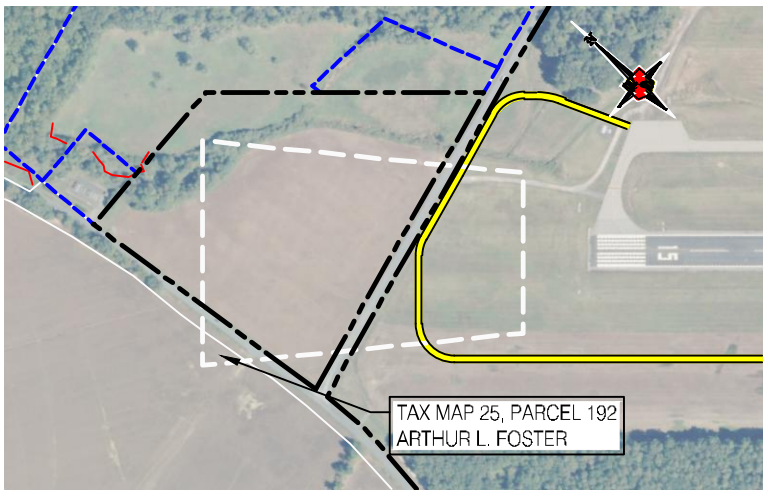
Under the No Action Alternative, obstructions to the 14 CFR Part 77 surfaces of existing Runway 4-22 would remain and the purpose and need of meeting the FAA design standards would not be met. No ground disturbance or impacts to environmental resources would occur. A potential loss of approach minimums and/or a shortening of the usable pavement could also be incurred. In addition, under the No Action Alternative, the Airport would not be in compliance with their Grant Assurances.

3.4 ACQUISITION OF PROPERTY INTERESTS WITHIN THE RPZ OF RUNWAY 15 AND RUNWAY 33

3.4.1 ALTERNATIVE 1

Under the Build Alternative, approximately 0.17 acres of a 313 acre parcel (Tax Map 25, Parcel 192) adjacent to the Airport is within the existing Runway 15 end RPZ (see **Exhibit 3.4-1**). It should be noted that the entire parcel in which this 0.17 acre portion is located is currently under a conservation easement which significantly limits development. Therefore, for the purposes within this evaluation, no further land use restriction is proposed (avigation easement or fee simple) due to the conservation easement already in place.

Portions of three parcels are located within the existing Runway 33 RPZ (see **Exhibit 3.4-1**). The portions of two of these parcels (Tax Map 25, Parcel 238, Lot 1 and Tax Map 100, Parcel 47, Lot 2) within the Runway 33 RPZ currently do not contain any structures. The County already has an avigation easement over these parcels; the easements currently restrict the height of natural and manmade structures on the property. Thus, the easements would need to be revised to restrict the physical uses of the properties within the portion located within the RPZ. The RPZ does encroach upon a building on the third parcel (Tax Map 100, Parcel 47, Lot 5); fee simple acquisition is proposed for that entire parcel. This parcel contains a business and associated warehouse/office. Acquisition and relocation of the property would be undertaken in accordance with the *Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970*, as amended.



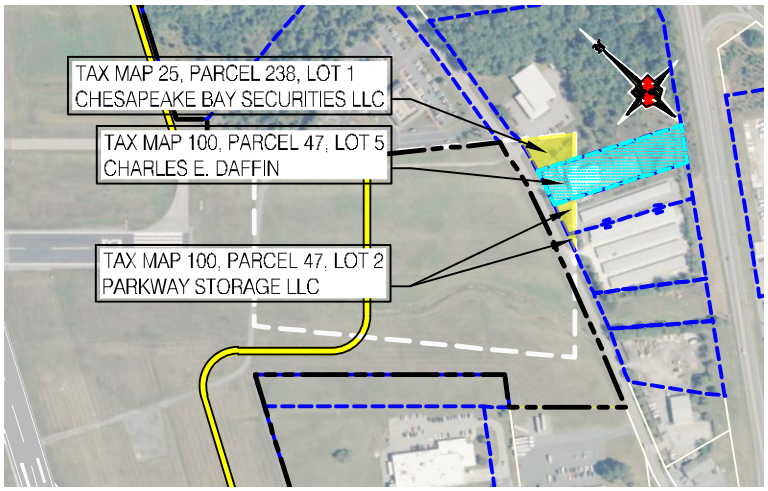
RUNWAY 15 RPZ

LEGEND

- Airport Property Line
- Existing Avigation Easement
- Proposed Property Interests - Fee Simple
- Proposed Property Interests - Avigation Easement

Drawing Source: AECOM, 2016

Source of Obstruction Data: 2015 Quantum Spatial (AGIS Aerial Survey, Date of Aerial: September 2015)



RUNWAY 33 RPZ

300 0 300 600
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EASTON/NEWNAM FIELD AIRPORT
EASTON, MARYLAND

AECOM

PROPERTY INTERESTS WITHIN THE RUNWAY 15 AND 33 PROTECTION ZONES

EXHIBIT

3.4-1

FILE NAME: U:\Projects\E\ESN\60423280\CAD\CIVIL\ESN EA EXHIBITS NOV 2016\ESN-EA-3.4-1.dwg PLOTTED: Tuesday, February 27, 2018 - 1:59pm USER: derek.hollinger

TABLE 3.4-1:
RUNWAYS 15 AND 33 PROTECTION ZONE – PROPERTY INTERESTS

PROPERTY INTEREST	AREA WITHIN RPZ (ACRES)	APPROX. AREA OF INTEREST (ACRES)	DISPOSITION	REASON
Tax Map 25, Parcel 192[1]	0.17	0.00	N/A (Existing Conservation Easement)	RW 15 RPZ
Tax Map 100, Parcel 47, Lot 2[2]	0.13	0.13	Avigation Easement (Revised)	RW 33 RPZ
Tax Map 100, Parcel 47, Lot 5[3]	0.25	1.08	Fee Simple (entire parcel)	RW 33 RPZ
Tax Map 25, Parcel 238, Lot 1[4]	0.31	0.31	Avigation Easement (Revised)	RW 33 RPZ

Source: AECOM, 2016.

[1] Tax Map 25, Parcel 192: a conservation easement was placed on this parcel in 2006; this easement is held by the Eastern Shore Land Conservancy and Maryland Environmental Trust as co-grantee. The conservation easement limits residential development and prohibits any type of commercial or industrial activities other than farming, forestry, or other open space uses. Thus, due to the extreme restrictive nature of the land uses permitted, no property interests are proposed on the 0.17 acres of this parcel that encroach upon the Runway 15 RPZ.

[2]Tax Map 100, Parcel 47, Lot 2: The County currently holds an avigation easement over this parcel of land. It is recommended that the County revise the existing easement to restrict the land uses permitted in the small portion of the property that encroaches upon the RPZ.

[3]Tax Map 100, Parcel 47, Lot 5: The County currently holds an avigation easement over this parcel of land. It is recommended that the County obtain this parcel through fee simple acquisition due to the presence of a building within the RPZ.

[4]Tax Map 25, Parcel 238, Lot 1: The County currently holds an avigation easement over this parcel of land. It is recommended that the County revise the existing easement to restrict the land uses permitted in the small portion of the property that encroaches upon the RPZ.

3.4.2 NO ACTION ALTERNATIVE

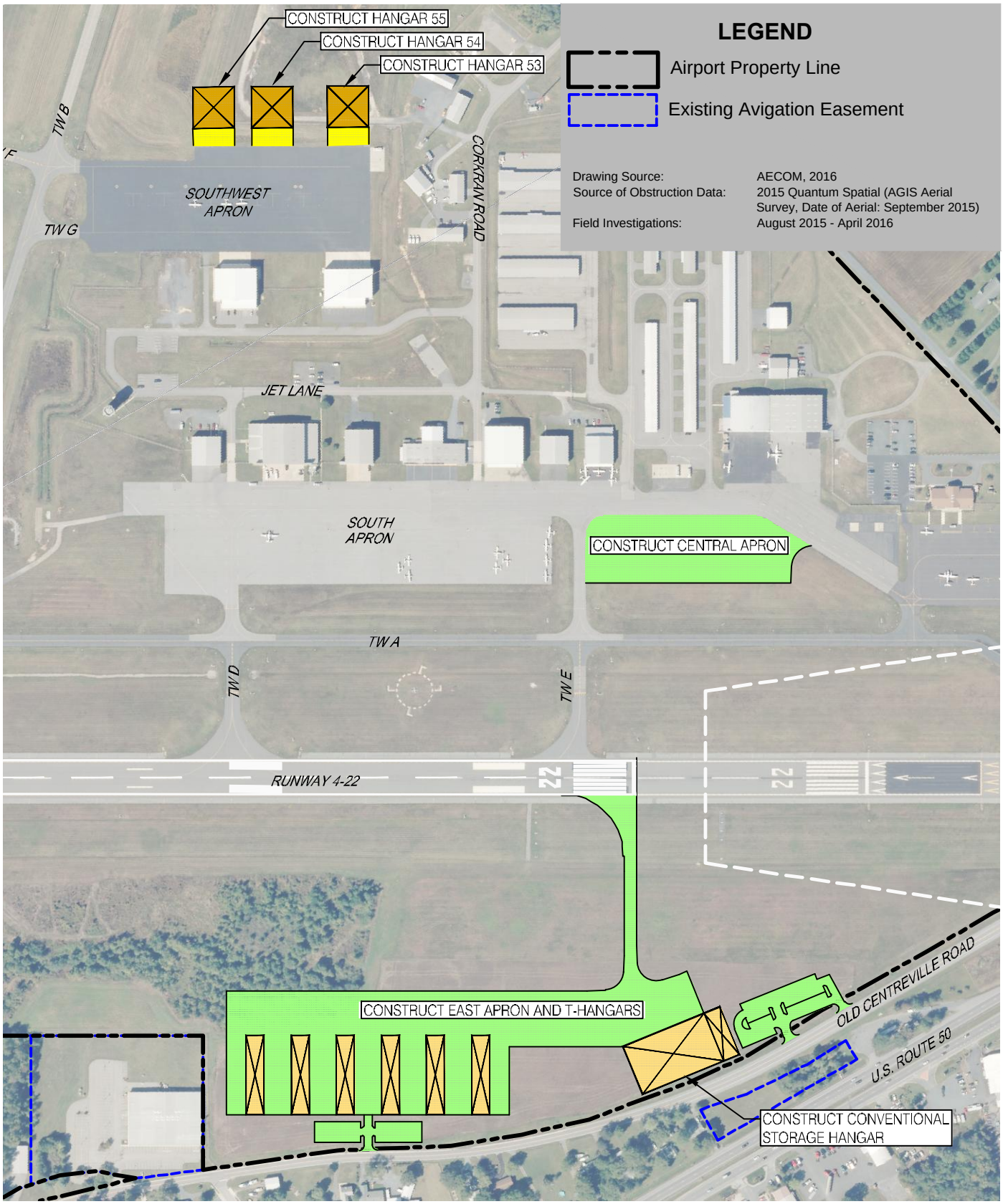
Under the No Action Alternative, non-Airport owned property located within the RPZs of Runway 15 and Runway 33 would not be acquired and/or existing easements would not be modified to prevent non-compatible land uses. Current FAA standards regarding airport control of properties located within the RPZ would not be met.

3.5 CONSTRUCTION OF AIRCRAFT STORAGE FACILITIES

3.5.1 ALTERNATIVE 1

In order to meet the current demand for both conventional and T-hangars and to provide adequate apron parking space, several projects are proposed within this alternative (see **Exhibit 3.5-1**):

- Six 10-unit T-hangar facilities and a conventional hangar with associated offices/visitors area and associated aprons/parking areas are proposed immediately east of Runway 22; this is referred to as the East Apron.
- Three conventional hangars and associated apron are proposed along the west side of the Southwest Apron. The Southwest Apron was built with the intent of constructing conventional hangars surrounding the apron.
- In order to meet the current demand for aircraft tie-down space, the Central Apron is proposed to the north of the South Apron.



200 0 200 400
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FILE NAME: U:\Projects\E\ESN\60423280\CAD\CIVIL\ESN EA EXHIBITS NOV 2016\ESN-EA-3.5-1.dwg PLOTTED: Monday, February 26, 2018 – 10:34am USER: derek.hollinger

EASTON/NEWNAM FIELD AIRPORT
EASTON, MARYLAND

AECOM

AIRCRAFT STORAGE FACILITIES

EXHIBIT

3.5-1

3.5.2 NO ACTION ALTERNATIVE

Under this alternative, additional T-hangars, conventional hangars, associated aprons, and connector taxiways would not be constructed. The stated purpose and need of providing needed aircraft storage and parking space would not be met. No ground disturbance or impacts to environmental resources would occur. No capital costs over and above budgeted maintenance would be incurred.

3.6 CONSTRUCTION OF AIRPORT SERVICE ROAD

3.6.1 ALTERNATIVE 1

Under the Build Alternative, a 20 foot wide by 18,760 linear foot vehicle service road would be constructed along the existing perimeter of the Airport (refer back to **Exhibit 1.3-1**). This road would be constructed outside of all ROFAs and RSAs with the exception of the perimeter roadway crossing the extended Runway 22 end ROFA along the northeast corner for approximately 20 linear feet; appropriate signage and marking (stop bar and "Stop/Contact ATC" sign) would be installed requiring vehicle traffic crossing this area to contact Airport Traffic Control prior to proceeding. The road would be contiguous along the perimeter of the Airport with one exception on the Runway 33 end where the roadway would connect to an existing service road.

3.6.2 NO ACTION ALTERNATIVE

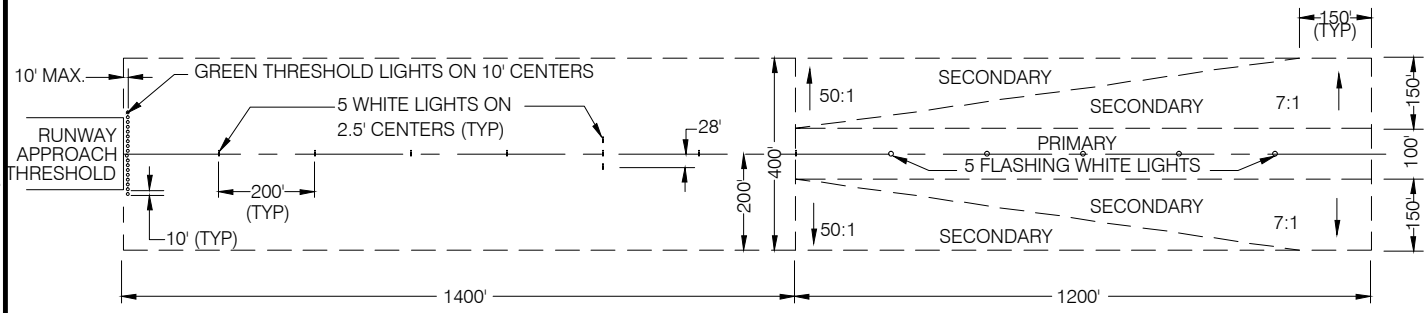
Under the No Action Alternative, no Airport Service Road would be constructed and the purpose and need of providing a contiguous access road for airfield maintenance would not be met. No ground disturbance or impacts to environmental resources would occur. No capital costs over and above budgeted maintenance would be incurred.

3.7 EXTENSION OF RUNWAY 4-22 AND ASSOCIATED PROJECTS

Five different runway extension build alternatives were developed for the extension of Runway 4-22 to a total length of 6,400 feet. The physical footprint and runway ends of each alternative are identical. The alternatives vary with respect to the type of approach lighting system (ALS) and, if required, the amount of displacement of the threshold.

3.7.1 TYPES OF APPROACH LIGHTING SYSTEMS

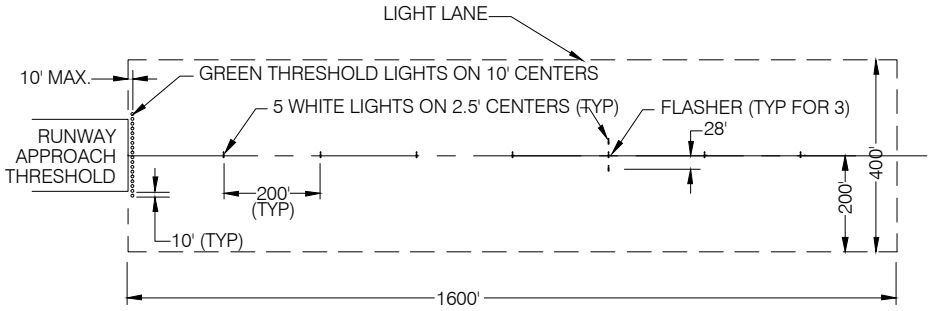
An ALS is a configuration of signal lights arranged symmetrically about the extended runway centerline, starting at the landing threshold and extending outward into the approach zone (see **Exhibit 3.7-1**). An ALS provides the basic means to transition from instrument flight to visual flight for landing. The Medium Intensity Approach Lighting System (MALS) portion of this system consists of a series of steady-burning runway threshold lights installed ten feet off and ten feet on center across the width of the runway, six steady-burning single light bars with five white light fixtures attached on each bar, and one triple light bar array that consists of three single light bars with five steady burning white light fixtures attached to each bar. The MALS lights have three intensity settings (high, medium, low). The approach light plane is 400 feet wide centered on the extended runway centerline. The MALS component is approximately 1,400 feet long.



NOTE: MAINTAIN MINIMUM OF 15' VERTICAL CLEARANCE FROM LIGHTS TO ROADWAY

MEDIUM INTENSITY APPROACH LIGHTING SYSTEM WITH RUNWAY ALIGNMENT INDICATOR LIGHTS (MALSR) DETAILS

N.T.S.



NOTE: MAINTAIN MINIMUM OF 15' VERTICAL CLEARANCE FROM LIGHTS TO ROADWAY

MEDIUM INTENSITY APPROACH LIGHTING SYSTEM WITH SEQUENCED FLASHING LIGHTS (MALSF) DETAILS

N.T.S.

EASTON/NEWNAM FIELD AIRPORT
EASTON, MARYLAND

AECOM

MALSR AND MALSF DETAILS

EXHIBIT

3.7-1

FILE NAME: U:\Projects\E\ESN\60423280\CAD\CIVIL\ESN EA EXHIBITS NOV 2016\ESN-EA-3.7-1.dwg PLOTTED: Wednesday, February 28, 2018 - 1:18pm USER: derek.hollinger

There are various types of components of a MALS. Herein, the Runway Alignment Indicator Lights (RAIL or "R") and Sequenced Flashers ("F") components of the lighting system are discussed. For a Medium Intensity Approach Lighting System with Runway Alignment Indicator Lights (MALSR), the RAIL or "R" consists of five sequenced flashing lights (strobe lights) located beyond the MALS portion of the system and features one light per station. The first RAIL station is located approximately 200 feet past the last MALS light bar. For a Medium Intensity Approach Lighting System with Sequenced Flashers (MALSF), the Sequenced Flashers ("F") component of the lighting system consists of the same configuration as the MALS with three sequenced flashers with one added to each the first three centerline bars of the system an aircraft sees on approach.

With the implementation of a MALSR, the approach minimum would be not lower than ½ mile and the approach RPZ would have a length of 2,500 feet, inner width of 1,000 feet and an outer width of 1,750 feet. Through the implementation of a MALSF, the approach minimum would be not lower than ¾ mile and the RPZ would have a length of 1,700 feet, inner width of 1,000 feet, and an outer width of 1,510 feet.

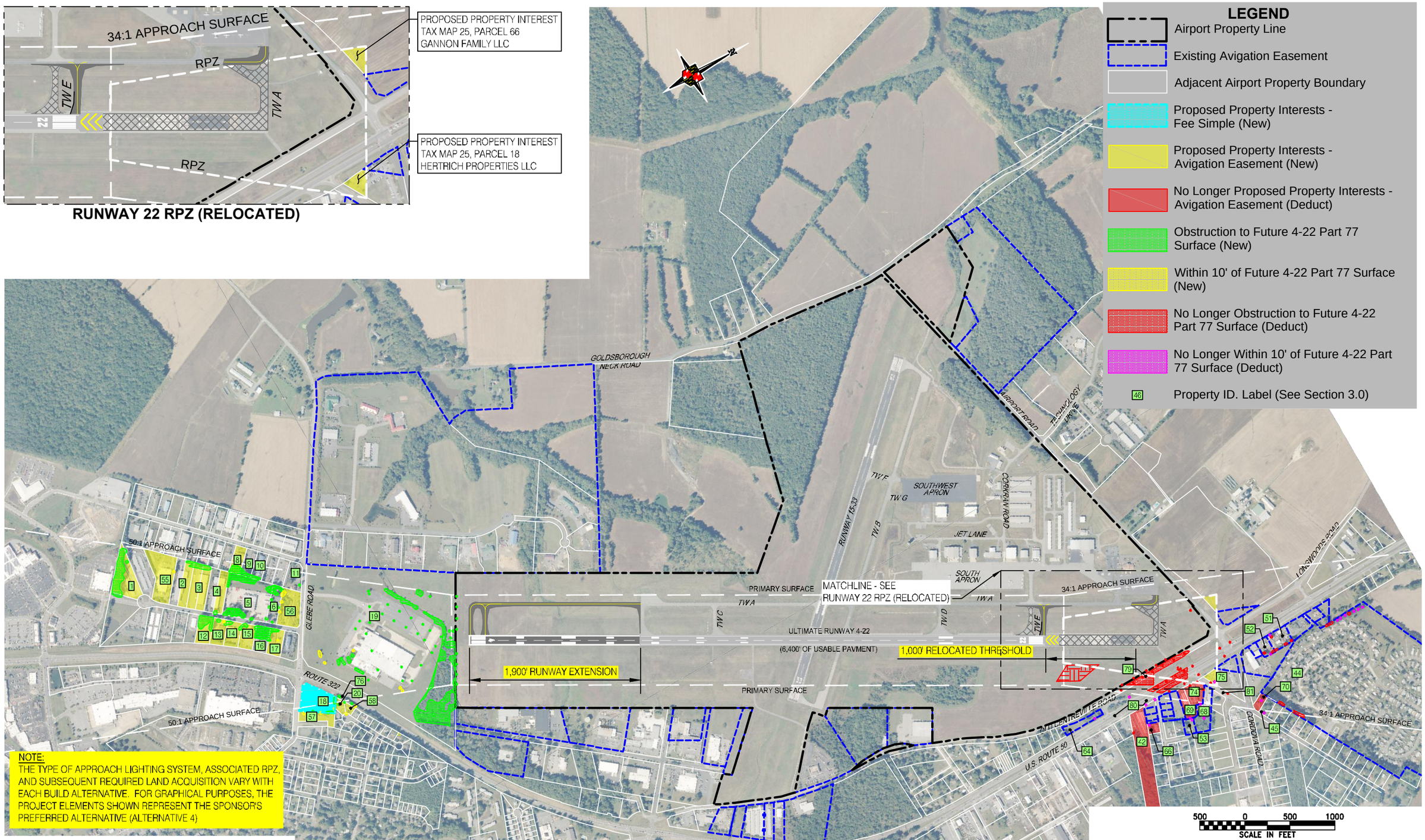
Thus, the type of approach lighting system (MALSF or MALSR) will determine the size of the RPZ; the size of the RPZ impacts the number of parcels required for fee-simple acquisition. Therefore, for each alternative studied in detail, the environmental impacts of each will be discussed in terms of the amount of parcels and subsequent fee simple acquisitions that would be required for the resultant RPZ.

3.7.2 CONNECTED ACTIONS TO EXTENSION OF RUNWAY 4-22

With an identical physical footprint and runway ends, cumulatively, the extension of Runway 4-22, regardless of the alternative selected, includes the following components (see **Exhibit 3.7-2**):

- Shift and extend Runway 4-22 to the south for a total length of 6,400 feet
  - Extend Runway 4 to the south 1,900 feet
  - Extend Taxiway A to the south 1,900 feet
  - Discontinue use of 1,000 feet of the northern end of Runway 4-22 and Taxiway A and demolish pavement (see subsection below, *Relocated Threshold*)
  - Construct connecting and bypass taxiways to the new Runway 4 threshold
  - Construct new taxiway connector to the new relocated Runway 22 end threshold and demolish existing Taxiway E connector
  - Rehabilitate existing Runway 4-22 and existing Taxiway A
  - Remove existing Runway 4-22 shoulder pavement
  - Construct a standard RSA, ROFA, TSA, and TOFA for Runway 4-22 and Taxiway A.
  - Acquire avigation easements and remove and/or light obstructions to the 14 CFR Part 77 surface for future Runway 4-22 (see subsection below, *Removal of Obstructions and Associated Avigation Easements*)
  - Acquire property interests within the future Runway 4 RPZ and Runway 22 RPZ
  - Install airfield fence
  - Revise Instrument Flight Rules (IFR) approach procedures to account for the shift and extension
  - Install and/or relocate navigational aids:
    - Install an Approach Lighting System (ALS) on Runway 4
    - Install medium-intensity runway and taxiway edge lights along the new sections of runway and taxiway

RUNWAY 22 RPZ (RELOCATED)



NOTE:
THE TYPE OF APPROACH LIGHTING SYSTEM, ASSOCIATED RPZ, AND SUBSEQUENT REQUIRED LAND ACQUISITION VARY WITH EACH BUILD ALTERNATIVE. FOR GRAPHICAL PURPOSES, THE PROJECT ELEMENTS SHOWN REPRESENT THE SPONSOR'S PREFERRED ALTERNATIVE (ALTERNATIVE 4)

THE GREAT SEAL OF TALBOT COUNTY MARYLAND

EASTON/NEWNAM FIELD AIRPORT
EASTON, MARYLAND

AECOM

COMMON PROJECT ELEMENTS TO EXTENSION OF RUNWAY 4-22

EXHIBIT
3.7-2

FILE NAME: U:\Projects\E\ESN\60423280\CAD\CIVIL\ESN EA EXHIBITS NOV 2016\ESN-EA-3.7-2.dwg

- Relocate Runway 4 and Runway 22 threshold lights and Precision Approach Path Indicator (PAPI) lights for Runway 4 and Runway 22
- Install airfield signage and marking for the new sections of runway and taxiway
- Install Runway End Identifier Lights (REILs) on Runway 22
- Relocate existing Runway 4 Glideslope to coincide with new approach threshold

3.7.2.1 Relocated Threshold

Common to each runway extension alternative is the relocation of the Runway 22 end 1,000 feet south in order to create the standard 1,000 foot RSA and ROFA beyond the Runway 22 end and to allow for the required 15 foot of 14 CFR Part 77 clearances over Centreville Road and Route 50 (see **Exhibit 3.7-2**). With the relocation of the threshold, the resultant RPZ for the Runway 22 end (length of 1,700 feet, inner width of 500 feet and an outer width of 1,010 feet) would encroach upon a small portion of two parcels of land (see **Table 3.7-1**). Since no structures are located within these portions, avigation easements are proposed to restrict the land use within this area.

TABLE 3.7-1:
PROPERTY INTERESTS FOR STANDARD RSA AND OFA OF RUNWAY 22

PROPERTY INTEREST	AREA WITHIN RPZ (ACRES)	APPROX. AREA OF INTEREST (ACRES)	DISPOSITION	REASON
Tax Map 25, Parcel 66	0.42	0.42	Avigation Easement	Runway 22 RPZ
Tax Map 25, Parcel 18	0.42	0.42	Avigation Easement	Runway 22 RPZ

Source: AECOM, 2016.

3.7.2.2 Removal of Obstructions and Associated Avigation Easements

As mentioned above, since the footprint and runway end for each of the five different runway extension build alternatives are identical, the 14 CFR Part 77 surfaces and associated obstructions of each runway alternative are also identical as discussed herein. The alternatives analyzed in this section are related to the extension of Runway 4-22 that would result from the following combined actions: 1) relocation of the Runway 22 end threshold 1,000 feet to the south to provide standard RSA (See Section 2.2.5.1) and 2) extension of the Runway 4 end. In Section 3.3, existing obstructions to the current runway configuration are discussed. Thus, if the extension was not to occur and the runway would not be shifted, with a Modification of Standards left in place, the existing obstructions would still need to be addressed. However, when the runway is shifted with the extension, “new” obstructions (caused by the extension) would be removed. Obstructions that are currently penetrating but would no longer be penetrating with a threshold shift would not need to be removed and are “deducted” from the analysis.

Alternative 1 analyzes only the obstructions that are new or deducted as a result of the proposed shift and extension of Runway 4-22. Alternative 1 does not re-analyze obstructions that remain obstructions to future Runway 4-22 Part 77 surfaces where previously analyzed in Section 3.3 as obstructions to the existing Part 77 surfaces of Runway 4-22.

Alternative 2 analyzes only the vegetation within 10 feet that are new or deducted as a result of the proposed shift

and extension of Runway 4-22. Alternative 2 does not re-analyze vegetation within 10 feet that remain within 10 feet of future Runway 4-22 Part 77 surfaces where previously analyzed in Section 3.3 as vegetation within 10 feet of the existing Part 77 surfaces of Runway 4-22.

Deducted Obstructions: As a result of the relocation of the Runway 22 threshold**,** 1.02 acres of ground on-Airport, 0.29 acres of tree obstructions off-Airport, 0.27 acres of vegetation within 10 feet off-Airport, and 18 manmade obstructions, including the linear AOA fence, Route 50, and Centreville Road, for existing Runway 4-22 as identified in **Table 3.3-1** would not be required to be removed, relocated, or lowered. This is summarized in **Table 3.7-2** as "deductions" (i.e. -0.02). This results in a deduction of 7 parcels (Parcel IDs 42, 51, 52, 66, 69, 70, and 74) and 2 right-of-ways (Parcel IDs 79 and 81) originally required to meet 14 CFR Part 77 for existing Runway 4-22 and 5 less avigation easements (1 parcel with clearing to existing surfaces, 4 parcels with clearing within 10 feet) required (Parcel IDs 42, 66, 69, 70, and 74) for those respective parcels.

Alternative 1 –Clear to Existing Surfaces (New): Alternative 1, as depicted on **Exhibit 3.7-2** and **Table 3.7-2**, would result in the additional (new) clearing of approximately 8.76 acres of trees off-Airport and the lighting and/or removal of 21 manmade obstructions (1 of which is the linear Southwest AOA fence). The off-Airport obstructions are located on 21 parcels.

Of the 21 parcels that contain obstructions, 13 parcels are new parcels that were not identified as parcels containing obstructions or vegetation within 10 feet of the existing 14 CFR Part 77 surfaces of Runway 4-22. Of these 13 parcels, avigation easements are proposed for 12; 1 parcel (Tax Map 101, Parcel 264) is slated for fee simple acquisition. Note: this parcel (Tax Map 101, Parcel 264) is also needed for the extension of Runway 4-22. Currently, it is zoned as commercial property, but there are no improvements on the site and it exists as a farm field; thus, no relocation of businesses would be required.

Alternative 2 –Clear to within 10 Feet of Surfaces (New): Alternative 2 includes clearing vegetative obstructions 10 feet below the controlling 14 CFR Part 77 elevation for future Runway 4-22. Clearing to within 10 feet of the controlling elevation would require the additional (new) clearing of approximately 0.38 acres of trees off-Airport. These obstructions are located on 4 additional parcels as compared to Alternative 1. Of these 4 additional off-Airport parcels, 3 are new parcels that were not identified as parcels containing obstructions or vegetation within 10 feet of the existing 14 CFR Part 77 surfaces of Runway 4-22. Avigation easements are proposed on all 3 parcels.

Thus, when combined with the clearing of obstructions to the controlling elevation (Alternative 1), Alternative 2, as depicted on **Exhibit 3.7-2** and **Table 3.7-2**, would result in the additional (new) clearing of approximately 9.14 acres of trees off-Airport and the lighting and/or removal of 21 manmade obstructions (1 of which is the linear Southwest AOA fence). Off-Airport obstructions are located on 16 parcels that were not identified as parcels containing obstructions or vegetation within 10 feet of the existing 14 CFR Part 77 surfaces of Runway 4-22 (refer back to **Section 3.3**). Avigation easements would be required on a total of 15 off-Airport parcels (12 parcels with clearing to existing surfaces, 3 parcels with clearing within 10 feet) and 1 fee simple acquisition would be required.

TABLE 3.7-2:
PARCELS WITH OBSTRUCTIONS TO THE 14 CFR PART 77 SURFACES OF FUTURE RUNWAY 4-22 (NEW AND DEDUCTED)

PROPERTY ID#	TAX MAP/PARCEL/LOT	EXISTING AVIGATION EASEMENT (YES OR NO)	TREE CANOPY AREAS THAT PENETRATE FUTURE RW 4-22 PART 77 SURFACE (ACRES)	MANMADE OBJECTS THAT PENETRATE FUTURE RW 4-22 PART 77 SURFACE	GROUND AREAS THAT PENETRATE FUTURE RW 4-22 PART 77 SURFACE (ACRES)	TREE CANOPY AREAS WITHIN 10' OF FUTURE RW 4-22 PART 77 SURFACE (ACRES)
AIRPORT		AIRPORT	0.00	+1 (SOUTHWEST FENCE) -2 (1 was NORTHEAST FENCE)	-1.02	0.00
1	101/4/17	NO	1.05	0	0.00	0.00
2	101/4/12	NO	0.08	0	0.00	0.00
3	101/4/10	NO	0.22	0	0.00	0.00
4	101/4/8	NO	0.04	0	0.00	0.00
5	101/4/3	NO*	1.01	0	0.00	0.00
6	101/4/2	NO*	0.23	0	0.00	0.00
8	101/3670/24	NO	0.24	0	0.00	0.00
9	101/3670/25	NO*	0.14	0	0.00	0.00
10	101/3670/26	NO*	0.09	0	0.00	0.00
11	101/3670/29	NO*	0.02	0	0.00	0.00
12	101/4/24	NO	0.45	0	0.00	0.00
13	101/4/25	NO	0.07	0	0.00	0.02
14	101/4/26	NO	0.08	0	0.00	0.00
15	101/4/27	NO	0.08	0	0.00	0.00
16	101/4/28	NO*	0.52	0	0.00	0.00
17	101/4/29	NO	0.11	0	0.00	0.01
18	101/264	NO	0.11	0	0.00	0.03
19	25/58	NO*	4.12	20 (1 is BUILDING)	0.00	0.11
20	101/142/9	NO	0.03	0	0.00	0.00
42**	25/48	NO*	-0.01	0	0.00	0.00
44	25/13	YES*	-0.13	0	0.00	-0.06
45	25/207/13	NO*	0.00	0	0.00	-0.01
51**	25/207/3	YES*	-0.06	0	0.00	-0.01
52**	25/207/5	YES*	-0.04	0	0.00	-0.02
53	25/232/1	YES*	0.00	0	0.00	-0.01
55	101/4/15	NO	0.00	0	0.00	0.02
56	101/4/1	NO	0.00	0	0.00	0.10
57	101/263	NO	0.00	0	0.00	0.02
58	101/142/10	NO	0.01	0	0.00	0.02
64	25/19	YES*	0.00	0	0.00	-0.02
66**	25/232/10	NO*	0.00	0	0.00	-0.02
68	25/103	YES*	-0.02	0	0.00	-0.02
69**	25/16	NO*	0.00	0	0.00	-0.06
70**	25/207/12	NO*	0.00	0	0.00	-0.02
74**	25/95	NO*	0.00	-4	0.00	0.00
75	25/18	NO*	-0.02	0	0.00	0.00
76	Route 322 ROW	NO*	0.06	0	0.00	0.04
79**	Centreville Road ROW	NO*	0.00	-1 and ROADWAY	0.00	0.00

PROPERTY ID#	TAX MAP/PARCEL/LOT	EXISTING AVIGATION EASEMENT (YES OR NO)	TREE CANOPY AREAS THAT PENETRATE FUTURE RW 4-22 PART 77 SURFACE (ACRES)	MANMADE OBJECTS THAT PENETRATE FUTURE RW 4-22 PART 77 SURFACE	GROUND AREAS THAT PENETRATE FUTURE RW 4-22 PART 77 SURFACE (ACRES)	TREE CANOPY AREAS WITHIN 10' OF FUTURE RW 4-22 PART 77 SURFACE (ACRES)
				CLEARANCE		
80	Route 50 ROW	NO*	0.00	-9 and ROADWAY CLEARANCE	0.00	-0.02
81**	Cordova Road ROW	NO*	-0.01	-2	0.00	0.00
84	101/142/12	NO*	0.00	0	0.00	0.01

Source: AECOM, 2016
*Parcel previously analyzed in Section 3.3 with obstructions to the 14 CFR Part 77 Surfaces of existing Runway 4-22.
**Parcel as previously analyzed in Section 3.3 with obstructions to the 14 CFR Part 77 Surfaces of existing Runway 4-22 is no longer required after relocating Runway 22 threshold.

Cumulatively, as depicted on **Exhibit 1.3-1** and **Table 3.7-3**, combining the clearing of obstructions and vegetation within 10 feet of the existing 14 CFR Part 77 surfaces of Runway 4-22 as depicted on **Exhibit 2.2-2** and **Table 3.3-1** and the clearing of obstructions and vegetation within 10 feet of the future 14 CFR Part 77 surfaces of Runway 4-22 as depicted on **Exhibit 3.7-2** and **Table 3.7-2** (new and deduct), the combined clearing would result in the clearing of approximately 6.77 acres of trees on-Airport, 3.40 acres of ground on-Airport, 19.64 acres of trees off-Airport, and the lighting and/or removal of 25 manmade obstructions (1 of which is the linear Southwest AOA fence). Off-Airport obstructions are located on 53 parcels and within 4 roadway rights-of-way. Avigation easements would be required on a total of 42 off-Airport parcels (27 parcels with clearing to existing surfaces, 15 parcels with clearing within 10 feet), 2 fee simple acquisitions would be required, and 9 parcels have existing easements.

TABLE 3.7-3:
PARCELS WITH OBSTRUCTIONS TO THE 14 CFR PART 77 SURFACES OF FUTURE RUNWAY 4-22 (COMBINED)

PROPERTY ID#	TAX MAP/PARCEL/LOT	EXISTING AVIGATION EASEMENT (YES OR NO)	TREE CANOPY AREAS THAT PENETRATE FUTURE RW 4-22 PART 77 SURFACE (ACRES)	MANMADE OBJECTS THAT PENETRATE FUTURE RW 4-22 PART 77 SURFACE	GROUND AREAS THAT PENETRATE FUTURE RW 4-22 PART 77 SURFACE (ACRES)	TREE CANOPY AREAS WITHIN 10' OF FUTURE RW 4-22 PART 77 SURFACE (ACRES)
AIRPORT		AIRPORT	6.64	1 (SOUTHWEST FENCE)	3.40	0.13
1	101/4/17	NO	1.05	0	0.00	0.00
2	101/4/12	NO	0.08	0	0.00	0.00
3	101/4/10	NO	0.22	0	0.00	0.00
4	101/4/8	NO	0.04	0	0.00	0.00
5	101/4/3	NO	1.01	0	0.00	0.05
6	101/4/2	NO	0.23	0	0.00	0.03
7	25/138	NO	0.16	0	0.00	0.07
8	101/3670/24	NO	0.24	0	0.00	0.00
9	101/3670/25	NO	0.15	0	0.00	0.02
10	101/3670/26	NO	0.09	0	0.00	0.02
11	101/3670/29	NO	0.03	0	0.00	0.02
12	101/4/24	NO	0.45	0	0.00	0.00
13	101/4/25	NO	0.07	0	0.00	0.02
14	101/4/26	NO	0.08	0	0.00	0.00
15	101/4/27	NO	0.08	0	0.00	0.00

PROPERTY ID#	TAX MAP/PARCEL/LOT	EXISTING AVIGATION EASEMENT (YES OR NO)	TREE CANOPY AREAS THAT PENETRATE FUTURE RW 4-22 PART 77 SURFACE (ACRES)	MANMADE OBJECTS THAT PENETRATE FUTURE RW 4-22 PART 77 SURFACE	GROUND AREAS THAT PENETRATE FUTURE RW 4-22 PART 77 SURFACE (ACRES)	TREE CANOPY AREAS WITHIN 10' OF FUTURE RW 4-22 PART 77 SURFACE (ACRES)
16	101/4/28	NO	0.52	0	0.00	0.03
17	101/4/29	NO	0.11	0	0.00	0.01
18	101/264	NO	0.11	0	0.00	0.03
19	25/58	NO	5.90	20 (1 is BUILDING)	0.00	2.97
20	101/142/9	NO	0.03	0	0.00	0.00
21	101/142/13	NO	0.05	0	0.00	0.00
22	101/142/14	NO	0.06	0	0.00	0.00
23	101/142/15	NO	0.03	0	0.00	0.00
24	101/142/16	NO	0.03	0	0.00	0.00
25	101/142/5	NO	0.04	0	0.00	0.00
26	101/142/4	NO	0.03	0	0.00	0.00
27	100/147	NO	0.01	0	0.00	0.02
28	100/38	YES	0.29	0	0.00	0.12
29	100/40	YES	0.03	0	0.00	0.10
30	100/41	YES	0.09	4	0.00	0.07
37*	25/238/3	YES	2.05	0	0.00	0.53
44	25/13	YES	0.30	0	0.00	0.02
45	25/207/13	NO	0.03	0	0.00	0.01
49	25/46/8	YES	0.16	0	0.00	0.03
50	25/214/13	NO	0.04	0	0.00	0.00
53	25/232/1	YES	0.00	0	0.00	0.05
54	25/232/2	NO	0.02	0	0.00	0.02
55	101/4/15	NO	0.00	0	0.00	0.02
56	101/4/1	NO	0.00	0	0.00	0.10
57	101/263	NO	0.00	0	0.00	0.02
58	101/142/10	NO	0.01	0	0.00	0.02
59	101/142/3	NO	0.00	0	0.00	0.02
60	101/142/17	NO	0.00	0	0.00	0.02
61	101/142/18	NO	0.00	0	0.00	0.04
62	100/42	NO	0.00	0	0.00	0.05
64	25/19	YES	0.00	0	0.00	0.08
65	25/168	NO	0.00	0	0.00	0.02
67	25/232/3	NO	0.00	0	0.00	0.02
68	25/103	YES	0.00	0	0.00	0.10
71	25/207/15	NO	0.00	0	0.00	0.02
73	25/22	NO	0.00	0	0.00	0.02
75	25/18	NO	0.00	0	0.00	0.02
76	Route 322 ROW	NO	0.21	0	0.00	0.07
77	Glebe Park Drive ROW	NO	0.07	0	0.00	0.04
78	Airpark Drive ROW	NO	0.10	0	0.00	0.04
80	Route 50 ROW	NO	0.25	0	0.00	0.11
84	101/142/12	NO	0.01	0	0.00	0.01

Source: AECOM, 2016

*Parcel ID 37 is also required for both existing obstructions and obstructions within 10 feet of the 14 CFR Part 77 surfaces to Runway 15-33.

3.7.3 PRIOR ALTERNATIVES ANALYSIS OF RUNWAY EXTENSION ALTERNATIVES

As discussed in **Section 2.2.5**, during preparation of the Draft Environmental Assessment for the Five-Year CIP in 2008, additional planning analyses were required to revisit alternatives involving an extension to Runway 4-22, which were initially evaluated in the RSA Study completed in 2003. As a result, the *Runway 4-22 Alternatives Analysis* was completed in 2008 involving six initial runway length alternatives (see **Appendix A**):

- **Alternative 1**: Provides a 5,600 foot runway without the use of declared distances. The Runway 4 end is extended 1,100 feet and the Runway 22 end is relocated 1,000 feet.
- **Alternative 2**: Provides a 6,400 foot runway through the use of declared distances on the Runway 4 end. The Runway 4 end is extended 1,896 feet, with an 800 foot displaced threshold, and the Runway 22 end is relocated 1,000 feet.
- **Alternative 3**: Provides a 6,000 foot runway without the use of declared distances and incorporates an EMAS on the Runway 22 end. The Runway 4 end is extended 1,100 feet and the Runway 22 end is displaced 600 feet.
- **Alternative 4**: Provides a 6,800 foot runway through the use of declared distances on both runway ends. The Runway 4 end is extended 1,100 feet and an additional 800 feet of pavement is added for use during takeoff. The Runway 22 end is relocated 1,000 feet.
- **Alternative 5**: Provides 6,492 feet of usable runway. The Runway 4 end is extended 1,896 feet with a displaced threshold of 800 feet
- **Alternative 6**: Provides a 7,396 foot runway through the use of declared distances on both runway ends. Runway 4 is extended 1,100 feet with an additional 800 feet for use during takeoff. The threshold for Runway 22 will remain in its current location.

A two-tier evaluation process was used in this analysis. The purpose of the Tier 1 evaluation was to reveal any "fatal flaws" which would immediately eliminate a particular alternative from further detailed consideration. The Tier 1 criteria process involved assessing each of the original six alternatives for their ability to adequately comply with the following restrictive FAA criteria with minimal off-Airport effects: Runway Visibility Zone (RVZ); Roadway Clearance (14 CFR Part 77 requirements); ATCT Visibility; Primary Surface; and Localizer Critical Area.

Despite the use of an Engineered Materials Arresting System (EMAS) with Alternative 3 and declared Distances on Alternative 5, ROFA requirements could be met; therefore, these Alternatives were not recommended for further Tier 2 analysis due to insufficient roadway clearances of the Runway 22 end 14 CFR Part 77 approach surfaces. ROFA requirements were not met on Alternative 6 either; because of this, it was also not recommended for further Tier 2 analysis. Under Alternatives 3, 4 and 6, Old Centreville Road is an obstruction to the approach surface of the Runway 22 end. With Alternative 6, the approach surface on the Runway 22 end did not clear Old Centreville Road or US Route 50 by 15 feet, thereby making both roads obstructions. However, three alternatives (Alternatives 1, 2, and 5) successfully met all five Tier 1 evaluation criteria and were recommended for further Tier 2 analysis, which included: environmental considerations (wetlands, DFS habitat, compliance to the Maryland Forest Conservation Act); runway length requirements; land acquisition needs; 14 CFR Part 77 obstruction considerations; and compatibility with other Airport projects. Note: All of the Build Alternatives addressed in this prior planning analysis included the installation of a MALSR for further discussion).

TABLE 3.7-4:
PRIOR RUNWAY EXTENSION ALTERNATIVES ANALYSIS RATINGS

	Alternative 1	Alternative 2	Alternative 5
Environmental Considerations	3*	3*	3*
Runway Length (Feet)	1	4	4
Land Acquisition (Number of Parcels)	4	3	2
14 CFR Part 77 Obstructions (acres)	4	3	3
Compatibility with other Airport Projects	5	5	5
Total Score:	**17**	**18**	**17**

Source: URS Corporation (2008).
*Since the tiered analysis rated the alternatives on a scale from 1 to 5, a rating of 3 was selected for all three alternatives given their similar degree of impacts.

Per the *Runway 4-22 Alternatives Analysis*, the following impacts were calculated:

TABLE 3.7-5:
PRIOR RUNWAY EXTENSION ALTERNATIVES IMPACTS

	Wetlands	DFS Habitat	Forested Areas	Tree/Brush Obstructions
Alternative 1	7.2 acres	5.8 acres	5.6 acres	25.9 acres
Alternative 2:	7.2 acres	5.8acres	5.6 acres	30.2 acres
Alternative 5	7.2 acres	5.8 acres	5.6 acres	30.7 acres

Source: URS Corporation (2008).

3.7.4 CURRENT ALTERNATIVES ANALYSIS

As discussed in **Section 2.2.5**, based on the recent runway length justification analysis, a runway length of 6,400 feet is needed at ESN. Thus, Alternative 2 is the only viable alternative from the prior planning analysis retained for additional evaluation in this Environmental Assessment. This Alternative is referred to as "Alternative 2" and is evaluated herein

As mentioned previously, the physical footprint and runway ends of each build alternative are identical. The alternatives vary with respect to the type of approach lighting system (ALS) and, if required, the amount of displacement of the threshold.

3.7.4.1 Alternative 1

Alternative 1 would provide a 6,400 foot runway through the use of declared distances while employing the use of a MALSR to achieve minimums not lower than ½ mile visibility to the Runway 4 end approach (see **Exhibit 3.7-3**). This alternative extends the Runway 4 end 1,900 feet with an 800 foot displaced approach threshold. The declared distances with Alternative 1 would be as follows:

LEGEND

- MALSR
- Proposed Property Interests - Fee Simple
- Proposed Property Interests - Avigation Easement
- Existing Airport Property Line
- Existing Avigation Easement
- 25/58/1 Tax Map/Parcel/Lot

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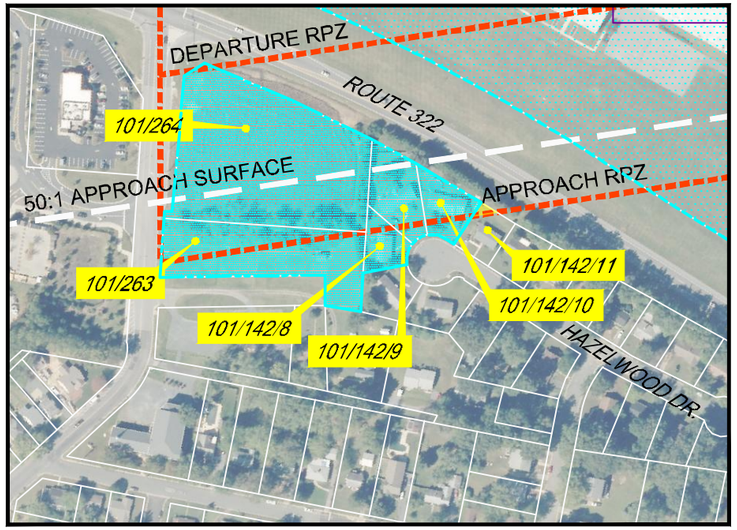
SCALE IN FEET

Date of Aerial: September 2015



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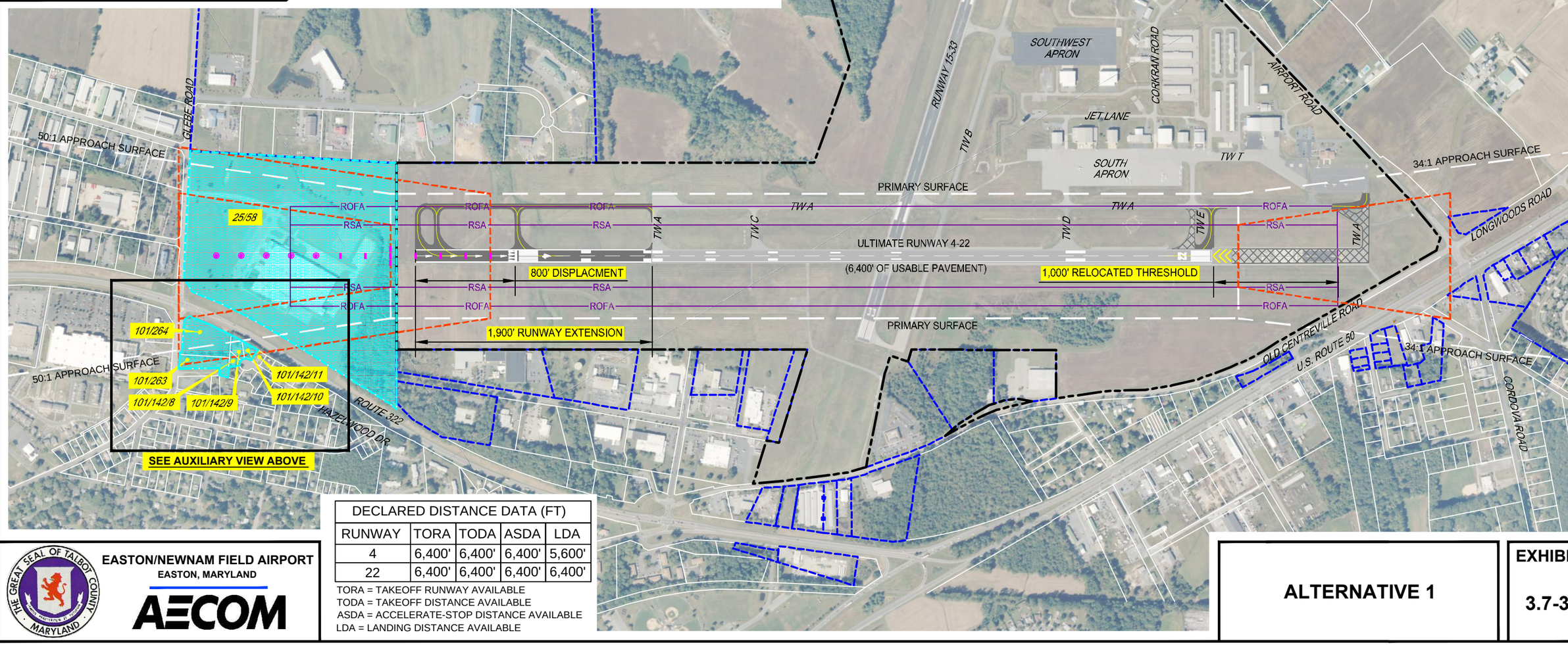


DECLARED DISTANCE DATA (FT)				
RUNWAY	TORA	TODA	ASDA	LDA
4	6,400'	6,400'	6,400'	5,600'
22	6,400'	6,400'	6,400'	6,400'

TORA = TAKEOFF RUNWAY AVAILABLE
TODA = TAKEOFF DISTANCE AVAILABLE
ASDA = ACCELERATE-STOP DISTANCE AVAILABLE
LDA = LANDING DISTANCE AVAILABLE

THE GREAT SEAL OF TALBOT COUNTY MARYLAND

EASTON/NEWNAM FIELD AIRPORT
EASTON, MARYLAND

AECOM

ALTERNATIVE 1

EXHIBIT
3.7-3

FILE NAME: U:\Projects\E\ESN\60423280\CAD\CIVIL\ESN EA EXHIBITS NOV 2016\ESN-EA-3.7-3.dwg LAYOUT NAME: ESN EA 3.7-3 PLOTTED: Monday, February 26, 2018 - 4:50pm

Runway	TORA (FT)	TODA (FT)	ASDA (FT)	LDA (FT)
4	6,400	6,400	6,400	5,600
22	6,400	6,400	6,400	6,400

With the implementation of a MALSR, the approach RPZ would have a length of 2,500 feet, inner width of 1,000 feet and an outer width of 1,750 feet. To accommodate the approach RPZ associated with the MALSR on the Runway 4 end, Alternative 1 would require the fee simple acquisition of all or part of six parcels and an avigation easement over one parcel (see **Table 3.7-6** and **Exhibit 3.7-3**). As shown on **Exhibit 3.7-3**, based on the delineated property lines provided on the Maryland Real Property Tax Maps, the approach RPZ slightly encroaches upon the western most corner of Tax Map 101, Parcel 142, Lot 11. A formal topographical survey will be required to determine the exact amount of encroachment of the RPZ of this parcel. No structures are located within this area of the parcel; an avigation easement is proposed to restrict the use of that portion of the property.

TABLE 3.7-6:
ALTERNATIVE 1 – PROPERTY INTERESTS

PROPERTY INTEREST	DISPOSITION	REASON
Tax Map 101, Parcel 263	Fee Simple	Runway 4 RPZ
Tax Map 101, Parcel 264	Fee Simple	Runway 4 RPZ
Tax Map 101, Parcel 142, Lot 8	Fee Simple	Runway 4 RPZ
Tax Map 101, Parcel 142, Lot 9[1]	Fee Simple	Runway 4 RPZ
Tax Map 101, Parcel 142, Lot 10	Fee Simple	Runway 4 RPZ
Tax Map 101, Parcel 142, Lot 11	Avigation Easement	Runway 4 RPZ
Tax Map 25, Parcel 58[2]	Fee Simple	Runway 4 RPZ

Source: AECOM, 2016
Note: See Table 3.7-2 for property interests required for standard RSA and OFA of Runway 22.
[1]Tax Map 101, Parcel 142, Lot 9 also contains obstructions to the 14 CFR Part 77 surface of future Runway 4-22 and is discussed in Section 3.7
[2]Tax Map 25, Parcel 58 also contains obstructions to the existing and future 14 CFR Part 77 surfaces of Runway 4-22, as discussed in Section 3.3 and Section 3.7, respectively.

Due to the fee simple land acquisition of residential properties (Tax Map 101, Parcel 263; Tax Map 101, Parcel 142, Lot 8; Tax Map 101, Parcel 142, Lot 9; and Tax Map 101, Parcel 142, Lot 10) that would be required for installation of a MALSR, the County has eliminated Alternative 1 from further analysis.

3.7.4.2 Alternative 2

Similar to Alternative 1, Alternative 2 would also provide a 6,400 foot runway through the use of declared distances while employing a MALSR to achieve minimums not lower than ½ mile visibility to the Runway 4 end approach. Alternative 2 differs from Alternative 1 in that the Runway 4 end is displaced 1,600 feet instead of 800 feet (see **Exhibit 3.7-4**). By displacing the Runway 4 end an additional 800 feet, the Runway 4 approach RPZ is brought inward 800 feet further north thereby reducing the number of parcels located within the RPZ**.**

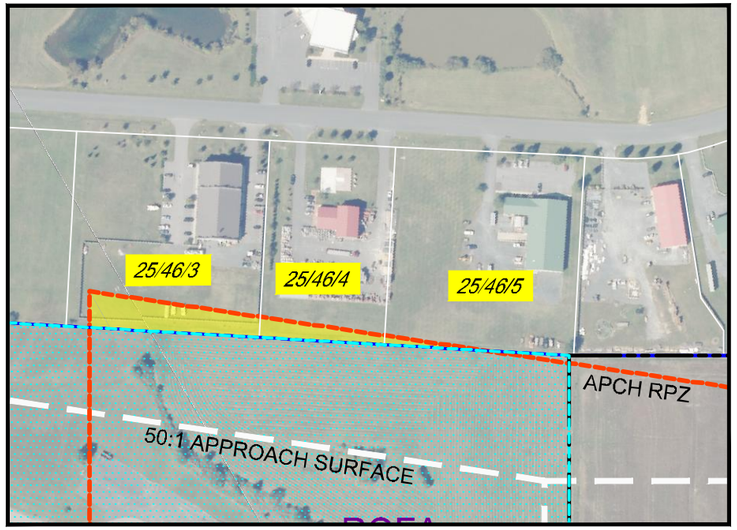
When a runway threshold is displaced, separate approach and departure runway thresholds are created, which requires separate approach and departure RPZs. Both the approach and departure RPZs extend from a point 200

LEGEND

- MALSR
- Proposed Property Interests - Fee Simple
- Proposed Property Interests - Avigation Easement
- Existing Airport Property Line
- Existing Avigation Easement
- 25/58/1 Tax Map/Parcel/Lot

400 0 400 800
SCALE IN FEET

Date of Aerial: September 2015



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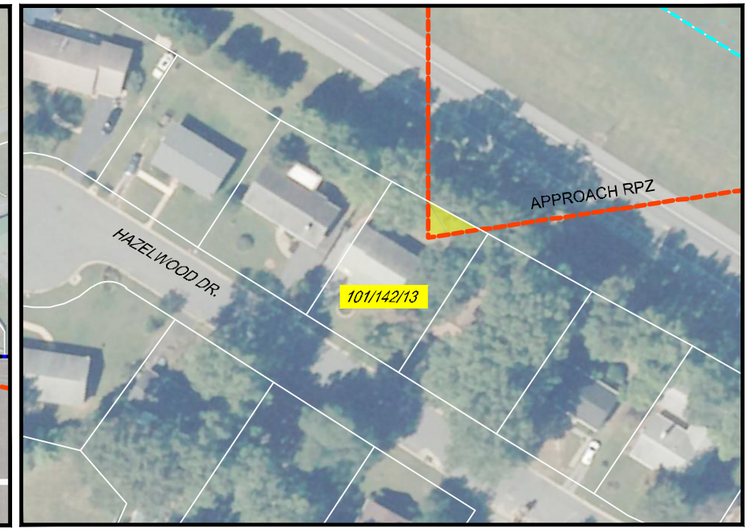

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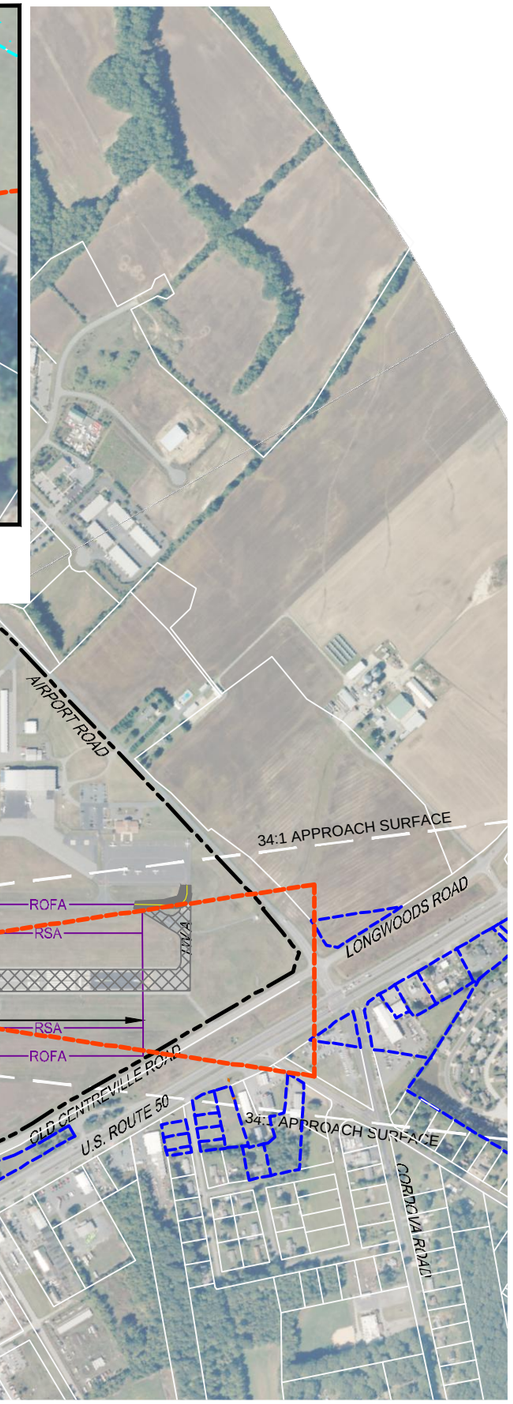
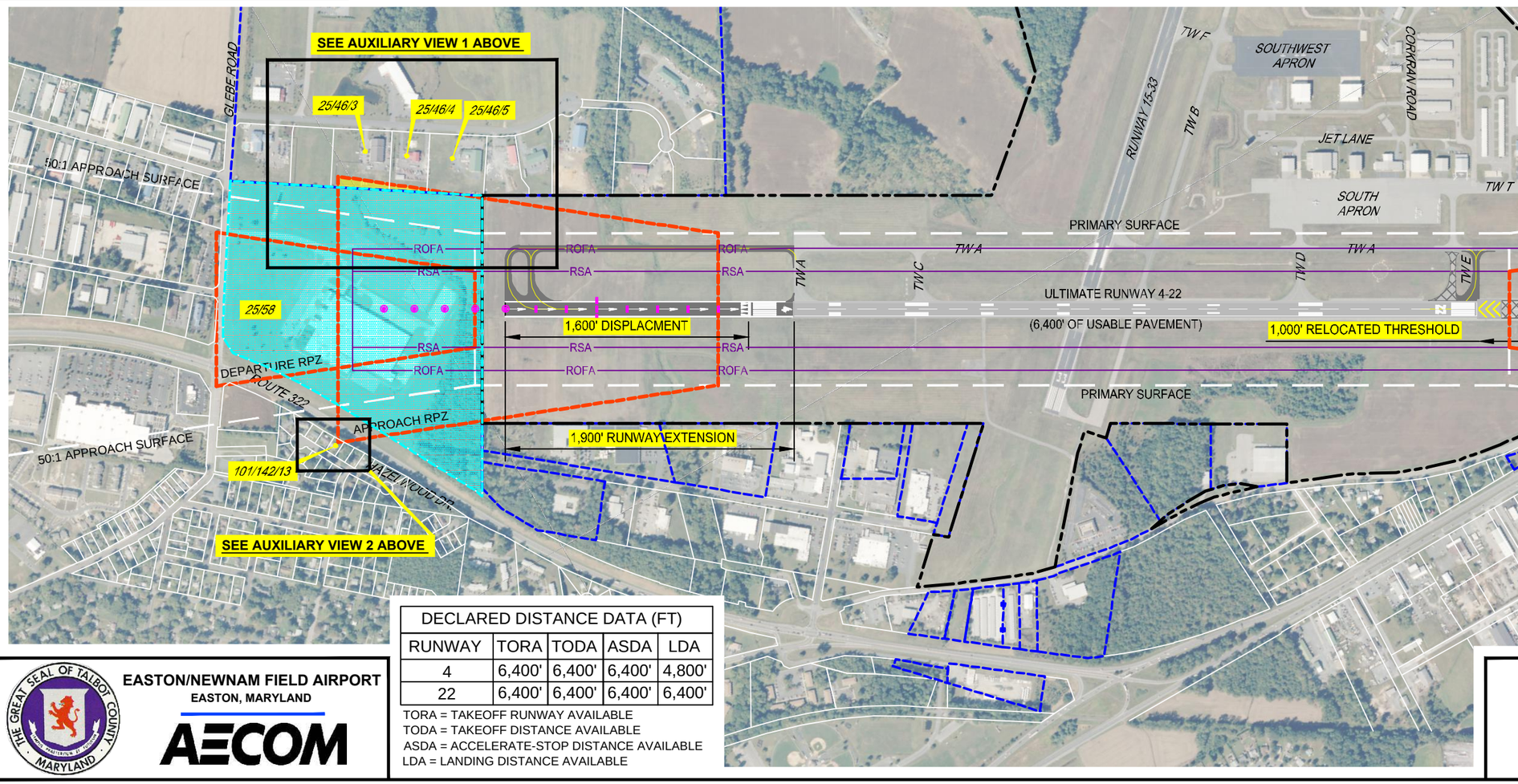




DECLARED DISTANCE DATA (FT)				
RUNWAY	TORA	TODA	ASDA	LDA
4	6,400'	6,400'	6,400'	4,800'
22	6,400'	6,400'	6,400'	6,400'

TORA = TAKEOFF RUNWAY AVAILABLE
TODA = TAKEOFF DISTANCE AVAILABLE
ASDA = ACCELERATE-STOP DISTANCE AVAILABLE
LDA = LANDING DISTANCE AVAILABLE

THE GREAT SEAL OF TALBOT COUNTY MARYLAND

EASTON/NEWNAM FIELD AIRPORT
EASTON, MARYLAND

AECOM

ALTERNATIVE 2

EXHIBIT
3.7-4

FILE NAME: U:\Projects\E\ESN\60423280\CAD\CIVIL\ESN EA EXHIBITS NOV 2016\ESN-EA-3.7-4.dwg LAYOUT NAME: ESN EA 3.7-4 PLOTTED: Tuesday, February 27, 2018 - 7:57am

feet from the respective runway approach and departure thresholds. The dimensions of the approach RPZs are a function of the aircraft approach category and approach visibility minimums associated with the approach runway end. The departure RPZ is a function of the aircraft approach category and departure procedures associated with the runway. For a particular runway end, the more stringent RPZ requirements (usually the approach RPZ requirements) will govern the property interests and clearing requirements the airport owner should pursue.

The declared distances with Alternative 2 would be as follows:

RUNWAY	TORA (FT)	TODA (FT)	ASDA (FT)	LDA (FT)
4	6,400	6,400	6,400	4,800
22	6,400	6,400	6,400	6,400

With the implementation of a MALSR, the approach RPZ would have a length of 2,500 feet, inner width of 1,000 feet, and outer width of 1,750 feet. To accommodate the RPZ associated with the MALSR and a 1,600 foot threshold displacement on the Runway 4 end, this alternative would require fee simple acquisition of one parcel, an avigation easement on one parcel, and revised avigation easements on three additional parcels (see **Table 3.7-7** and **Exhibit 3.7-4**). As shown on **Exhibit 3.7-4**, based on the delineated property lines provided on the Maryland Real Property Tax Maps, the approach RPZ slightly encroaches upon the western most corner of Tax Map 101, Parcel 142, Lot 13. A formal topographical survey will be required to determine the exact amount of encroachment of the RPZ on this parcel. No structures are located within this portion of the parcel; an avigation easement is proposed to restrict the use of that portion of the property. The approach RPZ also encompasses a small portion of three parcels (Tax Map 26, Parcel 46, Lots 3, 4, and 5). No structures are located within these portions of the parcels. The County already has an avigation easement over these (Tax Map 25, Parcel 46); the easement currently restricts the height of natural and manmade structures on the property. Thus, the easements would need to be revised to restrict the use the property.

TABLE 3.7-7:
ALTERNATIVE 2 – PROPERTY INTERESTS

PROPERTY INTEREST	DISPOSITION	REASON
Tax Map 101, Parcel 142, Lot 13	Avigation Easement	Runway 4 RPZ
Tax Map 25, Parcel 46, Lot 3	Avigation Easement (revision)	Runway 4 RPZ
Tax Map 25, Parcel 46 , Lot 4	Avigation Easement (revision)	Runway 4 RPZ
Tax Map 25, Parcel 46, Lot 5	Avigation Easement (revision)	Runway 4 RPZ
Tax Map 25, Parcel 58[1]	Fee Simple	Runway 4 RPZ

Source: AECOM, 2016
Note: See Table 3.7-2 for property interests required for standard RSA and OFA of Runway 22.
[1]Tax Map 25, Parcel 58 also contains obstructions to the existing and future 14 CFR Part 77 surfaces of Runway 4-22, as discussed in Section 3.3 and Section 3.7, respectively.

Due to the amount of displacement of the threshold that would need to occur to avoid the residential properties with the installation of a MALSR, the County has eliminated Alternative 2 from further analysis.

3.7.4.3 Alternative 3

Alternative 3 would provide a 6,400 foot runway through the use of declared distances while employing a MALSF. This alternative extends the Runway 4 end 1,900 feet with an 800 foot displaced approach threshold (see **Exhibit 3.7-5**). The declared distances with Alternative 3 would be as follows:

RUNWAY	TORA (FT)	TODA (FT)	ASDA (FT)	LDA (FT)
4	6,400	6,400	6,400	5,600
22	6,400	6,400	6,400	6,400

The implementation of a MALSF would not offer any lower approach minimums than current conditions as they would remain at ¾ mile to the Runway 4 end approach. By replacing the MALSR (included in Alternative 1 and Alternative 2) with a MALSF, the required Runway 4 approach RPZ is 800 feet shorter in length. Thus, the RPZ would have a length of 1,700 feet, inner width of 1,000 feet and an outer width of 1,510 feet. With the RPZ length reduced by 800 feet, one parcel would need to be acquired fee simple (Tax Map 25, Parcel 58) and no avigation easements would be needed to accommodate the RPZ associated with the MALSF on the Runway 4 end (see **Exhibit 3.7-5** and **Table 3.7-8**).

TABLE 3.7-8:
ALTERNATIVE 3 – PROPERTY INTERESTS

PROPERTY INTEREST	DISPOSITION	REASON
Tax Map 25, Parcel 58[1]	Fee Simple	Runway 4 RPZ

Source: AECOM, 2016
Note: See Table 3.7-2 for property interests required for standard RSA and OFA of Runway 22.
[1]Tax Map 25, Parcel 58 also contains obstructions to the existing and future 14 CFR Part 77 surfaces of Runway 4-22, as discussed in Section 3.3 and Section 3.7, respectively.

Alternative 3 requires the use of declared distances and does not offer any lower approach minimums than current conditions which would not provide the Airport with any operational benefit. Thus, Alternative 3 is eliminated from further evaluation.

3.7.4.4 Alternative 4

Alternative 4 would provide a 6,400 foot runway without the use of declared distances and would include a MALSF (see **Exhibit 3.7-6**). This alternative extends the Runway 4 end 1,900 feet with no displacement of the threshold. Thus, 6,400 feet would be available in all directions for takeoff and landing. The implementation of a MALSF would not offer any lower approach minimums as they would remain at not lower than ¾ mile to the Runway 4 end approach.

By replacing the MALSR (included in Alternative 1 and Alternative 2) with a MALSF (included in Alternative 3), the Runway 4 approach RPZ is 800 feet shorter in length. With the 800 foot shorter RPZ and no displacement of the threshold, two parcels would need to be acquired (fee simple) and one parcel would require an avigation easement to accommodate the RPZ associated with the MALSF on the Runway 4 end (see **Table 3.7-9** and **Exhibit 3.7-6**).

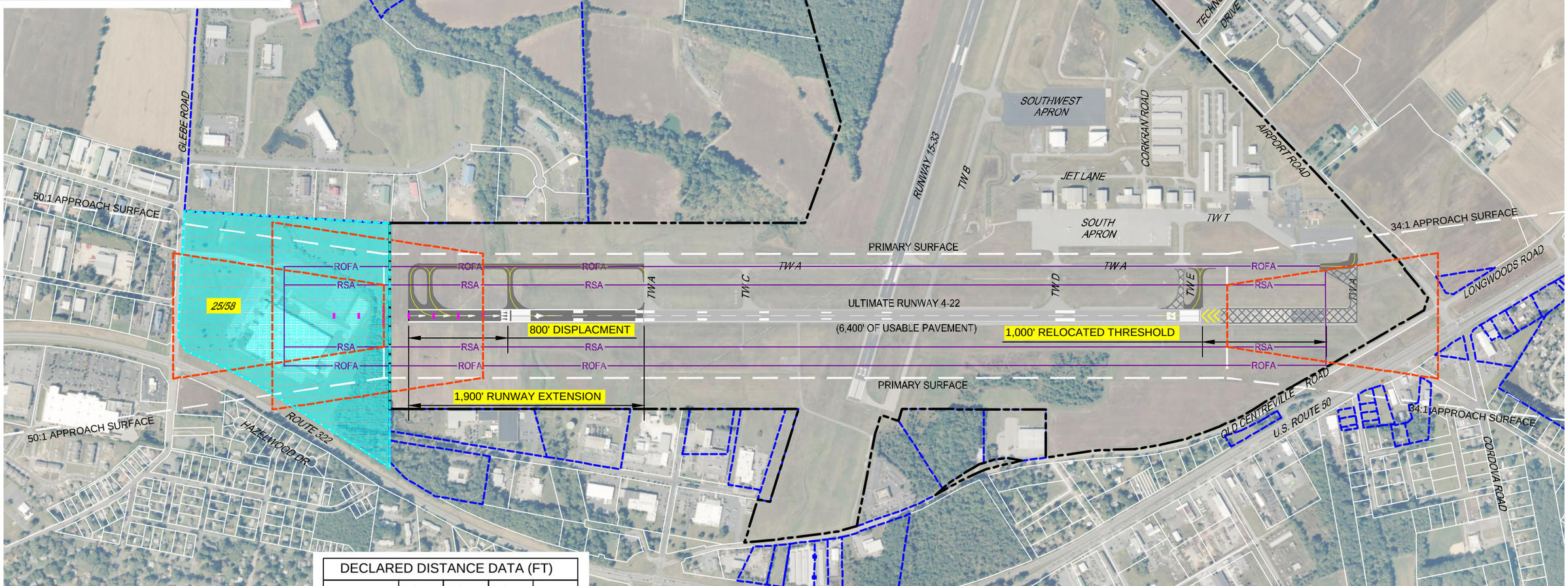
As shown on **Exhibit 3.7-6**, based on the delineated property lines provided on the Maryland Real Property Tax Maps, the approach RPZ slightly encroaches upon the western most corner of Tax Map 101, Parcel 142, Lot 9. A

LEGEND

- MALSF
- Proposed Property Interests - Fee Simple
- Existing Airport Property Line
- Existing Avigation Easement
- 25/58/1 Tax Map/Parcel/Lot

400 0 400 800
SCALE IN FEET

Date of Aerial: September 2015



DECLARED DISTANCE DATA (FT)				
RUNWAY	TORA	TODA	ASDA	LDA
4	6,400'	6,400'	6,400'	5,600'
22	6,400'	6,400'	6,400'	6,400'

TORA = TAKEOFF RUNWAY AVAILABLE
TODA = TAKEOFF DISTANCE AVAILABLE
ASDA = ACCELERATE-STOP DISTANCE AVAILABLE
LDA = LANDING DISTANCE AVAILABLE

THE GREAT SEAL OF TALBOT COUNTY MARYLAND

EASTON/NEWNAM FIELD AIRPORT
EASTON, MARYLAND

AECOM

ALTERNATIVE 3

EXHIBIT 3.7-5

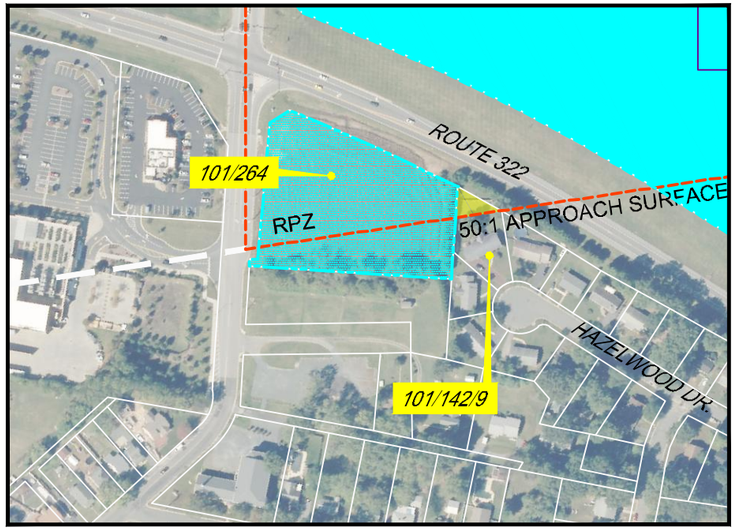
FILE NAME: U:\Projects\E\ESN\60423280\CAD\CIVIL\ESN EA EXHIBITS NOV 2016\ESN-EA-3.7-5.dwg

LEGEND

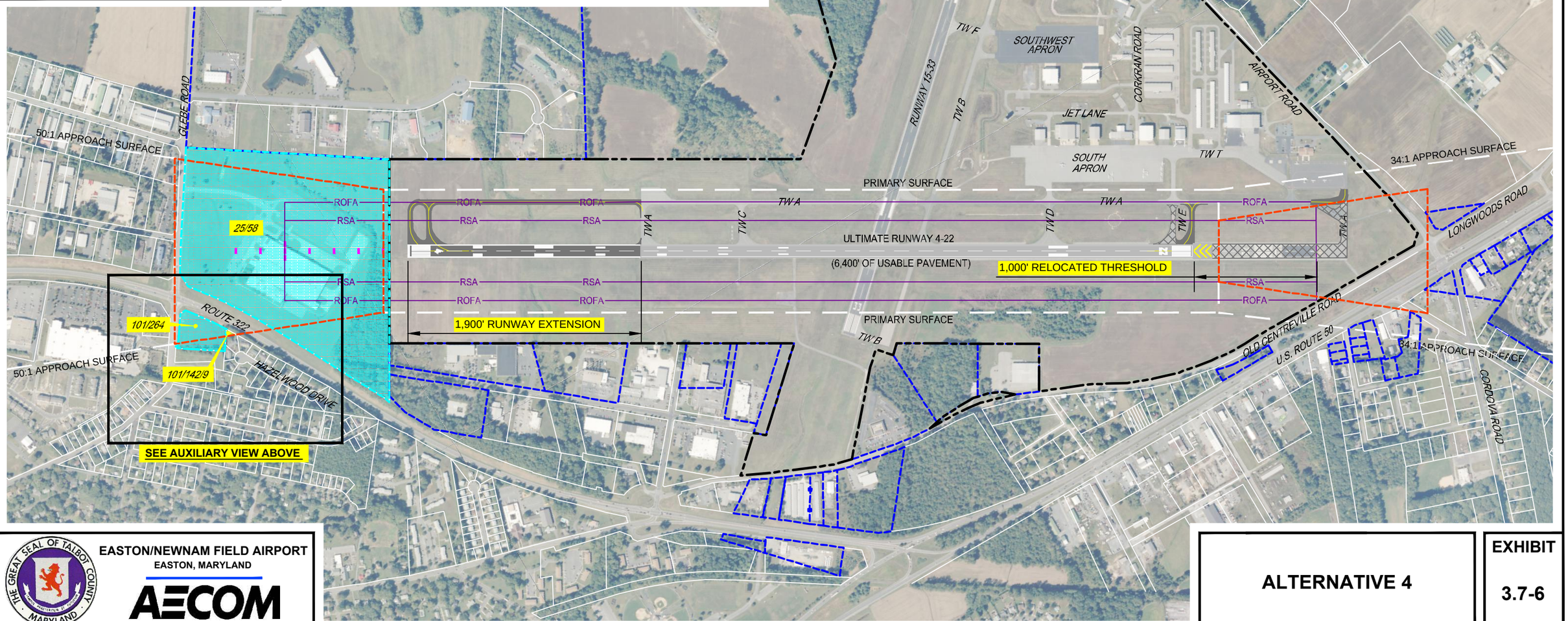
- MALSF
- Proposed Property Interests - Fee Simple
- Proposed Property Interests - Avigation Easement
- Existing Airport Property Line
- Existing Avigation Easement
- 25/58/1 Tax Map/Parcel/Lot

400 0 400 800
SCALE IN FEET

Date of Aerial: September 2015



AUXILIARY VIEW
1"=300'



EASTON/NEWNAM FIELD AIRPORT
EASTON, MARYLAND

AECOM

ALTERNATIVE 4

EXHIBIT 3.7-6

FILE NAME: U:\Projects\E\ESN\60423280\CAD\CIVIL\ESN EA EXHIBITS NOV 2016\ESN-EA-3.7-6.dwg LAYOUT NAME: ESN EA-3.7-6 PLOTTED: Monday, March 26, 2018 - 11:30am

formal topographical survey will be required to determine the exact amount of encroachment of the RPZ on this parcel. However, since no structures are located within this area of the parcel; an avigation easement that restricts the use of that portion of the property is proposed as opposed to fee simple acquisition. Fee simple acquisition of the referenced two parcels would then give the Sponsor control of these parcels.

TABLE 3.7-9:
ALTERNATIVE 4 – PROPERTY INTERESTS

PROPERTY INTEREST	DISPOSITION	REASON
Tax Map 101, Parcel 264	Fee Simple	Runway 4 RPZ
Tax Map 101, Parcel 142, Lot 9	Avigation Easement	Runway 4 RPZ
Tax Map 25, Parcel 58[1]	Fee Simple	Runway 4 RPZ

Source: AECOM, 2016
Note: See Table 3.7-2 for property interests required for standard RSA and OFA of Runway 22.
[1]Tax Map 25, Parcel 58 also contains obstructions to the existing and future 14 CFR Part 77 surfaces of Runway 4-22, as discussed in Section 3.3 and Section 3.7, respectively.

3.7.4.5 Alternative 5

Alternative 5 would provide a 6,400 foot runway without the use of declared distances and without employing the use of any type of approach lighting system (MALSF or MALSR) (see **Exhibit 3.7-7**). The implementation of this alternative would not offer any lower approach minimums as they would remain at ¾ mile to the Runway 4 end approach. To accommodate the RPZ (1,000 feet inner width, 1,700 feet in length and 1,510 outer width) on the Runway 4 end, two parcels would need to be acquired and one parcel would require an avigation easement (see **Table 3.7-10** and **Exhibit 3.7-7**). As shown on **Exhibit 3.7-7**, based on the delineated property lines provided on the Maryland Real Property Tax Maps, the approach RPZ slightly encroaches upon the western most corner of Tax Map 101, Parcel 142, Lot 9. A formal topographical survey will be required to determine the exact amount of encroachment of the RPZ of this parcel. No structures are located within this area of the parcel; an avigation easement is proposed to restrict the use of that portion of the property.

TABLE 3.7-10:
ALTERNATIVE 5 – PROPERTY INTERESTS

PROPERTY INTEREST	DISPOSITION	REASON
Tax Map 101, Parcel 264	Fee Simple	Runway 4 RPZ
Tax Map 101, Parcel 142, Lot 9	Avigation Easement	Runway 4 RPZ
Tax Map 25, Parcel 58[1]	Fee Simple	Runway 4 RPZ

Source: AECOM, 2016
Note: See Table 3.7-3 for property interests required for standard RSA and OFA of Runway 22.
[1]Tax Map 25, Parcel 58 also contains obstructions to the existing and future 14 CFR Part 77 surfaces of Runway 4-22, as discussed in Section 3.3 and Section 3.7, respectively.

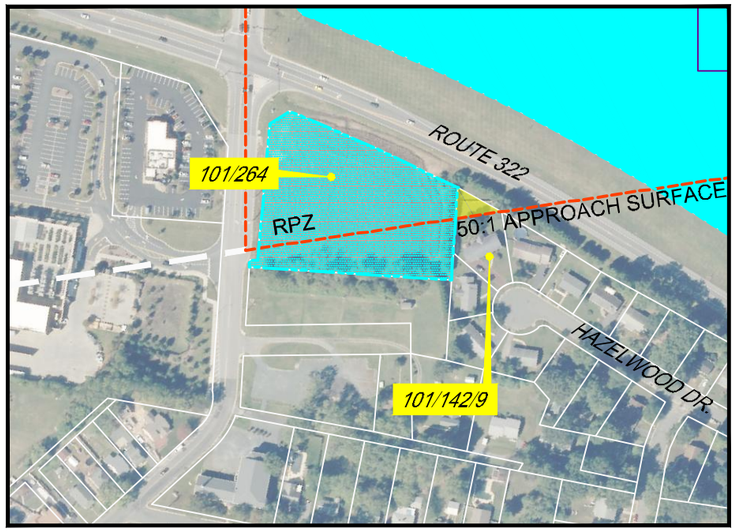
The County desires to have an ALS for Runway 4-22 for operational benefits; therefore, considering this preference, the County has eliminated Alternative 5 from further analysis.

LEGEND

- Proposed Property Interests - Fee Simple
- Proposed Property Interests - Avigation Easement
- Existing Airport Property Line
- Existing Avigation Easement
- 25/58/1 Tax Map/Parcel/Lot

400 0 400 800
SCALE IN FEET

Date of Aerial: September 2015



AUXILIARY VIEW
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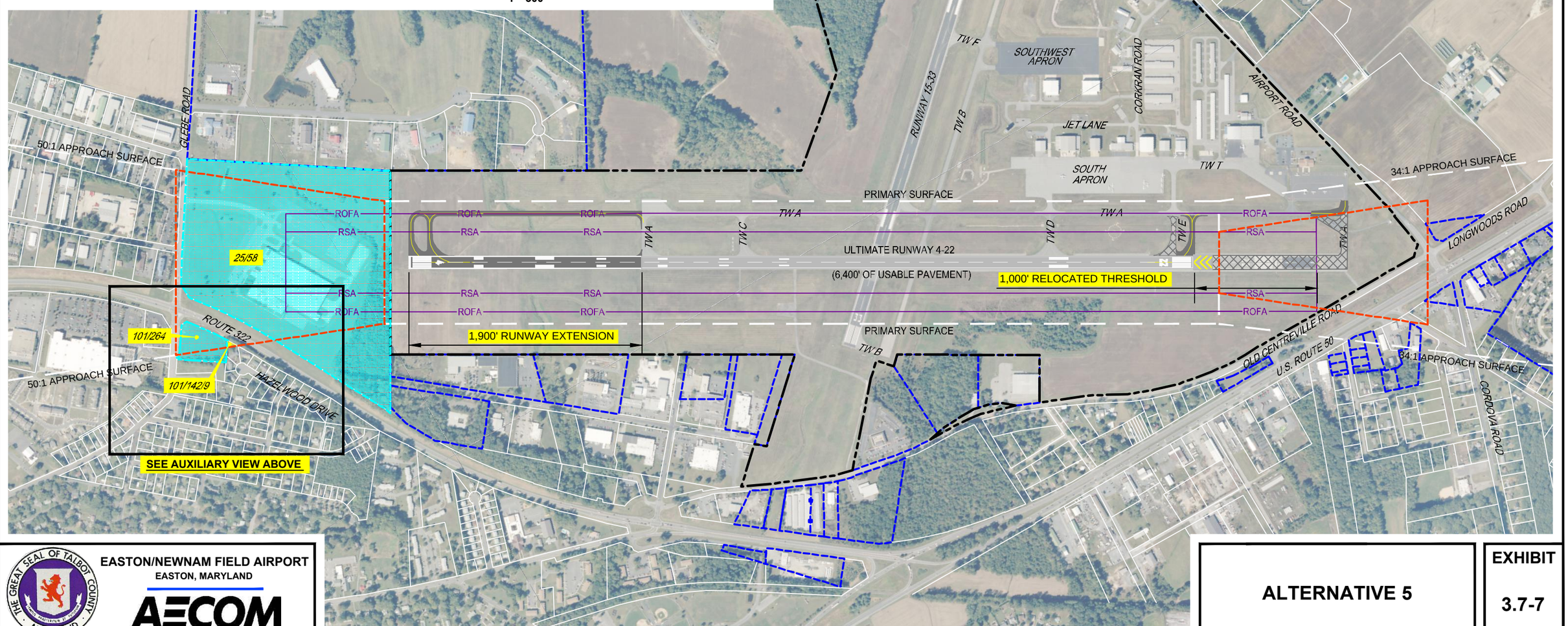


EASTON/NEWNAM FIELD AIRPORT
EASTON, MARYLAND

AECOM

ALTERNATIVE 5

EXHIBIT 3.7-7

FILE NAME: U:\Projects\E\ESN\60423280\CAD\CIVIL\ESN EA EXHIBITS NOV 2016\ESN-EA-3.7-7.dwg

3.7.4.6 No Action Alternative

Under the No Action Alternative, the existing length of Runway 4-22 would remain at 5,500 feet with the use of declared distances through a MOS. The approach minimums would remain at not lower than ¾ mile. The declared distances would remain as follows for Runway 4-22:

Runway	TORA (FT)	TODA (FT)	ASDA (FT)	LDA (FT)
4	5,175	5,500	4,775	4,775
22	5,500	5,500	5,500	5,175

These runway lengths are significantly less than the runway length required at ESN. In addition, no additional visual guidance lighting system would be implemented. The ROFA would remain in a non-standard condition for Runway 22. Thus, the stated purpose and need of providing a runway length to serve the existing and forecasted fleet as well as a standard Runway OFA would not be met.

The No Action Alternative represents the "status quo" of the airport and its environs. Airport maintenance, including crack sealing and pavement overlays, would continue as necessary into the future. No ground disturbance or impacts to environmental resources would occur. No capital costs over and above budgeted maintenance would be incurred. This alternative will be carried forward as the foundation against which to measure other alternatives.

3.8 SUMMARY OF SPONSOR'S PREFERRED ALTERNATIVE

3.8.1 REMOVAL OF OBSTRUCTIONS AND ASSOCIATED AVIGATION EASEMENTS TO THE 14 CFR PART 77 SURFACES OF EXISTING RUNWAY 15-33

Alternative 1, as depicted on **Exhibit 2.2-2** and **Table 3.2-1**, would result in the clearing of approximately 20.25 acres of trees on-Airport, 31.79 acres of trees off-Airport, and the lighting and/or removal of 13 manmade obstructions, including the linear AOA fence and Airport Road. Off-Airport obstructions are located on 16 parcels and within 4 roadway rights-of-way.

Alternative 2 includes clearing vegetative obstructions 10 feet below the controlling 14 CFR Part 77 elevation for existing Runway 15-33. This 10 foot buffer is used to account for tree growth between the time airspace data is collected and the time the trees are physically removed-a process that typically takes several years. Clearing to within 10 feet of the controlling elevation would require the additional clearing of approximately 1.79 acres of trees on-Airport and 2.98 acres of trees off-Airport. One additional off-Airport parcel contains obstructions in excess of what is required for Alternative 1; that parcel would require an avigation easement.

Thus, when combined with the clearing of obstructions to the controlling elevation (Alternative 1), Alternative 2, as depicted on **Exhibit 2.2-2** and **Table 3.2-1**, would result in the clearing of approximately 22.04 acres of trees on-Airport, 34.77 acres of trees off-Airport, and the lighting and/or removal of 13 manmade obstructions, including the linear AOA fence and Airport Road. Off-Airport obstructions are located on 17 parcels and 4 roadway rights-of-way. Avigation easements would be required on a total of 10 off-Airport parcels (9 parcels with clearing to existing surfaces and 1 parcel with clearing within 10 feet).

Alternative 2 is carried forward and Alternative 1 is eliminated from further analysis as Alternative 2 would allow for trees within 10 feet of the 14 CFR Part 77 surface to be removed. **Table 3.8-1** summarizes the property interests associated with Alternative 2.

TABLE 3.8-1:
PROPERTY INTERESTS REQUIRED FOR 14 CFR PART 77 SURFACES OF RUNWAY 15-33 (SPONSOR'S PREFERRED ALTERNATIVE – ALTERNATIVE 2)

PROPERTY ID#	TAX MAP/PARCEL/LOT	DISPOSITION
31	100/43	EASEMENT
32	100/46	EASEMENT
33	100/47/1	EXISTING EASEMENT
34	100/47/2	EXISTING EASEMENT
35	25/238/1	EXISTING EASEMENT
36	25/238/2	EXISTING EASEMENT
37*	25/238/3	EXISTING EASEMENT
38	25/140	EASEMENT
39	100/48	EASEMENT
40	100/4724C	EASEMENT
41	100/1A	EASEMENT
46	25/161	EXISTING EASEMENT
47	25/92	EASEMENT
48	25/192	EASEMENT
63	100/SHA	EASEMENT
72	25/218	EASEMENT
79	CENTREVILLE ROAD ROW	ACCESS AND REMOVAL
82	ROUTE 322 ROW	ACCESS AND REMOVAL
83	GOLDSBOROUGH NECK ROAD ROW	ACCESS AND REMOVAL
85	100/47/5	EXISTING EASEMENT
86	AIRPORT ROAD ROW	ACCESS AND REMOVAL
TOTAL	**10 NEW EASEMENTS* / 4 ACCESS AND REMOVAL AGREEMENTS / 7 EXISTING EASEMENTS**	

*Parcel ID 37 is also required for Runway 4-22 obstructions

3.8.2 REMOVAL OF OBSTRUCTIONS AND ASSOCIATED AVIGATION EASEMENTS TO THE 14 CFR PART 77 SURFACES OF EXISTING RUNWAY 4-22

Alternative 1, as depicted on **Exhibit 2.2-2** and **Table 3.3-1**, would result in the clearing of approximately 6.64 acres of trees on-Airport, 4.42 acres of ground on-Airport, 6.09 acres of trees off-Airport, and the lighting and/or removal of 22 manmade obstructions, including the linear AOA fence, Route 50, and Centreville Road. The off-Airport obstructions are located on 26 parcels and within 6 roadway rights-of-way.

Clearing to within 10 feet of the controlling elevation (Alternative 2) would require the additional clearing of approximately 0.13 acres of trees on-Airport and 4.97 acres of trees off-Airport. These obstructions are located on 18 additional parcels as compared to Alternative 1. Of these 18 additional off-Airport parcels, 2 parcels have existing avigation easements. Thus, 16 avigation easements would be required in excess of what is required for Alternative 1.

Thus, when combined with the clearing of obstructions to the controlling elevation (Alternative 1), Alternative 2, as depicted on **Exhibit 2.2-2** and **Table 3.3-1**, would result in the clearing of approximately 6.77 acres of trees on-

Airport, 4.42 acres of ground on-Airport, 11.06 acres of trees off-Airport, and the lighting and/or removal of 22 manmade obstructions, including the linear AOA fence, Route 50, and Centreville Road. Off-Airport obstructions are located on 44 parcels and within 6 roadway rights-of-way. Avigation easements would be required on a total of 32 off-Airport parcels (16 parcels with clearing to existing surfaces, 16 parcels with clearing within 10-feet) and 1 fee simple acquisition would be required.

After the relocation of the Runway 22 threshold as described in **Section 3.7.2.2** and the resultant deduction in obstructions and vegetation within 10 feet, Alternative 2 is carried forward and Alternative 1 is eliminated from further analysis as Alternative 2 would allow for trees within 10 feet of the 14 CFR Part 77 surface to be removed. **Table 3.8-2** summarizes the property interests associated with Alternative 2.

TABLE 3.8-2:
PROPERTY INTERESTS REQUIRED FOR 14 CFR PART 77 SURFACES OF EXISTING RUNWAY 4-22
(SPONSOR'S PREFERRED ALTERNATIVE – ALTERNATIVE 2)

PROPERTY ID#	TAX MAP/PARCEL/LOT	DISPOSITION
5	101/4/3	EASEMENT
6	101/4/2	EASEMENT
7	25/138	EASEMENT
9	101/3670/25	EASEMENT
10	101/3670/26	EASEMENT
11	101/3670/29	EASEMENT
16	101/4/28	EASEMENT
19**	25/58	FEE SIMPLE
21	101/142/13	EASEMENT
22	101/142/14	EASEMENT
23	101/142/15	EASEMENT
24	101/142/16	EASEMENT
25	101/142/5	EASEMENT
26	101/142/4	EASEMENT
27	100/147	EASEMENT
28	100/38	EXISTING EASEMENT
29	100/40	EXISTING EASEMENT
30	100/41	EXISTING EASEMENT
37*	25/238/3	EXISTING EASEMENT
44	25/13	EXISTING EASEMENT
45	25/207/13	EASEMENT
49	25/46/8	EXISTING EASEMENT
50	25/214/13	EASEMENT
53	25/232/1	EXISTING EASEMENT
54	25/232/2	EASEMENT
59	101/142/3	EASEMENT
60	101/142/17	EASEMENT
61	101/142/18	EASEMENT
62	100/42	EASEMENT
64	25/19	EXISTING EASEMENT
65	25/168	EASEMENT
67	25/232/3	EASEMENT

PROPERTY ID#	TAX MAP/PARCEL/LOT	DISPOSITION
68	25/103	EXISTING EASEMENT
71	25/207/15	EASEMENT
73	25/22	EASEMENT
75	25/18	EASEMENT
76	Route 322 ROW	ACCESS AND REMOVAL
77	Glebe Park Drive ROW	ACCESS AND REMOVAL
78	Airpark Drive ROW	ACCESS AND REMOVAL
80	Route 50 ROW	ACCESS AND REMOVAL
84	101/142/12	EASEMENT
TOTAL	**27 NEW EASEMENTS* / 1 FEE SIMPLE** / 4 ACCESS AND REMOVAL AGREEMENTS / 9 EXISTING EASEMENTS**	

Source: AECOM, 2016
*Parcel ID 37 is also required for Runway 15-33 Obstructions
**Parcel ID 19 is also required for extension of Runway 4-22

3.8.3 ACQUISITION OF PROPERTY INTERESTS WITHIN THE RPZ OF RUNWAY 15 AND RUNWAY 33

Alternative 1 for the acquisition of property interests within Runways 15 and 33 is carried forward with fee simple acquisition of one parcel (Tax Map 100, Parcel 47, Lot 5) and revision to the existing avigation easements of two parcels (Tax Map 100, Parcel 47, Lot 2 and Tax Map 25, Parcel 238, Lot 1).

3.8.4 CONSTRUCTION OF AIRCRAFT STORAGE FACILITIES

Alternative 1 for the construction of aircraft storage facilities is carried forward; this alternative includes six 10-unit T-hangar facilities and a conventional hangar with associated offices/visitors area and associated aprons/parking areas immediately east of Runway 22 (referred to as the East Apron), three conventional hangars and associated apron along the west side of the Southwest Apron, and a new Central Apron to the north of the South Apron.

3.8.5 CONSTRUCTION OF AIRPORT SERVICE ROAD

Alternative 1 for the construction of an airport service road is carried forward; this alternative includes a 20 foot wide by 18,760 linear foot vehicle service road along the existing perimeter of the Airport.

3.8.6 EXTENSION OF RUNWAY 4-22 AND ASSOCIATED PROJECTS

The Sponsor's Preferred Alternative is Alternative 4. Alternative 4 would provide a 6,400 foot runway with a MALSF without the use of declared distances (see **Exhibit 1.3-1**). This alternative extends the Runway 4 end 1,900 feet with no displacement of the threshold. Thus, 6,400 feet would be available in all directions for takeoff and landing. The implementation of a MALSF would not offer any lower approach minimums as they would remain at not lower than ¾ mile to the Runway 4 end approach.

The Extension of Runway 4-22 and Associated Projects would result in the additional (new) clearing of approximately 9.14 acres of trees off-Airport and the lighting and/or removal of 21 manmade obstructions (1 of which is the linear Southwest AOA fence). Off-Airport obstructions are located on 16 parcels that were not identified as parcels containing obstructions or vegetation within 10 feet of the existing 14 CFR Part 77 surfaces of Runway 4-22.

Avigation easements would be required on a total of 15 off-Airport parcels (12 parcels with clearing to existing surfaces, 3 parcels with clearing within 10 feet) and 2 fee simple acquisitions would be required. **Table 3.8-3** summarizes the combined property interests associated with Extension of Runway 4-22 and Associated Projects for the Proposed Action.

TABLE 3.8-3
PROPERTY INTERESTS REQUIRED FOR EXTENSION OF RUNWAY 4-22 AND ASSOCIATED PROJECTS (SPONSOR'S PREFERRED ALTERNATIVE – ALTERNATIVE 4)

PROPERTY ID#	TAX MAP/PARCEL/LOT	DISPOSITION
1	101/4/17	EASEMENT
2	101/4/12	EASEMENT
3	101/4/10	EASEMENT
4	101/4/8	EASEMENT
8	101/3670/24	EASEMENT
12	101/4/24	EASEMENT
13	101/4/25	EASEMENT
14	101/4/26	EASEMENT
15	101/4/27	EASEMENT
17	101/4/29	EASEMENT
18	101/264	FEE SIMPLE
19*	25/58	FEE SIMPLE
20	101/142/9	EASEMENT
55	101/4/15	EASEMENT
56	101/4/1	EASEMENT
57	101/263	EASEMENT
58	101/142/10	EASEMENT
TOTAL	**15 NEW EASEMENTS / 2 FEE SIMPLE***	

*Parcel ID 19 is also required Runway 4-22 existing obstructions

3.9 SUMMARY OF PROPOSED ACTION

The Sponsor's Preferred Alternative (Proposed Action) includes all of the following elements:

- Acquisition of avigation easements and removal and lighting of obstructions to within 10 feet of the 14 CFR Part 77 surfaces for Runway 15-33 and Runway 4-22
- Acquire property interests within Runway Protection Zones (RPZs) of Runway 15-33
- Construct aircraft storage facilities (T-hangars, tie-downs, conventional hangars) and associated aprons
- Construct an Airport Service Road
- Shift and extend Runway 4-22 to the south for a total length of 6,400 feet
    - Extend Runway 4 to the south 1,900 feet
    - Extend Taxiway A to the south 1,900 feet
    - Discontinue use of 1,000 feet of the northern end of Runway 4-22 and Taxiway A and demolish pavement
    - Construct connecting and bypass taxiways to the new Runway 4 threshold
    - Construct new taxiway connector to the new relocated Runway 22 end threshold and demolish existing Taxiway E connector
    - Rehabilitate Runway 4-22 and Taxiway A

- Remove Runway 4-22 Shoulder Pavement
- Construct a standard Runway Safety Area (RSA), Runway Object Free Area (ROFA), Taxiway Safety Area (TSA), and Taxiway Object Free Area (TOFA) for Runway 4-22 and Taxiway A.
- Acquisition of avigation easements and removal and lighting of obstructions to the 14 CFR Part 77 surface for future Runway 4-22
- Acquire property interests within the future Runway 4 RPZ and Runway 22 RPZ
- Install airfield fence
- Revise Instrument Flight Rules (IFR) approach procedures to account for the shift and extension
- Install and/or relocate navigational aids:
    - Install an Approach Lighting System (ALS) on Runway 4
    - Install medium-intensity runway and taxiway edge lights along the new sections of runway and taxiway
    - Relocate Runway 4 and Runway 22 threshold lights and Precision Approach Path Indicator (PAPI) lights for Runway 4 and Runway 22
    - Install airfield directional signs for the new sections of runway and taxiway
    - Install Runway End Identifier Lights (REILs) on Runway 22
    - Relocate existing Runway 4 Approach Glideslope to coincide with new approach threshold

SECTION 4.0
AFFECTED ENVIRONMENT

4.1 INTRODUCTION

FAA Order 5050.4B states that the affected environment section of an Environmental Assessment should succinctly describe only those environmental resources the Proposed Action and its reasonable alternatives are likely to affect. The amount of information on a potentially affected resource should be based on the extent of the expected impact and be commensurate with the importance of the impact.

The No Action, Proposed Action, and reasonable alternatives would not affect the following resources:

- **Coastal Resources:** A Consistency Determination was received from the MDE for the prior Environmental Assessment for the Proposed Action; MDE concluded that the actions evaluated in the Draft Environmental Assessment (2010) were consistent with the Maryland CZMP, contingent upon the authorization of any State permits/approvals that are required for the proposed activities. The MDE has concurred with the prior Determination for this current effort (see **Appendix B**).
- **Department of Transportation Act, Section 4(f)**: Section 4(f) resources include public parks and recreation areas, and wildlife and waterfowl refuges or management areas of national, state, or local significance. Section 4(f) also applies to historic sites of national, state, or local significance, as determined by the Official that has jurisdiction over these historic resources. There are no Section 4(f) resources located on Airport property or within the immediate vicinity.
- **Historical, Archaeological, Architectural, and Cultural Resources**: The Maryland Historical Trust was consulted in order to document the historical resources within the immediate vicinity of the Airport. Coordination with the Maryland Historical Trust indicates that there are no Historic, Archaeological, Architectural, and Cultural Resources that would be affected by the proposed undertaking (see **Appendix B**).
- **Water Resources – Wild and Scenic Rivers**: A review of the DOI National Park Service National Rivers Inventory website and the MDNR Scenic and Wild Rivers Inventory website indicated that there are no Federal or State designated nor potentially eligible Wild and Scenic Rivers on or within the vicinity of the Airport.

4.2 AIR QUALITY

Pursuant to the requirements of the CAA, the EPA establishes, enforces, and periodically reviews the National Ambient Air Quality Standards (NAAQS). The NAAQS are set to safeguard public health and environmental welfare against the detrimental effects of ambient air pollution and are defined as primary and/or secondary standards. Primary NAAQS are health-based standards geared toward protecting sensitive or at-risk portions of the population such as asthmatics, children, and the elderly. Secondary NAAQS are welfare oriented and are designed to prevent decreased visibility and damage to animals, vegetation, and physical structures. NAAQS have been established for six common air pollutants, referred to as criteria pollutants: carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO_2), ozone (O_3), particulate matter (PM), which includes particulate matter with a diameter of 10 microns or less (PM_{10}) and a diameter of 2.5 microns or less ($PM_{2.5}$), and sulfur dioxide (SO_2). Nitrogen oxides (NO_x) and volatile organic compound (VOC) emissions are precursors to ozone formation. The NAAQS are listed in **Table 4.2-1**.

TABLE 4.2-1:
NATIONAL AMBIENT AIR QUALITY STANDARDS (NAAQS)

POLLUTANT		PRIMARY/ SECONDARY	AVERAGING TIME	LEVEL
Carbon Monoxide (CO)[a]		primary	8-hour	9 ppm
			1-hour	35 ppm
Lead (Pb)[b]		primary and secondary	Rolling 3 month average	0.15 µg/m^3
Nitrogen Dioxide (NO_2)[c]		primary	1-hour	100 ppb
		primary and secondary	Annual	53 ppb [d]
Ozone (O_3)[e]		primary and secondary	8-hour	0.070 ppm[f]
Particle Pollution (PM)	$PM_{2.5}$[g]	primary	Annual	12 µg/m^3
		secondary	Annual	15 µg/m^3
		primary and secondary	24-hour	35 µg/m^3
	PM_{10}[h]	primary and secondary	24-hour	150 µg/m^3
Sulfur Dioxide (SO_2)[i]		primary	1-hour	75 ppb[j]
		secondary	3-hour	0.5 ppm

Source**:** EPA, National Ambient Air Quality Standards (NAAQS), September 2016, https://www.epa.gov/criteria-air-pollutants/naaqs-table.
Notes: ppb = parts per billion, ppm = parts per million, and µg/m^3 = micrograms per cubic meter of air.
[a] CO 1-hour and 8-hour standard not to be exceeded more than once per year.
[b] Lead rolling three month average standard not to be exceeded. In areas designated nonattainment for the Pb standards prior to the promulgation of the current (2008) standards, and for which implementation plans to attain or maintain the current (2008) standards have not been submitted and approved, the previous standards (1.5 µg/m^3 as a calendar quarter average) also remain in effect.
[c] NO_2 1-hour standard represents the 98th percentile of 1-hour daily maximum concentrations, averaged over three years.
[d] The level of the annual NO_2 standard is 0.053 ppm, equal to 53 ppb, which is presented for the purpose of clearer comparison to the 1-hour standard.
[e] Ozone 8-hour standard represents the annual fourth-highest daily maximum 8-hr concentration, averaged over three years.
[f] Final rule signed October 1, 2015, and effective December 28, 2015. The previous (2008) O_3 standards additionally remain in effect in some areas. Revocation of the previous (2008) O_3 standards and transitioning to the current (2015) standards will be addressed in the implementation rule for the current standards.
[g] $PM_{2.5}$ annual standards represent annual mean, averaged over three years. $PM_{2.5}$ 24-hour standard represents 98th percentile, averaged over three years.
[h] PM_{10} 24-hour standard not to be exceeded more than once per year on average over three years.
[i] SO_2 1-hour standard represents 99th percentile of 1-hour daily maximum concentrations, averaged over three years. SO_2 3-hour standard not to be exceeded more than once per year.
[j] The previous SO_2 standards (0.14 ppm 24-hour and 0.03 ppm annual) will additionally remain in effect in certain areas: (1) any area for which it is not yet 1 year since the effective date of designation under the current (2010) standards, and (2) any area for which implementation plans providing for attainment of the current (2010) standard have not been submitted and approved and which is designated nonattainment under the previous SO_2 standards or is not meeting the requirements of an SIP call under the previous SO_2 standards (40 CFR 50.4(3)), An SIP call is an EPA action requiring a state to resubmit all or part of its State Implementation Plan to demonstrate attainment of the required NAAQS.

The EPA designates areas as either meeting (attainment) or not meeting (nonattainment) the NAAQS. An area with measured pollutant concentrations that exceed the NAAQS is designated as a nonattainment area. Once a nonattainment area meets the NAAQS and the additional re-designation requirements in the CAA are completed, the EPA will designate the area as a maintenance area. Ozone nonattainment areas are further classified as extreme, severe, moderate, or marginal. An area is designated as unclassifiable when there is a lack of sufficient data to form the basis of an attainment status determination.

The CAA requires states to develop a general plan to attain and/or maintain the primary and secondary NAAQS in all areas of the country and to develop a specific plan to attain the standards for each area designated nonattainment for a NAAQS. These plans, known as SIPs, are developed by state and local air quality management agencies and submitted to the EPA for approval. ESN is located in Talbot County which is currently designated as an "attainment" area of all NAAQS established by the EPA.

4.2.1 AIR QUALITY MONITORING DATA

The MDE maintains an air quality monitoring network composed of 19 monitoring stations throughout Maryland. These monitors record concentrations of pollutants in the ambient (i.e., outdoor) air to gauge compliance with the NAAQS. The closest monitoring station is located at Horn Point, Maryland, approximately 15 miles away from the Airport. The other two are a distance away in Seaford, Delaware; and Beltsville, Maryland. Available data from these stations is presented in **Table 4.2-2**. For ease of reference, the applicable NAAQS for each monitored pollutant is included on the table as well as the distance from the Airport.

TABLE 4.2-2:
AIR QUALITY MONITORING DATA

STATION ID/NAME	APPROXIMATE DISTANCE FROM ESN	POLLUTANT	AVERAGING PERIOD	NAAQS	2013	2014	2015
Horn Point, Maryland ID: 24-019-0004	15 Miles	CO (ppm)	8-Hour	9	0.3	0.4	0.3
			1-Hour	35	1	0.4	0.4
		O_3 (ppm)	8-Hour	0.07	0.08[a]	0.07	0.07
		SO_2 (ppb)	1 Hour	75	5[b]	6	6
Seaford, Delaware ID: 10-005-1002	26 Miles	$PM_{2.5}$ (µg/m^3)	24-hour	35	23	22	22
			Annual	12	9	8	8
Beltsville, Maryland ID: 24-033-0030	48 Miles	NO_2 (ppb)	1-hour	100	36	37	38
			Annual	53	8	8	8

Source**:** EPA, Air Data: Air Quality Data Collected at Outdoor Monitors across the U.S., https://www.epa.gov/outdoor-air-quality-data, 2016.
Notes**:** ppb – parts per billion, ppm – parts per million, µg/m^3 – micrograms per cubic meter.
[a] O_3 requires three full years of data to compute the value for NAAQS standards. The station was not collecting data in 2011.
[b] SO_2 requires three full years of data to compute the value for NAAQS standards. The station was not collecting data in 2011.

4.3 BIOLOGICAL RESOURCES

4.3.1 PROTECTED SPECIES AND ASSOCIATED HABITAT

In accordance with FAA Order 1050.1F, biological resources include fish, wildlife, plants, and their respective habitats and are "…valued for their intrinsic, aesthetic, economic, and recreational qualities." Under Section 7(a) of the Endangered Species Act of 1973 (16 U.S.C. 1536 *et seq.*), federal agencies are required to consult with the appropriate Federal service regarding listed threatened and/or endangered species in the proposed project areas to ensure that the proposed action is "not likely to jeopardize the continued existence" or "result in the destruction or adverse modification of habitat" of such species.

The Maryland Department of Natural Resources (MDNR) and US Fish and Wildlife Service (USFWS) were contacted to

identify if any known occurrences of state and federally listed rare, threatened, or endangered species and their associated habitats, respectively, are located in the vicinity of the proposed projects.

Initial project scoping performed on the USFWS Information for Planning and Conservation (IPaC) online system indicated that there are 29 migratory birds of concern that may be affected by the Proposed Action. The list of migratory birds provided through IPaC is for informational purposes. The Migratory Bird Treaty Act requires federal agencies to consider the effects of their projects on migratory birds. Measures to avoid and minimize potential impacts are described in Section 5.3. The IPaC also indicated there are no critical habitats, fish hatcheries, or wildlife refuges within the boundaries of the project site as delineated (see **Appendix B**).

In a response dated January 13, 2016, the MDNR Wildlife and Heritage Service stated that there are no State or Federal listed plant or animal species within the proposed project areas (see **Appendix B**).

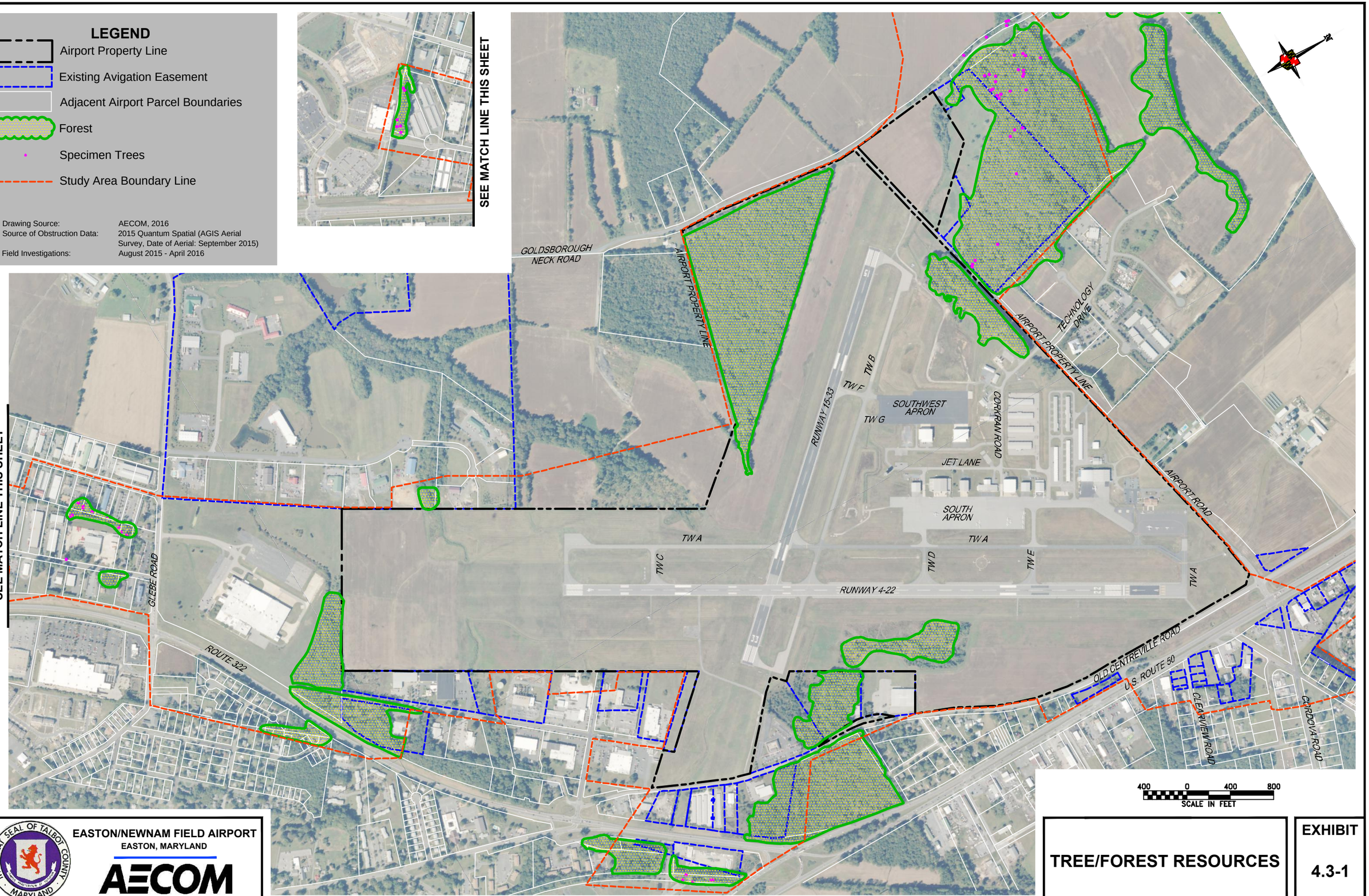
In a response dated June 29, 2017, the USFWS stated that if there is not a nest of migratory birds in the trees removed as part of the project, then the project would not be under violation of the Migratory Bird Treaty Act. If a migratory bird nest is found, then compliance with the Migratory Bird Act Treaty and associated permitting will be required. Lastly, the USFWS stated that there are no threatened or endangered species, critical habitats, or refuges or fish hatcheries within the project area (see **Appendix B**).

Coordination with the MDNR Environmental Review Program was initiated on April 11, 2016 to determine the presence of any migratory fish species and essential fish habitat (EFH) within the proposed project area. A response was received on July 22, 2016 and stated that the project areas are located near the Glebe Creek and its tributaries, which are classified as Use I streams. White perch have been documented near the project site. No instream work is permitted in any of the surrounding streams from March 1 through June 15, inclusive, during any year (see **Appendix B**). Protection of the white perch EFH resides with the DNR, who has authority over fishes and EFH in state freshwater streams and rivers.

4.3.2 FOREST RESOURCES

A forest is defined by the MDNR State Forest Conservation Technical Manual as "a biological community dominated by trees and other woody plants covering a land area of 10,000 square feet or greater. Forest includes (1) areas that have at least 100 trees per acre with at least 50 percent of those having a two-inch or greater diameter at 4.5 feet above the ground and larger, and (2) forest areas that have been cut but not cleared…"

The largest portion of forest existing on Airport property is located west of Runway 15-33 and consists of mid-successional mixed hardwoods dominated by loblolly pine, oaks, sweet gum, and red maple. A small forested area is located at the northern most portion of the Airport property, along the south side of Airport Road, consisting of an upland riparian stream buffer dominated by black cherry, red maple, white oak and ironwood, and also composed of a forested wetland area of the same species as well as loblolly pine and sweetgum. One early successional forest is located just east of Runway 4-22, and is dominated by similar species. Wetlands are present within this forested area and much of this vegetation has been previously disturbed. Understory and herbaceous species present throughout the Airport property are largely consistent as well as non-native and invasive species, and include Japanese honeysuckle, common greenbrier, and poison ivy. Additional forests of similar species are present surrounding the Airport and within the project study limits. Species present here are similar to those identified within airport boundaries, with oaks, maples and pine dominating the canopy. Existing forested areas are illustrated on **Exhibit 4.3-1**.



EASTON/NEWNAM FIELD AIRPORT
EASTON, MARYLAND

AECOM

TREE/FOREST RESOURCES

EXHIBIT
4.3-1

FILE NAME: U:\Projects\E\ESN\60423280\CAD\CIVIL\ESN EA EXHIBITS NOV 2016\ESN-EA-4.3-1.dwg LAYOUT NAME: ESN EA 4.3-1 PLOTTED: Tuesday, February 27, 2018 - 8:35am

A specimen tree is defined by the MDNR State Forest Conservation Technical Manual as "trees having a diameter measured at 4.5 feet above the ground of 30 inches or more, or trees having 75 percent or more of the diameter of the current State champion of that species." **Exhibit 4.3-1** identifies the specimen trees within the vicinity of the Airport.

4.3.2.1 Maryland Forest Conservation Act

In accordance with the Annotated Code of Maryland Regulations (COMAR) Natural Resources Article, Title 8, Subtitle 16 and the COMAR Title 08, Subtitle 19, Forest Conservation, the Forest Conservation Act of 1991 requires that prior to the approval of any public or private subdivision, project plan, grading permit, or sediment control permit on a unit of land 40,000 square feet or greater, applicants must submit a Forest Stand Delineation (FSD) and a Forest Conservation Plan (FCP) to the MDNR, or local authority, for approval. The Airport is located within the Town of Easton; activities occurring on Airport property and within the Town limits surrounding the Airport must comply with the Town of Easton Forest Conservation Ordinance (1993). Activities located off-Airport outside of the Town of Easton are regulated by the County's Forest Conservation Ordinance (Chapter 73, adopted 1996). A FSD was prepared for the entire Airport property and was approved by the Town of Easton on April 25, 2016 (see **Appendix C**). In addition, ten off-Airport FSDs were prepared and approved by the Town of Easton on September 1, 2016 (see **Appendix C**). As per the Town of Easton's Forest Conservation Act guidance, these ten locations were identified as areas where greater than 20,000 square feet of forest impact is anticipated per individual parcel. An FCP for the Airport and the off-Airport properties within the Town of Easton are currently being prepared for submittal to the Town for review and approval. Mitigation for proposed impacts is anticipated and discussed further in Section 5.3 of this report.

4.4 FARMLANDS

A review of the Natural Resources Conservation Service's (NRCS) list of prime and unique farmlands soils was conducted. Together with the land use/zoning delineations for the project area, the farmland soils classification was used to determine the areas that would be considered farmlands for the purposes of the Farmland Protection Policy Act (FPPA). Within the Airport and the immediately surrounding area, there are soils having the characteristic of prime farmland and farmlands of statewide importance. However, only those areas outside of the existing Airport property or Airport property purchased after 1984 are potentially subject to the FPPA.

4.5 CLIMATE

Due to its close proximity to the Atlantic Ocean, ESN has a humid subtropical climate, with hot, humid summers, cool winters, and evenly distributed precipitation throughout the year. Prevailing weather patterns typically bring storms from the south and west, with the exception being instances where hurricane activity occurs in the Atlantic in proximity to the eastern seaboard. July is typically ESN's hottest month with an average high temperature of 78 °F, and about 10 days annually reaching 88 °F. Conversely, average temperatures typically reach their minimum of 35 °F in February with temperatures falling below freezing 63 days a year on average. March is usually the wettest month of the year with an average rainfall of 4.44 inches, compared to annual average rainfall of 45.87 inches.

Research has shown that the increase in atmospheric greenhouse gas (GHG) emissions is affecting the Earth's climate. These conclusions are based upon a scientific record that includes substantial contributions from the United States Global Change Research Program (USGCRP)—a program mandated by Congress in the Global Change Research Act to "assist the Nation and the world to understand, assess, predict, and respond to human-induced and natural processes of global change."

In 2009, based primarily on the scientific assessments of the USGCRP, as well as the National Research Council (NRC) and the Intergovernmental Panel on Climate Change (IPCC), the EPA issued a finding that it was reasonable to assume that changes in our climate caused by elevated concentrations of GHG in the atmosphere endanger the public health and public welfare of current and future generations. In 2015, the EPA acknowledged more recent scientific assessments that "highlight the urgency of addressing the rising concentration of carbon dioxide (CO_2) in the atmosphere".

The EPA and the FAA traditionally work within the standard-setting process of the International Civil Aviation Organization's (ICAO) Committee on Aviation Environmental Protection (CAEP) to establish international emission standards and related requirements, which individual nations later adopt into domestic law. At its meeting in February of 2016, ICAO/CAEP agreed on the first-ever international standards to regulate CO_2 emissions from aircraft. In July of 2016 the EPA formally announced that GHG emissions from certain classes of aircraft engines contribute to climate change. However, EPA has not yet finalized any legislation to adopt future GHG standards.

Notably, there are currently no standards for ambient concentrations of GHGs. The IPCC estimates that aviation accounted for 2 percent of world-wide transportation GHG emissions during the year 2015. EPA data further indicates that commercial aviation contributed 12 percent of all US transportation GHG emissions and 3 percent of total US GHG emissions during the same year. Total US GHG emissions by economic sector includes the transportation sector (27 percent), electricity production (29 percent), industry (21 percent), commercial and residential (12 percent), and agricultural (9 percent).

4.6 HAZARDOUS MATERIALS, SOLID WASTE, AND POLLUTION PREVENTION

The identification of sites or facilities that utilize or store hazardous and other regulated materials, as well as sites that are known or have the potential to contain environmental contamination on and near ESN, was mostly derived from an electronic database search of agency records pertaining to facilities and sites located within the vicinity of the Airport (see **Appendix D**).

Based upon the findings of this assessment, the utilization and storage of hazardous materials and other regulated substances at ESN are typical of most general aviation airports. These activities and facilities at ESN largely comprise the storage and transfer of aircraft fuels and other petroleum-based fuels. The materials and substances used at ESN that are classifiable as hazardous, regulated, or have the potential to cause environmental contamination are aircraft and other petroleum-based fuels. These fuels are contained in ASTs ranging in size from 500 to 30,000 gallons and are located on the north side of the Airport. The fuel types stored include aviation jet fuel, aviation gasoline (AvGas), gasoline, diesel, and used oil. On-airport sites include the six currently active ASTs containing the previously listed fuel types ranging from 500 to 30,000 gallons; nine historic USTs containing gasoline and heating oil ranging from 550 gallons to 1,000 gallons; and one active small quantity generator with no violations.

Adjoining (non-airport) land uses and types include residential, farm lands, commercial and industrial land uses. These non-airport sites included five active small quantity generators, two active large quantity generators, three conditionally exempt small quantity generators, five active USTs, 23 historic USTs, four active ASTs, two historic ASTs, eight cases involving a release and a cleanup, five cases involving a release but no cleanup, one case of soil contamination, two cases of groundwater (well) contamination, one case of hand bailing, one case of dumping, two sites with emergency releases to the soil, eight historic auto stations, two sites on the Leaking Underground Storage Tank, one site which had several shipments of hazardous waste transported to a treatment, storage and disposal (TSD) facility, and two sites which are found in the UIC Database.

Importantly, the research did not identify any sites or facilities at ESN, or in its vicinity, which are on the EPA's NPL. NPL sites are considered by the EPA to have the most significant public health and environmental risks to neighboring areas. Moreover, there are no reported or currently-operated landfills; large-scale industrial/chemical facilities; or RCRA-permitted hazardous waste treatment, storage, and disposal facilities at the airport or nearby.

An evaluation of current and historic aerial photography of the Airport and its general vicinity was also conducted to help identify other facilities and sites with the potential to contain these materials and substances. A review of these historical aerial photographs did not reveal any additional areas or facilities in the vicinity of the airport.

4.6.1 ENVIRONMENTAL DUE DILIGENCE AUDIT

A Phase I Environmental Due Diligence Audit (EDDA) was performed in July 2016 in connection with the former Black and Decker facility (Tax Map 25, Parcel 58) (see **Appendix D**). Based on the results of the July 2016 Phase I, a Phase II sampling program was implemented (see **Appendix D**). The Phase II sampling program included 28 soil borings, soil sampling, and groundwater sampling. Soil samples were collected at the top of the water table (capillary fringe) where contaminates may accumulate if they are held in place by capillary action. Groundwater is pulled up from the water table by capillary action into the zone of soil immediately above the water table known as the capillary fringe. The majority of the soil samples were collected from a half-foot interval between 7 feet and 10 feet. Several samples were collected as shallow as 3.5 feet to as deep as 14 feet depending on the observed depth of the water table.

Based on the analytical results of the Phase II sampling program, select metals, chlorinated solvents, and petroleum hydrocarbons exceeded a regulatory cleanup standard in either the soil or groundwater. Of particular interest were the detections of chlorinated solvents (cis-1, 2-dichloroethene, trichloroethene, and vinyl chloride) in the groundwater. The exceedances appeared mostly in an isolated area and at levels suggesting residual impacts, and were not indicative of a significant spill or release to the environment. Based on the limited investigation, there does not appear to be a significant, widespread environmental concern at the subject site. Residual impacts, including trace chlorinated solvents, were detected in collected groundwater samples and from an outfall surface water sample. This may be indicative of the long history of solvent use at the site with minor drips, spills, or releases. A sensitive receptor survey was conducted which identified several wells in the vicinity (including a deep municipal well adjacent to the site) and surface waters which receive storm water runoff from the site. Subsequently, Talbot County applied to the MDE Voluntary Cleanup Program (VCP) seeking inculpable person status and a No Further Action letter for the existing environmental conditions. As part of the application, the Phase I EDDA, Phase II ESA, and Supplemental Phase II ESA were submitted to the MDE Land Restoration Program (LRP). Acceptance into the program is currently pending the results of additional sampling required by the MDE which is currently ongoing. Although exceedances were observed during the Phase II investigations, concentrations are relatively low and there does not appear to be a significant, widespread environmental concern at the Site.

During April and May 2018, a supplemental investigation was conducted at the former Black and Decker facility to obtain adequate data to complete the application for acceptance into the MDE VCP program. As previously investigated, chlorinated solvents observed in the deeper soils and groundwater were found to be very isolated; MDE requirements for this investigation were to focus primarily on PAHs and Resource Conservation and Recovery Act (RCRA) metals in the surface and shallow subsurface soil. The investigation included the installation of eight monitoring wells, sub-slab soil gas sampling, and sample collection of environmental media including surface soil, shallow subsurface soil, stream sediment, surface water and groundwater. Incremental composite soil samples were collected from 11 decisional based units (DBUs) for the analysis of RCRA metals and PAHs. The incremental sampling included surface samples collected from 0 to 1 feet and shallow

subsurface samples collected from approximately 1 to 5 feet as required by MDE VCP for the evaluation of the potential exposure hazards (i.e. ingestion, dermal contact, or inhalation). Additionally, incremental soil samples (non-composited) were collected from the on-site storm water ditch, the loading dock in the vicinity of the trash compactor, and near the transformers. The results of the supplemental investigation indicate that environmental impacts from the former manufacturing activities are minimal and there is no known contaminate plume on the Site. The results indicate no exceedances of the MDE Non-Residential Cleanup Standards in the soil or sediment samples collected as part of the supplemental investigation with the exception of arsenic which exceeded the standard in several of the DBU composite samples. However, the arsenic concentrations are consistent with background levels in the area and not considered a risk based on discussions with the MDE. The results of the groundwater and surface water sampling completed during April and May 2018 indicate that all samples were below the MDE Groundwater Cleanup Standards with the exception of TPH-DRO exceedances observed in three of the monitoring wells. The concentrations of TPH-DRO are relatively low and do not pose significant environmental risk. Sub-slab soil gas samples were collected at four locations inside the warehouse structure; the results indicate that concentrations of dioxane (1,4) and trichloroethene (TCE) exceeded the USEPA Commercial Vapor Intrusion Screening Levels (VISLs) at one of the sample locations.

Environmental concerns were identified during the Phase II investigation and the recently completed supplement investigation which included exceedances of chlorinated solvents, metals, and TPH-DRO in the on-site environmental media. The exceedances are limited in nature and are not expected to pose environmental liability or require environmental remediation costs. Additionally, the environmental concerns are not expected to interfere with acceptance into the VCP program or with obtaining inculpable person status.

A Phase I EDDA for Tax Map 101, Parcel 264 is currently ongoing and will be included in a subsequent submittal. Preliminary data indicated that no Recognized Environmental Conditions (RECs), Controlled Recognized Environmental Conditions (CRECs), or Historic Recognized Environmental Conditions (HRECs) were identified in connection with the subject property.

A Phase I EDDA for Tax Map 100, Parcel 47, Lot 5 will be completed under a separate scope of services prior to acquisition.

4.7 LAND USE

ESN encompasses approximately 525.83 acres of land in central Talbot County, Maryland. The Airport is located within the northern end of the Town of Easton. Areas to the north and west of the Airport are predominately outside of the Town's municipal limits. As a result, the overall comprehensive planning and zoning for these areas is governed by Talbot County; areas to the south and east are predominately within the Town of Easton's municipal limits and are governed by the regulations of the Town.

According to the *2010 Town of Easton Comprehensive Plan*, the land use designation for the Airport is Municipal. To the immediate north, land uses are Municipal, Limited Industrial, General Commercial, and Countryside Preservation. To the east land uses are designated Municipal, General Commercial, Limited Industrial, and Town Residential. South of the Airport, land uses are Primarily Municipal with a small area of General Commercial. Land to the west of the Airport is located outside of Town limits with Talbot County and consist of Limited Industrial, Countryside Preservation, and Rural Conservation. According to the *2010 Town of Easton Comprehensive Plan*, future land use designations will remain relatively similar with the exception of undeveloped areas to the north of the Airport changing to Industrial and Institutional.

	Yearly Day-Night Average Sound Level (DNL)					
	Below 65 dB	65-70 dB	70-75 dB	75-80 dB	80-85 dB	Over 85 dB
Residential						
Residential (Other than mobile homes & transient lodges)	Y	N[1]	N[1]	N	N	N
Mobile Home Parks	Y	N	N	N	N	N
Transient Lodging	Y	N[1]	N[1]	N[1]	N	N
Public Use						
Schools	Y	N[1]	N[1]	N	N	N
Hospitals, Nursing Homes	Y	25	30	N	N	N
Churches, Auditoriums, Concert Halls	Y	25	30	N	N	N
Governmental Services	Y	Y	25	30	N	N
Transportation	Y	Y	Y[2]	Y[3]	Y[4]	Y[4]
Parking	Y	Y	Y[2]	Y[3]	Y[4]	N
Commercial Use						
Offices, Business & Professional	Y	Y	25	30	N	N
Wholesale & Retail Building Materials, Hardware & Farm Equipment	Y	Y	Y[2]	Y[3]	Y[4]	N
Retail Trade - General	Y	Y	25	30	N	N
Utilities	Y	Y	Y[2]	Y[3]	Y[4]	N
Communications	Y	Y	25	30	N	N
Manufacturing & Production						
Manufacturing, General	Y	Y	Y[2]	Y[3]	Y[4]	N
Photographic and Optical	Y	Y	25	30	N	N
Agriculture (Except Livestock) & Forestry	Y	Y[6]	Y[7]	Y[8]	Y[8]	Y[8]
Livestock Farming & Breeding	Y	Y[6]	Y[7]	N	N	N
Mining & Fishing, Resource Production & Extraction	Y	Y	Y	Y	Y	Y
Recreational						
Outdoor Sports Arenas, Spectator Sports	Y	Y[5]	Y[5]	N	N	N
Outdoor Music Shells, Amphitheaters	Y	N	N	N	N	N
Nature Exhibits & Zoos	Y	Y	N	N	N	N
Amusement, Parks, Resorts, Camps	Y	Y	Y	N	N	N
Golf Courses, Riding Stables, Water Recreation	Y	Y	25	30	N	N

NOTE:

The responsibility for determining the acceptable and permissible land uses and the relationship between specific properties remains with the local authorities. FAA determinations under Part 150 are not intended to substitute Federally determined land use for those determined to be appropriate by local authorities in response to locally determined needs and values in achieving noise-compatible land uses.

KEY TO TABLE:

SLUCM — Standard Land Use Coding Manual.

Y (Yes) — Land Use and related structures are compatible without restrictions.

N (No) — Land Use and related structures are not compatible and should be prohibited.

NLR — Noise Level Reduction (outdoor to indoor) are to be achieved through incorporation of noise attenuation into the design and construction of structure.

25,30, or 35 — Land use and related structures are generally compatible; measures to achieve NLR of 25, 30, or 35 dB must be incorporated in design and construction of structure.

1 — Where the community determines that residential or school uses must be allowed, measures to achieve outdoor to indoor NLR of at least 25 dB and 30 dB should be incorporated into building codes and be considered in individual approvals. Normal residential construction can be expected to provide a NLR of 20 dB, thus, the reduction requirements are often stated as 5, 10 or 15 dB over standard construction and normally assume mechanical ventilation and closed windows year round. However, the use of NLR criteria will not eliminate outdoor noise problems

2 — Measures to achieve NLR of 25 dB must be incorporated into the design and construction of portions of the buildings where the public is received, office areas, noise-sensitive areas, or where the normal noise level is low.

3 — Measures to achieve NLR of 30 dB must be incorporated into the design and construction of portions of the buildings where the public is received, office areas, noise-sensitive areas, or where the normal noise level is low.

4 — Measures to achieve NLR of 35 dB must be incorporated into the design and construction of portions of the buildings where the public is received, office areas, noise-sensitive areas, or where the normal noise level is low.

5 — Land use compatible provided special sound reinforcement systems are installed.

6 — Residential buildings require an NLR of 25 dB.

7 — Residential buildings require an NLR of 30 dB.

8 — Residential buildings not permitted.

Noncompatible land use.

Source: Title 14 CFR part 150, Appendix A, Table 1, January 1998.

EASTON/NEWNAM FIELD AIRPORT
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LAND USE COMPATIBILITY WITH YEARLY DAY-NIGHT AVERAGE SOUND LEVELS

EXHIBIT 4.8-1

FILE NAME: U:\Projects\E\ESN\60423280\CAD\CIVIL\ESN_EA_EXHIBITS_NOV_2016\ESN-EA-4.8-1.dwg LAYOUT NAME: ESN_EA_4.8-1 PLOTTED: Saturday, July 01, 2017 - 3:23pm

According to the latest zoning ordinance for the Town of Easton (updated September 29, 2016), the Airport is zoned I-1 (Select Industrial). Town limits extend only to a small portion of land just north of the Airport and north of Airport Road; this area is zoned I-1, G/I (Government Institutional), and RH (Regional Healthcare). Town limits to the east extend just beyond the east side of US Route 50; this area is zoned R10A (Residential District), CG (General Commercial), BC (Business Commercial), and CL (Limited Commercial). South of the Airport, zoning is governed by the Town and consists of I-1 on the west side of Route 322 and R7A (Residential District) and R10A on the east side of Route 322.

Land north and west of the Airport is located outside of the Town of Easton municipal boundaries and zoning is governed by Talbot County. According to the latest zoning ordinance for Talbot County (effective June 7, 2016), County land to the north is zoned LI (Limited Industrial); to the west, zoning designations are TC (Town Conservation), CP (Countryside Preservation), and LI. An exception must be noted for the recently annexed property north of Airport Road, west of US Route 50, and south of the Talbot County Community Center. The Town recently amended the zoning ordinance to include this Annexation Property and applied the RH Zoning District to the majority of the land with a small portion zoned as G/I.

4.8 NOISE AND NOISE-COMPATIBLE LAND USE

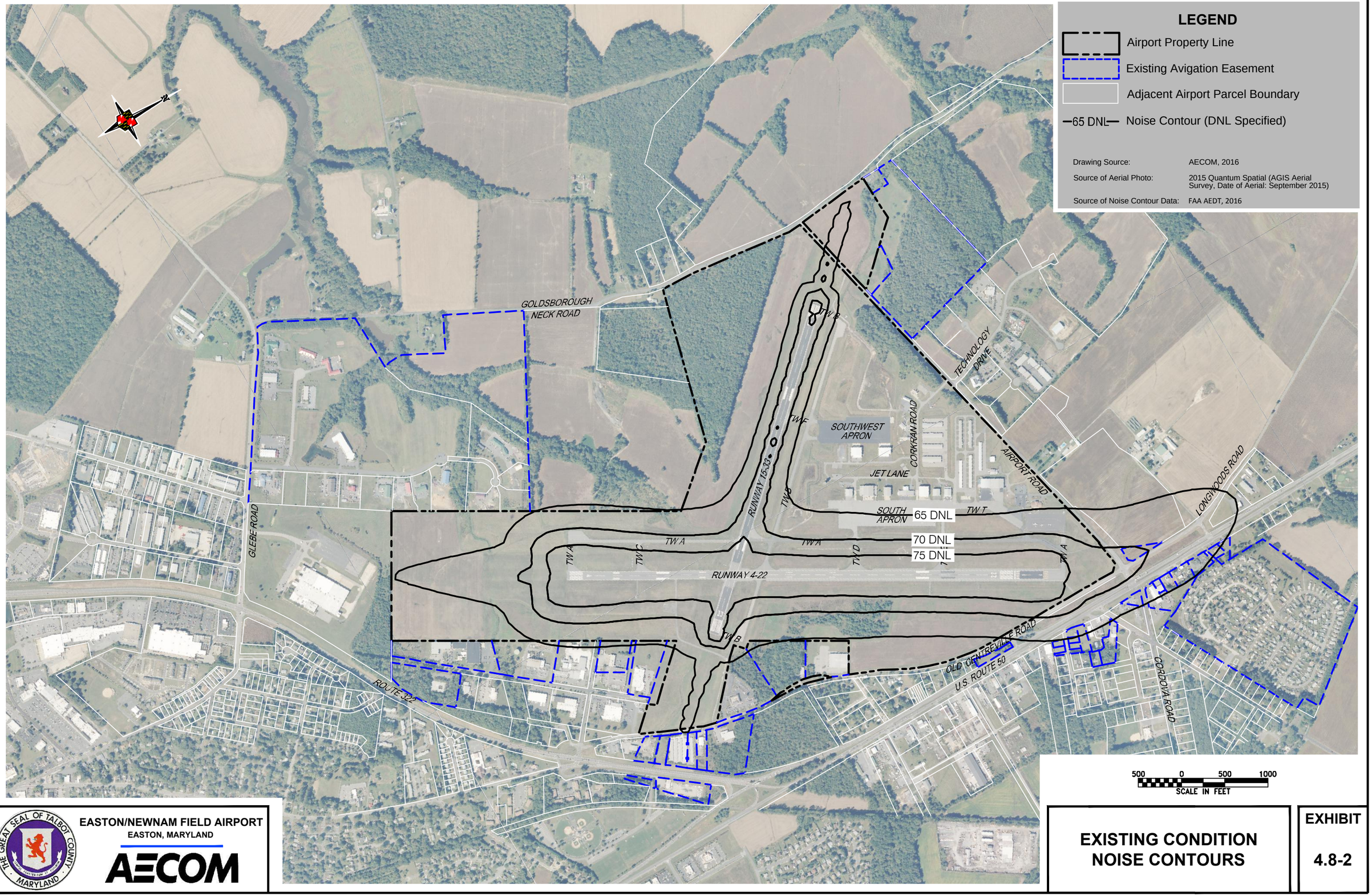
The compatibility of existing and planned land uses in the vicinity of an airport is usually associated with the extent of the airport's noise impacts. Airport development actions to accommodate fleet mix changes, the number of aircraft operations, or air traffic changes are examples of activities that can alter aviation-related noise impacts and affect land uses subjected to those impacts. The evaluation of the ESN noise environment and land use compatibility associated with airport noise was conducted using methodologies developed by the FAA and published in FAA Order 5050.4B, FAA Order 1050.1F, and Title 14 CFR Part 150, *Airport Noise Compatibility Planning*. This section describes the baseline noise environment and the associated land use compatibility.

For aviation noise analysis, the FAA has determined that the cumulative noise energy exposure of individuals to noise resulting from aviation activities must be established in terms of yearly Day-Night Average Sound Level (DNL) which is used as the FAA's primary metric. Title 14 CFR Part 150, Appendix A, Table 1, provides Federal compatible land use guidelines for several land uses as a function of DNL values. The ranges of DNL values in Table 1 reflect the statistical variability for the responses of large groups of people to noise. Compatible or non-compatible land use is determined by comparing the predicted or measured DNL values at a site to the values listed in Table 1 of title 14 CFR Part 150. Land use compatibility with yearly DNL is shown in **Exhibit 4.8-1**.

4.8.1 AIRCRAFT NOISE DESCRIPTORS AND EFFECTS

In this document, noise or sound levels are expressed in terms of A-weighted decibels (dBA). DNL is a 24-hour time-weighted-average noise metric expressed in dBA which accounts for the noise levels of all individual aircraft events, the number of times those events occur, and the time of day which they occur. DNL has two time periods: daytime (7:00 a.m. to 10:00 p.m.) and nighttime (10:00 p.m. to 7:00 a.m.). In order to represent the added intrusiveness of sounds occurring during nighttime hours, DNL penalizes or weights events occurring during the nighttime periods by 10 dBA.

The FAA has required the use of the Aviation Environmental Design Tool (AEDT) since May 29, 2015 for determining the predicted noise impact in the vicinity of airports. Requirements for AEDT use are defined in FAA Order 1050.1F, FAA Order 5050.4B, and Title 14 CFR Part 150. AEDT Version 2C, released September 12, 2016, was the version used for this document. The results of the AEDT analysis provide a relative measure of noise levels around airfield facilities. When the



EASTON/NEWNAM FIELD AIRPORT
EASTON, MARYLAND

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EXISTING CONDITION NOISE CONTOURS

EXHIBIT 4.8-2

FILE NAME: U:\Projects\E\ESN\60423280\CAD\CIVIL\ESN EA EXHIBITS NOV 2016\ESN-EA-4.8-2.dwg LAYOUT NAME: ESN EA 4.6-2 PLOTTED: Thursday, July 06, 2017 - 9:30am

calculations are made in a consistent manner, the AEDT is most accurate for comparing before and after noise effects resulting from forecast changes or alternative noise control actions. It allows noise levels to be predicted for such Proposed Projects without the actual implementation and noise monitoring of those actions.

Title 14 CFR Part 150, Appendix A, provides Federal compatible land use guidelines for several land uses as a function of DNL values. Compatible or non-compatible land use is determined by comparing the predicted or measured DNL values at a site to the established thresholds (see **Exhibit 4.8-1**).

4.8.2 EXISTING CONDITION AIRCRAFT NOISE EXPOSURE AND LAND USE COMPATIBILITY

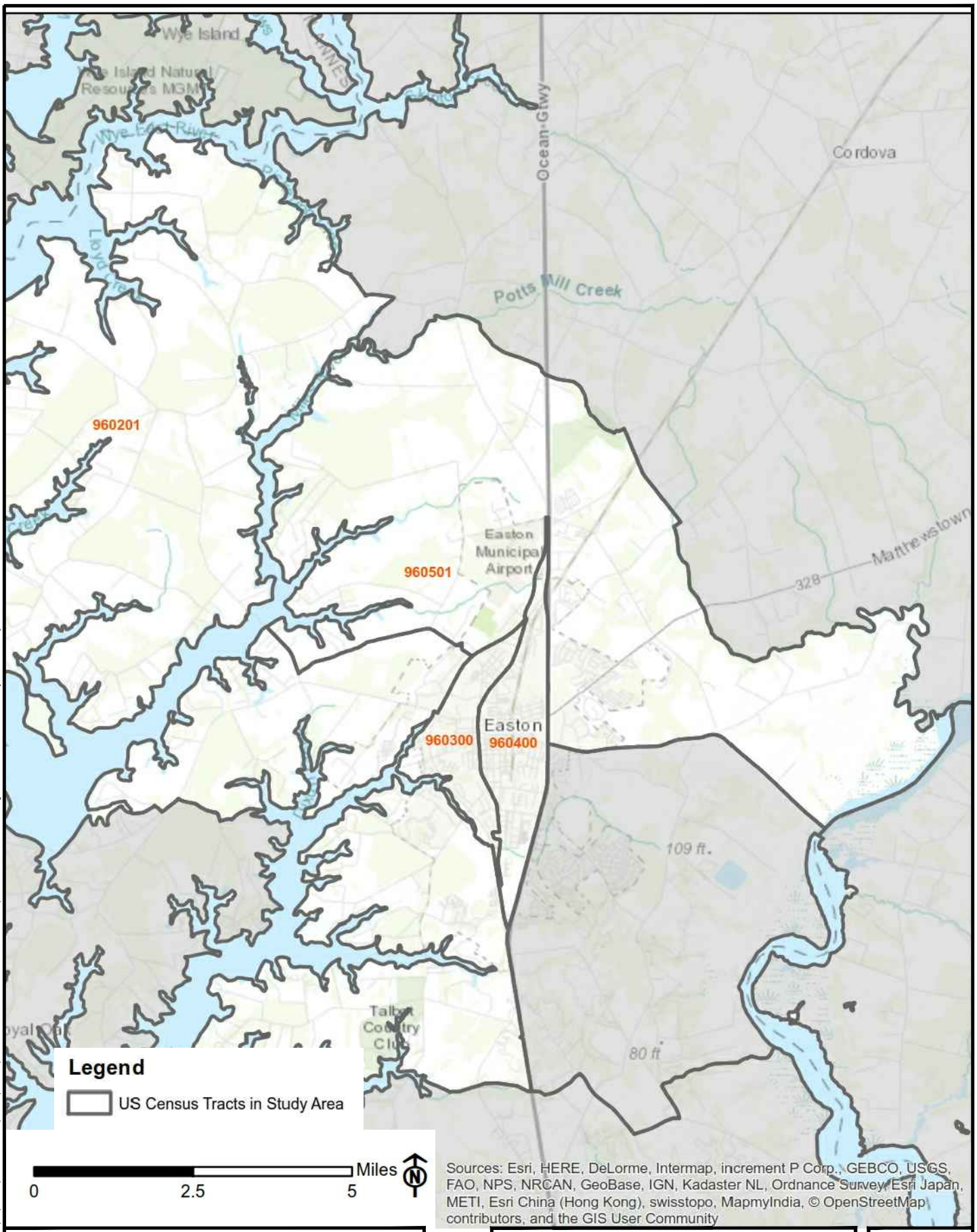
DNL Contours – Noise exposure resulting from Existing Condition aircraft operations at ESN is depicted as DNL 65, 70, and 75 dB contours (see **Exhibit 4.8-2)**. The estimated land area within each DNL contour interval is shown in **Table 4.8-1**.

Land Use Compatibility – It should be noted that Title 14 CFR Part 150 land use compatibility guidelines shown in Table 4.8-1 do not constitute a Federal determination that a specific land use is acceptable or unacceptable under Federal, state, or local laws. The responsibility for determining acceptable land uses rests with the local authorities through its zoning laws and ordinances.

The noise exposure is quantified as acreage of on- and off-airport land exposed to various levels of aircraft noise. The DNL 65+ dB contour for the Existing Condition, shown in **Table 4.8-1**, encompasses approximately 328 acres.

TABLE 4.8-1
EXISTING CONDITION NOISE EXPOSURE ESTIMATES

LAND USE TYPE (ACRES)[1]	DNL 65 TO 70 DBA	DNL 70 TO 75 DBA	DNL 75+ DBA	TOTAL OVER DNL 65 DBA
Agricultural	24.2	5.9	---	30.1
Airport	120.7	77.7	78.0	276.4
Commercial	14.7	0.2	---	14.7
Industrial	0.8	---	---	0.8
Institutional	0.6	---	---	0.6
Transportation	5.0	---	---	5.0
Undeveloped	0.4	---	---	0.4
Wetlands	---	---	---	---
Water	---	---	---	---
High Density Residential	---	---	---	---
Medium Density Residential	---	---	---	---
Low Density Residential	---	---	---	---
Total Acreage	**166.4**	**83.8**	**78.0**	**328.5**



EASTON/NEWNAM FIELD AIRPORT
EASTON, MARYLAND

AECOM

SOCIOECONOMIC STUDY AREA

EXHIBIT

4.9-1

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POPULATION[2]	DNL 65 TO 70 DBA	DNL 70 TO 75 DBA	DNL 75+ DBA	TOTAL OVER DNL 65 DBA
Single Family Residential	---	---	---	---
Mobile Home Residential	---	---	---	---
Total Population	---	---	---	---
Housing Units[3]	**DNL 65 to 70 dBA**	**DNL 70 to 75 dBA**	**DNL 75+ dBA**	**Total Over DNL 65 dBA**
Single Family Residential	---	---	---	---
Mobile Home Residential	---	---	---	---
Total Units	---	---	---	---

Source: AECOM, 2017.

1. Maryland Department of Planning, Talb_2010LULC.
2. Talbot County Property Appraisers Parcel Database, 2016.
3. http://www.city-data.com/city/Easton-Maryland.html, 12-09-2016

Affected Population – FAA defines DNL 65 as the threshold of noise compatibility for residential land uses. The existing condition DNL 65+ contour contains no property designated as residential.

4.9 SOCIOECONOMIC CHARACTERISTICS

The socioeconomic study area for the project incorporates four US Census Tracts including tracts 9602.01, 9603.00, 9604.00, and 9605.01, See **Exhibit 4.9-1** for a depiction of the affected Census Tracts. The Airport property is located entirely within Census Tract 9605.01.

The American Community Survey (2010-2014) was reviewed to determine the presence of minority and/or low-income populations within these Census Tracts. US DOT Order 5610.2 defines a minority population as "any readily identifiable group of minority persons who live in geographic proximity." CEQ regulations guiding the examination of potential environmental justice impacts state that if the percentage of the minority population within a given area is greater than 50 percent or the minority or low-income population percentage in the area is "meaningfully greater" than the minority or low-income population in the general population, then these areas would be considered potentially sensitive to disproportionate effects. **Table 4.9-1** provides a summary of characteristics of the population present in the affected Census Tracts, Talbot County, and State of Maryland. Of the 4,725 people in Census Tract, 9605.01, 4,079 are non-minority (13.7% minority). Of the 3,920 people in Census Tract, 9602.01, 3,384 are non-minority (13.7% minority). Of the 3,762 people in Census Tract, 9603.00, 3,295 are non-minority (12.4% minority). Of the 5,460 people in Census Tract, 9604.00, 3,600 are non-minority (34.1% minority). When compared more generally to the County and State, the minority population present in a single Census Tract, 9604.00, exceeds the County average (21.6% minority), and all fall well below that present in the state (46.4% minority).

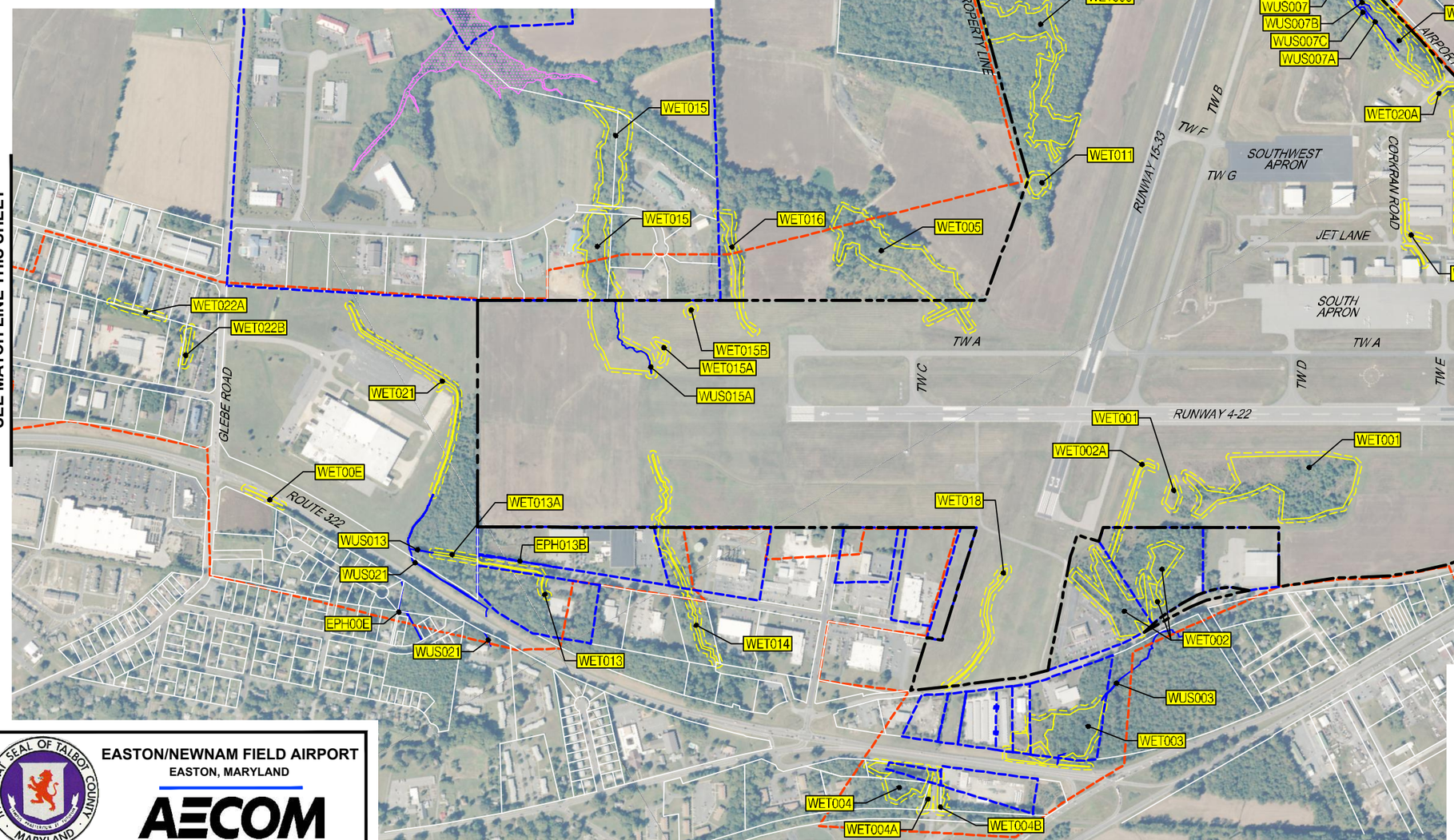
The US Bureau of Census follows the Office of Management and Budget's Statistical Policy Directive 14 and uses a set of money income thresholds that vary by family size and composition to determine both the poverty threshold and also who is poor. If a family's total income is less than that family's threshold, then that family, and every individual in it, is considered poor. The poverty threshold for 2015, as established by the US Bureau of Census, was used to determine the low-income populations within the vicinity of the Airport. **Table 4.9-1** includes the low-income population present within the study area, County, and State. The portion of the population present in Census Tracts 9603.00 and 9604.00 living below poverty exceeds

LEGEND

- Airport Property Line
- Existing Avigation Easement
- Adjacent Airport Property Boundaries
- Wetlands W/25' Buffer
- Waters of the US
- Floodplain Boundary
- WET00B — Wetlands (WET), Waters of the US (WUS) and Ephemeral Stream (EPH) Labels
- Study Area Boundary

Drawing Source: AECOM, 2016
Source of Obstruction Data: 2015 Quantum Spatial (AGIS Aerial Survey, Date of Aerial: September 2015)
Source of WET, WUS, EPH Data : AECOM 2015-2016
Source of Floodplain Data: FEMA 2013 Talbot County Floodplain Map

SEE MATCH LINE THIS SHEET



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EASTON/NEWNAM FIELD AIRPORT
EASTON, MARYLAND

AECOM

WATER RESOURCES

EXHIBIT
4.11-1

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both state and county averages.

The population present within the study area is diverse. Within Census Tracts 9603.00 and 9604.00, the low-income and minority populations occur at rates above those present in the county or state more generally. In these Census Tracts, it can be assumed that the environmental justice populations occur at rates that are "meaningfully greater" than the general population, and the potential for a disproportionate negative effect on a low-income or minority population is greater.

TABLE 4.9-1:
SOCIOECONOMIC FACTORS - RACE, ETHNICITY, AND INCOME

	TOTAL	WHITE, NON-HISPANIC (%)	WHITE (%)	BLACK (%)	AMER. INDIAN (%)	ASIAN (%)	NATIVE HAWAIIAN OR PACIFIC ISLANDER (%)	SOME OTHER RACE (%)	TWO OR MORE RACES (%)	HISPANIC (%)	BELOW POVERTY (%)
MD	5,887,776	53.6%	58.10%	29.50%	0.30%	5.90%	0.00%	3.40%	2.90%	8.80%	10.00%
County	37,894	78.4%	82.30%	13.50%	0.10%	1.50%	0.10%	0.80%	1.80%	5.90%	10.40%
Tract – 9602.01	3,920	86.3%	87.20%	8.90%	0.00%	2.20%	0.00%	0.60%	1.10%	1.50%	5.10%
Tract – 9603.00	3,762	87.6%	64.40%	31.00%	0.00%	1.70%	0.00%	2.10%	0.70%	12.40%	18.10%
Tract – 9604.00	5,460	65.9%	76.10%	19.20%	0.00%	0.50%	0.00%	0.00%	4.20%	18.40%	13.70%
Tract – 9605.01	4,725	86.3%	87.90%	3.90%	0.30%	5.90%	0.00%	0.40%	1.60%	2.20%	6.50%

4.10 VISUAL RESOURCES

Visual effects include potential impacts to views and from lights. The site is located in an area where increasingly commercial and light industrial development is occurring. Airfield lighting and rotating beacons are the main sources of light emissions emanating from the Airport. Airport visual and electronic aids consist of instruments and equipment that assist pilots with navigation on the airfield and within the vicinity of the Airport while in flight. The airfield at ESN is equipped with the following visual and electronic aids:

- White/green rotating beacon
- Lighted wind sock and segmented circle
- Runway End Identifier Lights (REIL)
- Precision Approach Path Indicator (PAPI) lights
- Medium Intensity Runway Edge Lighting (MIRL)

4.11 WATER RESOURCES

In accordance with FAA Order 1050.1F, water resources include wetlands, floodplains, surface water, groundwater, and wild and scenic rivers.

4.11.1 WETLANDS

A wetland is defined by the US Army Corps of Engineers (USACE) as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions." In Maryland, the USACE and the MDE take jurisdiction over regulating wetlands and their impacts. The majority of jurisdictional wetlands, those wetlands that are protected by the Clean Water Act (CWA), meet three delineation criteria: a prevalence of wetland-associated vegetation, hydric soils, and wetland hydrology.

Wetland Delineations: Numerous field investigations have been conducted at the Airport in support of aviation projects, including wetland delineations previously occurring in 2000, 2004, 2005, and 2009, with an approved Jurisdictional Determination (JD) granted by the USACE in 2009.

In support of the current Environmental Assessment, field investigations were conducted from October 2015 through April 2016 to delineate waters of the US, including wetlands, within and surrounding Airport property. The previously approved 2009 JD boundaries were utilized to create baseline mapping for field efforts. New unmapped wetland features identified within the study area were field delineated and surveyed (see **Exhibit 4.11-1**). Modifications to any previously delineated boundaries included in the 2009 JD were made as appropriate based on field investigations. In some cases the modifications consisted of a reclassification of the feature type ("wetland" vs. "water") or changes in the size of the system present. Upon completion of the wetland delineation, the following summarizes the changes that occurred from the previously approved 2009 JD and the new investigations:

- 15 new wetland systems were delineated;
- 5 previously delineated wetlands decreased in total area from what was identified on the 2009 JD;
- 3 previously delineated wetlands increased in size;
- 2 waters were reclassified to wetlands;
- 3 wetlands were reclassified to waters; and
- 12 previously delineated systems boundaries were confirmed and unaltered from the 2009 JD.

As depicted on **Exhibit 4.11-1**, several linear palustrine emergent (PEM) wetland systems traverse the Airport property, its periphery, and adjacent roadways (WET019, WET020 and WET020A, WET014, WET004A, WET00A, WET00B, WET00C, WET00D, WET00E, WET002 and WET002A, WET018, WET021, and WET015A). The majority of these wetlands located within the Airport property boundary were, at one time, manmade drainage features created to keep drainage off of the Airport runways, taxiways, and other facilities. Through time, these systems have developed anaerobic conditions that now support hydric soils and hydrophilic vegetation. The main source of hydrology for these systems is drainage from the Airport, groundwater, and in some cases a connection to waters of the US. Typical emergent vegetation found throughout these wetlands include spikerush species, soft rush, Japanese stiltgrass, smartweed, and Japanese honeysuckle.

Palustrine forested wetlands (PFO) are also present within the Airport property boundary as well as the adjacent areas outside the Airport within the study boundary. PFO wetlands within the Airport boundary include WET6, WET11, WET12, WET7, WET8B, WET9A, WET1, WET13 and portions of WET2, WET5, and WET15 (see **Exhibit 4.11-1**). WET8B, WET9, WET11, WET12, and WET7 are more mature forested wetlands with mid-successional species present and are connected to larger upland forested tracts. Dominant vegetation found includes ironwood, red maple, sweetgum, and willow oak. WET1 is a more disturbed area of younger forest where it appears that land debris has, at some time, been deposited. The area is forested, but largely overrun with invasive non-native species.

A pre-application meeting was conducted with the USACE and MDE on November 10, 2015. The purpose of the meeting was to review the delineation of jurisdictional Waters of the US, including wetlands, completed in 2015-2016. A Wetland Delineation Summary/Jurisdictional Determination Memorandum was prepared as well as waters and wetland location mapping (see **Appendix E**). All comments by the agencies are represented in the memorandum and on resource mapping. On March 22, 2016 and April 14, 2016, two additional addenda were submitted to the local USACE field office in order to delineate additional areas not captured within the original 2015-2016 field investigations. On August 30, 2016, the USACE provided an approved JD incorporating all the updates and modifications from the addenda (**Appendix E**). It should be noted that WET00A, WET00B, and WET00C are not illustrated on the signed JD. Since the time of the pre-application meeting (November 2015) and issuance of the JD (August 2016), WET00A, WET00B, and WET00C were impacted by the recently completed pavement rehabilitation project (Authorization No. 16-NT-2042/201660695, dated June 15, 2016).

4.11.2 FLOODPLAINS

Executive Order 11988, *Floodplain Management*, defines floodplains as the "lowland and relatively flat areas adjoining inland and coastal waters including flood prone areas of offshore islands, including, at a minimum, the area subject to a one percent or greater chance of flooding in a given year."

The Federal Emergency Management Agency (FEMA) National Flood Hazard Layer (NFHL) is shown on **Exhibit 4.11-1** depicting the 100-year floodplain. The project area is located on FEMA NFHL Panels 24041C0180D, 24041C0185C, 24041C0187D, and 24041C0191C. Panels 24041C0180D and 24041C0187D were published on August 5, 2013 and were revised, effective July 20, 2016. The revisions included a change to Base Flood Elevations, a change to Special Flood Hazard Areas, updates to the effects of wave action, updates to reflect revised shoreline, updates to reflect the effects of coastal erosion, and updates to reflect updated topographic information. Panels 24041C0185C and 24041C0191C were published on August 5, 2013, and have not been revised.

The only floodplain located within the study area is associated with Goldsborough Creek and tributaries. It is located north of the Airport and Airport Road and totals 4.6 acres. A narrow floodplain boundary is associated with its tributary and is identified as WUS009 on **Exhibit 4.11-1**.

4.11.3 SURFACE WATERS

Talbot County is located within both the Choptank and the Upper Eastern Shore tributary strategy basins, both of which encompass 1,976 square miles of land in Cecil, Kent, Queen Anne's, Talbot, Caroline, and Dorchester Counties. The Airport is located on approximately 615 acres of land almost entirely within the Upper Eastern Shore basin, within the Miles River Watershed of the Chester River, and is surrounded by the Choptank basin to the south and east.

Two main tributaries to the Miles River border the northern and southern boundaries of the Airport: an unnamed tributary to Goldsborough Creek and Glebe Creek. Both systems are classified by the MDE as Use I streams, designated for Water Contact Recreation and Protection of Nontidal Warmwater Aquatic Life and outlet into the Eastern Bay. WUS007, WUS008, and WUS009 are all intermittent and perennial tributaries to the unnamed tributary to Goldsborough Creek (see **Exhibit 4.11-1**). WUS015A and WUS021 are both perennial tributaries to Glebe Creek and are located within the Airport property boundary. WUS007 is located along the northern boundary, just outside the Airport fence line and south of Airport Road. It has a braided system of intermittent channels within the forest in this area, which emerges into one stream channel and

connects to a linear emergent wetland system to the west. WUS015A is located just south of Runway 4-22. This system is perennial, with an emergent wetland fringe. WUS021 is located at the southernmost end of the Airport property. This system exists just along the edge of the forested area and leads west eventually converting to emergent wetland system WET021.

Outside of the Airport property, WUS009 is a perennial system that connects to the unnamed tributary to Goldsborough Creek. Closer to Airport Road this channel is incised, with banks greater than three feet and water depth averaging four inches to one foot. As WUS009 system nears its connection to the tributary, the banks decrease in height, water depth decreases, and the system is surrounded by wetland.

Runoff at the Airport is collected at several locations including onsite SWM facilities as well as several drainage swales, mostly PEM wetlands, traversing the property. A *Comprehensive Stormwater Management Report* (URS, 2010) prepared for the Airport identified nine drainage areas throughout the site in which stormwater is collected and conveyed towards the Miles River. Three large stormwater management systems are located within airport property just north of Runway 15-33 and are accepted by the MDE and the USACE as non-jurisdictional systems; this was verified during the pre-application meeting on November 10, 2015.

4.11.4 GROUNDWATER

Talbot County lies within the Coastal Plain Region, a very low-lying region with little elevation change, where groundwater flows through pore spaces between sand and gravel particles. According to the Maryland Geological Survey (MGS), groundwater levels are not significantly affected by short-term periods of drought or rain events. Existing drainage conditions at the Airport are relatively poor. Proper drainage is difficult to achieve because of the Airport's low elevation and poorly drained soils. According to soil data from the United States Department of Agriculture (USDA) – National Resource Conservation Service (NRCS), the soil types at the Airport primarily consist of Hydrologic Soil Group (HSG) Class C and D. HSG Class C and Class D soils are described as usually sandy or silty clay loams with low infiltration rates and having a moderately high to high runoff potential when thoroughly wet.

As stated in the *Talbot County Comprehensive Plan* (2010), the County does not operate any public water systems. All public water systems are supplied by groundwater wells. The *2009 Easton Comprehensive Plan Water Resources Element* identifies six wells within three source aquifers in Easton. These are areas where the underground layer of porous rock, sand, or other materials contain water into which wells can be sunk. None of these wells are located within the proposed project areas.

SECTION 5.0
ENVIRONMENTAL CONSEQUENCES

5.1 INTRODUCTION

This chapter discusses the reasonably foreseeable environmental impacts of the Proposed Action relative to existing conditions; the organization of this chapter is consistent with the environmental resource categories prescribed in FAA Order 1050.1F and FAA Order 5050.4B. The evaluation of potential for impacts has been conducted consistent with the provisions of NEPA, appropriate CEQ, US Department of Transportation (US DOT), and FAA environmental regulations and guidance, as well as all applicable local, state, and Federal laws, as appropriate.

This also includes potential cumulative impacts which result from the incremental impact of this proposed action added to other past, present, and reasonably foreseeable future actions. Potential environmental consequences are evaluated for the No Action Alternative and Proposed Action. Construction activities could result in potential impacts to multiple categories. Per FAA Order 1050.1F, the assessment of potential construction related impacts is discussed where applicable for each of the categories listed.

The Sponsor's Preferred Alternative (Proposed Action) includes the following elements:

- Acquisition of avigation easements, lighting of manmade obstructions, and removal of tree obstructions to within 10 feet of the 14 CFR Part 77 surfaces for Runway 15-33 and Runway 4-22
- Acquire property interests within Runway Protection Zones (RPZs) of Runway 15-33
- Construct aircraft storage facilities (T-hangars, tie-downs, conventional hangars) and associated aprons
- Construct an Airport Service Road
- Shift and extend Runway 4-22 to the south for a total length of 6,400 feet (see Section 1.3 for associated projects)

5.2 AIR QUALITY

Talbot County is currently designated as an "attainment" area of all NAAQS established by EPA. Thus, General Conformity requirements outlined under the federal CAA do not apply to the proposed project and, accordingly, a General Conformity Applicability Analysis is not warranted. However, for disclosure purposes under the NEPA, both short-term construction and long-term operational-related emissions for the project's No Action (No-Build) and Build future year of 2023 are presented.

5.2.1 PROPOSED ACTION

Construction Emissions: Construction activities are temporary and variable depending on project location, duration, and level of activity. These emissions occur predominantly in the engine exhaust from the operation of construction equipment and vehicles (e.g., scrapers, dozers, delivery trucks, etc.) at the site, the transportation of construction workers to and from the site, and are also attributed to fugitive dust produced from construction materials staging, soil handling, and un-stabilized land and wind erosion. Construction equipment typically utilized in airport projects comprises both of on-road (i.e., on-road-licensed) and non-road equipment (i.e., off-road).

The short-term construction emissions associated with the proposed improvements at ESN were computed using the Airport Construction Emissions Inventory Tool (ACEIT). Project-specific details and construction costs were used in the ACEIT to estimate construction activities and equipment/vehicles activity data (e.g., equipment mixes/times). Since the default emission factors used by ACEIT are outdated and do not reflect the latest EPA's Motor Vehicle Emission Simulator (i.e., MOVES/NONROAD) model, only activity data was extracted from ACEIT. Up-to-date emission factors were then developed using MOVES, which includes both on-road vehicles and off-road construction equipment. Year(s), construction activities, and

construction emission calculations associated with the construction of each proposed improvement project can be found in **Appendix F**.

Additionally, fugitive emissions were calculated using emission factors within the EPA's Compilation of Air Pollutant Emission Factors (AP-42). Fugitive emissions result from site preparation, land clearing, material handling, equipment movement on unpaved areas, and evaporative fugitive emissions from application of asphalt paving.

Construction emissions of on- and off-road vehicles/equipment are presented in **Table 5.2-1** by pollutant and construction year. For disclosure purposes, construction emissions of CO, NO_x, SO_2, PM_{10}, $PM_{2.5}$ and VOC are reported.

TABLE 5.2-1:
CONSTRUCTION EMISSIONS (TONS PER YEAR)

YEAR	SOURCE	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	VOC
2021	On-Road Motor Vehicles	17.9	23.2	<0.1	2.1	2.0	5.1
	Off-Road Equipment	0.4	<0.1	<0.1	<0.1	<0.1	<0.1
	Fugitive Emissions	-	-	-	63.2	6.3	-
	Total	18.3	23.2	<0.1	65.3	8.4	5.1
2023	On-Road Motor Vehicles	3.2	5.7	<0.1	0.4	0.4	1.2
	Off-Road Equipment	5.2	0.6	<0.1	0.1	<0.1	0.5
	Fugitive Emissions	-	-	-	72.4	7.2	0.9
	Total	8.4	6.3	<0.1	72.9	7.6	2.6
2024	On-Road Motor Vehicles	2.9	5.0	<0.1	0.3	0.3	1.2
	Off-Road Equipment	4.8	0.5	<0.1	0.1	<0.1	0.5
	Fugitive Emissions	-	-	-	72.4	7.2	0.9
	Total	7.7	5.5	<0.1	72.8	7.6	2.5
2025	On-Road Motor Vehicles	2.7	4.6	<0.1	0.3	0.3	1.1
	Off-Road Equipment	4.8	1.1	<0.1	0.1	<0.1	0.5
	Fugitive Emissions	-	-	-	72.4	7.2	0.9
	Total	7.5	5.7	<0.1	72.8	7.6	2.5
2027	On-Road Motor Vehicles	1.3	4.0	<0.1	0.2	0.2	1.0
	Off-Road Equipment	0.3	0.4	<0.1	0.1	<0.1	0.1
	Fugitive Emissions	-	-	-	20.7	2.1	1.2
	Total	1.6	4.4	<0.1	20.9	2.2	2.2
2028	On-Road Motor Vehicles	0.5	1.4	<0.1	0.1	0.1	0.4
	Off-Road Equipment	2.0	0.2	<0.1	<0.1	<0.1	0.2
	Fugitive Emissions	<0.1	<0.1	<0.1	7.7	0.8	0.5
	Total	2.5	1.6	<0.1	7.8	0.8	1.0
2029	On-Road Motor Vehicles	0.3	0.8	<0.1	<0.1	<0.1	0.2
	Off-Road Equipment	1.8	0.1	<0.1	<0.1	<0.1	0.2
	Fugitive Emissions	<0.1	<0.1	<0.1	2.4	0.2	0.1
	Total	2.1	0.9	<0.1	2.5	0.3	0.5
2030	On-Road Motor Vehicles	1.6	3.6	<0.1	0.2	0.2	0.9

YEAR	SOURCE	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	VOC
	Off-Road Equipment	0.9	0.2	<0.1	<0.1	<0.1	0.1
	Fugitive Emissions	<0.1	<0.1	<0.1	9.0	0.9	0.4
	Total	2.5	3.7	<0.1	9.2	1.1	1.4
2031	On-Road Motor Vehicles	0.7	1.7	<0.1	0.1	0.1	0.4
	Off-Road Equipment	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Fugitive Emissions	<0.1	<0.1	<0.1	7.2	0.7	0.3
	Total	0.9	1.7	<0.1	7.2	0.8	0.8

Source: KBE, 2016
Notes: CO - carbon monoxide, NOx - nitrogen oxide, SO_2 - sulfur dioxide, PM_{10} - particulate matter with a diameter of 10 microns or less, $PM_{2.5}$ – particulate matter with a diameter of 2.5 microns or less, and VOC - volatile organic compound.

Notably, consideration of Best Management Practices (BMPs) is recommended to minimize air emissions during construction of the Proposed Actions. Examples of BMPs that would be employed include the following:

- Reduction of exposed erodible surface area through appropriate materials and equipment staging procedures;
- Cover of exposed surface areas with pavement or vegetation in an expeditious manner;
- Reduction of equipment idling times;
- Ensure contractor knowledge of appropriate fugitive dust and equipment exhaust controls;
- Soil and stockpile stabilization via cover or periodic watering;
- Use of low- or zero-emissions equipment;
- Use of covered haul trucks and conveyors during materials transportation;
- Reduction of electrical generator usage, wherever possible;
- Suspension of construction activities during high-wind conditions;
- Creation of dust, odor, and nuisance reporting system;
- Reduction of vehicles speeds onsite; and
- Prohibition of open burning for waste disposal.

Operational Emissions: The aircraft operational-related emissions associated with the proposed improvements at ESN were computed using the latest version of FAA's AEDT. Airport operational emissions sources other than aircraft (e.g., auxiliary power units, ground service equipment, and motor vehicles) were not considered in the analysis as these source emissions would not change as a result of the proposed improvements. Aircraft fleet mix and operations remain the same between the No Action (No Build) and Build future year (2023); however, taxi times are affected due to the proposed extension of Runway 4-22. The proposed runway extension would create, in the future Build condition, an additional aircraft taxi time of 1.44 minutes per operation because of the increase in distance travelled during takeoff. AEDT aircraft fleet mix and level of operations by aircraft category (i.e., single-engine, multi-engine, turboprop, jet, rotor, and military), airframe, and engine combination can be found in **Appendix F**.

Table 5.2-2 presents the aircraft operational emissions inventories for the future 2023 No Action (No Build) and Build conditions for ESN. For disclosure purposes under NEPA, operational emissions of CO, NOx, SO_2, PM_{10}, $PM_{2.5}$ and VOC are reported. As shown, overall total emissions increase from the 2023 future No Action (No Build) and Build conditions. These emissions changes can be attributed to the slight increase in aircraft taxi times due to the proposed improvements to Runway 4-22.

TABLE 5.2-2:
AIRCRAFT OPERATIONAL EMISSIONS FOR CRITERIA POLLUTANTS (TONS PER YEAR)

2023 PROJECT SCENARIO	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	VOC
No Action	264.3	9.6	2.0	0.4	0.4	18.9
Proposed Action	271.2	9.7	2.1	0.4	0.4	19.9

Source: KBE, 2016
Notes: CO - carbon monoxide, NO_x - nitrogen oxide, SO_2 - sulfur dioxide, PM_{10} - particulate matter with a diameter of 10 microns or less, $PM_{2.5}$ – particulate matter with a diameter of 2.5 microns or less, and VOC - volatile organic compound.

5.2.2 NO ACTION

With no expansion of existing facilities or extension of the runway, the No Action Alternative would not significantly change traffic patterns or increase the number of Airport operations, or otherwise change air quality in the area.

5.2.3 MITIGATION

No mitigation measures are required. BMPs would be implemented to minimize air emissions during construction of the Proposed Action at the Airport.

5.3 BIOLOGICAL RESOURCES

Biotic resources include all species of fish, wildlife, plants, and their habitats. There are numerous statutes, regulations, Executive Orders, and guidance related to biological resources that may need to be addressed under NEPA and require consultation with various federal and state agencies. The USFWS and MDNR were consulted in support of this Environmental Assessment.

Thresholds indicating significant impact include actions that would jeopardize the continued existence of threatened or endangered species, result in the destruction or adverse modification of federally-designated critical habitat, or have substantial impacts to non-listed species. The Proposed Project is not anticipated to impact any federally-listed species, convert designated critical habitat, or have substantial impacts to non-listed species. In addition, due to the abundance of undeveloped land that surrounds the Airport, it is not anticipated that the Proposed Action would contribute to the long term or permanent loss of unlisted species. Therefore, thresholds indicating significant impacts would not be exceeded.

5.3.1 PROPOSED ACTION

Although the significance thresholds, as defined by the FAA, have not been triggered as a result of the Proposed Action, the projects would need to adhere to the State's Forest Conservation Act (FCA). As discussed in Section 4.3, the State's FCA requires that prior to the approval of any public or private subdivision, project plan, grading permit, or sediment control permit on a unit of land 40,000 square feet or greater, applicants must submit a FCP to the Town of Easton for projects that meet the requirements within the Town limits and to the County for those projects outside of the Town limits.

Individual tree and forest impacts would result from several of the proposed projects both on- and off-Airport property. As noted in Section 4, a forest is defined by the MDNR State Forest Conservation Technical Manual as "a biological community dominated by trees and other woody plants covering a land area of 10,000 square feet or greater. Forest includes (1) areas

that have at least 100 trees per acre with at least 50 percent of those having a two-inch or greater diameter at 4.5 feet above the ground and larger, and (2) forest areas that have been cut but not cleared." **Table 5.3-1** identifies the total acreage of forest impact as a result of each proposed project. **Exhibit 5.3-1** illustrates these forested areas as well as individual trees not located within a forest that will be impacted.

TABLE 5.3-1:
TOTAL FOREST IMPACTS PER PROJECT

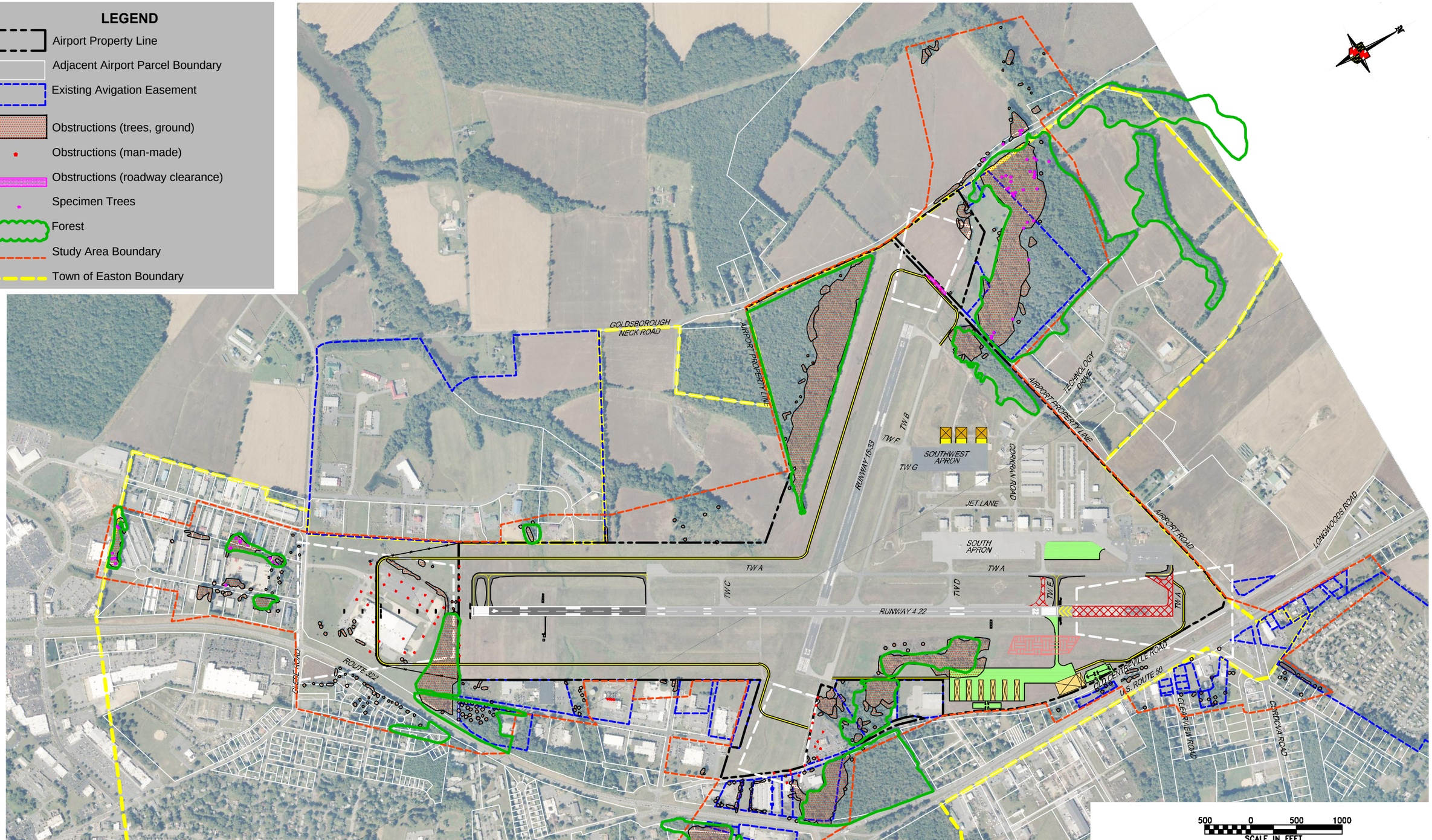
PROPOSED PROJECTS	FOREST IMPACTS (ACRE)
Acquisition of avigation easements, lighting of manmade obstructions, and removal of tree obstructions to within 10 feet of the 14 CFR Part 77 surfaces for Runway 15-33 and Runway 4-22	74.08
Acquire property interests within Runway Protection Zones (RPZs) of Runway 15-33	0
Construct aircraft storage facilities (T-hangars, tie-downs, conventional hangars) and associated aprons	0
Construct an Airport Service Road	0
Shift and extend Runway 4-22 to the south for a total length of 6,400 feet[1]	9.14
TOTAL	83.22

Source: AECOM, 2016
[1]All forest impacts are associated with the removal of obstructions that penetrate the 14 CFR Part 77 surfaces for future Runway 4-22.

Removal of existing pervious surfaces, such as maintained grass, existing drainage ditches supporting streams and wetlands, and forested area, would be necessary as a result of the various projects. The majority of tree clearing is required for the obstruction removal projects; it is anticipated that trees would be flush cut at the ground and stumps left in place. Low-lying herbaceous vegetation and shrubs would remain in place in locations where they are not considered a penetration to the 14 CFR Part 77 surfaces. As a result of potential changes in understory vegetation with the removal of taller trees that penetrate the 14 CFR Part 77 surfaces, such areas may experience changes in species composition and density due to new openings in the canopy and change in soil saturation. Soil disturbance is expected to be minimal and temporary in areas where pervious surfaces will remain, which are largely tree obstruction removal locations.

Wildlife species within project areas may experience short-term disturbance from construction and associated noise. Any species dependent upon the specific trees removed could also be negatively impacted. A bald eagle was observed in the forest area north of Airport Road within typical habitat for that species. The bald eagle, along with other bird species may be temporarily impacted during construction, however, the forested area in this location does not in its entirety fall within the areas identified as containing obstructions, and habitat for the bald eagle would remain in place post construction activities. The location of this forested area falls on two parcels (Tax Map 25, Parcels 92 and 161). Approximately 18 acres of the existing approximate 50 acres of forest would require removal.

Although minor temporary disturbances would occur as a result of the proposed actions, these activities will not have a significant impact on biological resources within the study area. No existing habitat type will be lost and all efforts to minimize and reduce disturbances to these resources will be taken during construction activities. If possible, tree obstruction removal activities would be scheduled to occur outside the migratory bird nesting season (spring through late summer) to minimize potential impacts to migratory birds. As no listed threatened or endangered species were identified within any of the proposed project areas, no additional coordination with the USFWS or MDNR regarding species or habitat impacts is required, nor



NOTE:
PER TOWN OF EASTON FCA GUIDANCE, FOREST STAND BOUNDARIES HAVE BEEN INCLUDED FOR THOSE FOREST AREAS WHERE IMPACTS TOTAL > 20,000 S.F. PER PARCEL.

Drawing Source: AECOM, 2016

Source of Obstruction Data: 2015 Quantum Spatial (AGIS Aerial Survey, Date of Aerial: September 2015)

THE GREAT SEAL OF TALBOT COUNTY MARYLAND

EASTON/NEWNAM FIELD AIRPORT
EASTON, MARYLAND

AECOM

TREE/FOREST IMPACTS

EXHIBIT
5.3-1

FILE NAME: U:\Projects\E\ESN\60423280\CAD\CIVIL\ESN EA EXHIBITS NOV 2016\ESN-EA-5.3-1.dwg LAYOUT NAME: ESN EA 5.3-1 PLOTTED: Tuesday, February 27, 2018 - 9:22am

should any species surveys be required. Mitigation measures would be required under the Maryland FCA as a result of proposed impacts and are discussed in Section 5.3.3.

5.3.2 NO ACTION

Implementation of the No Action Alternative would not impact any forested resources or non-forested land. Furthermore, there are no impacts to rare, threatened, or endangered species or associated habitat with implementation of the No Action Alternative.

5.3.3 MITIGATION

Coordination with the MDNR stated that no instream work is permitted in any of the surrounding streams from March 1 through June 15, inclusive, during any year. Construction specifications would require the contractor to abide by these instream prohibition periods and any relevant Best Management Practices for each proposed project would be utilized to the maximum extent possible. This time of year restriction also coincides with migratory bird nesting season, so limited construction activities would also occur within forests during this time period. As a general recommendation, the USFWS recommends that if removals must occur within the breeding season, a field survey for nests should be conducted. If no active nests of migratory birds are identified, than no further action is required. If nests are identified, further coordination would be required prior to the proposed action to avoid violation to the Migratory Bird Treaty Act.

Associated mitigation requirements vary with respect to the resource and regulating agency. For example, upland forest impacts are regulated through the Town of Easton or Talbot County through their respective Forest Conservation Ordinances; however, forested wetlands are regulated through the MDE and USACE and are discussed in the Water Resources section (Section 5.12) of this document. Separation of these resources allows for mitigation requirements by regulatory authorities to not overlap.

Mitigation requirements in accordance with the Forest Conservation Act as a result of the proposed projects will vary depending upon the project; the discussion herein relates to tree/forest impacts as regulated by the Town of Easton or Talbot County, therefore not including any forested wetland areas. Mitigation could be required in the form of reforestation, afforestation, or pay a fee in lieu. Afforestation, as defined in the MDNR *State Forest Conservation Technical Manual*, is "the establishment of a forest in an area on which forest cover has been absent for a long period of time or the planting of open areas which are not presently in forest cover." As tree plantings and the establishment or enhancement of habitat on and surrounding Airport property is not preferred, it is recommended that the Airport request to pay a fee in lieu of reforestation or afforestation to the Town of Easton to satisfy mitigation requirements for FCA impacts.

- **Acquisition of avigation easements, lighting of manmade obstructions, and removal of tree obstructions to within 10 feet of the 14 CFR Part 77 surfaces for Runway 15-33 and Runway 4-22:** In accordance with the Town of Easton's Forest Conservation Ordinance, 14 CFR Part 77 obstruction removals of forest and trees are exempt activities on Airport property (see **Appendix C**). No permitting and mitigation are required with the Town of Easton for these impacts. For those activities outside of Airport property yet within the Town of Easton limits, 14 CFR Part 77 obstructions are not exempt from the FCA and the provisions of the Town's Forest Conservation Ordinance apply. As identified in Section 4.3.2.1 and in **Appendix C**, ten (10) Forest Stand Delineations (FSDs) were prepared and approved for individual parcels outside of the Airport property boundary. A Forest Conservation Plan (FCP) for each property for which an FSD was prepared, and for which obstruction removals will occur, is currently being prepared

and will be submitted to the Town for review and approval. Those that have been submitted and approved are located in **Appendix C**. Through preparation of a Forest Conservation Worksheet, total acreage of required plantings will be determined. The worksheet factors in any forested wetlands that may be present within the total tract area for the project so that these forest areas are not mitigated for twice. No anticipated impacts to forested areas outside of the Town of Easton limits and within the Talbot County jurisdiction are proposed. For those individual tree impacts within County limits, outside of the Town of Easton, the Talbot County Forest Conservation Ordinance indicates that, "the cutting or clearing of trees to comply with the requirements of 14 CFR § 77.25 relating to objects affecting navigable airspace, provided that the Federal Aviation Administration has determined that the trees are a hazard to aviation" are exempt from its provisions. Thus, no mitigation is required with Talbot County for these impacts; communication with the County is ongoing and confirmation of this exemption will be requested.

- **Acquire property interests within Runway Protection Zones (RPZs) of Runway 15-33**: The acquisition of properties located within the RPZs of Runways 15 and 33 would not trigger the requirements of the Town's or County's Forest Conservation Ordinance. No permitting or mitigation would be required.

- **Construct aircraft storage facilities (T-hangars, tie-downs, conventional hangars) and associated aprons**: Although no forested area would be impacted for each of these proposed projects, these activities would trigger the Town of Easton's Forest Conservation Ordinance as the projects are located on Airport property, a land unit greater than 40,000 square feet, and would require a grading and/or sediment and erosion control permit. A FCP and associated Forest Conservation Worksheet are required for submittal to the Town of Easton for each project, depending on the project planning and construction timeframe.

- **Construct an Airport Service Road**: Although no forested area would be impacted for each of these proposed projects, these activities would trigger the Town of Easton's Forest Conservation Ordinance as the projects are located on Airport property, a land unit greater than 40,000 square feet, and would require a grading and/or sediment and erosion control permit. A FCP and associated Forest Conservation Worksheet are required for submittal to the Town of Easton for each project, depending on the project planning and construction timeframe.

- **Shift and extend Runway 4-22 to the south for a total length of 6,400 feet**: The extension of Runway 4-22 and associated projects would also trigger the Town of Easton's Forest Conservation Ordinance as the projects would require a grading and/or sediment and erosion control permit on a property greater than 40,000 square feet and/or the projects would cause the removal of forest (obstruction removal activities). A FCP and associated Forest Conservation Worksheet would be required for submittal to the Town of Easton for each project, depending upon the project planning and construction timeframe. In accordance with the Town of Easton's Forest Conservation Ordinance, obstruction removal of forest and trees are exempt activities on Airport property within the Town of Easton. No permitting and mitigation are required. For those removals outside of Airport property within the Town of Easton limits, the provisions of the Forest Conservation Ordinance apply. FSDs were prepared and approved for these off-Airport parcels (see **Appendix C**). A FCP will need to be submitted to the Town for each of these parcels and mitigation provided according to the calculations developed through each individual Forest Conservation Worksheet.

In summary, mitigation required will be dependent upon each individual project included within the Environmental Assessment, and due to County, State, and Federal funding limitations and programming, these identified projects may be constructed in portions of the total project. Subsequent permitting and mitigation will be completed in concurrence to the

portions of the total project as coordinated with State and Local agencies. For all projects, mitigation efforts will include relevant time of year restrictions as noted for both instream work as well as forest removal potentially affecting migratory bird nesting habitat. Required plantings, or fee in lieu of planting, will be coordinated with the Town of Easton.

5.4 CLIMATE

Although there are no federal standards for aviation-related GHG emissions, it is well-established that GHG emissions can affect climate. As noted in the FAA Order 1050.1F Desk Reference, "climate change is a particularly complex challenge given its global nature and the inherent interrelationships among its sources, causation, mechanisms of action, and impacts; however, analyzing a proposed action's GHG emissions and the effects of climate change relevant to a proposed action—particularly how climate change may change an action's environmental effects—can provide useful information to decision makers and the public."

5.4.1 PROPOSED ACTION

For this analysis, GHG emissions associated with construction activities as well as the net change in aircraft operational emissions between the future No Action and Proposed Action conditions are disclosed. The GHG emissions are presented in metric tons of CO_2 equivalent (CO_{2e}).

For disclosure purposes under NEPA, the estimated project-related annual CO_{2e} construction and operational emissions are presented in **Tables 5.4-1 and 5.4-2**, respectively. As shown, over the short-term, emissions of CO_{2e} increase due to construction activities. Over the long term, when the 2023 build year is compared to the future no build, CO_{2e} emissions slightly increase with the proposed project due to the increase in aircraft taxi times.

TABLE 5.4-1:
CONSTRUCTION CO_{2e} EMISSIONS (METRIC TONS)

CONSTRUCTION YEAR	CO_{2e}
2021	7,404
2023	3,094
2024	3,081
2025	3,660
2027	3,289
2028	1,383
2029	907
2030	2,940
2031	1,360

Source: KBE, 2016
Note: CO_{2e} – carbon dioxide equivalent.

TABLE 5.4-2:
AIRCRAFT OPERATIONAL CO_{2e} EMISSIONS (METRIC TONS)

2023 PROJECT SCENARIO	CO_{2e}
No Build	4,910
Build	5,061

Source: KEB, 2016
Note: CO_{2e} – carbon dioxide equivalent.

As shown in **Table 5.4-1** and **Table 5.4-2**, with the short-term and Proposed Action, emissions of CO_{2e} would increase due to construction activities. Over the long term, because the Proposed Action does not affect operations and only minimally increases aircraft taxi times, there would be little change in CO_{2e} emissions. Therefore, it is anticipated that this change will not have a significant impact on climate.

5.4.2 NO ACTION

The continued operation of the Airport in its current condition would not change any traffic patterns, and only slight increases in Airport operations are forecasted. Therefore, it is anticipated that the No Action Alternative would not result in a significant change to air quality or climate conditions in the area, and would not contribute to a significant increase in GHG emissions.

5.4.3 MITIGATION

Best Management Practices (BMPs) would be implemented to minimize air emissions and energy usage during construction of the Proposed Action. When implemented, BMPs could help to reduce GHG emissions at the Airport.

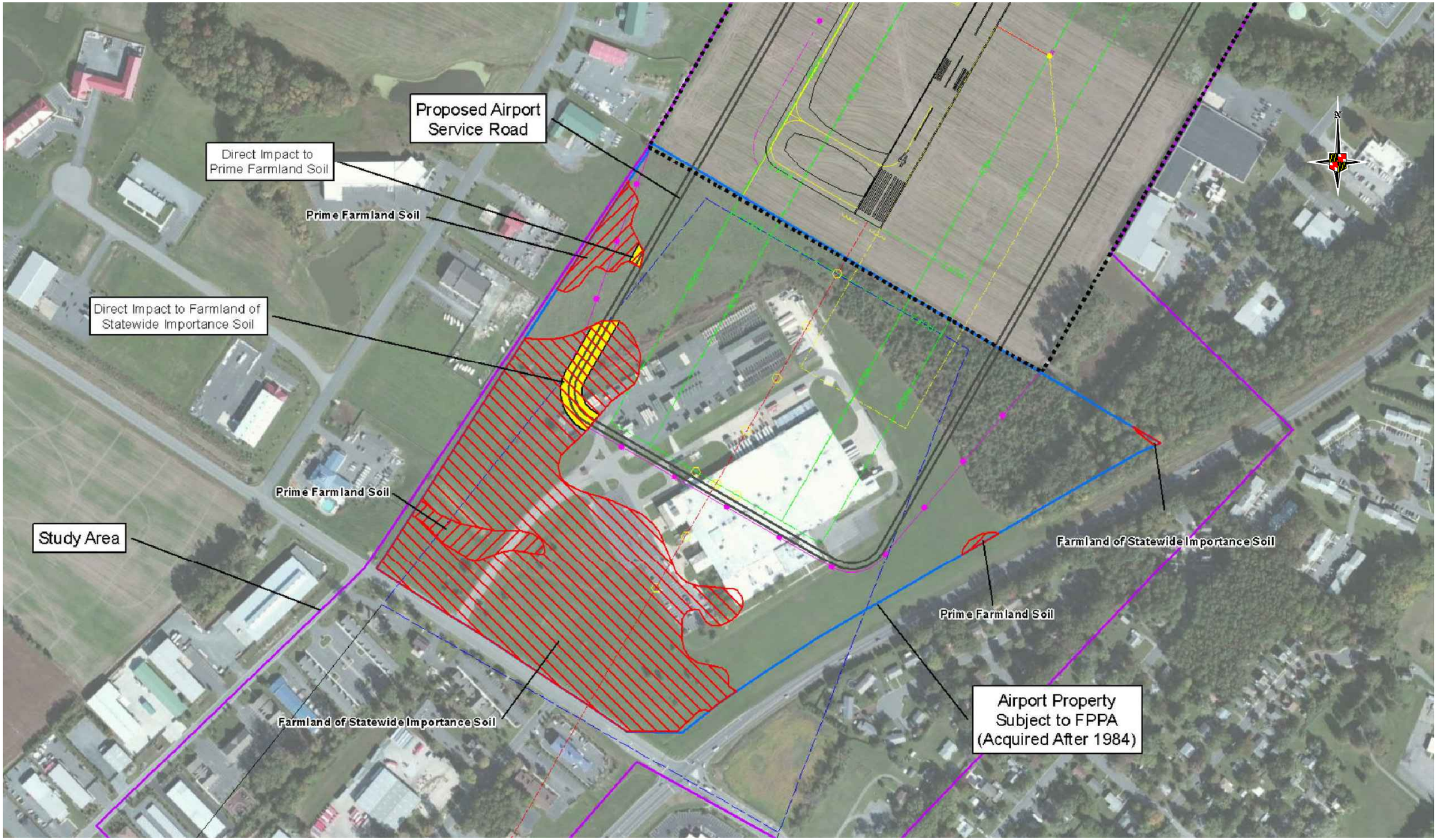
5.5 FARMLANDS

In accordance with the FPPA, Federal agencies are directed to use development criteria to identify and take into account the adverse effects of Federal programs on the preservation of farmland and to minimize the extent to which Federal activities contribute to the conversion of agricultural land to nonagricultural uses. The majority of the area that would be impacted by the proposed projects is dedicated to Airport use and was purchased prior to 1984. Therefore, and in accordance with the FPPA, 7 USC 4202, Rules, 7 CFR Part 658, Sec. 403.4, Exempted Conversion and Farmland Exclusions, since the land was purchased prior to 1984 and committed to use for airport development purposes, it is exempt from the provisions of the FPPA. However, since a portion of the land in the project area was acquired subsequent to 1984 and is categorized as having agricultural land use, it is appropriate to evaluate this area for farmlands as specified in the FPPA.

5.5.1 PROPOSED ACTION

The direct impacts to farmland soils are due to the construction activities associated with the Proposed Project that occur within the area are potentially subject to the FPPA (see **Exhibit 5.5-1**). Approximately 0.1 acres of Prime Farmland soils are directly impacted. Approximately 0.6 acres of Farmlands of Statewide Importance soils are directly impacted. The total direct impacts to farmland soils are 0.7 acres **(see Table 5.5-1)**.

Approximately 1.3 acres of Prime Farmland soil and 4.4 acres of Farmlands of Statewide Importance soils area are potentially subject to the FPPA due to the change in land use of the area from an agricultural to a non-agricultural use and because of



EASTON/NEWNAM FIELD AIRPORT
EASTON, MARYLAND

AECOM

Drawing Source: AECOM, 2016

Source of Aerial Photo: 2015 Quantum Spatial (AGIS Aerial Survey, Date of Aerial: September 2015)

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FARMLAND IMPACTS

EXHIBIT
5.5-1

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the restricted access to the land once the runway and taxiway extension and associated facilities are built **(see Table 5.5-1)**. These soils would remain undisturbed and intact; however, they would no longer be available for agricultural use. Therefore, the implementation of the Proposed Project would indirectly impact these existing farmlands soils.

TABLE 5.5-1:
FARMLAND CHARACTERISTICS FOR SOILS THAT ARE SUBJECT TO THE FPPA

SOIL ID	SOIL DESCRIPTION	DIRECT IMPACT ACRES	INDIRECT IMPACT ACRES	FARMLAND CHARACTERISTIC
WoA	Woodstown sandy loam, 0 to 2 percent slopes	- -	0.6	All areas are prime farmland
HfA	Hambrook-Sassafras complex, 0 to 2 percent slopes	0.1	0.7	All areas are prime farmland
EmA	Elkton silt loam, 0 to 2 percent slopes	0.6	4.4	Farmland of statewide importance
TOTAL:		**0.7**	**5.7**	

Source: AECOM, 2016 and NRCS, 2016

5.5.2 NO ACTION

Under the No Action Alternatives, no indirect impacts are anticipated that could adversely impact farmlands subject to the FPPA.

5.5.3 MITIGATION

A Form AD-1006 will be submitted to the NRCS for review. A significant impact would occur if the conversion impact rating score is between 200 and 260 points. According to FAA Desk Reference Exhibit 6-2, "if the total score on Form AD-1006, 'Farmland Conservation Impact,' rating is below 160, no further analysis is necessary." Since the areas that include soils with farmland characteristics are potentially affected by the Proposed Project are not actively and have not recently been farmed, and much of the surrounding land is of an urban land use (i.e. industrial, commercial, airport), it is anticipated that the Proposed Project would not approach or exceed the threshold indicating a significant impact. Moreover, and for the same reasons, it is not anticipated that the Proposed Project would exceed the 160 point threshold that might indicate the need to perform additional analysis.

5.6 HAZARDOUS MATERIALS, SOLID WASTE, AND POLLUTION PREVENTION

As discussed in Section 4.6, several sites on or in the vicinity of the airport were identified that are known, or have the potential, to involve hazardous materials, hazardous waste, environmental contamination and/or other regulated substances which could have an effect on the proposed improvements at ESN. **Appendix D** illustrates each of the potential Hazardous Material sites in relation to the proposed improvement projects at ESN.

According to the FAA Desk Reference Exhibit 4-1, the FAA has not established significance thresholds for hazardous materials, solid waste, or pollution prevention. Instead, the FAA has identified factors to consider when evaluating impacts. These factors include assessing whether or not a project has the potential to:

- Violate applicable Federal, state, tribal, or local laws or regulations regarding hazardous materials and/or solid waste management;

- Involve a contaminated site (including, but not limited to, a site listed on the NPL). Of note, not all of the grounds within the boundaries of a contaminated site may be contaminated, which leaves space for siting a facility on non-contaminated land within the boundaries of a contaminated site;
- Produce an appreciably different quantity or type of hazardous waste;
- Generate an appreciably different quantity or type of solid waste or use a different method of collection or disposal; or
- Adversely affect human health and the environment.

According to these factors, the proposed improvement projects at ESN have the potential to be significant, as three sites (Site Nos. 12, 33 and 35) are located on property of several proposed improvement projects. However, as stated in the FAA Desk Reference Exhibit 4-1, not all of the grounds within the boundaries of a contaminated site are contaminated, which leaves space for siting a facility on non-contaminated land within the boundaries of a contaminated site. If appropriately mitigated, actions within the boundaries of a contaminated site would not have significant impacts.

During 2016, a Phase I Environmental Due Diligence Audit (EDDA) was completed for Site No. 33 which identified the potential for recognized environmental conditions (RECs). As a result, a Phase II Environmental Site Assessment (ESA) and a Supplemental Phase II ESA were completed (see **Appendix D**). The results identified several soil and groundwater exceedances of the MDE Clean-up Standards. Subsequently, as discussed in Section 4.6.1, Talbot County applied to the MDE VCP seeking inculpable person status and a No Further Action letter for the existing environmental conditions. As part of the application, the Phase I EDDA, Phase II ESA and Supplemental Phase II ESA were submitted to the MDE Land Restoration Program (LRP). Acceptance into the program is currently pending the results of additional sampling required by the MDE which is currently ongoing. Although exceedances were observed during the Phase II investigations, concentrations are relatively low and there does not appear to be a significant widespread environmental concern at the Site. Based on the existing data, non-hazardous impacted waste may be generated during the proposed actions as described in the section below; however, the actions will not likely cause significant impacts. Of note, Site No. 35 is located at the same address as Site No. 33. The EDDA indicated that this site is included in the Resource Conservation and Recovery Act Conditionally Exempt Small Quantity Generator (RCRA-CESQG) database for ignitable waste. However, this facility does not have any significant non-compliance violations, and no tanks are associated with this facility.

5.6.1 PROPOSED ACTION

According to this assessment, Site Nos. 33 and 35 are within the vicinity of several proposed improvement projects. Site No. 33 includes three closed UST cases; one UST was removed from the ground and two USTs were abandoned in place. The abandoned USTs include a 500 gallon concrete pit that has been cleaned and filled with concrete, and an 800 gallon UST. Both tanks formerly contained waste oil and should be properly removed prior to proposed improvement projects. During the Phase II ESA completed in 2016, petroleum-related impact was detected in the vicinity of the abandoned 800 gallon UST and low levels of chlorinated solvents were detected in the vicinity of the abandoned 500 gallon UST. Site improvement activities will include the removal of the previously abandoned 500 gallon and 800 gallon USTs. MDE requires 30 day notification prior to UST removal. Soil samples must be collected in accordance with MDE Oil Control Program (OCP) and VCP protocols. Solid waste (material surrounding the USTs) will likely be generated during removal activities. Waste characterization samples will be collected to determine the appropriate disposal facility.

Additionally, during the Site No. 33 Phase II ESA, arsenic was detected in soil samples above the MDE Non-Residential Clean-up Standard and several metals, including arsenic, chromium, and lead were detected, in groundwater above the MDE Groundwater Clean-up Levels. Concentrations of metals found in the groundwater are below the Resource Conservation and

Recovery Act (RCRA) hazardous waste regulations. Although toxicity characteristic leaching procedures (TCLP) were not conducted on the soil samples, it is anticipated that levels are below the RCRA hazardous waste regulations based on the concentrations observed in the soil and groundwater. Therefore, it is anticipated that any impacted solid waste excavated during the improvement projects will not be considered hazardous waste.

Site No. 12 includes a case involving groundwater contamination, a case found in the historic leaking UST database for hand bailing a monitor well, a historic UST which has been removed, and is found in the Brownfield Master Inventory Report. This site is located on property slated for an avigation easement as obstruction removal is proposed to occur. However, the Phase I EDDA performed in 2016 indicated that this site is not considered a REC. Based on this data, significant impacts are not anticipated from this site.

Based on these findings, appropriate precautions should be undertaken prior to and during the construction of the proposed improvements. These may include, but are not necessarily limited to, the testing of soils and/or groundwater and the notification of appropriate agencies should hazardous materials or environmental contamination be encountered.

Use and Generation of Hazardous Materials: The proposed improvement projects are typical of general aviation airports of the approximate size and function of ESN. Therefore, the generation of hazardous materials is likely limited to solvents and their waste products. The facilities may also involve the storage of fuel and other petroleum products (e.g., oil, grease, lubricants) in relatively small quantities. During demolition activities asbestos-containing materials may also be encountered and will require proper handling and disposal. Solid wastes will likely be confined to building demolition debris such as concrete, asphalt, wood, etc. These materials may be transported and disposed of in nearby landfills, repurposed, or recycled to the extent feasible.

Pollution Prevention: The design and use of the proposed improvement projects will adhere to federal and state regulations as well as best practices pertaining to the use of hazardous materials, petroleum storage, and waste disposal. This includes precautionary measures aimed at preventing and minimizing impacts to surface and ground waters, soil, and air.

Solid Waste: The anticipated solid wastes include, but are not limited to, paper and cardboard, plastic and steel containers, wood, concrete, and various white goods. Generation of non-hazardous impacted solid wastes is anticipated during the removal of the abandoned USTs at Site No. 33 if deemed necessary. Solid wastes will include the concrete pit, the 800 gallon UST, and surrounding materials (i.e. soil, gravel, etc.).

5.6.2 NO ACTION

The No Action Alternative would not result in any changes at the Airport, and therefore would not have an effect on hazardous materials, solid waste, or pollution prevention.

5.6.3 MITIGATION

Construction equipment maintenance would be performed in a designated area and include control measures, such as drip pans to contain petroleum products. Best Management Practices to prevent or minimize the potential for the generation or disposal of hazardous substances will be employed during the construction phase of the proposed project. Pollution prevention measures such as the National Pollutant Discharge Elimination System (NPDES) stormwater permit will be followed.

5.7 LAND USE

The FAA has not established a significance threshold for land use. For this Environmental Assessment, land use compatibility will be discussed with respect to noise impacts and property interest requirements. If the noise and noise-compatible land use analysis concludes that there is no significant impact, usually a similar conclusion may be drawn with respect to land use in general. However, if the proposal would result in other impacts that have land use ramifications, for example, disruption of communities, relocation, or induced socioeconomic impacts, the impacts on land use should be analyzed.

5.7.1 PROPOSED ACTION

Noise impacts are further discussed in **Section 5.9**. The noise analysis indicates there would be no change in noncompatible land use (DNL 65 dB and above noise contours) between the 2023 No Action and Proposed Project Alternatives and no change from the 2028 No Action and 2028 Proposed Project Alternatives. Despite that there is no change in noncompatible land use, there is a reduction in noise exposure directly related to the southwest shift of Runway 4-22 away from the residential areas (under avigation easements) off of the existing Runway 22 end.

The construction of the Proposed Action is expected to last for approximately three (3) years, during which time the primary runway, Runway 4-22 will be temporarily closed for aircraft operations; therefore, a noise analysis was performed to determine any temporary short-term noise effects from this closure. This analysis compared the 2023 No Action Alternative to an interim alternative with Runway 4-22 temporarily closed. Operational counts and characteristics between the two (2) alternatives remain the same except for the change in runway utilization. It should be noted that not all of the aircraft operating at ESN would be able to operate, or would have to operate with weight restrictions, at ESN with only Runway 15-33 available, as discussed in greater detail in **Section 5.9**. Based on previously provided information, **Table 5.7-1** provides a comparison of runway utilization between the No Action Alternative and the Interim, one-runway alternative. The Proposed Actions will require Runway 4-22 to be closed no more than six months of any one year during construction; therefore, the average annual day operations were calculated using six months of the No-Action runway configuration and six months of the single runway configuration.

TABLE 5.7-1
RUNWAY UTILIZATION

AIRCRAFT CATEGORY	NO-ACTION RUNWAY CONFIGURATION				INTERIM RUNWAY CONFIGURATION			
	04	22	15	33	04	22	15	33
Jet	65.0 %	30.0 %	2.0 %	3.0 %	0 %	0 %	40.0 %	60.0 %
Turboprop	61.0 %	30.0 %	4.0 %	5.0 %	0 %	0 %	45.0 %	55.0 %
MEP	60.4 %	29.6 %	4.8 %	5.2 %	0 %	0 %	48.0 %	52.0 %
SEP	60.4 %	29.6 %	4.8 %	5.2 %	0 %	0 %	48.0 %	52.0 %
HELO	60.4 %	29.6 %	4.8 %	5.2 %	0 %	0 %	48.0 %	52.0 %

Source: ESN ATCT, 2016.
Note: MEP = Multi-engine piston
SEP = Single-engine piston

As shown in **Table 5.7-2**, the Interim Alternative for the Proposed Action in 2023 results in a 0.2 acre increase of noncompatible land use within the DNL 65 dB and above noise contour when compared to the 2023 No Action Alternative and an increase of 0.2 acres when compared to the Proposed Action Alternative (see **Exhibit 5.9-2**). Since this impact will only

occur during the three (3) years of construction and the areas impacted are zoned agricultural/residential, but the areas within the contour contain no residential buildings, recommended mitigation measures are temporary in nature during the construction period. Specific mitigation measures recommended are discussed in Section 5.9.1.2.

TABLE 5.7-2
2023 INTERIM FUTURE CONDITION NONCOMPATIBLE LAND USE ESTIMATES WITHIN DNL 65 DB CONTOUR UP

LAND USE TYPE (ACRES)	2023 NO-ACTION	2023 PROPOSED ACTION	2023 INTERIM PROJECT	CHANGE FROM NO-ACTION PROJECT	CHANGE FROM PROPOSED ACTION PROJECT
High Density Residential	---	---	---	---	---
Medium Density Residential	---	---	---	---	---
Low Density Residential	---	---	0.2	0.2	0.2
Total Acreage	**---**	**---**	**0.2**	**0.2**	**0.2**

Source: AECOM, 2016
Maryland Department of Planning, TALB_2010 LULC.
*Note: There are no residential structures currently within this area.

While there are 0.2 acres of land zoned agricultural/residential within the DNL 65 dB noise contours, no residential dwellings are associated with these areas; therefore, since there would be no aircraft noise-related impacts due to the implementation of the Proposed Project, land use compatibility impacts would be restricted to the acquisition of off-airport parcels through avigation easements, and through fee simple acquisition to provide for RPZs as mandated by FAA regulations. The Proposed Project does include off-airport property.

The County would perform appraisals and review appraisals in accordance with Public Law 91-646, the *Uniform Relocation Assistance and Real Property Acquisition Policy Act of 1970*, and FAA Advisory Circular 150/5100-17, *Land Acquisition and Relocation Assistance for Airport Improvement Program Assisted Projects*, for each privately owned parcel. Once negotiated with the landowner, it is anticipated that avigation easements would be recorded to provide the County with a perpetual nonexclusive height restriction easement over the parcel which would preclude the property owner from constructing any improvements or planting on site that would impede the navigational system at the Airport. The easement would grant the County the right to enter the property and remove or light the obstruction that exceeds the height restriction imposed by the easement. Development of these easements would be undertaken in accordance with the *Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970*, as amended (*Uniform* Act).

In addition, in some cases, avigation easements are proposed to further restrict the land use to preclude inncompatible land uses. Incompatible land uses within a RPZ include residences and public places of assembly. Development of these easements would be undertaken in accordance with the *Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970*, as amended (*Uniform* Act).

Fee simple acquisition requires the actual purchase of properties by the Airport. Acquisition of the properties will be undertaken in accordance with the *Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970*, as

amended (*Uniform* Act). None of these properties are zoned or in use as residential property; therefore, Proposed Action land acquisition will not result in significant land use impacts.

Table 5.7-3 summarizes the property interest requirements of the Proposed Action. The Proposed Action would involve land acquisition; however, no residential relocation would be required. One fee simple acquisition with a business is proposed. This business is Grand Rental Station, an equipment rental company. All property acquisition would occur in compliance with the Uniform Relocation Assistance and Real Property Acquisition Act. The Proposed Action would not divide or disrupt an established community. No local (off-airport) surface transportation patterns would be altered.

TABLE 5.7-3
PROPERTY INTERESTS

PROPOSED PROJECT	FEE SIMPLE	AVIGATION EASEMENT
Acquisition of avigation easements, lighting of manmade obstructions, and removal of tree obstructions to within 10 feet of the 14 CFR Part 77 surfaces for Runway 15-33 and Runway 4-22	**0**	**10** (includes Parcel ID 37 duplicate (RW 15-33 and RW 4-22 obstructions))
Acquisition of avigation easements and removal and lighting of obstructions to within 10 feet of the 14 CFR Part 77 surfaces Runway 4-22	**1** (includes Parcel ID 19 duplicate (RW 4-22 obstructions and RW 4-22 extension))	27 (-1 for Parcel ID 37 duplicate (RW 15-33 and RW 4-22 obstructions)) = **26** total
Acquire property interests within Runway Protection Zones (RPZs) of Runway 15-33[1]	**1**	**2**
Construct aircraft storage facilities (T-hangars, tie-downs, conventional hangars) and associated aprons	**0**	**0**
Construct an Airport Service Road	**0**	**0**
Shift and extend Runway 4-22 to the south for a total length of 6,400 feet	2 (-1 for Parcel ID 19 duplicate (RW 4-22 obstructions and RW 4-22 extension)) = **1** total	**15**
Total	**3**	**53**

[1]See table 5.7-4 below

While noise is typically the central compatibility concern for land uses in the vicinity of an Airport, safety should also be considered. The safety element of land use compatibility is achieved by ensuring that only compatible land uses lay within an Airport's RPZs. Thus, to prevent the potential noncompatible land uses that exist within the RPZs, various measures are proposed, as detailed in **Table 5.7-4** for the existing RPZs of Runway 15 and 33.

TABLE 5.7-4:
RUNWAYS 15 AND 33 PROTECTION ZONES – PROPERTY INTERESTS

ID #	PROPERTY INTEREST	AREA WITHIN RPZ	APPROX. AREA OF INTEREST (ACQUISITION)	DISPOSITION	REASON
48	Tax Map 25, Parcel 192[1]	0.17 Acres	0.00 Acres	N/A (Existing Conservation Easement)	RW 15 RPZ
34	Tax Map 100, Parcel 47, Lot 2[2]	0.13 Acres	0.13 Acres	Need Avigation Easement (Revised)	RW 33 RPZ
85	Tax Map 100, Parcel 47, Lot 5[3]	0.25 Acres	1.08 Acres	Fee Simple (entire parcel)	RW 33 RPZ
35	Tax Map 25, Parcel 238, Lot 1[4]	0.31 Acres	0.31 Acres	Avigation Easement (Revised)	RW 33 RPZ

Source: AECOM, 2016

[1] Tax Map 25, Parcel 192: a conservation easement was placed on this parcel in 2006; this easement is held by the Eastern Shore Land Conservancy and Maryland Environmental Trust as co-grantee. The conservation easement limits residential development and prohibits any type of commercial or industrial activities other than farming, forestry or other open space uses. Thus, due to the extreme restrictive nature of the land uses permitted, no property interests are proposed on this 0.17 acres of this parcel that encroach upon the Runway 15 RPZ.

[2]Tax Map 100, Parcel 47, Lot 2: The County currently holds an avigation easement over this parcel of land. It is recommended that the County revise the existing easement to restrict the land uses permitted in the very small portion of the property encroached by the RPZ.

[3]Tax Map 100, Parcel 47, Lot 5: The County currently holds an avigation easement over this parcel of land. It is recommended that the County obtain this parcel through fee simple due to the presence of a building within the RPZ. The building is associated with the Grand Rental Station, an equipment rental company.

[4]Tax Map 25, Parcel 238, Lot 1: The County currently holds an avigation easement over this parcel of land. It is recommended that the County revise the existing easement to restrict the land uses permitted in the very small portion of the property encroached upon by the RPZ.

5.7.2 NO ACTION

Under the No Action Alternative, no land use impacts would result.

5.7.3 MITIGATION

No residential zoned parcels have dwellings or structures impacted by aviation noise resulting from the operation of the Proposed Action; there is no disruption of communities caused by the construction and operation of the Proposed Action nor would the Proposed Action result in any socioeconomic impacts. Therefore, since neither the No Action Alternative nor the Proposed Action would produce significant impacts to land use, no mitigation is required.

5.8 NATURAL RESOURCES AND ENERGY SUPPLY

In FAA Order 1050.1F, the FAA has not identified a significant impact threshold on natural resources and energy supply, but the FAA identified a factor to consider when evaluating potential impact. It should be noted that this factor is not a threshold and may not necessarily indicate a significant impact. As stated in FAA Order 1050.1F: this factor includes, but is not limited to, situations in which the proposed action or alternative(s) would have the potential to cause demand to exceed available or future supplies of these resources. For most actions, changes in energy demands or other natural resource consumption for FAA projects will not result in significant impacts. As it relates to the goal of determining impact significance, the No Action and Proposed Project Alternatives were considered in the following contexts:

- Utility Impacts: identify any large demand on local existing or planned utilities;
- Consumable Materials Impacts: estimate the volume(s) of any scarce or unusual materials needed to implement any Alternative considered; and
- Fuel Consumption Impacts: identify any changes to existing fuel usage attributable to changes in aircraft operations, ground procedures, or service vehicle utilization.

5.8.1 PROPOSED ACTION

Utility Impacts: The development of aviation-related facilities at ESN is expected to center around aircraft storage, including conventional and T-hangars that require lighting, air conditioning, and power for aircraft related activity and office equipment. Easton Utilities, Delmarva Electric, and Chesapeake Energy provide electric power to Talbot County through a network of power generation plants, substations, and distribution lines capable of serving existing and prospective tenants at ESN. The existing infrastructure serving ESN is sized to accommodate the terminal buildings, aircraft storage facilities, and other large facilities currently operating at the Airport. The Proposed Project facilities are estimated to require 0.114 mWh of electricity per 12-unit T-hangar and 0.026 mWh per conventional hangar at maximum demand, for a total maximum demand of 0.765 mWh of electricity. ESN would help coordinate electric and gas power needs with utility companies and energy suppliers. At this time, there are no known issues related to local energy suppliers meeting the increased demand. Existing energy generating capacity in Talbot County is approximately 68.9 mWh; therefore, the electricity demand of the Proposed Action results in approximately one percent of the available generating capacity for Talbot County. Overall, there is sufficient capacity to meet the projected increased energy demand and energy suppliers are expected to accommodate the increased demand. No substantial energy-related impacts are anticipated with the implementation of the Proposed Project.

Consumable Materials Impacts: Construction and operation of the Proposed Project would not require the use of unusual or scarce materials, or other commodities that are otherwise in short supply in the Talbot County area.

Fuel Consumption Impacts: The aviation-related facilities developed as part of the Proposed Project would be primarily private use hangars. According to the FAA *Aerospace Forecast, FY 2016-2036*, total fuel consumption for general aviation aircraft is expected to increase a total of 1.9 percent over the next 15 years nationwide. As the Proposed Action is not expected to result in a noticeable increase in aircraft operations at ESN, the expected fuel usage at ESN would not be expected to increase at a rate higher than the FAA forecast. Therefore, it is unlikely that the fuel demand at the ESN due to the Proposed Action would exceed available capacities.

5.8.2 NO ACTION

Although the Proposed Project would not be constructed, an increase in demand for fuel and electrical energy would occur due to a projected increase in activity at the Airport. This increase, however, is considered small and can be easily supplied by existing providers and infrastructure.

5.8.3 MITIGATION

No mitigation is required.

5.9 NOISE AND NOISE-COMPATIBLE LAND USE

Potential changes in aircraft noise exposure around the airport were evaluated using the FAA's AEDT – Version 2c. The noise contour analysis shows that a change in DNL would occur with the implementation of the Proposed Project (when compared to the No Action Alternative). Federal guidance concerning compatible land use in regard to noise levels indicates noise exposure impacts are significant if there is a 1.5 dB increase in DNL in noise-sensitive areas exposed to DNL of 65 dB or greater. If this increase occurs, then the analysis must determine if there is an increase of 3.0 dB in DNL in noise sensitive areas exposed to DNL 60 dB or greater. Results of the noise analysis performed for this Environmental Assessment indicates that no permanent changes of greater than 1.5 dB in the DNL 65 dB or 3.0 in the DNL 60 dB would occur over noise-sensitive areas. Therefore, the Proposed Project would not result in significant aircraft-generated noise impacts and mitigation measures are not warranted.

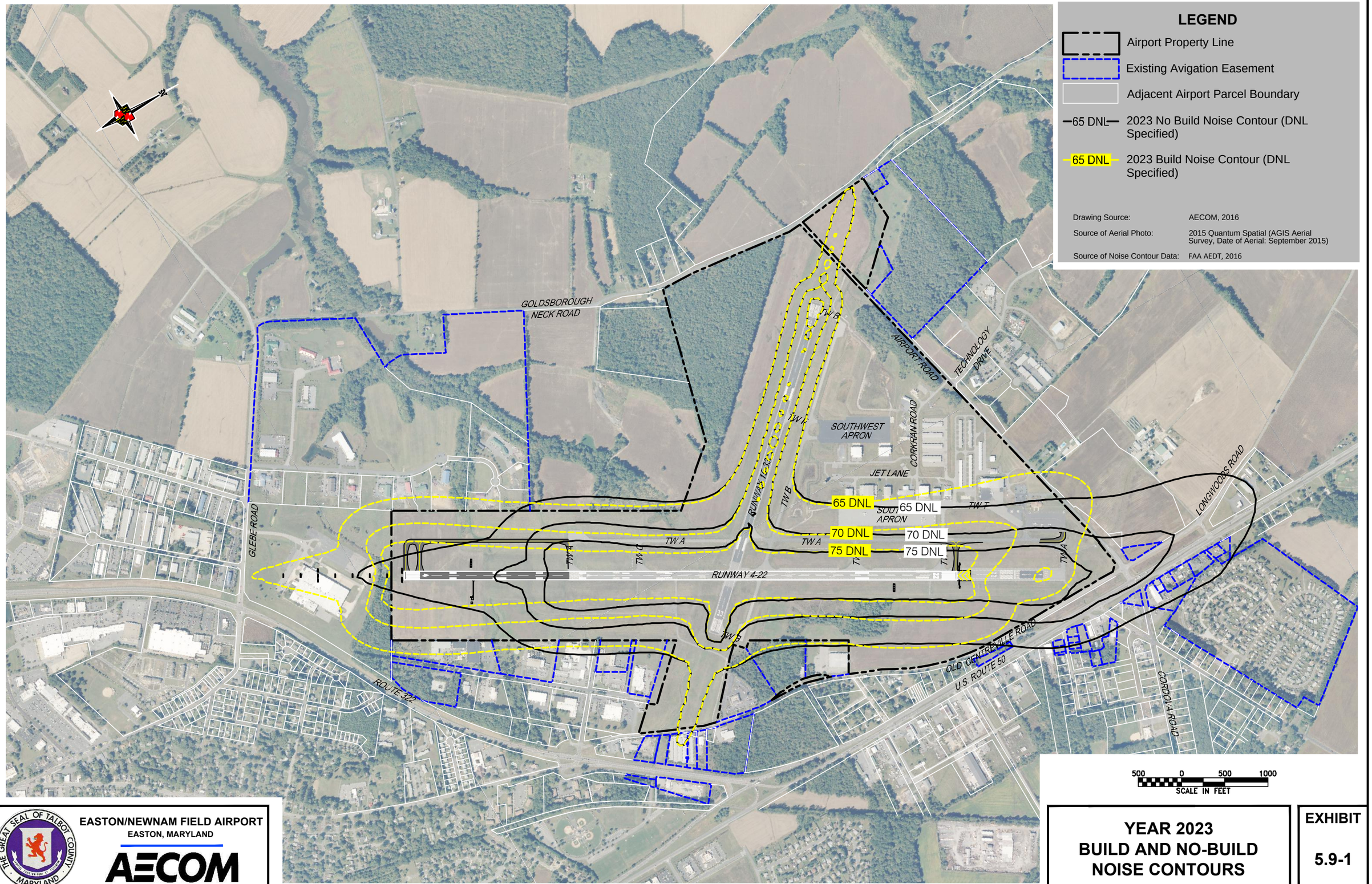
Noise levels at the Airport were computed using the AEDT and are presented as noise exposure contours using the DNL metric (**Appendix G**). Noise exposure contours are a graphical representation of how the noise from aircraft operations is distributed over an area. Noise exposure contours for ESN are depicted at DNL 65, 70, and 75 dB intervals. The FAA defines DNL 65 dB as the threshold of noise compatibility with residential and certain other noise-sensitive land uses. Thus, the DNL 65 dB contour is important for population impact assessment.

Noise contours resulting from the Proposed Action were compared to those resulting from the No Action Alternative. The DNL 65 dB contours for the No Action and Proposed Project Alternatives were reviewed to determine if any noise-sensitive sites and/or land uses are located within the noise exposure contours. According to FAA guidance, noise-sensitive sites include, but are not limited to, schools and daycares, churches, hospitals and nursing homes, and residential properties. Further guidance indicates noise-sensitive sites may include historic sites, national parks, and wildlife refuges, particularly where aircraft noise is low and quiet settings are an attribute of the particular property. A review of the land use around the Airport indicated there were no noise-sensitive sites within the noise exposure contours developed for the noise analysis outside of the residential land uses discussed in detail in the following sections.

5.9.1 PROPOSED ACTION (2023)

The estimated land area within each DNL contour interval is provided in **Table 5.9-1**. **Exhibit 5.9-1** shows modeled noise exposure resulting from projected aircraft operations under the 2023 (approximate opening year) Proposed Action scenario. Approximately 387 acres of land would be exposed to DNL 65 dB or greater, including approximately 53 acres off-Airport property. There are residential structures located in the zoned agricultural properties off the approach end of Runway 22, but the structures themselves are not within the DNL 65 dB noise contour. Note that the analysis used operational levels for the final year of construction (opening year of Proposed Action). This represents the highest level of aircraft operations forecasted during the construction period in addition to the aircraft operations levels for the opening year of the Proposed Action.

Affected Population – The 2023 Proposed Action DNL 65+ contour contains no property zoned residential in the Build Alternative. **Table 5.9-1** indicates there are no noise-impacted population or households within the DNL 65, 70, and 75 dBA contours. There are agricultural land use parcels partially within the DNL 65 dB contour that contain residential structures, but the structures themselves are outside of the DNL 65 dB contour. Therefore, since there are no residential zoned parcels or residential structures within the DNL 65 dB noise contours, there are no aviation related noise impacts resulting from the operation of the Proposed Action.



EASTON/NEWNAM FIELD AIRPORT
EASTON, MARYLAND

AECOM

YEAR 2023 BUILD AND NO-BUILD NOISE CONTOURS

EXHIBIT 5.9-1

FILE NAME: U:\Projects\E\ESN\60423280\CAD\CIVIL\ESN EA EXHIBITS NOV 2016\ESN-EA-2023_B-NB_NC.dwg LAYOUT NAME: ESN EA 5._-_ PLOTTED: Thursday, July 06, 2017 - 9:35am

TABLE 5.9-1:
2023 PROPOSED ACTION ALTERNATIVE NOISE EXPOSURE ESTIMATES (ACRES)

LAND USE TYPE (ACRES)	DNL 65 TO 70 DBA	DNL 70 TO 75 DBA	DNL 75+ DBA	TOTAL OVER DNL 65 DBA
Agricultural	17.5	3.7	1.1	22.3
Airport	142.9	91.9	99.2	334.0
Commercial	2.0	---	---	2.0
Industrial	25.1	1.1	0.1	26.3
Institutional	0.6	---	---	0.6
Transportation	---	---	---	---
Undeveloped	1.7	---	---	1.7
Wetlands	---	---	---	---
Water	---	---	---	---
High Density Residential	---	---	---	---
Medium Density Residential	---	---	---	---
Low Density Residential	---	---	---	---
Total Acreage	**189.8**	**96.7**	**100.4**	**386.9**
Population[1]	**DNL 65 to 70 dBA**	**DNL 70 to 75 dBA**	**DNL 75+ dBA**	**Total Over DNL 65 dBA**
Single Family Residential	---	---	---	---
Mobile Home Residential	---	---	---	---
Total Population	---	---	---	---
Housing Units[2]	**DNL 65 to 70 dBA**	**DNL 70 to 75 dBA**	**DNL 75+ dBA**	**Total Over DNL 65 dBA**
Single Family Residential	---	---	---	---
Mobile Home Residential	---	---	---	---
Total Units	---	---	---	---

1. Source: AECOM, 2017.Maryland Department of Planning, Talb_2010LULC.
2. Talbot County Property Appraisers Parcel Database, 2016.

Changes in aircraft noise exposure in the vicinity of ESN would result from the extending and shifting of the primary runway, Runway 4-22, to the southwest. The Proposed Project would not introduce new operations to the Airport, and changes in the approach and departure flight tracks at the Airport are only a result of the change in runway configuration.

When compared with the No Action Alternative, non-airport land exposed to noise levels of DNL 65 dB or higher would decrease by approximately 28 acres as a result of the Proposed Action in 2023. Residential land use within the DNL 65 dB contour would remain the same (0 acres).

5.9.1.2 Interim Action (2023)

Due to the potential three (3) year timeframe for the construction of the Proposed Action, it is only anticipated that Runway 4-22 will be closed temporarily for short periods of time with no extended closures exceeding six (6) months. As such, this Environmental Assessment includes an Interim Action, which will analyze the potential effect of the closure that Runway 4-22 will have on the surrounding community as a result of a temporary increase in operations on Runway 15-33. A phased

approach to the Extension of Runway 4-22 project will be implemented to minimize the respective operational and environmental impacts to the Airport.

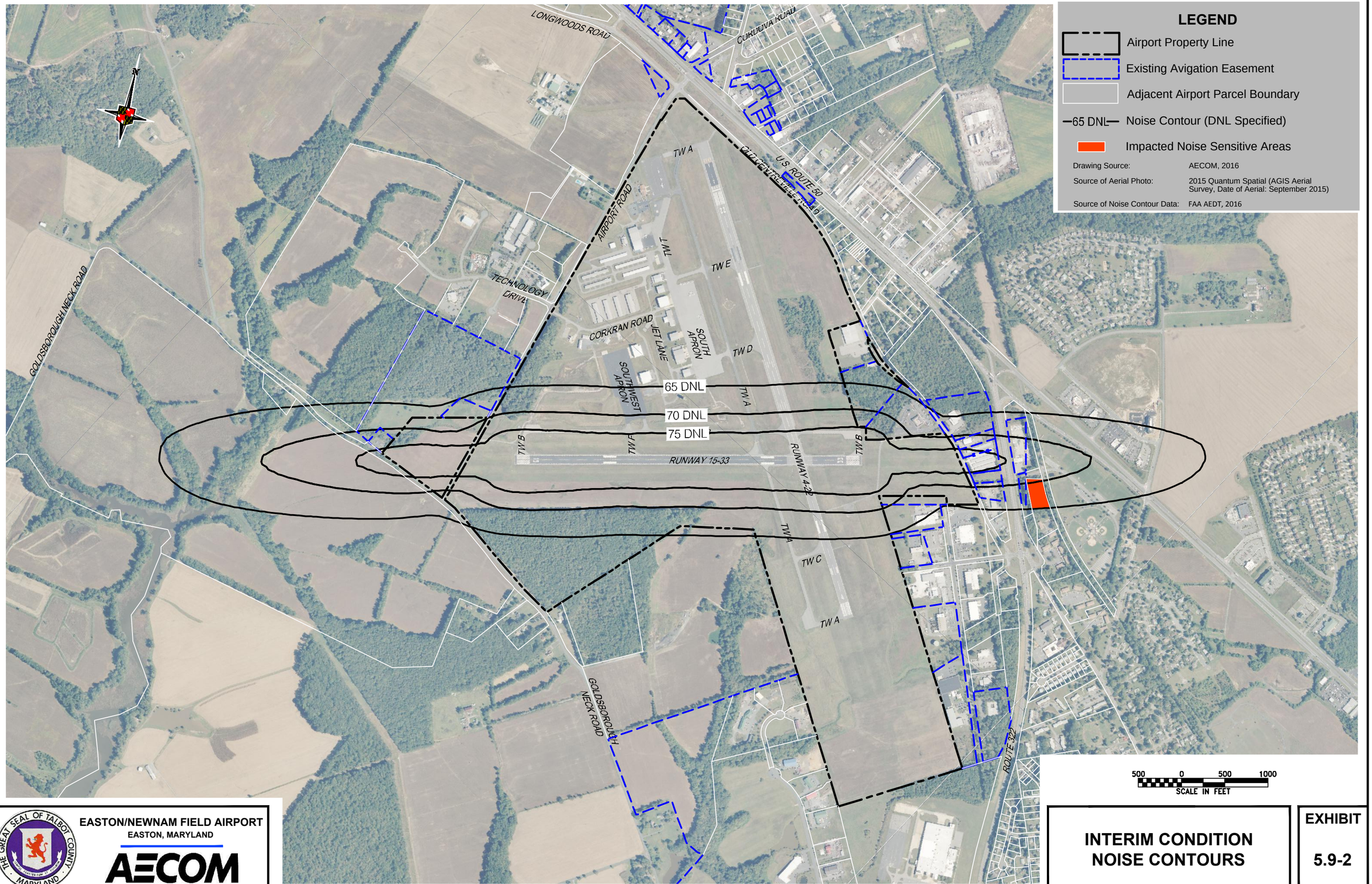
- Phase 1 will likely include the site demolition, clearing, and grading of the property for the proposed Runway 4 extended RSA while maintaining sufficient clearance from Runway 4-22 existing RSA, resulting in no closures of Runway 4-22.
- Phase 2 will include the construction of 900 feet (out of the 1,900 feet) of the Runway 4 extension pavement and parallel Taxiway A and connector taxiways while maintaining sufficient clearance from Runway 4-22 existing RSA, resulting in no closures of Runway 4-22.
- Phase 3 will include a temporary relocation (1,000 feet to provide for sufficient RSA) of the Runway 4 threshold at the start of the phase in order to construct the remaining 1,000 feet of the Runway 4 extension and connection of new extended Taxiway A pavement to existing Taxiway A. At the start of Phase 3, Runway 4-22 will be temporarily shut down in which operations will be diverted to Runway 15-33 so as to perform the associated work with the temporary threshold relocation prior to the major construction items of Phase 3. After the temporary threshold relocation, all major construction items associated with the pavement construction can be accomplished with Runway 4-22 in operation. Likewise, at the completion of Phase 3, Runway 4-22 will again need to be temporarily shut down so as to establish the Runway 4 threshold at its ultimate location with the extension.
- The final phase, Phase 4, will include the 1,000 feet of pavement demolition associated with the shift of the Runway 22 threshold as well as the grading of the new Runway 22 extended RSA. Similarly to Phase 3, Phase 4 will also require a temporary threshold relocation of 1,000 feet which will close Runway 4-22 temporarily at the beginning and end of the respective phase.

The estimated land area within each DNL contour interval for the Runway 15-33 operations with the Interim Action is provided in **Table 5.9-2**. **Exhibit 5.9-2** shows modeled noise exposure resulting from projected aircraft operations under the 2023 Interim action. Approximately 445 acres of land would be exposed to DNL 65 dB or greater, including approximately 113 acres of off-Airport property.

Affected Population – The DNL 65+ contour contains approximately 0.2 acres of residential property in the Build Alternative Interim Action. The 0.2 acres of residential property is zoned agricultural/residential, but does not contain any population or housing units. **Table 5.9-2** also provides noise-impacted population and household quantities within the DNL 65, 70, and 75 dB contours.

TABLE 5.9-2:
2023 INTERIM ACTION NOISE EXPOSURE ESTIMATES (ACRES)

LAND USE TYPE (ACRES)	DNL 65 TO 70 DBA	DNL 70 TO 75 DBA	DNL 75+ DBA	TOTAL OVER DNL 65 DBA
Agricultural	48.2	8.9	0.2	57.3
Airport	123.9	92.5	115.4	331.9
Commercial	20.6	8.3	0.6	29.5
Industrial	---	---	---	---
Institutional	10.5	0.2	---	10.7
Transportation	5.4	---	---	5.4
Undeveloped	10.5	---	---	10.5
Wetlands	---	---	---	---
Water	---	---	---	---



EASTON/NEWNAM FIELD AIRPORT
EASTON, MARYLAND

AECOM

INTERIM CONDITION NOISE CONTOURS

EXHIBIT 5.9-2

FILE NAME: U:\Projects\E\ESN\60423280\CAD\CIVIL\ESN EA EXHIBITS NOV 2016\ESN-EA-INTERIM_NC.dwg LAYOUT NAME: ESN EA 4.6-2 PLOTTED: Thursday, July 06, 2017 - 9:40am

LAND USE TYPE (ACRES)	DNL 65 TO 70 DBA	DNL 70 TO 75 DBA	DNL 75+ DBA	TOTAL OVER DNL 65 DBA
High Density Residential	---	---	---	---
Medium Density Residential	---	---	---	---
Low Density Residential	0.2	---	---	0.2
Total Acreage	**219.3**	**109.9**	**116.2**	**445.5**
Population	**DNL 65 to 70 dBA**	**DNL 70 to 75 dBA**	**DNL 75+ dBA**	**Total Over DNL 65 dBA**
Single Family Residential	---	---	---	---
Mobile Home Residential	---	---	---	---
Total Population	---	---	---	---
Housing Units	**DNL 65 to 70 dBA**	**DNL 70 to 75 dBA**	**DNL 75+ dBA**	**Total Over DNL 65 dBA**
Single Family Residential	---	---	---	---
Mobile Home Residential	---	---	---	---
Total Units	---	---	---	---

Source: AECOM, 2017.

1. Maryland Department of Planning, Talb_2010LULC.
2. Talbot County Property Appraisers Parcel Database, 2016.

The Interim Action would not introduce new aircraft operations at ESN and the changes in the operation characteristics at ESN consist of all operations occurring on Runway 15-33 during the temporary closures of Runway 4-22. With the phased construction, Runway 4-22 will only require closure for six months of any one year of construction. Therefore, the Interim Action consists of moving six months of all forecasted Runway 4-22 aircraft operations to Runway 15-33 during the closure, using the identical fleet mix and operational count as the 2023 No Action and Proposed Action Alternatives without performing a runway length analysis of the forecasted fleet mix to determine if all of the aircraft in the fleet mix are actually able to depart from Runway 15-33 due to the runway length. Using this methodology provides an extremely conservative estimate of the noise exposure resulting from the Interim Action, as some of the larger, louder aircraft would not be able to depart off Runway 15-33 during this time, or would require a significant weight penalty to depart from this runway. This would result in fewer operations occurring at ESN, particularly of the louder, larger jet aircraft, during these temporary conditions, which would therefore result in significantly smaller noise impacts than shown. Additionally, the duration of Runway 4-22 closures will be minimized to less than six (6) consecutive months whereas the methodology used was based on an average day model; this methodology was used to provide a “worst-case” scenario during the temporary construction periods.

A runway length analysis would indicate that there is a large portion of corporate jet traffic that would not be able to operate on the 4,000 foot Runway 15-33 during times of construction, but the operators may choose to use a smaller aircraft that can still operate on Runway 15-33 instead of choosing to use another local airport, although there is only one airport within 27 miles of ESN that has a runway longer than 4,000 feet. Cambridge-Dorchester Regional Airport, located 16 nautical miles south of ESN, has a 4,477 foot runway which is not long enough to handle a significantly greater number of jet aircraft types that would not be able to operate at ESN with only Runway 15-33 operational. Developing noise contours using the reduced fleet resulting from a runway length analysis would result in much smaller interim condition noise contour; however, it is more likely that most users of ESN would choose aircraft within their available fleet to continue to operate at ESN. Therefore, the reduced fleet mix resulting from a runway length analysis would likely produce a much smaller noise contour that what would actually occur without the ability to predict how operators would continue to use ESN.

It should be noted that the noise contours represent six months of Runway 4-22 being inoperative due to construction and represent the full existing fleet mix. This produces a conservative estimate of aircraft noise that might occur during any one year of construction.

When compared with the No Action Alternative, non-airport land exposed to noise levels of DNL 65 dB or higher would increase by approximately 33 acres as a result of the Interim Action in 2023. Of this, residential land use exposed to DNL 65 dB or greater noise exposure under the Interim action would increase by 0.2 for a total of 0.2 acres agriculture/residential zoned land. These new residential areas that would be exposed to DNL 65 dB or higher due to the Interim Action are located off Runway 15 end and do not contain any population or housing units. This property is shown as Parcel ID 41 on **Exhibit 2.2-2**; the County is proposing to obtain an avigation easement on this parcel for the removal of obstructions to the 14 CFR Part 77 surfaces of Runway 15-33 and is currently in active communications with the Owner in order to obtain the easement. The avigation easement will include language related to noise (existing or future) levels over the property.

While these impacts resulting from the closure of Runway 4-22 are temporary, ESN should additionally provide temporary measures to mitigate these newly impacted residential properties, including direct notification of impacted undeveloped parcel property owners of the Proposed Project and potential impacts, preferred use of Runway 33 when wind and weather conditions allow, and the use of flight tracks that avoid overflight of noise-sensitive areas.

Implementing noise abatement arrival and departure tracks to avoid overflight of noise-sensitive areas may require coordination with FAA Air Traffic Division prior to implementation.

5.9.2 NO ACTION (2023)

The estimated land area within each DNL contour interval is provided in **Table 5.9-3**. **Exhibit 5.9-1** shows modeled noise exposure resulting from projected aircraft operations under the 2023 No Action scenario. Approximately 389 acres of land would be exposed to DNL 65 dB or greater, including approximately 81 acres of off-Airport property.

Affected Population – FAA defines DNL 65 as the threshold of noise compatibility for residential land uses. The no-build DNL 65+ contour contains no property designated as residential. In addition to summarizing the area by land use category, **Table 5.9.1** also provides noise-impacted population within the DNL 65, 70, and 75 dBA contours. It should be noted that the residential land uses within the DNL 65 dB noise contour do not contain any residential dwellings.

TABLE 5.9-3 :
2023 NO-ACTION ALTERNATIVE NOISE EXPOSURE ESTIMATES (ACRES)

LAND USE TYPE (ACRES)	DNL 65 TO 70 DBA	DNL 70 TO 75 DBA	DNL 75+ DBA	TOTAL OVER DNL 65 DBA
Agricultural	30.8	11.4	---	42.2
Airport	128.0	86.5	93.7	308.2
Commercial	24.3	0.2	---	24.5
Industrial	3.9	---	---	3.9
Institutional	1.5	---	---	1.5
Transportation	4.3	1.5	---	5.8
Undeveloped	2.7	---	---	2.7
Wetlands	---	---	---	---

LAND USE TYPE (ACRES)	DNL 65 TO 70 DBA	DNL 70 TO 75 DBA	DNL 75+ DBA	TOTAL OVER DNL 65 DBA
Water	---	---	---	---
High Density Residential	---	---	---	--
Medium Density Residential	---	---	---	--
Low Density Residential	---	---	---	--
Total Acreage	**195.5**	**99.6**	**93.7**	**388.8**
Population[1]	**DNL 65 to 70 dBA**	**DNL 70 to 75 dBA**	**DNL 75+ dBA**	**Total Over DNL 65 dBA**
Single Family Residential	---	---	---	---
Mobile Home Residential	---	---	---	---
Total Population	---	---	---	---
Housing Units[2]	**DNL 65 to 70 dBA**	**DNL 70 to 75 dBA**	**DNL 75+ dBA**	**Total Over DNL 65 dBA**
Single Family Residential	---	---	---	---
Mobile Home Residential	---	---	---	---
Total Units	---	---	---	---

Source: AECOM, 2017.

1. Maryland Department of Planning, Talb_2010LULC.
2. Talbot County Property Appraisers Parcel Database, 2016.

5.9.3 PROPOSED ACTION (2028)

The estimated land area within each DNL contour interval is provided in **Table 5.9-4**. **Exhibit 5.9-3** shows modeled noise exposure resulting from projected aircraft operations under the 2028 Proposed Action scenario. Approximately 396 acres of land would be exposed to DNL 65 dB or greater, including approximately 58 acres of off-airport property.

Affected Population – The Proposed Action DNL 65+ contour contains no zoned residential property and no residential structures. **Table 5.9-4** indicates that there are no noise-impacted population or households within the DNL 65, 70, and 75 dB contours

TABLE 5.9-4
2028 PROPOSED ACTION ALTERNATIVE NOISE EXPOSURE ESTIMATES (ACRES)

LAND USE TYPE (ACRES)	DNL 65 TO 70 DBA	DNL 70 TO 75 DBA	DNL 75+ DBA	TOTAL OVER DNL 65 DBA
Agricultural	18.7	3.7	1.2	23.6
Airport	143.4	93.1	101.5	338.0
Commercial	2.9	---	---	2.9
Industrial	27.4	1.5	0.1	29.0
Institutional	0.7	---	---	0.7
Transportation	---	---	---	---
Undeveloped	1.9	---	---	1.9
Wetlands	---	---	---	---
Water	---	---	---	---

LAND USE TYPE (ACRES)	DNL 65 TO 70 DBA	DNL 70 TO 75 DBA	DNL 75+ DBA	TOTAL OVER DNL 65 DBA
High Density Residential	---	---	---	---
Medium Density Residential	---	---	---	---
Low Density Residential	---	---	---	---
Total Acreage	**195.0**	**98.3**	**102.8**	**396.1**
Population[1]	**DNL 65 to 70 dBA**	**DNL 70 to 75 dBA**	**DNL 75+ dBA**	**Total Over DNL 65 dBA**
Single Family Residential	---	---	---	---
Mobile Home Residential	---	---	---	---
Total Population	---	---	---	---
Housing Units[2]	**DNL 65 to 70 dBA**	**DNL 70 to 75 dBA**	**DNL 75+ dBA**	**Total Over DNL 65 dBA**
Single Family Residential	---	---	---	---
Mobile Home Residential	---	---	---	---
Total Units	---	---	---	---

Source: AECOM, 2017.

1. Maryland Department of Planning, Talb_2010LULC.
2. Talbot County Property Appraisers Parcel Database, 2016.

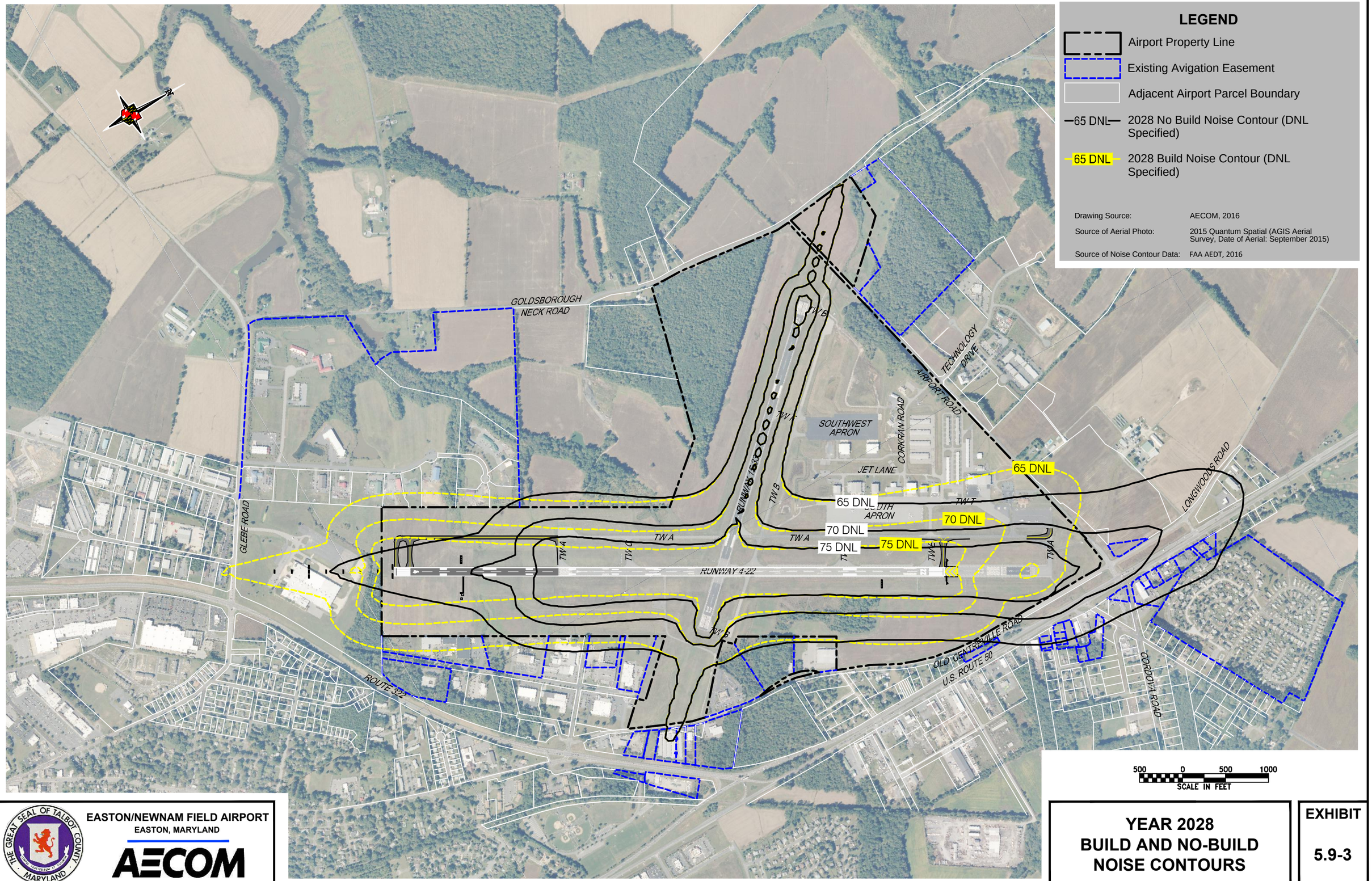
Changes in aircraft noise exposure in the vicinity of ESN would result from the extending and shifting of the primary runway, Runway 4-22 to the south. The Proposed Project would not introduce new operations to the Airport, and changes in the approach and departure flight tracks at the Airport are only a result of the change in runway configuration.

When compared with the No Action Alternative, non-airport land exposed to noise levels of DNL 65 dB or higher would decrease by approximately 27 acres as a result of the Proposed Action in 2028. Residential land use within the DNL 65 dB contour would remain the same (0 acres). There are no residentially zoned land uses within the DNL 65+ dB contours. To the north of ESN, there are agricultural zoned parcels partially within the contour. Those parcels contain residential structures that are outside the contours. To mitigate any impacts to these structures, it is recommended that ESN, ATCT, and aircraft operators develop informal mitigation to avoid overflight of these structures.

5.9.4 NO ACTION (2028)

The estimated land area within each DNL contour interval is provided in **Table 5.9-5**. **Exhibit 5.9-3** shows modeled noise exposure resulting from projected aircraft operations under the 2028 No Action scenario. Approximately 397 acres of land would be exposed to DNL 65 dB or greater, including approximately 85 acres of off-Airport property.

Affected Population – The No Action (No Build) DNL 65+ contour contains no property designated as residential. **Table 5.9.5** indicates there are no noise-impacted population or households within the DNL 65, 70, or 75 dB contours



EASTON/NEWNAM FIELD AIRPORT
EASTON, MARYLAND

AECOM

YEAR 2028
BUILD AND NO-BUILD
NOISE CONTOURS

EXHIBIT
5.9-3

FILE NAME: U:\Projects\E\ESN\60423280\CAD\CIVIL\ESN EA EXHIBITS NOV 2016\ESN-EA-2028_B-NB_NC.dwg LAYOUT NAME: ESN EA 4.6-2 PLOTTED: Thursday, July 06, 2017 – 9:38am

TABLE 5.9-5:
2028 NO-ACTION ALTERNATIVE NOISE EXPOSURE ESTIMATES (ACRES)

LAND USE TYPE (ACRES)	DNL 65 TO 70 DBA	DNL 70 TO 75 DBA	DNL 75+ DBA	TOTAL OVER DNL 65 DBA
Agricultural	31.8	11.8	---	43.6
Airport	129.0	87.8	94.8	311.6
Commercial	25.1	0.3	---	25.4
Industrial	5.4	---	---	5.4
Institutional	1.6	---	---	1.6
Transportation	4.2	1.7	---	5.9
Undeveloped	2.9	---	---	2.9
Wetlands	---	---	---	---
Water	---	---	---	---
High Density Residential	---	---	---	---
Medium Density Residential	---	---	---	---
Low Density Residential	---	---	---	---
Total Acreage	**200.0**	**101.6**	**94.8**	**396.4**
Population	**DNL 65 to 70 dBA**	**DNL 70 to 75 dBA**	**DNL 75+ dBA**	**Total Over DNL 65 dBA**
Single Family Residential	---	---	---	---
Mobile Home Residential	---	---	---	---
Total Population	---	---	---	---
Housing Units	**DNL 65 to 70 dBA**	**DNL 70 to 75 dBA**	**DNL 75+ dBA**	**Total Over DNL 65 dBA**
Single Family Residential	---	---	---	---
Mobile Home Residential	---	---	---	---
Total Units	---	---	---	---

Source: AECOM, 2017.
1. Maryland Department of Planning, Talb_2010LULC.
2. Talbot County Property Appraisers Parcel Database, 2016.

5.9.5 MITIGATION

Because neither the Proposed Project nor the Interim Alternative would result in significant aircraft noise impacts in 2023 or 2028, no permanent mitigation is required or proposed. However, while these impacts resulting from the closure of Runway 4-22 are temporary, ESN should provide temporary measures to mitigate these newly impacted parcels zoned agriculture/residential with no residential structures within the contours. The new residential areas would be exposed to DNL 65 dB or higher due to the Interim Action are located off Runway 15 end and do not contain any population or housing units. This property is shown as Parcel ID 41 on **Exhibit 2.2-2**; the County is proposing to obtain an avigation easement on this parcel for removal of obstructions to the 14 CFR Part 77 surfaces of Runway 15-33 and is currently in active communications with the Owner in order to obtain the easement. The avigation easement will include language related to noise (existing or future) levels over the property.

Additionally, ESN should provide temporary measures to mitigate these newly impacted residentially zoned properties,

including direct notification of impacted undeveloped parcel property owners of the Proposed Project and potential impacts, preferred use of Runway 33 when wind and weather conditions allow, and the use of flight tracks that avoid overflight of noise sensitive areas.

Furthermore, while there are no residentially zoned land uses within the Proposed Project DNL 65 dB contour, there are residential structures on agricultural properties within the DNL 65 dB contours to the north of ESN. As noted above, the structures themselves do not fall within the DNL 65 dB contours. Nevertheless, to mitigate any noise impacts to these structures, it is recommended that ESN, ATCT, and aircraft operators develop informal mitigation to avoid overflight of these structures.

5.10 SOCIOECONOMICS, ENVIRONMENTAL JUSTICE, AND CHILDREN'S ENVIRONMENTAL HEALTH AND SAFETY RISKS

The FAA must evaluate proposed airport development actions to determine if they would cause socioeconomic impacts (i.e., elements of the human environment such as population, employment, housing, public services, and transportation) and are consistent with executive orders governing environmental justice and children's environmental health and safety risks. The types of social impacts typically associated with airport development are:

- Extensive relocation of people's homes or businesses;
- Substantial induced economic growth in an area or a substantial change in the community tax base; and
- Disruption of local traffic patterns that substantially reduce the levels of service on roads serving the airport and the surrounding communities.

Federal agencies require that the *Uniform Relocation Assistance and Real Property Acquisition Policy Act* (Uniform Act) of 1970 be implemented if displacements would be a result of a proposed federal project or action. An impact is considered adverse under NEPA if people are displaced from their homes, businesses, or farms.

Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations,* requires all federal agencies to identify and address disproportionate and adverse human health or environmental effects of their programs, policies, and activities on minority and low-income populations. The Executive Order also directs federal agencies to incorporate environmental justice into their overall missions by conducting their programs and activities in a manner that provides minority and low-income populations an opportunity to participate in agency programs and activities. As stated in FAA Order 1050.1F, the FAA must provide for meaningful public involvement of minority and low-income populations.

US DOT Order 5610.2(a), *Environmental Justice in Minority and Low-Income Populations,* was issued to implement Executive Order 12898. US DOT Order 5610.2(a) defines minorities as people who are Black, Hispanic, Asian American, American Indian, or Alaskan Native. The US DOT Order defines a low-income population as "any readily identifiable group" of persons whose median household income is at or below the poverty guidelines of the U.S. Department of Health and Human Services.

Executive Order 13045, *Protection of Children from Environmental Health Risks and Safety Risks*, directs federal agencies, to the extent permitted by law and appropriate, to make it a high priority to identify and assess environmental health and safety risks that may disproportionately affect children. Environmental health risks and safety risks include risks to health or to safety that are attributable to products or substances that a child is likely to come in contact with or ingest, such as air, food, drinking water, recreational waters, soil, or products they might use or be exposed to.

According to Maryland Economic Impact of Airports – Final Report (July 2015), the Airport generates economic activity by supporting employment, contributing to wage earnings, and generating economic activity for the local and regional economy. The Airport employs 483 people with personal income totaling $20,060,000. Business revenue totals $42,461,000 and contributes $2,126,000 in State and local taxes.

5.10.1 PROPOSED ACTION

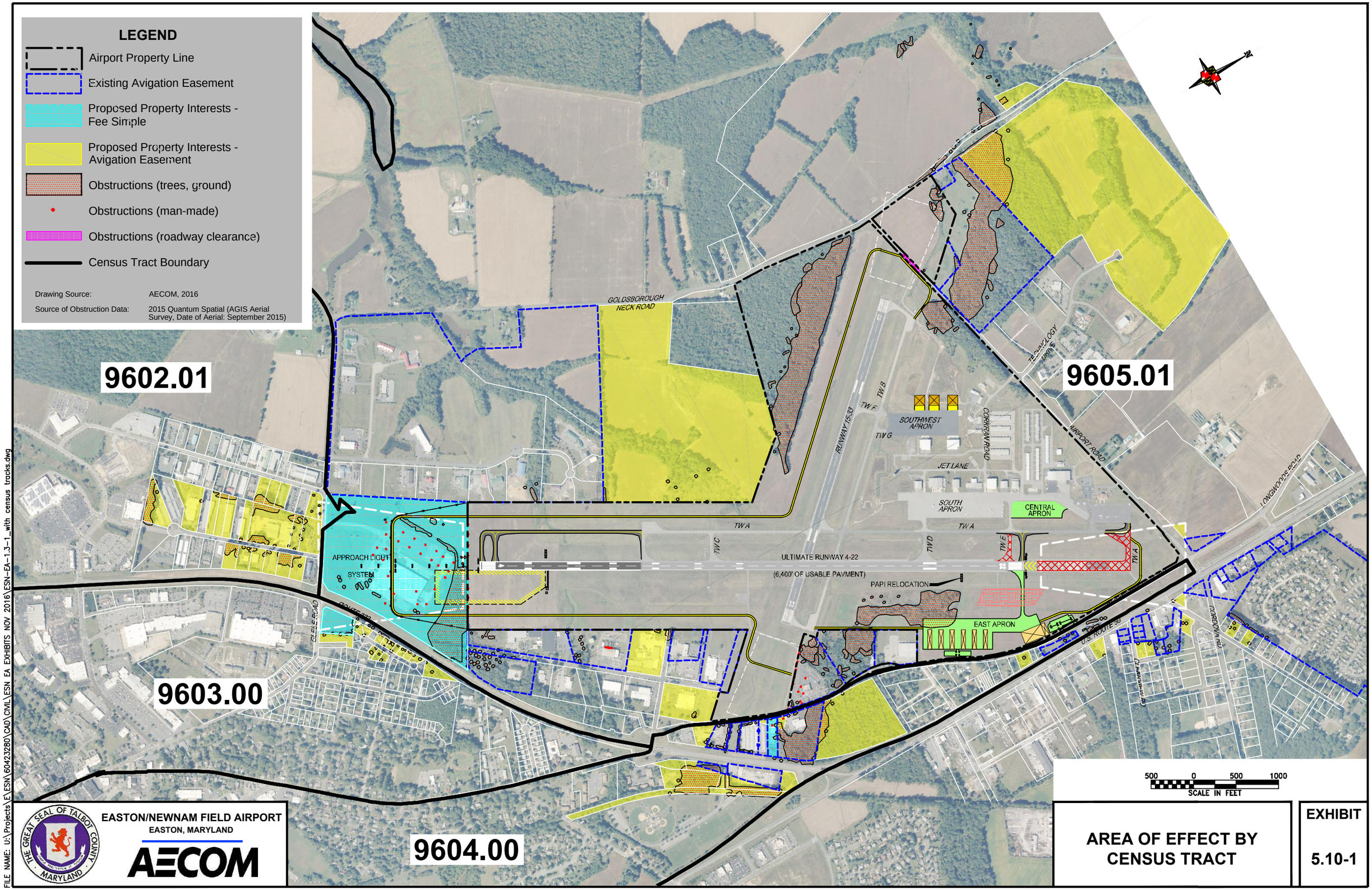
Socioeconomics*:* No homes or farms would be displaced by the Proposed Action. The Proposed Action would require the fee simple acquisition of 3 parcels, 1 of which contains a business (Grand Rental Station), 1 of which is an agricultural field with no structures (Mears), 1 is a former manufacturing facility (Black and Decker) owned by the County, and avigation easements over 53 parcels for obstruction removal. As shown in **Exhibit 5.10-1**, the relocation and easement impacts would occur on all sides of the Airport, affecting a range of land uses. All property acquisition would occur in compliance with the Uniform Relocation Assistance and Real Property Acquisition Act. Capital development (i.e., construction projects) generates additional income and employment opportunities, albeit on a temporary basis. Under the Proposed Action, the Extension of Runway 4-22 project would take approximately three years to construct. The project is expected to cost over $20 million. There would be direct economic impacts to the community as the result of expenditures associated with the construction of the project, in the form of labor, materials, and supplies.

Because of the inadequate runway length at ESN, some aircraft that operate at the Airport must modify their takeoff configurations (amount of fuel and/or passengers) under certain weather conditions. Operators of these aircraft subsequently go to other airports in the area to purchase fuel or pick up passengers in route to their final destination. With implementation of the Proposed Action, operators would be able to take off with their full load of passengers and the needed amount of fuel to reach their destination, thus increasing fuel sales at the Airport. Overall, the proposed projects can be expected to cause a positive change in the existing economy of Talbot County.

In addition to the direct economic impacts of a construction project (i.e., spending on labor, materials, and supplies), indirect impacts can be expected in the form of business transactions as a result of the project, including suppliers purchasing goods and services from contractors and vendors to meet the demand, which would not occur but for the proposed construction project. The construction would also produce secondary or induced economic impacts, which are the multiplier or "spin-off" effects of the direct and indirect impacts (i.e., increases in consumer spending by wage earners employed by the construction and support industries). Due to the significant capital costs of the Proposed Action, it is expected that the project would contribute to a positive impact on local and regional economies over the three year construction period.

Despite the Airport's economic contribution to the community, there is minimal potential for secondary or induced development or growth to occur as a result of the Proposed Action; the incremental changes associated with the Proposed Action are not likely to contribute to a major shift in local population, income, or employment.

Construction Traffic Impacts: During construction, the Proposed Action has the potential to affect the level of service on local roads serving the Airport and the surrounding communities. The Extension of Runway 4-22 is assumed to take place over a three year period. Construction traffic associated with the Proposed Action would consist of passenger vehicles generated by construction personnel (including laborers, managers, and administrative staff), as well as construction trucks associated with the movement of materials and equipment traveling directly to the construction site via established truck routes.



EASTON/NEWNAM FIELD AIRPORT
EASTON, MARYLAND

AECOM

AREA OF EFFECT BY CENSUS TRACT

EXHIBIT 5.10-1

FILE NAME: U:\Projects\EASN\60423280\CAD\CIVIL\ESN EA EXHIBITS NOV 2016\ESN-EA-1.3-1_with census tracks.dwg

Environmental Justice: In determining whether a proposed project or activity is in compliance with Executive Order 12898, a determination of disproportionate adverse effect is required. US DOT Order 5610.2(a) defines "adverse effects" as "the totality of significant individual or cumulative human health or environmental effects, including interrelated social and economic effects." The US DOT Order also defines "disproportionately high and adverse effects" as those that are "predominately borne by a minority population and/or a low-income population, or will be suffered by the minority population and/or low-income population and [are] appreciably more severe or greater in magnitude than the adverse effect[s] that will be suffered by the non-minority population and/or non-low-income population."

The proposed airport development actions were evaluated to determine if they would have significant adverse environmental effects. Analysis contained in this Environmental Assessment describes effects related to the natural (i.e. air quality, climate, biologic resources, and water resources) and human environments (i.e. noise, land use compatibility, aesthetics, and socioeconomics) in areas identified in Section 4.9 as supporting high concentrations of low-income and minority residents. The analysis described for each environmental category identifies no significant environmental effect. The lack of significant environmental effect resulting from the proposed action makes it unlikely that the project will have a disruptive community effect to include reduced community cohesion, or limitation of a traditional community practice. However even in the absence of a finding of significant effect, additional analysis is required in the Environmental Justice evaluation to identify the potential for disproportionately high and adverse effects.

To assess disproportionate adverse effect, an evaluation was conducted to identify the occurrence of direct effects, and relate the location of those effects to the location of low-income and minority populations. The Census Tracts identified in **Table 4.9-1** were mapped in combination with areas of direct effect identified in the Environmental Assessment. **Table 5.10-1** provides a summary of effect by Census Tract. **Exhibit 5.10-1** provides a graphical depiction of the same elements. Comparison between datasets shows that the potentially adverse direct impacts resulting from the proposed action are not focused in an area supporting a large low-income and minority population, but are located primarily within a Census Tract (9605.01) that supports low-income and minority populations at rates well below comparative state and county levels. Therefore, it is unlikely that the proposed development actions would result in a disproportionately high and adverse effect on a low-income or minority group.

TABLE 5.10-1
AREA OF EFFECT (ACRES) BY US CENSUS TRACT

CENSUS TRACT	PROPOSED PROPERTY INTEREST – FEE SIMPLE	PROPOSED PROPERTY INTEREST – AVIGATION EASEMENT	PROPOSED AREA OF OBSTRUCTION REMOVAL
Tract – 9602.01	1.31	34.86	4.77
Tract – 9603.00	2.28	4.25	1.19
Tract – 9604.00	1.07	31.58	10.60
Tract – 9605.01	56.88	41.22	70.06

Based on the foregoing, in the context of environmental justice, the effects of the proposed action are not expected to be significant, and are not expected to have a disproportionately high and adverse effect on a low-income or minority population.

Children's Environmental Health and Safety Risks: No environmental health risks or safety risks have been identified in this Environmental Assessment that would adversely affect any person of any age; therefore, it is reasonable to assume that there would be no disproportionate effects on children or that any potential effects would be less than significant.

5.10.2 NO ACTION

Under the No Action Alternative, the Proposed Action would not be implemented, so there would be no economic benefits from construction; no disproportionately high and adverse effects on low-income or minority populations; no disproportionate indirect impacts on children; and would not cause or contribute to significant induced development or create an appreciable change in public service demands. The No Action Alternative would allow for existing revenue producing elements to continue at ESN; however, it would not allow for the Airport to grow and expand its revenue base.

5.10.3 MITIGATION

The potential for significant impacts was not identified; therefore, no mitigation measures have been identified.

5.11 VISUAL EFFECTS

Some visual resources are protected under Federal, state, or local regulations. According to FAA Order 1050.1F, these resources generally include, but are not limited to, Federal, state, or local scenic roadways/byways; Wild and Scenic Rivers; National Scenic Areas; protected trails; biological resources; and features protected under other Federal, state, or local regulations. In addition to NEPA, laws protecting resources that may be affected by visual effects include Section 106 of the National Historic Preservation Act (NHPA), Section 4(f) of the DOT Act, the Wild and Scenic Rivers Act, and the Coastal Zone Management Act. In addition, there may be state and local regulations, policies, and zoning ordinances that apply to visual effects.

5.11.1 PROPOSED ACTION

Light Emissions: Light emissions include any light that emanates from a light source into the surrounding environment. Examples of sources of light emissions include airfield and apron flood lighting, navigational aids, terminal lighting, parking facility lighting, and roadway lighting. New lighting systems are proposed with the Proposed Action.

With implementation of Proposed Action the following navigational aids would be installed and/or relocated:

- Install an Approach Lighting System on Runway 4.
- Install medium-intensity runway and taxiway edge lights along the new sections of runway and taxiway pavement.
- Relocate Runway 4 and Runway 22 threshold lights and PAPI lights for Runway 4 and Runway 22.
- Install airfield directional signs for the new sections of runway and taxiway.
- Install REILs on Runway 22.
- Relocate existing Runway 4 Glideslope to coincide with new approach threshold.

The MALSF system consists of the following light fixture components:

- 9 light bars each with 5 steady burning white PAR38 fixtures
- 5 sequence flashing white PAR56 fixtures
- Threshold bar of 18 steady burning green PAR56 fixtures.

The MALSF system can be mounted on 2-inch EMT up to a 6 feet mounting height or on frangible towers over 6 feet. System control of the sequence flashing lights is accomplished through the master controller selecting one of three light intensities:

low, medium, or high. Both the sequence flashing and the steady burning light systems provide for either local or remote control.

The MALSF portion of this system consists of a series of sequenced flashing runway threshold lights installed ten feet on center across the width of the runway, six steady burning single light bars with five white light fixtures attached on each bar, and one triple light bar array that consists of three single light bars with five steady burning white light fixtures attached to each bar. The MALS lights have three intensity settings (high, medium, or low). The approach light plane is 400 feet wide centered on the extended runway centerline. The MALSF component is approximately 1,400 feet long. A portion of the MALSF would be installed in-pavement on each runway end.

The Runway Alignment Indicator Lights (RAIL) component of the lighting system consists of five sequenced flashing lights (strobe lights) located beyond the MALS portion of the system, one light per stanchion. The first RAIL station is located approximately 200 feet past the last MALS light bar.

Runway and taxiway edge lights would be constructed under the Proposed Action. These lights would provide visual guidance to pilots by alerting them to the location of the pavement edge so as to avoid maneuvering their aircraft off the hardened surface. These lights would only be illuminated during periods of reduced visibility. Taxiway lights are blue in color, spaced no more than 200 feet apart, and can be installed either in-pavement or approximately two feet above the pavement. Runway edge lights are usually white in color, spaced 200 feet apart, and are mounted approximately two feet above the pavement.

In summary, adverse light emissions to the natural and social environments are not expected to occur as a result of the proposed installation of visual guidance lighting systems associated with the Proposed Action. The light emissions that would be emitted from these systems do not significantly scatter light in levels sufficient to cause adverse visual impacts and are not expected to create an adverse additive effect when coupled with the existing light emissions at the Airport and surrounding urbanized area to the south and southeast. Motorists traveling along Glebe Road and Route 322 may notice the light bar structures and lights associated with the MALSF; however, it is unlikely that they would experience either distraction or discomfort from such limited exposure.

Visual Impacts: Potential visual impacts of the Proposed Action were considered in accordance with FAA Order 1050.1F. The areas of consideration included areas of extent of earthmoving required to construct the Proposed Action, the design of proposed new facilities, and the overall aesthetic integrity of the area.

The extent of earthmoving process during construction of the proposed project would create a temporary visual disturbance of the landscape to the passersby. Portions of the woodland areas on all sides of the Airport would need to be cleared to conform with 14 CFR Part 77 guidelines.

Development of the Proposed Action would create both temporary visual disturbance during construction and long-term impacts to the existing viewscape of the area. Improvements associated with the proposed runway and taxiway construction would visually impact persons traveling along Old Centerville Road and US Route 50. Improvements associated with the removal of trees associated with 14 CFR Part 77 guidelines would visually impact persons traveling along Route 322 and Airport Drive. However, only trees that penetrate 14 CFR Part 77 surfaces would be removed. The understory would remain. Improvements associated with the east T-Hangars and apron facilities would visually impact persons traveling along US Route 50 and Centerville Road. These visual impacts are considered minor in nature, as the changes are small and will be assimilated into the already urbanized viewshed with the passage of time.

5.11.2 NO ACTION

The No Action Alternative would not require the installation of any visual guidance approach lighting systems or runway and taxiway edge lights. Therefore, no new light emissions impacts would be created. Under the No Action Alternative, no construction would occur; therefore, the overall aesthetics of the area would remain.

5.11.3 MITIGATION

Because the Proposed Action would not result in significant changes to lighting or visual resources, there would be no mitigation necessary.

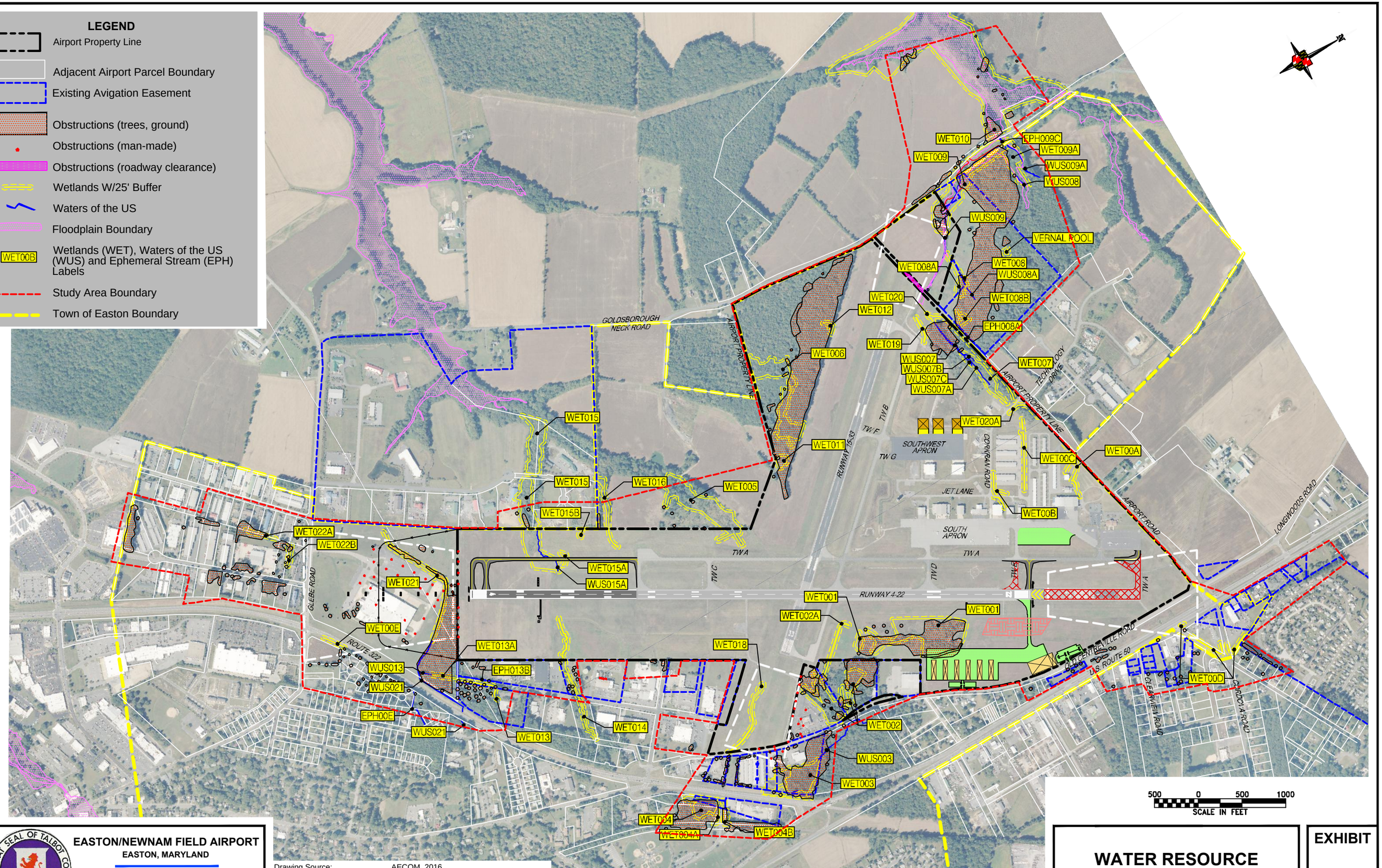
5.12 WATER RESOURCES

Wetlands: Wetlands, including freshwater and tidal wetlands, are regulated by the USACE under the authority of Section 404 of the Clean Water Act (CWA). Executive Order 11990, *Protection of Wetlands*, requires federal agencies to avoid impacts to wetlands wherever there is a practicable alternative. The implementing guidelines for Executive Order 11990 are set forth in DOT Order 5660.1A, *Preservation of the Nation's Wetlands*. In the state of Maryland, wetlands are additionally regulated by the Maryland Department of the Environment (MDE). FAA Order 1050.1F sets significance thresholds for wetland impacts. A significant impact would occur when the Proposed Action would:

1. Adversely affect a wetland's function to protect the quality or quantity of municipal water supplies, including surface waters and sole source and other aquifers;
2. Substantially alter the hydrology needed to sustain the affected wetland system's values and functions or those of a wetland to which it is connected;
3. Substantially reduce the affected wetland's ability to retain floodwaters or storm runoff, thereby threatening public health, safety or welfare (the term welfare includes cultural, recreational, and scientific resources or property important to the public);
4. Adversely affect the maintenance of natural systems supporting wildlife and fish habitat or economically important timber, food, or fiber resources of the affected or surrounding wetlands;
5. Promote development of secondary activities or services that would cause the circumstances listed above to occur; or
6. Be inconsistent with applicable state wetland strategies.

Floodplains: Per FAA Order 1050.1F, floodplain impacts would be significant if the action would "cause notable adverse impacts on natural and beneficial floodplain values."

Surface Waters: As with the regulation of wetlands, the CWA regulates the discharge of pollutants into waters of the US. The process for regulating waters is the same as for regulating wetlands through a Section 404 permit and the Section 401 Water Quality Certification. If the proposed action has the potential to discharge pollutants into waters through a point source, then a NPDES permit is necessary. FAA Order 1050.1F identifies a significant impact to surface waters if the action would "exceed water quality standards established by Federal, state, local, and tribal regulatory agencies, or contaminate public drinking water supply such that public health may be adversely affected."



FILE NAME: U:\Projects\E\ESN\60423280\CAD\CIVIL\ESN EA EXHIBITS NOV 2016\ESN-EA-5.12-1.dwg LAYOUT NAME: WATER RESOURCES PLOTTED: Tuesday, February 27, 2018 - 10:27am

EASTON/NEWNAM FIELD AIRPORT
EASTON, MARYLAND

AECOM

Drawing Source: AECOM, 2016
Source of Obstruction Data: 2015 Quantum Spatial (AGIS Aerial Survey, Date of Aerial: September 2015)
Source of Floodplain Data: FEMA 2013 Talbot County Floodplain Map

WATER RESOURCE IMPACTS

EXHIBIT
5.12-1

Groundwater: Per FAA Order 1050.1F, groundwater impacts would be significant if the Proposed Action would "exceed groundwater quality standards established by Federal, state, local, and tribal regulatory agencies; or contaminate an aquifer used for public water supply such that public health may be adversely affected."

5.12.1 PROPOSED ACTION

Wetlands: The Proposed Action would not exceed the FAA's significance threshold established in FAA Order 1050.1F. However, the proposed projects would result in unavoidable impacts to non-tidal wetlands and their buffers (see **Exhibit 5.12-1**). The type of impacts, direct or indirect and permanent or temporary, will vary depending upon the project. Impacts to linear emergent wetland swales as a result of runway and taxiway extensions and service roads will require fill and re-grading. Although this will be a direct impact to these systems and permanent impacts will need to be accounted for in the permitting process, the overall function and value of these wetland systems will not be lost, and indirect impacts to these systems should not occur. A connection to existing wetland or waterways adjoining those impacted areas will also be maintained. The areas will still provide flood storage and protection and help maintain water quality.

Table 5.12-1 below provides the total wetland and 25 foot wetland buffer impacts estimated per proposed project. During design of each project, additional grading efforts and new limits of disturbance will be developed and a distinction between such impacts and the overall total impact will be finalized. For purposes of this Environmental Assessment, a 10 foot additional width was added to the identified construction/pavement area of proposed roadways, and a 30 foot additional width added to the edge of the East Apron project, in order to determine a more realistic estimated impact to wetlands as well as streams.

TABLE 5.12-1:
NON-TIDAL WETLAND AND BUFFER IMPACTS

PROPOSED PROJECTS	PEM WETLAND IMPACTS (ACRE)	PEM WETLAND BUFFER IMPACTS (ACRE)	PFO WETLAND IMPACTS (ACRE)	PFO WETLAND BUFFER IMPACTS (ACRE)
Acquisition of avigation easements, lighting of manmade obstructions, and removal of tree obstructions to within 10 feet of the 14 CFR Part 77 surfaces for Runway 15-33 and Runway 4-22	2.32	2.10	16.25	6.32
Acquire property interests within Runway Protection Zones (RPZs) of Runway 15-33	0	0	0	0
Construct aircraft storage facilities (T-hangars, tie downs, conventional hangars) and associated aprons	0.75	0.30	0	0
Construct an Airport Service Road	0.30	0.37	0	0
Shift and extend Runway 4-22 to the south for a total length of 6,400 feet	1.24	0.71	0.15	1.16
TOTAL	**4.61**	**3.48**	**16.40**	**7.48**

Source: AECOM, 2016

Floodplains: The only existing floodplain within the study area is associated with Goldsborough Creek and its tributaries, located in the far northern portion of the study area. This approximate 1.5 acres of floodplain area is slated for 14 CFR Part

77 tree obstruction removals. Soil disturbance is not anticipated, as the trees would be flush cut in place and roots would remain. No erosion and sediment control would be required; there would be no fill, cut, or grading within the floodplain. As a result, there are no impacts that would result from the proposed project activities to the existing floodplain.

Surface Waters: Impacts to streams would occur as a result of runway and taxiway construction. As noted in the Wetland section, although this will be a direct and permanent impact, the overall connection to existing wetland or streams would be maintained and indirect impacts regarding stream function should not occur. Impacts to surface waters should not adversely affect the natural and beneficial uses and values of the existing streams. **Table 5.12-2** illustrates the linear feet of stream impacts anticipated per each of the proposed projects.

TABLE 5.12-2
STREAM IMPACTS

PROPOSED PROJECTS	TOTAL WUS IMPACTS (LF)
Acquisition of avigation easements, lighting of manmade obstructions, and removal of tree obstructions to within 10 feet of the 14 CFR Part 77 surfaces for Runway 15-33 and Runway 4-22	0
Acquire property interests within Runway Protection Zones (RPZs) of Runway 15-33	0
Construct aircraft storage facilities (T-hangars, tie downs, conventional hangars) and associated aprons	0
Construct an Airport Service Road	80
Shift and extend Runway 4-22 to the south for a total length of 6,400 feet	60
TOTAL	**140**

Source: AECOM, 2016

The Proposed Action has the potential to cause temporary and long-term effects on the water quality of Glebe Creek and Goldsborough Creek; however, the Proposed Action would not exceed the FAA's significance threshold established in FAA Order 1050.1F. Temporary impacts during construction operations could involve increases in turbidity, suspended solids, and dissolved solids, all of which would affect the aquatic habitat both during construction and for a period of time after. Long-term effects would be those associated with the increased impervious surfaces and the resulting potential for greater volumes of stormwater runoff containing volatile organic compounds and other hydrocarbons to enter the system. Although the project will be constructing areas of new impervious surfaces for runway extensions, taxiways, and new facilities, the overall impervious surface within the surrounding area at the Airport is not extensive. The amount of impervious surface in a watershed is a key indicator of water quality. The water quality in streams can decline as the percent impervious coverage increases; however, as indicated in the Water Resources Element of the *Talbot County Comprehensive Plan*, the majority of Talbot County is pervious land and even in the County's most developed watersheds, the Miles River and the Lower Choptank River, impervious surface coverage is under five (5) percent.

Groundwater: Impacts to groundwater can result from construction activities for the proposed projects, where any permanent infrastructure is built, as well as any temporary construction activities including equipment and staging areas. Activities that are to take place during operation of the projects, meaning actions that can occur as a result of the projects ongoing operation, can also result in impacts to groundwater. As is typical in the Coastal Plain Region, the low permeability clay layers present often help prevent surface contaminants from reaching the aquifers. Although groundwater levels are thought to respond readily to increased groundwater withdrawals, the proposed projects do not have need for groundwater withdrawals.
It is not anticipated that the increase in impervious surfaces or any actions occurring during construction or during operations, will adversely affect any natural and beneficial groundwater values or quantities.

5.12.2 NO ACTION

The No Action Alternative would not impact wetland resources, would not improve or worsen the quality of the Airport runoff into Glebe Creek and Goldsborough Creek, and would not cause encroachment on the floodplain.

5.12.3 MITIGATION

Wetlands: As the estimated impacts total greater than 5,000 square feet for each of the obstruction removal projects, permitting and mitigation would be required. The MDE will regulate these wetland impacts, but the USACE will not require permitting and mitigation for any impact associated with 14 CFR Part 77 obstruction removals, as the cutting and removal of the trees and other vegetation would not result in the discharge of any dredged or fill material regulated under Section 404 of the CWA. The USACE, as well as the MDE, however, may require mitigation for the non-obstruction related projects. Coordination is ongoing with both the MDE and the USACE. Permitting and associated mitigation for each project is discussed below:

- **Acquisition of avigation easements, lighting of manmade obstructions, and removal of tree obstructions to within 10 feet of the 14 CFR Part 77 surfaces for Runway 15-33 and Runway 4-22**: A Joint Federal/State Application for the Alteration of Any Floodplain, Waterway, Tidal or Nontidal Wetland in Maryland (JPA) would need to be submitted to the MDE and the USACE for wetland impacts associated with these obstruction removals. Impacts to PEM wetlands will be temporary in nature, as only the taller woody species present randomly throughout the wetland may need to be flush cut. Further coordination with the MDE during the permitting process will identify how these PEM impacts are to be identified on the application. PFO impacts would be considered wetland conversion under current MDE regulations. Wetland conversions, such as forested wetlands converted to emergent grass wetlands, are mitigated at a 1:1 ratio since the impacted areas will remain wetlands. Cutting and removal of the trees and other vegetation as proposed would not result in the discharge of any dredged or fill material regulated under Section 404 of the CWA. Therefore, the obstruction removal would not be an activity regulated by the USACE. Thus, there are no permitting or mitigation requirements with the USACE. Note: the JPA is a "joint" application and, by process, is submitted to the MDE who forwards the application to the USACE for their formal comment. As stated, obstruction removal is not regulated by the USACE and no permit will be required from the USACE.

- **Acquire property interests within Runway Protection Zones (RPZs) of Runway 15-33**: No wetlands would be impacted; no permitting and associated mitigation would be required.

- **Construct aircraft storage facilities (T-hangars, tie-downs, conventional hangars) and associated aprons**: A JPA would need to be prepared and submitted to the MDE and the USACE for the construction of the east apron and T-hangars. Impacts associated with these projects would be permanent loss of wetland, not a conversion of one wetland type to another. As emergent wetland impacts are estimated to be greater than 5,000 square feet, mitigation with both the agencies for these project impacts will be required at a ratio of 1:1.

- **Construct an Airport Service Road**: A JPA would need to be prepared and submitted to the MDE and the USACE for the proposed project. Impacts associated with this project would be permanent loss of emergent wetland, and are estimated to be greater than 5,000 square feet. Mitigation with both the agencies for this project will be required at a ratio of 1:1.

- **Shift and extend Runway 4-22 to the south for a total length of 6,400 feet**: A JPA would need to be prepared and submitted to the MDE and the USACE for the proposed projects. Impacts associated with these projects would involve both the permanent loss of wetland as a result of runway/taxiway pavement as well as conversion of PFO wetland to PEM wetland as a result of 14 CFR Part 77 obstruction removals. As wetland impacts are estimated to be greater than 5,000 square feet, mitigation will be required with both agencies for those impacts associated with construction and with just the MDE for those impacts associated with obstruction removals. All mitigation is anticipated to be required at a ratio of 1:1.

For those projects requiring wetland mitigation, a Phase I Mitigation Plan must be developed and prepared during the permitting process where it is to be determined whether a mitigation project, payment into an approved Wetland Mitigation Bank, or a payment into the Nontidal Wetlands Compensation Fund will be proposed. Preferred mitigation is one that supports wetland conservation and is achieved through creation, restoration, or enhancement of nontidal wetlands. To compensate for permanent nontidal wetland impacts, wetland replacement ratios are used to determine the amount of mitigation required. As previously described, the MDE regulates the conversion of forested to emergent wetlands at a mitigation ratio of 1:1, meaning for every acre of PFO wetland being flush cut and converted to PEM, one acre of wetland must be created, restored, or enhanced. Although these impacts do not result in a loss of wetland acreage, they do result in a loss of forested wetland functions. For impacts where permanent emergent wetlands will be lost due to the regulated activity, again a mitigation ratio of 1:1 is required.

Creation of a wetland on-site on or near Airport property is not desirable; thus, coordination will be ongoing with the MDE and the USACE through the permitting process to determine the potential for creation of a wetland mitigation site off-Airport and within the watershed. An evaluation of potential mitigation sites with appropriate physical characteristics should be conducted and coordinated with the agencies.

Wetland mitigation banks are another option available to compensate for unavoidable, adverse impacts to wetlands and other aquatic resources. A mitigation bank is a site, or a suite of sites, where resources (e.g., wetlands, streams, riparian areas) are restored, established, enhanced, and/or preserved for the purpose of providing compensatory mitigation for authorized impacts. In general, a mitigation bank sells compensatory mitigation credits to permittees whose obligation to provide compensatory mitigation is then transferred to the mitigation bank sponsor. The operation and use of a mitigation bank are governed by a mitigation banking instrument, which is a legal document for the establishment, operation, and use of a mitigation bank. A higher acreage replacement ratio is utilized when using a bank for mitigation. A ratio of 1.5:1 would be required for both permanent emergent wetland impacts as well as conversion of forested wetland to emergent wetland. Early coordination with the MDE indicated that the preferred option for impacts associated with the projects collectively described in this Environmental Assessment is the development of an off-site wetland mitigation project. Continued coordination with the Airport, the FAA, and the regulating agencies during later development and permitting phases of the project will determine how each project will satisfy wetland mitigation requirements.

In summary, mitigation required will be dependent upon individual projects included within the Environmental Assessment, and due to Town, State, and Federal funding limitations and programming, these identified projects may be constructed in portions of the total project. Subsequent permitting and mitigation will be completed in concurrence to the portions of the total project as coordinated with State and Local agencies. At this time, the obstruction removal projects occurring on Airport property and within existing avigation easements are being pursued and a JPA has been prepared. The County is currently evaluating potential mitigation sites suitable to satisfy Phase I mitigation requirements. Coordination is ongoing with the MDE regarding mitigation site selection, and upon determination of a location for mitigation, the JPA package will be submitted and

included in a subsequent version of this environmental document.

Surface Water: All efforts to avoid and minimize impacts to surface waters will be considered during project design and construction, and mitigation for stream impacts is not anticipated. The area of ground disturbance would be limited and all appropriate sediment and erosion control and best management practices will be utilized. Linear feet of stream impacts is not anticipated to reach a threshold where stream mitigation is required.

Mitigation of potential water quality impacts associated with the Proposed Action would involve a combination of temporary measures to be implemented during construction for control of erosion and sedimentation, along with permanent measures to provide adequate stormwater management infrastructure for the increased surface runoff volumes. The *Stormwater Management Act of 2007* requires establishing a comprehensive process for stormwater management approval, implementing Environmental Site Design (ESD) to the maximum extent practicable, and ensuring that structural practices are used only where absolutely necessary. Through implementation of the ESDs, it is anticipated that there will be minimal impacts on water quality in Glebe Creek, Goldsborough Creek, and other surface water and groundwater resources.

Groundwater: All ground disturbance and areas of new impervious surfaces should be minimized to only those necessary for project-related construction. Appropriate erosion and sediment controls should be used during construction to protect against surface water runoff, and disturbed areas to remain pervious when construction is complete should be reseeded with appropriate FAA accepted seed mix. Where possible, future ditch maintenance should attempt to implement a more gradual ditch section with 2:1 or even 3:1 vegetated side slopes if the grade adjacent to the construction is suitable and there is available space. This ditch geometry is much more stable and maintainable, and periodic maintenance should focus on keeping the ditch inverts and culvert entrances clear of debris and woody vegetation.

5.13 CUMULATIVE IMPACTS

Cumulative impacts are those impacts on the environment that result from the incremental impact of an action added to other past, present, and reasonably foreseeable future actions, regardless of what agency, federal or non-federal, or person undertakes such other actions. Cumulative impacts can result from actions which are individually minor, but collectively significant over a period of time. In the environs surrounding the Airport, development is generally guided through the use of zoning and land use regulations. It is expected that growth will continue to occur in the area in compliance with the Talbot County and Town of Easton's Comprehensive Plan.

CEQ regulations require that all federal agencies consider the cumulative effects of proposed actions. Cumulative impacts can result from individually minor, but collectively significant, actions taking place over a period of time. If the Proposed Action would not cause direct or indirect impacts on a resource, then it may be concluded that it will not contribute to a cumulative impact on the resource.

The cumulative impacts resulting from the implementation of the Proposed Action have been assessed for projects on and off the Airport. The geographic boundary of the analysis generally includes the existing Airport property and adjacent properties where impacts would occur. The temporal boundary (timeframe) for the analysis extends five years into the past (2011-2016) and into the future through the aviation activity forecast period (2016-2028).

The following is a list of past, ongoing, and reasonably foreseeable projects within the defined geographic area and timeframe.

Past Projects: Airport projects and upgrades to existing facilities necessary for maintaining the airport in a state of good repair are typically excluded from the need for further analysis under NEPA. These projects are, by definition, minor projects which do not individually or collectively have a significant impact on the environment; therefore, no further analysis is required for categorically excluded projects. Over the past five years, FAA has allowed for categorical exclusion (CATEX) after review of the following projects at the Airport:

- Categorical Exclusion for the Lower Level T-Hangar Taxilane Rehabilitation (April 2016)
- Categorical Exclusion for Proposed Hangar Development (November 2014)

The following off-airport project within close proximity ESN was recently completed:

- Easton Village Shopping, located approximately one (1) mile southwest of Runway 22 within the Town of Easton.

Ongoing Projects: There are no current projects underway at the Airport.

Reasonably Foreseeable Projects: Within the next five years, no additional projects beyond those that are discussed in this Environmental Assessment are proposed at the Airport.

The following off-airport projects are planned in the immediate surrounding areas of ESN:

- Talbot Commerce Park, located immediately adjacent to the Airport to the south within the Town of Easton.
- Easton Point residential development, located approximately two (2) miles southwest of the Airport within the Town of Easton.
- Shore Health Hospital, located approximately one (1) mile to the north of the Airport. The land has been acquired and it has been annexed by the Town.

Many of the identified past, current, and reasonably foreseeable projects involve an increase in pavement. Regarding water quality, the greatest effect would be an increase of impervious surfaces that trap pollutants and increase runoff to receiving waterways, as there is a general correlation between new pavement and reduction in water quality due to increased runoff. Therefore, it would be imperative that Best Management Practices are employed for all projects, including the Proposed Action, to minimize these potential effects.

With respect to noise, there would be a change in the noise environment in the vicinity of ESN if the Proposed Alternative was implemented, but the increase is not expected to be significant. Other development projects at the Airport would primarily consist of new aircraft storage hangars. It is anticipated the area surrounding the Airport would remain in its present state and no other major off-airport developments were identified. The Proposed Action would not generate substantial aircraft noise impacts and short term construction noise increases are not expected to be severe. Therefore, the noise impacts of the Proposed Action, when considered in addition to noise impacts of other on- or off-airport projects, are not expected to lead to additional substantial cumulative noise impact.

As discussed in the environmental resource categories in this chapter, the Proposed Action would not result in significant increases in emissions or adverse impacts to noise, visual, or other resources that are likely to create cumulative effects when combined with other past, present, or recently foreseeable actions. Furthermore, for each of these projects, impacts to resource categories have been or would be mitigated per regulatory agency requirements. With these considerations in mind, implementation of the Proposed Action along with other past, present, or reasonably foreseeable projects would not result in significant cumulative impacts to environmental resources as defined by FAA Environmental Order 1050.1F.

Appendix A: Runway Length Requirements

URS

In reply, please refer to: 20836388

July 14, 2015

MEMORANDUM

TO: Mike Henry, Airport Manager
Jeff Breeden, Federal Aviation Administration

FROM: Jennifer Lutz

cc: Ken Brazeau
Howard Klein
Mindy Lee, Federal Aviation Administration
Ashish Solanki, Maryland Aviation Administration

REFERENCE: Professional Planning Services – Phase 1
Task 4: Briefing Paper
Environmental Assessment for the Five-Year Capital Improvement Program
Easton / Newnam Field Airport
Easton, Maryland

Per URS's scope of services, dated October 29, 2013, this memorandum presents the results of Task 1 – Review and Update Forecast of Aircraft Operations, Task 2 – Review Aircraft Fleet Mix and Confirm Critical Aircraft, and Task 3 – Reconfirm Runway Length Requirements.

TASK 1 - REVIEW AND UPDATE FORECAST OF AIRCRAFT OPERATIONS

Scope of Work: Task 1 included a review of monthly aircraft operations during 2013 versus 2012 to assess recent growth trends at the Airport. This task also included a review of the Federal Aviation Administration's (FAA) most recent Terminal Area Forecast (TAF). Sources of data used to complete this task included the FAA's Air Traffic Activity System (ATADS) and the TAF.

Analysis: On August 6, 2014, the FAA approved the fleet mix forecast included in Table 10 of the August 1, 2014 memo submitted by URS. **Table 10** is included below.

Table 10: Fleet Mix Forecast (By Operations)

Category	2012	2018	2023	2028	2033
Single-Engine	27,904	34,656	34,083	33,509	32,945
Multi-Engine	2,232	2,720	2,596	2,477	2,364
Turbo Prop	3,229	4,403	4,471	4,508	4,515
Jet	7,534	11,414	12,652	13,927	15,226
Rotor	292	422	450	477	502
Subtotal	41,191	53,616	54,252	54,898	55,551
Military	1,361	1,827	1,827	1,827	1,827
Total	42,552	55,443	56,079	56,725	57,378

TASK 2 - REVIEW AIRCRAFT FLEET MIX AND CONFIRM CRITICAL AIRCRAFT

Scope of Work: Task 2 included an analysis of the Airport's historical aircraft fleet mix, an identification of the Airport's critical aircraft and a forecast of future fleet mix. The analysis of historical fleet mix was conducted using the FAA's Traffic Flow Management System Counts (TFMSC) and Aviation System Performance Metrics (ASPM). The forecast of future fleet mix was prepared using a variety of sources including the FAA TAF, Table 28 from the FAA's Aerospace Forecast, data from the General Aviation Manufacturers Association's Statistical Databook and Industry Outlook, and data from various aircraft manufacturers.

Analysis: On August 6, 2014, the FAA approved the fleet mix included in the August 1, 2014 memo submitted by URS. In addition, the FAA approved the existing critical aircraft as the Hawker 800 and the future critical aircraft is expected to be Challenger 300/350 series aircraft.

TASK 3 – RECONFIRM RUNWAY LENGTH REQUIREMENTS

Scope of Work: Task 3 included a review of historical length of haul data for the existing and future critical aircraft (i.e., the Hawker 800XP and the Challenger 300) at the Airport. Task 3 also included assessment of runway length requirements for these aircraft considering a wide variety of variables.

Analysis: On July 1, 2015, the FAA approved the runway length requirements included in the June 25, 2015 memo submitted by URS. The estimated runway lengths requirements were determined to be as follows:

Aircraft	Runway Length (feet)	Elevation Change (feet)	Total Length (feet)
Challenger 300	5,870	360	6,230
Hawker 800 XP	6,640	360	7,000
Hawker 900 XP	5,626	360	5,986

The analysis generally shows the operations of the Hawker 800 XP and 900 XP to be decreasing over time and the operations of the Challenger 300 to be increasing over time. Thus, the FAA concurred with using an average of the three aircraft runway length referenced above. This results in an average length of 6,405 feet or rounded to 6,400 feet.

U. S. Department
of Transportation

**Federal Aviation
Administration**

WASHINGTON AIRPORTS DISTRICT OFFICE
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July 1, 2015

Mr. Michael L. Henry
Airport Manager
Easton Airport
29137 Newnam Road, Unit One
Easton, MD 21601

**RE: Runway Length Concurrence
Easton Airport
Easton, Maryland**

Dear Mr. Henry:

Our office is in receipt of the Runway 4-22 Length Analysis Matrix to be used for the on-going environmental assessment for the Easton Airport. This document was submitted electronically by URS on June 25, 2015. We want to thank AECOM for consolidating the analysis to this point and the preparation of the requested matrix.

We have reviewed the attached material as follows:

We agree with using a 95 degree F and MTOW to determine the runway length for each aircraft family member. While the temperature is slightly higher than the mean max at ESN, most airport planning manuals recommend not interpolating between temperatures. As a result, we have used the higher of the two temperatures provided. The MTOW for the aircraft departure weight was used based on users letters submitted by AECOM. These letters suggest that there is an aircraft departure weight operational penalty based on existing runway length at ESN which doesn't allow aircraft operators to depart at the desired payload.

We also added the additional 360 feet of runway length required for each aircraft to account for the elevation change between runway ends of 36 feet for Runway 4-22.

Below is the estimated runway length of the following by aircraft type:

Challenger 300 5,870 + 360 = 6,230 feet
Hawker 800 XP 6,640 + 360 = 7,000 feet
Hawker 900 XP 5,626 = 360 = 5,986 feet

The approved aviation forecasts in Table 11 of the memo dated August 1, 2014 was reviewed and is attached. This table generally shows the operations of the Hawker 800 XP and 900XP to be decreasing over time and the operations of the Challenger 300 to be increasing over time.

The Worldwide Business Jet Shipments (2000 – 2014) was reviewed and is attached. This report, produced by the general Aviation Manufactures Association (GAMA), provides aircraft shipments by manufactures by year. This information can be helpful to indicate the number of aircraft being produced for a specific model and also when a specific model either started or stopped production. This information is helpful to the airport planner to indicated trends and when evaluating families of aircraft, should one member of the aircraft family be emphasized more than the other members of the family. This document indicated that the Hawker 800 XP stopped production in 2006. The Hawker 900XP started production in 2007 and the Challenger 300 started production in 2003. It also indicated that the total number of Challenger 300 shipments is much higher than the Hawker 900XP. This would suggest that there is a higher probability of Challenger 300 operating at ESN in the future than the Hawker 800 XP and Hawker 900XP.

In order to arrive at a final recommended runway length, our office would concur with using an average of the three aircraft runway lengths referenced earlier. This results in an average length of 6,405 feet or rounded to 6,400 feet. Therefor the upcoming EA being prepared for ENS should use a runway length of 6,400 feet.

We would also like to point out that FAA AC 150/5325-4B "Runway Length for Airport Design" is currently undergoing a major revision that is expected to be released this Fall. The draft version of the updated AC eliminates the use of the percent of fleet runway length tables which was submitted in previous technical memos. The new AC does recommend using aircraft planning manuals so the methodology used should be consistent with the release of the new AC.
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I want to extend my appreciation for your patience as we went thru this rather length process. Ultimately, I think we have a runway length that is justified and defensible. If you should have any questions, I can be contacted at (703) 661-1363 or via e-mail at Jeffrey.breeden@faa.gov.

Sincerely,
Original Signed By
Jeffrey W. Breeden

Jeffrey W. Breeden, AICP
Airport Planner
Washington Airports District Office

Enclosure
cc: Ashish Solanki, MAA w/encl via e-mail
Jennifer Lutz, URS w/encl via e-mail
Howard Klein, URS w/encl via e-mail
Mindy Lee, FAA WADO w/encl via e-mail
Marcus Brundage, FAA WADO w/encl via e-mail

Runway 4-22 Length Analysis Matrix [1:]

Easton / Newnam Field Airport

Aircraft Performance Manuals	Challenger 300	Hawker 800XP	Hawker 900XP
Length Required at 86° F and MTOW [2]	5580 (10°)	5640 (15°)	5258 (15°)
Length Required at 95° F and MTOW [2]	5870 (10°)	6640 (0°) [3]	5626 (15°)
Length Required at 86° F and 90% useful load [2]	5340 (10°)	5250 (15°)	4903 (15°)
Length Required at 95° F and 90% useful load [2]	5610 (10°)	5630 (15°)	5228 (15°)
Length Required at 86° F and 60% useful load [2]	3810 (10°)	4360 (15°)	4271 (15°)
Length Required at 95° F and 60% useful load [2]	3970 (10°)	4460 (15°)	4612 (15°)
FAA AC 150/5325-4B	**Challenger 300**	**Hawker 800XP**	**Hawker 900XP**
Figure 3-1 - 75% of Fleet at 90% useful load (86°F)	6450		
Figure 3-1 - 75% of Fleet at 90% useful load (95°F)	7400		
Figure 3-1 -75% of Fleet at 60% useful load (86°F)	4600		
Figure 3-1 -75% of Fleet at 60% useful load (95°F)	4700		
Figure 3-2 - 100% of Fleet at 90% useful load (86 °F)		7800	
Figure 3-2 - 100% of Fleet at 90% useful load (95°F)		8900	
Figure 3-2 - 100% of Fleet at 60% useful load (86°F)		5400	
Figure 3-2 - 100% of Fleet at 60% useful load (95°F)		5600	

Source: URS Corporation, June 26, 2015

[1] AC 150/ 5325-4B addresses the uphill condition, termed "effective runway gradient," for takeoff operations by using the maximum difference of runway centerline elevation. For airplanes over 12,500 pounds (5,670 kg) maximum certified takeoff weight, the recommended runway length for takeoff derived from the curves of figures 3-1 and 3-2 or from the APMs must be increased by 10 feet per foot of difference in centerline elevations between the high and low points of the runway centerline elevations. Airport designers using APMs should also apply the same adjustment because APMs use zero effective runway gradients in their takeoff curves. This adjustment to the obtained runway length approximates the operational increase required to overcome the uphill effective runway gradient. Therefore, for this analysis it is estimated that **360 feet** of Runway length should be added to all the specified length above due to an estimated 36 feet difference in the Runway 4-22 centerline.

CHALLENGER 300	HAWKER 800XP	900XP
5,870	6,640	5,626
360	360	360
6,230	7,000	5,986

[2] Source of Aircraft Data:
Challenger 300 - Airplane Flight Manual CSP 100-1
Hawker 800XP - Flight Planning and Performance Guide
Hawker 900XP - Flight Planning and Performance Guide

[3] No runway length given a 15° flaps

Notes:
Aircraft Maximum Takeoff Weights (MTOW)
Challenger 300 (38,500 lbs.)
Hawker 800XP (28,000 lbs)
Hawker 900XP (28,000 lbs.)

(*)flap settings represent the least amount of runway length for all the flap settings provided within the APM.

Useful Load Weight = Maximum Takeoff Weight minus Basic empty weight times usefull weight percentage plus basic emty weight. USEFUL LOAD = MTOW - Empty Wt. x (% OF USEFUL LOAD)+ Basic Empty Weight

Per data compiled from National Oceanic & Atmospheric Administration (2004-2014), the mean maximum monthly termperature for the hottest month (July) is 89° F. Within this analysis temperatures were only available in increments of 5° C. Thus 86° (30°C) and 95° (35°C) were used as the critical temperatures.

Table 11: Forecast of Critical Aircraft Operations

	2012	2018	2023	2028	2033
Total Jet Operations	7,534	11,414	12,652	13,927	15,226
Estimated Percent of Jet Operations by Midsize Jets	34%	34%	34%	34%	34%
Midsize Jet Operations	2,562	3,881	4,302	4,735	5,177
Estimated Operations by Existing and Future Critical Aircraft					
Existing					
Hawker 800 / 900XP	615 (24%)	699 (18%)	516 (12%)	284 (6%)	207 (4%)
IAI Astra 1125	615 (24%)	699 (18%)	516 (12%)	284 (5%)	207 (4%)
Total	1,230	1,398	1,032	568	414
Future					
Challenger 300 / 350	333 (13%)	621 (16%)	860 (20%)	1089 (23%)	1346 (26%)
Total	333	621	860	1,089	1,346

Source: URS Corporation, 2014.
Note: Values in parenthesis represents the estimated percent of midsize jet operations conducted by each type of aircraft.

URS

In reply, please refer to: 20836388

September 22, 2014

MEMORANDUM

TO: Mike Henry, Airport Manager
Jeff Breeden, Federal Aviation Administration
Ashish Solanki, Maryland Aviation Administration

FROM: Jennifer Lutz
Howard Klein

cc: Ken Brazeau
Mindy Lee, Federal Aviation Administration

REFERENCE: Professional Planning Services – Phase 1
Task 3: Reconfirm Runway Length Requirements
Environmental Assessment for the Five-Year Capital Improvement Program
Easton / Newnam Field Airport
Easton, Maryland

Per URS's scope of services, dated October 29, 2013, this memorandum presents the results of Task 3 (Reconfirm Runway Length Requirements) for the above referenced project at Easton /Newnam Field Airport (ESN). Task 3 includes a review of historical length of haul data for the existing and future critical aircraft (i.e., the Hawker 800XP and the Challenger 300) at the Airport. Task 3 also includes assessment of runway length requirements for these aircraft considering a wide variety of variables. Both of these items are described in the following paragraphs.

TASK 3 – RECONFIRM RUNWAY LENGTH REQUIREMENTS

Review of Length of Haul

The length of haul for Hawker 800XP and Challenger 300 operations from ESN was examined prior to beginning the runway length analysis. **Table 1** presents length-of-haul data for both aircraft in 500 mile increments. The data includes operations at ESN from 2004 through 2013 as recorded by the Federal Aviation Administration's (FAA) Traffic Flow Management System Counts (TFMCS).

TABLE 1: LENGTH OF HAUL FOR EXISTING AND FUTURE CRITICAL AIRCRAFT (2004 TO 2013)

Length of Haul	Hawker 800XP	Challenger 300
0 to 500	73%	68%
500 to 1,000	21%	24%
1,000 to 1,500	4%	3%
1,500 to 2,000	2%	1%
2,000 to 2,500	<1%	4%
Total	100%	100%

Source: FAA Traffic Flow Management System Counts (TFMSC). Data compiled by URS 2014.

1.4a **Worldwide Business Jet Shipments by Manufacturer (2000–2014)**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Airbus	**0**	**5**	**2**	**0**	**0**	**9**	**11**	**13**	**11**	**13**	**15**	**10**	**9**	**6**	**5**
Airbus Corporate Jet (all models)	-	5	2	0	0	9	10	12	9	11	-	-	-	-	-
ACJ318	-	-	-	-	-	-	-	-	-	-	2	2	2	1	0
ACJ319	-	-	-	-	-	-	-	-	-	-	8	6	6	4	1
ACJ320	-	-	-	-	-	-	-	-	-	-	3	1	0	0	4
ACJ321	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0
ACJ330	-	-	-	-	-	-	-	1	1	1	1	1	1	0	0
ACJ340	-	-	-	-	-	-	1	0	1	1	1	0	0	0	0
Avcraft (prev. Fairchild)	**0**	**4**	**4**	**9**	**9**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Envoy 3	-	4	4	9	9	1	-	-	-	-	-	-	-	-	-
Boeing Business Jets	**14**	**16**	**11**	**7**	**3**	**4**	**13**	**7**	**6**	**6**	**12**	**8**	**12**	**7**	**10**
Boeing Business Jet	14	11	9	4	2	3	12	7	3	3	4	8	2	5	3
Boeing Business Jet 2	-	5	2	3	1	1	1	0	1	0	2	0	2	1	2
Boeing Business Jet 3	-	-	-	-	-	-	-	-	2	1	4	0	0	0	0
Boeing Business Jet 747	-	-	-	-	-	-	-	-	-	-	-	-	8	0	0
Boeing Business Jet 767	-	-	-	-	-	-	-	-	-	1	0	0	0	0	0
Boeing Business Jet 777	-	-	-	-	-	-	-	-	-	1	2	0	0	0	1
Boeing Business Jet 787	-	-	-	-	-	-	-	-	-	-	-	-	-	1	4
Bombardier Business Aircraft	**207**	**179**	**101**	**70**	**130**	**188**	**213**	**224**	**247**	**173**	**150**	**182**	**179**	**180**	**204**
Learjet 31A	27	17	9	2	-	-	-	-	-	-	-	-	-	-	-
Learjet 40/XR	-	-	-	-	17	21	26	57	48	33	16	24	24	1	-
Learjet 45/XR	71	63	27	17	22	28	30								
Learjet 60/XR	35	29	17	12	9	18	15	23	26	13	12	19	15	10	1
Learjet 70/75	-	-	-	-	-	-	-	-	-	-	-	-	-	18	33
Challenger 300/350	-	-	-	1	28	50	55	51	60	33	29	37	48	55	54
Challenger 604/605	39	41	31	24	29	36	29	35	44	36	38	43	34	32	36
Global 5000	-	-	-	-	4	17	18	46	52	51	49	53	54	62	80
Global 6000/Express	35	29	17	14	20	13	22								
CL 850/870/890	-	-	-	-	1	5	18	12	17	7	6	6	4	2	0
Dassault Falcon Jet	**73**	**75**	**66**	**49**	**63**	**51**	**61**	**70**	**72**	**77**	**95**	**63**	**66**	**77**	**66**
Falcon 50EX	18	13	10	8	5	5	5	2	1	-	-	-	-	-	-
Falcon 900B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Falcon 900C	6	6	4	3	3	1	-	-	-	-	-	-	-	-	-
Falcon 900EX	23	21	17	6	1	-	-	-	-	-	-	-	-	-	-
Falcon 900DX	-	-	-	-	-	2	4	10	4	1	3	-	-	-	-
Falcon 900EX EASy	-	-	-	4	14	16	16	18	19	17	17	1	-	-	-
Falcon 900LX	-	-	-	-	-	-	-	-	-	-	4	11	7	11	8
Falcon 2000	26	35	35	12	11	6	6	1	-	-	-	-	-	-	-
Falcon 2000DX	-	-	-	-	-	-	-	-	3	1	-	-	-	-	-
Falcon 2000EX	-	-	-	16	10	-	-	-	-	-	-	-	-	-	-
Falcon 2000EX EASy	-	-	-	-	19	21	30	33	24	3	-	-	-	-	-
Falcon 2000LX	-	-	-	-	-	-	-	-	-	23	30	20	22	8	-
Falcon 2000LXS	-	-	-	-	-	-	-	-	-	-	-	-	-	3	18
Falcon 2000S	-	-	-	-	-	-	-	-	-	-	-	-	-	12	13
Falcon 7X	-	-	-	-	-	-	-	6	21	32	41	31	37	43	27
Eclipse Aerospace, Inc.	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**98**	**161**	**0**	**0**	**0**	**0**	**0**	**12**
Eclipse 500	-	-	-	-	-	-	1	98	161	-	-	-	-	-	-
Eclipse 550	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12
Embraer	**0**	**0**	**8**	**13**	**13**	**20**	**27**	**36**	**38**	**122**	**145**	**99**	**99**	**119**	**116**
Phenom 100	-	-	-	-	-	-	-	-	2	97	100	41	29	30	19
Phenom 300	-	-	-	-	-	-	-	-	-	1	26	42	48	60	73
Legacy 500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
Legacy 600/650	-	-	8	13	13	20	27	36	36	18	11	13	17	21	18
Lineage 1000 /E190 Head of State	-	-	-	-	-	-	-	-	-	5	5	3	2	4	3
Shuttles (ERJs and E-Jets)	-	-	-	-	-	-	-	-	-	1	3	0	3	4	0
Emivest (prev. Sino Swearingen)	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**2**	**0**	**0**	**0**	**0**	**0**
SJ30-2	-	-	-	-	-	-	1	1	0	2	0	0	0	0	0
Gulfstream Aerospace Corporation	**88**	**101**	**85**	**74**	**78**	**89**	**113**	**138**	**156**	**94**	**99**	**99**	**94**	**144**	**150**
G100/150 (prev. IAI Astra)	11	5	9	24	22	26	42	59	68	19	24	21	11	23	33
G200 (prev. IAI Galaxy)	6	25	15												
G300/350/400/450 (prev. GIV/GIVSP)	37	36	29	50	56	63	71	79	88	75	75	78	83	121	117
G500/G550 (prev. GV/GVSP), G650	34	35	32												
Textron Aviation (Beechcraft)	**118**	**98**	**94**	**100**	**115**	**141**	**140**	**162**	**160**	**98**	**73**	**52**	**32**	**6**	**0**
Premier I/A	-	18	29	29	37	30	23	54	31	16	11	11	3	-	-
Hawker 400XP	51	25	19	24	28	53	53	41	35	11	12	1	-	-	-
Hawker 750	-	-	-	-	-	-	-	-	23	13	5	7	-	-	-
Hawker 800XP	67	55	46	47	50	58	8	-	-	-	-	1	-	-	-
Hawker 850XP	-	-	-	-	-	-	56	35	15	3	1	0	-	-	-
Hawker 900XP	-	-	-	-	-	-	-	32	50	35	28	22	17	-	-
Hawker 4000	-	-	-	-	-	-	-	-	6	20	16	10	12	6	-
Textron Aviation (Cessna Aircraft)	**252**	**306**	**305**	**196**	**181**	**247**	**307**	**388**	**466**	**289**	**178**	**183**	**181**	**139**	**159**
CE-510 Citation Mustang	-	-	-	-	-	-	1	45	101	125	73	43	38	20	8
CE-525 Citation CJ1	56	61	30	22	20	14	-	-	-	-	-	-	-	-	-
CE-525 Citation CJ1+	-	-	-	-	-	4	25	34	20	14	3	2	-	-	-

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F I N A L

RUNWAY 4-22
ALTERNATIVES ANALYSIS

Prepared for

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Appendix A **Letter From Talbot County Council**
Appendix B **Land Acquisition**
Appendix C **Detailed Development Costs**

1.0 PROJECT BACKGROUND

The most recent Airport Layout Plan (ALP) Update for Easton/Newnam Field (ESN) was prepared by Delta Airport Consultants in August 2006. The primary recommendation of this ALP Update was to convert Runway 15-33 to the Airport's primary runway and extend it to the length necessary to serve the Airport's critical aircraft. The critical aircraft is defined as the aircraft or family of aircraft with the largest wingspan and highest approach to landing speed that uses the airport on a regular basis. A runway length analysis was completed as part of the ALP Update to determine the runway length needed to accommodate the critical aircraft's takeoff requirements. The results of this analysis showed that the Hawker 800, the aircraft identified as the critical aircraft for runway length consideration, requires 6,900 feet of runway. Although the full recommended length for Runway 15-33 to meet the needs of the Hawker 800 was determined to be 6,900 feet, this length was deemed unattainable due to the potential impacts to wetlands, biotic communities, and Delmarva Fox Squirrel (DFS) habitat and therefore, decreased to 6,200 feet. The ALP Update also states that if the Environmental Assessment (EA) findings indicate a length greater than 6,200 feet to be feasible, it is recommended that Talbot County (the County) pursue the additional length up to 6,900 feet.

As a result of the ALP Update, a Scope of Work was prepared by URS for an EA for the Five-Year Capital Improvement Program (CIP), which included the extension and conversion of Runway 15-33 to the primary runway at ESN. The original Scope of Work for the EA was finalized on June 19, 2006, and a Notice-to-Proceed was issued on August 7, 2006. An Agency Scoping Meeting and a Public Scoping Workshop were held on February 20, 2007. At this meeting, the Eastern Shore Land Conservancy expressed their opposition to the project since they, along with Maryland Environmental Trust as co-grantee, hold a conservation easement on the property previously owned by Mary and Charlotte Fletcher. This property was designated for acquisition on the ALP approved by the Federal Aviation Administration (FAA) in August 2006 (which was the basis on which the final EA Scope of Work was prepared) in order to accommodate the extension of Runway 15-33 to the northwest as depicted on the approved ALP. Subsequent meetings with the Talbot County Council, Eastern Shore Land Conservancy, Attorney General, Maryland Environmental Trust, as well as the advice of legal counsel, resulted in a decision by the County to no longer pursue any future plans for Airport expansion onto the Fletcher property.

As a result, additional planning services were required to revisit alternatives involving an extension to Runway 4-22, which were initially evaluated in the Runway Safety Area Study completed by Delta Airport Consultants in 2003. Subsequently, because alternatives involving an extension to Runway 4-22 are being re-developed, the potential to increase the runway length closer to the 2006 ALP Update's original runway length objective of 6,900 feet is being revisited.

2.0 RUNWAY 4-22 AIRPORT DESIGN CRITERIA

Airport design criteria must be identified and applied, to properly and consistently plan future airport facilities. Airport design criteria are specified by the Airport Reference Code (ARC). The ARC is a

coding system used to relate airport design criteria to the operational and physical characteristics of the airplanes intended to operate at the airport. The ARC has two components relating to the airport design aircraft. The first component, depicted by a letter, is the aircraft approach category which relates to aircraft approach speed and provides information on the operational capabilities of aircraft. The second component, depicted by a Roman numeral, is the airplane design group and relates to airplane wingspan or tailheight, whichever is the most restrictive and provides information regarding the physical characteristics of aircraft using the airport. **Table 2.0-1** provides a listing of the approach categories and design groups.

TABLE 2.0-1
AIRPORT DESIGN CRITERIA

Aircraft Approach Category		
Category	Approach Speed (kts)	
A	Less than 91	
B	91 or more but less than 121	
C	121 or more but less than 141	
D	141 or more but less than 166	
E	166 or more	
Airplane Design Group		
Group	Wing Span (ft)	Tail Height (ft)
I	‹ 49	‹ 20
II	49 - ‹ 79	20 - ‹ 30
III	79 - ‹ 118	30 - ‹ 45
IV	118 - ‹ 171	45 - ‹ 60
V	171 - ‹ 214	60 - ‹ 66
VI	214 - ‹ 262	66 - ‹ 80

Source: AC 150/5300-13 Change 13, *Airport Design*

2.1 AIRCRAFT APPROACH CATEGORY

A review of aircraft presently using, and forecasted to use ESN, reveals that the aircraft in Approach Category D regularly use the Airport. This includes the Gulfstream IV and a few other business jets. Approach Category D will be used to plan future airfield facilities associated with Runway 4-22.

2.2 AIRPLANE DESIGN GROUP

The critical aircraft based on Airplane Design Group at ESN was determined to be the Gulfstream IV for Runway 4-22. The Gulfstream IV, which is the largest aircraft anticipated to use ESN on a regular basis, has a wingspan of approximately 78 feet which places it in Airplane Design Group II.

2.3 AIRPORT REFERENCE CODE

The ARC is determined by combining the Aircraft Approach Category letter with the Airplane Design Group number. Consequently, the ARC for Runway 4-22 is D-II.

2.4 RUNWAY SAFETY AREAS

Runway Safety Areas (RSA) are defined by the FAA as "a defined surface surrounding the runway that are prepared or suitable for reducing the risk of damage to airplanes in the event of an undershoot, overshoot, or excursion from the runway." RSAs consist of a relatively flat graded area that is free of objects and vegetation that could damage aircraft. According to FAA guidance, the RSA should be capable, under dry conditions, of supporting aircraft rescue and fire fighting equipment, and the occasional passage of aircraft without causing structural damage to the aircraft. **Table 2.4-1** presents the FAA standard RSA dimensions for runway serving aircraft in approach categories D-II.

TABLE 2.4-1
FAA DIMENSION STANDARDS (FUTURE ARC D-II RUNWAY)

		FAA Standard		
	Runway	**Length (Feet)**	**Width (Feet Centered on Runway Centerline)**	
RSA	4	1,000	500	
	22	1,000	500	
OFA	4	1,000	800	
	22	1,000	800	
RPZ	4	2,500	1,000 Inner Portion	1,750 Outer Portion
	22	1,700	500 Inner Portion	1,010 Outer Portion

Source: AC 150/5300-13 Change 13, *Airport Design*

2.5 RUNWAY OBJECT FREE AREA

In addition to the RSA, the Object Free Area (OFA) is also defined around runways to enhance the safety of aircraft operations. The FAA defines the OFA as an area clear of above ground objects protruding above the RSA edge elevation. Unlike the RSA, there is no physical component to the OFA. Thus, there is no requirement to support an aircraft or emergency response vehicles. **Table 2.4-1** summarizes the OFA dimensions.

2.6 RUNWAY PROTECTION ZONE

The purpose of Runway Protection Zone (RPZ) is to enhance the protection of people and property on the ground. These areas should be cleared of incompatible objects and activities. The dimensions of the RPZ for a particular runway end are a function of the type of aircraft and approach

visibility minimum associated with that runway end. It is centered on the extended runway centerline and begins 200 feet beyond the end of usable pavement. The RPZ for a runway with approach visibilities not lower than ¾ mile, such as existing Runway 4, is 1,700 feet long, with an inner width of 1,000 feet and an outer width of 1,510 feet. This creates a trapezoidal shape that encompasses 48.9 acres. For a runway with approach minimums lower than ¾ mile, such as the future Runway 4, the associated RPZ is 2,500 long, has an inner width of 1,000 feet and an outer width of 1,750 feet encompassing 78.9 acres. **Table 2.4-1** shows the RPZ dimensions for future Runway 4-22.

2.7 RUNWAY DESIGN COMPONENTS

2.7.1 DECLARED DISTANCES

Declared distances are usually used on runways where it is impracticable to provide a full RSA, OFA, or RPZ in accordance with FAA design standards in Advisory Circular (AC) 150/5300-13 Change 13, *Airport Design*. Declared distances are defined as the distances the airport owner declares available and suitable for satisfying an airplane's take-off distance, accelerated-stop distance, and landing distance requirements. These distances are defined as:

Take-off run available (TORA): The runway length available and suitable for the ground run of an airplane taking off.

Take-off distance available (TODA): The TORA plus the length of any remaining runway and/or clearway beyond the far end of the TORA.

Accelerate-stop distance available (ASDA): The runway plus stopway length declared available and suitable for the acceleration and deceleration of an airplane aborting take-off.

Landing distance available (LDA): The runway length declared available and suitable for a landing airplane.

2.7.2 *ENGINEERED MATERIALS ARRESTING SYSTEMS*

A standard Engineered Materials Arresting System (EMAS) provides a level of safety that is generally equivalent to a full RSA built to the dimensional standards in AC 150/5300-13 Change 13. It is a bed of lightweight, crushable concrete at the end of a runway and is designed to minimize the potential for structural damage to aircraft. An EMAS is located beyond the end of the runway and centered on the extended runway centerline. The minimum width of the EMAS must be the width of the runway. It usually begins at a setback distance from the end of the runway to avoid damage due to jet blast and undershoots. This distance will vary depending on the available area and the EMAS materials. EMAS installation can vary in length due to the different types of critical aircraft encountered at airports. If the alternative that is selected utilizes EMAS, specific design efforts must be accomplished to determine the dimensions needed to serve the critical aircraft at ESN.

3.0 EXISTING CONDITIONS FOR RUNWAY 4-22

Currently, Runway 4-22 is 5,500 feet long by 100 feet wide with a precision instrument approach to Runway 4 and a non-precision instrument approach to Runway 22. It is designed to accommodate ARC D-II. **Exhibit 3-1** depicts the existing conditions for Runway 4-22 at ESN.

The RSA, OFA, and RPZ associated with Runway 4 all meet FAA standards as shown in **Table 2.4-1**. The RSA, OFA, and RPZ, on the Runway 22 end do not meet FAA standards as published in AC 150/5300-13 Change 13. The RSA for the Runway 22 end currently does not meet FAA standards due to the location of the fence along Centreville Road. At a point approximately 600 feet beyond the Runway 22 displaced threshold, the Airport security fence intersects the southeast side of the extended RSA. The OFA for Runway 22 does not meet FAA standards due to Centreville Road and is currently 800 feet wide by 350 feet beyond the Runway 22 end displaced threshold. The RPZ is not clear of prohibited and/or discouraged land uses. There are small businesses, a car dealership, residential areas, Centreville Road, U.S. Route 50, and Airport Drive within the RPZ. The current conditions for Runway 4-22 are summarized in **Table 3.0-1**.

TABLE 3.0-1
CURRENT RUNWAY 4-22 CONDITIONS

	Runway 4	Runway 22
RSA	500’ wide, 1,000’ beyond runway end	500’ wide, 600’ beyond runway end
OFA	800’ wide, 1,000’ beyond runway end	800’ wide, 350 beyond runway end
RPZ	1,700 long, 1,000’ wide inner portion, 1,510 wide outer portion, encompassing 48.9 acres	1,700’ long, 500’ wide inner portion, 1,010’ wide outer portion, encompassing 29.4 acres
14 CFR Part 77 Approach Surface	50:1 slope for inner 10,000’, 40:1 slope for additional 40,000’	34:1 slope for 10,000’
14 CFR Part 77 Primary Surface	1,000’ wide, extends 200’ off end of usable pavement	

Source: ALP, Revision 1, May 2007

4.0 RUNWAY EXTENSION ALTERNATIVES

4.0.1 ASSUMPTIONS

Before developing alternatives for an extension of Runway 4-22, several limiting assumptions were made. These assumptions are listed below.

- Neither Centreville Road nor U.S. Route 50 will be closed or relocated;
- Runway 4 RPZ will not extend into the businesses on the south side of Glebe Road;

- A CAT I Precision Approach with a Medium Intensity Approach Lighting System with Runway Alignment Indicator Lights (MALSR) will be installed on Runway 4;
- The critical aircraft for airfield geometry will remain a Gulfstream IV (ARC D-II);
- The building currently occupied by SFA (former Black and Decker buildings) will be acquired for the Runway 4 RPZ; and
- The length of usable pavement will not exceed 6,900', as calculated in the 2006 ALP Update.

Six alternatives were developed including options with and without the use of declared distances, and the installation of EMAS. The limiting factors in all of the alternatives are the Glebe Road businesses to the south of the Runway 4 end, and Centreville Road and U.S. Route 50 to the north of the Runway 22 end.

All alternatives were developed to meet ARC D-II standards. ARC D-II includes aircraft with wingspans 49 feet up to but not including 79 feet and tail heights from 20 feet up to but not including 30 feet.

4.1 ALTERNATIVE 1 – 5,600' RUNWAY

Alternative 1 provides a 5,600 foot runway without the use of declared distances as depicted in **Exhibit 4-1**. The Runway 4 end, which is extended 1,100 feet, requires a precision RPZ that extends to the south side of the Glebe Road right-of-way. This is the farthest the Runway 4 end RPZ can be extended without requiring the acquisition of business properties located just to the south of Glebe Road because of the associated RPZ. The Runway 22 end is relocated 1,000 feet in order to achieve the required 1,000 foot RSA, and thus avoiding Centreville Road. The RSA, OFA, and RPZ for this alternative meet all FAA design criteria. The RPZ on the Runway 22 end encompasses only two small areas that are currently not controlled by the Airport, including areas of small businesses and a car dealership.

4.2 ALTERNATIVE 2 – 6,400' RUNWAY – DECLARED DISTANCES ON RUNWAY 4 END

Alternative 2 provides a 6,400 foot runway through the use of declared distances on the Runway 4 end. The Runway 4 end is extended 1,896 feet, with an 800 foot displaced threshold. The 1,100 feet of pavement before the displaced threshold will be available for use during takeoff. The Runway 22 end is relocated 1,000 feet in order to create a 1,000 foot RSA off the Runway 22 end. Through the use of declared distances, 6,400 feet will be available for takeoff on Runway 4 and 22, 6,400 feet will be available for landing on Runway 22, and 5,600 feet will be available for landing on Runway 4, as shown in the table in **Exhibit 4-2.** The RSA, OFA, and RPZ for both runways ends meet FAA design criteria. The RPZ on the Runway 22 end encompasses only small areas that are not controlled by the Airport, including areas of small businesses and a car dealership.

4.3 ALTERNATIVE 3 – 6,000' RUNWAY – EMAS ON RUNWAY 22 END

Alternative 3 provides a 6,000 foot runway without the use of declared distances and incorporates an EMAS on the Runway 22 end as shown in **Exhibit 4-3**. The Runway 4 end is extended 1,100 feet which allows for a standard RSA, OFA, and RPZ. Installing EMAS on the Runway 22 end requires the threshold to be displaced only 600 feet compared to the 1,000 foot displacement in Alternatives 1 and 2. The RSA and OFA extend 600 feet off the Runway end, which meets the FAA's requirement when EMAS is installed. The RPZ on the Runway 22 end encompasses small areas that are not controlled by the Airport, including areas of small businesses and a car dealership.

4.4 ALTERNATIVE 4 – 6,800' RUNWAY – DECLARED DISTANCES ON BOTH RUNWAY ENDS

As **Exhibit 4-4** demonstrates, this alternative creates a 6,800 foot runway through the use of declared distances on both runway ends. The Runway 4 end is extended 1,100 feet and an additional 800 feet of pavement is added for use during takeoff. The Runway 22 end is relocated 1,000 feet. Through the use of declared distances, 6,400 feet of usable pavement is available for takeoff on Runway 4 and 6,800 feet of usable pavement for takeoff on Runway 22. The use of declared distances allow for 5,600 feet of landing distance available on Runway 4 and 6,800 feet of landing distance available on Runway 22. The Runway 4 end and the Runway 22 end both have a standard RSA, OFA, and RPZ. The RPZ on the Runway 22 end encompasses small areas that are not controlled by the Airport, including areas of small businesses and a car dealership.

4.5 ALTERNATIVE 5 – 6,492' RUNWAY – MAXIMIZING LENGTH THROUGH DECLARED DISTANCES

This alternative involves the extension of the Runway ends to its maximum length based upon meeting Title 14 of the Code of Federal Regulations (CFR) Part 77 requirements, shown in **Exhibit 4-5**. Alternative 5 uses declared distances while clearing all roadways by 15 feet and maintaining a 1,000 foot wide primary surface. This creates 6,492 feet of usable runway with a full RSA and OFA on both runway ends that meets FAA design criteria. The Runway 4 end is extended 1,896 feet with a displaced threshold of 800 feet to allow for a takeoff runway available of 6,400 feet. The use of declared distances allows 6,492 feet of takeoff run available on the Runway 22 end. The landing distance available on the Runway 4 end is 5,600 feet and 6,492 feet on the Runway 22 end. The RPZ on the Runway 22 end encompasses small areas that are not controlled by the Airport, including areas of small businesses and a car dealership.

4.6 ALTERNATIVE 6 – INTERIM THRESHOLD – EXTENDING RUNWAY 4 END

Alternative 6 is based on extending the Runway 4 end 1,896 feet, as shown in Alternative 2, while maintaining the existing (interim) displaced threshold on the Runway 22 end. This would equate to a 7,396 foot runway through the use of declared distances on both runway ends. Runway 4 is

extended 1,100 feet with an additional 800 feet for use during takeoff; the threshold for Runway 22 will remain in its current location. As shown in **Exhibit 4-6**, there is a standard RSA and OFA on the Runway 4 end and nonstandard RSA and OFA of 600 feet and 350 feet respectively, on the Runway 22 end because of Centreville Road. There are small businesses, a car dealership, residential areas, Centreville Road, U.S. 50, and Airport Drive within the RPZ on the Runway 22 end.

5.0 TIER 1 ALTERNATIVES ANALYSIS

To evaluate these runway alternatives, a two-tier evaluation process has been used. The purpose of the Tier 1 evaluation is to reveal any fatal flaws, which would immediately eliminate the alternative from further consideration. Each of the alternatives have been screened using the criteria in Tier 1 and any alternatives that do not meet all Tier 1 criteria have been eliminated from further consideration. The alternatives that passed the first tier criteria will go on to be evaluated in more detail in the Tier 2 evaluation.

Six runway extension alternatives were generated as part of this analysis. The six alternatives were evaluated with respect to the following Tier 1 criteria:

- Runway Visibility Zone (RVZ)
- Roadway Clearance (14 CFR Part 77 requirements)
- Airport Traffic Control Tower (ATCT) Visibility
- Primary Surface
- Localizer Critical Area

5.1 RUNWAY VISIBILITY ZONE (RVZ)

The RVZ is an area formed by an imaginary line connecting the runways visibility points. The location of runway visibility points depends on the length of the runway beyond the runway intersection. These points are centered on the runway and there is a point for each end, creating four points for two intersected runways. The terrain needs to be graded and permanent objects need to be designed or sited so that there will be an unobstructed line of sight within the RVZ. Alternatives 2, 4, and 5 have a few trees located in the RVZ to the west of the runway intersection that will require clearing. After this tree removal, all of the alternatives would have an unobstructed RVZ.

5.2 ROADWAY CLEARANCE

14 CFR Part 77 states that there must be at least 10 feet of clearance over all private or access roads, 15 feet of clearance over all public roads, and 17 feet of clearance over all interstate highways for the 14 CFR Part 77 Imaginary Surfaces.

Runway 4-22 is surrounded by four roads that may have an impact on the runway dimensions. Glebe Road is situated to the south of the Runway 4 end, Airport Road runs north/northwest of the Runway

22 end, and Centreville Road and U.S. Route 50 run parallel and to the north/northeast of the Runway 22 end. All four roads are public roads requiring 15 feet of clearance from all 14 CFR Part 77 surfaces. The Part 77 surfaces associated with Alternatives 1, 2, and 5 clear the roads surrounding the Airport by at least 15 feet. Centreville Road is an obstruction to the approach surface to the Runway 22 end in Alternatives 3, 4, and 6. The approach surface on the Runway 22 end in Alternative 6 does not clear Centreville Road or U.S. Route 50 by 15 feet; therefore, both roads are obstructions.

5.3 AIRPORT TRAFFIC CONTROL TOWER (ATCT) VISIBILITY

There must be an unobstructed line-of-sight from the ATCT cab to all aircraft movement areas on the airfield. Additionally, the line-of-sight angle of incidence defines the minimum line-of-sight slant angle required for the ATCT operators to provide aircraft separation. The minimum line-of-sight angle of incidence is 0.80 degrees. For all alternatives, there is a clear line-of-sight and the angle of incidence exceeds 0.80 degrees.

5.4 PRIMARY SURFACE

The primary surface is a 14 CFR Part 77 Imaginary Surface that is longitudinally centered on the runway. The elevation of any point on the primary surface is the same as the elevation of the nearest point on the Runway centerline. It extends 200 feet from the runway ends on paved runways. The width of the primary surface varies with the classification of the runway but is the same width the entire length and is based on the most demanding approach existing for either Runway end. Alternatives 1 through 5 have no penetrations to the primary surface. Centreville Road penetrates the primary surface on the Runway 22 end in Alternative 6.

5.5 LOCALIZER CRITICAL AREA

The localizer (LOC) antenna is usually sited between 1,000 feet and 2,000 feet from the runway ends, outside the RSA on the extended runway centerline. The localizer critical area surrounds the LOC antenna and must be clear of objects and smoothly graded. Due to the relocated Runway 22 threshold, there is adequate space for a full LOC critical area if the antenna is relocated in Alternatives 1 through 5. Following the relocation of the LOC, its critical area will be unobstructed in Alternatives 1 through 5. The potential locations for each alternative will be investigated in the Tier 2 Analysis. There is not 1,000 feet available between the LOC critical area and the end of the runway in Alternative 6, therefore an unobstructed LOC critical area is not possible for this Alternative.

Table 5.0-1 provides a summary of all six alternatives and the result of the analysis using Tier 1 evaluation criteria.

TABLE 5.0-1
TIER 1 ANALYSIS

	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6
RVZ	Yes	No*	Yes	Yes	No*	Yes
Roadway Clearance	Yes	Yes	No	No	Yes	No
ATCT Visibility	Yes	Yes	Yes	Yes	Yes	Yes
Primary Surface	Yes	Yes	Yes	Yes	Yes	No
Localizer Critical Area	Yes	Yes	Yes	Yes	Yes	No

*A few trees located west of the runway intersection would require clearing for an unobstructed RVZ.

5.6 SUMMARY OF ALTERNATIVES ANALYSIS

Alternative 1 passed all five Tier 1 evaluation criteria and is recommended to continue to Tier 2 for further analysis. In order for Alternatives 2 and 5 to pass all five Tier 1 evaluation criteria, a few trees would need to be cleared for an unobstructed RVZ. Alternatives 3 and 4 could pass the Tier 1 evaluation if a portion of Centreville Road can be closed. Concurrence is now requested of the FAA, Maryland Aviation Administration, and Talbot County regarding the alternatives that will undergo evaluation in Tier 2.

Tier 2 evaluation criteria will include:

- Safety considerations
- Development costs
- Environmental considerations
- Runway length requirements
- Flexibility
- Land acquisition needs
- Strategic Airport goals
- Part 77 obstruction considerations

On July 22, 2008 the Talbot County Council voted to evaluate Alternatives 1, 2, and 5 in the Runway 4-22 Extension Analysis Tier 2 Evaluation. Alternatives 3 and 4 were eliminated from further consideration because a portion of Centreville Road is in the Primary surface and cannot be closed or relocated. The letter of recommendation from the Talbot County Council is provided in **Appendix A**.

6.0 TIER 2 ALTERNATIVES ANALYSIS

Based on the Tier 1 evaluation and analysis, the Talbot County Council voted to select Alternatives 1, 2, and 5 for further study in this Tier 2 Evaluation. These alternatives meet all roadway clearance

requirements, have a clear line-of-sight from the ATCT, and have no roadway obstructions to the primary surface. A few trees are located within the RVZ of Alternatives 2 and 5; Alternative 1 does not contain any obstructions to the RVZ. The localizer will be relocated in all alternatives in order to meet the critical area requirements. After the localizer is relocated, there will be no obstructions to the localizer critical area in all three alternatives. In addition to the criteria noted above, the alternatives in this Tier 2 Analysis meet all FAA design criteria as established in AC 150/5300-13 Change 13.

The goal of Tier 2 is to further analyze and compare the selected Alternatives from Tier 1. Prior to completion of the Tier 2 Analysis, a review of the applicability of the Tier 2 evaluation criteria was performed. Based on this review, the following evaluation criteria were eliminated from the Tier 2 Evaluation:

- **Safety considerations** - An assessment of compliance with FAA standards that may have an influence on the safe movement of aircraft was conducted for each runway alternative. Because all three of the alternatives are rated equally in the level of safety each design provided, this evaluation criteria was eliminated. Any alternatives that did not meet FAA safety standards were eliminated in the Tier 1 evaluation.

- **Flexibility -** The flexibility of an alternative pertains to the total growth potential of each alternative and the process inherent to achieving that growth. The phasing of development is typically considered with respect to airfield operations that will take place during the time of construction. Because all of the alternatives have similar phasing and will not be a determining factor in selecting an alternative this evaluation criteria was eliminated.

- **Strategic goals** - All remaining alternatives will meet the strategic goals of the Airport.

- **Development costs** - Based on comments received from the FAA, development costs were removed as part of the Tier 2 evaluation. A cost estimate for only the selected alternative is provided.

Therefore, in the Tier 2 analysis, Alternatives 1, 2, and 5 have been evaluated using the following criteria:

- Environmental considerations
- Runway length requirements
- Land acquisition needs
- 14 CFR Part 77 obstructions
- Compatibility with other Airport projects

The runway alternatives were evaluated quantitatively based on these criteria using a ranking system. This system assigned a numerical ranking from 1 (lowest) to 5 (highest). After ranking each

alternative relative to each criterion, the individual ranks were totaled to produce a score for the alternative. Each criterion and associated evaluation is described below.

6.1 ENVIRONMENTAL CONSIDERATIONS

The environmental considerations include potential impacts to wetlands, DFS habitat, and forest conservation (see **Exhibits 6-1**, **6-2**, and **6-3**). The 2006 ALP Update identified three areas that are inhabited by the DFS within the vicinity of the Airport. The ALP Update also identified 10 areas of wetlands on Airport property as well as several adjacent parcels for a total of 12 acres.

Each runway alternative has tree obstructions off Airport property that would need to be mitigated. **Table 6.0-1** summarizes the obstructions to each alternative.

TABLE 6.0-1
SUMMARY OF ENVIRONMENTAL IMPACTS

	Alternative 1 (acres)	Alternative 2 (acres)	Alternative 5 (acres)
Wetlands	7.2	7.2	7.2
DFS Habitat	5.8	5.8	5.8
Forested Areas	5.6	5.6	5.6
Tree and Brush Obstructions	25.9	30.2	30.7

6.2 RUNWAY LENGTH REQUIREMENTS

The operational effectiveness and functionality of the runway alternatives were evaluated with respect to their ability to meet the required runway length determined in the 2006 ALP Update. The 2006 ALP Update recommended a runway length of 6,900 feet to accommodate a Gulfstream IV as the critical aircraft.

Therefore, every effort was made to provide the maximum runway length for this analysis. Alternative 1 provides a 5,600 foot runway. Alternatives 2 and 5 provide 6,400 and 6,492 foot runways respectively, through the use of declared distances.

6.3 LAND ACQUISITION NEEDS

As stated in AC 150/5300-13 Change 13, the FAA prefers the RPZs to be controlled by the Airport. Portions of the RPZ on the proposed Runway 22 end and most of the RPZ on the proposed Runway 4 end in each alternative are not controlled by the Airport. **Table 6.3-1** shows the number of parcels, acres, and cost of acquiring the Runway 4-22 RPZ through fee simple acquisition.

TABLE 6.3-1
LAND ACQUISITION TOTALS FOR FEE SIMPLE - RPZ

	Alternative 1	Alternative 2	Alternative 5
Number of Parcels - Fee Simple	10	10	10
Number of Acres - Fee Simple	92.7	92.7	92.7
Estimated Cost - Fee Simple	$10,967,876	$10,967,876	$10,967,876

All three alternatives have obstructions to 14 CFR Part 77 surfaces on parcels surrounding Airport property that must be mitigated through acquisition either by avigation easement or fee simple. See **Section 6.4** for a description of the 14 CFR Part 77 obstructions. **Table 6.3-2** shows the number of parcels, acres and cost of mitigating tree obstructions through avigation easement. Detailed property information can be found in **Appendix B**.

TABLE 6.3-2
LAND ACQUISITION TOTALS FOR AVIGATION EASEMENT

	Alternative 1	Alternative 2	Alternative 5
Number of Parcels - Avigation Easement	37	41	43
Number of Acres - Avigation Easement	10.5	13.6	14.4
Estimated Cost - Avigation Easement	$11,601,764	$11,709,809	$11,743,047

The parcels that need to be acquired for Alternatives 1, 2, and 5 are shown in **Exhibits 6-4**, **6-5** and **6-6**, respectively.

6.4 14 CFR PART 77 OBSTRUCTIONS

All of the alternatives have obstructions to 14 CFR Part 77 primary, approach, and transitional surfaces. An avigation easement for tree clearing will be needed to be acquired for all off-Airport parcels with obstructions to Runway 4-22. The amount of on-Airport tree and brush obstructions and ground obstructions are similar for each alternative. The on-airport obstructions for each alternative are shown in **Table 6.4-1**.

TABLE 6.4-1
ON-AIRPORT OBSTRUCTIONS

	Alternative 1 (acres)	Alternative 2 (acres)	Alternative 5 (acres)
Tree and Brush	9.8	9.8	9.8
Ground	5.5	5.5	4.7

The off-airport obstructions to 14 CFR Part 77 are shown in **Table 6.4-2**.

TABLE 6.4-2
OFF-AIRPORT OBSTRUCTIONS

	Alternative 1	Alternative 2	Alternative 5
Tree and Brush	10.5 acres	14.9 acres	16.1 acres
Manmade[1]	9	18	18

[1]These manmade obstructions include utility poles, light poles, and smoke-stacks.

All obstructions for Alternative 1, 2, and 5 are shown in **Exhibits 6-4**, **6-5**, and **6-6**, respectively.

6.5 COMPATIBILITY WITH OTHER AIRPORT PROJECTS

At the time of this study, there are two projects currently ongoing at the Airport: the installation of airfield signage and the design of the expansion and rehabilitation of the South Apron, expansion of Taxiway H, and the rehabilitation of two landside service roads (Jet Lane and Corkran Road).

One component of the airfield signage project involves electrical upgrades to the existing power supply. The electrical upgrades were designed to accommodate the newly installed airfield signs as well as the runway extension and associated light systems.

As originally proposed, a portion of the South Apron would be expanded to the south. The expansion is not compatible with the existing RVZ; however, the RVZ associated with Alternatives 1, 2 and 5 would allow for the expansion to the south. Given the uncertainty of timing for construction of the runway extension, coordination is ongoing with the FAA to determine the appropriate limits of the apron expansion.

6.6 SUMMARY OF ALTERNATIVES

Table 6.6-1 shows the numerical range and associated score for each evaluation criteria.

TABLE 6.6-1
TIER 2 EVALUATION SCALES

	1	2	3	4	5
Environmental Considerations	Severe Impact		Some Impact		No Impact
Runway Length (Feet)	5,400-5,700	5,700-6,000	6,000-6,300	6,300-6,600	6,600-6,900
Land Acquisition (Number of Parcels)	46-48	43-45	40-42	37-39	34-36
14 CFR Part 77 Obstructions (acres)	34-36	31-33	28-30	25-27	22-24
Compatibility w/ other Airport Projects	Severe Impact		Some Impact		No Impact

Using the numerical ranges above, Alternatives 1, 2, and 5 were assigned a score. (See **Table 6.6-2**)

TABLE 6.6-2
RUNWAY ALTERNATIVES TIER 2 EVALUATION MATRIX

	Alternative 1	Alternative 2	Alternative 5
Environmental Considerations	3	3	3
Runway Length (Feet)	1	4	4
Land Acquisition (Number of Parcels)	4	3	2
14 CFR Part 77 Obstructions (acres)	4	3	3
Compatibility with other Airport Projects	5	5	5
Total Score:	**17**	**18**	**17**

7.0 RECOMMENDED RUNWAY EXTENSION ALTERNATIVE

Based on the quantitative evaluation, Alternative 2 is the recommended runway extension alternative.

8.0 DEVELOPMENT COSTS

Estimated construction costs for Alternative 2 are presented below in **Table 8.0-1**.

TABLE 8.0-1
DEVELOPMENT COSTS

Development	Cost ($)
Airfield Development[1]	8,034,624
Land Acquisition	
Estimated Cost for Fee Simple[2]	10,967,876
Estimated Cost for Avigation Easement[3]	741,933
Relocation of SFA	5,000,000
Environmental Mitigation	
Wetlands	1,080,000
DFS Habitat	99,500
Forested Areas (Forest Conservation Act)	56,000
Pervious Surface to Impervious Surface (Forest Conservation Act)	33,939
Total	**$26,013,872**

Source: Maryland Department of Assessment and Taxation, Real Property Data Search
[1] Detailed Cost Estimate is provided in **Appendix C**
[2] Current Tax Assessors Appraised Value as of July 1, 2008
[3] The percentage of each parcel containing obstructions was calculated. This percentage was multiplied by the total parcel value, which was then multiplied by 30 percent to represent the value of the avigation easement.

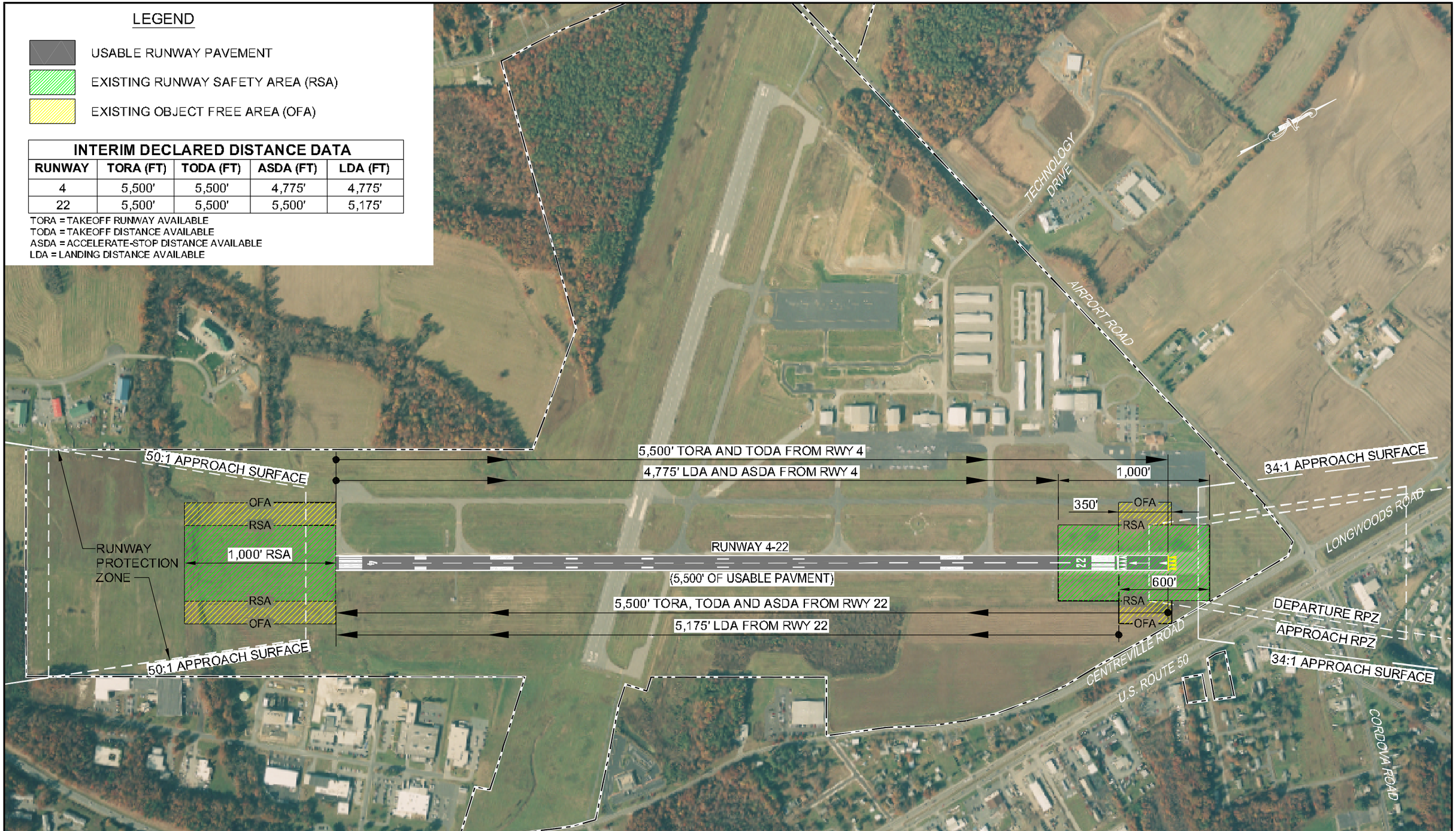
LEGEND

- USABLE RUNWAY PAVEMENT
- EXISTING RUNWAY SAFETY AREA (RSA)
- EXISTING OBJECT FREE AREA (OFA)

INTERIM DECLARED DISTANCE DATA

RUNWAY	TORA (FT)	TODA (FT)	ASDA (FT)	LDA (FT)
4	5,500'	5,500'	4,775'	4,775'
22	5,500'	5,500'	5,500'	5,175'

TORA = TAKEOFF RUNWAY AVAILABLE
TODA = TAKEOFF DISTANCE AVAILABLE
ASDA = ACCELERATE-STOP DISTANCE AVAILABLE
LDA = LANDING DISTANCE AVAILABLE



EASTON AIRPORT

EASTON/NEWNAM FIELD
EASTON, MARYLAND

RUNWAY 4-22 EXTENSION ANALYSIS

400 0 200 400 800
SCALE IN FEET

RUNWAY 4-22 ALTERNATIVES ANALYSIS
EXISTING CONDITIONS

EXHIBIT
3-1

FILE NAME: P:\C3DProjects\20830985\Planning\RW_Alts\C-DECL-DIST-ESN_EXIST.dwg LAYOUT NAME: color exhibit PLOTTED: Thursday, June 26, 2008 - 11:24am

EASTON/NEWNAM FIELD
EASTON, MARYLAND

RUNWAY 4-22 EXTENSION ANALYSIS

400 0 200 400 800
SCALE IN FEET

RUNWAY 4-22 ALTERNATIVES ANALYSIS
ALTERNATIVE 1
(5,600' RUNWAY)

EXHIBIT
4-1

FILE NAME: P:\C3DProjects\20830985\Planning\RW_Alts\C-ALT1-4-22-ESN.dwg LAYOUT NAME: color exhibit PLOTTED: Thursday, June 26, 2008 - 11:27am

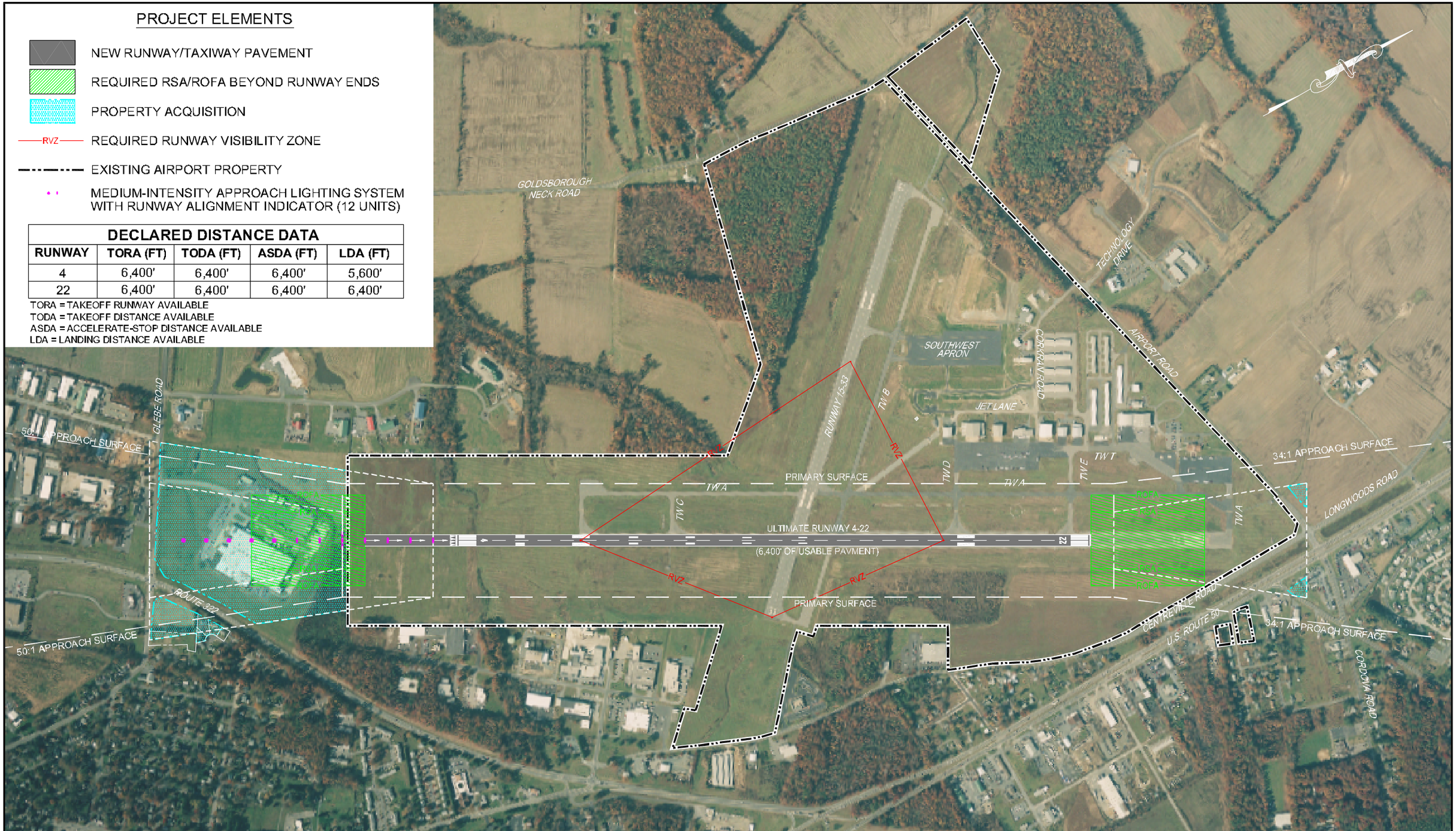
PROJECT ELEMENTS

- NEW RUNWAY/TAXIWAY PAVEMENT
- REQUIRED RSA/ROFA BEYOND RUNWAY ENDS
- PROPERTY ACQUISITION
- RVZ — REQUIRED RUNWAY VISIBILITY ZONE
- EXISTING AIRPORT PROPERTY
- MEDIUM-INTENSITY APPROACH LIGHTING SYSTEM WITH RUNWAY ALIGNMENT INDICATOR (12 UNITS)

DECLARED DISTANCE DATA

RUNWAY	TORA (FT)	TODA (FT)	ASDA (FT)	LDA (FT)
4	6,400'	6,400'	6,400'	5,600'
22	6,400'	6,400'	6,400'	6,400'

TORA = TAKEOFF RUNWAY AVAILABLE
TODA = TAKEOFF DISTANCE AVAILABLE
ASDA = ACCELERATE-STOP DISTANCE AVAILABLE
LDA = LANDING DISTANCE AVAILABLE



EASTON AIRPORT

EASTON/NEWNAM FIELD
EASTON, MARYLAND

RUNWAY 4-22 EXTENSION ANALYSIS

400 0 200 400 800
SCALE IN FEET

RUNWAY 4-22 ALTERNATIVES ANALYSIS
ALTERNATIVE 2
(6,400' USABLE RUNWAY THROUGH THE USE OF DECLARED DISTANCES)

EXHIBIT
4-2

FILE NAME: P:\C3DProjects\20830985\Planning\RW_Alts\C-ALT2-4-22-ESN.dwg LAYOUT NAME: color exhibit PLOTTED: Thursday, June 26, 2008 - 11:29am

EASTON AIRPORT

EASTON/NEWNAM FIELD
EASTON, MARYLAND

RUNWAY 4-22 EXTENSION ANALYSIS

400 0 200 400 800
SCALE IN FEET

RUNWAY 4-22 ALTERNATIVES ANALYSIS

ALTERNATIVE 3

(6,000' RUNWAY THROUGH THE USE OF EMAS ON THE RUNWAY 22 END)

EXHIBIT

4-3

FILE NAME: P:\C3DProjects\20830985\Planning\RW_Alts\C-ALT3-4-22-ESN.dwg LAYOUT NAME: color exhibit PLOTTED: Thursday, June 26, 2008 - 11:31am

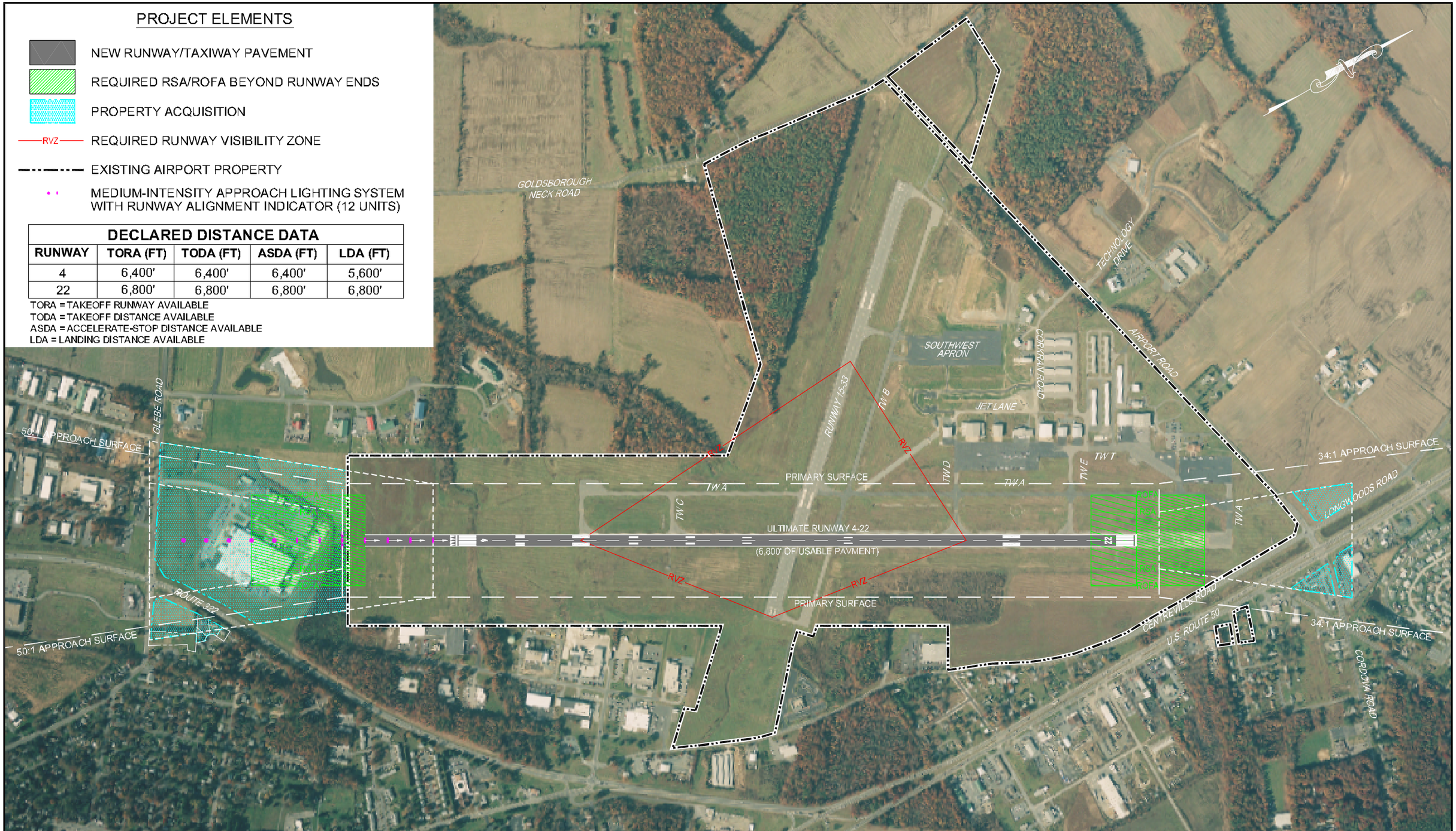
PROJECT ELEMENTS

- NEW RUNWAY/TAXIWAY PAVEMENT
- REQUIRED RSA/ROFA BEYOND RUNWAY ENDS
- PROPERTY ACQUISITION
- RVZ — REQUIRED RUNWAY VISIBILITY ZONE
- EXISTING AIRPORT PROPERTY
- MEDIUM-INTENSITY APPROACH LIGHTING SYSTEM WITH RUNWAY ALIGNMENT INDICATOR (12 UNITS)

DECLARED DISTANCE DATA

RUNWAY	TORA (FT)	TODA (FT)	ASDA (FT)	LDA (FT)
4	6,400'	6,400'	6,400'	5,600'
22	6,800'	6,800'	6,800'	6,800'

TORA = TAKEOFF RUNWAY AVAILABLE
TODA = TAKEOFF DISTANCE AVAILABLE
ASDA = ACCELERATE-STOP DISTANCE AVAILABLE
LDA = LANDING DISTANCE AVAILABLE



EASTON AIRPORT

EASTON/NEWNAM FIELD
EASTON, MARYLAND

RUNWAY 4-22 EXTENSION ANALYSIS

400 0 200 400 800
SCALE IN FEET

RUNWAY 4-22 ALTERNATIVES ANALYSIS
ALTERNATIVE 4
(6,800' USABLE RUNWAY THROUGH THE USE OF DECLARED DISTANCES)

EXHIBIT
4-4

FILE NAME: P:\C3DProjects\20830985\Planning\RW_Alts\C-ALT4-4-22-ESN.dwg LAYOUT NAME: color exhibit PLOTTED: Thursday, June 26, 2008 - 11:32am

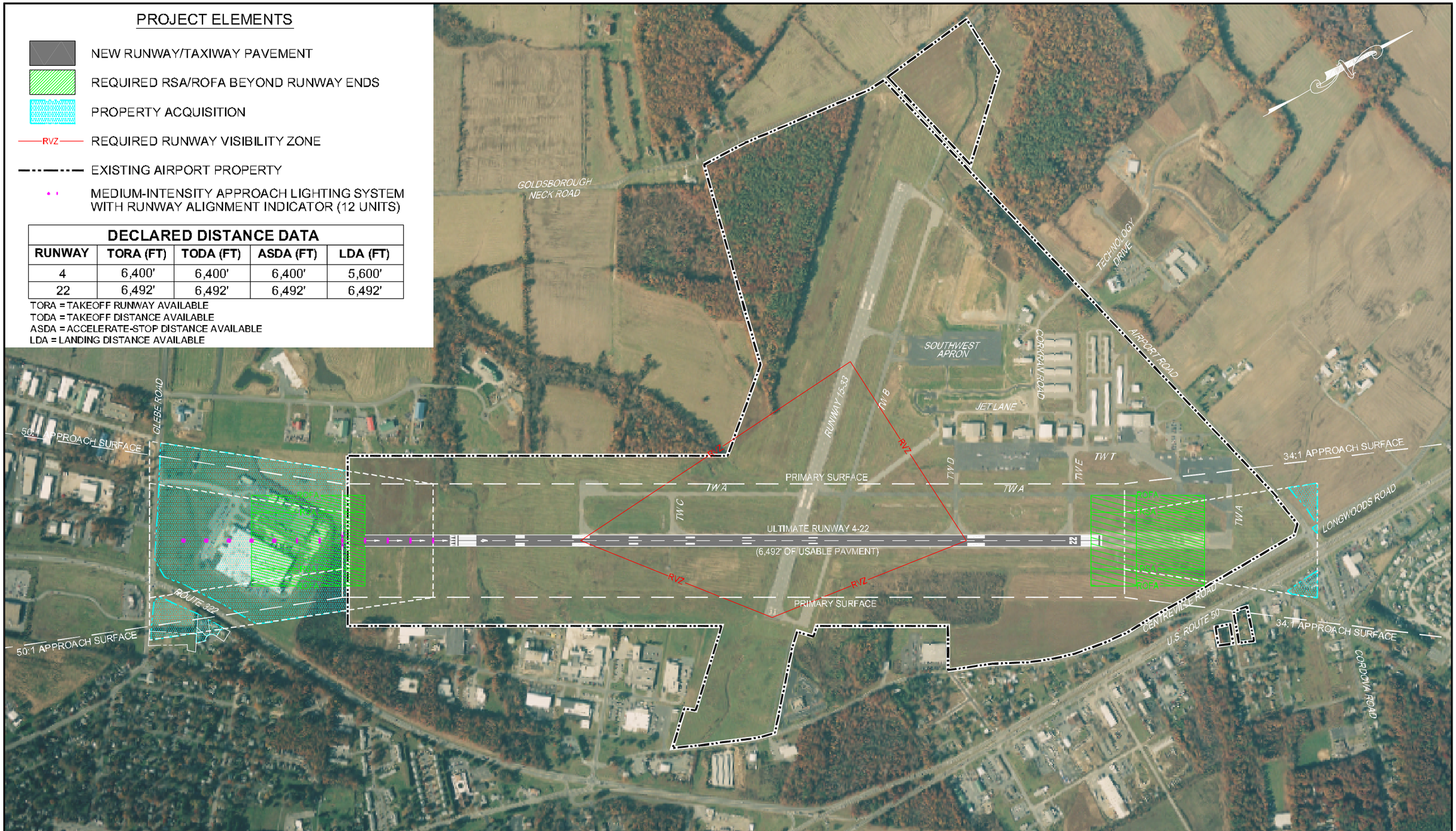
PROJECT ELEMENTS

- NEW RUNWAY/TAXIWAY PAVEMENT
- REQUIRED RSA/ROFA BEYOND RUNWAY ENDS
- PROPERTY ACQUISITION
- RVZ — REQUIRED RUNWAY VISIBILITY ZONE
- EXISTING AIRPORT PROPERTY
- MEDIUM-INTENSITY APPROACH LIGHTING SYSTEM WITH RUNWAY ALIGNMENT INDICATOR (12 UNITS)

DECLARED DISTANCE DATA

RUNWAY	TORA (FT)	TODA (FT)	ASDA (FT)	LDA (FT)
4	6,400'	6,400'	6,400'	5,600'
22	6,492'	6,492'	6,492'	6,492'

TORA = TAKEOFF RUNWAY AVAILABLE
TODA = TAKEOFF DISTANCE AVAILABLE
ASDA = ACCELERATE-STOP DISTANCE AVAILABLE
LDA = LANDING DISTANCE AVAILABLE



EASTON/NEWNAM FIELD
EASTON, MARYLAND

RUNWAY 4-22 EXTENSION ANALYSIS

400 0 200 400 800
SCALE IN FEET

RUNWAY 4-22 ALTERNATIVES ANALYSIS
ALTERNATIVE 5
(6,492' USABLE RUNWAY THROUGH THE USE OF DECLARED DISTANCES)

EXHIBIT
4-5

FILE NAME: P:\C3DProjects\20830985\Planning\RW_Alts\C-ALT5-4-22-ESN.dwg LAYOUT NAME: color exhibit PLOTTED: Thursday, June 26, 2008 - 11:35am

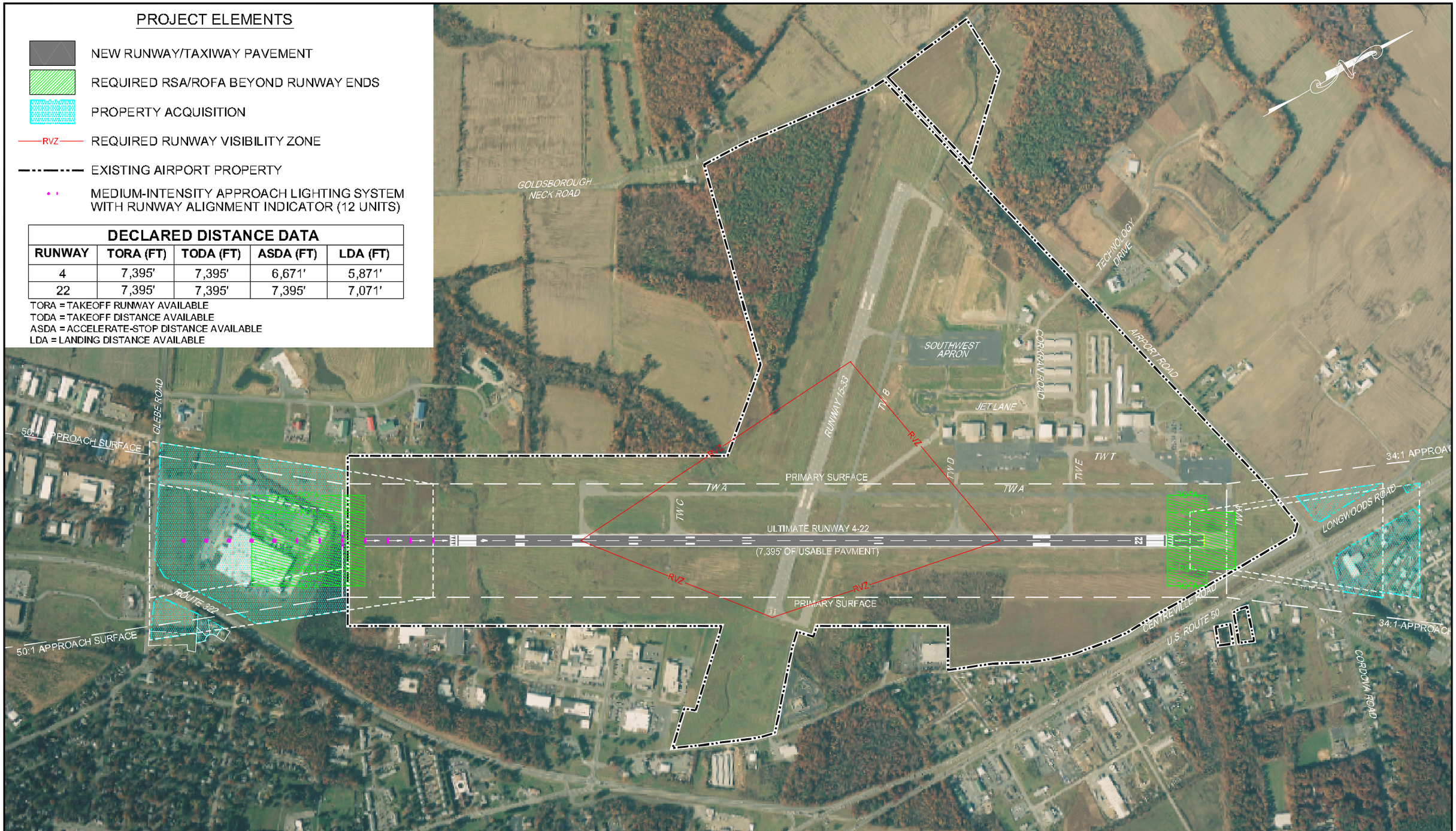
PROJECT ELEMENTS

- NEW RUNWAY/TAXIWAY PAVEMENT
- REQUIRED RSA/ROFA BEYOND RUNWAY ENDS
- PROPERTY ACQUISITION
- RVZ — REQUIRED RUNWAY VISIBILITY ZONE
- EXISTING AIRPORT PROPERTY
- MEDIUM-INTENSITY APPROACH LIGHTING SYSTEM WITH RUNWAY ALIGNMENT INDICATOR (12 UNITS)

DECLARED DISTANCE DATA

RUNWAY	TORA (FT)	TODA (FT)	ASDA (FT)	LDA (FT)
4	7,395'	7,395'	6,671'	5,871'
22	7,395'	7,395'	7,395'	7,071'

TORA = TAKEOFF RUNWAY AVAILABLE
TODA = TAKEOFF DISTANCE AVAILABLE
ASDA = ACCELERATE-STOP DISTANCE AVAILABLE
LDA = LANDING DISTANCE AVAILABLE



EASTON AIRPORT

EASTON/NEWNAM FIELD
EASTON, MARYLAND

RUNWAY 4-22 EXTENSION ANALYSIS

400 0 200 400 800
SCALE IN FEET

RUNWAY 4-22 ALTERNATIVES ANALYSIS
ALTERNATIVE 6
(MAINTAINING INTERIM THRESHOLD AND EXTENDING RUNWAY 4 END)

EXHIBIT
4-6

FILE NAME: P:\C3DProjects\20830985\Planning\RW_Alts\C-ALT6-4-22-ESN.dwg LAYOUT NAME: color exhibit PLOTTED: Thursday, June 26, 2008 - 11:21am

EASTON AIRPORT
AVIATION GATEWAY EASTERN SHORE

EASTON/NEWNAM FIELD
EASTON, MARYLAND

RUNWAY 4-22 EXTENSION ANALYSIS

400 0 200 400 800
SCALE IN FEET

RUNWAY 4-22 ALTERNATIVES ANALYSIS
ALTERNATIVE 1
(ENVIRONMENTAL CONSIDERATIONS)

EXHIBIT
6-1

FILE NAME: P:\C3DProjects\20830985\Planning\RW_Alts\C-ALT1-OBST-ESN.dwg LAYOUT NAME: environmental PLOTTED: Friday, October 10, 2008 - 2:48pm

EASTON AIRPORT
AVIATION GATEWAY TO THE EASTERN SHORE

EASTON/NEWNAM FIELD
EASTON, MARYLAND

RUNWAY 4-22 EXTENSION ANALYSIS

400 0 200 400 800
SCALE IN FEET

RUNWAY 4-22 ALTERNATIVES ANALYSIS
ALTERNATIVE 2
(ENVIRONMENTAL CONSIDERATIONS)

EXHIBIT
6-2

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EASTON AIRPORT
AVIATION GATEWAY EASTERN SHORE

EASTON/NEWNAM FIELD
EASTON, MARYLAND

RUNWAY 4-22 EXTENSION ANALYSIS

400 0 200 400 800
SCALE IN FEET

RUNWAY 4-22 ALTERNATIVES ANALYSIS
ALTERNATIVE 5
(ENVIRONMENTAL CONSIDERATIONS)

EXHIBIT
6-3

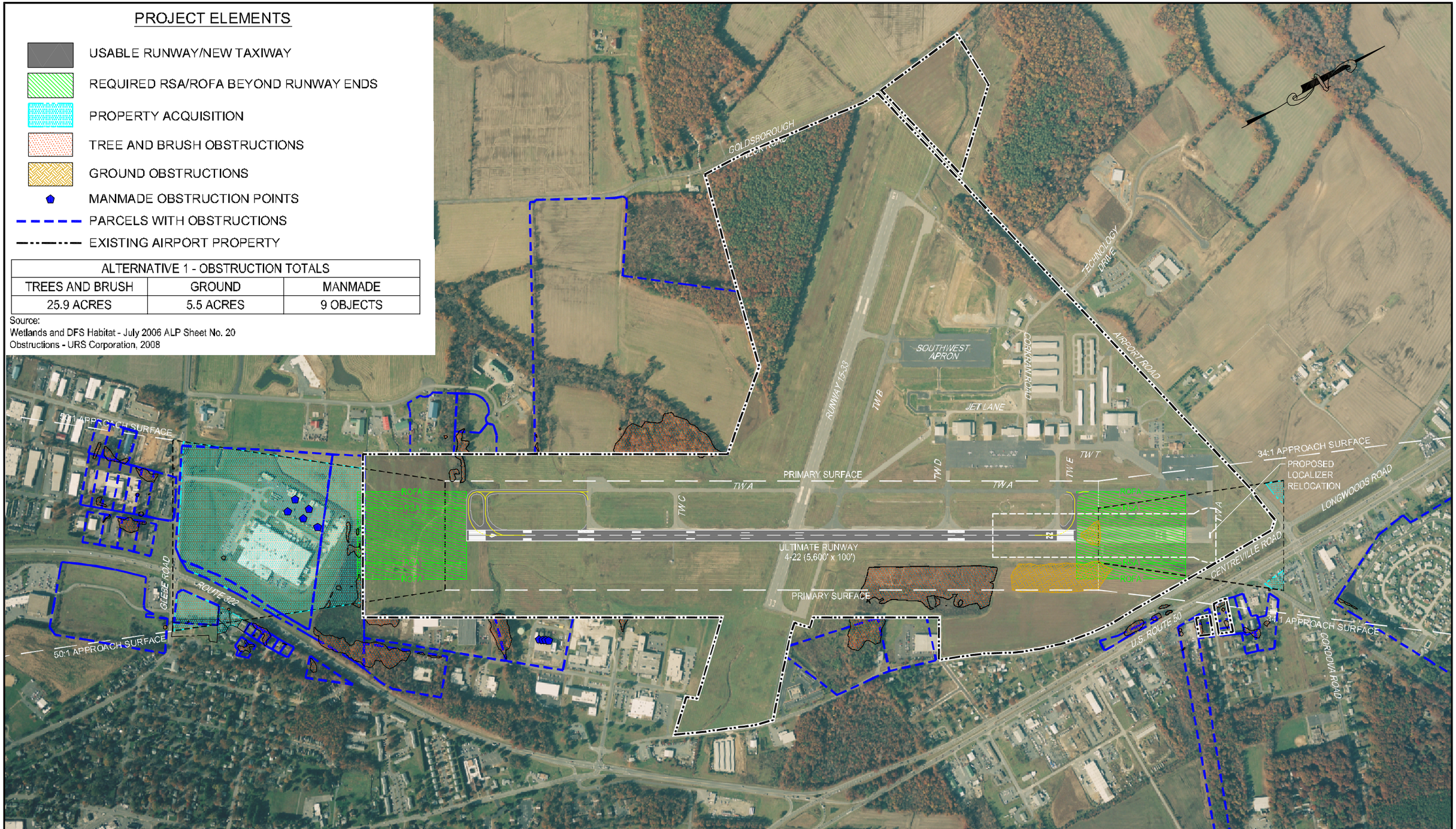
FILE NAME: P:\CJDProjects\20830985\Planning\RW_Alts\C-ALTS-OBST-ESN.dwg LAYOUT NAME: environmental PLOTTED: Friday, October 10, 2008 - 2:53pm

PROJECT ELEMENTS

- USABLE RUNWAY/NEW TAXIWAY
- REQUIRED RSA/ROFA BEYOND RUNWAY ENDS
- PROPERTY ACQUISITION
- TREE AND BRUSH OBSTRUCTIONS
- GROUND OBSTRUCTIONS
- MANMADE OBSTRUCTION POINTS
- PARCELS WITH OBSTRUCTIONS
- EXISTING AIRPORT PROPERTY

ALTERNATIVE 1 - OBSTRUCTION TOTALS		
TREES AND BRUSH	GROUND	MANMADE
25.9 ACRES	5.5 ACRES	9 OBJECTS

Source:
Wetlands and DFS Habitat - July 2006 ALP Sheet No. 20
Obstructions - URS Corporation, 2008



EASTON AIRPORT
AVIATION GATEWAY TO THE EASTERN SHORE

EASTON/NEWNAM FIELD
EASTON, MARYLAND

RUNWAY 4-22 EXTENSION ANALYSIS

400 0 200 400 800
SCALE IN FEET

RUNWAY 4-22 ALTERNATIVES ANALYSIS
ALTERNATIVE 1
(OBSTRUCTION ANALYSIS)

EXHIBIT
6-4

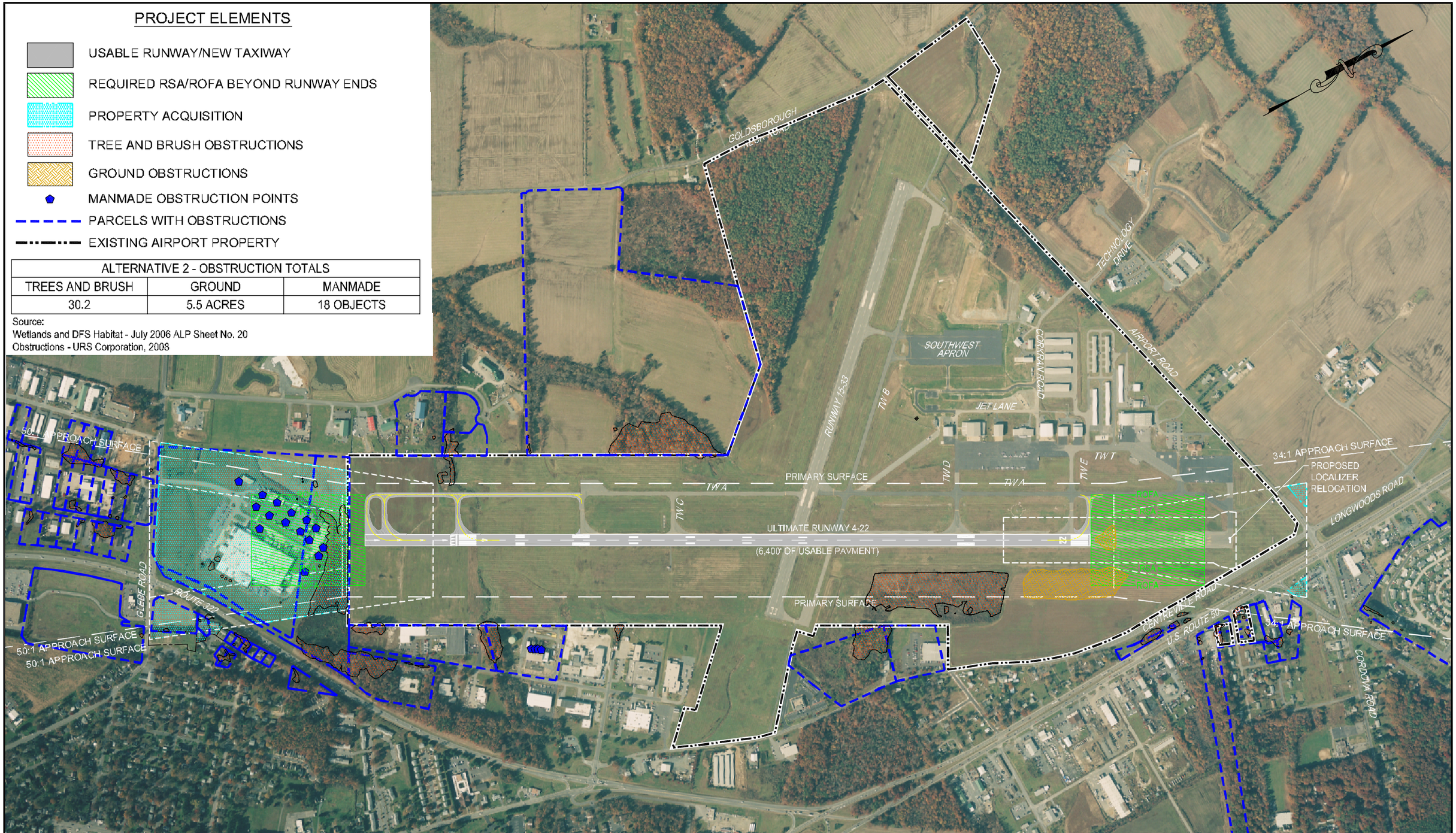
FILE NAME: P:\C3DProjects\20830885\Planning\RW_Alts\C-ALT1-OBST-ESN.dwg LAYOUT NAME: color exhibit PLOTTED: Friday, October 10, 2008 - 2:50pm

PROJECT ELEMENTS

- USABLE RUNWAY/NEW TAXIWAY
- REQUIRED RSA/ROFA BEYOND RUNWAY ENDS
- PROPERTY ACQUISITION
- TREE AND BRUSH OBSTRUCTIONS
- GROUND OBSTRUCTIONS
- MANMADE OBSTRUCTION POINTS
- PARCELS WITH OBSTRUCTIONS
- EXISTING AIRPORT PROPERTY

ALTERNATIVE 2 - OBSTRUCTION TOTALS		
TREES AND BRUSH	GROUND	MANMADE
30.2	5.5 ACRES	18 OBJECTS

Source:
Wetlands and DFS Habitat - July 2006 ALP Sheet No. 20
Obstructions - URS Corporation, 2008



EASTON AIRPORT
AVIATION GATEWAY TO THE EASTERN SHORE

EASTON/NEWNAM FIELD
EASTON, MARYLAND

RUNWAY 4-22 EXTENSION ANALYSIS

400 0 200 400 800
SCALE IN FEET

RUNWAY 4-22 ALTERNATIVES ANALYSIS
ALTERNATIVE 2
(OBSTRUCTION ANALYSIS)

EXHIBIT
6-5

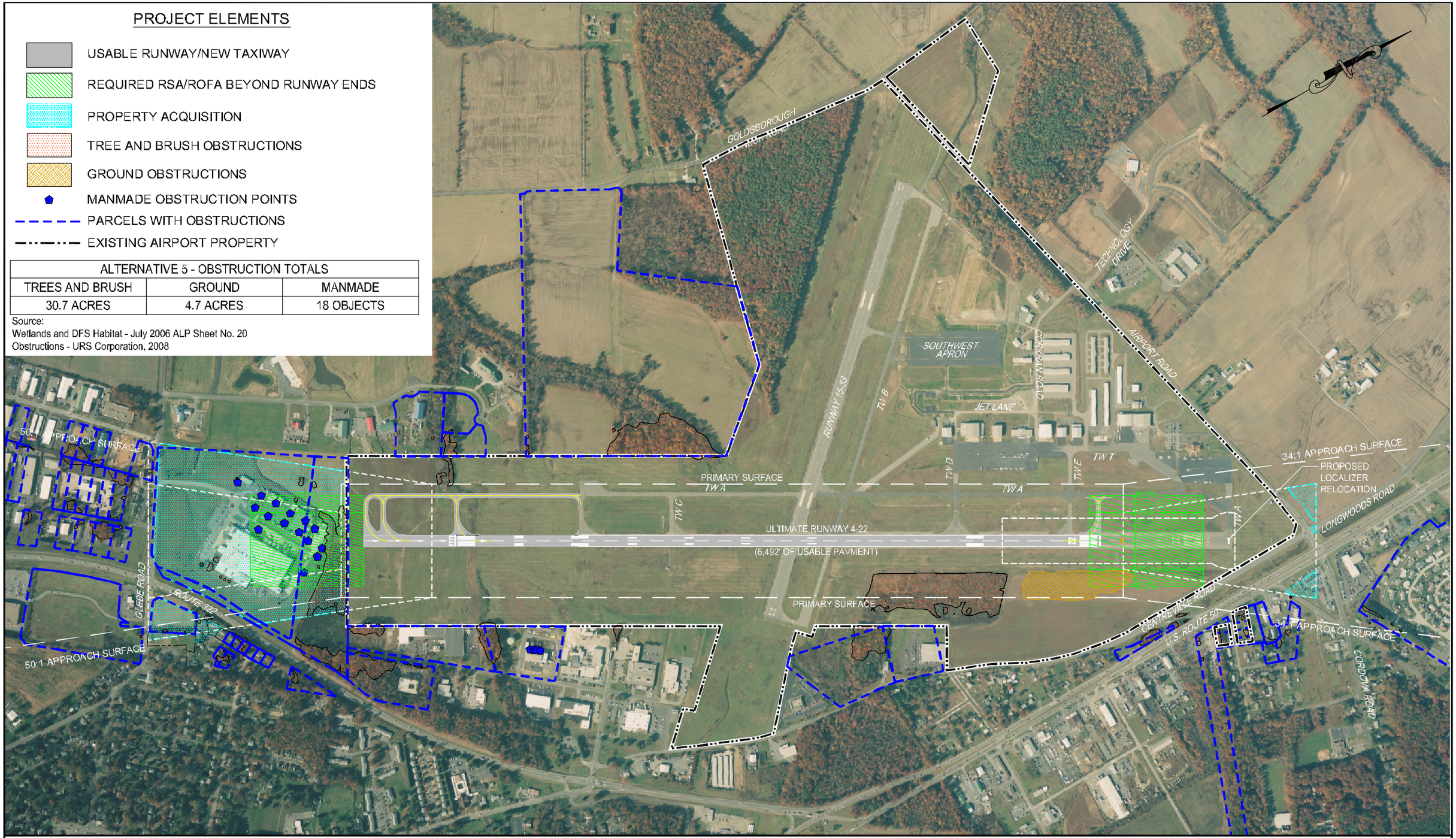
FILE NAME: P:\C3DProjects\208330885\Planning\RW_Alts\C-ALT2-OBST-ESN.dwg LAYOUT NAME: color exhibit PLOTTED: Friday, October 10, 2008 - 2:52pm

PROJECT ELEMENTS

- USABLE RUNWAY/NEW TAXIWAY
- REQUIRED RSA/ROFA BEYOND RUNWAY ENDS
- PROPERTY ACQUISITION
- TREE AND BRUSH OBSTRUCTIONS
- GROUND OBSTRUCTIONS
- MANMADE OBSTRUCTION POINTS
- PARCELS WITH OBSTRUCTIONS
- EXISTING AIRPORT PROPERTY

ALTERNATIVE 5 - OBSTRUCTION TOTALS		
TREES AND BRUSH	GROUND	MANMADE
30.7 ACRES	4.7 ACRES	18 OBJECTS

Source:
Wetlands and DFS Habitat - July 2006 ALP Sheet No. 20
Obstructions - URS Corporation, 2008



EASTON AIRPORT
AVIATION GATEWAY EASTERN SHORE

EASTON/NEWNAM FIELD
EASTON, MARYLAND

RUNWAY 4-22 EXTENSION ANALYSIS

400 0 200 400 800
SCALE IN FEET

RUNWAY 4-22 ALTERNATIVES ANALYSIS
ALTERNATIVE 5
(OBSTRUCTION ANALYSIS)

EXHIBIT
6-6

FILE NAME: P:\C3DProjects\20630985\Planning\RW_Alts\C-ALT5-OBST-ESN.dwg LAYOUT NAME: color exhibit PLOTTED: Friday, October 10, 2008 - 2:53pm

APPENDIX A: LETTER FROM TALBOT COUNTY COUNCIL

EASTON AIRPORT

TOWER 118.525
GROUND 119.075
UNICOM 122.95
ATIS / AWOS 124.475
ILS 109.35
CLRNC 126.9

29137 NEWNAM ROAD, UNIT ONE, EASTON, MD 21601 TEL: 410.770.8055 FAX: 410.822.8694 WWW.EASTONAIRPORT.COM

July 23, 2008

Ms. Jennifer Lutz
URS Corporation
4 North Park Drive, Suite 300
Hunt Valley, MD 21030

RE: RW 4-22 Extension Analysis Tier 1 Evaluation

Dear Ms. Lutz

On July 22, 2008 the Talbot County Council voted unanimously to proceed with the Runway 4-22 Extension Analysis Tier 2 Evaluation. Alternates 1, 2 and 5 are to be evaluated.

If you have any questions please call.

Sincerely,

Mike Henry
Airport Manager

cc:	Talbot County Council	
	Andy Hollis	County Manager
	Wayne Switzer	Federal Aviation Administration
	Ashish Solanki	Maryland Aviation Administration
	Mike Pullen	County Attorney

APPENDIX B: LAND ACQUISITION

LAND ACQUISITION - ALTERNATIVE 1								
MAP	PARCEL	LOT	OWNER	ADDRESS	ACRES OF OBSTRUCTIONS	TOTAL ACRES OF PARCEL	VALUE$	COST OF AVIGATION EASEMENT
25	13		JENSEN'S INC.	9632 HYDE PARK CT	0.07	94.02	$4,787,066	$1,102
25	16		C S TARBUTTON INC.	9541 OCEAN GATEWAY	0.07	0.88	$328,700	$7,590
25	19		OCEAN GATEWAY LLC	CENTREVILLE ROAD	0.18	0.72	$59,666	$4,582
25	46	8	TRINTAUDON, LLC	8977 MISTLETOE DRIVE	0.01	5.29	$899,732	$754
25	46	9A	SHAW FAMILY TRUST	BRYAN DRIVE	0.02	2.19	$286,000	$690
25	46	9B	OXFORD LAWN AND LANDSCAPE, INC.	9055 BRYAN DRIVE	0.35	2.06	$412,266	$21,117
25	48		RPM 50, LLC	9477 OCEAN GATEWAY	0.04	7.78	$710,800	$1,074
25	103		YI, KYOM AND YI, KYUNGWON T/C	9561 CORDOVA ROAD	0.11	1.55	$302,066	$6,525
25	138		TOWN OF EASTON	GOLDSBOROUGH NECK ROAD	5.00	86.25	$227,700	$4,465
25	147		TOWN OF EASTON	GOLDSBOROUGH NECK ROAD	0.12	3.10	$15,500	$186
25	219		DELMARVA REAL ESTATE MANAGEMENT GROUP LLC	9529 OCEAN GATEWAY	0.01	1.00	$214,710	$475
25	232	1	QUICK, JAMES A. AND MARY G.	9510 SERVICE LANE	0.03	0.48	$205,636	$4,151
25	238	3	WATERFOWL FESTIVAL, INC.	9210 CENTREVILLE ROAD	1.24	7.27	$271,566	$14,113
25	238	4	DELMARVA FOUNDATION FOR MEDICAL CARE, INC.	9240 CENTREVILLE ROAD	0.11	5.00	$2,610,566	$17,535
100	38		DELMARVA BANK DATA PROCESSING CENTER INC.	GLEBE PARK DRIVE	1.48	6.62	$1,739,900	$118,010
100	40		WHALEN COMPANY, INC.	8900 GLEBE ROAD	0.05	7.72	$3,889,300	$138,497
100	41		TOWN OF EASTON	840 GLEBE ROAD	0.06	6.84	$625,566	$24,161
101	4	1		GLEBE ROAD	0.05			
101	4	2	E AND H PROPERTIES, LLC	8694 COMMERCE DRIVE	0.25	1.00	$525,400	$39,739
101	4	3,4,5	DELAWARE COCA-COLA BOTTLING CO INC. C/O COCA COLA	321 COMMERCE DRIVE	0.20	5.09	$1,343,432	$15,859
101	4	26	BUGG PROPERTIES LLC	8659 COMMERCE DRIVE	0.00	1.00	$744,932	$594
101	4	27	ARMSTRONG, CAROL W. TRUSTEE	8673 COMMERCE DRIVE	0.04	0.99	$459,232	$5,066
101	4	28	DENT, GEORGE E.	8685 COMMERCE DRIVE	0.36	1.00	$282,432	$31,355
101	4	29	MAUTZ, JOHN F. AND DIANA T/C	8695 COMMERCE DRIVE	0.03	1.00	$622,000	$6,259
101	142	4	HADDAWAY, PAUL V. AND JUANITA C.	318 SYCAMORE AVE	0.08	0.25	$109,176	$11,304
101	142	5	SPECTOR, BRIAN AND SHARY N.	506 HAZELWOOD DRIVE	0.06	0.23	$240,882	$17,622
101	142	12	COOPER, ROBERT A. AND GRACE H. L/E	507 HAZELWOOD DRIVE	0.02	0.17	$185,430	$5,515
101	142	13	EWING, DAVID A. AND TAMELA E.	509 HAZELWOOD DRIVE	0.05	0.17	$173,430	$14,860
101	142	14	SINGH, CYNTHIA A.	511 HAZELWOOD DRIVE	0.13	0.17	$178,992	$40,879
101	142	15	GIDDENS, GLADYS H.	513 HAZELWOOD DRIVE	0.01	0.17	$170,272	$1,780
101	142	16	SATTERFIELD, PAUL W. SR AND CHARLOTTE HOWETH	515 HAZELWOOD DRIVE	0.00	0.18	$207,290	$2,240
101	142	17	HALEY RENTALS, LLC	517 HAZELWOOD DRIVE	0.00	0.18	$198,820	$884
101	265	4A	LOWE'S HOME CENTER, INC.	501 GLEBE ROAD	0.01	14.58	$11,587,900	$4,970
101	3670	24	TRED AVON DEVELOPMENT LLC	8709 BROOKS DRIVE	0.06	0.91	$902,066	$21,266
101	3670	25	TRED AVON DEVELOPMENT LLC C/O LEE MAYER	BROOKS DRIVE	0.17	0.91	$674,932	$37,375
101	3670	26	S AND A LLC	8727 BROOKS DRIVE	0.06	0.91	$507,332	$10,354
101	3670	29	VAN SCHAIK, ROBERT AND TERESE V.S. SCHAUBER	BROOKS DRIVE	0.00	0.64	$580,832	$939
				Total	10.54	268.32		$633,888

LAND ACQUISITION - ALTERNATIVE 2								
MAP	PARCEL	LOT	OWNER	ADDRESS	ACRES OF OBSTRUCTIONS	TOTAL ACRES OF PARCEL	VALUE$	COST OF AVIGATION EASEMENT
25	13		JENSEN'S INC.	9632 HYDE PARK CT	0.10	94.02	$4,787,066	$1,461
25	16		C S TARBUTTON INC.	9541 OCEAN GATEWAY	0.08	0.88	$328,700	$8,798
25	19		OCEAN GATEWAY LLC	CENTREVILLE ROAD	0.19	0.72	$59,666	$4,632
25	46	8	TRINTAUDON, LLC	8977 MISTLETOE DRIVE	0.01	5.29	$899,732	$741
25	46	9A	SHAW FAMILY TRUST	BRYAN DRIVE	0.02	2.19	$286,000	$760
25	46	9B	OXFORD LAWN AND LANDSCAPE, INC.	9055 BRYAN DRIVE	0.37	2.06	$412,266	$22,019
25	48		RPM 50, LLC	9477 OCEAN GATEWAY	0.06	7.78	$710,800	$1,534
25	103		YI, KYOM AND YI, KYUNGWON T/C	9561 CORDOVA ROAD	0.12	1.55	$302,066	$6,974
25	138		TOWN OF EASTON	GOLDSBOROUGH NECK ROAD	5.65	86.25	$227,700	$4,473
25	147		TOWN OF EASTON	GOLDSBOROUGH NECK ROAD	0.09	3.10	$15,500	$133
25	207	13	A D & F RENTALS, INC. C/O ARTHUR FOSTER	9592 CORDOVA ROAD	0.01	0.46	$64,996	$165
25	219		DELMARVA REAL ESTATE MANAGEMENT GROUP LLC	9529 OCEAN GATEWAY	0.01	1.00	$214,710	$426
25	232	1	QUICK, JAMES A. AND MARY G.	9510 SERVICE LANE	0.03	0.48	$205,636	$4,417
25	238	3	WATERFOWL FESTIVAL, INC.	9210 CENTREVILLE ROAD	1.28	7.27	$271,566	$14,349
25	238	4	DELMARVA FOUNDATION FOR MEDICAL CARE, INC.	9240 CENTREVILLE ROAD	0.12	5.00	$2,610,566	$18,868
100	38		DELMARVA BANK DATA PROCESSING CENTER INC.	GLEBE PARK DRIVE	1.46	6.62	$1,739,900	$115,029
100	40		WHALEN COMPANY, INC.	8900 GLEBE ROAD	0.86	7.72	$3,889,300	$129,793
100	41		TOWN OF EASTON	840 GLEBE ROAD	0.65	6.84	$625,566	$11,853
101	4	1		GLEBE ROAD	0.07			
101	4	2	E AND H PROPERTIES, LLC	8694 COMMERCE DRIVE	0.27	1.00	$525,400	$42,515
101	4	3,4,5	DELAWARE COCA-COLA BOTTLING CO INC. C/O COCA COLA	321 COMMERCE DRIVE	0.45	5.09	$1,343,432	$35,757
101	4	10,11	POSTAL BUILDING LIMITED PARTNERSHIP	8632 COMMERCE DRIVE	0.06	2.26	$1,017,832	$7,580
101	4	12	COMMERCE PROPERTIES LLC C/O DAN RUEGG	8610 COMMERCE DRIVE	0.01	2.36	$1,117,332	$1,502
101	4	17	PIERSON, T. DOUGLAS AND DONNA M.	8582 COMMERCE DRIVE	0.20	2.77	$966,466	$21,350
101	4	24	HOCKER, HARRIET G. LIFE ESTATE	312 COMMERCE DRIVE	0.06	1.03	$177,566	$3,248
101	4	26	BUGG PROPERTIES LLC	8659 COMMERCE DRIVE	0.01	1.00	$744,932	$1,266
101	4	27	ARMSTRONG, CAROL W. TRUSTEE	8673 COMMERCE DRIVE	0.08	0.99	$459,232	$10,664
101	4	28	DENT, GEORGE E.	8685 COMMERCE DRIVE	0.39	1.00	$282,432	$33,355
101	4	29	MAUTZ, JOHN F. AND DIANA T/C	8695 COMMERCE DRIVE	0.05	1.00	$622,000	$9,346
101	142	4	HADDAWAY, PAUL V. AND JUANITA C.	318 SYCAMORE AVE	0.08	0.25	$109,176	$11,090
101	142	5	SPECTOR, BRIAN AND SHARY N.	506 HAZELWOOD DRIVE	0.06	0.23	$240,882	$17,841
101	142	12	COOPER, ROBERT A. AND GRACE H. L/E	507 HAZELWOOD DRIVE	0.01	0.17	$185,430	$2,842
101	142	13	EWING, DAVID A. AND TAMELA E.	509 HAZELWOOD DRIVE	0.05	0.17	$173,430	$14,018
101	142	14	SINGH, CYNTHIA A.	511 HAZELWOOD DRIVE	0.09	0.17	$178,992	$27,110
101	142	16	SATTERFIELD, PAUL W. SR AND CHARLOTTE HOWETH	515 HAZELWOOD DRIVE	0.01	0.18	$207,290	$1,111
101	265	4A	LOWE'S HOME CENTER, INC.	501 GLEBE ROAD	0.02	14.58	$11,587,900	$4,498
101	3670	20	KLEPPINGER, J. CHRISTOPHER, SR	8675 BROOKS DRIVE	0.01	0.91	$551,732	$1,369
101	3670	24	TRED AVON DEVELOPMENT LLC	8709 BROOKS DRIVE	0.24	0.91	$902,066	$70,771
101	3670	25	TRED AVON DEVELOPMENT LLC C/O LEE MAYER	BROOKS DRIVE	0.23	0.91	$674,932	$52,273
101	3670	26	S AND A LLC	8727 BROOKS DRIVE	0.10	0.91	$507,332	$17,364
101	3670	29	VAN SCHAIK, ROBERT AND TERESE V.S. SCHAUBER	BROOKS DRIVE	0.01	0.64	$580,832	$2,641
				Total	13.64	277.76		$741,933

LAND ACQUISITION - ALTERNATIVE 5								
MAP	PARCEL	LOT	OWNER	ADDRESS	ACRES OF OBSTRUCTIONS	TOTAL ACRES OF PARCEL	VALUE$	COST OF AVIGATION EASEMENT
25	13		JENSEN'S INC.	9632 HYDE PARK CT	0.01	94.02	$4,787,066	$1,815
25	16		C S TARBUTTON INC.	9541 OCEAN GATEWAY	0.07	0.88	$328,700	$7,810
25	19		OCEAN GATEWAY LLC	CENTREVILLE ROAD	0.47	0.72	$59,666	$4,555
25	46	8	TRINTAUDON, LLC	8977 MISTLETOE DRIVE	0.01	5.29	$899,732	$616
25	46	9A	SHAW FAMILY TRUST	BRYAN DRIVE	0.02	2.19	$286,000	$769
25	46	9B	OXFORD LAWN AND LANDSCAPE, INC.	9055 BRYAN DRIVE	0.37	2.06	$412,266	$22,192
25	48		RPM 50, LLC	9477 OCEAN GATEWAY	0.08	7.78	$710,800	$2,256
25	103		YI, KYOM AND YI, KYUNGWON T/C	9561 CORDOVA ROAD	0.12	1.55	$302,066	$6,737
25	138		TOWN OF EASTON	GOLDSBOROUGH NECK ROAD	5.75	86.25	$227,700	$4,552
25	147		TOWN OF EASTON	GOLDSBOROUGH NECK ROAD	0.09	3.10	$15,500	$133
25	207	13	A D & F RENTALS, INC. C/O ARTHUR FOSTER	9592 CORDOVA ROAD	0.01	0.46	$64,996	$149
25	219		DELMARVA REAL ESTATE MANAGEMENT GROUP LLC	9529 OCEAN GATEWAY	0.01	1.00	$214,710	$232
25	232	1	QUICK, JAMES A. AND MARY G.	9510 SERVICE LANE	0.04	0.48	$205,636	$4,624
25	238	3	WATERFOWL FESTIVAL, INC.	9210 CENTREVILLE ROAD	1.27	7.27	$271,566	$14,279
25	238	4	DELMARVA FOUNDATION FOR MEDICAL CARE, INC.	9240 CENTREVILLE ROAD	0.12	5.00	$2,610,566	$19,407
100	38		DELMARVA BANK DATA PROCESSING CENTER INC.	GLEBE PARK DRIVE	1.61	6.62	$1,739,900	$114,837
100	40		WHALEN COMPANY, INC.	8900 GLEBE ROAD	0.91	7.72	$3,889,300	$137,182
100	41		TOWN OF EASTON	840 GLEBE ROAD	0.64	6.84	$625,566	$17,668
101	4	1			0.09			
101	4	2	E AND H PROPERTIES, LLC	8694 COMMERCE DRIVE	0.30	1.00	$525,600	$46,595
101	4	3,4,5	DELAWARE COCA-COLA BOTTLING CO INC. C/O COCA COLA	321 COMMERCE DRIVE	0.55	5.09	$1,343,432	$43,789
101	4	10,11	POSTAL BUILDING LIMITED PARTNERSHIP	8632 COMMERCE DRIVE	0.05	2.26	$1,017,832	$6,213
101	4	12	COMMERCE PROPERTIES LLC C/O DAN RUEGG	8610 COMMERCE DRIVE	0.01	2.36	$1,117,332	$1,273
101	4	17	PIERSON, T. DOUGLAS AND DONNA M.	8582 COMMERCE DRIVE	0.03	2.77	$966,466	$2,778
101	4	24	HOCKER, HARRIET G. LIFE ESTATE	312 COMMERCE DRIVE	0.06	1.03	$177,566	$3,248
101	4	25	BAMBLING, JACQUES D.	314 COMMERCE DRIVE	0.01	1.00	$430,332	$172
101	4	26	BUGG PROPERTIES LLC	8659 COMMERCE DRIVE	0.02	1.00	$744,932	$3,390
101	4	27	ARMSTRONG, CAROL W. TRUSTEE	8673 COMMERCE DRIVE	0.11	0.99	$459,232	$14,992
101	4	28	DENT, GEORGE E.	8685 COMMERCE DRIVE	0.51	1.00	$282,432	$37,702
101	4	29	MAUTZ, JOHN F. AND DIANA T/C	8695 COMMERCE DRIVE	0.09	1.00	$622,000	$15,464
101	142	4	HADDAWAY, PAUL V. AND JUANITA C.	318 SYCAMORE AVE	0.08	0.25	$109,176	$10,892
101	142	5	SPECTOR, BRIAN AND SHARY N.	506 HAZELWOOD DRIVE	0.06	0.23	$240,882	$18,232
101	142	12	COOPER, ROBERT A. AND GRACE H. L/E	507 HAZELWOOD DRIVE	0.02	0.17	$185,430	$4,976
101	142	13	EWING, DAVID A. AND TAMELA E.	509 HAZELWOOD DRIVE	0.05	0.17	$173,430	$11,432
101	142	14	SINGH, CYNTHIA A.	511 HAZELWOOD DRIVE	0.16	0.17	$178,922	$39,338
101	142	15	GIDDENS, GLADYS H.	513 HAZELWOOD DRIVE	0.01	0.17	$170,272	$1,316
101	142	16	SATTERFIELD, PAUL W. SR AND CHARLOTTE HOWETH	515 HAZELWOOD DRIVE	0.01	0.18	$207,290	$1,111
101	265	4A	LOWE'S HOME CENTER, INC.	501 GLEBE ROAD	0.01	14.58	$11,587,900	$2,016
101	3670	20	KLEPPINGER, J. CHRISTOPHER, SR	8675 BROOKS DRIVE	0.01	0.91	$551,732	$1,338
101	3670	24	TRED AVON DEVELOPMENT LLC	8709 BROOKS DRIVE	0.24	0.91	$902,066	$71,175
101	3670	25	TRED AVON DEVELOPMENT LLC C/O LEE MAYER	BROOKS DRIVE	0.24	0.91	$674,932	$52,498
101	3670	26	S AND A LLC	8727 BROOKS DRIVE	0.10	0.91	$507,332	$17,386
101	3670	27	CLEM, WARREN D. AND CAROLE ANN	8737 BROOKS DRIVE	0.01	1.86	$1,374,066	$758
101	3670	29	VAN SCHAIK, ROBERT AND TERESE V.S. SCHAUBER	BROOKS DRIVE	0.03	0.64	$580,832	$7,418
				Total:	14.43	280.79		$775,181

SOURCE: Maryland Department of Assessments and Taxation, Real Property Data Search

$AS OF 07/01/2008

RPZ OBSTRUCTION TABLE - ALTERNATIVE 1, 2, and 5						
MAP	PARCEL	LOT	OWNER	ADDRESS	TOTAL ACRES OF PARCEL	VALUE[$]
25	18		NORRIS EASTON LAND COMPANY LLC	OCEAN GATEWAY	2.17	284,600
25	66		LOWE'S HOMES CENTER, INC ATTN TAX DEPT	LONGWOODS ROAD	24.46	2,630,666
101	263		EASTON CHURCH OF THE NAZARENE INC	GLEBE ROAD	1.03	113,386
25	46	1	PASTIME PROPERTIES, LLC	8801 MISTLETOE DRIVE	3.61	1,303,600
101	142	11	WILLEY, HAROLD LEROY AND NAOMI LANE	505 HAZELWOOD DRIVE	0.18	163,390
101	142	10	APPLE, JAMES E AND SHAREN L	503 HAZELWOOD DRIVE	0.24	202,906
101	142	9	BUSHE, ALIDA C	501 HAZELWOOD DRIVE	0.35	225,342
101	142	8	VAN EVERA, SEAN M AND GOLSHANI, AMBER M	500 HAZELWOOD DRIVE	0.18	186,922
25	58		EASTON EXCHANCE LLC	28712 GLEBE ROAD	58.19	5,631,332
101	264		MEARS PROPERTIES LLC C/O WALTER R. STONE	GLEBE ROAD	2.28	225,732
				Total:	92.69	10,967,876

SOURCE: Maryland Department of Assessments and Taxation, Real Property Data Search

[$]AS OF 07/01/2008

ON AIRPORT OBSTRUCTIONS - ALTERNATIVE 1, 2, AND 5							
MAP	PARCEL	LOT	OWNER	ADDRESS	ACRES OF OBSTRUCTIONS	TOTAL ACRES OF PARCEL	VALUE[$]
25	130		TALBOT COUNTY MARYLAND	29290 CLEARVIEW ROAD	0.17	0.24	65,900
25	132		TALBOT COUNTY MARYLAND	29304 CLEARVIEW ROAD	0.05	0.21	58,860
25	133		TALBOT COUNTY MARYLAND	29310 CLEARVIEW ROAD	0.00	0.15	47,360
25	134		LATHAM, R. JAMES	CLEARVIEW ROAD	0.01	0.24	2,500
25	135		TALBOT COUNTY MARYLAND	CLEARVIEW ROAD	0.09	0.21	55,846
25	136		TALBOT COUNTY MARYLAND	CLEARVIEW ROAD	0.10	0.31	68,840
				Total:	0.42	1.36	299,306

SOURCE: Maryland Department of Assessments and Taxation, Real Property Data Search

[$]AS OF 07/01/2008

APPENDIX C: DETAILED DEVELOPMENT COSTS

Appendix C - Detailed Development Costs

Development Costs Alternative 2	
Mobilization / Demobilization / Construction Layout and Surveying	375,000.00
Temporary Construction Items	375,000.00
Site Demolition	95,000.00
Site Work	400,000.00
Earthwork	360,000.00
Paving	2,450,000.00
Signage and Markings	74,500.00
Service Road (Paved)	150,000.00
Erosion and Sediment Control	80,000.00
Stormwater Management and Drainage (Potential Major Structure)	400,000.00
Electrical Demolition	50,000.00
Edge Lighting	1,246,575.00
Temporary Electrical	30,000.00
Electrical Sitework	650,000.00
Vault Work	50,000.00
SUBTOTAL :	***6,427,699.00***
CONCEPTUAL PLANNING PHASE MARKUP (25%) :	***1,606,925.00***
TOTAL ESTIMATED CONSTRUCTION COST :	***$ 8,034,624.00***

Appendix C - Detailed Development Costs
Site Demolition

Pay Item	SUBTOTAL: / DATE:	Unit	Unit Cost	Bid QTY	$ 95,000.00 / 10/13/2008
X-67-2.6	DEMOLISH FENCE/GATE	LF	2.50	340.00	850.00
P-151-5.1	CLEARING AND GRUBBING	AC	5,400.00	0.90	4,860.00
Z-1-4.1	PROPERTY DEMOLITION	LS	13,250.00	1.99	26,390.00
Z-1-4.2	PROPERTY DEMOLITION	LS	4,000.00	2.00	8,000.00
Z-1-4.3	BUILDING DEMOLITION	LS	9,800.00	2.00	19,600.00
Z-1-4.4	BUILDING DEMOLITION	LS	8,650.00	2.00	17,300.00
Z-1-4.5	CONTINGENCY - UNKNOWN MATERIALS	SF	6.00	1,500.00	9,000.00
Z-1-4.6	CONTINGENCY - UNKNOWN MATERIALS	SF	6.00	1,500.00	9,000.00

Appendix C - Detailed Development Costs
Site Work

Pay Item	SUBTOTAL: / DATE:	Unit	Unit Cost	Bid QTY	$ 400,000.00 / 10/13/2008
F-162-5.1	10' CHAIN LINK FENCE WITH 3 STRANDS BARBED WIRE	LF	19.00	7,754.47	147,335.00
F-162-5.2	22-FOOT WIDE, DOUBLE SWING VEHICULAR GATE	EA	1,825.00	3.00	5,475.00
T-901-5.1	HYDROSEEDING	AC	1,500.00	26.00	39,000.00
T-904-5.1	SODDING	SY	5.00	16,600.00	83,000.00
T-905-5.1	TOPSOILING	AC	4,815.00	26.00	125,190.00

Appendix C - Detailed Development Costs
Paving

Pay Item	SUBTOTAL: / DATE:	Unit	Unit Cost	Bid QTY	$ 2,450,000.00 / 10/13/2008
X-25-5.2	VARIABLE DEPTH BITUMINOUS CONCRETE MILLING (2 INCH MAX. DEPTH)	SY	2.00	790.00	1,580.00
X-27-5.1	PAVEMENT GROOVING	SY	1.10	30,450.00	33,495.00
X-31-5.1	FILTER FABRIC	SY	1.85	78,600.00	145,410.00
P-209-5.1	CRUSHED AGGREGATE BASE COURSE	CY	33.75	19,000.00	641,250.00
P-401-8.1	BITUMINOUS SURFACE COURSE - AIRCRAFT	TON	65.00	10,600.00	689,000.00
P-401-8.2	BITUMINOUS BASE COURSE - AIRCRAFT	TON	59.00	14,521.44	856,765.00
P-603-5.1	BITUMINOUS TACK COAT	GAL	2.45	10,000.00	24,500.00
D-705-5.1	4-INCH, HDPE UNDERDRAIN (PERFORATED), COMPLETE	LF	8.80	4,500.00	39,600.00
D-705-5.2	4-INCH, HDPE UNDERDRAIN (SOLID), COMPLETE	LF	8.00	400.00	3,200.00
D-705-5.3	UNDERDRAIN CLEANOUT	EA	980.00	10.00	9,800.00
D-705-5.4	UNDERDRAIN OUTLET (MDSHA 387.01)	EA	540.00	10.00	5,400.00

Appendix C - Detailed Development Costs
Signage and Markings

Pay Item	SUBTOTAL: / DATE:	Unit	Unit Cost	Bid QTY	$ 75,000.00 / 10/13/2008
P-620-5.1	TEMPORARY PAVEMENT MARKING	SF	0.38	34,000.00	12,920.00
P-620-5.2	PERMANENT PAVEMENT MARKING	SF	0.43	34,000.00	14,620.00
L-125-5.9	L-858R GUIDANCE SIGN, COMPLETE	EA	3,300.00	9.00	29,700.00
L-125-5.10	L-858Y TAXIWAY RETROREFLECTIVE SIGN, COMPLETE	EA	2,000.00	8.88	17,760.00

Appendix C - Detailed Development Costs
Service Road

Pay Item	SUBTOTAL: / DATE:	Unit	Unit Cost	Bid QTY	$ 150,000.00 / 10/13/2008
MD-504-1.1	BITUMINOUS CONCRETE - SURFACE COURSE, NON-AIRCRAFT	TON	64.00	1,296.88	83,000.00
MD-504-1.2	BITUMINOUS CONCRETE - BASE COURSE, NON-AIRCRAFT	TON	59.00	1,000.00	59,000.00
MD-901-1.1	CRUSHED AGGREGATE PAVEMENT	SY	8.00	1,000.00	8,000.00

Appendix C - Detailed Development Costs
Erosion and Sediment Control

Pay Item	SUBTOTAL: / DATE:	Unit	Unit Cost	Bid QTY	$ 80,000.00 / 10/13/2008
P-156-5.1	SILT FENCE	LF	2.60	12,300.00	31,980.00
P-156-5.2	TEMPORARY EROSION CONTROL MATTING	SY	2.00	5,950.00	11,900.00
P-156-5.3	TYPE A EARTH DIKE	LF	5.00	1,224.00	6,120.00
P-156-5.4	TEMPORARY STONE OUTLET STRUCTURE	EA	525.00	5.00	2,625.00
P-156-5.6	TEMPORARY STONE CHECK DAM	EA	194.00	20.00	3,880.00
P-156-5.7	ROCK OUTLET PROTECTION - III	SY	31.00	80.97	2,510.00
P-156-5.8	MODIFIED CHECK DAM	EA	194.00	8.00	1,552.00
P-156-5.9	STONE OUTLET SEDIMENT TRAP (ST-IV)	EA	593.00	1.00	593.00
P-156-5.10	SUPER SILT FENCE	LF	23.00	100.00	2,300.00
P-156-5.11	STABILIZED CONSTRUCTION ENTRANCE, COMPLETE	EA	1,725.00	4.00	6,900.00
P-156-5.12	TEMPORARY DRAWDOWN DEVICE	EA	1,620.00	2.54	4,120.00
P-156-5.13	STANDARD INLET PROTECTION	EA	350.00	4.00	1,400.00
P-156-5.14	TEMPORARY DRAWDOWN DEVICE	EA	1,617.00	2.55	4,120.00

Appendix C - Detailed Development Costs
Stormwater Management

Pay Item	SUBTOTAL: / DATE:	Unit	Unit Cost	Bid QTY	$ 400,000.00 / 10/13/2008
P-156-5.5	RIP-RAP INFLOW PROTECTION	SY	30.00	135.00	4,050.00
D-701-5.1	15-INCH RCP, CLASS IV	LF	52.00	482.69	25,100.00
D-701-5.2	18-INCH RCP, CLASS IV	LF	55.00	448.00	24,640.00
D-701-5.3	24-INCH RCP, CLASS IV	LF	70.00	184.00	12,880.00
D-751-5.5	15-INCH STANDARD MDSHA END SECTION (MDSHA-368.01)	EA	555.00	6.00	3,330.00
D-751-5.6	18-INCH STANDARD MDSHA END SECTION (MDSHA-368.01)	EA	660.00	4.00	2,640.00
D-751-5.7	24-INCH STANDARD MDSHA END SECTION (MDSHA-368.01)	EA	840.00	4.00	3,360.00
D-751-5.8	CONTINGENCY - UNKNOWN DRAINAGE STRUCTURE	LS	18,825.00	17.21	324,000.00

Appendix C - Detailed Development Costs
Electrical - Edge Lighting

Pay Item	SUBTOTAL: / DATE:	Unit	Unit Cost	Bid QTY	$ 1,015,000.00 / 10/13/2008
L-108-5.1	UNDERGROUND CABLE, NO. 8 AWG, 5kV CABLE, L-824 INSTALLED IN DUCT OR TRENCH	LF	2.70	35,518.52	95,900.00
L-108-5.2	NO.6 BARE COUNTERPOISE WIRE, INSTALLED IN TRENCH, INCLUDING GROUND RODS AND GROUND CONNECTIONS	LF	2.00	39,800.00	79,600.00
L-108-5.11	UNDERGROUND CABLE, NO. 8 AWG, 600V, RHH/RHW/USE-2, INSTALLED IN DUCT	LF	5.00	5,000.00	25,000.00
L-108-5.12	UNDERGROUND CABLE, NO. 10 AWG, 600V, RHH/RHW/USE-2, INSTALLED IN DUCT	LF	4.00	6,300.00	25,200.00
L-108-5.13	UNDERGROUND CABLE, 1-3/C NO. 8 AWG, 600V, TYPE MC, INSTALLED IN DUCT OR TRENCH	LF	8.00	1,900.00	15,200.00
L-108-5.14	UNDERGROUND CABLE, 1-3/C NO. 6 AWG, 600V, TYPE MC, INSTALLED IN DUCT OR TRENCH	LF	9.00	2,600.00	23,400.00
L-108-5.15	UNDERGROUND CABLE, 25 PAIR #19 – PE39 CABLE INSTALLED IN DUCT OR CONDUIT	LF	10.00	350.00	3,500.00
L-125-5.1	STAKE MOUNTED L-861 RUNWAY EDGE LIGHT, COMPLETE	EA	2,400.00	37.00	88,800.00
L-125-5.2	BASE MOUNTED L-861 RUNWAY EDGE LIGHT, COMPLETE	EA	4,000.00	10.00	40,000.00
L-125-5.3	STAKE MOUNTED L-861 THRESHOLD LIGHT, COMPLETE	EA	2,300.00	8.00	18,400.00
L-125-5.4	BASE MOUNTED L-861 THRESHOLD LIGHT, COMPLETE	EA	4,000.00	4.00	16,000.00
L-125-5.5	STAKE MOUNTED L-861 TAXIWAY EDGE LIGHT, COMPLETE	EA	2,250.00	192.00	432,000.00
L-125-5.6	BASE MOUNTED L-861 TAXIWAY EDGE LIGHT, COMPLETE	EA	4,000.00	38.00	152,000.00

Appendix C - Detailed Development Costs
Eletrical - Sitework

Pay Item	SUBTOTAL: / DATE:	Unit	Unit Cost	Bid QTY	$ 650,000.00 / 10/13/2008
L-108-5.3	CABLE TRENCH	LF	3.00	28,300.00	84,900.00
L-108-5.4	CABLE AND DUCT MARKER	EA	1,200.00	14.00	16,800.00
L-110-5.1	ONE-WAY 2-INCH SAND ENCASED DUCT BANK	LF	10.00	475.00	4,750.00
L-110-5.2	ONE-WAY 2-INCH CONCRETE ENCASED DUCT BANK	LF	12.00	440.00	5,280.00
L-110-5.3	TWO-WAY 2-INCH CONCRETE ENCASED DUCT BANK	LF	21.00	355.00	7,455.00
L-110-5.4	THREE-WAY 2-INCH SAND ENCASED DUCT BANK	LF	46.00	70.00	3,220.00
L-110-5.5	FOUR-WAY 2-INCH SAND ENCASED DUCT BANK	LF	48.00	90.00	4,320.00
L-110-5.6	FOUR-WAY 2-INCH CONCRETE ENCASED DUCT BANK	LF	70.00	40.00	2,800.00
L-110-5.7	ONE-WAY 3-INCH CONCRETE ENCASED DUCT BANK	LF	38.00	130.00	4,940.00
L-110-5.8	TWO-WAY 3-INCH SAND ENCASED DUCTBANK	LF	23.00	670.00	15,410.00
L-110-5.9	TWO-WAY 3-INCH CONCRETE ENCASED DUCT BANK	LF	23.00	710.00	16,330.00
L-110-5.10	THREE-WAY 3-INCH SAND ENCASED DUCT BANK	LF	31.00	2,100.00	65,100.00
L-110-5.11	THREE-WAY 3-INCH CONCRETE ENCASED DUCT BANK	LF	31.00	1,320.00	40,920.00
L-110-5.12	FOUR-WAY 3-INCH SAND ENCASED DUCT BANK	LF	42.00	630.00	26,460.00
L-110-5.13	FOUR-WAY 3-INCH CONCRETE ENCASED DUCT BANK	LF	42.00	670.00	28,140.00
L-110-5.14	SIX-WAY 3-INCH CONCRETE ENCASED DUCT BANK	LF	68.00	420.00	28,560.00
L-110-5.15	EIGHT-WAY 3-INCH CONCRETE ENCASED DUCTBANK	LF	140.00	25.00	3,500.00
L-110-5.16	TWO-WAY 4-INCH SAND ENCASED DUCTBANK	LF	29.00	260.00	7,540.00
L-115-5.1	ELECTRICAL MANHOLE, 4-FT X 4-FT X 6-FT, AASHTO-HS-25	EA	9,000.00	2.00	18,000.00
L-115-5.2	ELECTRICAL HAND HOLE, 3-FT X 3-FT X 3-FT, AASHTO-HS-25	EA	7,000.00	22.50	157,475.00
L-115-5.3	ELECTRICAL JUNCTION BOX, 18-INCH DIA, AASHTO-HS-25	EA	1,900.00	10.00	19,000.00
L-125-5.11	AREA LIGHTING FIXTURE - SINGLE ARM	EA	7,300.00	8.00	58,400.00
L-125-5.12	AREA LIGHTING FIXTURE - DOUBLE ARM	EA	8,900.00	3.00	26,700.00
L-125-5.14	L-867 BASE WITH STEEL COVER	EA	800.00	5.00	4,000.00

Appendix B: Early Agency Coordination

AECOM

AECOM
4 North Park Drive, Suite 300
Hunt Valley, MD 21030
www.aecom.com

410-785-7220 tel
410-785-6818 fax

F
FAA
EJR

2015000077 **In reply, please refer to:** 60423280

The Maryland Historical Trust has determined that there are no historic properties affected by this undertaking.

Beth Cole 1/15/2016
Date

RECEIVED
JAN 07 2016
BY:

December 31, 2015

Ms. Beth Cole
Maryland Historical Trust
100 Community Place, 3rd Floor
Crownsville, MD 21032-2023

Reference: Request for Review and Comment on Proposed Projects
Environmental Assessment for Five-Year Capital Improvement Program
AIP 03-24-0014-42
MAA GR-16-006
Easton / Newnam Field Airport
Easton, Maryland

TA Co.

Dear Ms. Cole:

AECOM Technical Services, Inc. (AECOM) has been contracted by Talbot County to prepare an Environmental Assessment (EA), as required by the Federal Aviation Administration (FAA) under the National Environmental Policy Act, to address the environmental impacts associated with the proposed five-year capital improvement program (CIP) at Easton / Newnam Field Airport in Easton, Maryland. The proposed projects are depicted on **Exhibit 1.2-1**.

Background on Proposed Projects

An Agency Scoping Meeting and Public Informational Workshop were originally held for this project on February 20, 2007. At that time, the intent of the EA was to address the proposed projects in the Airport's CIP, which included the extension and conversion of Runway 15-33 to the primary runway at the Airport. At that time, it was determined that the Eastern Shore Land Conservancy and the Maryland Environmental Trust, as co-grantee, hold a conservation easement on the private property needed for the project. As a result, the EA was then placed on hold by the FAA and additional planning services were conducted to revisit alternatives involving an extension to the other runway at the Airport, Runway 4-22. The additional planning services resulted in several extension alternatives to Runway 4-22. The EA was re-started with the incorporation of the new alternatives involving Runway 4-22. A draft EA was released for public and agency review in June 2010. Comments were received from the FAA between April 2011 and April 2013.

Given the time that lapsed between initial preparation of the EA and FAA final review, on October 1, 2013, the FAA indicated that the EA was to be updated to ensure that the data presented was still consistent with current conditions and requirements at the Airport. Thus, the County then embarked on an additional planning analysis to update the forecast of aircraft operations, aircraft fleet mix and/or critical aircraft, and determine runway length requirements. On July 1, 2015, the FAA approved the additional planning analyses and a grant was issued in September 2015 to complete a new EA for the proposed improvements.

Description of Proposed Projects

The proposed projects listed in the five-year CIP for the Airport, which are subject to the EA, include the following:

- Extend Runway 4-22 feet to the south to a total length of 6,400 feet.
- Construct a partial parallel taxiway and connecting taxiways to the new Runway 4 threshold.
- Construct a standard Runway Object Free Area (OFA) for Runway 22.
- Construct aircraft storage facilities (T-hangars, tie downs, three conventional hangars) and associated aprons.
- Construct an Airport Service Road.

#1A BC 1/16/15 For all activities in the 5 Year CIP

- Remove obstructions to the existing 14 Code of Federal Regulations (CFR) Part 77 surfaces for Runway 15-33 and Runway 4-22.
- Acquire property interests within Runway 15, 33, and 22 Protection Zone (RPZ).

Connected Actions to the Proposed Action include the following:

- Install an Approach Light System on Runway 4.
- Install runway and taxiway edge lights along the new sections of pavement.
- Relocate Runway 4 threshold lights and Precision Approach Path Indicator (PAPI) lights.
- Install Runway End Identifier Lights (REILs) on Runway 4-22.
- Install airfield directional signs for the new sections of runway and taxiway.
- Relocate existing Runway 4 Approach Glide Slope to coincide with new approach threshold.
- Construct a graded Runway Safety Area (RSA) and Taxiway Safety Area (TSA) for the new sections of runway and taxiway.
- Design and publish modified Instrument Approach Procedures for the future Runway 4-22.
- Construct drainage improvements for the new airfield pavements.

Request for Review and Comment

Since February 2007, the County, through URS (now AECOM) has been in contact with you regarding various proposed projects, including the proposed projects listed in the five-year CIP, as well as two separate projects (installation of Airport wide signage program and expansion and rehabilitation of an apron and landside service roads). Correspondence from your office on all of these coordination efforts have stated that no historical properties would be affected by these undertakings. Attached is the most recent coordination effort with respect to the projects listed in the five-year CIP, dated July 22, 2009 and August 5, 2009. Since time has lapsed since that coordination effort, at this time, I am requesting your review of the proposed projects; the optional MHT Project Review Form is attached. [illegible] serves as the supporting documentation.

If you have any questions, or need additional information, please do not hesitate to contact me at 410.891.9451 or jennifer.lutz@aecom.com. Through a Notice of Availability, the draft EA will be made available for review and comment; your agency will also receive a copy at your request.

Thank you for your assistance with all projects, past and present, at the Airport.

Sincerely,

Jennifer Lutz
Project Manager
AECOM Technical Services, Inc.
jennifer.lutz@aecom.com

cc (electronic transmittal only):

Ms. Mindy Lee, Federal Aviation Administration
Mr. Marcus Brundage, Federal Aviation Administration
Mr. Jeff Breeden, Federal Aviation Administration
Mr. Ashish Solanki, Maryland Aviation Administration
Mr. Mike Henry, Easton / Newnam Field Airport

MARYLAND
DEPARTMENT OF
NATURAL RESOURCES

Larry Hogan, *Governor*
Boyd Rutherford, *Lt. Governor*
Mark Belton, *Secretary*
Joanne Throwe, *Deputy Secretary*

January 13, 2016

Ms. Jennifer Lutz
AECOM Technical Services, Inc.
4 North Park Drive
Suite 300
Hunt Valley, Maryland 21030

RE: Environmental Review for Five-Year Capital Improvement Program, AIP 03-24-0014-42, MAA GR-16-006, Easton/Newnam Field Airport, Talbot County, Maryland.

Dear Ms. Lutz:

The Wildlife and Heritage Service has determined that there are no official State or Federal records for listed plant or animal species within the delineated area shown on the map provided. As a result, we have no specific concerns regarding potential impacts or recommendations for protection measures at this time. Please let us know however if the limits of proposed disturbance or overall site boundaries change and we will provide you with an updated evaluation.

Thank you for allowing us the opportunity to review this project. If you should have any further questions regarding this information, please contact me at (410) 260-8573.

Sincerely,

Lori A. Byrne

Lori A. Byrne,
Environmental Review Coordinator
Wildlife and Heritage Service
MD Dept. of Natural Resources

ER# 2016.0031.ta

U.S. Fish & Wildlife Service

Easton Airport Obstruction Removals

IPaC Trust Resources Report

Generated April 11, 2016 11:10 AM MDT, IPaC v3.0.2

This report is for informational purposes only and should not be used for planning or analyzing project level impacts. For project reviews that require U.S. Fish & Wildlife Service review or concurrence, please return to the IPaC website and request an official species list from the Regulatory Documents page.

IPaC - Information for Planning and Conservation (https://ecos.fws.gov/ipac/): A project planning tool to help streamline the U.S. Fish & Wildlife Service environmental review process.

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Refuges & Hatcheries 6
Wetlands 7

U.S. Fish & Wildlife Service

IPaC Trust Resources Report

NAME

Easton Airport Obstruction Removals

LOCATION

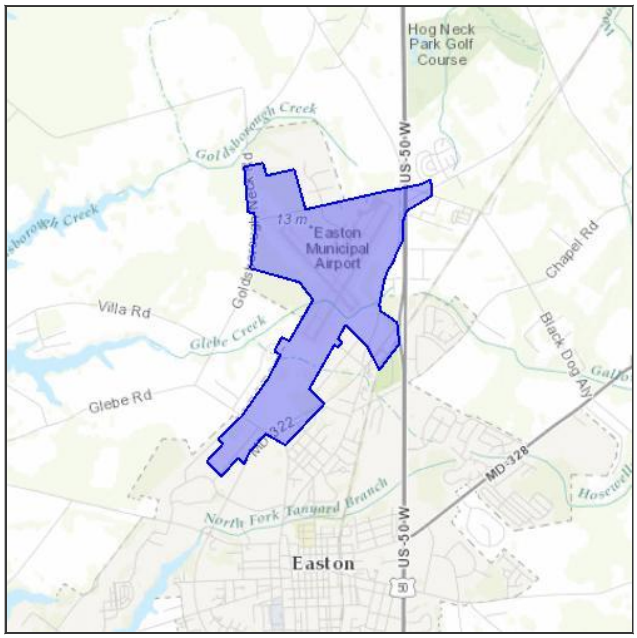
Talbot County, Maryland

DESCRIPTION

Tree Removals

IPAC LINK

https://ecos.fws.gov/ipac/project/SAFHB-7JR7N-GOZIT-YHVBR-I5ZG3A



U.S. Fish & Wildlife Service Contact Information

Trust resources in this location are managed by:

Chesapeake Bay Ecological Services Field Office
177 Admiral Cochrane Drive
Annapolis, MD 21401-7307
(410) 573-4599

Endangered Species

Proposed, candidate, threatened, and endangered species are managed by the Endangered Species Program of the U.S. Fish & Wildlife Service.

This USFWS trust resource report is for informational purposes only and should not be used for planning or analyzing project level impacts.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list from the Regulatory Documents section.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency.

A letter from the local office and a species list which fulfills this requirement can only be obtained by requesting an official species list either from the Regulatory Documents section in IPaC or from the local field office directly.

There are no endangered species in this location

Critical Habitats

There are no critical habitats in this location

Migratory Birds

Birds are protected by the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act.

Any activity that results in the take of migratory birds or eagles is prohibited unless authorized by the U.S. Fish & Wildlife Service.[1] There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured.

Any person or organization who plans or conducts activities that may result in the take of migratory birds is responsible for complying with the appropriate regulations and implementing appropriate conservation measures.

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1. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

Additional information can be found using the following links:

- Birds of Conservation Concern
  http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Conservation measures for birds
  http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Year-round bird occurrence data
  http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/akn-histogram-tools.php

The following species of migratory birds could potentially be affected by activities in this location:

American Oystercatcher Haematopus palliatus — Bird of conservation concern
Year-round
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0G8

American Bittern Botaurus lentiginosus — Bird of conservation concern
Season: Wintering
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0F3

Bald Eagle Haliaeetus leucocephalus — Bird of conservation concern
Year-round
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B008

Black Rail Laterallus jamaicensis — Bird of conservation concern
Season: Breeding
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B09A

Black-billed Cuckoo Coccyzus erythropthalmus — Bird of conservation concern
Season: Breeding
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0HI

Blue-winged Warbler Vermivora pinus — Bird of conservation concern
Season: Breeding

Fox Sparrow Passerella iliaca — Bird of conservation concern
Season: Wintering

Gull-billed Tern Gelochelidon nilotica — Bird of conservation concern
Season: Breeding
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0JV

Kentucky Warbler Oporornis formosus — Bird of conservation concern
Season: Breeding

Least Bittern Ixobrychus exilis
Season: Breeding
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B092

Least Tern Sterna antillarum — Bird of conservation concern
Season: Breeding

Lesser Yellowlegs Tringa flavipes — Bird of conservation concern
Season: Wintering
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0MD

Marbled Godwit Limosa fedoa — Bird of conservation concern
Season: Wintering
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0JL

Nelson's Sparrow Ammodramus nelsoni — Bird of conservation concern
Season: Wintering

Peregrine Falcon Falco peregrinus — Bird of conservation concern
Season: Wintering
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0FU

Pied-billed Grebe Podilymbus podiceps — Bird of conservation concern
Year-round

Prairie Warbler Dendroica discolor — Bird of conservation concern
Season: Breeding

Prothonotary Warbler Protonotaria citrea — Bird of conservation concern
Season: Breeding

Purple Sandpiper Calidris maritima — Bird of conservation concern
Season: Wintering

Red Knot Calidris canutus rufa — Bird of conservation concern
Season: Wintering
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0DM

Red-headed Woodpecker Melanerpes erythrocephalus — Bird of conservation concern
Year-round

Rusty Blackbird Euphagus carolinus — Bird of conservation concern
Season: Wintering

Saltmarsh Sparrow Ammodramus caudacutus — Bird of conservation concern
Year-round

Seaside Sparrow Ammodramus maritimus — Bird of conservation concern
Year-round

Short-eared Owl Asio flammeus — Bird of conservation concern
Season: Wintering
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0HD

Snowy Egret Egretta thula — Bird of conservation concern
Season: Breeding

Willow Flycatcher Empidonax traillii — Bird of conservation concern
Season: Breeding
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0F6

Wood Thrush Hylocichla mustelina — Bird of conservation concern
Season: Breeding

Worm Eating Warbler Helmitheros vermivorum — Bird of conservation concern
Season: Breeding

Wildlife refuges and fish hatcheries

There are no refuges or fish hatcheries in this location

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

DATA LIMITATIONS

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

DATA EXCLUSIONS

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

DATA PRECAUTIONS

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

This location overlaps all or part of the following wetlands:

Freshwater Emergent Wetland

PEM1C	1.04 acres
PEM1A	0.534 acre
PEM1D	0.195 acre

Freshwater Forested/shrub Wetland

PFO1C	4.56 acres

PSS1C	1.52 acres
PFO1D	1.33 acres
PFO1A	1.08 acres
PFO1E	0.497 acre
PSS1/FO1E	0.264 acre
PSS1E	0.173 acre

Freshwater Pond

PUBHx	0.566 acre
PABHx	0.199 acre

A full description for each wetland code can be found at the National Wetlands Inventory website: http://107.20.228.18/decoders/wetlands.aspx

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Chesapeake Bay Ecological Services Field Office
177 ADMIRAL COCHRANE DRIVE
ANNAPOLIS, MD 21401
PHONE: (410)573-4599 FAX: (410)266-9127
URL: www.fws.gov/chesapeakebay/;
www.fws.gov/chesapeakebay/endsppweb/ProjectReview/Index.html

Consultation Code: 05E2CB00-2016-SLI-0901 April 11, 2016
Event Code: 05E2CB00-2016-E-01086
Project Name: Easton Airport Obstruction Removals

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. This species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment

United States Department of Interior
Fish and Wildlife Service

Project name: Easton Airport Obstruction Removals

Official Species List

Provided by:

Chesapeake Bay Ecological Services Field Office
177 ADMIRAL COCHRANE DRIVE
ANNAPOLIS, MD 21401
(410) 573-4599
http://www.fws.gov/chesapeakebay/
http://www.fws.gov/chesapeakebay/endsppweb/ProjectReview/Index.html

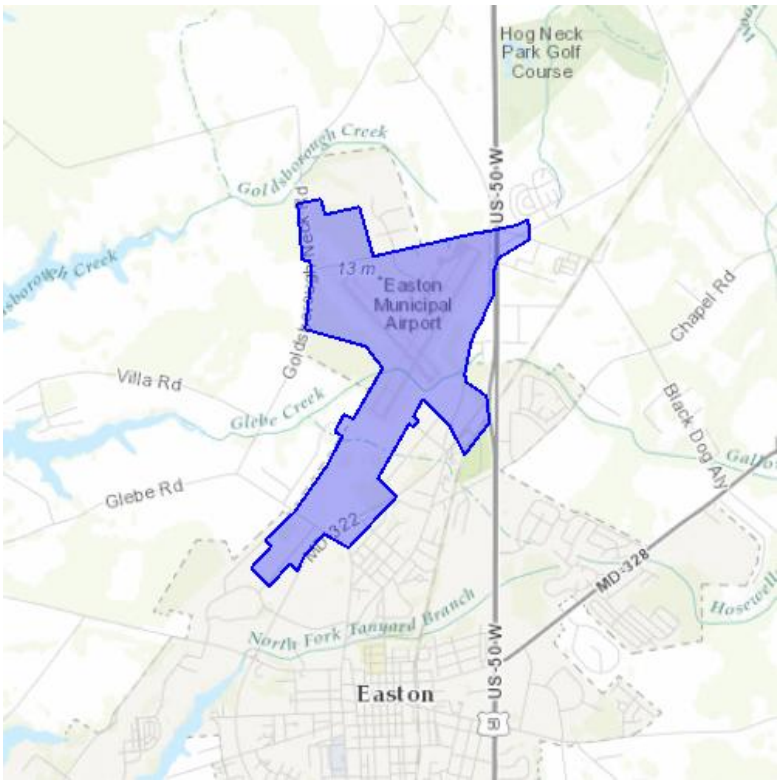
Consultation Code: 05E2CB00-2016-SLI-0901
Event Code: 05E2CB00-2016-E-01086

Project Type: VEGETATION MANAGEMENT

Project Name: Easton Airport Obstruction Removals
Project Description: Impacts associated with the removal of obstructions to the 14 CFR Part 77 - Obstruction removals

Please Note: The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.

Project Location Map:



Project Coordinates: The coordinates are too numerous to display here.

Project Counties: Talbot, MD

Endangered Species Act Species List

There are a total of 0 threatened or endangered species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

There are no listed species identified for the vicinity of your project.

Critical habitats that lie within your project area

There are no critical habitats within your project area.

Appendix A: FWS National Wildlife Refuges and Fish Hatcheries

There are no refuges or fish hatcheries within your project area.

Appendix B: NWI Wetlands

The U.S. Fish and Wildlife Service is the principal Federal agency that provides information on the extent and status of wetlands in the U.S., via the National Wetlands Inventory Program (NWI). In addition to impacts to wetlands within your immediate project area, wetlands outside of your project area may need to be considered in any evaluation of project impacts, due to the hydrologic nature of wetlands (for example, project activities may affect local hydrology within, and outside of, your immediate project area). It may be helpful to refer to the USFWS National Wetland Inventory website. The designated FWS office can also assist you. Impacts to wetlands and other aquatic habitats from your project may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal Statutes. Project Proponents should discuss the relationship of these requirements to their project with the Regulatory Program of the appropriate U.S. Army Corps of Engineers District.

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

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Exclusions - Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Precautions - Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of

this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

The following NWI Wetland types intersect your project area in one or more locations. To understand the NWI Classification Code, see http://wetlandsfws.usgs.gov/Data/interpreters/wetlands.aspx.

Wetland Types	**NWI Classification Code**	**Total Acres**
Freshwater Emergent Wetland	PEM1A	0.534
Freshwater Emergent Wetland	PEM1C	1.04
Freshwater Emergent Wetland	PEM1D	0.195
Freshwater Forested/Shrub Wetland	PFO1A	1.08
Freshwater Forested/Shrub Wetland	PFO1C	4.56
Freshwater Forested/Shrub Wetland	PFO1D	1.33
Freshwater Forested/Shrub Wetland	PFO1E	0.497
Freshwater Forested/Shrub Wetland	PSS1/FO1E	0.264
Freshwater Forested/Shrub Wetland	PSS1C	1.52
Freshwater Forested/Shrub Wetland	PSS1E	0.173
Freshwater Pond	PABHx	0.199
Freshwater Pond	PUBHx	0.566

MARYLAND
DEPARTMENT OF
NATURAL RESOURCES

Larry Hogan, *Governor*
Boyd Rutherford, *Lt. Governor*
Mark Belton, *Secretary*
Joanne Throwe, *Deputy Secretary*

16-MIS-203

July 22, 2016

Jennifer Lutz
AECOM
4 North Park Drive, Suite 300
Hunt Valley, MD 21030

Subject: Fisheries Information for the Proposed Easton/Newnam Field Airport Capital Improvement Project, in Easton, Maryland.

Dear Ms. Lutz,

The above referenced project has been reviewed to determine fisheries species in the vicinity of the proposed project. The proposed activities include the Easton/Newnam Field Airport Capital Improvement Project, in Easton, Maryland.

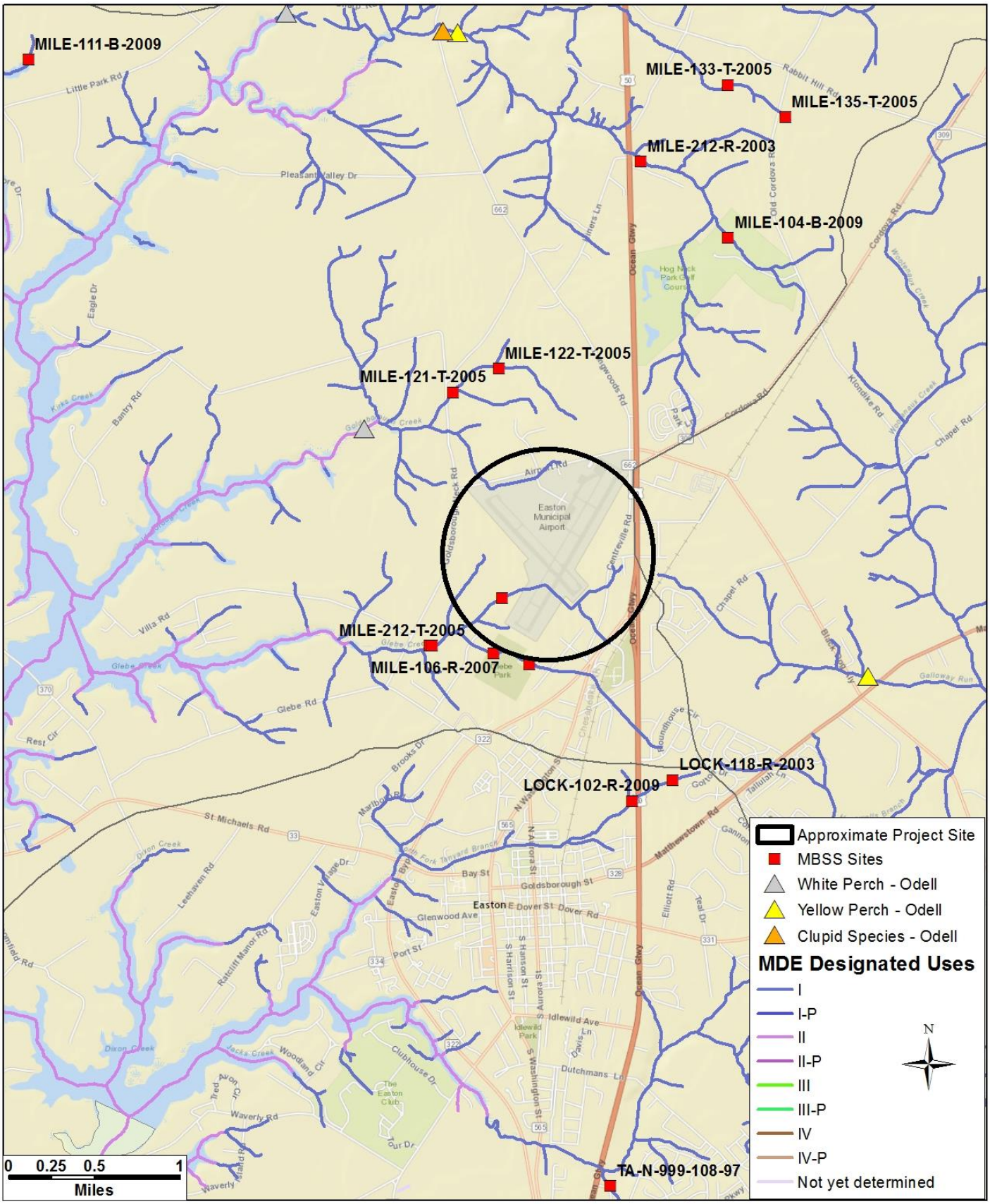
Glebe Creek (Chester River Basin) and tributaries near the site are classified as Use I streams (Water Contact Recreation, and Protection of Aquatic Life). White perch have been documented near the project site. Where the presence of white perch has been documented, no instream work is permitted from March 1 through June 15, inclusive, during any year.

These streams may also support many resident fish species documented by our Maryland Biological Stream Survey. MBSS data can be accessed via the MDDNR web page at http://streamhealth.maryland.gov, allowing access to resource surveys in neighboring tributaries.

If you have further questions, please contact the Environmental Review Program at 410-260-8803.

Sincerely,

Alison Armocida
Environmental Review Program



MARYLAND
DEPARTMENT OF
NATURAL RESOURCES

Lutz, Jennifer

From: Elder Ghigiarelli -MDE- <elder.ghigiarelli@maryland.gov>
Sent: Thursday, December 01, 2016 10:59 AM
To: Lutz, Jennifer
Cc: Alan Kampmeyer -MDE-
Subject: Re: Easton/ Newnam Field Airport: Coastal Zone Consistency Determination Request

Ms. Lutz,

As requested in your email, this is to confirm that the State's Federal Consistency determination, dated May 1, 2013, for the projects contained in the Easton/Newnam Field Airport's Five-Year Capital Improvement Program, is still valid. Please note, however, that this determination is contingent upon authorization from the Nontidal Wetlands Division for any proposed impacts to nontidal wetlands, as well as any other State approvals that may be necessary for the proposed activities.

If you have any questions, please contact me.

Elder Ghigiarelli, Jr.
Deputy Program Administrator
Maryland Federal Consistency Coordinator
Wetlands and Waterways Program
Maryland Department of the Environment
Phone: (410) 537-3763
Fax: (410) 537-3751

From: Kluever, Bryan <bryan_kluever@fws.gov>
Sent: Thursday, June 29, 2017 2:11 PM
To: Hiebler, Joanna
Subject: Re: Record of Conversation 6/29/2017

Hi Joanna,

I find the text that you have provided to be an accurate portrayal of our phone conversation.

Let me know if you need anything else.

Best,

Bryan

On Thu, Jun 29, 2017 at 1:52 PM, Hiebler, Joanna <joanna.hiebler@aecom.com> wrote:
Hi Bryan,

Thank you for speaking with me this morning regarding the Easton Airport and potential migratory bird impacts. We discussed the type of projects that have the potential to impact migratory bird habitat – the obstruction removals associated with 14 CFR Part 77, objects affecting navigable airspace. We also spoke about the desire not to have habitat in close proximity to an airport.

This morning you indicated that if there is not a removal of migratory bird nests in the trees removed as part of this project (obstructions), then we would not be under violation of the Migratory Bird Treaty Act. If we discover there is a nest of a migratory bird then compliance with the Act would be required before any action occurs. We should not have any issues regarding rare, threatened or endangered species, as they were not identified by the MD DNR or the USFWS within our study area.

You indicated the general recommendation for any cutting of trees to occur during the non-breeding season for migratory birds. There are also additional avoidance and minimization measures that can be utilized for different types of projects. Below I have clipped the statements included with the Environmental Assessment written for the Easton Newnam Field Airport 5-Year Capital Improvement Program. I would like to request your permission to include this email and any email response from you, within the agency correspondence appendix to the report.

Affected Environment section of EA:
"Initial project scoping performed on the USFWS Information for Planning and Conservation (IPaC) online system indicated that there are 29 migratory birds of concern that may be affected by the Proposed Action. The list of migratory birds provided through IPac is for informational purposes. The Migratory Bird Treaty Act requires federal agencies to consider the effects of their projects on migratory birds. Measures to avoid and minimize potential impacts are described in Section 5.3."

Environmental Consequences section of EA:
" If possible, tree obstruction removal activities would be scheduled to occur outside the migratory bird nesting season (spring through late summer) to minimize potential impacts to migratory birds."
"...Construction specifications would require the contractor to abide by these instream prohibition periods and any relevant Best Management Practices for each proposed project would be utilized to the extent possible. This time of year restriction also coincides with migratory bird nesting season, so limited construction activities would also occur within forests during this time period. As a general recommendation, the U.S. Fish & Wildlife Service recommends that if removals must occur within the breeding season then a field survey for nests should be conducted. If no active nests of migratory birds are identified, than no further action is required. If nests are identified, further coordination would be required prior to the proposed action, to avoid violation to the Migratory Bird Treaty Act."

Bryan, thanks so much for your time and coordination.

Joanna Hiebler
Sr. Environmental Specialist

AECOM
4 North Park Drive
Suite 300
Hunt Valley, MD 21030, United States
T 1-410-785-7220
D 1-410-891-9284
aecom.com

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--
Bryan M. Kluever
Permits Branch Chief, Region 5
Migratory Bird Program
US Fish & Wildlife Service
300 Westgate Center Drive
Hadley, MA 01035
bryan_kluever@fws.gov
413-253-8541 (office)

Talbot County Department of Planning and Zoning
215 Bay Street, Suite 2
Easton, Maryland 21601

Phone: 410-770-8030 FAX: 410-770-8043
Email: mverdery@talbotcountymd.gov TTY: 410-822-8735

July 10, 2017

Mike Henry
Airport Manager
Easton/Newman Field
29137 Newman Road
Easton, MD 21601

Dear Mr. Henry,

On January 29, 2009, the Talbot County Council approved changes to the Takeoff Run Available for Runway 4-22 of Easton/Newman Field as it related to the Airport Layout Plan (ALP). AECOM is now in the process of preparing an Environmental Assessment that includes the extension of Runway 4-22 and associated improvements; acquisition of property within the Runways 15-33 and 4-22 protection zones; relocation of the Runway 22 end threshold; and removal of obstructions with the Runway Protection Zones for both Runways 15-33 and 4-22.

The Talbot County Comprehensive Plan supports the continued improvement of air transportation services at Easton/Newman Field. This letter serves to confirm that the capital improvements per the ALP, particularly those associated with Runway 4-22, are consistent with the land use plan contained in the County Comprehensive Plan. The airport is located within the incorporated municipality of the Town of Easton, MD and is zoned I-Industrial District. Compatible uses such as airport-related businesses and light industry are encouraged in nearby County zoned areas.

Should you have any additional questions, please don't hesitate to contact me.

Sincerely,

Mary Kay Verdery
Planning Officer

Cc: R. Andrew Hollis, County Manager

Appendix C: Forest Resources

April 25, 2016

Joanna Hiebler
AECOM
4 North Park Drive
Hunt Valley, MD 21104

Re: Easton Newnam Field Airport
APPROVED- Forest Stand Delineation

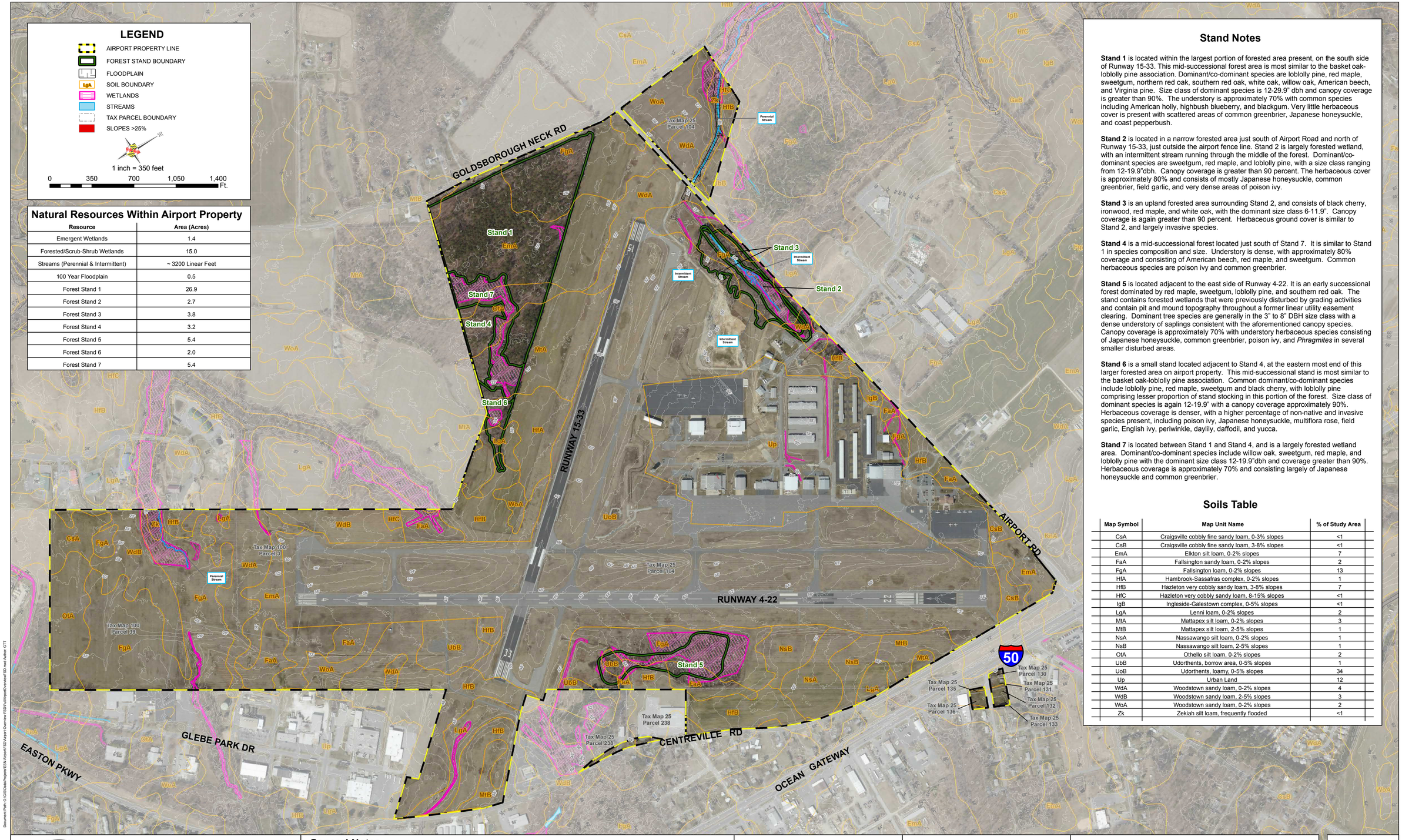
Dear Applicant:

Thank you for submitting the revised Forest Stand Delineation dated 4/20/16. The **Town of Easton hereby approves this plan** as submitted. An approved copy of this plan is now on file with the Town of Easton Planning & Zoning Office. Additionally an approved copy for your use is enclosed with this letter.

Please contact me if you have any questions concerning this matter.

Sincerely,

Brett C. Ewing, AICP
Current Planner/ GIS Analyst



Natural Resources Within Airport Property

Resource	Area (Acres)
Emergent Wetlands	1.4
Forested/Scrub-Shrub Wetlands	15.0
Streams (Perennial & Intermittent)	~ 3200 Linear Feet
100 Year Floodplain	0.5
Forest Stand 1	26.9
Forest Stand 2	2.7
Forest Stand 3	3.8
Forest Stand 4	3.2
Forest Stand 5	5.4
Forest Stand 6	2.0
Forest Stand 7	5.4

Stand Notes

Stand 1 is located within the largest portion of forested area present, on the south side of Runway 15-33. This mid-successional forest area is most similar to the basket oak-loblolly pine association. Dominant/co-dominant species are loblolly pine, red maple, sweetgum, northern red oak, southern red oak, white oak, willow oak, American beech, and Virginia pine. Size class of dominant species is 12-29.9" dbh and canopy coverage is greater than 90%. The understory is approximately 70% with common species including American holly, highbush blueberry, and blackgum. Very little herbaceous cover is present with scattered areas of common greenbrier, Japanese honeysuckle, and coast pepperbush.

Stand 2 is located in a narrow forested area just south of Airport Road and north of Runway 15-33, just outside the airport fence line. Stand 2 is largely forested wetland, with an intermittent stream running through the middle of the forest. Dominant/co-dominant species are sweetgum, red maple, and loblolly pine, with a size class ranging from 12-19.9"dbh. Canopy coverage is greater than 90 percent. The herbaceous cover is approximately 80% and consists of mostly Japanese honeysuckle, common greenbrier, field garlic, and very dense areas of poison ivy.

Stand 3 is an upland forested area surrounding Stand 2, and consists of black cherry, ironwood, red maple, and white oak, with the dominant size class 6-11.9". Canopy coverage is again greater than 90 percent. Herbaceous ground cover is similar to Stand 2, and largely invasive species.

Stand 4 is a mid-successional forest located just south of Stand 7. It is similar to Stand 1 in species composition and size. Understory is dense, with approximately 80% coverage and consisting of American beech, red maple, and sweetgum. Common herbaceous species are poison ivy and common greenbrier.

Stand 5 is located adjacent to the east side of Runway 4-22. It is an early successional forest dominated by red maple, sweetgum, loblolly pine, and southern red oak. The stand contains forested wetlands that were previously disturbed by grading activities and contain pit and mound topography throughout a former linear utility easement clearing. Dominant tree species are generally in the 3" to 8" DBH size class with a dense understory of saplings consistent with the aforementioned canopy species. Canopy coverage is approximately 70% with understory herbaceous species consisting of Japanese honeysuckle, common greenbrier, poison ivy, and *Phragmites* in several smaller disturbed areas.

Stand 6 is a small stand located adjacent to Stand 4, at the eastern most end of this larger forested area on airport property. This mid-successional stand is most similar to the basket oak-loblolly pine association. Common dominant/co-dominant species include loblolly pine, red maple, sweetgum and black cherry, with loblolly pine comprising lesser proportion of stand stocking in this portion of the forest. Size class of dominant species is again 12-19.9" with a canopy coverage approximately 90%. Herbaceous coverage is denser, with a higher percentage of non-native and invasive species present, including poison ivy, Japanese honeysuckle, multiflora rose, field garlic, English ivy, periwinkle, daylily, daffodil, and yucca.

Stand 7 is located between Stand 1 and Stand 4, and is a largely forested wetland area. Dominant/co-dominant species include willow oak, sweetgum, red maple, and loblolly pine with the dominant size class 12-19.9"dbh and coverage greater than 90%. Herbaceous coverage is approximately 70% and consisting largely of Japanese honeysuckle and common greenbrier.

Soils Table

Map Symbol	Map Unit Name	% of Study Area
CsA	Craigsville cobbly fine sandy loam, 0-3% slopes	<1
CsB	Craigsville cobbly fine sandy loam, 3-8% slopes	<1
EmA	Elkton silt loam, 0-2% slopes	7
FaA	Fallsington sandy loam, 0-2% slopes	2
FgA	Fallsington loam, 0-2% slopes	13
HfA	Hambrook-Sassafras complex, 0-2% slopes	1
HfB	Hazleton very cobbly sandy loam, 3-8% slopes	7
HfC	Hazleton very cobbly sandy loam, 8-15% slopes	<1
IgB	Ingleside-Galestown complex, 0-5% slopes	<1
LgA	Lenni loam, 0-2% slopes	2
MtA	Mattapex silt loam, 0-2% slopes	3
MtB	Mattapex silt loam, 2-5% slopes	1
NsA	Nassawango silt loam, 0-2% slopes	1
NsB	Nassawango silt loam, 2-5% slopes	1
OtA	Othello silt loam, 0-2% slopes	2
UbB	Udorthents, borrow area, 0-5% slopes	1
UoB	Udorthents, loamy, 0-5% slopes	34
Up	Urban Land	12
WdA	Woodstown sandy loam, 0-2% slopes	4
WdB	Woodstown sandy loam, 2-5% slopes	3
WoA	Woodstown sandy loam, 0-2% slopes	2
Zk	Zekiah silt loam, frequently flooded	<1

EASTON/NEWNAM FIELD AIRPORT

EASTON, MARYLAND

AECOM

General Notes

1. A FSD & FCP has been previously approved for the Easton/Newnam Airport on April 18, 2008
2. Jurisdictional Determination of Waters of the U.S., including wetlands delineation on the airport property was completed in Nov/Dec 2015 & March 2016.
3. The total Airport Property is 614.277 acres.
4. Basemapping for the FSD is provided by the MD IMAP GIS data portal. 2013-2014 4-band 6 inch aerial photography.
5. North American Datum 1983, Maryland State Plane Projection (US Feet)
6. Tax map and parcel data has been obtained from Maryland Property View 2014 online via the Maryland Department of Planning

Town of Easton Planning and Zoning

Name Date

Signature of Qualified Professional

Joanna Hiebler Date

AECOM

EASTON/NEWNAM FIELD AIRPORT
FOREST STAND DELINEATION
TOWN OF EASTON, MD
APRIL 20, 2016

EXHIBIT 1

Document Path: O:\GIS\Data\Projects\ESN Airport\FSD\Airport Overview FSD\FullAirportOverviewFSD.mxd Author: CTT

September 1, 2016

Joanna Hiebler
AECOM
4 North Park Drive
Hunt Valley, MD 21104

Re: Easton Newnam Field Airport- Ten (10) off-site locations
APPROVED- Forest Stand Delineation

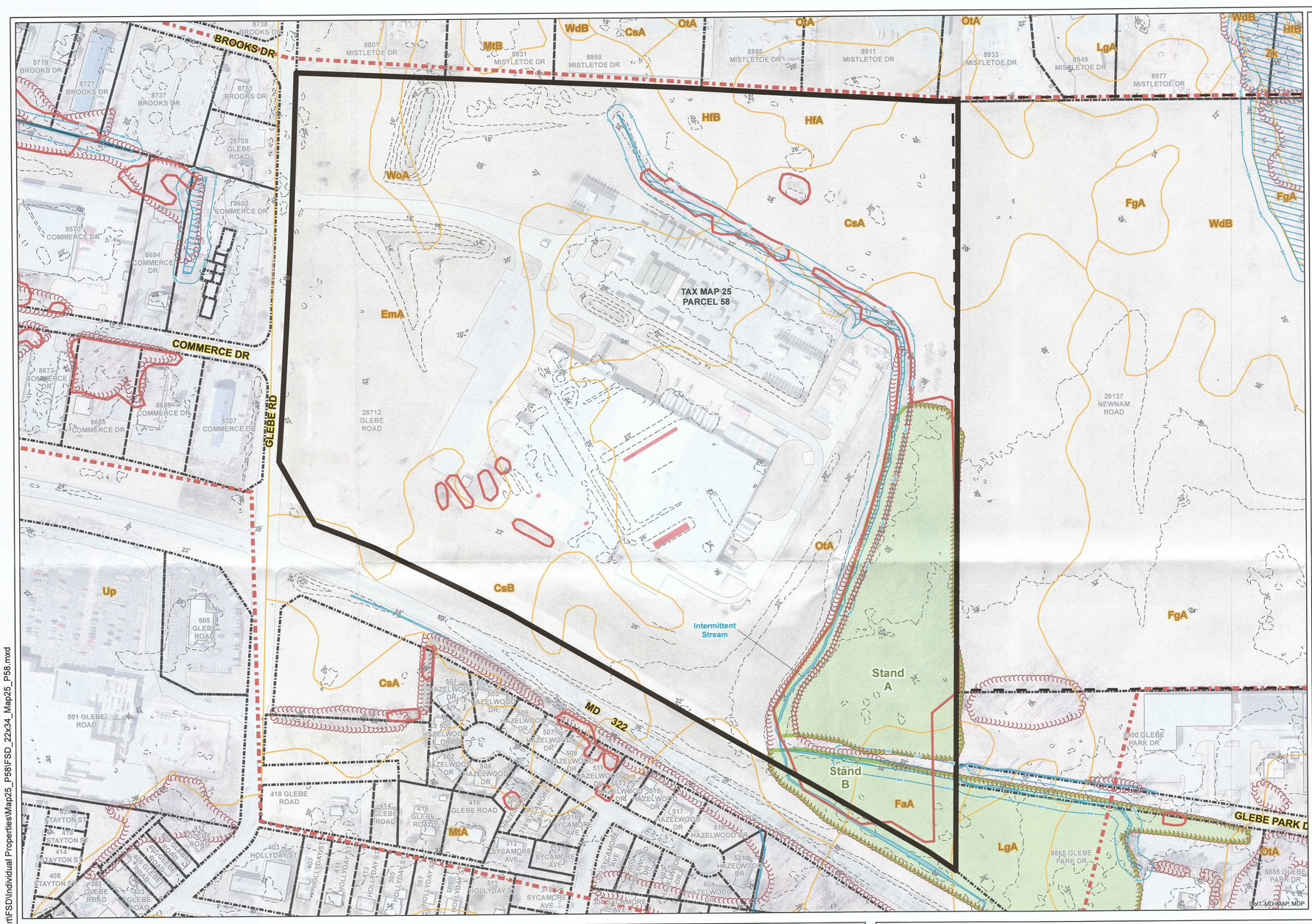
Dear Applicant:

Thank you for submitting the revised Forest Stand Delineations dated 8/29/16. The **Town of Easton hereby approves these plans** as submitted. Please mail hard copies of the signed plans as only one copy was provided to the Town. Approved plans for your use are enclosed with this letter.

Please contact me if you have any questions concerning this matter.

Sincerely,

Brett C. Ewing, AICP
Current Planner/ GIS Analyst



Stand Notes

Stand A is located on the northwest side of Easton Parkway on the northern portion of the parcel, bordered by airport property. The eastern boundary of the stand is bordered by a cleared maintenance access path. The streams southern end is bordered by an intermittent tributary to Glebe Creek. This early successional forest is densely populated with white pine, black locust, green ash, and red maple trees in the 2-5.9" dbh size class. Red oak trees in the 6-11.9" dbh size class dominate the canopy, with approximately 65 percent coverage. There is little to no understory and the herbaceous layer is mostly present along the existing stream, consisting of sedges, grasses, and common greenbrier.

Stand B is located east of Stand A, adjacent to the cleared maintenance access path, and its western end bound by Easton Parkway. This mid-successional forest is dominated by chestnut oak in the 12- 19.9" dbh size class, with co-dominant species including southern red oak, sweetgum, white oak, and slippery elm, ranging from 8 to 14 inches dbh. Canopy coverage is approximately 85 percent. Common understory species include sweetgum, elm, greenbrier, and blackberry. Japanese honeysuckle dominates the herbaceous layer, and invasive species coverage is approximately 20 percent. There are a few standing dead trees within the stand, and some trees have been cut. There were no specimen trees present.

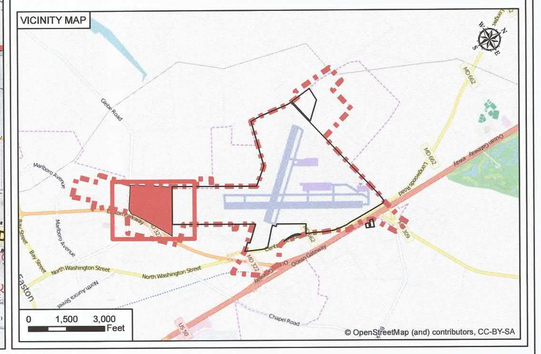
Natural Resources Within Parcel

Resource	
Forest Stand A	5.74 Acres
Forest Stand B	1.47 Acres
Streams (Perennial & Intermittent)	~ 625 Linear Feet
Emergent Wetlands	0.51 Acres
Forested/Scrub-Shrub Wetlands	0.09 Acres
Wetland Buffer	2.33 Acres

Soils Table

Map Symbol	Map Unit Name	% of Study Area
CsA	Craigsville cobbly fine sandy loam, very stony, 0-3% slopes	14
CsB	Craigsville cobbly fine sandy loam, very stony, 3-8% slopes	11
EmA	Elkton silt loam, 0-2% slopes	30
FaA	Fallsington sandy loam, 0-2% slopes	3
HfA	Hambrook-Sassafras complex, 0-2% slopes	1
HfB	Hazleton very cobbly sandy loam, very rubbly, 3-8% slopes	2
LgA	Lenni loam, 0-2% slopes	<1
MtA	Mattapex silt loam, 0-2% slopes	<1
OtA	Othello silt loam, 0-2% slopes	38
WoA	Woodstown sandy loam, 0-2% slopes	1

VICINITY MAP



Feet
0 125 250 500

Specimen Tree
Treeline
Forest Stand
>25% Slopes
2-Ft Contours
USGS NHD Stream Line
Soil Boundary
Delineated Streams
Delineated Wetlands
25ft Wetland Buffer
Floodplain
FAA PART 77 Obstruction Removal
DNR Potential FIDS Habitat
Property Boundary
Airport Property Boundary Line
Study Area Boundary

General Notes:

1. The property area is 58.38 acres.
2. Jurisdictional Determination of Waters of the U.S., including wetlands, was completed by MDE & USACE in April 2016.
3. Basemapping for the FSD is provided by the MD IMAP GIS data portal.
4. North American Datum 1983, Maryland State Plane Projection (US Feet)
5. Tax and property data is by Maryland Property View online via the Maryland Department of Planning and Department of Assessments & Taxation

EASTON/NEWNAM FIELD AIRPORT
EASTON, MARYLAND

AECOM

Town of Easton Planning and Zoning		Signature of Qualified Professional	
	9/1/16	Joanna Hiebler	8/26/2016
Name	Date	Joanna Hiebler, AECOM	Date

TAX MAP 25, PARCEL 58
FOREST STAND DELINEATION
TOWN OF EASTON, MD
JUNE 9, 2016

EXHIBIT
1

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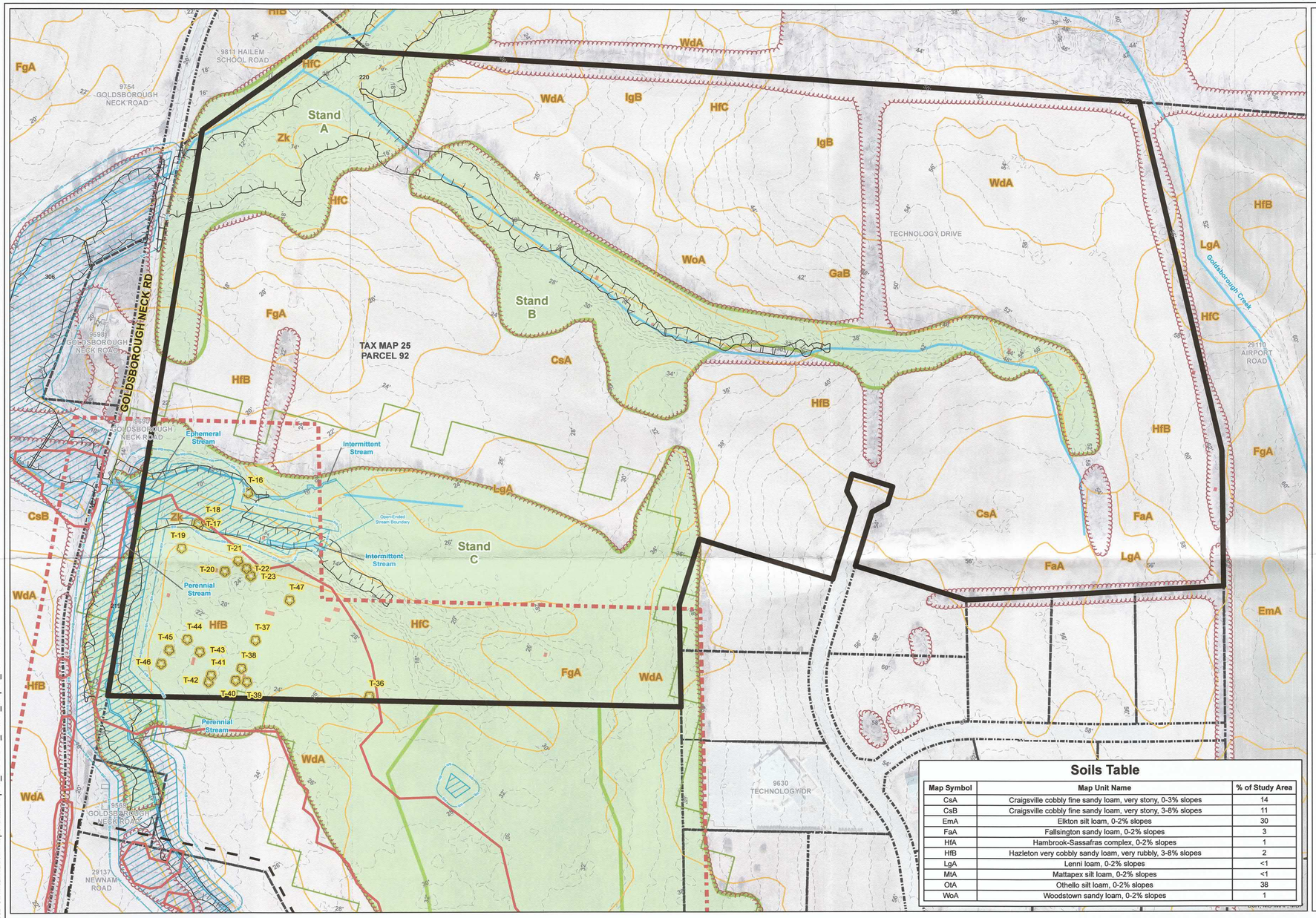
AUG 29 2016
TOWN OF EASTON

Document Path: O:\GIS\Data\Projects\ESN Airport\FSD\Individual Properties\Map25_P58\FSD_22x34_Map25_P58.mxd



Stand Notes

Stands A and B are mid-successional riparian deciduous forests located east of Goldsborough Neck Road and function as a riparian buffer to Goldsborough Creek and its unnamed tributary. Dominant canopy species include sweetgum, red maple, and tulip poplar in the 12-29.9" dbh size class, with a canopy coverage approximately 75 percent. Co-dominant species include hickory and southern red oak. Common understory includes greenbrier and tree-of-heaven, with Japanese honeysuckle and invasive vines dominating the forest edges.

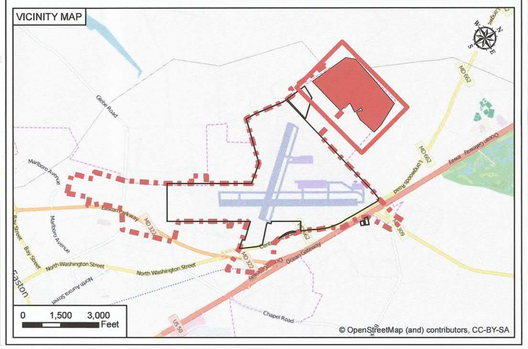
Stand C is located on the southern portion of the parcel, and again encompassing tributaries and wetlands contributing to Goldsborough Creek. The dominant tree species present is tulip poplar in the 20-29.9" dbh size class. Co-dominant species include American beech, sweetgum, green ash, red maple, and hickory in the 12-19.9" dbh size class. Canopy coverage is approximately 95 percent. A sparse sapling layer of ironwood and American beech is present, and little to no shrub layer. Woody debris is present mostly within the palustrine forested wetland located at the northwestern end of the stand, as is a denser herbaceous layer consisting of lizard tail and false nettle. Invasive species coverage is less than 5 percent.

Natural Resources Within Parcel*

Resource	
Forest Stand A	5.99 Acres
Forest Stand B	9.03 Acres
Forest Stand C	22.97 Acres
Specimen Tree (T-16)	Tulip Poplar 39"
Specimen Tree (T-17)	Tulip Poplar 66"
Specimen Tree (T-18)	Tulip Poplar 31"
Specimen Tree (T-19)	Tulip Poplar 35"
Specimen Tree (T-20)	Tulip Poplar 35"
Specimen Tree (T-21)	Tulip Poplar 41"
Specimen Tree (T-22)	Tulip Poplar 36"
Specimen Tree (T-23)	Tulip Poplar 33"
Specimen Tree (T-36)	Southern Red Oak 36"
Specimen Tree (T-37)	Tulip Poplar 31"
Specimen Tree (T-38)	Tulip Poplar 35"
Specimen Tree (T-39)	Tulip Poplar 31"
Specimen Tree (T-40)	Scarlet Oak 30"
Specimen Tree (T-41)	Tulip Poplar 33"
Specimen Tree (T-42)	Scarlet Oak 31"
Specimen Tree (T-43)	Tulip Poplar 31"
Specimen Tree (T-44)	Scarlet Oak 36"
Specimen Tree (T-45)	Tulip Poplar 31"
Specimen Tree (T-46)	Scarlet Oak 38"
Specimen Tree (T-47)	Tulip Poplar 46"
Streams (Perennial & Intermittent)	~ 850 Linear Feet
Forested/Scrub-Shrub Wetlands	2.01 Acres
Wetland Buffer	2.33 Acres
Floodplain	6.00 Acres

*Note, resource data only pertains to areas surveyed within obstruction removal areas

VICINITY MAP



Soils Table

Map Symbol	Map Unit Name	% of Study Area
CsA	Craigsville cobbly fine sandy loam, very stony, 0-3% slopes	14
CsB	Craigsville cobbly fine sandy loam, very stony, 3-8% slopes	11
EmA	Elkton silt loam, 0-2% slopes	30
FaA	Fallsington sandy loam, 0-2% slopes	3
HfA	Hambrook-Sassafras complex, 0-2% slopes	1
HfB	Hazleton very cobbly sandy loam, very rubbly, 3-8% slopes	2
LgA	Lenni loam, 0-2% slopes	<1
MtA	Mattapex silt loam, 0-2% slopes	<1
OtA	Othello silt loam, 0-2% slopes	38
WoA	Woodstown sandy loam, 0-2% slopes	1

Feet
0 150 300 600

N W E S

Specimen Tree
Treeline
Forest Stand
>25% Slopes
2-Ft Contours
USGS NHD Stream Line
CsA Soil Boundary
Delineated Streams
Delineated Wetlands
25ft Wetland Buffer
Floodplain
FAA PART 77 Obstruction Removal
DNR Potential FIDS Habitat
Property Boundary
Airport Property Boundary Line
Study Area Boundary

General Notes:

1. The property area is 106.33 acres.
2. Jurisdictional Determination of Waters of the U.S., including wetlands, was completed by MDE & USACE in April 2016.
3. Basemapping for the FSD is provided by the MD IMAP GIS data portal.
4. North American Datum 1983, Maryland State Plane Projection (US Feet)
5. Tax and property data is by Maryland Property View online via the Maryland Department of Planning and Department of Assessments & Taxation

THE GREAT SEAL OF TALBOT COUNTY MARYLAND

EASTON/NEWNAM FIELD AIRPORT
EASTON, MARYLAND

AECOM

Town of Easton Planning and Zoning	Signature of Qualified Professional
9/1/16	8/26/2016
Name Date	Joanna Hiebler, AECOM Date

TAX MAP 25, PARCEL 92
FOREST STAND DELINEATION
TOWN OF EASTON, MD
JUNE 9, 2016

EXHIBIT
1

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AUG 29 2016
TOWN OF EASTON

Document Path: O:\GIS\Data\Projects\ESN Airport\FSD\Individual Properties\Map25_P92\FSD_22x34_Map25_P92.mxd

Stand Notes

Stand A is located at the southernmost portion of the subject property, which contains a large forested area largely bounded by Glebe Creek to the north and Route 50 and Centreville Road to the east and west, respectively. A large palustrine forested wetland is located within this stand. Dominant species include swamp white oak and pin oak in the 12-19.9" dbh size class with co-dominant species including green ash, red maple, and Virginia pine ranging from 8 to 14 inches dbh. Canopy coverage is approximately 90 percent. Some woody debris is present, and invasive species coverage is less than 10 percent.

Stand B is located north of the existing wetland and a tributary to Glebe Creek. This stand is a younger denser forest with dominant and co-dominant species in the canopy including American beech, red maple, and southern red oak, mostly within the 6- 11.9" dbh size class. Some loblolly pine is also present. The majority of the trees within the stand are within the 2-5.9" dbh size class. Canopy coverage is approximately 85 percent. The understory is dense with common greenbrier and scattered red cedar trees. The herbaceous coverage is light, and consisting largely of Japanese honeysuckle.

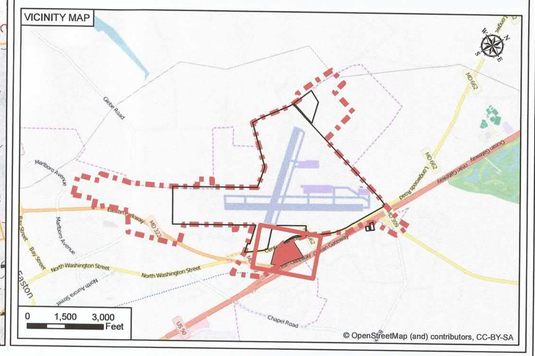
Natural Resources Within Parcel

Resource	
Forest Stand A	2.77 Acres
Forest Stand B	14.55 Acres
Streams (Perennial & Intermittent)*	~185 Linear Feet
Forested/Scrub-Shrub Wetlands	1.00 Acres
Wetland Buffer	0.40 Acres

*Note: Streams were only surveyed within the study area boundary.

Soils Table

Map Symbol	Map Unit Name	% of Study Area
FaA	Fallsington sandy loam, 0-2% slopes	6
FgA	Fallsington loam, 0-2% slopes	77
LgA	Lenni loam, 0-2% slopes	5
MtB	Mattapex silt loam, 2-5% slopes	4
WdB	Woodstown sandy loam, 2-5% slopes	7



Feet
0 100 200 400

EASTON/NEWNAM FIELD AIRPORT
EASTON, MARYLAND

AECOM

- Specimen Tree
- Treeline
- Forest Stand
- >25% Slopes
- 2-Ft Contours
- USGS NHD Stream Line
- Soil Boundary
- Delineated Streams
- Delineated Wetlands
- 25ft Wetland Buffer
- Floodplain
- FAA PART 77 Obstruction Removal
- DNR Potential FIDS Habitat
- Property Boundary
- Airport Property Boundary Line
- Study Area Boundary

General Notes:

1. The property area is 17.87 acres.
2. Jurisdictional Determination of Waters of the U.S., including wetlands, was completed by MDE & USACE in April 2016.
3. Basemapping for the FSD is provided by the MD IMAP GIS data portal.
4. North American Datum 1983, Maryland State Plane Projection (US Feet)
5. Tax and property data is by Maryland Property View online via the Maryland Department of Planning and Department of Assessments & Taxation

Town of Easton Planning and Zoning	Signature of Qualified Professional	
9/1/16	8/26/2016	
Name	Joanna Hiebler, AECOM	Date

TAX MAP 25, PARCEL 140
FOREST STAND DELINEATION
TOWN OF EASTON, MD
JUNE 9, 2016

EXHIBIT
1

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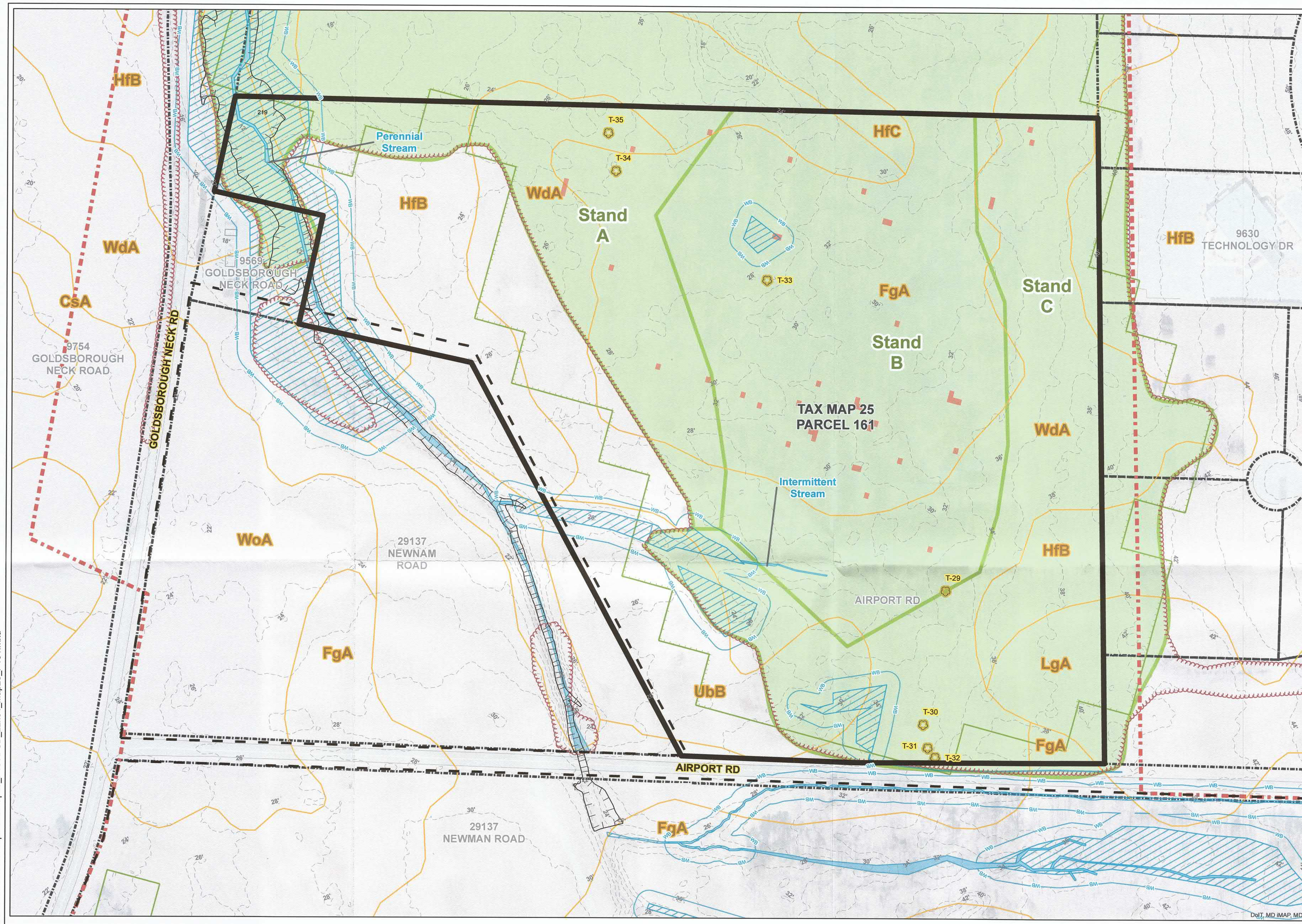
TOWN OF EASTON

Document Path: O:\GIS\Data\Projects\ESN Airport\FSD\Individual Properties\Map25_P140\FSD_22x34_Map25_P140.mxd



Stand Notes

Stand A is located on the northern portion of the parcel and encompasses tributaries and wetlands contributing to Goldsborough Creek. This mid to late successional forest is dominant with tulip poplar in the 12-19.9" dbh and 20-29.9" dbh size classes. Co-dominant species include American beech, sweetgum, green ash, red maple, and hickory in the 12-19.9" dbh size class. Canopy coverage is approximately 95 percent. A sparse sapling layer of ironwood and American beech is present in the understory. Invasive species coverage is less than 5 percent.

Stand B is a mid to late successional forest located in the middle portion of the parcel. Loblolly pine in the 12-19.9" dbh and 20-29.9" dbh size classes are the dominant canopy. Co-dominant species present include American beech in the 6-11.9" dbh size class and several 2-5.9" size class. Canopy coverage is approximately 90 percent. The stand is largely open, with little to no shrub layer or herbaceous layer present. There are several standing dead trees within the stand, and invasive species coverage is less than 5 percent. A vernal pool is located in this forest stand.

Stand C is located south and east of Stand B, north of Airport Road. Dominant and co-dominant species include white oak, southern red oak, mockernut hickory, loblolly pine, and sweetgum in the 12-19.9" dbh and 20-29.9" dbh size class. American beech (2-5.9"dbh) are dominant in the understory. Little to no shrub layer is present, with Japanese honeysuckle and greenbrier dominating the herbaceous layer. Canopy coverage is approximately 90 percent. Palustrine forested wetland systems and one intermittent tributary to Goldsborough Creek are located within the western portion of the stand.

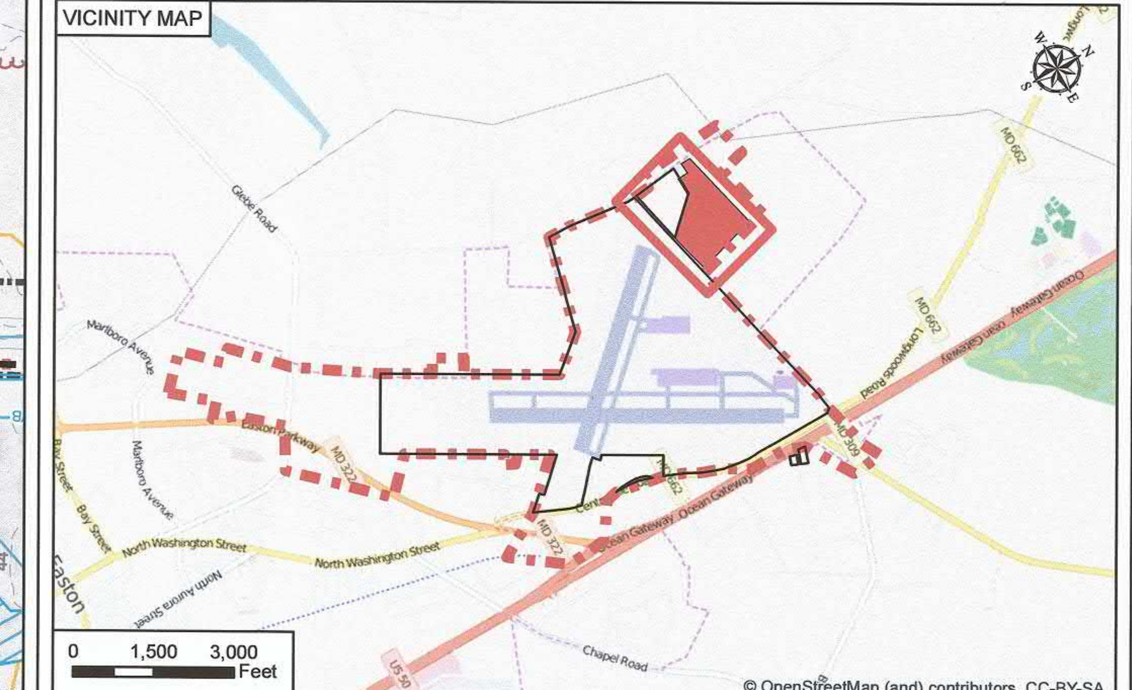
Natural Resources Within Parcel

Resource	
Forest Stand A	5.46 Acres
Forest Stand B	11.41 Acres
Forest Stand C	9.07 Acres
Specimen Tree (T-29)	Loblolly Pine 36"
Specimen Tree (T-30)	Southern Red Oak 30"
Specimen Tree (T-31)	Southern Red Oak 31"
Specimen Tree (T-32)	Loblolly Pine 30"
Specimen Tree (T-33)	Tulip Poplar 31"
Specimen Tree (T-34)	Red Oak 35"
Specimen Tree (T-35)	Scarlet Oak 34"
Vernal Pool	0.06 Acres
Emergent Wetlands	0.13 Acres
Forested/Scrub-Shrub Wetlands	1.50 Acres
Wetland Buffer	1.52 Acres
Floodplain	0.41 Acres

Soils Table

Map Symbol	Map Unit Name	% of Study Area
FgA	Fallsington loam, 0-2% slopes	33
HfB	Hazleton very cobbly sandy loam, very rubbly, 3-8% slopes	15
HfC	Hazleton very cobbly sandy loam, very rubbly, 8-15% slopes	3
LgA	Lenni loam, 0-2% slopes	3
UbB	Udorthents, borrow area, 0-5% slopes	10
WdA	Woodstown sandy loam, 0-2% slopes	35
Zk	Zekiah silt loam, frequently flooded	2

VICINITY MAP



Feet
0 100 200 400

Specimen Tree
Treeline
Forest Stand
>25% Slopes
2-Ft Contours
USGS NHD Stream Line
Soil Boundary
Delineated Streams
Delineated Wetlands
25ft Wetland Buffer
Floodplain
FAA PART 77 Obstruction Removal
DNR Potential FIDS Habitat
Property Boundary
Airport Property Boundary Line
Study Area Boundary

General Notes:
1. The property area is 33.63 acres.
2. Jurisdictional Determination of Waters of the U.S., including wetlands, was completed by MDE & USACE in April 2016.
3. Basemapping for the FSD is provided by the MD IMAP GIS data portal.
4. North American Datum 1983, Maryland State Plane Projection (US Feet)
5. Tax and property data is by Maryland Property View online via the Maryland Department of Planning and Department of Assessments & Taxation

THE GREAT SEAL OF TALBOT COUNTY MARYLAND

EASTON/NEWNAM FIELD AIRPORT
EASTON, MARYLAND

AECOM

Town of Easton Planning and Zoning	Signature of Qualified Professional
[signature] 9/1/16	[signature] 8/26/2016
Name Date	Joanna Hiebler, AECOM Date

TAX MAP 25, PARCEL 161
FOREST STAND DELINEATION
TOWN OF EASTON, MD
JUNE 9, 2016

EXHIBIT 1

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AUG 29 2016
TOWN OF EASTON

Document Path: O:\GIS\Data\Projects\ESN Airport\FSD\Individual Properties\Map25_P161\FSD_22x34_Map25_P161.mxd

Stand Notes

The forest stand located at the subject property is a mid-successional forest dominated by pin oak, white oak, and southern red oak in the 12-19.9" dbh size class. Scattered Virginia pine is also present within the canopy. Co-dominant species include red maple and green ash ranging from 8 to 14 inches dbh. Canopy coverage is approximately 70 percent. The northern portion of the parcel consists of a palustrine forested wetland that extends beyond the property boundary and connects to a larger forest. Swamp white oak is dominant within the wetland. Little to no understory is present and herbaceous coverage is sparse, with Japanese honeysuckle dominating.

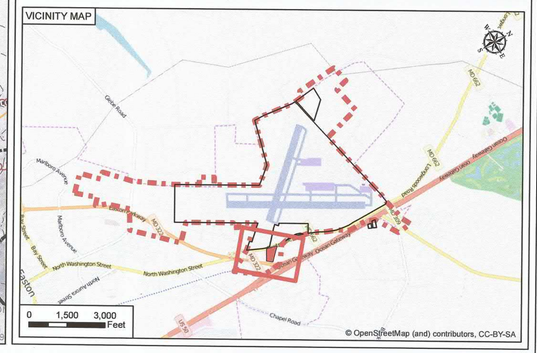
Natural Resources Within Parcel

Resource	
Forest Stand	1.36 Acres
Forested/Scrub-Shrub Wetlands	0.42 Acres
Wetland Buffer	0.25 Acres

Soils Table

Map Symbol	Map Unit Name	% of Study Area
FgA	Fallsington loam, 0-2% slopes	49
MtB	Mattapex silt loam, 2-5% slopes	51

VICINITY MAP



Feet
0 100 200 400

Specimen Tree
Treeline
Forest Stand
>25% Slopes
2-Ft Contours
USGS NHD Stream Line
Soil Boundary
Delineated Streams
Delineated Wetlands
25ft Wetland Buffer
Floodplain
FAA PART 77 Obstruction Removal
DNR Potential FIDS Habitat
Property Boundary
Airport Property Boundary Line
Study Area Boundary

General Notes:

1. The property area is 4.16 acres.
2. Jurisdictional Determination of Waters of the U.S., including wetlands, was completed by MDE & USACE in April 2016.
3. Basemapping for the FSD is provided by the MD IMAP GIS data portal.
4. North American Datum 1983, Maryland State Plane Projection (US Feet)
5. Tax and property data is by Maryland Property View online via the Maryland Department of Planning and Department of Assessments & Taxation

EASTON/NEWNAM FIELD AIRPORT
EASTON, MARYLAND

AECOM

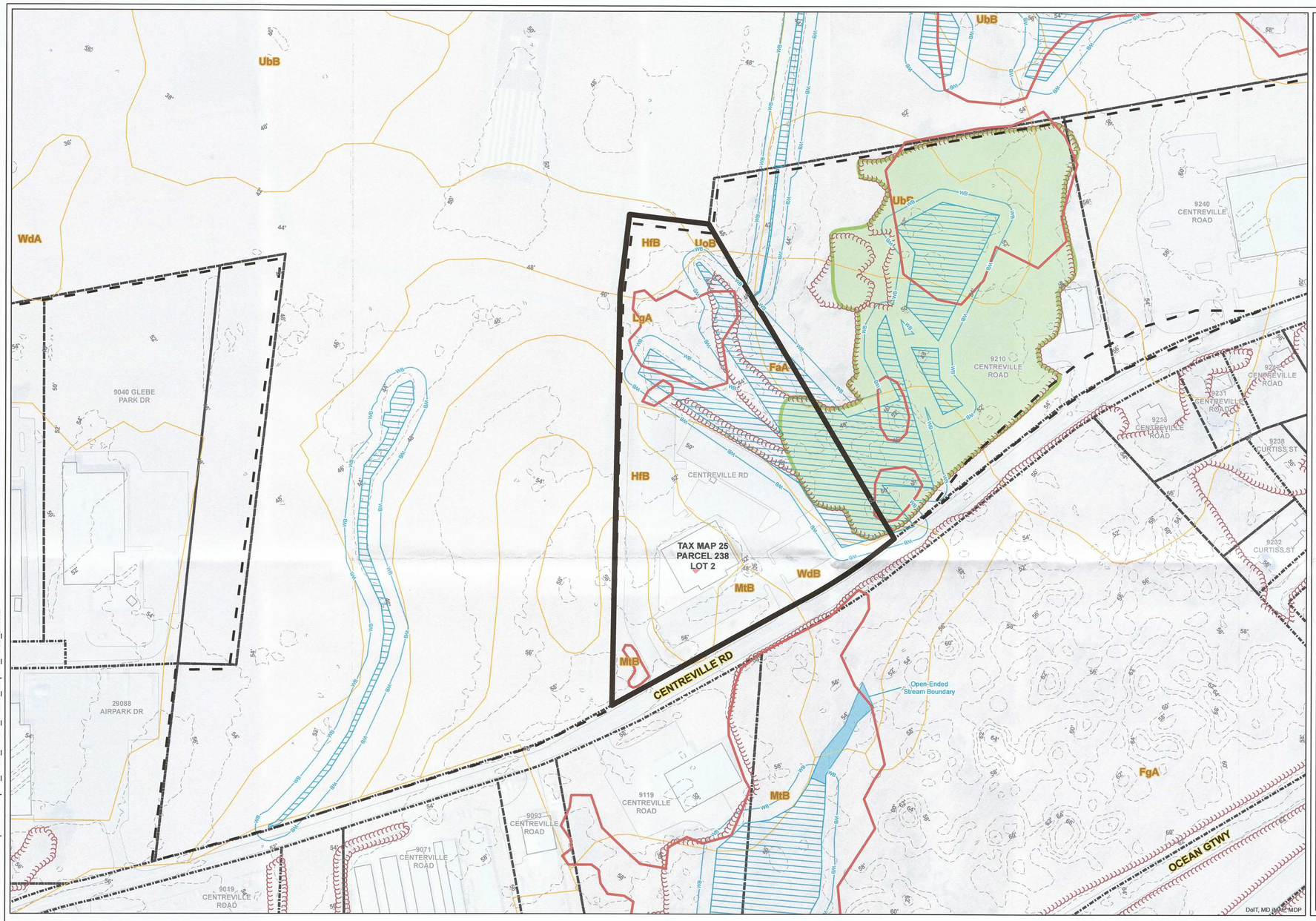
Town of Easton Planning and Zoning	Signature of Qualified Professional
9/1/16	8/26/2016
Name / Date	Joanna Hiebler, AECOM / Date

TAX MAP 25, PARCEL 238, LOT 1
FOREST STAND DELINEATION
TOWN OF EASTON, MD
JUNE 9, 2016

EXHIBIT
1

RECEIVED
AUG 29 2016
TOWN OF EASTON

Document Path: O:\GIS\Data\Projects\ESN Airport\FSD\Individual Properties\Map25_P238_1\FSD_22x34_Map25_P238_1.mxd



Stand Notes

A large portion of the property is dominated by scrub/shrub wetland, with only scattered black willow, cedar, and pear trees. The eastern portion of the parcel is dominated by forested wetland. This early to mid-successional mixed hardwood wetland forest is dominated by red maple in the 6-11.9" dbh size class and American sycamore in the 12-19.9" dbh size class. Surrounding the wetland is dense forest dominated by red maples ranging from 4 to 10" dbh and loblolly pines 10 to 14" dbh, with scattered red cedars, American holly, and American beech saplings. There is minimal shrub and herbaceous layer. The herbaceous layer is dominated by Japanese honeysuckle and wild onion. Canopy coverage is 80 percent and invasive coverage is 10 percent.

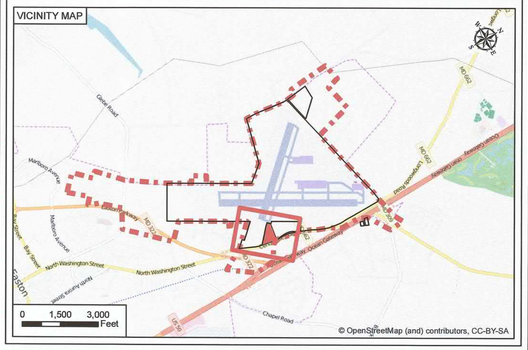
Natural Resources Within Airport Property

Resource	
Forest Stand	0.54 Acres
Forested/Scrub-Shrub Wetlands	1.50 Acres
Wetland Buffer	0.85 Acres

Soils Table

Map Symbol	Map Unit Name	% of Study Area
FaA	Fallsington sandy loam, 0-2% slopes	2
HfB	Hazleton very cobbly sandy loam, 3-8% slopes, very rubbly	24
LgA	Lenni loam, 0-2% slopes	37
MtB	Mattapex silt loam, 2-5% slopes	13
UoB	Udorthents, loamy, 0-5% slopes	<1
WdB	Woodstown sandy loam, 2-5% slopes	22

VICINITY MAP



Feet
0 100 200 400

Specimen Tree
Treeline
Forest Stand
>25% Slopes
2-Ft Contours
USGS NHD Stream Line
CsA Soil Boundary
Delineated Streams
Delineated Wetlands
25ft Wetland Buffer
Floodplain
FAA PART 77 Obstruction Removal
DNR Potential FIDS Habitat
Property Boundary
Airport Property Boundary Line
Study Area Boundary

General Notes:

1. The property area is 6.71 acres.
2. Jurisdictional Determination of Waters of the U.S., including wetlands, was completed by MDE & USACE in April 2016.
3. Basemapping for the FSD is provided by the MD IMAP GIS data portal.
4. North American Datum 1983, Maryland State Plane Projection (US Feet)
5. Tax and property data is by Maryland Property View online via the Maryland Department of Planning and Department of Assessments & Taxation

EASTON/NEWNAM FIELD AIRPORT
EASTON, MARYLAND

AECOM

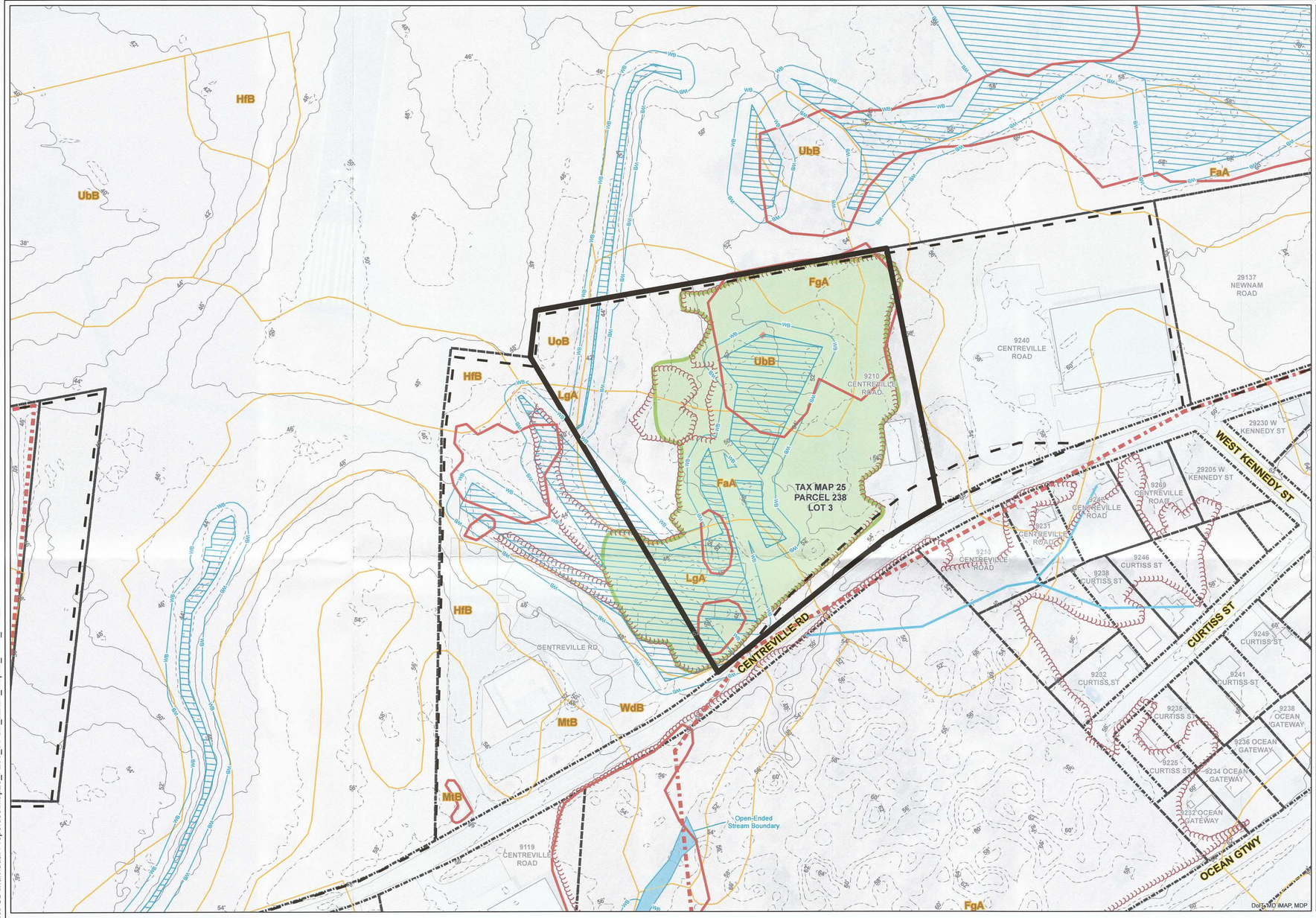
Town of Easton Planning and Zoning	Signature of Qualified Professional	
9/1/16	8/26/2016	
Name	Joanna Hiebler, AECOM	Date

TAX MAP 25, PARCEL 238, LOT 2
FOREST STAND DELINEATION
TOWN OF EASTON, MD
JUNE 9, 2016

EXHIBIT
1

RECEIVED
AUG 29 2016
TOWN OF EASTON

Document Path: O:\GIS\Data\Projects\ESN Airport\FSD\Individual Properties\Map25_P238_2\FSD_22x34_Map25_P238_2.mxd



Stand Notes

The early to mid-successional mixed hardwood forest includes a large forested wetland in the middle of the parcel. Dominant trees in the wetland include red maple in the 6-11.9" dbh size class and American sycamore in the 12-19.9" dbh size class. Surrounding the wetland is dense forest dominated by red maples ranging from 4 to 10" dbh and loblolly pines 10 to 14" dbh, with scattered red cedars, American holly, and American beech saplings. There is minimal shrub and herbaceous layer. The herbaceous layer is dominated by Japanese honeysuckle and wild onion. Canopy coverage is 80 percent and invasive coverage is 10 percent.

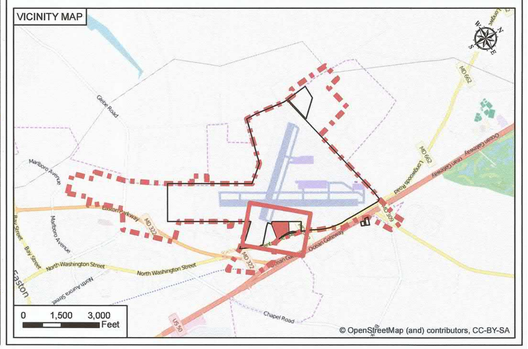
Natural Resources Within Parcel

Resource	
Forest Stand	5.58 Acres
Emergent Wetlands	<0.01 Acres
Forested/Scrub-Shrub Wetlands	1.49 Acres
Wetland Buffer	1.51 Acres

Soils Table

Map Symbol	Map Unit Name	% of Study Area
FaA	Fallsington sandy loam, 0-2% slopes	48
FgA	Fallsington loam, 0-2% slopes	4
LgA	Lenni loam, 0-2% slopes	14
UbB	Udorthents, borrow area, 0-5% slopes	29
UoB	Udorthents, loamy, 0-5% slopes	4
WdB	Woodstown sandy loam, 2-5% slopes	<1

VICINITY MAP



Feet
0 100 200 400

Specimen Tree
Treeline
Forest Stand
>25% Slopes
2-Ft Contours
USGS NHD Stream Line
Soil Boundary
Delineated Streams
Delineated Wetlands
25ft Wetland Buffer
Floodplain
FAA PART 77 Obstruction Removal
DNR Potential FIDS Habitat
Property Boundary
Airport Property Boundary Line
Study Area Boundary

General Notes:

1. The property area is 8.59 acres.
2. Jurisdictional Determination of Waters of the U.S., including wetlands, was completed by MDE & USACE in April 2016.
3. Basemapping for the FSD is provided by the MD IMAP GIS data portal.
4. North American Datum 1983, Maryland State Plane Projection (US Feet)
5. Tax and property data is by Maryland Property View online via the Maryland Department of Planning and Department of Assessments & Taxation

EASTON/NEWNAM FIELD AIRPORT
EASTON, MARYLAND

AECOM

Town of Easton Planning and Zoning	Signature of Qualified Professional
9/1/16	8/26/2016
Name / Date	Joanna Hiebler, AECOM / Date

TAX MAP 25, PARCEL 238, LOT 3
FOREST STAND DELINEATION
TOWN OF EASTON, MD
JUNE 9, 2016

EXHIBIT
1

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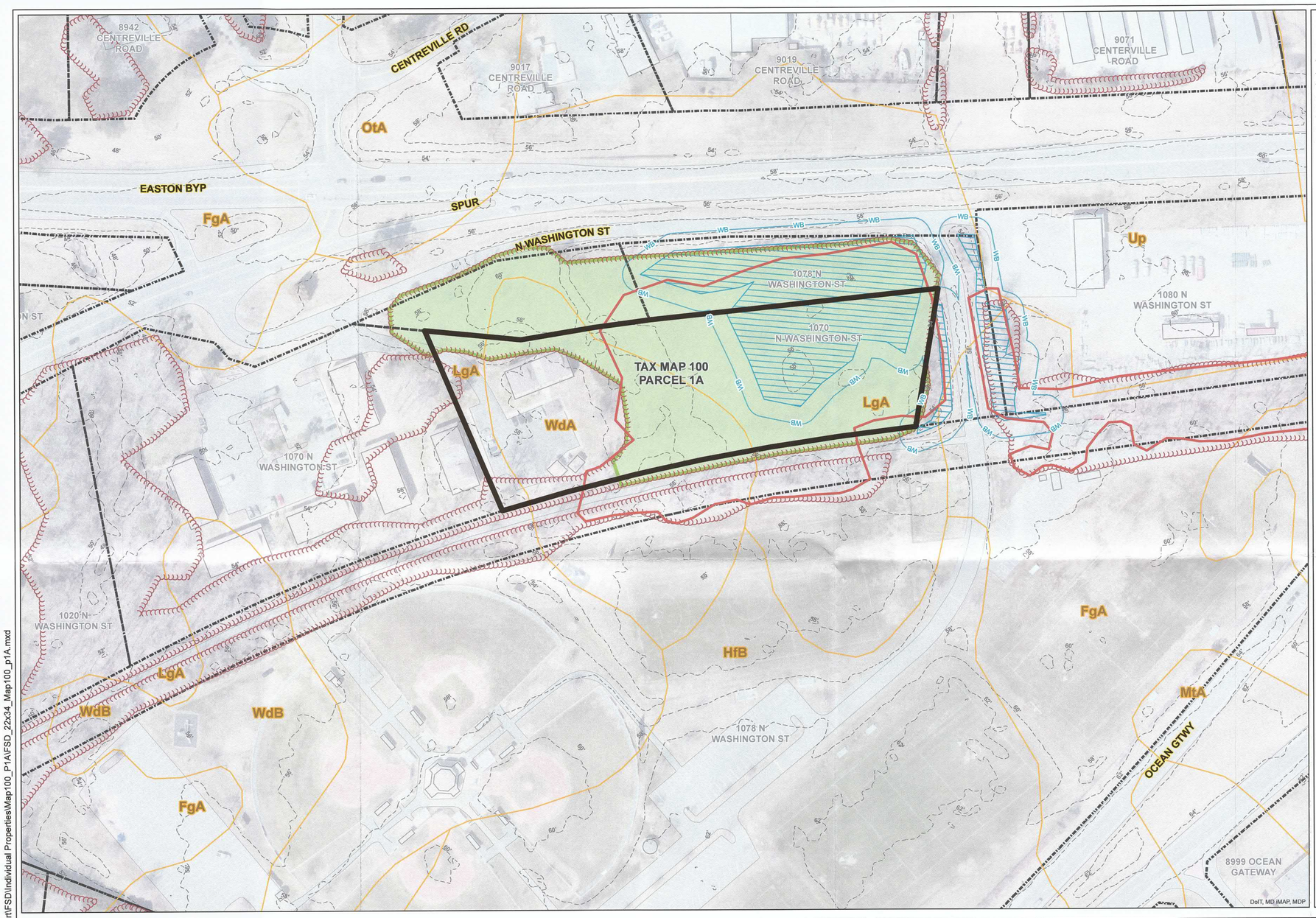
TOWN OF EASTON

Document Path: O:\GIS\Data\Projects\ESN Airport\FSD\Individual Properties\Map25_P238_3\FSD_22x34_Map25_P238_3.mxd



Stand Notes

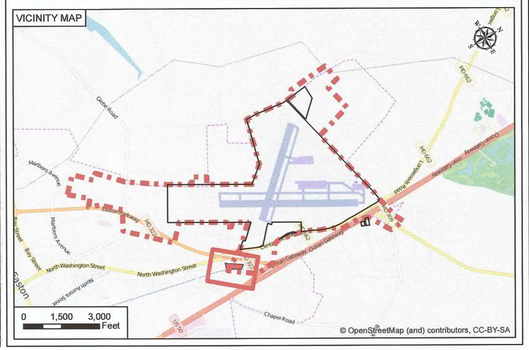
The forest stand located on the subject property is a mid-successional mixed hardwood forest comprised of red maple, sweet gum, white oak, and willow oak ranging from 10" to 24" dbh. Canopy coverage is approximately 90 percent. Red maple, red oak, sweetgum, and black gum comprise the dominant stocking in the sapling layer. This is a low lying forested area, with a large portion of the stand containing a palustrine forested wetland. The shrub layer is comprised of viburnum, multiflora rose, greenbrier, and Japanese honeysuckle on the forest floor. The understory is dense and has approximately 15 percent invasive coverage.

Natural Resources Within Parcel

Resource	
Forest Stand	2.22 Acres
Forested/Scrub-Shrub Wetlands	0.58 Acres
Wetland Buffer	0.31 Acres

Soils Table

Map Symbol	Map Unit Name	% of Study Area
LgA	Lenni loam, 0-2% slopes	57
WdA	Woodstown sandy loam, 0-2% slopes	43



Feet
0 75 150 300

Specimen Tree
Treeline
Forest Stand
>25% Slopes
2-Ft Contours
USGS NHD Stream Line
Soil Boundary
Delineated Streams
Delineated Wetlands
25ft Wetland Buffer
Floodplain
FAA PART 77 Obstruction Removal
DNR Potential FIDS Habitat
Property Boundary
Airport Property Boundary Line
Study Area Boundary

General Notes:

1. The property area is 3.21 acres.
2. Jurisdictional Determination of Waters of the U.S., including wetlands, was completed by MDE & USACE in April 2016.
3. Basemapping for the FSD is provided by the MD IMAP GIS data portal.
4. North American Datum 1983, Maryland State Plane Projection (US Feet)
5. Tax and property data is by Maryland Property View online via the Maryland Department of Planning and Department of Assessments & Taxation

EASTON/NEWNAM FIELD AIRPORT
EASTON, MARYLAND

AECOM

Town of Easton Planning and Zoning	Signature of Qualified Professional	
9/1/16	8/26/2016	
Name Date	Joanna Hiebler, AECOM Date	

TAX MAP 100, PARCEL 1A
FOREST STAND DELINEATION
TOWN OF EASTON, MD
JUNE 9, 2016

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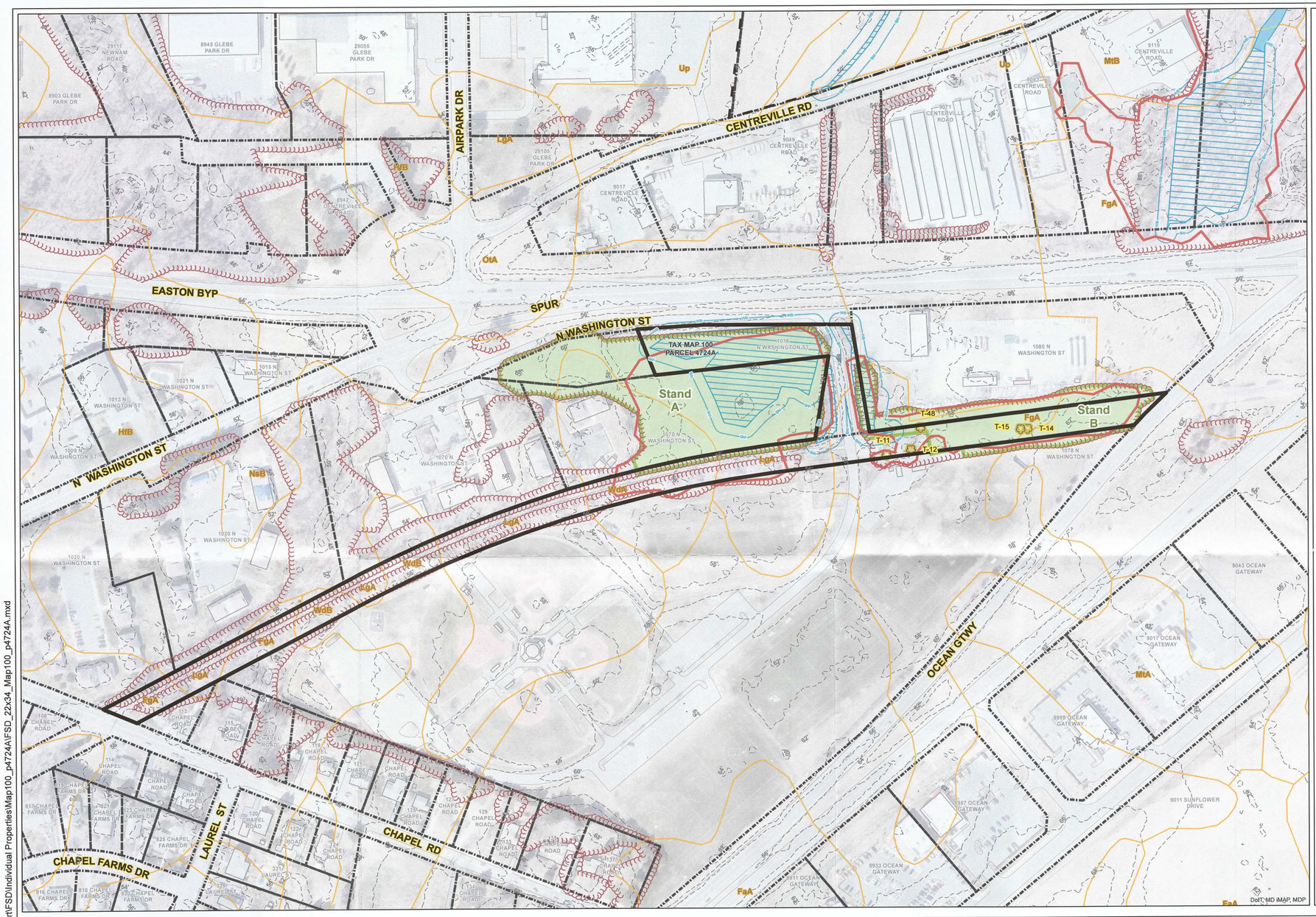


Stand Notes

Stand A is located within the forested area between the Easton Rails-To-Trails path and North Washington Street, south of the entrance to the park. The stand is primarily palustrine forested wetland, with sapling and pole pin oak, white pine, and red maple in the 2-5.9" dbh and 6-11.9" dbh size classes along the westernmost portion of the stand. Bradford pear is dominant along the forest edge. The dominant and co-dominant species comprising the forest stand are red maple, pin oak, sweetgum, red oak, and white oak in the 6-11.9" dbh and 12-19.9" dbh size classes, and black gum and black cherry in the 2-5.9" dbh size class. Canopy coverage is approximately 80 percent. There are several snags present and invasive species coverage is approximately 15 percent.

Stand B is a mid-successional deciduous forest located north of the park entrance in a linear area between the park property ball fields and a commercial facility. The center of this area appears to have been a cleared that is now reverting. There are several specimen trees located within this forest stand and dominant species include white oak and red oak in the 12-19.9" dbh size class and co-dominant species include sweetgum, white pine, red maple, and mockernut hickory in the 6-11.9" dbh size class. Saplings include black cherry and red maple. Common greenbrier, Japanese honeysuckle, multiflora rose, and wild onion are all present in the understory, with approximately 15 percent of the stand including invasive species. Due to the more open canopy through the center of the stand, the coverage ranges from approximately 25 to 60 percent.

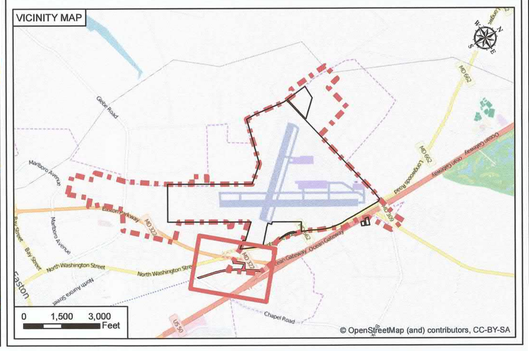
Natural Resources Within Parcel

Resource	
Forest Stand A	0.92 Acres
Forest Stand B	0.88 Acres
Specimen Tree (T-11)	Sweet Gum 38"
Specimen Tree (T-12)	Red Oak 43"
Specimen Tree (T-14)	Red Oak 35"
Specimen Tree (T-15)	Red Oak 40"
Specimen Tree (T-48)	Red Maple 34"
Emergent Wetlands	0.05 Acres
Forested/Scrub-Shrub Wetlands	0.76 Acres
Wetland Buffer	0.71 Acres

Soils Table

Map Symbol	Map Unit Name	% of Study Area
FgA	Fallsington loam, 0-2% slopes	27
HfB	Hazleton very cobbly sandy loam, very rubbly, 3-8% slopes	7
LgA	Lenni loam, 0-2% slopes	49
Up	Urban land	<1
WdA	Woodstown sandy loam, 0-2% slopes	9
WdB	Woodstown sandy loam, 2-5% slopes	8

VICINITY MAP



Feet
0 125 250 500

Specimen Tree
Treeline
Forest Stand
>25% Slopes
2-Ft Contours
USGS NHD Stream Line
Soil Boundary
Delineated Streams
Delineated Wetlands
25ft Wetland Buffer
Floodplain
FAA PART 77 Obstruction Removal
DNR Potential FIDS Habitat
Property Boundary
Airport Property Boundary Line
Study Area Boundary

General Notes:

1. The property area is 5.39 acres.
2. Jurisdictional Determination of Waters of the U.S., including wetlands, was completed by MDE & USACE in April 2016.
3. Basemapping for the FSD is provided by the MD IMAP GIS data portal.
4. North American Datum 1983, Maryland State Plane Projection (US Feet)
5. Tax and property data is by Maryland Property View online via the Maryland Department of Planning and Department of Assessments & Taxation

EASTON/NEWNAM FIELD AIRPORT
EASTON, MARYLAND

AECOM

Town of Easton Planning and Zoning		Signature of Qualified Professional	
	9/1/16	Joanna Hiebler	8/26/2016
Name	Date	Joanna Hiebler, AECOM	Date

TAX MAP 100, PARCEL 4724A
FOREST STAND DELINEATION
TOWN OF EASTON, MD
JUNE 9, 2016

EXHIBIT
2

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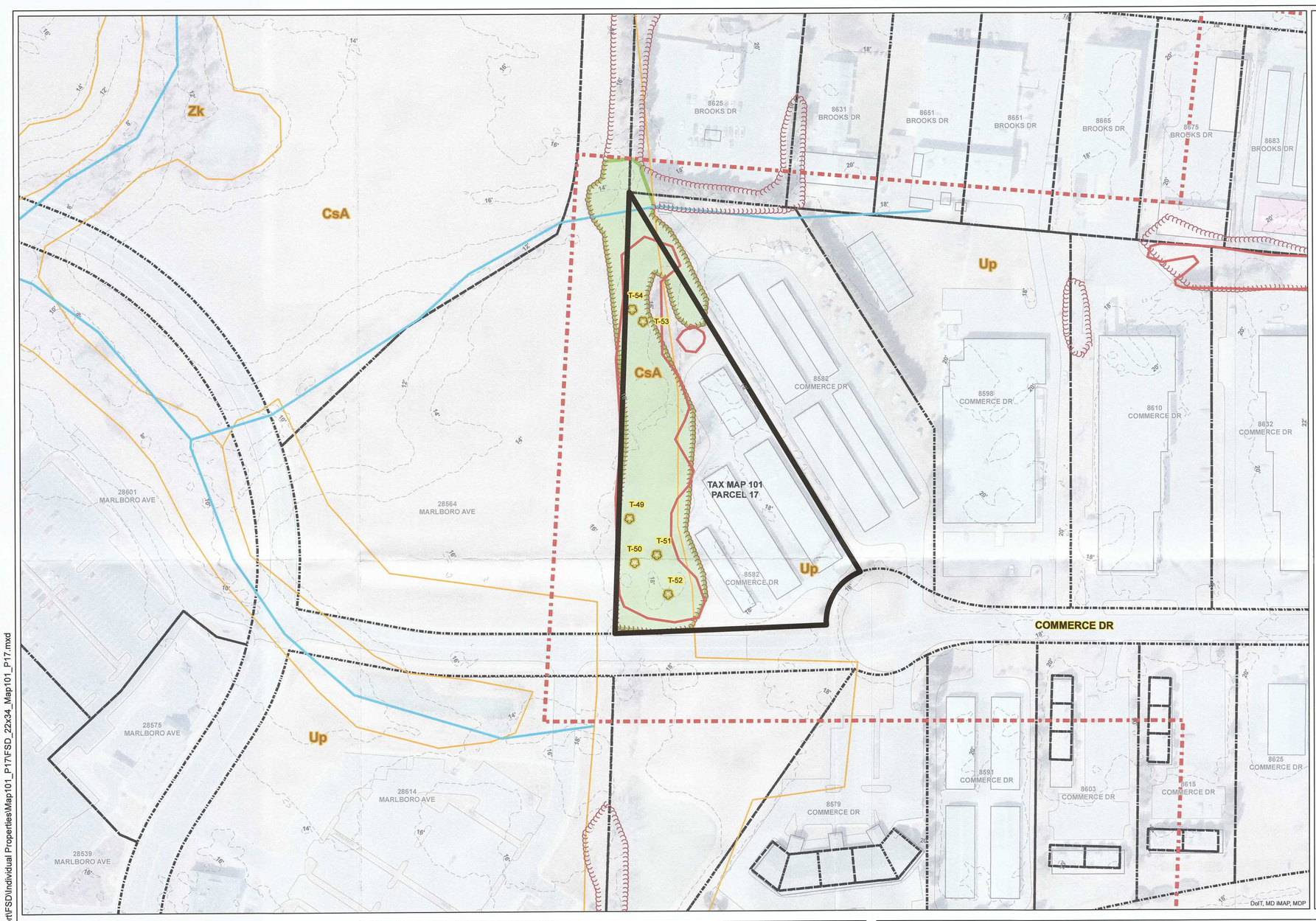
AUG 29 2016
TOWN OF EASTON

Document Path: O:\GIS\Data\Projects\ESN Airport\FSD\Individual Properties\Map100_p4724A\FSD_22x34_Map100_p4724A.mxd



Stand Notes

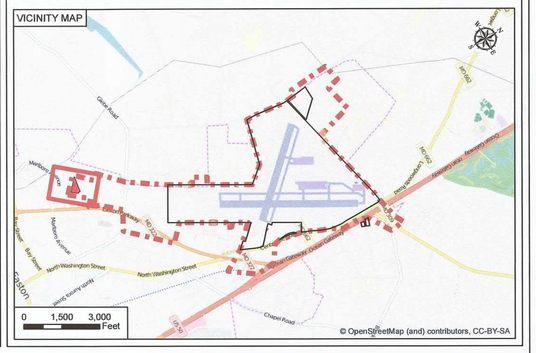
The mid to late successional forest is located along the southern edge of the subject property is dominated by southern red oak. Co-dominant species include sweetgum and southern red oak in the 12-19.9" dbh size class, and red maple in the 6-11.9" dbh size class. Canopy coverage is approximately 85 percent. This is a forest fragment surrounded by commercial development. There is evidence of oak galls on the mature trees and the understory is dense with common greenbrier. A small stormwater management pond is located in the northwestern portion of the stand.

Natural Resources Within Parcel

Resource	
Forest Stand	1.29 Acres
Specimen Tree (T-49)	Southern Red Oak 48"
Specimen Tree (T-50)	Southern Red Oak 38"
Specimen Tree (T-51)	Southern Red Oak 36"
Specimen Tree (T-52)	Southern Red Oak 41"
Specimen Tree (T-53)	Southern Red Oak 32"
Specimen Tree (T-54)	Southern Red Oak 36"

Soils Table

Map Symbol	Map Unit Name	% of Study Area
CsA	Craigsville cobbly fine sandy loam, 0-3% slopes, very stony	38
Up	Urban land	62



Feet
0 75 150 300

Specimen Tree
Treeline
Forest Stand
>25% Slopes
2-Ft Contours
USGS NHD Stream Line
Soil Boundary
Delineated Streams
Delineated Wetlands
25ft Wetland Buffer
Floodplain
FAA PART 77 Obstruction Removal
DNR Potential FIDS Habitat
Property Boundary
Airport Property Boundary Line
Study Area Boundary

General Notes:

1. The property area is 2.72 acres.
2. Jurisdictional Determination of Waters of the U.S., including wetlands, was completed by MDE & USACE in April 2016.
3. Basemapping for the FSD is provided by the MD IMAP GIS data portal.
4. North American Datum 1983, Maryland State Plane Projection (US Feet)
5. Tax and property data is by Maryland Property View online via the Maryland Department of Planning and Department of Assessments & Taxation

EASTON/NEWNAM FIELD AIRPORT
EASTON, MARYLAND

AECOM

Town of Easton Planning and Zoning	Signature of Qualified Professional
7/1/16	8/26/2016
Name Date	Joanna Hiebler, AECOM Date

TAX MAP 101, PARCEL 17
FOREST STAND DELINEATION
TOWN OF EASTON, MD
JUNE 9, 2016

EXHIBIT
1

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TOWN OF EASTON

Planning & Zoning Department
14 South Harrison Street
P.O. Box 520
Easton, Maryland 21601

Date: 2018-4-4
From: Sierra Crist
Subject: Forest Conservation Approval for Airport
To: Joanna Hiebler
CC: Jennifer Lutz

Thank you for submitting the forest conservation plans for Tax Map 25, Parcel 238 lot 1 and 3 and tax map 25, Parcel 161. These three plans were approved as submitted. Please proceed by submitting a fee-in-lieu for the reforestation to the Town of Easton in the amount of $41,905.

The FSD/FCP for the On-Airport obstruction removal was approved as submitted and is exempt from Forest Conservation pursuant to section 14 CFR Part 77.25 regarding the aviation obstructions as deemed hazardous by the FAA.

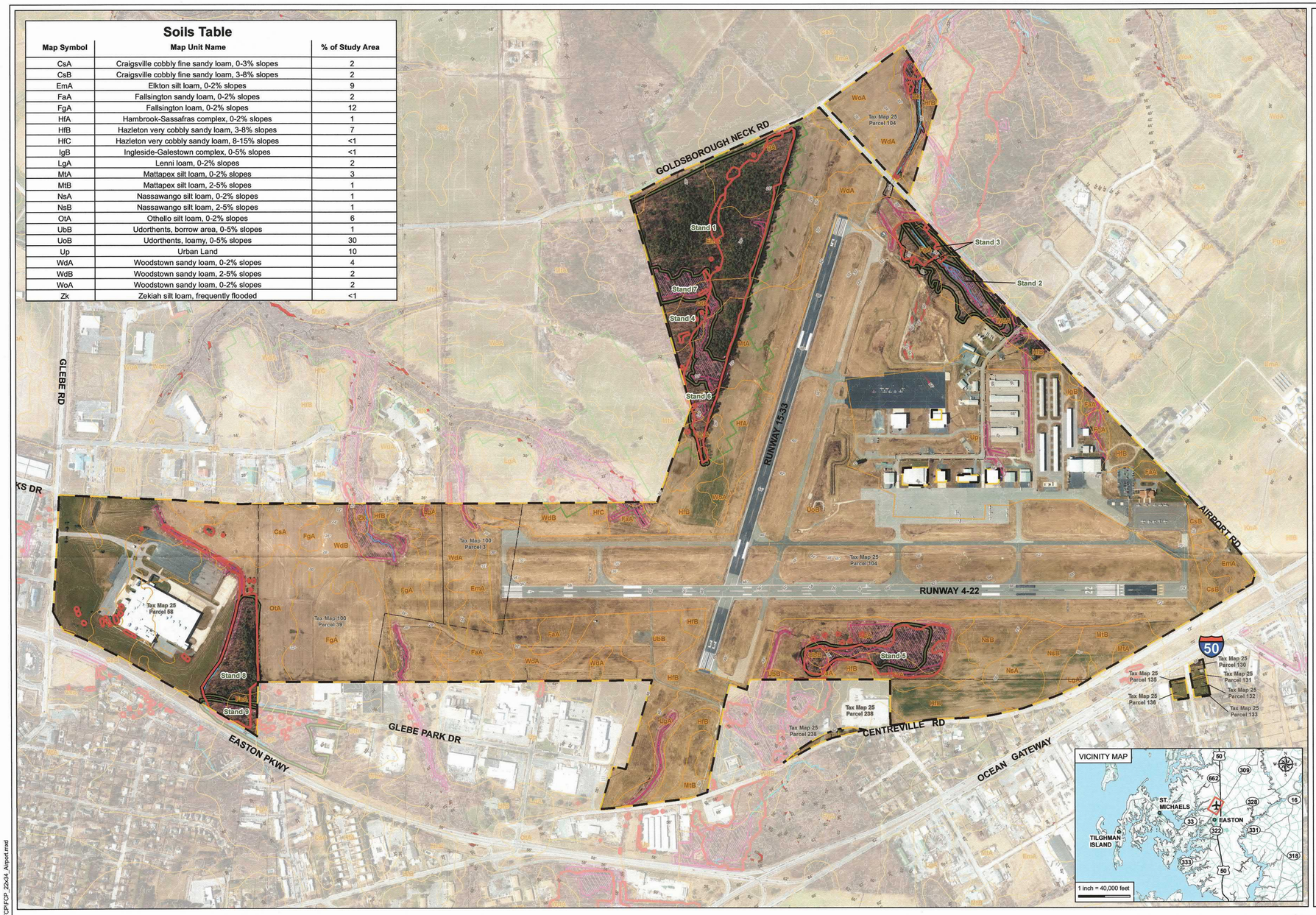
Additionally, please be advised than an update Forest Conservation ordinance was adopted by the Town on March 19 and will is effective April 8th, 2018. If you have any questions or concerns please don't hesitate to contact our office for any assistance.

Thank you,

Sierra A. Crist
Planner – GIS Analyst
Town of Easton
14 South Harrison Street
Easton, MD 21601
410-822-1943 ext. 134
scrist@eastonMD.gov

Soils Table

Map Symbol	Map Unit Name	% of Study Area
CsA	Craigsville cobbly fine sandy loam, 0-3% slopes	2
CsB	Craigsville cobbly fine sandy loam, 3-8% slopes	2
EmA	Elkton silt loam, 0-2% slopes	9
FaA	Fallsington sandy loam, 0-2% slopes	2
FgA	Fallsington loam, 0-2% slopes	12
HfA	Hambrook-Sassafras complex, 0-2% slopes	1
HfB	Hazleton very cobbly sandy loam, 3-8% slopes	7
HfC	Hazleton very cobbly sandy loam, 8-15% slopes	<1
IgB	Ingleside-Galestown complex, 0-5% slopes	<1
LgA	Lenni loam, 0-2% slopes	2
MtA	Mattapex silt loam, 0-2% slopes	3
MtB	Mattapex silt loam, 2-5% slopes	1
NsA	Nassawango silt loam, 0-2% slopes	1
NsB	Nassawango silt loam, 2-5% slopes	1
OtA	Othello silt loam, 0-2% slopes	6
UbB	Udorthents, borrow area, 0-5% slopes	1
UoB	Udorthents, loamy, 0-5% slopes	30
Up	Urban Land	10
WdA	Woodstown sandy loam, 0-2% slopes	4
WdB	Woodstown sandy loam, 2-5% slopes	2
WoA	Woodstown sandy loam, 0-2% slopes	2
Zk	Zekiah silt loam, frequently flooded	<1



Stand 1 is located within the largest portion of forested area present, on the south side of Runway 15-33. This mid-successional forest area is most similar to the basket oak-loblolly pine association. Dominant/co-dominant species are loblolly pine, red maple, sweetgum, northern red oak, southern red oak, white oak, willow oak, American beech, and Virginia pine. Size class of dominant species is 12-29.9" dbh and canopy coverage is greater than 90%. The understory is approximately 70% with common species including American holly, highbush blueberry, and blackgum. Very little herbaceous cover is present with scattered areas of common greenbrier, Japanese honeysuckle, and coast pepperbush.

Stand 2 is located in a narrow forested area just south of Airport Road and north of Runway 15-33, just outside the airport fence line. Stand 2 is largely forested wetland, with an intermittent stream running through the middle of the forest. Dominant/co-dominant species are sweetgum, red maple, and loblolly pine, with a size class ranging from 12-19.9"dbh. Canopy coverage is greater than 90 percent. The herbaceous cover is approximately 80% and consists of mostly Japanese honeysuckle, common greenbrier, field garlic, and very dense areas of poison ivy.

Stand 3 is an upland forested area surrounding Stand 2, and consists of black cherry, ironwood, red maple, and white oak, with the dominant size class 6-11.9". Canopy coverage is again greater than 90 percent. Herbaceous ground cover is similar to Stand 2, and largely invasive species.

Stand 4 is a mid-successional forest located just south of Stand 7. It is similar to Stand 1 in species composition and size. Understory is dense, with approximately 80% coverage and consisting of American beech, red maple, and sweetgum. Common herbaceous species are poison ivy and common greenbrier.

Stand 5 is located adjacent to the east side of Runway 4-22. It is an early successional forest dominated by red maple, sweetgum, loblolly pine, and southern red oak. The stand contains forested wetlands that were previously disturbed by grading activities and contain pit and mound topography throughout a former linear utility easement clearing. Dominant tree species are generally in the 3" to 8" DBH size class with a dense understory of saplings consistent with the aforementioned canopy species. Canopy coverage is approximately 70% with understory herbaceous species consisting of Japanese honeysuckle, common greenbrier, poison ivy, and *Phragmites* in several smaller disturbed areas.

Stand 6 is a small stand located adjacent to Stand 4, at the eastern most end of this larger forested area on airport property. This mid-successional stand is most similar to the basket oak-loblolly pine association. Common dominant/co-dominant species include loblolly pine, red maple, sweetgum and black cherry, with loblolly pine comprising lesser proportion of stand stocking in this portion of the forest. Size class of dominant species is again 12-19.9" with a canopy coverage approximately 90%. Herbaceous coverage is denser, with a higher percentage of non-native and invasive species present, including poison ivy, Japanese honeysuckle, multiflora rose, field garlic, English ivy, periwinkle, daylily, daffodil, and yucca.

Stand 7 is located between Stand 1 and Stand 4, and is a largely forested wetland area. Dominant/co-dominant species include willow oak, sweetgum, red maple, and loblolly pine with the dominant size class 12-19.9"dbh and coverage greater than 90%. Herbaceous coverage is approximately 70% and consisting largely of Japanese honeysuckle and common greenbrier.

Stand 8 is located on the northwest side of Easton Parkway near the previously occupied Black and Decker facility. The eastern boundary of the stand is bordered by a cleared maintenance access path. The stand's southern end is bordered by an intermittent tributary to Glebe Creek. This early successional forest is densely populated with white pine, black locust, green ash, and red maple trees in the 2-5.9" dbh size class. Red oak trees in the 6-11..9" dbh size class dominate the canopy, with approximately 65 percent coverage. There is little to no understory and the herbaceous layer is mostly present along the existing stream, consisting of sedges, grasses, and common greenbrier.

Stand 9 is located east of Stand 8, adjacent to the cleared maintenance access path, and its eastern end bound by Easton Parkway. This mid-successional forest is dominated by chestnut oak in the 12-19.9" dbh size class, with co-dominant species including southern red oak, sweetgum, white oak, and slippery elm, ranging from 8 to 14 inches dbh. Canopy coverage is approximately 85 percent. Common understory species include sweetgum, elm, greenbrier, and blackberry. Japanese honeysuckle dominates the herbaceous layer, and invasive species coverage is approximately 20 percent. There are a few standing dead trees within the stand, and some trees have been cut. There were no specimen trees present.

Natural Resources Within Airport Property

Resource	Size
Forest Stand 1	26.9 Acres
Forest Stand 2	2.7 Acres
Forest Stand 3	3.8 Acres
Forest Stand 4	3.2 Acres
Forest Stand 5	5.4 Acres
Forest Stand 6	2.0 Acres
Forest Stand 7	5.4 Acres
Forest Stand 8	5.8 Acres
Forest Stand 9	1.5 Acres
Emergent Wetlands	1.3 Acres
Forested/Scrub-Shrub Wetlands	15.0 Acres
Streams (Perennial & Intermittent)	~ 3500 Linear Feet
100 Year Floodplain	0.5 Acres

Feet
0 400 800 1,600

Forest Stand
>25% Slopes
2-Ft Contours
FAA PART 77 Obstruction Removal Limit of Disturbance
Delineated Streams
Delineated Wetlands
25ft Wetland Buffer
USGS NHD Stream Line
DNR Potential FIDS Habitat
Property Boundary
Airport Property Boundary Line
Floodplain

General Notes:

1. A FSD for the Easton/Newnam Field Airport was approved on April 25, 2016.
2. Jurisdictional Determination of Waters of the U.S., including wetlands, was completed by MDE & USACE in April 2016.
3. Basemapping for the FCP/FSD is provided by the MD IMAP GIS data portal.
4. North American Datum 1983, Maryland State Plane Projection (US Feet)
5. Tax and property data is by Maryland Property View online via the Maryland Department of Planning and Department of Assessments & Taxation
6. In accordance with the Town of Easton's Forest Conservation Ordinance, 14 CFR Part 77 obstruction removal of forest and trees are exempt activities on Airport Property. Approximately 31.9 acres of forest and trees will result. 5.2 acres of this impact are wetlands and coordination with the MDE/USACE is ongoing.

EASTON/NEWNAM FIELD AIRPORT
EASTON, MARYLAND

AECOM

Town of Easton Planning and Zoning	Signature of Qualified Professional
Name: Simon Ellis — Date: 4/4/18	Joanna Hiebler — Date: 3/7/2018

Joanna Hiebler, AECOM

EASTON/NEWMAN AIRPORT
FOREST STAND DELINEATION/
FOREST CONSERVATION PLAN
TOWN OF EASTON, MD
ON-AIRPORT OBSTRUCTION
REMOVAL PROGRAM 2018

EXHIBIT
1

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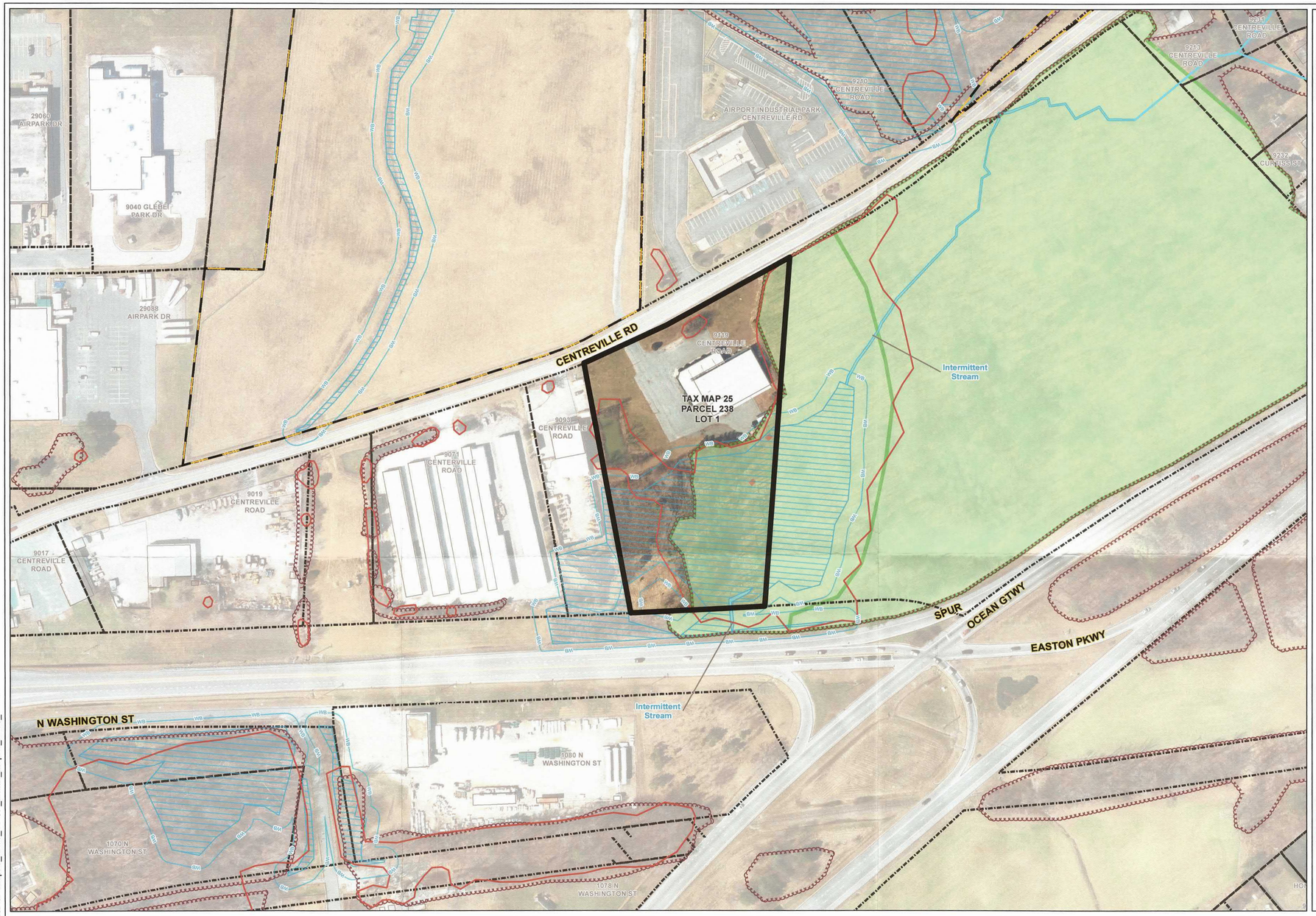


Natural Resources Within Parcel

Resource	Size
Forest Stand	1.36 Acres
Forested/Scrub-Shrub Wetlands	1.57 Acres
Wetland Buffer	0.35 Acres
Streams (Perennial & Intermittent)*	~60 Linear Feet

Forest Conservation Worksheet

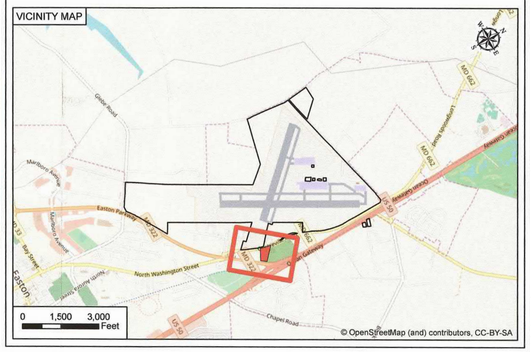
Net Tract Area			
A.	Total Tract Area	A =	4.16
B.	Deductions	B =	1.57
C.	Net Tract Area	C =	2.59
Land Use Category			

Input the number "1" under the appropriate land use zoning, and limit to only one entry

ARA	MDR	IDA	HDR	MPD	CIA
0	0	1	0	0	0

D.	Afforestation Threshold (Net Tract Area x 15%)	D =	0.39
E.	Conservation Threshold (Net Tract Area x 20%)	E =	0.52
Existing Forest Cover			
F.	Existing Forest Cover within the Net Tract Area	F =	0.32
G.	Area of Forest Above Conservation Threshold	G =	0.00
Break Even Point			
H.	Break Even Point	H =	0.32
I.	Forest Clearing Permitted Without Mitigation	I =	0.00
Proposed Forest Clearing			
J.	Total Area of Forest to be Cleared	J =	0.29
K.	Total Area of Forest to be Retained	K =	0.03
Planting Requirements			
L.	Reforestation for Clearing Above the Conservation Threshold	L =	0.00
M.	Reforestation for Clearing Below the Conservation Threshold	M =	0.57
N.	Credit for Retention above the Conservation Threshold	N =	0.00
P.	Total Reforestation Required	P =	0.57
Q.	Total Afforestation Required	Q =	0.07
R.	Total Planting Requirement	R =	0.64

VICINITY MAP



Feet
0 100 200 400

Treeline
Forest Stand
>25% Slopes
USGS NHD Stream Line
Delineated Streams
Delineated Wetlands
25ft Wetland Buffer
Floodplain
FAA PART 77 Obstruction Removal
DNR Potential FIDS Habitat
Property Boundary
Airport Property Boundary Line
Existing Avigation Easement

General Notes:

1. A FSD for the property of interest was approved on September 1, 2016.
2. Jurisdictional Determination of Waters of the U.S., including wetlands, was completed by MDE & USACE in April 2016.
3. Basemapping for the FCP is provided by the MD IMAP GIS data portal.
4. North American Datum 1983, Maryland State Plane Projection (US Feet)
5. Tax and property data is by Maryland Property View online via the Maryland Department of Planning and Department of Assessments & Taxation
6. Additional delineation of wetland areas were completed in Jan. 2018

EASTON/NEWNAM FIELD AIRPORT
EASTON, MARYLAND

AECOM

Town of Easton Planning and Zoning	Signature of Qualified Professional
Susan Stock 4/4/18	Joanna Hiebler 3/7/2018
Name Date	Joanna Hiebler, AECOM Date

TAX MAP 25, PARCEL 238, LOT 1
FOREST CONSERVATION PLAN
TOWN OF EASTON, MD

EXHIBIT
1

Document Path: O:\GIS\Data\Projects\ESN Airport\FCP\Map25_P238_1\FCP_22x34_Map25_P238_1.mxd

Natural Resources Within Parcel

Resource	Size
Forest Stand	5.58 Acres
Emergent Wetlands	<0.01 Acres
Forested/Scrub-Shrub Wetlands	1.49 Acres
Wetland Buffer	1.51 Acres

Forest Conservation Worksheet

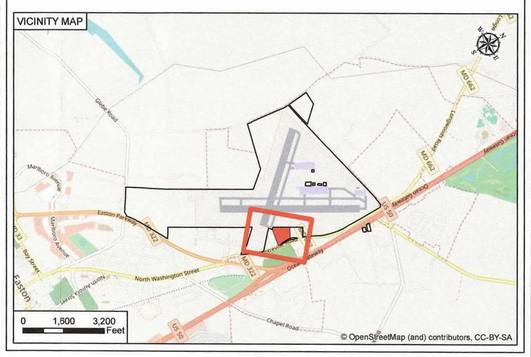
Net Tract Area			
A.	Total Tract Area	A =	8.59
B.	Deductions	B =	1.50
C.	Net Tract Area	C =	7.10
Land Use Category			

Input the number "1" under the appropriate land use zoning, and limit to only one entry

ARA	MDR	IDA	HDR	MPD	CIA
1	0	0	0	0	0

D.	Afforestation Threshold (Net Tract Area x 20%)	D =	1.42
E.	Conservation Threshold (Net Tract Area x 50%)	E =	3.55
Existing Forest Cover			
F.	Existing Forest Cover within the Net Tract Area	F =	4.17
G.	Area of Forest Above Conservation Threshold	G =	0.62
Break Even Point			
H.	Break Even Point	H =	3.67
I.	Forest Clearing Permitted Without Mitigation	I =	0.49
Proposed Forest Clearing			
J.	Total Area of Forest to be Cleared	J =	1.52
K.	Total Area of Forest to be Retained	K =	2.65
Planting Requirements			
L.	Reforestation for Clearing Above the Conservation Threshold	L =	0.15
M.	Reforestation for Clearing Below the Conservation Threshold	M =	1.81
N.	Credit for Retention above the Conservation Threshold	N =	0.00
P.	Total Reforestation Required	P =	1.96
Q.	Total Afforestation Required	Q =	0.00
R.	Total Planting Requirement	R =	1.96

VICINITY MAP



Feet
0 100 200 400

Treeline
Forest Stand
>25% Slopes
USGS NHD Stream Line
Delineated Streams
Delineated Wetlands
25ft Wetland Buffer
Floodplain
FAA PART 77 Obstruction Removal Limit of Disturbance
DNR Potential FIDS Habitat
Property Boundary
Airport Property Boundary Line
Existing Avigation Easement

General Notes:

1. A FSD for the property of interest was approved on September 1, 2016.
2. Jurisdictional Determination of Waters of the U.S., including wetlands, was completed by MDE & USACE in April 2016.
3. Basemapping for the FCP is provided by the MD IMAP GIS data portal.
4. North American Datum 1983, Maryland State Plane Projection (US Feet)
5. Tax and property data is by Maryland Property View online via the Maryland Department of Planning and Department of Assessments & Taxation

EASTON/NEWNAM FIELD AIRPORT
EASTON, MARYLAND

AECOM

Town of Easton Planning and Zoning		Signature of Qualified Professional	
Susan Christ	4/4/18	Joanna Hiebler	3/7/2018
Name	Date	Joanna Hiebler, AECOM	Date

TAX MAP 25, PARCEL 238, LOT 3
FOREST CONSERVATION PLAN
TOWN OF EASTON, MD

EXHIBIT
1

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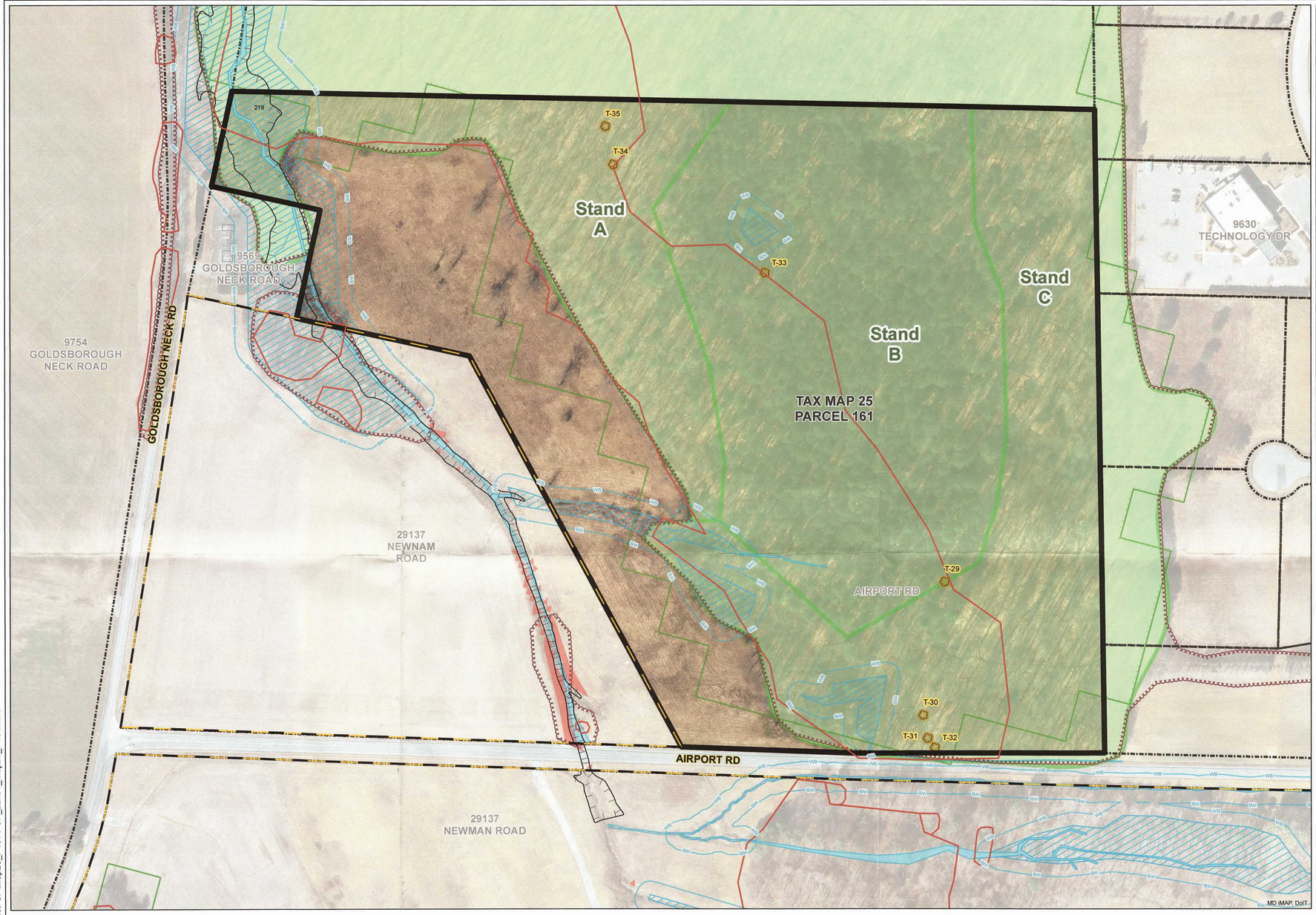


Natural Resources Within Parcel

Resource	Size
Forest Stand A	5.46 Acres
Forest Stand B	11.41 Acres
Forest Stand C	9.07 Acres
Specimen Tree (T-29)	Loblolly Pine 36"
Specimen Tree (T-30)	Southern Red Oak 30"
Specimen Tree (T-31)	Southern Red Oak 31"
Specimen Tree (T-32)	Loblolly Pine 30"
Specimen Tree (T-33)	Tulip Poplar 31"
Specimen Tree (T-34)	Red Oak 35"
Specimen Tree (T-35)	Scarlet Oak 34"
Vernal Pool	0.06 Acres
Emergent Wetlands	0.48 Acres
Forested/Scrub-Shrub Wetlands	1.14 Acres
Wetland Buffer	1.52 Acres
Floodplain	0.41 Acres

Forest Conservation Worksheet

Net Tract Area

A.	Total Tract Area	A =	33.63
B.	Deductions	B =	1.68
C.	Net Tract Area	C =	31.95

Land Use Category

Input the number "1" under the appropriate land use zoning, and limit to only one entry

ARA	MDR	IDA	HDR	MPD	CIA
1	0	0	0	0	0

D.	Afforestation Threshold (Net Tract Area x 20%)	D =	6.39
E.	Conservation Threshold (Net Tract Area x 50%)	E =	15.98

Existing Forest Cover

F.	Existing Forest Cover within the Net Tract Area	F =	24.84
G.	Area of Forest Above Conservation Threshold	G =	8.87

Break Even Point

H.	Break Even Point	H =	17.75
I.	Forest Clearing Permitted Without Mitigation	I =	7.10

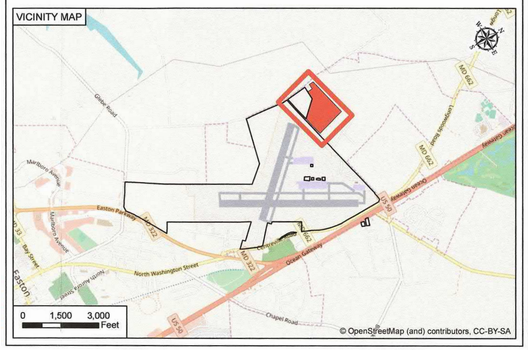
Proposed Forest Clearing

J.	Total Area of Forest to be Cleared	J =	11.27
K.	Total Area of Forest to be Retained	K =	13.57

Planting Requirements

L.	Reforestation for Clearing Above the Conservation Threshold	L =	2.22
M.	Reforestation for Clearing Below the Conservation Threshold	M =	4.81
N.	Credit for Retention above the Conservation Threshold	N =	0.00
P.	Total Reforestation Required	P =	7.02
Q.	Total Afforestation Required	Q =	0.00
R.	Total Planting Requirement	R =	7.02

VICINITY MAP



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Specimen Tree
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Forest Stand
>25% Slopes
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25ft Wetland Buffer
Floodplain
FAA PART 77 Obstruction Removal Limit of Disturbance
DNR Potential FIDS Habitat
Property Boundary
Airport Property Boundary Line
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General Notes:

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EASTON/NEWNAM FIELD AIRPORT
EASTON, MARYLAND

AECOM

Town of Easton Planning and Zoning	Signature of Qualified Professional
4/4/18	Joanna Hiebler 3/7/2018
Name Date	Joanna Hiebler, AECOM Date

TAX MAP 25, PARCEL 161
FOREST CONSERVATION PLAN
TOWN OF EASTON, MD

EXHIBIT
1

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Appendix D: Hazardous Materials

PHASE I ENVIRONMENTAL DUE DILIGENCE AUDIT

AT

FORMER BLACK AND DECKER MANUFACTURING FACILITY

28712 GLEBE ROAD
EASTON, MARYLAND

PREPARED FOR: TALBOT COUNTY

PREPARED BY: AECOM
8000 VIRGINIA MANOR ROAD SUITE 110
BELTSVILLE, MARYLAND 20705

JULY 2016

GENERAL ACRONYMS USED IN THIS REPORT

AULs – Activity Use Limitations

ASTM – American Society for Testing and Materials

CESQG – Conditionally Exempt Small Quantity Generator of Hazardous Waste

CERCLIS – Comprehensive Environmental Response, Compensation, and Liability Information System

CORRACTS – Corrective Action Report

CREC – Controlled Recognized Environmental Conditions

EDDA – Environmental Due Diligence Audit

EDR – Environmental Data Resources

EPA – Environmental Protection Agency

ESA – Environmental Site Assessment

FAA - Federal Aviation Administration

HREC – Historical Recognized Environmental Condition

LQG – Large Quantity Generator of Hazardous Waste

MDE – Maryland Department of the Environment

NFA – No Further Action

NFRAP – No Further Remedial Action Planned

NPL – National Priority List

OCP – Oil Control Program

PCB - Polychlorinated Biphenyls

RCRA – Resource Conservation Recovery Act

REC – Recognized Environmental Condition

SDAT – Maryland State Department of Assessments & Taxation

SQG – Small Quantity Generator of Hazardous Waste

UST – Underground Storage Tank

EXECUTIVE SUMMARY

AECOM Technical Services, Inc. (AECOM) has been contracted by Talbot County to prepare an Environmental Assessment, as required by the Federal Aviation Administration (FAA) under the National Environmental Policy Act, to address the environmental impacts associated with the proposed Five-year Capital Improvement Program (CIP) at Easton / Newnam Field Airport in Easton, Maryland. As part of this Environmental Assessment (EA), a Phase I Environmental Due Diligence Audit (EDDA) was prepared for property planned for acquisition at the Airport. This was accomplished in accordance with FAA Order 1050.19, *Environmental Due Diligence Audits in the Conduct of FAA Real Property Transactions*.

The purpose of this Phase I EDDA is to identify recognized environmental conditions (RECs) in connection with the former Black and Decker facility located at 28712 Glebe Road, Easton, MD 21601 (Subject Property), to the extent feasible, pursuant to the processes prescribed in the American Society for Testing and Materials (ASTM) Practice E 1527-13 entitled *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (ASTM Standard), and the Environmental Protection Agency (EPA) Rule entitled, "Standards and Practices for All Appropriate Inquiries; Final Rule," 40 CFR Part 312, and AECOM's professional judgment. This practice is intended to satisfy one of the User's qualification requirements for the innocent landowner defense to CERCLA liability: that is, to undertake "all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice." It also is intended to assist the User in developing information about the environmental condition of the Subject Property. This EDDA is site-specific for the Subject Property.

FINDINGS

Subject Property

A summary of the findings for the Subject Property is included in Section 6.2.1 – Findings - Subject Property of this Report.

1. A portion of the Subject Property's office space is currently occupied by Maverick Trucking. According to the site escort, Sotera Engineered Solutions (Sotera) occupied the Subject Property from approximately August 1, 2013 until approximately one year ago. During this time, Sotera used the office and warehouse space for the fabrication of plastics and appliances/furniture. Upon exiting the subject property, Sotera removed all components of their operation. The existing site materials observed during AECOM's site reconnaissance were reportedly from Black and Decker's former operations. Black and Decker occupied the Subject Property from approximately 1974 through June 2003. During this time, the facility maintained three underground storage tanks (USTs), two of which have reportedly been removed from the ground and one that was closed in-ground. Three records for

the Subject Property are included in the Maryland Department of the Environment (MDE) Closed Petroleum Investigation/Remediation Cases:

- 92-1992TA, report closed in 1992 – 1,000-gallon UST (diesel)
- 95-1065TA, report closed in 1997 – 800-gallon UST (waste oil)
- 04-0161TA, report closed in 2004 – 500-gallon UST (waste oil)

The MDE Oil Control Program (OCP) completed a review of the three OCPCASES and issued a Site Status Letter in May 2004. The OCP stated that it specifically addressed only the petroleum contamination at the site. Based on the review, residual petroleum contamination remains onsite; however, the OCP did not require further investigation or corrective action at that time. The three OCPCASES remain in closed status and no changes to the regulatory criteria were found as a result of this Phase I EDDA. The closed OCPCASES are considered HRECs, and the residual petroleum contamination is considered a REC.

2. The Subject Property once maintained 11 active above-ground storage tanks (ASTs). A 6,000-gallon water AST and a 2,500-gallon oil/water AST remain in the wastewater treatment area along the southwestern portion of the building, but are no longer in use. In addition, AECOM observed an enclosed containment area with a concrete pad along the southwestern exterior of the building that previously housed a 300-gallon double-walled diesel fuel tank until sometime in the last year. This tank was used to fuel forklifts associated with site operations. Furthermore, an AST of unknown capacity and associated trash compactor was observed along the northern building exterior in the vicinity of the bay doors. No staining was observed in the vicinity of this active tank. Surficial staining from previous operations was observed on the concrete floor in the wastewater treatment room, which is situated in secondary containment. Additional minor surficial staining was observed in the maintenance area in the vicinity of the out-of-use wastewater treatment system. The surficial stains are considered *de minimis* conditions.

3. A Phase I Environmental Site Assessment, March 2003 (Phase I ESA – 2003) prepared for the Subject Property reported that an approximately 400-gallon concrete pit that was located in the puck area in front of the roll off was used to collect excess oil from the processing pucks. During the March 2003 site visit, oil staining was noted outside the facility in the puck processing area on the concrete foundation of the building. During the June 15, 2016 site visit, AECOM did not observe any oil staining in the vicinity. The area of the pit is considered an HREC.

4. The Phase I ESA – 2003 reported that the heat-treat ovens in the motor area have concrete catch pits that contain quench oil. During the June 15, 2016 site visit, AECOM did not observe heat-ovens in the motor area. The site escort indicated that these pits were cleaned and filled with concrete. The concrete catch pits are considered HRECs.

5. Black and Decker was registered as a large quantity generator of hazardous waste. The facility accumulated hazardous wastes in 55-gallon drums placed in the Flammable Storage Room.

Currently, several 55-gallon drums reside in the maintenance area, two of which contain 14-year-old oil formerly used for the air compressors. The drums appeared to be in good condition with no signs of a release or staining on the floor in the vicinity. This area has floor drains that drain into the wastewater treatment room adjacent to the southeast. These storage practices are not considered to be RECs.

6. According to the Phase I ESA – 2003, an oil spill occurred from the 200-hp air compressor in April 2000. Approximately 10 to 15 gallons of oil were released when an air compressor caught fire. Drip pans of oil overflowed and flowed out the door across the south parking lot onto a small grassy area (30 feet by 30 feet). The site escort indicated that a 10-yard dumpster was filled by Black and Decker for impacted soil removal offsite. Approximately 9 cubic yards of soil were excavated in April 2000. No analytes were detected in concentrations above the detection limits, except for TPH, which was found to be 140 m/kg. Additional samples for TPH were found to be 78 mg/kg and non-detect in April and May 2000, respectively. The former oil spill is considered a HREC.
7. On behalf of Black and Decker, Miles & Stockbridge, P.C. stated in a letter dated January 2004 that no floor drains were located in the plant during Black and Decker's operation and that the plant was not a transport storage disposal facility subject to the requirements of the Resource Conservation Recovery Act during the time Black and Decker owned and operated the plant; however, Black and Decker was registered as a large quantity generator of hazardous waste. The facility accumulated hazardous wastes in 55-gallon drums placed in the Flammable Storage Room. This area has floor drains that drain into the wastewater treatment room adjacent to the southeast.
8. Two additional sites were identified in the Environmental Data Resources Report as having the same physical address as the Subject Property. SFA Defense Products Division has an NPDES permit that expires in December 2018. Sotera Engineered Solutions was a conditionally exempt small quantity generator (CESQG) of hazardous waste.

Surrounding Properties

As part of this EDDA, 12 surrounding properties were identified that may be pertinent to the EDDA of the Subject Property. A summary of the findings for the surrounding properties is included in Section 6.2.2 – Surrounding Properties and in Table 1 of this Report.

1. Jerry's Painting, Inc. (Site No. 1) is located adjacent to the northwest area of the Subject Property in a down-gradient position. This site is included in the MDE Hazardous Waste Program and is not considered a REC.
2. Coca-Cola Distribution (Site No. 2), located approximately 0.2 miles south-southwest of the Subject Property in a cross-gradient position, had two 10,000-gallon USTs removed from the ground in 1997. In addition, one OCPCASE associated with a tank closure (motor/lube oil) was closed in April 1997. The former USTs and the OCPCASE are considered Historical (HRECs).

3. The Whalen Co., Inc. (Site No. 3), located approximately 0.2 miles northeast of the Subject Property in a cross-gradient position, is an active CESQG of hazardous waste. Based on the distance from the Subject Property and cross-gradient position, this site is not considered a REC.

4. Lewis Autobody (Site No. 4), located approximately 0.3 miles south of the Subject Property, is an automotive body, paint, and interior repair and maintenance facility and an active CESQG of hazardous waste. This site is not considered a REC.

5. Easton Utilities Commission – Plant No. 2 (Site No. 5) is located approximately 0.3 miles northeast of the Subject Property. This facility maintains four diesel alternative generators, an oil water separator, two 6,000-gallon lube oil USTs, and one 1,000,000-gallon AST (oil). This site is not considered a REC or an HREC.

6. Lowes Home Center – No. 400 (Site No. 6) is located approximately 0.3 miles south-southeast of the Subject Property. This site is included in the MDE Hazardous Waste Program as being inactive. This site is not considered a REC or HREC.

7. Alda Misenheimer (Site No. 7), a private residence, is located approximately 0.4 miles southeast of the Subject Property. One OCPCASE associated with a tank closure (heating oil) was opened in March 2005 and closed in April 2005. Based on the regulatory status and distance from the Subject Property, this site is not considered a REC or an HREC.

8. Easton Bypass Crown (Site No. 8) is located approximately 0.4 miles south-southeast of the Subject Property. This site is included in the MD Open Remediation Cases database. However, based on the distance from the Subject Property, this site is not considered a REC.

9. The Chesapeake Publishing Company (Site No. 9), located approximately 0.5 miles north of the Subject Property, was listed on the Brownfield Master Inventory Report, Archived Sites, by County. This site is not considered a REC or HREC.

10. Search results did not reveal any active National Priority Listing (NPL) sites under the Federal Superfund Program within a 1-mile radius of the Subject Property. However, three sites that were archived under the Program were identified. None of these three sites are considered RECs or HRECs.

    a. Noble Motor Rebuilders (Site No. 10), located about 0.6 miles south-southeast of the Subject Property at 350 N. Aurora Street did not qualify for the NPL based on existing information.

    b. The NPL status for Easton Utilities – Plant 1 (Site No. 11), located about 0.9 miles south of the Subject Property, was “deferred to RCRA.” An evaluation conducted by the U.S. EPA determined that additional investigation and/or cleanup measures were not necessary.

    c. Louis Charlie/Merrimac Cleaners (Site No. 12), located at about 0.9 miles south of the Subject Property, did not qualify for the NPL based on existing information.

De Minimis Conditions

1. AECOM observed surficial oil staining on the concrete floor within the wastewater treatment room. This room itself is within secondary containment, as the entire room is contained within a concrete berm and flooring, and floor drains reinject any discharge into the wastewater treatment system.

General

1. The historical aerial photograph for 1970 shows that the Subject Property is undeveloped.
2. Public utilities available for the Subject Property include electricity, telephone, water, and sewer. The MDE retains an inventory of waste disposal facilities within Maryland. According to the inventory list, the Town of Easton contracts with Talbot County to dispose of solid waste at the Mid-Shore Transfer Station located southeast of the town. The MDE inventory list indicates that the Mid-Shore Regional Municipal Landfill is closed.
3. The Subject Property and the business parks located both north and south of the Subject Property are zoned as light industrial. The area in the northeast quadrant of Glebe Road and MD 322 is zoned as residential, and areas in the southeast quadrant are zoned as light commercial, planned unit developments, and residential.
4. Easton Utilities – Glebe WTP wells 11 and 12 are located at 28705 Glebe Road. No records were found regarding compliance or enforcement violations for these wells.
5. The EDDA did not include an assessment of asbestos-containing materials or lead-based paint associated with the Subject Property.

Recommendations

Based on the findings of this report and the RECs that have been identified at the Subject Property, AECOM recommends that a Phase II subsurface investigation be conducted at the Subject Property to determine the extent, if any, of subsurface contamination based on the former use of the Subject Property for manufacturing operations and the historical presence of at least three USTs, concrete pits, and surficial and underground releases that have been identified in historical reports.

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Appendix G Support Documentation – Subject Property and Surrounding Properties

Appendix H Resumes of Environmental Professionals

1.0 INTRODUCTION

1.1 Purpose

AECOM Technical Services, Inc. (AECOM) has been contracted by Talbot County to prepare an Environmental Assessment, as required by the Federal Aviation Administration (FAA) under the National Environmental Policy Act, to address the environmental impacts associated with the proposed Five-year Capital Improvement Program (CIP) at Easton / Newnam Field Airport in Easton, Maryland. As part of this Environmental Assessment (EA), a Phase I Environmental Due Diligence Audits (EDDA) was prepared for property planned for acquisition at the Airport. This work was accomplished in accordance with FAA Order 1050.19, *Environmental Due Diligence Audits in the Conduct of FAA Real Property Transactions*.

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The ASTM Standard defines RECs as "the presence or likely presence of any hazardous substances or petroleum products in on, or at a property: 1) due to any release to the environment; 2) under conditions indicative of a release to the environment; or 3) under conditions that pose a material threat of a future release to the environment.

A controlled recognized environmental condition (CREC) results from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (e.g., as evidenced by the issuance of a no further action (NFA) letter or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (e.g., property use restrictions, activity and use limitations, institutional or engineering controls).

A historical REC (HREC) refers to a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable

regulatory authority or meeting unrestricted use criteria established by a regulatory authority (e.g., property use restrictions, activity and use limitations, institutional controls, or engineering controls). Before calling the past release a HREC, the Environmental Professional must determine whether the past release is a REC at the time the Phase I ESA is conducted (e.g., if there has been a change in the regulatory criteria).

De minimis conditions generally do not present a threat to human health or the environment and would not be subject of an enforcement action if brought to the attention of appropriate governmental agencies. De minimis conditions are not RECs.

1.2 Scope of Services

The scope of services for this EDDA consisted of the following tasks:

Records Review

- Reviewing property information to confirm the legal description and location of the Subject Property. This information is included in Appendix A.
- Reviewing environmental record sources including federal and State of Maryland regulatory databases to identify facilities with past or current regulatory enforcement actions within applicable distances of the Subject Property as defined in the ASTM Standard. The regulatory database search report is presented in Appendix B.
- Reviewing physical setting information sources to identify information about the geologic, hydrogeologic, hydrologic, and topographic conditions in the area of the Subject Property. The U.S. Geological Survey (USGS) 7.5-minute topographic map of the area of the Subject Property is shown on the historical topographic maps included in Appendix C.
- Reviewing historical record sources to identify past land use activities at the Subject Property and surrounding properties. Selected historical information obtained during performance of the Phase I ESA investigation is included in Appendix C.

Site Reconnaissance

- Performing a reconnaissance of the Subject Property and surrounding properties to identify potential sources of chemical and petroleum contamination such as aboveground storage tanks (ASTs), underground storage tanks (USTs), potential sources of polychlorinated biphenyls (PCBs), chemicals, and hazardous materials. Surficial evidence of potential RECs such as distressed vegetation, stained soils, and/or stained paving was also evaluated at the

time of the site reconnaissance. Photographs recorded during the site reconnaissance are included in Appendix D.

Interviews

- Interviewing available individuals with knowledge of current or historical use, storage, or disposal of potentially hazardous materials or other environmentally related activities on or adjacent to the Subject Property. User provided information is included in Appendix E.

Report Preparation

- Preparing a report that documents the findings, opinions, and conclusions of the Phase I EDDA investigation conducted at the Subject Property and provides the supporting documentation and references for those findings, opinions, and conclusions. Resumes for the Environmental Professionals that performed the assessment and prepared this Phase I EDDA Report are included in Appendix H.

1.3 Significant Assumptions

Assumptions made in the preparation of this report include that the environmental records obtained are complete and current. It is also assumed that those interviewed for the Report were truthful in their answers.

1.4 Limitations and Exceptions

Services were performed in accordance with the following principles that are an integral part of the ASTM Standard:

- No environmental site assessment (ESA) can wholly eliminate uncertainty regarding the potential for RECs in connection with a property. Performance of this EDDA is intended to reduce, but not eliminate, uncertainty regarding the potential for RECs in connection with the Subject Property, and the ASTM Standard recognizes reasonable limits of time and cost;

- “All appropriate inquiry” does not mean an exhaustive assessment of a property. This EDDA was performed in conformance with the ASTM Standard’s principle of identifying a balance between the competing goals of limiting the costs and time demands inherent in performing an EDDA and the reduction of uncertainty about unknown conditions resulting from additional information;

- Not every property warrants the same level of assessment - the type of property subject to the assessment, the expertise and risk tolerance of the user, and the information developed in the course of the inquiry guided the appropriate level of assessment for this EDDA; and

- EDDAs must be evaluated based on the reasonableness of judgments made at the time and under the circumstances in which they were made. Subsequent EDDAs should not be considered valid standards to judge the appropriateness of any prior assessment based on hindsight, new information, use of developing technology or analytical techniques, or other factors.

1.5 Terms and Conditions

The purpose of this EDDA was to identify, to the extent feasible pursuant to the processes described herein to RECs, which are significant adverse environmental concerns, in connection with the Subject Property. This practice is intended to satisfy one of the User's qualification requirements for the innocent landowner defense to CERCLA liability: that is, to undertake "all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice." It also is intended to assist the User in developing information about the environmental condition of the Subject Property. This EDDA is site-specific for the former Black and Decker facility located at 28712 Glebe Road, Easton, MD 21601.

Although this Report may be reviewed by the general public, use of the information contained within by anyone other than the User is permissible only with prior written authorization from AECOM, and only under the conditions allowed by the ASTM Standard. AECOM is not responsible for independent conclusions, opinions, or recommendations made by others based on the findings presented in this Report.

1.6 Location and Legal Description

The Subject Property is physically located at 28712 Glebe Road, in the incorporated municipality of the Town of Easton, Maryland in Talbot County. The center of the Subject Property is located at approximately 38° 47′ 27" North latitude and -76° 4′ 37" West longitude. The approximately 58-acre parcel is located on the north side of Easton in the northwest quadrant of Glebe Road and Easton Parkway (MD 322), south of the Easton / Newnam Field Airport.

The Maryland State Department of Assessments & Taxation (SDAT) website lists the Account Number for the Subject Property as District 01 - No. 002090; the property type is light manufacturing and the land use is light industrial. The Subject Property is currently owned by Easton Exchange LLC. Pettinaro Management, LLC is the property manager. At the time of this writing, the Subject Property is partially occupied, and is advertised for sale or lease.

A site location map is shown on Figure 1. A legal description for the Subject Property is presented in Appendix A.

2.0 USER PROVIDED INFORMATION

The ASTM Standard defines User as the party seeking to use Practice E 1527 to complete an ESA of the Subject Property. The ASTM Standard requires the User to provide certain information to the Environmental Professional. A User Questionnaire was provided to Mr. Michael Henry, Easton / Newnam Field Airport Manager, who completed the User Questionnaire on April 13, 2016; a copy is included in Appendix E.

2.1 Environmental Liens and Activity and Use Limitations

An environmental lien is a charge, security, or encumbrance on a property's title to secure payment of cost or debt arising from response actions, cleanup, or other remediation of hazardous substances or petroleum products. A search for environmental liens and activity use limitations (AULs) against the Subject Property was performed on February 5, 2016 by Environmental Data Resources (EDR). No environmental liens or AULs were found for the Subject Property.

To meet the requirements of 40 CFR 312.25, the User was asked about the existence of environmental liens and AULs that are filed or recorded against the property under federal, tribal, state, or local law. The User responded that there are no environmental liens. A copy of the Clear Zone and Adjacent Transition Zone Easement and Agreement (Liber 1044/Folio 392) is included in Appendix E User Questionnaire.

2.2 Specialized Knowledge or Experience of the User

The User was asked about having specialized knowledge or experience related to the Subject Property or nearby properties. The User responded, “No.”

2.3 Relationship of the Purchase Price to the Fair Market Value

The User was asked if the purchase price being paid for this property reasonably reflects the fair market value of the property. The User replied, “The County had an appraisal completed and offered the owner’s $5 million. The owner countered with $7 million. The difference in price is not due to contamination.” The User provided an Appraisal Review dated May 20, 2015 that was developed and reported in accordance with Standard 3 of the 2014-2015 Edition of the Uniform Standards of Professional Appraisal Practice, the assignment conditions set forth within 49 CFR Part 24.104 concerning review of appraisals for federal-aid projects, and FAA Policy and Procedures. The conclusion of value in the Appraisal Report is $5,000,000. A copy of the Appraisal Review is included in Appendix E with the User Questionnaire.

2.4 Commonly Known or Reasonably Ascertainable Information

The User was asked if they were aware of commonly known or reasonably ascertainable information within the local community about the Subject Property that is material to RECs in connection with the Subject Property. The User replied that known past uses of the property include Black and Decker Tool Manufacture Plant and Global Defense Technology Manufacture Plant. The User indicated that they do

not know of any environmental cleanup liens that have taken place at the property and do not know of former or existing underground or above ground storage tanks.

2.5 Adjoining Properties

The User, based on User's knowledge related to the Subject Property, was asked if there are any indicators or history of environmental conditions on any adjoining or nearby properties that could have an effect on the Subject Property. The User replied, "No."

3.0 RECORDS REVIEW

This section includes information provided by federal, state, and local regulatory agencies. The records were reviewed during February 2016 to identify RECs on the Subject Property and surrounding locations that may impact the site. A copy of the Federal and State Regulatory Database Search is presented in Appendix B. Findings for the Subject Property are referenced in relevant sections in this Report; Table 1 includes a summary of listings and findings for the surrounding properties.

3.1 Standard Environmental Record Sources, Federal and State

EDR performed an environmental regulatory database search of the Subject Property. The federal and state regulatory agency records listed below were reviewed to identify the use, generation, storage, treatment or disposal of hazardous substances or petroleum products, or release incidents of such materials that might impact the Subject Property.

FEDERAL ASTM STANDARD DATABASES

Database	Approximate Minimum Search Distance
Federal NPL (National Priorities List)	1.0 mile
Federal Delisted NPL Site List	1.0 mile
Federal Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Site List	0.5 miles
Federal CERCLIS-No Further Remedial Action Planned (NFRAP) Site List	0.5 miles
Federal Resource Conservation and Recovery Act (RCRA) CORRACTS (Corrective Action Report) Facilities List	1.0 mile
Federal RCRA non-CORRACTS Treatment Storage and Disposal (TSD) facilities list	0.5 miles
Federal RCRA Generators List	0.25 miles
Federal Institutional Control/Engineering Control Registries	0.5 miles
Federal Emergency Response Notification System (ERNS) List	Subject Property

STATE AND TRIBAL ASTM STANDARD DATABASES

Database	Approximate Minimum Search Distance

State and Tribal Hazardous Waste Sites Identified for Investigation or Remediation: CERCLIS – Equivalent Sites	1.0 mile
State and Tribal Landfill and/or Solid Waste Disposal Site List	0.5 miles
State and Tribal Leaking Storage Tank Lists	0.5 miles
State and Tribal Registered Storage Tank Lists	0.25 miles
State and Tribal Institutional Control/Engineering Control Registries	0.5 miles
State and Tribal Voluntary Cleanup Sites	0.5 miles
State and Tribal Brownfield Sites	0.5 miles

EDR HIGH RISK HISTORICAL RECORDS DATABASES

Database	Description
EDR Proprietary Gas Plants	includes records of coal gas plants (manufactured gas plants)
EDR Historic Gas Stations	national collections of business directories - listings of potential gas station/filling station/service station sites; EDR classifies this database as High Risk Historical Records
EDR Historic Dry Cleaners	national collections of business directories - listings of potential dry cleaner sites; EDR classifies this database as High Risk Historical Records
Recovered Government Archives • State Hazardous Waste Facilities List	list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists
Recovered Government Archives • Solid Waste Facilities List	list of landfills derived from historical databases and includes many records that no longer appear in current government lists
Recovered Government Archives • Leaking Underground Storage Tank	list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists

3.1.1 Subject Property Database Listing

The EDR Report includes the Subject Property in the following databases: Hist UST, FINDS, RCRA-LQG, UST – Financial Assurance, and OCPCASES.

Two additional sites with the same physical address as the Subject Property, SFA Defense products (FINDS) and Sotera Engineered Solutions (FINDS, RCRA-CESQG), are also included in the EDR database listings.

3.1.2 Off-Site Properties Database Listings

Four off-site properties are included in the EDR database listings:

- Coca-Cola Distribution (OCPCASES, UST, Financial Assurance)
- Alda Misenheimer (OCPCASES)
- Noble Motor Rebuilders (CERCLIS-NFRAP, SHWS, RCRA NonGen/NLR)
- Easton Utilities – Plant No. 1 (CERCLIS-NFRAP, CORRACTS, RCRA-CESQG, SHWS, OCPCASES, Hist UST, 2020 Cor Action, PADS, US AIRS).

3.1.3 Orphans Summary

The EDR report identified three facilities that are considered "orphan sites." An orphan site is one that EDR has been unable to locate with adequate precision to determine its relevance to the EDDA of the Subject Property. Additional research conducted (based on the limited property information provided in the EDR Report) located two of the orphan sites (see Table 1).

3.2 Additional Environmental Record Sources

Additional database searches included the U.S. EPA Enforcement and Compliance History Online (ECHO), U.S. EPA Envirofacts Multisystem Search, and Maryland Department of the Environment (MDE):

- U.S. EPA ECHO – This online database helps determine whether compliance inspections have been conducted by the U.S. EPA or state/local governments, if violations were detected, or if enforcement actions were taken, and if penalties were assessed in response to environmental law violations. Clean Water Act – The National Pollutant Discharge Elimination System (NPDES) program uses the term Significant Non-Compliance (SNC). Examples of events that could result in a SNC code include unauthorized discharges; failure of a Publicly Owned Treatment Works to enforce its approved pretreatment program; failure to meet a construction deadline; failure to file a Discharge Monitoring Report (DMR); filing a DMR more than 30 days late; or violating any judicial or administrative order. Removal of the SNC designation occurs once the facility's DMR reports show a consistent pattern of compliance with permit limits, or if U.S. EPA or a state agency issues a formal enforcement order to address the violations that resulted in the SNC and the facility has returned to compliance. RCRA SNC is a term used to describe a site determined to cause actual

exposure or has a substantial likelihood of causing exposure to a hazardous waste or constituent; is a chronic or recalcitrant violator; or deviates substantially from the terms of a permit, order or agreement, or from RCRA statutory or regulatory requirements. Under the RCRA program, the SNC is removed when the site is in full physical compliance with statutory and/or regulatory requirements. Compliance data regarding the Subject Property is referenced in relevant sections of this Report; Table 1 includes findings for surrounding properties.

- U.S. EPA Envirofacts Multisystem Search – Searches multiple environmental databases for facility information.

- MDE database searches – a variety of searches conducted are discussed in Section 3.2 of this Report. In addition, the MDE provided copies of three closed OCPCASE files associated with the Subject Property, along with copies of the Phase I Environmental Site Assessment, March 2003 (Phase I ESA – 2003), Phase II Environmental Site Assessment, May 2003 (Phase II ESA – 2003), and other support documentation. The findings from these documents are referenced in relevant sections of this Report.

3.2.1 Maryland State Records

At the state level, the MDE is primarily responsible for making sure federal hazardous materials regulations are enforced and upheld. State-level regulations, meant to both ensure proper enforcement of federal regulations, as well as to account for regionally specific problems, have been incorporated into the Administrative Code of Maryland, as summarized below.

State Regulation	Description
§26.02.01 - §26.02.07	Occupational, Industrial and Residential Hazards
§26.10.01 - §26.10.15	Oil Pollution and Tank Management
§26.13.01 - §26.13.13	Disposal of Controlled Hazardous Substances
§26.14.01 - §26.14.02	Hazardous Substances Response Plan
§26.15.01 - §26.15.03	Disposal of Controlled Hazardous Substances – Radioactive Hazardous Substances
§26.16.01 - §26.16.06	Lead
§26.26.01	Community Right-to-Know Fund
§26.27.01	Hazardous Materials Security

3.2.1.1 Underground Storage Tanks

3.2.1.1.1 Open Cases

MDE's Open Petroleum Subsurface Investigation/Remediation Cases database contains information on open subsurface cases in Maryland. According to the MDE website, this database was updated on July

7, 2016. No sites were listed on MDE's list of open subsurface cases in Maryland within 0.5 miles of the Subject Property.

3.2.1.1.2 Closed Cases

MDE's Closed Petroleum Investigation/Remediation Cases database of historical closed cases includes cases handled by the OCP, including surface spills, storage tank operation compliance activities, and groundwater remediation/investigation cases. The closed cases, including the Subject Property, found within MDE's database are referenced throughout this Report.

The MDE may prohibit the delivery of product to a UST system when it determined that the system is in significant violation of registration, spill prevention, overfill protection, release detection, corrosion protection, and/or financial responsibility. When it is determined that a delivery prohibition is the proper course of action, the site is entered into the MDE OCP Delivery Ban database (Code of Maryland Regulations 26.10.02-11 Oil Pollution and Tank Management) and the facility is notified in writing that the UST cannot receive new deliveries of product. None of the sites identified in the EDR Report were found to be under MDE's delivery ban.

3.2.1.2 Hazardous Waste Sites

MDE inspectors make routine, unannounced inspections of hazardous waste generators and permitted hazardous waste facilities. Generator facilities found in violation of hazardous waste rules may be penalized under administrative or civil actions. Violations of hazardous waste laws in Maryland may be considered a felony and subject the violator to criminal sanctions, including imprisonment. No sites were listed on MDE's list of Hazardous Waste Program Cleanup Sites within 0.5 miles of the Subject Property.

3.2.1.3 Landfill Sites

The MDE retains an inventory of waste disposal facilities within Maryland. According to the inventory list, the Town of Easton contracts with Talbot County to dispose of solid waste at the Mid-Shore Transfer Station located on Barkers Landing Road, southeast of the town. The MDE inventory list indicates that the Mid-Shore Regional Municipal Landfill is closed.

3.2.1.4 Toxic Chemical Release Inventory

The Toxic Chemical Release Inventory, State of Maryland Summary Report outlines the releases and waste management activities of Maryland facilities that are subject to the environmental report requirements of Section 313 of the federal Emergency Planning and Community Right-to-Know Act (EPCRA). The inventory report was not readily available; however, the Right-To-Know Network (RTK NET), a public database that provides free access to environmental resources (in support of the EPCRA) provided information regarding the Town of Easton. No records were found for Toxic Release incidents for the Subject Property or surrounding areas.

3.2.2 Additional Database Search Results

As a result of additional federal, state, and local database searches for Talbot County and the Town of Easton, eight additional properties that may be pertinent to the EDDA of the Subject Property were identified:

- Jerry's Painting, Inc. (MD-RCRA)
- The Whalen Co., Inc. (RCRA-Info)
- Lewis Autobody (RCRA-Info, MD-RCRA)
- Easton Utilities Commission – Plant No. 2 (MD Coastal Zone Management Program, MD Open Remediation Cases, NPDES)
- Lowes Home Center – No. 400 (RCRA-Info, MD-RCRA)
- Easton Bypass Crown (MD Open Remediation Cases)
- Chesapeake Publishing Co. (Brownfield Master Inventory Report)
- Louis Charlie/Merrimac Cleaners (U.S. EPA Superfund)

3.3 Physical Setting Sources

Physical setting sources reviewed include the 2014 Easton USGS 7.5-minute topographic map, 2013 aerial images on the Talbot County website, aerial photographs provided by EDR (see Section 3.5.2), EDR's GeoCheck® Physical Setting Source Addendum report, and historical USGS 7.5-minute topographic maps.

3.3.1 General Topographic Setting of the Area

The general topographic gradient of the area is generally to the west. Based on the EDR's GeoCheck® Physical Setting Source Addendum report, the Subject Property's elevation ranges from the lowest to the west (reported at 12 feet) to the highest to the east (reported at 59 feet).

3.3.2 Geologic and Hydrogeologic Setting

The Subject Property is located in the Town of Easton in central Talbot County on the Eastern Shore of Maryland. The Soil Conservation Service data included in the EDR report indicates the dominant soil composition in the general area of the Subject Property is Othello. The soil surface texture is silt loam and the hydrologic group is Class C/D – drained/undrained hydrology class of soils that can be drained and classified. This poorly drained soil may have a saturated zone, a layer of low hydraulic conductivity,

or seepage. The characteristic depth to water table for the Othello soil is less than 1 foot. This soil meets the requirements for classification as a hydric soil. Typically this soil has a surface layer of fine-grained soils, silts and clays about 9 inches thick. The underlying material extends to a depth of about 72 inches. The upper 50 inches is silt-clay materials, while the lower 22 inches is granular materials.

3.3.3 Surface Water and Hydrologic Setting

Based on a review of the Talbot County Flood Risk Map (2013 aerial image), the Subject Property is located in Zone X, areas determined to be outside the 500-year floodplain. The Flood Risk Map also shows that Goldborough Neck Road (west of the Subject Project) experiences historic road closures due to rain and tidal floods.

Evidence of a site-specific, surficial aquifer groundwater flow direction was not ascertained from the Phase I EDDA. However, based on the area's topographic relief reported in EDR report, the general groundwater flow direction within the shallow surficial aquifer is suspected to be generally towards the west, although it is likely influenced by surface topography, hydrology, hydrogeology, soil characteristics, and nearby wells.

The nearest surface water is Glebe Creek, which is approximately 1,500 feet northwest of the Subject Property.

3.4 Historical Use Information

3.4.1 Subject Property Historical Use Summary

Black and Decker – Overview

Prior to 1975, the Subject Property was undeveloped. Black and Decker (power-tool assembly and manufacturing) occupied the Subject Property from approximately 1974 to 2003. According to the SDAT property record, the primary 224,735-SF structure was constructed in 1975. At one time, Black and Decker employed approximately 1,500 full- and part-time employees at the Subject Property. An article published in The New York Times, November 21, 2002, stated that Black and Decker would shut the factory and move from Easton, MD to Fayetteville, NC and Reynosa, Mexico. Black and Decker sold the Subject Property in June 2003 (recorded date) to Easton Exchange LLC. Pettinaro Management, LLC is the property manager. At the time of this writing, the Subject Property was partially occupied (small office space), and is advertised for sale or lease.

The Phase I ESA – 2003 prepared for the Subject Property reported that outdoor products such as lawn mowers and lawn edgers were originally manufactured at the Subject Property. Injection molding, dip and power coating, and vapor degreasing with 1,1,1-trichloroethane (TCA) were all performed during this time. Hazardous waste manifests from 1983-1993 indicated shipment of TCA offsite for disposal. Later in 1975, Black and Deck began manufacturing motors. Nickel-cadmium battery powered household products were brought in around 1979. Black and Decker began manufacturing battery operated kitchen appliances and continued with similar injection molding, painting, and vapor degreasing as was done in the mid-1970s. By 1986, Black and Decker began the manufacture of electric tools. Two more vapor degreasers were brought to the facility, at which time the facility began machining, motor winding, and injection molding. In 1993, vapor degreasing was replaced by aqueous parts washers. In 1995, battery powered tools were brought into the facility and product assembly was introduced. At the time of the Phase I ESA – 2003, the facility was manufacturing and assembling drills, saws, and grinders.

According to the site escort, Sotera Engineered Solutions (Sotera) occupied the Subject Property from approximately August 1, 2013 until approximately one year ago. During this time, Sotera used the office and warehouse space for the fabrication of plastics and appliances/furniture. Upon exiting the subject property, Sotera removed all components of their operation. The existing site materials observed during AECOM's site reconnaissance were noted as resulting from Black and Decker's former operations, with the exception of the office space currently occupied by Maverick Trucking, which is limited to office furniture and equipment.

Solid Waste

The Phase I ESA – 2003 reported that the Subject Property generated two general types of solid waste: 1) metal parts and grindings related to manufacturing, and 2) food wastes and other non-process related

material. Reportedly, approximately 1,800 pounds of fine metal grindings mixed with oil (called swarf) was combined (after oil removal) with waste solid polyester resin and oily rags and disposed by Ogden-Martin in Alexandria, VA each year. Non-hazardous glue used in the motor area was also disposed by Ogden-Martin. The facility produced a large quantity of metal turnings through the machining processes at the plant. Since 1995, the facility reclaimed the oil from the turnings by pressing out the oil and forming metal turning "pucks." The recovered oil was sent to a storage tank for reuse in the screw machines. The pucks were stored in a roll-off in the waste area until they were sent to a mill. Other process-related waste (off-spec parts, waste metal parts, and spent motors) were shipped by truck off site for reclamation.

Water Supply

The Phase I ESA – 2003 indicates that the Subject Property receives its water supply from the Town of Easton, which was confirmed by the site escort during the June 15, 2016 site reconnaissance.

Wastewater

The Phase I ESA – 2003 reported that three septic tanks were located at the Subject Property. One septic tank and associated drain field serviced the guard shack. The other two septic tanks served as holding tanks for sanitary waste generated at a temporary trailer that was located in the northwest corner of the building. Reportedly, the tanks were periodically pumped out for treatment. According to the site escort during the June 15, 2016 site visit, the only septic system that remains in place is the one associated with the guard shack, but it is out of use due to inactivity at the subject property. Process wastewater was pretreated at the facility before discharge to the Town of Easton. The discharge was regulated by a wastewater discharge permit (No 4060 dated July 2002). Three outfalls were listed in the permit:

- Discharge from pump station to manhole on Glebe Road
- Discharge from nonofiltration
- Discharge from cafeteria to manhole on Glebe Road

The Phase I ESA – 2003 reported that sampling of each discharge was performed for biological oxygen demand, total suspended solids, and oil and grease, total nitrogen, and total phosphorus. The site escort indicated that sampling of the retention area north of the access road entrance along Glebe Road is conducted annually and has always be in compliance.

Stormwater

One man-made stormwater retention pond is located in the southwestern portion of the Subject Property. According to the Phase I ESA – 2003, this pond receives stormwater from the Subject Property via overland flow and drainage swales. Equipped with an overflow pipe that drains to the municipal stormwater collection system during heavy rain, the pond subsequently drains into Glebe Creek. The

facility had a general stormwater permit (No. 02-SW) that was valid from December 2002 to November 2007.

Used Oil

The Phase I ESA – 2003 reported that used oil reclaimed from the puck process was reused throughout the screw machining area. Other used oil was generated at the site through recovery in the wastewater treatment process (disposed of by Safety-Kleen).

USTs

Records indicate that Black and Decker had maintained at least three USTs at the Subject Property. Three closed MDE OCP records were found (closed in 1992, 1997, and 2004); no active tanks were found within the MDE OCP database. Mike Jester with the MDE OCP Department verified in a phone conversation on 1-27-16 that there are no active OCP cases associated with the Subject Property. Two USTs have been removed from the ground and 1 UST was closed in place. Mr. Jester said there are no other "known" tanks located at the Subject Property, but it is possible that unregistered tanks exist onsite.

The three closed USTs include the following:

- 92-1992TA – According to the Closure Report for 1,000 Gallon UST At Black and Decker, Inc., September 1992, prepared by RMC Environmental Services, Inc., the UST was located west of the facility's main building, adjacent to an access road. After the UST was excavated in 1992, almost 12 tons of contaminated soil was removed from the property. Subsequent soil samples indicated concentrations below 15 ppm.

- 95-1065TA – According to the Removal of Waste Oil Underground Storage Tank Report, January 1995, prepared by O'Brien and Gere Engineers, Inc., one 800-gallon waste oil UST (located near the south office space entrance) was abandoned in place in 1994. Prior to tank closure, approximately 100 gallons of fluid and sludge were removed from the tank. The top three feet of the tank was demolished and the tank was filled with fill and restored with topsoil and grass seed.

- 04-0161TA – The Leak Summary and Tank Closure Form, July 2004, reports that a release was detected and cleanup was initiated. The form does not indicate the 500-gallon UST was removed. According to the site escort during the June 15, 2016 site reconnaissance, the 500-gallon UST was actually a concrete pit that was pumped, cleaned and filled with concrete as part of the abandonment procedure.

Monitoring Wells

According to the Phase II ESA – 2003, six monitoring wells were installed onsite. AECOM was only able to locate two monitoring wells during the June 2016 site reconnaissance. Groundwater was encountered between 7 and 8 feet below ground surface.

ASTs

The Phase I ESA – 2003, identified 11 active ASTs at the Subject Property. Reportedly, they were all equipped with secondary containment.

Location	Size (gallon)	Contents
Tank Farm	6,600	Methanol
Tank Farm	6,600	Methanol
Tank Farm	750	Liquid Nitrogen
Tank Farm	750	Liquid Argon
Exterior of Chemical Storage Area	600	Hydraulic Oil
Exterior of Chemical Storage Area	600	Cutting Oil
Interior of Chemical Storage Area	Approx.. 2,000	Grease
Interior of Chemical Storage Area	Approx.. 2,000	Grease
Interior of Wastewater Area	6,000	Water
Interior of Wastewater Area	2,500	Oil/Water
Northwest Corner of Facility	500	Diesel

LQG

Black and Decker was registered as a large quantity generator of hazardous waste (forms received in 1990, 1992, and 1994). According to the Phase I ESA – 2003, hazardous wastes generated by the facility consisted of spent thinners and solvents, waste liquid resin, ethylene glycol, paints, mineral spirits, and liquid UV resin. The facility accumulated hazardous wastes in 55-gallon drums placed in the Flammable Storage Room. According to the U.S. EPA ECHO database – Compliance Summary, as of January 2016, no Significant Non-Compliance violations are associated with this facility.

Air Emissions

The Phase I ESA – 2003 reported that the Subject Property previously operated under several air permits for construction of processes at the facility, as shown below.

Permit Number	Description
PTC-041-6-0017M	One resin coating process with 6 resin coating lines, each with electric integral oven
20-6-0013	Bonding epoxy and curing
20-6-0025	Lindberg Furnace
20-6-0026	Lindberg Furnace
20-5-0005N	Natural Gas Steam Generator

One notice of violation was issued when the annual emissions inventory was not received by MDE on time; however, the violation was resolved.

PCB Management

The Phase I ESA – 2003 reported that six pad-mounted transformers were in use at the facility. Three of the transformers were older models that once contained PCBs. In the 1980s, the PCB-containing transformers were flushed and refilled with mineral oil. The remaining three transformers never contained PCBs. Reportedly, annual testing was completed on all the transformers to confirm the absence of PCBs; the latest testing was completed in June 2002.

Asbestos-containing Materials

The Phase I ESA – 2003 reported that an asbestos-containing cooling tower was removed from the roof and replaced by a cooling tower with stainless steel panels in 1997.

Specialized Environmental Issues

The Phase I ESA – 2003 reported that an oil spill occurred from the 200-hp air compressor in April 2000. Approximately 10 to 15 gallons of oil was released when an air compressor caught fire. The sprinkler system engaged and flooded the air compressor room. Drip pans of oil overflowed and flowed out the door across the south parking lot onto a small grassy area (30 feet by 30 feet). No oil or oily water flowed offsite to the stormwater drain. Approximately 9 cubic yards of soil were excavated in April 2000. No analytes were detected in concentrations above the detection limits, except for TPH, which was found to be 140 m/kg. Additional samples for TPH were found to be 78 mg/kg and non-detect in April and May 2000, respectively.

Other Occupants at the Subject Property with Potential RECs

SFA Defense Products Division (identified in the EDR Report at the same address as the Subject Property) was issued an NPDES permit in November 2014 (originally issued in October 2006); it expires in December 2018. Miles River is the receiving water. According to the U.S. EPA ECHO database – Three Year Compliance Status by Quarter (which is through December 2014), no violations were found. A review of the MDE OCP database did not reveal any tanks associated with this facility.

Sotera Engineered Solutions (identified in the EDR Report at the same address as the Subject Property) is included in the RCRA-CESQG database (waste code: ignitable waste). According to the U.S. EPA ECHO database – Compliance Summary, as of January 2016, this facility does not have any current Significant Non-Compliance violations. The property owner is listed as Pettinaro Enterprises on the facility information details. A review of the MDE OCP database did not reveal any tanks associated with this facility.

3.4.2 Wells

The EDR Reports included numerous wells listed under the Federal USGS and State well databases (see Appendix F). No public water supply wells were found within 1 mile of the Subject Property in the Federal Reporting Data System Public Water System database.

According to the U.S. EPA ECHO, Easton Utilities – Glebe WTP wells 11 and 12 are located at 28705 Glebe Road. The Facility Registry ID for these wells is 110050899426. No records were found regarding compliance or enforcement violations for these wells.

3.4.3 Standard Historical Records

3.4.3.1 Aerial Photographs Review

EDR provided historical aerial photographs for the years 1970, 1981, 1989, 1990, 1995, 1998, 2005, 2007, 2009, and 2011 (see Appendix C). The following discussion summarizes observations from a review of these aerial photographs.

1970 The Subject Property is undeveloped. Areas of the airport property located north of the Subject Property are cleared; an area northwest of Glebe Road and MD 322 is vegetated. Adjoining properties west of the Subject Property are undeveloped. The southwest quadrant of Glebe Road and MD 322 is vegetated, while the southeast quadrant is primarily undeveloped. Residential development is located east of the Subject Property in the northeast quadrant of Glebe Road and MD 322.

1981 The Subject Property has undergone development and the warehouse is visible. An area for storage or parking is located west of the main structure and an area for parking appears to be south of the main structure. A road leading to the Subject Property is accessible from Glebe Road. Some commercial development is visible north of the Subject Property and a larger area of residential development is seen east of MD 322.

1989 The Subject Property does not appear to have undergone much additional development, but commercial development has taken place south of the Subject Property in the southwest quadrant of Glebe Road and MD 322. The southeast quadrant of Glebe Road and MD 322 is not yet developed.

1990 The Subject Property and vicinity appear similar to the characteristics observed in the 1989 photo.

1995 The Subject Property is fully developed. A new road west of the Subject Property, Mistletoe Drive, was constructed. Commercial development in the southeast quadrant of Glebe Road and MD 322 has begun.

1998 The Subject Property and vicinity appear similar to the characteristics observed in the 1995 photo.

2005 The Subject Property is fully developed with parking and overflow storage. Commercial development is found northwest of the Subject Property along Mistletoe Drive. Mary's Court, leading from Mistletoe Drive to an unidentifiable property, was constructed. Additional commercial development is noted north of the Subject Property in the Easton Airport Industrial Park.

2007 An additional commercial property is located north of the Glebe Road and Mistletoe Drive intersection (west of the Subject Property), as well as commercial properties along Mary's Court and the west side of Mistletoe Drive. The Easton / Newnam Field Airport is visible in the area north of the Subject Property. The southeast quadrant of Glebe Road and MD 322 has begun commercial development.

2009 The Subject Property appears unchanged. The southeast quadrant of Glebe Road and MD 322 is developed with parking and a large commercial building; land east of this development is cleared.

2011 The Subject Property and adjoining properties appear similar to the characteristics observed in the 2009 photo. A few residential properties have been constructed in the southeast quadrant of Glebe Road and MD 322 (east of the large commercial development).

3.4.3.2 Sanborn© Fire Insurance Map Review

Historical Sanborn© Fire Insurance Maps were requested from EDR; however, fire insurance maps covering the Subject Property were not available from the Sanborn Library, LLC collection. A copy of the Sanborn© Map report is provided in Appendix C.

3.4.3.3 Property Tax Files

The Subject Property tax record reports the current market value of the parcel, delineates the Subject Property's boundary, includes the legal description, and identifies the land use of the property, which is industrial. A copy of the tax record is provided in Appendix A.

3.4.3.4 Recorded Land Title Records

A title search was not conducted as part of this Phase I EDDA; however, a copy of the Subject Property's warranty deed is included as Appendix A.

3.4.3.5 Historical Topographic Map Review

EDR provided historical USGS topographic quadrangle maps from EDR for the years 1898, 1904, 1908, 1942, 1943, 1974, and 2014. Copies of the historical topographic maps are provided in Appendix C. The following paragraphs summarize observations from the review of these historical topographic maps.

1898 No structures or development are depicted on or in the vicinity of the Subject Property. Glebe Creek is shown west of the Subject Property and the Baltimore Penn Central Railroad track (now Easton Rails-to-Trails) is visible east of the Subject Property. The Town of Easton is visible southeast of the Subject Property. Glebe Road is depicted; however, MD 322 is not yet constructed.

1904 The Subject Property and vicinity appear similar to the characteristics found in the 1898, along with additional topographic relief.

1908 The Subject Property and vicinity appear similar to the characteristics found in the 1904 and 1898 topographic maps.

1942 The Easton / Newnam Field Airport is labeled on the map north of the Subject Property; however, no runways are depicted.

1943 The Subject Property and vicinity appear similar to the characteristics found in the 1942 topographic map. The Easton / Newnam Field Airport is noted on the map as being "under construction."

1974 MD 322 and the Easton / Newnam Field Airport have been constructed. Residential development has occurred in the northeast and southeast quadrants of Glebe Road and MD 322. The Baltimore Penn Central Railroad track remains visible east of the Subject Property.

2014 The Subject Property is shown with topographic relief. Main roadways surrounding the Subject Property and vicinity are noted, including Glebe Road, MD 322, and SR 50. Construction of Runway 4-22, the primary runway for the Easton / Newnam Field Airport, appears to have been completed. The Town of Easton and surrounding communities have been further developed. The Baltimore Penn Central Railroad is no longer depicted.

3.4.3.6 Local City Directories

Local Street Directories included in the EDR Report for years 1992, 1995, 1999, 2003, 2008, and 2013 were reviewed for the Subject Property. Known businesses that occupied space at the Subject Property are shown below. A copy of the EDR City Directories is provided in Appendix C.

2013 County of Talbot, Easton Land LLC, Frederick, Maverick Transport, Inc.

2008 County of Talbot, Dixie Industrial Supply, IDG USA LLC, Industrial Distribution Group, SSA, Inc.

2003 Dixie Industrial Supply

1999 Black and Decker Manufacturing Company, Dixie Industrial Supply

1995 Black and Decker, Employment Control, Inc.

1992 Not listed

3.4.3.7 Town of Easton Zoning

According to the Town of Easton Zoning Map, effective January 26, 1993, amended September 28, 2007, the Subject Property and the business parks located both north and south of the Subject Property are zoned as light industrial. The area in the northeast quadrant of Glebe Road and MD 322 is zoned as residential, and areas in the southeast quadrant are zoned as light commercial, planned unit developments, and residential.

3.4.3.8 Existing and Future Land Use

The Existing Land Use Map, Easton Planning Office, 4-15-09, shows a large area, including the Subject Property, of industrial land use that is bound by Airport Road (north), Glebe Road (south), Goldsborough Neck Road (west), and MD 322 east. Another industrial/commercial area is located south of the Subject Property from Glebe Road to approximately Marlboro Avenue, and from Brooks Drive on the west east of MD 322.

A large area west and southwest of the Subject Property are within the Town of Easton's Priority 1 Boundary Refinement and Priority 3 Long Range Growth areas (Town of Easton 2009 Comprehensive Plan, Growth Area Map, 3-18-10). Priority 1 Areas often correspond to areas that are already developed in Talbot County, while Priority 3 Areas are referred to as Long Range Growth Areas. These area are consistent with the Town of Easton, 2009 Comprehensive Plan Future Land Use Map dated October 21, 2009.

3.5 Historical Use Summary for Surrounding Area

Section 3.4.2.1 – Aerial Photographs Reviewed and Section 3.4.2.5 – Historical Topographic Map Review discusses historical use interpretations for the surrounding area.

3.6 Information From Previous Reports

As part of this Phase I EDDA, other available environmental documents prepared for the Subject Property were reviewed, including:

- Phase I Environmental Site Assessment, March 2003, prepared by Environmental Resources Management, Inc.
- Phase II Environmental Site Assessment, May 2003 prepared by Weston Solutions, Inc.
- Supplemental Data, January 2004, prepared by Miles and Stockbridge, P.C.

Support documentation extracted from the previous ESAs is included in Appendix G.

3.6.1 Phase I ESA, March 2003 – Findings

Findings from the Phase I ESA – 2003 are referenced in relevant sections of this Report.

3.6.2 Phase II ESA, May 2003 – Findings

The focus of the Phase II ESA – 2003 was to determine if releases had occurred in the areas of concern identified in the Phase I ESA – 2003 and to characterize the site's uppermost groundwater zone. The Phase II investigation included:

- Installation of six monitoring wells;
- One soil boring;
- Groundwater and soil sampling for Volatile Organic Compounds (VOCs) and Total Petroleum Gasoline and Diesel Range Organics (TPH-GRO and TPH-DRO);
- Location and elevation survey of installed monitoring wells;

- Well development and field monitoring of groundwater parameters; and,
- Depth to water measurements to determine groundwater flow direction.

Analytical results of the Phase II ESA indicate the following:

- The presence of 1,1 dichloroethane and trichloroethene below regulatory standards in the groundwater sample collected from MW-5;
- Low levels of TPH-DRO in excess of MDE standards at MW-5 and MW-6;
- No TPH-GRO compounds in groundwater;
- Groundwater elevation measurement indicate a westerly flow direction;
- The facility and surrounding area were on public water; there was no reported use of groundwater within one half mile of the Subject Property; and,
- Weston Solutions, Inc. stated that no further evaluation appeared to be warranted.

3.6.3 Other Supplemental Information

A Site Status Letter dated 5-13-04 from the MDE OCP stated that it "specifically addresses only the petroleum contamination at the site." Based on the review, residual petroleum contamination remains onsite. The OCP did not require further investigation or corrective action at the Subject Property at that time.

4.0 SITE RECONNAISSANCE

A visual assessment of the Subject Property was conducted on June 15, 2016 in an effort to obtain information indicating the likelihood of identifying RECs in connection with the Subject Property. Figure 2 is a site plan that details the observations recorded during the site reconnaissance. Figure 3 depicts the surrounding properties and their current uses. Photographs and field notes recorded during the site assessment are presented in Appendix D.

4.1 Methodology and Limiting Conditions

The work was completed in accordance with FAA Order 1050.19B – *Environmental Due Diligence Audits in the Conduct of FAA Real Property Transactions* and the ASTM *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*, ASTM E1527-13, with the exceptions listed in Section 1.4.

During the site investigation on June 15, 2016 there was sunny and warm weather. Limiting conditions include:

- Physical obstructions by furniture and other materials that have been accumulated over the past year;
- The roof was not observed at the time of reconnaissance; and,
- AECOM was unable to inspect all portions of the office area as Maverick Transportation currently utilizes this space.

Due to the limited nature of the inquiry, AECOM makes no warranties; either expressed or implied that the site is free of contamination or other environmental issues. AECOM warrants that the assessment was performed in accordance with the level of attention and skill equal to industry standards under similar conditions.

4.2 General Site Setting and Current Use of the Subject Property

The Subject Property is located in the northwest quadrant of Glebe Road and MD 322. Glebe Road begins southwest of the Subject Property at Unionville Road/Old Bloomfield Road. It runs northeast until it intersects Goldsborough Neck Road where it turns east (running south of the Subject Property), crosses MD 322 and turns south. MD 322, also known as Easton Parkway, is part of the National Highway System that runs approximately 5.12 miles on the east side of the Subject Property between two junctions with US Route 50 (US 50). MD 322 serves as a bypass of downtown Easton for traffic between US 50 and highways to western Talbot County. Other surrounding roadways are used for local traffic.

One unnamed paved roadway leading to the Subject Property is accessible from Glebe Road. An unused guard house is situated at the end of the roadway that enters the Subject Property. This paved roadway provides access to the outdoor storage area (excess parking) west of the warehouse, to the docks located on the west and north sides of the warehouse, to an office entrance on the east side of the warehouse, and to paved parking south of the warehouse. No tenants were observed as occupying space at the Subject Property at the time of the site with the exception of Maverick Transportation (trucking company) that utilizes a portion of the office space. The manufacturing facility (with associated office space) is available for lease or sale.

One approximately 225,000-SF warehouse building is situated in the east area of the Subject Property. The main building, which includes available office space, appeared to be constructed of brick and metal.

A paved roadway separates the approximately 3.75 acres of outdoor storage area from the main building. The roadway circles the building, ending at an office entrance that fronts MD 322. Paved parking (including handicap parking) is located south of the building. A sidewalk leads from the east area of the parking lot to an office entrance on the south side of the building and an entrance that fronts MD 322. Additional parking is provided near this office entrance.

Twenty-one docks, all with levelers, seals, dock lights, and dock locks are located on the west and north sides of the main building.

Telephone lines were observed along Glebe Road. Power lines were observed on the Subject Property along Easton Parkway (MD 322).

4.3 Exterior Observations

4.3.1 Solid Waste

The Town of Easton contracts with Talbot County to dispose of solid waste at the Mid-Shore Regional Landfill transfer center located on Barkers Landing Road, southeast of the town. The Phase I ESA – 2003 reported that the Subject Property generated two general types of solid waste: 1) metal parts and grindings related to manufacturing, and 2) food wastes and other non-process related material. At the time of AECOM's site reconnaissance, no solid was generation was observed except for office refuse generated in the office space.

4.3.1 Water Supply

No active drinking water wells were observed during the June 15, 2016 site visit.

4.3.2 Wastewater

The Phase I ESA – 2003 reported that three septic tanks were located at the Subject Property. One septic tank and associated drain field serviced the guard shack. The other two septic tanks served as

holding tanks for sanitary waste generated at a temporary trailer that was located in the northwest corner of the building. The Phase I ESA – 2003 reported that pretreatment of the facility's process water occurred onsite. The site escort during AECOM's June 15, 2016 site reconnaissance indicated that only the septic system associated with the guard shack remains operable (but out of use), as the other two have been abandoned in place. AECOM did not observe evidence during the site visit that the Subject Property currently generates or discharges industrial waste.

4.3.3 Stormwater

One man-made stormwater collection pond is located in the southwestern portion of the Subject Property. AECOM did not observe evidence during the site visit of RECs associated with the pond.

4.3.4 Used Oil

The Phase I ESA – 2003 reported that used oil reclaimed from the puck process was reused throughout the screw machining area. Other used oil was generated at the site through recovery in the wastewater treatment process. During the June 15, 2016 site visit, AECOM did not observe any used oil at the Subject Property; however, unused oil was observed to be stored in two (2) 55-gallon drums located in the maintenance area, for use associated with the air compressors that are no longer in use. The site escort indicated that this oil is 14 years old and has not been used since Black and Decker vacated the property.

4.3.5 USTs

No active USTs were found during the site visit. In addition, the areas of the former USTs were walked to identify evidence of previous petroleum use. No fill or access ports for the former USTs were observed during the site visit. Former USTs and their locations include the following:

- 1,000-gallon UST (diesel), southern corner of the building;
- 800-gallon UST (waste oil), southern portion of building; and,
- 500-gallon UST (waste oil), west parking lot.

No indications of residual USTs were observed during AECOM's site visit on June 15, 2016. Furthermore, no odors, discolored soils or distressed vegetation was observed in the vicinity of former USTs.

4.3.6 Monitoring Wells

Two monitoring wells were observed during the AECOM's site visit. Based on previous reports, up to six monitoring wells were previously installed at the subject property. The two wells that were found were

gauged for depth-to-groundwater. Groundwater was observed at 7.00 feet and 8.20 feet below ground surface (bgs) in these wells, respectively. The observed monitoring wells and reported monitoring wells are depicted on Figure 2.

4.3.7 ASTs

The Phase I ESA – 2003 identified 11 active ASTs at the Subject Property (see below). A 6,000-gallon water AST and a 2,500-gallon oil/water AST remain in the wastewater treatment area along the southwestern portion of the building, but are no longer in use. In addition, AECOM observed an enclosed containment area with a concrete pad along the southwestern exterior of the building that previously housed a 300-gallon double-walled diesel fuel tank until sometime in the last year. This tank was used to fuel forklifts associated with site operations. Furthermore, an AST of unknown capacity and associated trash compactor was observed located along the northern building exterior in the vicinity of the bay doors. No staining was observed in the vicinity of this active tank. Surficial staining from previous operations was observed on the concrete floor in the wastewater treatment room, which is situated in secondary containment. The surficial staining is considered a *de minimis* condition. The areas of the former ASTs are not considered RECs.

Location	Size (gallon)	Contents
Tank Farm	6,600	Methanol
Tank Farm	6,600	Methanol
Tank Farm	750	Liquid Nitrogen
Tank Farm	750	Liquid Argon
Exterior of Chemical Storage Area	600	Hydraulic Oil
Exterior of Chemical Storage Area	600	Cutting Oil
Interior of Chemical Storage Area	Approx.. 2,000	Grease
Interior of Chemical Storage Area	Approx.. 2,000	Grease
Interior of Wastewater Area	6,000	Water
Interior of Wastewater Area	2,500	Oil/Water
Northwest Corner of Facility	500	Diesel

4.3.8 PCBs

According to the Phase I ESA – 2003, six pad-mounted transformers were in use at the facility. During the June 15, 2016 site visit, no evidence of PCBs associated with the transformers was observed. Furthermore, the site escort indicated that all PCBs were previously drained from the transformers. No distressed vegetation or indications of a release to the surface were observed in the vicinity of the transformers.

4.3.9 Asbestos-containing Materials or Lead-based Paint

This Phase I EDDA did not include an assessment of asbestos-containing materials or lead-based paint associated with the Subject Property.

4.3.10 Surface Water, Pits, Sumps

The Phase I ESA – 2003 reported that metal puck was placed in a roll-off under the puck processor. An approximately 400-gallon concrete pit was located in the puck area in front of the roll off. The pit was used to collect excess oil from the processing pucks. Oil staining was noted during the March 2003 site visit outside the facility in the puck processing area on the concrete foundation of the building. During the June 15, 2016 site visit, no staining was observed on the concrete foundation of the building.

The Phase I ESA – 2003 reported that the heat-treat ovens in the motors area have concrete catch pits under the ovens that contain quench oil. During the June 15, 2016 site visit, AECOM did not observe any heat-treat ovens or indications of a release in the vicinity of the former heat-treat ovens.

4.3.11 External Fuel Storage with Containment System

4.3.12 Odors

No olfactory indications of a petroleum release were observed along the exterior of the subject building. No odors were observed within the interior of the building. The site escort indicated that Sotera had complained of “musty” odors approximately one year ago, which was cleaned to their satisfaction shortly thereafter.

4.3.13 Pools of Liquid

No pools of liquid were observed at the Subject Property during the site visit.

4.3.14 Stained Soil or Pavement

No stained soils or pavement was observed at the Subject Property during the site visit. However, surficial oil staining was observed on the concrete floor in the wastewater treatment room and the maintenance room in the vicinity of the out-of-use water treatment system. Both of these surficial stains are considered *de minimis* conditions.

4.3.15 Vegetation

The Subject Property supports landscaped areas west of the overflow parking area and north of the warehouse adjacent to MD 322. Stressed vegetation was not observed in any areas of the Subject Property.

4.4 Interior Observations

4.4.1 Floor Drains

According to the Phase I ESA – 2003, there are no floor drains in the main plant area, but there are floor drains in the compressor room that connect to a 500-gallon pit. During the June 15, 2016 site visit, this was confirmed. No staining was observed in the vicinity of any floor drains, with the exception of the

concrete floor in the wastewater treatment area. This room was constructed within secondary containment (concrete) with floor drains that reinject into the wastewater treatment system upon discharge.

4.4.2 Utility Room

A utility room houses the warehouse HVAC chillers, air compression units, and provides additional storage space. The room is accessible via two 10' by 10' drive-in garage doors. In addition, several empty 55-gallon drums and two full drums for oil storage were observed in the utility room on the concrete floor. The oil has not been used in the 14 years since Black and Decker has operated at the Subject Property.

4.4.3 Heating/Cooling

The warehouse HVAC is a central plant with two 500-ton chillers. It includes 16 penthouse air handlers and three cooling towers. Two additional air chillers are available for the manufacturing processing. The HVAC system is not currently in use due to the vacancy of the manufacturing warehouse area.

4.4.4 Flammable Storage Room

A flammable storage room is located at the southern end of the building. According to the Phase I ESA – 2003, stored materials included mineral spirits (55-gallon drum), isopropyl alcohol (55-gallon drum), Envisolve 5168 solvent (55-gallon drum), ethylene glycol (55-gallon drum), polyester resin (5-gallon pails), and grease (two 2,000-gallon ASTs). Assorted paints, thinners, solvents, glues, and lubrications were also being stored there. During the June 15, 2016 site visit, AECOM observed these previously noted chemicals/solvents, in addition to 12 retail-sized canisters of Freon.

4.4.5 Mezzanine Storage

A mezzanine storage area is located in the northeastern portion of the building and is capable of 150 pounds/SF. The area includes a hydraulic access lift, which, according to the site escort, did not contain PCBs.

4.4.6 Chemical Use and Storage

No active chemical use and/or storage was found during the site reconnaissance other than what has been noted in previous sections of this report.

4.4.7 Hazardous Substance and Petroleum Product Drums or Containers

Several drums were observed in the maintenance area, two of which were approximately half full of oil used for maintenance of the air compressors. Two 55-gallon drums of anti-freeze were also observed in the maintenance area.

4.5 Past Use of the Subject Property

Past use of the Subject Property is described in Section 3.4.1 – Subject Property Historical Use Summary. Observations made during the site reconnaissance of potential past use of the Subject Property are referenced throughout Section 4.0 – Site Reconnaissance.

4.6 Off-Site Observations

A reconnaissance was conducted by vehicle of the adjoining properties. The general characteristic of the adjoining property uses are described below:

- North – The Easton / Newnam Field Airport is located north of the Subject Property. Whalen Company, the Easton Utilities Commission Plant No. 2, and Filter Networks are located northeast of the Subject Property on Glebe Park Drive. The Airport Industrial Park, also located northeast of the Subject Property, includes commercial and industrial properties and potentially other EPA-regulated facilities. Northwest of the Subject Property consists of an Collision Repair (automotive repair facility), Potomac Valley Brick and Supply, offices, Easton Tile & Marble, and a K-9 Academy.

- South – Glebe Road runs along the south portion of the Subject Property. Commercial and industrial properties located south of Glebe Road include Coca-Cola Distribution Facility, Lewis Autobody, and potentially other EPA-regulated facilities.

- West –Aqua Pools and Spas is located in the northeast quadrant of Glebe Road and Mistletoe Drive. Other commercial properties located on the east side of Mistletoe Drive and adjacent to the Subject Property include Nelson's Autobody Concepts, Eastern Shore Brick, Jerry's Painting, Brinsfield Fence, Admiral Tire and Auto, and Harrisons Transmission and Automotive. More commercial properties are located further west of the Subject Property from Mistletoe Drive to Goldborough Neck Road. Glebe Creek is west of the Subject Property.

- East – MD 322 runs along the eastern portion of the Subject Property. Land northeast of the Glebe Road and MD 322 intersection is primarily residential. Lowes Home Center is located in the southeast quadrant of Glebe Road and MD 322 on Marlboro Road.

5.0 INTERVIEWS

The purpose of interviews with past and present owners and occupants was to obtain information indicating potential RECs in connection with the Subject Property. Information obtained through these interviews is discussed in relevant sections of this Report.

5.1 Interview with the User

Mr. Michael Henry, Airport Manager, Easton / Newnam Field Airport completed a User Questionnaire on April 13, 2016; a copy is included in Appendix E.

5.2 Interview with Owners, Past Owners, Past Operators and Past Occupants

A User Questionnaire was provided to the owner; a copy is included in Appendix E.

5.3 Interview with Site Manager

On June 15, 2016, George Tarr, Facility Maintenance Engineer, was interviewed. Information obtained from the interview has been incorporated throughout the Report.

5.4 Interview with Occupants

The Subject Property is currently partially occupied by Maverick Trucking, but only temporarily. Nobody with Maverick Trucking had extensive knowledge of the property.

5.5 Interview with Local Government Officials

On January 27, 2016, Mike Jester with the MDE OCP Department was contacted in regards to the Subject Property. Mr. Jester confirmed that Black and Decker had maintained at least three USTs at the Subject Property; two USTs had been removed and one was closed in place. Mr. Jester confirmed that there are no active tanks and no other “known” tanks located at the Subject Property. He stated that it is possible that unregistered, or nonregulated, tanks exist on a given property.

The MDE provided copies of the three closed OCPCASE files, along with copies of the Phase I Environmental Site Assessment, March 2003, Phase II Environmental Site Assessment, May 2003, and other support documentation (presented in Appendix G).

6.0 EVALUATIONS

A Phase I EDDA was prepared for the Subject Property (former Black and Decker) located at 28712 Glebe Road, Easton, Maryland 21601 in conformance with the scope and limitations of the ASTM Standard. This section discusses the findings, opinions, and conclusion of the Phase I EDDA. Support documentation for the Subject Property and surrounding properties is presented in Appendix G.

6.1 Data Gaps

A Data Gap is defined as the lack of or inability to obtain information required by the ASTM Standard despite good faith efforts by the Environmental Professional (as defined in Section 312.10 of 40 CFR Part 312) to gather such information. A significant data gap occurs when a data gap impacts the ability of the Environmental Professional to identify RECs.

Pettinaro Management, LLC, property manager for the Subject Property, provided sufficient information regarding the Subject Property.

6.2 Findings

This section discusses known and suspect RECs, CRECs, HRECs, and de minimis conditions on the Subject Property and surrounding areas.

6.2.1 Subject Property

Finding: Black and Decker occupied the Subject Property from approximately 1974 through June 2003. During this time, the facility maintained three underground storage tanks (USTs), two of which have reportedly been removed from the ground and one that was closed in place. The three USTs had no secondary containment, overfill protection, release detection method, or spill protection. Three records for the Subject Property are included in the MDE Closed Petroleum Investigation/Remediation Cases:

- 92-1992TA, report closed in 1992 – 1,000-gallon UST (diesel), southern corner of the building.
  - According to the Closure Report for 1,000 Gallon UST At Black and Decker, Inc., September 1992, prepared by RMC Environmental Services, Inc., the UST was located west of the facility's main building, adjacent to an access road. After the UST was excavated in 1992, almost 12 tons of contaminated soil was removed from the property. Subsequent soil samples indicated concentrations below 15 ppm.
- 95-1065TA, report closed in 1997 – 800-gallon UST (waste oil), southern portion of building.
  - According to the Removal of Waste Oil Underground Storage Tank Report, January 1995, prepared by O'Brien and Gere Engineers, Inc., one 800-gallon waste oil UST (located near

the south office space entrance) was abandoned in place in 1994. Prior to tank closure, approximately 100 gallons of fluid and sludge were removed from the tank. The top three feet of the tank was demolished and the tank was filled with fill and restored with topsoil and grass seed.

- 04-0161TA, report closed in 2004 – 500-gallon UST (waste oil), west parking lot.

  - The Leak Summary and Tank Closure Form, July 2004, reports that a release was detected and cleanup was initiated. The form does not indicate the 500-gallon UST was removed.

The MDE OCP completed a review of the three OCPCASES and issued a Site Status Letter dated 5-13-04. The OCP stated that it specifically addressed only the petroleum contamination at the site. Based on the review, residual petroleum contamination remains onsite. The OCP did not require further investigation or corrective action at the Subject Property at that time.

Opinion: The three OCPCASES remain in closed status and no changes to the regulatory criteria were found as a result of this Phase I EDDA. The locations of these former USTs and the residual petroleum contamination are considered HRECs.

Finding: According to the Phase I ESA – 2003, an oil spill occurred from the 200-hp air compressor in April 2000. Approximately 10 to 15 gallons of oil were released when an air compressor caught fire. Drip pans of oil overflowed and flowed out the door across the south parking lot onto a small grassy area (30 feet by 30 feet). No oil or oily water flowed offsite to the stormwater drain. Approximately 9 cubic yards of soil were excavated in April 2000. No analytes were detected in concentrations above the detection limits, except for TPH, which was found to be 140 m/kg. Additional samples for TPH were found to be 78 mg/kg and non-detect in April and May 2000, respectively.

Opinion: The oil spill is considered a HREC.

Finding: The 2003 Phase II ESA revealed low levels of TPH-DRO in excess of MDE standards at MW-5 and MW-6.

Opinion: The MDE standard exceedances are considered a REC.

6.2.2 Surrounding Properties

No surrounding properties are considered to represent a material threat to the subject property based on the information available for review at the completion of this report.

6.2.3 De Minimis Conditions

De minimis conditions are not RECs and generally do not present a threat to human health or the environment and generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

In general, the Subject Property was well maintained, with most areas vacant. The entire manufacturing warehouse and associated systems were out of use at the time of the reconnaissance, but all equipment in the maintenance area remains intact. Minor surficial staining was observed in the wastewater treatment area beneath the holding tanks on the concrete floor. Minor surficial oil staining was also observed on the concrete floor of the maintenance area in the vicinity of the water treatment system, which is currently out of use. Both instances of surficial staining are considered *de minimis* conditions.

6.3 Opinion

The minimum level of inquiry required to support the Landowner Liability Protections, along with a review of collected files and records, interviews, and a site and surrounding area reconnaissance, was sufficient to evaluate the existence of RECs associated with the Subject Property.

6.4 Conclusions and Recommendations

A Phase I EDDA was performed in conformance with the scope and limitations of ASTM Practice E1527 of the former Black and Decker property located at 28712 Glebe Road, Easton, MD 21601, the Subject Property. Any exceptions to, or deletions from, this practice are described in Section 1.4 of this Report. This assessment has revealed evidence that supports the potential for RECs in connection with the Subject Property, as summarized below.

1. A portion of the Subject Property's office space is currently occupied by Maverick Trucking. According to the site escort, Sotera occupied the Subject Property from approximately August 1, 2013 until approximately one year ago. During this time, Sotera used the office and warehouse space for the fabrication of plastics and appliances/furniture. Upon exiting the subject property, Sotera removed all components of their operation. The existing site materials observed during AECOM's site reconnaissance were reportedly from Black and Decker's former operations. Black and Decker occupied the Subject Property from approximately 1974 through June 2003. During this time, the facility maintained three USTs, two of which have reportedly been removed from the ground and one that was closed in-ground. Three records for the Subject Property are included in the MDE Closed Petroleum Investigation/Remediation Cases:

    - 92-1992TA, report closed in 1992 – 1,000-gallon UST (diesel);
    - 95-1065TA, report closed in 1997 – 800-gallon UST (waste oil); and,
    - 04-0161TA, report closed in 2004 – 500-gallon UST (waste oil).

The MDE OCP completed a review of the three OCPCASES and issued a Site Status Letter in May 2004. The OCP stated that it specifically addressed only the petroleum contamination at the site. Based on the review, residual petroleum contamination remains onsite; however, the OCP did not require further investigation or corrective action at that time. The three OCPCASES remain in closed status and no changes to the regulatory criteria were found as a result of this Phase I EDDA. The closed OCPCASES are considered HRECs, and the residual petroleum contamination is considered a REC.

2. The Subject Property once maintained 11 active ASTs. A 6,000-gallon water AST and a 2,500-gallon oil/water AST remain in the wastewater treatment area along the southwestern portion of the building, but are no longer in use. In addition, AECOM observed an enclosed containment area with a concrete pad along the southwestern exterior of the building that previously housed a 300-gallon double-walled diesel fuel tank until sometime in the last year. This tank was used to fuel forklifts associated with site operations. Furthermore, an AST of unknown capacity and associated trash compactor was observed along the northern building exterior in the vicinity of the bay doors. No staining was observed in the vicinity of this active tank. Surficial staining from previous operations was observed on the concrete floor in the wastewater treatment room, which is situated in secondary containment. Additional minor surficial staining was observed in the maintenance area in the vicinity of the out-of-use wastewater treatment system. The surficial stains are considered de minimis conditions.

3. A Phase I Environmental Site Assessment, March 2003 (Phase I ESA – 2003) prepared for the Subject Property reported that an approximately 400-gallon concrete pit that was located in the puck area in front of the roll off was used to collect excess oil from the processing pucks. During the March 2003 site visit, oil staining was noted outside the facility in the puck processing area on the concrete foundation of the building. During the June 15, 2016 site visit, AECOM did not observe any oil staining in the vicinity. The area of the pit is considered an HREC.

4. The Phase I ESA – 2003 reported that the heat-treat ovens in the motor area have concrete catch pits that contain quench oil. During the June 15, 2016 site visit, AECOM did not observe heat-ovens in the motor area. The site escort indicated that these pits were cleaned and filled with concrete. The concrete catch pits are considered HRECs.

5. Black and Decker was registered as a large quantity generator of hazardous waste. The facility accumulated hazardous wastes in 55-gallon drums placed in the Flammable Storage Room. Currently, several 55-gallon drums reside in the maintenance area, two of which contain 14-year-old oil formerly used for the air compressors. The drums appeared to be in good condition with no signs of a release or staining on the floor in the vicinity. This area has floor drains that drain into the wastewater treatment room adjacent to the southeast. These storage practices are not considered to be RECs.

6. According to the Phase I ESA – 2003, an oil spill occurred from the 200-hp air compressor in April 2000. Approximately 10 to 15 gallons of oil were released when an air compressor caught fire. Drip pans of oil overflowed and flowed out the door across the south parking lot onto a small grassy area (30 feet by 30 feet). The site escort indicated that a 10-yard dumpster was filled by Black and Decker for impacted soil removal offsite. Approximately 9 cubic yards of soil were excavated in April 2000. No analytes were detected in concentrations above the detection limits, except for TPH, which was found to be 140 m/kg. Additional samples for TPH were found to be 78 mg/kg and non-detect in April and May 2000, respectively. The former oil spill is considered a HREC.
7. On behalf of Black and Decker, Miles & Stockbridge, P.C. stated in a letter dated January 2004 that no floor drains were located in the plant during Black and Decker's operation and that the plant was not a transport storage disposal facility subject to the requirements of the Resource Conservation Recovery Act during the time Black and Decker owned and operated the plant; however, Black and Decker was registered as a large quantity generator of hazardous waste. The facility accumulated hazardous wastes in 55-gallon drums placed in the Flammable Storage Room. This area has floor drains that drain into the wastewater treatment room adjacent to the southeast.
8. Two additional sites were identified in the Environmental Data Resources Report as having the same physical address as the Subject Property. SFA Defense Products Division has an NPDES permit that expires in December 2018. Sotera Engineered Solutions was a CESQG of hazardous waste.

Surrounding Properties

As part of this EDDA, 12 surrounding properties were identified that may be pertinent to the EDDA of the Subject Property. A summary of the findings for the surrounding properties is included in Section 6.2.2 and Table 1 of this Report.

Recommendations

Based on the findings of this report and the RECs that have been identified at the Subject Property, AECOM recommends that a Phase II subsurface investigation be conducted at the Subject Property to determine the extent, if any, of subsurface contamination based on the former use of the Subject Property for manufacturing operations and the historical presence of at least three USTs, concrete pits, and surficial and underground releases that have been identified in historical reports.

7.0 REFERENCES

Reference sources relied upon in preparing the Phase I EDDA are annotated in the relevant sections of this Report and others are listed below.

American Society for Testing and Materials Phase I Standards, ASTM E1527-13 – *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.*

Code of Maryland Regulations Website, accessed July 2016.

Closure Report for 1,000 Gallon UST at Black and Decker, Inc., September 1992, RMC Environmental Services, Inc.

Environmental Assessment (Draft), Five-Year Capital Improvement Program, Easton / Newnam Field Airport, June 2010.

Environmental Data Resources Report, January 14, 2016, Environmental Data Resources, Inc.

Environmental Data Resources Report, June 10, 2016, Environmental Data Resources, Inc.

Federal Aviation Administration Order 1050.19, *Environmental Due Diligence Audits in the Conduct of FAA Real Property Transactions.*

Maryland Coastal Zone Management Program, Department of Natural Resources.

Maryland Department of Assessments and Taxation Website, accessed February 2016.

Maryland Department of the Environment Websites, accessed February 2016:

- Closed Petroleum Investigation/Remediation Cases in Maryland;
- Hazardous Waste Program Cleanup Sites;
- Hazardous Waste - Regulatory Oversight;
- Oil Control Program, Underground Storage Tank Facility Summary; and,
- Open Remediation Cases.

Pettinaro Management LLC Website, accessed July 2016.

Phase I Environmental Site Assessment, March 2003, Environmental Resources Management, Inc.

Phase II Environmental Site Assessment, May 2003, Weston Solutions, Inc.

Removal of Waste Oil Underground Storage Tank, January 1995, O'Brien and Gere Engineers, Inc.,

Right-To-Know Network Website – Toxic Release Inventory Data, accessed June 2016.

Talbot County, Maryland Websites, accessed June 2016:

- 2015 Comprehensive Plan;
- Brownfield Master Inventory Report, Archived Sites, by County, July, 2016;
- Existing Land Use Map;
- Flood Risk Map;
- Landfill – Midshore Regional Solid Waste Facility; and,
- Proposed Land Use Map.

Town of Easton, Maryland Websites (accessed July 2016):

- 2010 Comprehensive Plan;
- Existing Land Use Map, Easton Planning Office; and,
- Growth Areas Map.

U.S. EPA Websites (accessed July 2016):

- Enforcement and Compliance History Online;
- Envirofacts Multisystem Search; and,
- Superfund Sites.

8.0 QUALIFICATIONS AND SIGNATURES OF ENVIRONMENTAL PROFESSIONALS

Resumes for members of the project team are included in Appendix H.

We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in 40 CFR Part 312. We have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed the appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

TABLE

TABLE 1

SUMMARY OF SURROUNDING FACILITIES IDENTIFIED IN THE ENVIRONMENTAL REGULATORY DATABASE REVIEW

Facility Name/Address	Data Source	Distances (miles) Direction from Site	Comments	Findings
Site No. 1 - Jerrys Painting, Inc. 8911 Mistletoe Drive Easton, MD 21601	MD-RCRA	Adjacent to NW area of Subject Property	MDR000501882 – no compliance violations found Included in the MDE Hazardous Waste Program, but not in the MDE Hazardous Waste Program Cleanup Sites. The housekeeping and disposal practices are unknown	No compliance violations were found for this site; therefore , this site is not considered a REC.
Site No. 2 - Coca-Cola Distribution (beverage distributor & bottler) 329 Commerce Drive Easton, MD 21601	UST	0.2 miles SSW	Facility ID: 10033 (1) 10,000 gallon UST containing diesel (installed in 1990; removed from the ground in 1997) (1) 10,000-gallon UST containing gasoline (installed 1990; removed from the ground in 1997	Based on the general groundwater flow direction to the west (SW of the Subject Property), the closed OCP file for this site, and no known active USTs, this site is considered an HREC.
	OCPCASES		Facility ID: 93-2903TA Facility Status: Closed/Tank Closure – Motor/Lube Oil Date Open: 6-2-1993 Date Closed: 4-22-1997 Release: No	

Site No. 3 - The Whalen Co., Inc. 8900 Glebe Park Drive Easton, MD 21601	RCRA-Info	0.2 miles NE	MDD003246980 Classification: Active CESQG Treatment and disposal methods are unknown U.S. EPA ECHO Compliance Summary, as of January 2016, no Significant Non-Compliance violations are associated with this facility.	This site is not considered a REC.
Site No. 4 - Lewis Autobody 8672 Brooks Drive Easton, MD 21601	RCRA-Info MD-RCRA	0.3 miles S	MDR000018044 – Automotive body, paint, and interior repair and maintenance facility with an active CESQG. Treatment and disposal methods are unknown. Included in the MDE Hazardous Waste Program, but not in the MDE Hazardous Waste Program Cleanup Sites. U.S. EPA ECHO Compliance Summary, as of January 2016, no Significant Non-Compliance violations are associated with this facility.	This site is not considered a REC.

Site No. 5 - Easton Utilities Comm. – Plant No. 2 8940 Glebe Park Drive Easton, MD 21601	MD Coastal Zone Mngmt Program MD Open Remediation Cases NPDES	0.3 miles NE	MDG343537 - Petroleum Bulk Stations & Terminals; According to a publication from the MD Coastal Zone Management Program, a building in the central part of the site contains four diesel alternating generators and their associated auxiliaries, basement/sumps, coolant system, organic ranking cycle unit, settling tank, and heavy fuel system. An oil water separator is located SW of the facility. Two 6,000-gallon lube oil USTs are located on the SW side of the driveway adjacent to the aboveground fuel storage area. One 1,000,000-gallon AST (oil) is SW of the main plant building. The plant was completed in 1978. The Easton Utility Commission has contracted with various treatment, storage, and disposal facilities to do all potential clean up and storage of hazardous and non-hazardous wastes. In 1990, MDE completed a Preliminary Assessment, Final Report for the U.S EPA, which noted there was no history of regulatory action taken by the County and the State of Maryland and that current and past waste handling practices did not indicate further environmental investigation. The site is on the State Master List that identifies potential hazardous waste sites in Maryland. The U.S. EPA has given the site a designation of NFRAP; the designation by EPA does not mean that MDE has reached the same conclusion concerning further investigation at the site. This facility is included in the MD Open Petroleum Subsurface Investigation/ Remediation Cases (Case No. 14-0353TA, date opened 12-10-2013). NPDES ID: MD0056090 (electric services)	Based on the cross-gradient position relative to the subject property, this site is not considered a REC.

Site No. 6 - Lowes Home Center No. 400 207 Marlboro Road Easton, MD 21601	RCRA-Info MD-RCRA	0.3 miles SSE	MDR000015115 – no compliance violations were found during an on-site inspection in June 2015; no RCRA SNC violations (current as of February 2016). Included in the MDE Hazardous Waste Program, but not in the MDE Hazardous Waste Program Cleanup Sites.	Based on the lack of any known compliance violations, this site is not considered a REC.
Site No. 7 - Alda Misenheimer (residential) 108 Sycamore Ave Easton, MD 21601	OCPCASES	0.4 miles SE	Facility ID: 05-0942TA Facility Status: Closed/Tank Closure – Residential Heating Oil Date Open: 3-9-2005 Date Closed: 4-12-2005 Release: Yes Cleanup: Yes	Based on the regulatory status of the OCPCASE, this site is not considered a REC.
Site No. 8 - Easton Bypass Crown 219 Marlboro Road Easton, MD 21601	MD Open Remediation Cases	0.4 miles SSE	This facility is included in the MD Open Petroleum Subsurface Investigation/ Remediation Cases (Case No. 14-0740TA, date opened 6-10-2014).	Based on the distance and cross-gradient position relative to the subject property, this site is not considered a REC.
Site No. 9 - Chesapeake Publishing Co.	Brownfield Master Inventory Report	0.5 miles N	Included on the Brownfield Master Inventory Report, Archived Sites, by County (Talbot, MD), January 4, 2016; the determination for the site is NFA.	No changes to the regulatory criteria were found for the Chesapeake Publishing Company. This site is not considered a REC.

Site No. 10 - Noble Motor Rebuilders (former engine rebuilder) 350 N Aurora Street Easton, MD 21601	CERCLIS-NFRAP SHWS	0.6 miles SSE	EPA ID: MDD004491478 CERCLIS-NFRAP Site ID: 0300228 Federal Facility: not a federal facility NPL Status: not on the NPL Non-NPL Status: NFRAP – site does not qualify for the NPL based on existing information. <u>CERCLIS-NFRAP Assessment History</u> Action: Discovery Date Started: not reported Date Completed: 5-1-1981 Action: Preliminary Assessment Date Started: 6-1-1998 Date Completed: 11-8-1999 Priority Level: low priority for further assessment Action: Site Reassessment Date Started: 4-21-1999 Date Completed: 11-8-1999 Priority Level: low priority for further assessment Action: Comfort/Status Letter Date Started: not reported Date Completed: 11-10-1999 Priority Level: not reported Action: Other Cleanup Activity Date Started: 9-3-2003 Date Completed: 9-30-2005 Priority Level: not reported Action: Archive Site Date Started: not reported Date Completed: 9-30-2005 Priority Level: not reported	Since no changes to the regulatory criteria were found for this archived NPL site, it did not qualify for the NPL, and/or because it was issued NFRAP status, this site is not considered a REC.

(cont.) Site No. 10 - Noble Motor Rebuilders (former engine rebuilder) 350 N Aurora Street Easton, MD 21601	OCPCASES		The "Borror Property," listed at the same address as Noble Motor Rebuilders, is included in the MDE OCPCASES. Case No. 08-0246TA Date Closed: 12-18-2007	
	RCRA NonGen/NLR		<u>RCRA NonGen/NLR</u> Date form rec'd by agency: 1-22-1981 Land Type: facility is not located on Indian land Classification: non-generator Description: handler – non-generators do not presently generate hazardous waste <u>Violations</u> Date violations determined: 11-25-1986, 12-17-1986, 4-3-1989 Compliance Evaluation Inspections On-site - 4-6-1989 & 4-7-1989 Area of violations: Generators – General	

Site No. 11 - Easton Utilities Co. – Plant 1 (electric power plant) 219 N Washington Easton, MD 21601	CERCLIS-NFRAP SHWS	0.6 miles S	EPA ID: MDD980555668 CERCLIS-NFRAP Site ID: 0303443 Federal Facility: not a federal facility NPL Status: deferred to RCRA <u>CERCLIS-NFRAP Assessment History</u> Action: Discovery Date Started: not reported Date Completed: 8-24-1988 Action: Preliminary Assessment Date Started & Completed: 10-30-1990 Priority Level: deferred to RCRA (Subtitle C) Action: Archive Site Date Started: not reported Date Completed: 1-23-1996 Priority Level: not reported	Since no changes to the regulatory criteria were found for this archived NPL site, it did not qualify for the NPL, and/or because it was issued NFRAP status, this site is not considered a REC.
	RCRA – CORRACTS 2020 COR Action		12-1-1991 - determined RFI is necessary; facility or area was assigned a high Corrective Action priority. 9-30-1996 – stabilization measures evaluated, but further data is needed. 7-8-1999 - RFI Imposition 10-12-1999 - more information needed to determine if human exposures and migration of contaminated groundwater are under control. 10-3-2002 - human exposures and migration of contaminated groundwater were verified to be under control; monitoring will be conducted to confirm that contaminated groundwater remains within the existing area of contaminated groundwater. 4-14-2003 - corrective action process terminated, NFA; no violations found. 2020 COR Action: – remedy constructed	

(cont.) Site No. 11 - Easton Utilities Co. – Plant 1 (electric power plant) 219 N Washington Easton, MD 21601	RCRA-CESQG		3-18-1993 Classification: CESQG Historical Generator 8-18-1980 & 10-8-1983: CESQG Wastes: ignitable waste; spent halogenated solvents used in degreasing; benzene, methyl- (or) toluene	
	OCPCASES		Facility ID: 99-1221TA Status: Closed/Tank Closure – Motor/Lube Oil Date Open: 11-17-1998 Date Closed: 12-1-1998 Release: Yes Cleanup: Yes Facility ID: 00-1383TA Status: Closed Date Open: unknown Date Closed: 5-10-2000 Facility ID: 05-0227TA Status: Closed Date Open: unknown Date Closed: 9-21-2004 Facility ID: 11-0042TA Status: Closed/Well/GW Contamination - Motor/Lube Oil Date Open: 7-23-10 Date Closed: 3-11-2011 Release: Yes Cleanup: Yes <u>Historical USTs (as reported in EDR)</u> (2) 4,000-gallon (product unknown), currently in use, age 10 years (1) 2,000-gallon (gasoline), in use, age 13 (1) 3,000-gallon (gasoline), in use, age 22 (1) 1,000-gallon (diesel), in use, age 13 <u>Facility Summary (as reported by MDE)</u> (2) 4,000-gallon (lube oil), in use, installed in 1987 (1) 2,000-gallon (gasoline), removed from ground in 1998 (1) 3,000-gallon (gasoline), removed from ground in 1998 (1) 1,000-gallon (diesel), removed from ground in 1998	
	PADS		3-2-1990 Generator: yes	

Site No. 12 - Louis Charlie/Merrimac Cleaners (dry cleaning) 106 N Washington Street Easton, MD 21601 Data Source: U.S. EPA Superfund Website	EPA Superfund	0.6 miles S	EPA ID: MDN000306753 NPL Status: not on the NPL; NFRAP Federal Facility: not a federal facility Action: Archive Site Date Started: not reported Date Completed: 11-4-2010	Since no changes to the regulatory criteria were found for this archived NPL site, it did not qualify for the NPL, and/or because it was issued NFRAP status, this site is considered an HREC.

NOTES:

Archived Site – An Archive designation indicates the site has no further interest under the Federal Superfund Program based on available information. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. The Archive designation is removed and the site is returned to CERCLIS inventory if more sustentative assessment and/or any cleanup work is necessary under the Federal Superfund Program.

CERCLIS-NFRAP – Comprehensive Environmental Response, Compensation, and Liability Information System - No Further Remedial Action Planned

CESQG – Conditionally Exempt Small Quantity Generator: Facilities that produce less than 220 pounds (100 kg) of hazardous waste, or less than 2.2 pounds (1 kg) of acutely hazardous waste, or less than 220 pounds of spill residue per month.

HREC – Historical Environmental Recognized Condition

MDE OCP – Maryland Department of the Environment Oil Control Program

MD-RCRA – Maryland Resource Conservation and Recovery Act – This database houses state information relating to hazardous waste regulated under the RCRA

NFA – No Further Action

NPDES – National Pollutant Discharge Elimination System

OCPCASES – Oil Control Program Cases An HREC is an environmental condition which, in the past, would have been considered an REC, but which may or may not be considered a REC currently. The rationale for considering these environmental conditions as HRECs is based solely on the information stated herein. However, designation as an HREC does not preclude the potential for the condition to affect the Subject Property.

RCRA – Resource Conservation and Recovery Act

RCRA CORRACTS – RCRA Corrective Action Sites

RCRA NonGen/NLR – RCRA Sites No Longer Reported

RCRA Significant Non Compliance (SNC) is a term used to describe a site determined to cause actual exposure or has a substantial likelihood of causing exposure to a hazardous

waste or constituent; is a chronic or recalcitrant violator; or deviates substantially from the terms of a permit, order or agreement, or from RCRA statutory or regulatory requirements.

RCRA Subtitle C - The objective of the Subtitle C program is to ensure that hazardous waste is handled in a manner that protects human health and the environment. There are Subtitle C regulations for the generation; transportation; and treatment, storage or disposal of hazardous wastes.

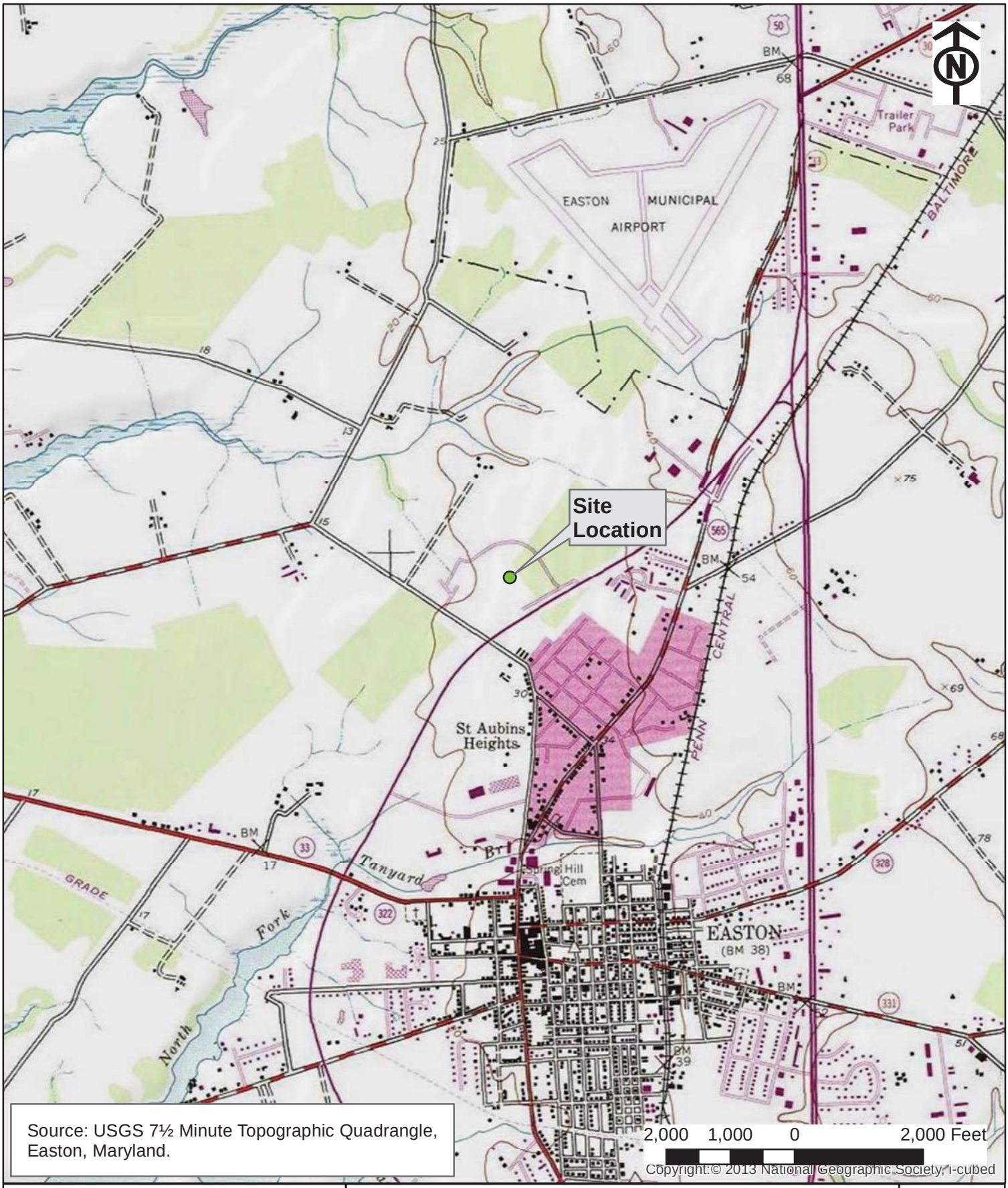
REC – Recognized Environmental Condition

RFI – RCRA Facility Investigation – Purpose is to determine the nature and extent of releases of hazardous constituents from regulated units, solid waste management units, and other source areas at the facility, and to gather all necessary data to support the environmental indicator determinations and a Corrective Measures Study.

SHWS - The State Hazardous Waste Sites records are the states' equivalent to CERCLIS

UST – Underground Storage Tank

FIGURES



Source: USGS 7½ Minute Topographic Quadrangle, Easton, Maryland.

Copyright:© 2013 National Geographic Society, i-cubed

AECOM

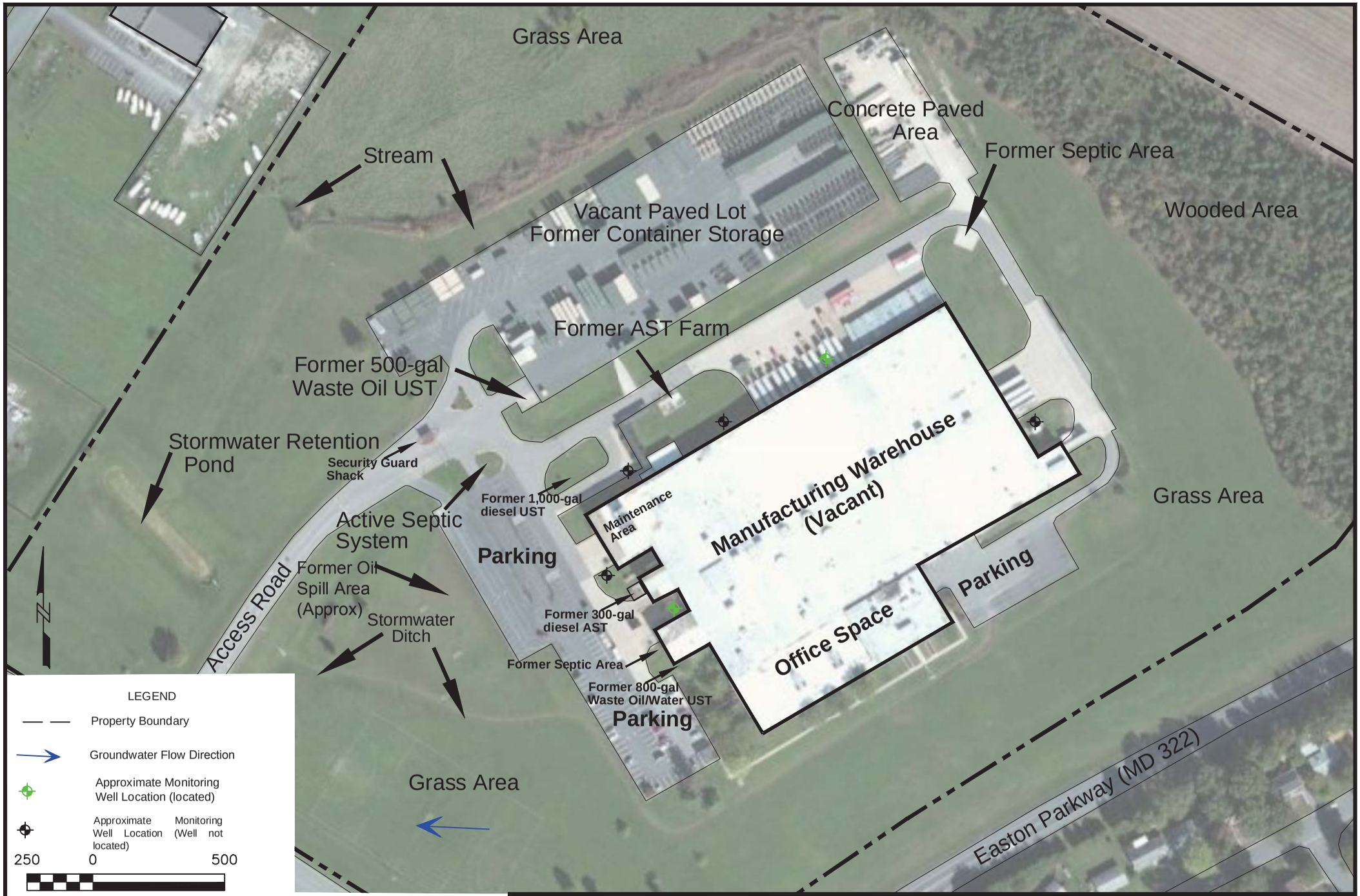
AECOM
8000 Virginia Manor Road, Suite 110
Beltsville, MD 20750, USA
T +1-301-289-3900
aecom.com

Site Location Map
Black and Decker (U.S.) Inc. – Subject Property
28712 Glebe Road
Easton, MD 21601

FIGURE NUMBER	
1	

DRAWN BY:	DATE:	PROJECT NUMBER:	SHEET NUMBER:
JG	06/23/16	60322389.04.05	1 of 1

Path: U:\Cad_Drive_New\Black and Decker\28712 Glebe Road, Easton, MD\GIS\Site Location Map.mxd



AECOM

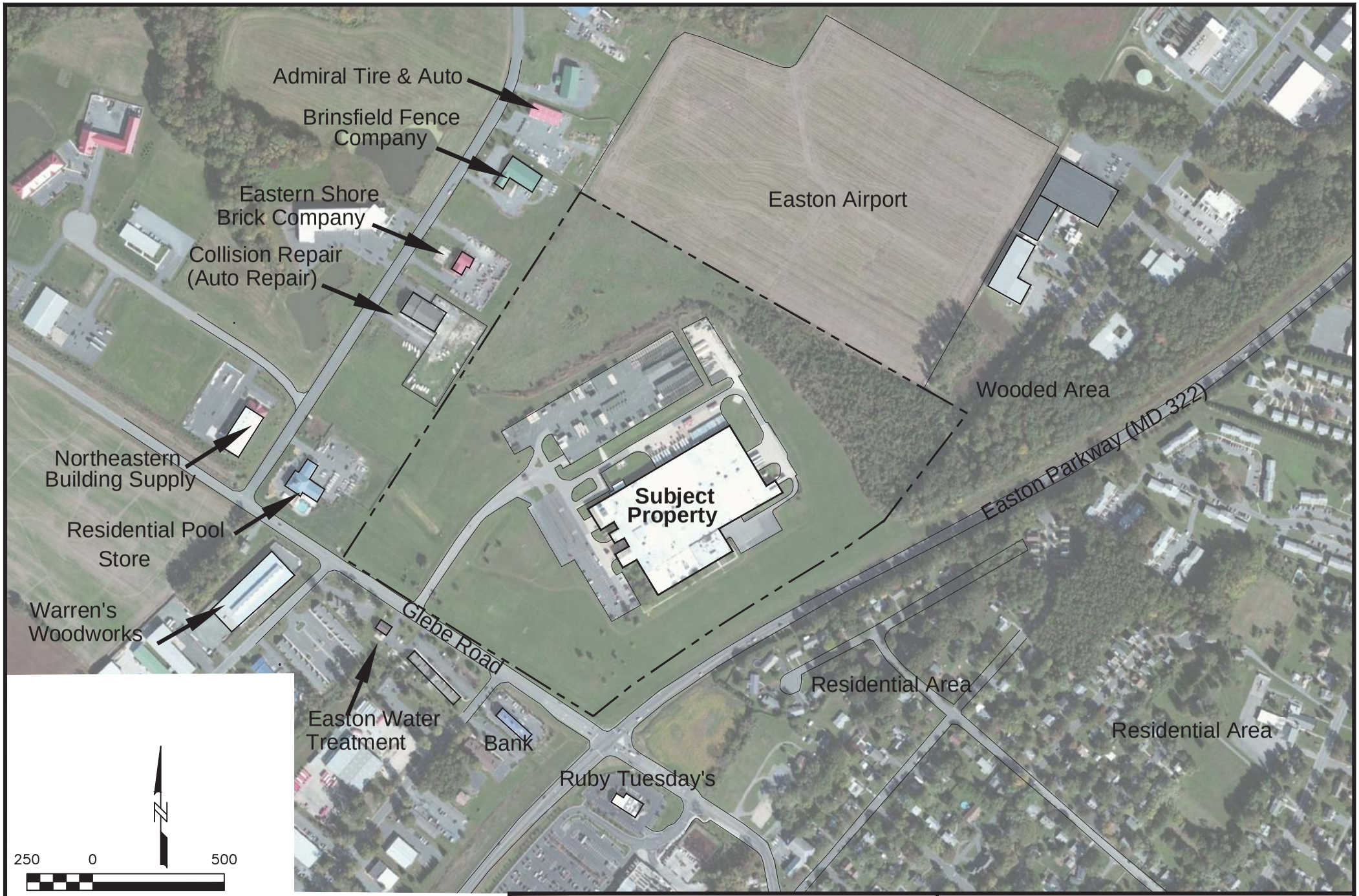
Black and Decker (U.S.) Inc. – Subject Property
28712 Glebe Road, Easton, MD 21601

Project No. 60423280

Site Layout

DATE: 06/23/16 | DRWN:

FIGURE 2



AECOM

Black and Decker (U.S.) Inc. – Subject Property
28712 Glebe Road, Easton, MD 21601
Project No. 60423280

Surrounding Property Map

DATE: 06/23/16 | DRWN:

FIGURE 3

APPENDIX A

LEGAL DESCRIPTION OF THE SUBJECT PROPERTY/ CHAIN OF TITLE REPORT

Black and Decker
28712 Glebe Road
Easton, MD 21601

Inquiry Number: 4643228.5
June 13, 2016

EDR Environmental Lien and AUL Search

Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

EDR Environmental Lien and AUL Search

The EDR Environmental Lien and AUL Search Report provides results from a search of available current land title records for environmental cleanup liens and other activity and use limitations, such as engineering controls and institutional controls.

A network of professional, trained researchers, following established procedures, uses client supplied address information to:

- search for parcel information and/or legal description;
- search for ownership information;
- research official land title documents recorded at jurisdictional agencies such as recorders' offices, registries of deeds, county clerks' offices, etc.;
- access a copy of the deed;
- search for environmental encumbering instrument(s) associated with the deed;
- provide a copy of any environmental encumbrance(s) based upon a review of key words in the instrument(s) (title, parties involved, and description); and
- provide a copy of the deed or cite documents reviewed.

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EDR Environmental Lien and AUL Search

TARGET PROPERTY INFORMATION

ADDRESS

28712 Glebe Road
Black and Decker
Easton, MD 21601

RESEARCH SOURCE

Source 1:

Talbot County Recorder
Talbot, MD

PROPERTY INFORMATION

Deed 1:

Type of Deed:	Deed
Title is vested in:	Easton Exchange, LLC
Title received from:	Black & Decker (US) Inc
Deed Dated	6/13/2003
Deed Recorded:	6/18/2003
Book:	1160
Page:	92
Volume:	NA
Instrument:	NA
Docket:	NA
Land Record Comments:	see exhibit
Miscellaneous Comments:	NA
Legal Description:	see exhibit
Legal Current Owner:	Easton Exchange, LLC
Parcel # / Property Identifier:	District - 01 Account Number - 002090
Comments:	see exhibit

ENVIRONMENTAL LIEN

Environmental Lien: Found ☐ Not Found ☒

OTHER ACTIVITY AND USE LIMITATIONS (AULs)

AULs: Found ☐ Not Found ☒

Deed Exhibit 1

TALBOT COUNTY CIRCUIT COURT (Land Records) MAS 1160, p. 0092, MSA_CE91_1097. Date available 03/15/2004. Printed 06/13/2016.

Returned to: Bruce C. Armistead LLC, 111 N. West St., Suite E, Easton, MD 21601

TRANSFER TAX $ 29.00
RECORDATION FEE - 20.00
RECORDATION T 20,340.00
TR TAX COUNTY 49,000.00
TR TAX STATE 24,500.00
TOTAL 106,889.00
Rcpt # TAB1 Rcpt # 46495
MAS 7416 Blk # 912
Jun 18, 2003 11:42 AM

THIS DEED, made this 13th day of June, 2003, by and between **BLACK & DECKER (U.S.), INC., a Maryland corporation** ("Grantor"); and **EASTON EXCHANGE, LLC, a Delaware limited liability company** ("Grantee").

WITNESSETH, that in consideration of the sum of **Four Million Nine Hundred Thousand Dollars ($4,900,000.00)**, which sum includes the amount of any mortgage or deed of trust assumed by Grantees, the receipt of which is hereby acknowledged, Grantor does hereby grant and convey to Grantee, its successors and assigns, in fee simple, the following described property:

ALL that lot of ground situate, lying and being in the Town of Easton, Talbot County, Maryland, and being more particularly shown and designated as "PARCEL 'A' 58.192 A." on a Plat prepared by James R. Kinnamon, Registered Surveyor, titled "TOWN OF EASTON MARYLAND MAP SHOWING AIRPORT INDUSTRIAL PARK AND ADJACENT PROPERTIES," dated March 1970, and recorded among the Land Records of Talbot County, Maryland in Liber 24, folio 28; reference being hereby made to said Plat for a more complete description of said parcel by metes and bounds, courses and distances.

The improvements thereon being known as 28712 Glebe Road, Easton, Maryland.

BEING the same property conveyed by The Black and Decker Manufacturing Company, a Maryland corporation, to Black & Decker (U.S.) Inc., a Maryland corporation, by a Deed dated October 18, 1978, and recorded among the Land Records of Talbot County, Maryland in Liber 530, folio 373.

SAVE AND EXCEPT THEREFROM, HOWEVER, all that portion of the property containing 0.264 acres, more or less, conveyed by The Black and Decker Manufacturing Company to Talbot County, Maryland by a Deed dated March 22, 1976, and recorded among the Land Records of Talbot County, Maryland in Liber 506, folio 494.

TOGETHER with the buildings and improvements thereon erected, made or being; and all and every the rights, alleys, ways, waters, privileges, appurtenances and advantages to the same belonging, or in anywise appertaining.

TO HAVE AND TO HOLD said tract or parcel of ground and premises above described and mentioned, and hereby intended to be conveyed; together with the rights, privileges, appurtenances and advantages thereto belonging or appertaining to and to the

proper use and benefit of Grantee, its successors and assigns, in fee simple, forever; SUBJECT, HOWEVER, to all easements, covenants, conditions, restrictions and reservations of record, if any.

AND Grantor does hereby covenant that it has not done or suffered to be done any act, matter or thing whatsoever to encumber the property hereby conveyed, that it will warrant specially the property granted, and that it will execute such further assurances of the same as may be requisite.

IN WITNESS WHEREOF, Grantor has caused this Deed to be properly executed and sealed the day and year first above written.

ATTEST:

BLACK & DECKER (U.S.), INC.,
a Maryland corporation

Helene Rodgville

By: Linda H. Biagioni (SEAL)

STATE OF MARYLAND, COUNTY OF ~~TALBOT~~ HARFORD, TO WIT:

I HEREBY CERTIFY, that on this 13th day of June, 2003, before me, the subscriber, a Notary Public of the aforesaid State, personally appeared LINDA H. BIAGIONI, who acknowledged ~~himself~~ herself to be the V.P. of the Grantor corporation, and that he as such officer, being authorized so to do, executed the foregoing Deed for the purpose therein contained, by signing the name of the Corporation by himself as such officer, and further did certify that this conveyance is not part of a transaction in which there is a sale, lease, exchange or other transfer of all, or substantially all, of the property and assets of the Corporation.

WITNESS my hand and Notarial Seal.

Helene Rodgville
Notary Public

HELENE RODGVILLE NOTARY PUBLIC HARFORD COUNTY, MD

My Commission Expires:
6/1/2006

THIS IS TO CERTIFY THAT THE PROPERTY DESCRIBED HEREIN HAS BEEN TRANSFERRED ON THE ASSESSMENT RECORDS OF TALBOT COUNTY.

DAVID H. EWING
SUPERVISOR OF ASSESSMENTS

CERTIFICATION IS MADE THAT ALL TAXES DUE ON THE PROPERTY INDICATED IN THIS DEED HAVE BEEN PAID.
FINANCE OFFICER OF TALBOT COUNTY
ANDREW HOLLIS, FIN. OFFICER CO

DATE 6/18/03 CO

~~ANDREW HOLLIS, FIN. OFFICER~~ CO
6/18/03 CO

BCAEL01.DEE(061103\RH\DEEDS\LLC)

TALBOT COUNTY CIRCUIT COURT (Land Records) MAS 1160, p. 0093, MSA_CE91_1097. Date available 03/15/2004. Printed 06/13/2016.

THE UNDERSIGNED, a member in good standing of the Bar of the Court of Appeals of Maryland, hereby certifies that this Deed was prepared by him or under his supervision.

Bruce C. Armistead

Bruce C. Armistead

TALBOT COUNTY CIRCUIT COURT (Land Records) MAS 1160, p. 0094, MSA_CE91_1097. Date available 05/15/2064. Printed 06/15/2016.

State of Maryland Land Instrument Intake Sheet

☐ Baltimore City ☒ County: Talbot

Information provided is for the use of the Clerk's Office, State Department of Assessments and Taxation, and County Finance Office only.

(Type or Print in Black Ink Only—All Copies Must Be Legible)

(Check Box if Addendum Intake Form is Attached.)

1 Type(s) of Instruments

X Deed | Mortgage | Other | Other
Deed of Trust | Lease

2 Conveyance Type Check Box

X Improved Sale Arms-Length [1] | Unimproved Sale Arms-Length [2] | Multiple Accounts Arms-Length [3] | Not an Arms-Length Sale [9]

3 Tax Exemptions (if Applicable)

Recordation
State Transfer
Cite or Explain Authority County Transfer

4 Consideration and Tax Calculations

Consideration Amount	
Purchase Price/Consideration	$ 4,900,000.00
Any New Mortgage	$
Balance of Existing Mortgage	$
Other:	$
Other:	$
Full Cash Value	$

Finance Office Use Only — Transfer and Recordation Tax Consideration	
Transfer Tax Consideration	$
X ( ) % =	$
Less Exemption Amount −	$
Total Transfer Tax =	$
Recordation Tax Consideration	$
X ( ) per $500 =	$
TOTAL DUE	$

5 Fees

Amount of Fees	Doc. 1	Doc. 2
Recording Charge	$ 20.00	$
Surcharge	$ 20.00	$
State Recordation Tax	$ 32,340.00	$
State Transfer Tax	$ 24,500.00	$
County Transfer Tax	$ 49,000.00	$
Other	$	$
Other	$	$

Agent:
Tax Bill:
C.B. Credit:
Ag. Tax/Other:

6 Description of Property

SDAT requires submission of all applicable information. A maximum of 40 characters will be indexed in accordance with the priority cited in Real Property Article Section 3-104(g)(3)(i).

District	Property Tax ID No. (1)	Grantor Liber/Folio	Map	Parcel No.	Var. LOG
01	01-002090	530/373	25	58	☐ (5)

Subdivision Name	Lot (3a)	Block (3b)	Sect/AR(3c)	Plat Ref.	SqFt/Acreage (4)

Location/Address of Property Being Conveyed (2): 28712 Glebe Road, Easton

Other Property Identifiers (if applicable) | Water Meter Account No.

Residential ☐ or Non-Residential XX | Fee Simple XX or Grount Rent ☐ | Amount:

Partial Conveyance? ☐ Yes XX No | Description/Amt. of SqFt/Acreage Transferred:

If Partial Conveyance, List Improvements Conveyed:

7 Transferred From

Doc. 1 - Grantor(s) Name(s)	Doc. 2 - Grantor(s) Name(s)
Black & Decker (U.S.), Inc.	
Doc. 1 - Owner(s) of Record, if Different from Grantor(s)	**Doc. 2 - Owner(s) of Record, if Different from Grantor(s)**

8 Transferred To

Doc. 1 - Grantee(s) Name(s)	Doc. 2 - Grantee(s) Name(s)
Easton Exchange, LLC	

New Owner's (Grantee) Mailing Address: 234 N. James Street, Newport, Delaware 19804

9 Other Names to Be Indexed

Doc. 1 - Additional Names to be Indexed (Optional)	Doc. 2 - Additional Names to be Indexed (Optional)

10 Contact/Mail Information

Instrument Submitted By or Contact Person
Name: Bruce C. Armistead, Esq.
Firm: Bruce C. Armistead LLC
Address: 111 N. West St., Ste. E
Easton, MD 21601 Phone: (410) 819-8989

☒ Return to Contact Person
☐ Hold for Pickup
☐ Return Address Provided

11 IMPORTANT: *BOTH* THE ORIGINAL DEED *AND* A PHOTOCOPY MUST ACCOMPANY EACH TRANSFER

Assessment Information

Yes X No Will the property being conveyed be the grantee's principal residence?
Yes X No Does transfer include personal property? If yes, identify:
Yes X No Was property surveyed? If yes, attach copy of survey (if recorded, no copy required).

Assessment Use Only - Do Not Write Below This Line

☐ Terminal Verification ☐ Agricultural Verification ☐ Whole ☐ Part ☐ Tran. Process Verification

Transfer Number: Date Received: Deed Reference: Assigned Property No.:

Year	19	19	Geo.	Map	Sub	Block
Land			Zoning	Grid	Plat	Lot
Buildings			Use	Parcel	Section	Occ. Cd.
Total			Town Cd.	Ex. St.	Ex. Cd.	

REMARKS:

Distribution: White - Clerk's Office
Canary - SDAT
Pink - Office of Finance
Goldenrod - Preparer
AOC-CC-300 (6/95)

LIBER 1160 FOLIO 095

TALBOT COUNTY CIRCUIT COURT (Land Records) MAS 1160, p. 0095, MSA_CE91_1097. Date available 03/15/2004. Printed 06/13/2016.

APPENDIX B

FEDERAL AND STATE REGULATORY DATABASE SEARCH

Black and Decker
28712 Glebe Road
Easton, MD 21601

Inquiry Number: 4643228.2s
June 10, 2016

The EDR Radius Map™ Report with GeoCheck®

EDR® Environmental Data Resources Inc

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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Overview Map	2
Detail Map	3
Map Findings Summary	4
Map Findings	8
Orphan Summary	60
Government Records Searched/Data Currency Tracking	GR-1

GEOCHECK ADDENDUM

Physical Setting Source Addendum	A-1
Physical Setting Source Summary	A-2
Physical Setting Source Map	A-10
Physical Setting Source Map Findings	A-11
Physical Setting Source Records Searched	PSGR-1

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

28712 GLEBE ROAD
EASTON, MD 21601

COORDINATES

Latitude (North):	38.7908000 - 38˚ 47' 26.88''
Longitude (West):	76.0770000 - 76˚ 4' 37.20''
Universal Tranverse Mercator:	Zone 18
UTM X (Meters):	406463.1
UTM Y (Meters):	4293905.0
Elevation:	23 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	6051138 EASTON, MD
Version Date:	2014

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20150815
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
28712 GLEBE ROAD
EASTON, MD 21601

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	BLACK & DECKER, INC.	28712 GLEBE RD	HIST UST		TP
A2	BLACK AND DECKER U S	28712 GLEBE ROAD	FINDS, ECHO		TP
A3	SFA DEFENSE PRODUCTS	28712 GLEBE RD	FINDS, ECHO		TP
A4	BLACK & DECKER CORP	28712 CLEBE RD.	RCRA-LQG		TP
A5	BLACK & DECKER (US)	28712 GLEBE ROAD	UST, Financial Assurance		TP
A6	BLACK & DECKER	28712 GLEBE RD	OCPCASES		TP
A7	SOTERA ENGINEERED SO	28712 GLEBE RD, STE	RCRA-CESQG, FINDS, ECHO		TP
8	COCA-COLA DISTRIBUTI	329 COMMERCE DR.	OCPCASES, UST, Financial Assurance	Lower	1047, 0.198, SSW
9	ALDA MISENHEIMER	108 SYCAMORE AVE	OCPCASES	Higher	2170, 0.411, SE
10	NOBLE MOTOR REBUILDE	350 N AURORA ST	SEMS-ARCHIVE, SHWS, RCRA NonGen / NLR	Higher	3268, 0.619, SSE
11	EASTON UTILITIES COM	219 NORTH WASHINGTON	SEMS-ARCHIVE, CORRACTS, RCRA-CESQG, SHWS,...	Lower	4640, 0.879, South

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 8 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
BLACK & DECKER, INC. 28712 GLEBE RD EASTON, MD 21601	HIST UST Facility Id: 3011667 Tank Status: REMOVED Tank Status: PERM. OU	N/A
BLACK AND DECKER U S 28712 GLEBE ROAD EASTON, MD 21601	FINDS Registry ID:: 110000340239 ECHO	N/A
SFA DEFENSE PRODUCTS 28712 GLEBE RD EASTON, MD 21601	FINDS Registry ID:: 110055095007 ECHO	N/A
BLACK & DECKER CORP 28712 CLEBE RD. EASTON, MD 21601	RCRA-LQG EPA ID:: MDD980555494	MDD980555494
BLACK & DECKER (US) 28712 GLEBE ROAD EASTON, MD 21601	UST Facility Id: 19304 Tank Status: Permanently Out of Use Tank Status: Permanently Out Of Use Financial Assurance Facility Id: 19304	N/A
BLACK & DECKER 28712 GLEBE RD EASTON, MD 21601	OCPCASES Date Closed: 04/10/1997 Date Closed: 11/19/1992 Date Closed: 07/16/2004 Facility Status: CLOSED Facility Id: 95-1065TA Facility Id: 92-1992TA Facility Id: 04-0161TA	N/A
SOTERA ENGINEERED SO 28712 GLEBE RD, STE EASTON, MD 21601	RCRA-CESQG EPA ID:: MDR000525551 FINDS Registry ID:: 110064383670 ECHO	MDR000525551

EXECUTIVE SUMMARY

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL ..... National Priority List
Proposed NPL ..... Proposed National Priority List Sites
NPL LIENS ..... Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL ..... National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY ..... Federal Facility Site Information listing
SEMS ..... Superfund Enterprise Management System

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE ..... Superfund Enterprise Management System Archive

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF ..... RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-SQG ..... RCRA - Small Quantity Generators

Federal institutional controls / engineering controls registries

LUCIS ..... Land Use Control Information System
US ENG CONTROLS ..... Engineering Controls Sites List
US INST CONTROL ..... Sites with Institutional Controls

Federal ERNS list

ERNS ..... Emergency Response Notification System

State and tribal landfill and/or solid waste disposal site lists

SWF/LF ..... Permitted Solid Waste Disposal Facilities

State and tribal leaking storage tank lists

INDIAN LUST ..... Leaking Underground Storage Tanks on Indian Land
HIST LUST ..... Recovery Sites

EXECUTIVE SUMMARY

State and tribal registered storage tank lists

FEMA UST..... Underground Storage Tank Listing
AST..... Permitted Aboveground Storage Tanks
INDIAN UST..... Underground Storage Tanks on Indian Land

State and tribal institutional control / engineering control registries

ENG CONTROLS..... Engineering Controls Site listing
INST CONTROL..... Voluntary Cleanup Program Applicants/Participants

State and tribal voluntary cleanup sites

VCP..... Voluntary Cleanup Program Applicants/Participants
INDIAN VCP..... Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

BROWNFIELDS..... Eligible Brownfields Properties

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

SWRCY..... Recycling Directory
INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands
ODI..... Open Dump Inventory
DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL..... Delisted National Clandestine Laboratory Register
US CDL..... National Clandestine Laboratory Register

Local Land Records

LIENS 2..... CERCLA Lien Information

Records of Emergency Release Reports

HMIRS..... Hazardous Materials Information Reporting System
SPILLS 90..... SPILLS 90 data from FirstSearch

Other Ascertainable Records

RCRA NonGen / NLR..... RCRA - Non Generators / No Longer Regulated
FUDS..... Formerly Used Defense Sites
DOD..... Department of Defense Sites
SCRD DRYCLEANERS..... State Coalition for Remediation of Drycleaners Listing

EXECUTIVE SUMMARY

US FIN ASSUR	Financial Assurance Information
EPA WATCH LIST	EPA WATCH LIST
2020 COR ACTION	2020 Corrective Action Program List
TSCA	Toxic Substances Control Act
TRIS	Toxic Chemical Release Inventory System
SSTS	Section 7 Tracking Systems
ROD	Records Of Decision
RMP	Risk Management Plans
RAATS	RCRA Administrative Action Tracking System
PRP	Potentially Responsible Parties
PADS	PCB Activity Database System
ICIS	Integrated Compliance Information System
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS	Material Licensing Tracking System
COAL ASH DOE	Steam-Electric Plant Operation Data
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER	PCB Transformer Registration Database
RADINFO	Radiation Information Database
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS	Incident and Accident Data
CONSENT	Superfund (CERCLA) Consent Decrees
INDIAN RESERV	Indian Reservations
FUSRAP	Formerly Utilized Sites Remedial Action Program
UMTRA	Uranium Mill Tailings Sites
LEAD SMELTERS	Lead Smelter Sites
US AIRS	Aerometric Information Retrieval System Facility Subsystem
US MINES	Mines Master Index File
DOCKET HWC	Hazardous Waste Compliance Docket Listing
UXO	Unexploded Ordnance Sites
AIRS	Permit and Facility Information Listing
COAL ASH	Coal Ash Disposal Site Listing
DRYCLEANERS	Registered Drycleaning Facilities
LEAD	Lead Inspection Database
LRP	Land Restoration Program
NPDES	Wastewater Permit Listing
UIC	Underground Injection Wells Database
FUELS PROGRAM	EPA Fuels Program Registered Listing

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	EDR Proprietary Manufactured Gas Plants
EDR Hist Auto	EDR Exclusive Historic Gas Stations
EDR Hist Cleaner	EDR Exclusive Historic Dry Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA HWS	Recovered Government Archive State Hazardous Waste Facilities List
RGA LF	Recovered Government Archive Solid Waste Facilities List

EXECUTIVE SUMMARY

RGA LUST..... Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal RCRA CORRACTS facilities list

CORRACTS: CORRACTS is a list of handlers with RCRA Corrective Action Activity. This report shows which nationally-defined corrective action core events have occurred for every handler that has had corrective action activity.

A review of the CORRACTS list, as provided by EDR, and dated 12/09/2015 has revealed that there is 1 CORRACTS site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
EASTON UTILITIES COM	***219 NORTH WASHINGTON***	***S 1/2 - 1 (0.879 mi.)***	***11***	***20***

State- and tribal - equivalent CERCLIS

SHWS: The State Hazardous Waste Sites records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. The data come from the Department of the Environment's Notice of Potential Hazardous Waste Sites list.

A review of the SHWS list, as provided by EDR, and dated 10/01/2009 has revealed that there are 2 SHWS sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
NOBLE MOTOR REBUILDE Facility Id: (MD-125) Facility Status: Formerly Investigated Site	***350 N AURORA ST***	***SSE 1/2 - 1 (0.619 mi.)***	***10***	***16***

Lower Elevation	Address	Direction / Distance	Map ID	Page
EASTON UTILITIES COM Facility Id: (MD-281)	***219 NORTH WASHINGTON***	***S 1/2 - 1 (0.879 mi.)***	***11***	***20***

Facility Status: Formerly Investigated Site

State and tribal leaking storage tank lists

OCPCASES: Cases monitored by the Oil Control Program.

A review of the OCPCASES list, as provided by EDR, and dated 03/07/2016 has revealed that there are 2 OCPCASES sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ALDA MISENHEIMER Date Closed: 04/12/2005 Facility Status: CLOSED Facility Id: 05-0942TA	108 SYCAMORE AVE	SE 1/4 - 1/2 (0.411 mi.)	9	15

Lower Elevation	Address	Direction / Distance	Map ID	Page
COCA-COLA DISTRIBUTI Date Closed: 04/22/1997 Facility Status: CLOSED Facility Id: 93-2903TA	***329 COMMERCE DR.***	***SSW 1/8 - 1/4 (0.198 mi.)***	***8***	***14***

State and tribal registered storage tank lists

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Department of the Environment's Listing of Underground Storage Tanks Reported in Maryland.

A review of the UST list, as provided by EDR, and dated 03/07/2016 has revealed that there is 1 UST site within approximately 0.25 miles of the target property.

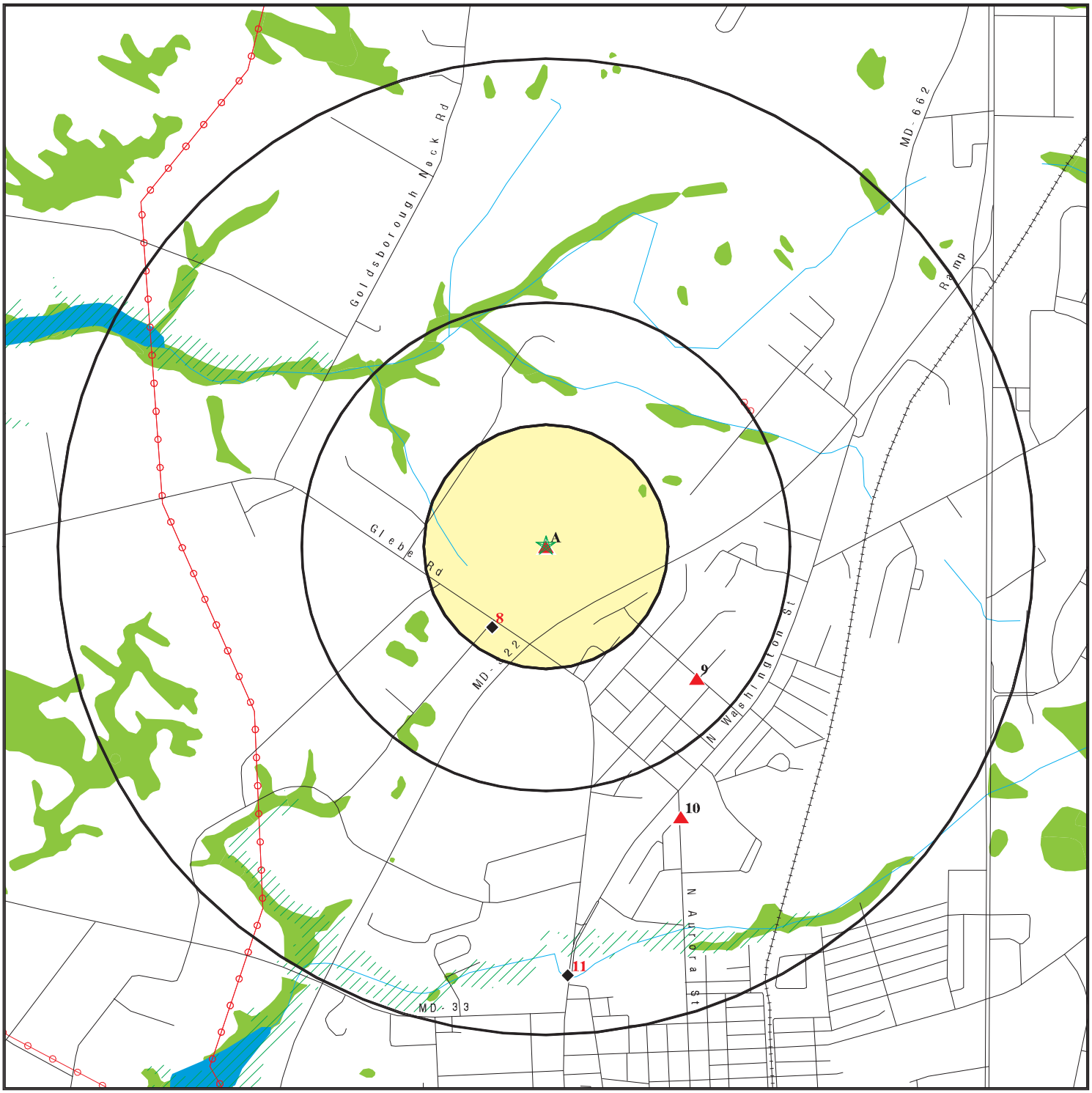
Lower Elevation	Address	Direction / Distance	Map ID	Page
COCA-COLA DISTRIBUTI Facility Id: 10033 Tank Status: Permanently Out of Use	***329 COMMERCE DR.***	***SSW 1/8 - 1/4 (0.198 mi.)***	***8***	***14***

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 3 records.

Site Name	Database(s)
SERVICE AMERICA	OCPCASES
ENVIRONMENTAL CONSTRUCTION CO	OCPCASES
SOUTHERN STATES PETROLEUM	OCPCASES

OVERVIEW MAP - 4643228.2S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

0 1/4 1/2 1 Miles

N

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Black and Decker ADDRESS: 28712 Glebe Road Easton MD 21601 LAT/LONG: 38.7908 / 76.077	CLIENT: AECOM CONTACT: Peter Pecora INQUIRY #: 4643228.2s DATE: June 10, 2016 9:40 am

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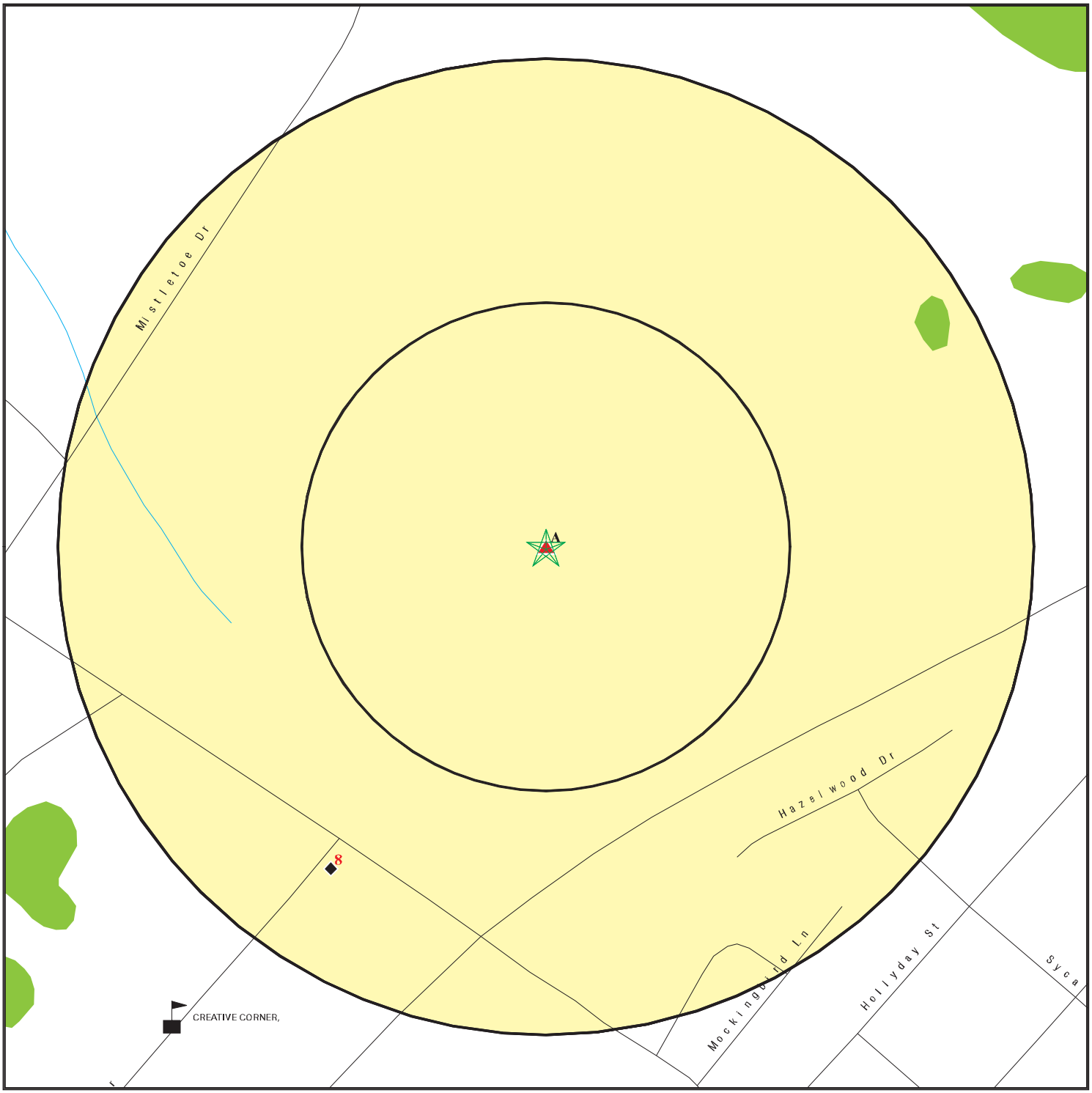
DETAIL MAP - 4643228.2S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

0 1/16 1/8 1/4 Miles

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Black and Decker	CLIENT: AECOM
ADDRESS: 28712 Glebe Road Easton MD 21601	CONTACT: Peter Pecora INQUIRY #: 4643228.2s
LAT/LONG: 38.7908 / 76.077	DATE: June 10, 2016 9:40 am

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	1	NR	1
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250	1	0	0	NR	NR	NR	1
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250	1	0	0	NR	NR	NR	1
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent CERCLIS								
SHWS	1.000		0	0	0	2	NR	2
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
INDIAN LUST	0.500		0	0	0	NR	NR	0
OCPCASES	0.500	1	0	1	1	NR	NR	3
HIST LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
UST	0.250	1	0	1	NR	NR	NR	2
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
ENG CONTROLS	0.500		0	0	0	NR	NR	0
INST CONTROL	0.500		0	0	0	NR	NR	0
State and tribal voluntary cleanup sites								
VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
SWRCY	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	TP		NR	NR	NR	NR	NR	0
US CDL	TP		NR	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
HIST UST	0.250	1	0	0	NR	NR	NR	1
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
FINDS	TP	3	NR	NR	NR	NR	NR	3
DOCKET HWC	TP		NR	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
AIRS	TP		NR	NR	NR	NR	NR	0
COAL ASH	0.500		0	0	0	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
Financial Assurance	TP	1	NR	NR	NR	NR	NR	1
LEAD	TP		NR	NR	NR	NR	NR	0
LRP	0.500		0	0	0	NR	NR	0
NPDES	TP		NR	NR	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
ECHO	TP	3	NR	NR	NR	NR	NR	3
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA HWS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
- Totals --		12	0	2	1	3	0	18

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1 Target Property | **BLACK & DECKER, INC.** | **HIST UST** | **1001699206**
28712 GLEBE RD | **N/A**
EASTON, MD 21601

Site 1 of 7 in cluster A

Actual: 23 ft.

Historical UST:

Facility ID:	3011667
Tank ID:	001
Age:	16
Capacity:	1,000
Tank Status:	Removed
Product:	Diesel

Facility ID:	3011667
Tank ID:	002
Age:	21
Capacity:	1,000
Tank Status:	Removed
Product:	Used Oil

Facility ID:	3011667
Tank ID:	003
Age:	Not reported
Capacity:	Not reported
Tank Status:	Permanently out of use
Product:	Heating Oil

A2 Target Property | **BLACK AND DECKER U S POWER TOOLS GROUP** | **FINDS ECHO** | **1016175129**
28712 GLEBE ROAD | **N/A**
EASTON, MD 21601

Site 2 of 7 in cluster A

Actual: 23 ft.

FINDS:

Registry ID: 110000340239

Environmental Interest/Information System

MD-RCRA (Maryland - Resource Conservation And Recovery Act Information System) houses state information relating to the Resource Conservation and Recovery Act (RCRA).

AFS (Aerometric Information Retrieval System (AIRS) Facility Subsystem) replaces the former Compliance Data System (CDS), the National Emission Data System (NEDS), and the Storage and Retrieval of Aerometric Data (SAROAD). AIRS is the national repository for information concerning airborne pollution in the United States. AFS is used to track emissions and compliance data from industrial plants. AFS data are utilized by states to prepare State Implementation Plans to comply with regulatory programs and by EPA as an input for the estimation of total national emissions. AFS is undergoing a major redesign to support facility operating permits required under Title V of the Clean Air Act.

AIR EMISSIONS CLASSIFICATION UNKNOWN

US EPA TRIS (Toxics Release Inventory System) contains information from facilities on the amounts of over 300 listed toxic chemicals that these facilities release directly to air, water, land, or that are

BLACK AND DECKER U S POWER TOOLS GROUP (Continued) **1016175129**

transported off-site.

MD-EPSC (Maryland - Environmental Permit Service Center) promotes multi-media pollution prevention and provides permit assistance to business and industries. An online permit guide is available and lists all permits, licenses and approvals that are issued by MDE.

MD-PEMIS (Maryland - Permanent (Air) Emission) database houses data related to Air Emissions. Also known to the EPA as National Emissions Inventory (NEI).

AIR MINOR

ECHO:
Envid: 1016175129
Registry ID: 110000340239
DFR URL: http://echo.epa.gov/detailed_facility_report?fid=110000340239

A3 Target Property | **SFA DEFENSE PRODUCTS DIVISION** | **FINDS** | **1016378521**
28712 GLEBE RD | **ECHO** | **N/A**
EASTON, MD 21601

Site 3 of 7 in cluster A

Actual: 23 ft.

FINDS:

Registry ID: 110055095007

Environmental Interest/Information System
US National Pollutant Discharge Elimination System (NPDES) module of the Compliance Information System (ICIS) tracks surface water permits issued under the Clean Water Act. Under NPDES, all facilities that discharge pollutants from any point source into waters of the United States are required to obtain a permit. The permit will likely contain limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the discharge does not adversely affect water quality.

ECHO:
Envid: 1016378521
Registry ID: 110055095007
DFR URL: http://echo.epa.gov/detailed_facility_report?fid=110055095007

A4 Target Property | **BLACK & DECKER CORP** | **RCRA-LQG** | **1000172482**
28712 CLEBE RD. | **MDD980555494**
EASTON, MD 21601

Site 4 of 7 in cluster A

Actual: 23 ft.

RCRA-LQG:
Date form received by agency: 02/28/1994
Facility name: BLACK & DECKER CORP
Site name: BLACK & DECKER US INC.

BLACK & DECKER CORP (Continued) **1000172482**

Facility address: 28712 CLEBE RD.
EASTON, MD 216010000
EPA ID: MDD980555494
Contact: WILLIAM J O'BRIEN
Contact address: Not reported
Not reported
Contact country: US
Contact telephone: (410) 820-2592
Contact email: Not reported
EPA Region: 03
Classification: Large Quantity Generator
Description: Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 02/05/1992
Site name: BLACK & DECKER US INC.
Classification: Large Quantity Generator

Date form received by agency: 02/16/1990
Site name: BLACK & DECKER
Classification: Large Quantity Generator

Violation Status: No violations found

A5 Target Property | **BLACK & DECKER (US) INC.**
28712 GLEBE ROAD
EASTON, MD 21601 | **UST** | **U004118522**
Financial Assurance | **N/A**

Site 5 of 7 in cluster A

Actual: 23 ft.

UST:

Facility Id:	19304
Oper Name:	Not reported
Form Name:	William O'Brien
Form Title:	Environmental/ Safety Coordinator
Form Date:	01/11/1994
Owner Id:	13102

Owner:

Owner Name:	Black and Decker (US) Inc.
Owner Address:	28712 Glebe Road
Owner City:	Easton
Owner State:	MD
Owner Zip:	21601
Owner Phone:	(410) 820-2592
Owner Contact:	Not reported

Tanks:

Tank ID:	1
Tank Status:	**Permanently Out of Use**
Tank Capacity:	800
Substance Description:	Heating Oil
Tank Compartment:	False
Compartment Compartment:	A
Date Intalled:	01/01/1975
Tank Material Desc:	Concrete
Pipe Material Desc:	Flexible Plastic

Tank ID:	2
Tank Status:	**Permanently Out of Use**
Tank Capacity:	1000
Substance Description:	Diesel
Tank Compartment:	False
Compartment Compartment:	A
Date Intalled:	01/01/1981
Tank Material Desc:	Asphalt Coated or Bare Steel
Pipe Material Desc:	Bare or Galvanized Steel

Tank ID:	3
Tank Status:	**Permanently Out Of Use**
Tank Capacity:	Not reported
Substance Description:	Used Oil
Tank Compartment:	False
Compartment Compartment:	A
Date Intalled:	02/05/1997
Tank Material Desc:	Concrete
Pipe Material Desc:	Copper

MD Financial Assurance 2:

Region:	2
Facility ID:	19304
Self Insured:	False

BLACK & DECKER (US) INC. (Continued) **U004118522**

Insurance:	False
Risk Retention Group:	False
Guarantee:	False
Surety Bonds:	False
Letter of Credit:	False
State Fund:	False
Other Finance:	False
Finacnce Comments:	Not reported
FR Not Listed:	False

A6 Target Property | **BLACK & DECKER**
28712 GLEBE RD
EASTON, MD 21601 | **OCPCASES** | **S104849346**
N/A

Site 6 of 7 in cluster A

Actual: 23 ft.

OCPCASES:

Facility ID:	95-1065TA
Facility Status/Code:	CLOSED/Tank Closure - Motor/Lube Oil
Date Open:	10/27/1994
Date Closed:	04/10/1997
Release:	YES
Cleanup:	Not reported
Registration Number:	19304

Facility ID:	92-1992TA
Facility Status/Code:	CLOSED/
Date Open:	03/16/1992
Date Closed:	11/19/1992
Release:	Not reported
Cleanup:	Not reported
Registration Number:	19304

Facility ID:	04-0161TA
Facility Status/Code:	CLOSED/Well/GW Contamination - Motor/Lube Oil
Date Open:	07/23/2003
Date Closed:	07/16/2004
Release:	YES
Cleanup:	YES
Registration Number:	19304

A7 Target Property | **SOTERA ENGINEERED SOLUTIONS**
28712 GLEBE RD, STE 1
EASTON, MD 21601 | **RCRA-CESQG**
FINDS
ECHO | **1017786828**
MDR000525551

Site 7 of 7 in cluster A

Actual: 23 ft.

RCRA-CESQG:

Date form received by agency:	02/29/2012
Facility name:	SOTERA ENGINEERED SOLUTIONS
Facility address:	28712 GLEBE RD, STE 1 EASTON, MD 21601
EPA ID:	MDR000525551
Contact:	DEBORAH SIACHOS
Contact address:	28712 GLEBE RD EASTON, MD 21601

SOTERA ENGINEERED SOLUTIONS (Continued) **1017786828**

Contact country:	US
Contact telephone:	410-820-9140
Contact email:	Not reported
EPA Region:	03
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	SOTERA ENGINEERED SOLUTIONS
Owner/operator address:	28712 GLEBE RD EASTON, MD 21601
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	09/01/2003
Owner/Op end date:	Not reported

Owner/operator name:	PETTINARO ENTERPRISES
Owner/operator address:	234 N JAMES ST WILMINGTON, DE 19804
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	08/01/2003
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No

SOTERA ENGINEERED SOLUTIONS (Continued) **1017786828**

Used oil transporter: No

Violation Status: No violations found

FINDS:

Registry ID: 110064383670

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

ECHO:
Envid: 1017786828
Registry ID: 110064383670
DFR URL: http://echo.epa.gov/detailed_facility_report?fid=110064383670

8
SSW
1/8-1/4
0.198 mi.
1047 ft.

Relative:
Lower

Actual:
21 ft.

COCA-COLA DISTRIBUTION FACILITY **OCPCASES** **U003733216**
329 COMMERCE DR. **UST** **N/A**
EASTON, MD 21601 **Financial Assurance**

OCPCASES:
Facility ID: 93-2903TA
Facility Status/Code: CLOSED/Tank Closure - Motor/Lube Oil
Date Open: 06/02/1993
Date Closed: 04/22/1997
Release: NO
Cleanup: Not reported
Registration Number: 10033

UST:
Facility Id: 10033
Oper Name: Debbie Kinnamon
Form Name: Joseph W. Richardson
Form Title: Environmental Affairs Mgr.
Form Date: 03/04/1994
Owner Id: 6120

Owner:
Owner Name: Coca Cola Enterprises
Owner Address: 9770 Patuxent Woods Dr.
Owner City: Columbia
Owner State: MD
Owner Zip: 21046
Owner Phone: (410) 240-3033
Owner Contact: Debbie Kinnamon

Tanks:
Tank ID: 1
Tank Status: **Permanently Out of Use**

COCA-COLA DISTRIBUTION FACILITY (Continued) **U003733216**

Tank Capacity:	10000
Substance Description:	Diesel
Tank Compartment:	False
Compartment Compartment:	A
Date Intalled:	03/01/1990
Tank Material Desc:	Asphalt Coated or Bare Steel
Pipe Material Desc:	Unknown

Tank ID:	2
Tank Status:	**Permanently Out of Use**
Tank Capacity:	10000
Substance Description:	Gasoline
Tank Compartment:	False
Compartment Compartment:	A
Date Intalled:	03/01/1990
Tank Material Desc:	Asphalt Coated or Bare Steel
Pipe Material Desc:	Unknown

MD Financial Assurance 2:

Region:	2
Facility ID:	10033
Self Insured:	False
Insurance:	False
Risk Retention Group:	False
Guarantee:	False
Surety Bonds:	False
Letter of Credit:	False
State Fund:	False
Other Finance:	False
Finacnce Comments:	Not reported
FR Not Listed:	False

9
SE
1/4-1/2
0.411 mi.
2170 ft.

ALDA MISENHEIMER **OCPCASES** **S106862852**
108 SYCAMORE AVE **N/A**
EASTON, MD 21601

Relative:
Higher

Actual:
36 ft.

OCPCASES:

Facility ID:	05-0942TA
Facility Status/Code:	CLOSED/Tank Closure - Residential Heating Oil
Date Open:	03/09/2005
Date Closed:	04/12/2005
Release:	YES
Cleanup:	YES
Registration Number:	Not reported

10 SSE 1/2-1 0.619 mi. 3268 ft. | **NOBLE MOTOR REBUILDERS**
350 N AURORA ST
EASTON, MD 21601 | **SEMS-ARCHIVE**
SHWS
RCRA NonGen / NLR | **1000279286**
MDD004491478

Relative: Higher

Actual: 31 ft.

SEMS-ARCHIVE:

Site ID:	300228
EPA ID:	MDD004491478
Federal Facility:	N
NPL:	Not on the NPL
Non NPL Status:	NFRAP-Site does not qualify for the NPL based on existing information

Following information was gathered from the prior CERCLIS update completed in 10/2013:

Site ID:	0300228
Federal Facility:	Not a Federal Facility
NPL Status:	Not on the NPL
Non NPL Status:	NFRAP-Site does not qualify for the NPL based on existing information

CERCLIS-NFRAP Site Contact Details:

Contact Sequence ID:	13338009.00000
Person ID:	13003857.00000

CERCLIS-NFRAP Assessment History:

Action:	DISCOVERY
Date Started:	/ /
Date Completed:	05/01/81
Priority Level:	Not reported
Action:	SITE REASSESSMENT
Date Started:	04/21/99
Date Completed:	11/08/99
Priority Level:	Low priority for further assessment
Action:	PRELIMINARY ASSESSMENT
Date Started:	06/01/98
Date Completed:	11/08/99
Priority Level:	Low priority for further assessment
Action:	COMFORT/STATUS LETTER
Date Started:	/ /
Date Completed:	11/10/99
Priority Level:	Not reported
Action:	ARCHIVE SITE
Date Started:	/ /
Date Completed:	10/30/87
Priority Level:	Not reported
Action:	PRELIMINARY ASSESSMENT
Date Started:	/ /
Date Completed:	10/30/87
Priority Level:	NFRAP-Site does not qualify for the NPL based on existing information
Action:	ARCHIVE SITE
Date Started:	/ /
Date Completed:	09/30/05
Priority Level:	Not reported

NOBLE MOTOR REBUILDERS (Continued) **1000279286**

Action: OTHER CLEANUP ACTIVITY
Date Started: 09/03/03
Date Completed: 09/30/05
Priority Level: NFRAP-Site does not qualify for the NPL based on existing information

SHWS:
Facility ID: (MD-125)
Alias Name: NONE
Status: Formerly Investigated Site
Facility Type: Formerly Investigated Sites

RCRA NonGen / NLR:
Date form received by agency: 01/22/1981
Facility name: NOBLE MOTOR REBUILDERS DIV
Facility address: N AURORA ST
EASTON, MD 21601
EPA ID: MDD004491478
Mailing address: PO BOX 119
EASTON, MD 21601
Contact: E.W. FISHER
Contact address: N AURORA ST
EASTON, MD 21601
Contact country: US
Contact telephone: (301) 822-1620
Contact email: Not reported
EPA Region: 03
Land type: Facility is not located on Indian land. Additional information is not known.
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: BEASLEY INDUSTRIES INC
Owner/operator address: OWNERSTREET
OWNERCITY, AK 99999
Owner/operator country: Not reported
Owner/operator telephone: (215) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: OPERNAME
Owner/operator address: OPERSTREET
OPERCITY, AK 99999
Owner/operator country: Not reported
Owner/operator telephone: (215) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No

NOBLE MOTOR REBUILDERS (Continued) **1000279286**

Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D002
. Waste name: CORROSIVE WASTE

Facility Has Received Notices of Violations:
Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 04/03/1989
Date achieved compliance: 04/07/1989
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: LDR - General
Date violation determined: 04/03/1989
Date achieved compliance: 04/06/1989
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 04/03/1989
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 12/17/1986
Date achieved compliance: 04/06/1989
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/17/1986
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported

NOBLE MOTOR REBUILDERS (Continued) **1000279286**

Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 11/25/1986
Date achieved compliance: 04/06/1989
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 12/10/1996
Evaluation: FOCUSED COMPLIANCE INSPECTION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 04/06/1989
Evaluation: COMPLIANCE SCHEDULE EVALUATION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 04/03/1989
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: LDR - General
Date achieved compliance: 04/06/1989
Evaluation lead agency: State

Evaluation date: 04/03/1989
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 04/07/1989
Evaluation lead agency: State

Evaluation date: 12/17/1986
Evaluation: COMPLIANCE SCHEDULE EVALUATION
Area of violation: Generators - General
Date achieved compliance: 04/06/1989
Evaluation lead agency: State

Evaluation date: 11/25/1986
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 04/06/1989
Evaluation lead agency: State

11
South
1/2-1
0.879 mi.
4640 ft.

Relative:
Lower

Actual:
19 ft.

EASTON UTILITIES COMM MUNI ELECT UTIL
219 NORTH WASHINGTON STREET
EASTON, MD 21601

SEMS-ARCHIVE
CORRACTS
RCRA-CESQG
SHWS
OCPCASES
HIST UST
2020 COR ACTION
PADS
US AIRS

1000416441
MDD980555668

SEMS-ARCHIVE:

Site ID:	303443
EPA ID:	MDD980555668
Federal Facility:	N
NPL:	Not on the NPL
Non NPL Status:	Deferred to RCRA

Following information was gathered from the prior CERCLIS update completed in 10/2013:

Site ID:	0303443
Federal Facility:	Not a Federal Facility
NPL Status:	Not on the NPL
Non NPL Status:	Deferred to RCRA

Program Priority:

Description:	RCRA Deferral Audit
Description:	RCRA Deferral - Lead Confirmed

CERCLIS-NFRAP Assessment History:

Action:	ARCHIVE SITE
Date Started:	/ /
Date Completed:	01/23/96
Priority Level:	Not reported
Action:	DISCOVERY
Date Started:	/ /
Date Completed:	08/24/88
Priority Level:	Not reported
Action:	PRELIMINARY ASSESSMENT
Date Started:	10/30/90
Date Completed:	10/30/90
Priority Level:	Deferred to RCRA (Subtitle C)

CORRACTS:

EPA ID:	MDD980555668
EPA Region:	03
Area Name:	ENTIRE FACILITY
Actual Date:	19911201
Action:	CA070YE - RFA Determination Of Need For An RFI, RFI is Necessary
NAICS Code(s):	Not reported
Original schedule date:	Not reported
Schedule end date:	Not reported
EPA ID:	MDD980555668
EPA Region:	03

EASTON UTILITIES COMM MUNI ELECT UTIL (Continued) **1000416441**

Area Name: ENTIRE FACILITY
Actual Date: 19911201
Action: CA075HI - CA Prioritization, Facility or area was assigned a high corrective action priority
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: MDD980555668
EPA Region: 03
Area Name: ENTIRE FACILITY
Actual Date: 20021003
Action: CA725YE - Current Human Exposures Under Control, Yes, Current Human Exposures Under Control has been verified
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: MDD980555668
EPA Region: 03
Area Name: ENTIRE FACILITY
Actual Date: 20021003
Action: CA750YE - Migration of Contaminated Groundwater under Control, Yes, Migration of Contaminated Groundwater Under Control has been verified
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: MDD980555668
EPA Region: 03
Area Name: ENTIRE FACILITY
Actual Date: 19990708
Action: CA100 - RFI Imposition
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: MDD980555668
EPA Region: 03
Area Name: ENTIRE FACILITY
Actual Date: 19991012
Action: CA750IN - Migration of Contaminated Groundwater under Control, More information is needed to make a determination
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: MDD980555668
EPA Region: 03
Area Name: ENTIRE FACILITY
Actual Date: 19991012
Action: CA725IN - Current Human Exposures Under Control, More information is needed to make a determination
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EASTON UTILITIES COMM MUNI ELECT UTIL (Continued) **1000416441**

EPA ID: MDD980555668
EPA Region: 03
Area Name: ENTIRE FACILITY
Actual Date: 20030414
Action: CA999NF - Corrective Action Process Terminated, No Further Action
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: MDD980555668
EPA Region: 03
Area Name: ENTIRE FACILITY
Actual Date: 20030414
Action: CA400 - Date For Remedy Selection (CM Imposed)
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: MDD980555668
EPA Region: 03
Area Name: ENTIRE FACILITY
Actual Date: 20030414
Action: CA900NC
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: MDD980555668
EPA Region: 03
Area Name: ENTIRE FACILITY
Actual Date: 20030414
Action: CA550NR
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: MDD980555668
EPA Region: 03
Area Name: ENTIRE FACILITY
Actual Date: 20030414
Action: CA800YE
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: MDD980555668
EPA Region: 03
Area Name: ENTIRE FACILITY
Actual Date: 19960930
Action: CA225IN - Stabilization Measures Evaluation, This facility is not, amenable to stabilization activity because of, a lack of technical data. An evaluation has been completed, but further data is necessary to determine stabilization measures, feasibility or appropriateness. This status should be changed when data becomes available
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EASTON UTILITIES COMM MUNI ELECT UTIL (Continued) **1000416441**

RCRA-CESQG:

Date form received by agency:	03/18/1993
Facility name:	EASTON UTILITIES COMM MUNI ELECT UTIL
Facility address:	219 NORTH WASHINGTON STREET EASTON, MD 21601
EPA ID:	MDD980555668
Mailing address:	11 SOUTH HARRISON STREET EASTON, MD 21601
Contact:	Not reported
Contact address:	Not reported Not reported
Contact country:	US
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	03
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

Date form received by agency:	10/08/1983
Site name:	EASTON UTILITIES COMM MUNI ELECT UTIL
Classification:	Conditionally Exempt Small Quantity Generator

Date form received by agency:	11/19/1980
Site name:	EASTON UTILITIES COMM MUNI ELECT UTIL
Classification:	Not a generator, verified

EASTON UTILITIES COMM MUNI ELECT UTIL (Continued) **1000416441**

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: F001
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLORETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Date form received by agency: 08/18/1980
Site name: EASTON UTILITIES COMM MUNI ELECT UTIL
Classification: Conditionally Exempt Small Quantity Generator

. Waste code: D000
. Waste name: Not Defined

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: F001
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLORETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: U220
. Waste name: BENZENE, METHYL- (OR) TOLUENE

Corrective Action Summary:
Event date: 12/01/1991
Event: RFA Determination Of Need For An RFI, RFI is Necessary;

Event date: 12/01/1991
Event: CA Prioritization, Facility or area was assigned a high corrective action priority.

Event date: 09/30/1996
Event: Stabilization Measures Evaluation,This facility is not amenable to stabilization activity because of a lack of technical data. An evaluation has been completed, but further data is necessary to determine stabilization measures, feasibility or appropriateness. This status should be changed when data becomes available.

Event date: 07/08/1999
Event: RFI Imposition

Event date: 10/12/1999
Event: Current Human Exposures under Control, More information is needed to make a determination.

EASTON UTILITIES COMM MUNI ELECT UTIL (Continued) **1000416441**

Event date: 10/12/1999
Event: Igration of Contaminated Groundwater under Control, More information is needed to make a determination.

Event date: 10/03/2002
Event: Current Human Exposures under Control, Yes, Current Human Exposures Under Control has been verified. Based on a review of information contained in the EI determination, current human exposures are expected to be under control at the facility under current and reasonably expected conditions. This determination will be re-evaluated when the Agency/State becomes aware of significant changes at the facility.

Event date: 10/03/2002
Event: Igration of Contaminated Groundwater under Control, Yes, Migration of Contaminated Groundwater Under Control has been verified. Based on a review of information contained in the EI determination, it has been determined that migration of contaminated groundwater is under control at the facility. Specifically, this determination indicates that the migration of contaminated groundwater is under control, and that monitoring will be conducted to confirm that contaminated groundwater remains within the existing area of contaminated groundwater. This determination will be re-evaluated when the Agency becomes aware of significant changes at the facility.

Event date: 04/14/2003
Event: Corrective Action Process Terminated, No Further Action

Event date: 04/14/2003
Event: CA900NC

Event date: 04/14/2003
Event: CA800YE

Event date: 04/14/2003
Event: CA550NR

Event date: 04/14/2003
Event: Date For Remedy Selection (CM Imposed)

Violation Status: No violations found

SHWS:
Facility ID: (MD-281)
Alias Name: NONE
Status: Formerly Investigated Site
Facility Type: Formerly Investigated Sites

OCPCASES:
Facility ID: 99-1221TA
Facility Status/Code: CLOSED/Tank Closure - Motor/Lube Oil
Date Open: 11/17/1998
Date Closed: 12/01/1998
Release: YES
Cleanup: YES
Registration Number: 515

EASTON UTILITIES COMM MUNI ELECT UTIL (Continued) **1000416441**

Facility ID: 11-0042TA
Facility Status/Code: CLOSED/Well/GW Contamination - Motor/Lube Oil
Date Open: 07/23/2010
Date Closed: 03/11/2011
Release: YES
Cleanup: YES
Registration Number: 515

Historical UST:
Facility ID: 3011615
Tank ID: 001
Age: 10
Capacity: 4,000
Tank Status: Currently in use
Product: Not reported

Facility ID: 3011615
Tank ID: 002
Age: 10
Capacity: 4,000
Tank Status: Currently in use
Product: Not reported

Facility ID: 3011615
Tank ID: 003
Age: 13
Capacity: 2,000
Tank Status: Currently in use
Product: Gasoline

Facility ID: 3011615
Tank ID: 004
Age: 22
Capacity: 3,000
Tank Status: Currently in use
Product: Gasoline

Facility ID: 3011615
Tank ID: 005
Age: 13
Capacity: 1,000
Tank Status: Currently in use
Product: Diesel

2020 COR ACTION:
EPA ID: MDD980555668
Region: 3
Action: Remedy Constructed

PADS:
EPAID: MDD980555668
Facility name: EASTON UTIL COMM
Facility Address: 219 N WASHINGTON ST
EASTON, MD 21601
Facility country: US
Generator: Yes

EASTON UTILITIES COMM MUNI ELECT UTIL (Continued) **1000416441**

Storer:	No
Transporter:	No
Disposer:	No
Research facility:	No
Smelter:	No
Facility owner name:	EASTON TOWN OF
Contact title:	Not reported
Contact name:	PLUTSCHAK RICHARD H
Contact tel:	(301)822-6110
Contact extension:	Not reported
Mailing address:	PO BOX 1189 EASTON, MD 21601
Mailing country:	US
Cert. title:	Not reported
Cert. name:	Not reported
Cert. date:	03/02/1990
Date received:	04/04/1990

US AIRS (AFS):

Envid:	1000416441
Region Code:	03
County Code:	MD041
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
D and B Number:	Not reported
Facility Site Name:	EASTON UTILITIES
Primary SIC Code:	4911
NAICS Code:	221122
Default Air Classification Code:	MAJ
Facility Type of Ownership Code:	POF
Air CMS Category Code:	TVM
HPV Status:	Not reported

US AIRS (AFS):

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	MACT Standards (40 CFR Part 63)
Activity Date:	2014-11-06 00:00:00
Activity Status Date:	2014-12-09 18:17:06
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Active

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	MACT Standards (40 CFR Part 63)
Activity Date:	2011-10-07 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

EASTON UTILITIES COMM MUNI ELECT UTIL (Continued) **1000416441**

Region Code: 03
Programmatic ID: AIR MD0000002404100029
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: MACT Standards (40 CFR Part 63)
Activity Date: 2012-01-31 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 03
Programmatic ID: AIR MD0000002404100029
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: MACT Standards (40 CFR Part 63)
Activity Date: 2013-01-22 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 03
Programmatic ID: AIR MD0000002404100029
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: MACT Standards (40 CFR Part 63)
Activity Date: 2013-06-25 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 03
Programmatic ID: AIR MD0000002404100029
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: MACT Standards (40 CFR Part 63)
Activity Date: 2013-08-20 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 03
Programmatic ID: AIR MD0000002404100029
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: MACT Standards (40 CFR Part 63)
Activity Date: 2013-10-28 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring

EASTON UTILITIES COMM MUNI ELECT UTIL (Continued) **1000416441**

Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	MACT Standards (40 CFR Part 63)
Activity Date:	2014-04-02 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	MACT Standards (40 CFR Part 63)
Activity Date:	2014-04-07 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	MACT Standards (40 CFR Part 63)
Activity Date:	2014-04-08 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	2014-11-06 00:00:00
Activity Status Date:	2014-12-09 18:17:06
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Active

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

EASTON UTILITIES COMM MUNI ELECT UTIL (Continued) **1000416441**

Activity Date:	2015-02-28 00:00:00
Activity Status Date:	2015-04-03 10:17:21
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Active
Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	2015-09-01 00:00:00
Activity Status Date:	2015-09-17 15:31:52
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Active
Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	1983-05-12 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	1984-09-06 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	1984-12-31 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069

EASTON UTILITIES COMM MUNI ELECT UTIL (Continued) **1000416441**

Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	1986-04-03 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	1986-09-17 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	1987-07-24 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	1988-06-07 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	1988-11-07 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

EASTON UTILITIES COMM MUNI ELECT UTIL (Continued) **1000416441**

Region Code: 03
Programmatic ID: AIR MD0000002404100029
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1989-12-04 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 03
Programmatic ID: AIR MD0000002404100029
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1991-09-11 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 03
Programmatic ID: AIR MD0000002404100029
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1992-09-17 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 03
Programmatic ID: AIR MD0000002404100029
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1993-09-28 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 03
Programmatic ID: AIR MD0000002404100029
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1994-02-03 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring

EASTON UTILITIES COMM MUNI ELECT UTIL (Continued) **1000416441**

Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 03
Programmatic ID: AIR MD0000002404100029
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1995-06-29 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 03
Programmatic ID: AIR MD0000002404100029
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1996-02-01 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 03
Programmatic ID: AIR MD0000002404100029
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1997-01-15 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 03
Programmatic ID: AIR MD0000002404100029
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1998-07-06 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 03
Programmatic ID: AIR MD0000002404100029
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

EASTON UTILITIES COMM MUNI ELECT UTIL (Continued) **1000416441**

Activity Date:	1999-06-02 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	1999-11-02 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	2000-11-03 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	2001-11-08 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	2002-03-29 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069

EASTON UTILITIES COMM MUNI ELECT UTIL (Continued) **1000416441**

Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	2002-08-21 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	2003-02-14 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	2003-10-30 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	2004-10-27 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	2005-01-10 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

EASTON UTILITIES COMM MUNI ELECT UTIL (Continued) **1000416441**

Region Code: 03
Programmatic ID: AIR MD0000002404100029
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2005-01-18 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 03
Programmatic ID: AIR MD0000002404100029
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2007-01-11 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 03
Programmatic ID: AIR MD0000002404100029
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2007-09-04 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 03
Programmatic ID: AIR MD0000002404100029
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2009-04-01 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 03
Programmatic ID: AIR MD0000002404100029
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2009-09-01 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring

EASTON UTILITIES COMM MUNI ELECT UTIL (Continued) **1000416441**

Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 03
Programmatic ID: AIR MD0000002404100029
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2010-01-29 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 03
Programmatic ID: AIR MD0000002404100029
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2010-05-19 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 03
Programmatic ID: AIR MD0000002404100029
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2010-07-19 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 03
Programmatic ID: AIR MD0000002404100029
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2010-10-25 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 03
Programmatic ID: AIR MD0000002404100029
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

EASTON UTILITIES COMM MUNI ELECT UTIL (Continued) **1000416441**

Activity Date:	2011-02-09 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	2011-05-12 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	2011-10-07 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	2012-01-31 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	2012-09-26 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069

EASTON UTILITIES COMM MUNI ELECT UTIL (Continued) **1000416441**

Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2012-10-04 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 03
Programmatic ID: AIR MD0000002404100029
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2013-01-22 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 03
Programmatic ID: AIR MD0000002404100029
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2013-02-06 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 03
Programmatic ID: AIR MD0000002404100029
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2013-06-25 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 03
Programmatic ID: AIR MD0000002404100029
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2013-08-20 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

EASTON UTILITIES COMM MUNI ELECT UTIL (Continued) **1000416441**

Region Code: 03
Programmatic ID: AIR MD0000002404100029
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2013-08-21 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 03
Programmatic ID: AIR MD0000002404100029
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2013-09-09 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 03
Programmatic ID: AIR MD0000002404100029
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2013-10-28 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 03
Programmatic ID: AIR MD0000002404100029
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2014-03-14 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 03
Programmatic ID: AIR MD0000002404100029
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2014-04-02 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring

EASTON UTILITIES COMM MUNI ELECT UTIL (Continued) **1000416441**

Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 03
Programmatic ID: AIR MD0000002404100029
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2014-04-07 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 03
Programmatic ID: AIR MD0000002404100029
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2014-04-08 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 03
Programmatic ID: AIR MD0000002404100029
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2014-09-16 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 03
Programmatic ID: AIR MD0000002404100029
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2014-09-22 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 03
Programmatic ID: AIR MD0000002404100029
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

EASTON UTILITIES COMM MUNI ELECT UTIL (Continued) **1000416441**

Activity Date:	2009-09-09 00:00:00
Activity Status Date:	2009-09-09 00:00:00
Activity Group:	Enforcement Action
Activity Type:	Administrative - Informal
Activity Status:	Achieved

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2014-11-06 00:00:00
Activity Status Date:	2014-12-09 18:17:06
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Active

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2015-02-28 00:00:00
Activity Status Date:	2015-04-03 10:17:21
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Active

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2015-03-19 00:00:00
Activity Status Date:	2015-06-05 13:58:31
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Active

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2015-09-01 00:00:00
Activity Status Date:	2015-09-17 15:31:52
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Active

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069

EASTON UTILITIES COMM MUNI ELECT UTIL (Continued) **1000416441**

Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	1998-07-06 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	1999-06-02 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	1999-11-02 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2000-11-03 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2001-11-08 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

EASTON UTILITIES COMM MUNI ELECT UTIL (Continued) **1000416441**

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2002-03-29 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2002-08-21 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2003-02-14 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2003-03-31 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2003-08-28 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring

EASTON UTILITIES COMM MUNI ELECT UTIL (Continued) **1000416441**

Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 03
Programmatic ID: AIR MD0000002404100029
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2003-10-30 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 03
Programmatic ID: AIR MD0000002404100029
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2004-03-31 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 03
Programmatic ID: AIR MD0000002404100029
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2004-08-05 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 03
Programmatic ID: AIR MD0000002404100029
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2004-10-27 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 03
Programmatic ID: AIR MD0000002404100029
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits

EASTON UTILITIES COMM MUNI ELECT UTIL (Continued) **1000416441**

Activity Date:	2005-01-10 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2005-01-18 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2005-03-31 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2005-06-07 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2006-03-27 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069

EASTON UTILITIES COMM MUNI ELECT UTIL (Continued) **1000416441**

Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2006-08-20 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2007-01-11 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2007-03-29 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2007-08-02 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2007-09-04 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

EASTON UTILITIES COMM MUNI ELECT UTIL (Continued) **1000416441**

Region Code: 03
Programmatic ID: AIR MD0000002404100029
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2008-04-01 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 03
Programmatic ID: AIR MD0000002404100029
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2008-04-21 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 03
Programmatic ID: AIR MD0000002404100029
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2009-03-27 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 03
Programmatic ID: AIR MD0000002404100029
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2009-04-01 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 03
Programmatic ID: AIR MD0000002404100029
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2009-09-01 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring

EASTON UTILITIES COMM MUNI ELECT UTIL (Continued) **1000416441**

Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 03
Programmatic ID: AIR MD0000002404100029
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2010-01-29 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 03
Programmatic ID: AIR MD0000002404100029
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2010-03-15 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 03
Programmatic ID: AIR MD0000002404100029
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2010-05-05 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 03
Programmatic ID: AIR MD0000002404100029
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2010-05-19 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 03
Programmatic ID: AIR MD0000002404100029
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits

EASTON UTILITIES COMM MUNI ELECT UTIL (Continued) **1000416441**

Activity Date:	2010-07-19 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2010-10-25 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2011-02-09 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2011-03-28 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2011-04-14 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069

EASTON UTILITIES COMM MUNI ELECT UTIL (Continued) **1000416441**

Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2011-05-12 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2011-10-07 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2012-01-31 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2012-03-28 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2012-04-08 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

EASTON UTILITIES COMM MUNI ELECT UTIL (Continued) **1000416441**

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2012-09-26 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2012-10-04 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2013-01-22 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2013-02-06 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2013-03-27 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring

EASTON UTILITIES COMM MUNI ELECT UTIL (Continued) **1000416441**

Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2013-04-02 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2013-06-25 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2013-08-20 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2013-08-21 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits

EASTON UTILITIES COMM MUNI ELECT UTIL (Continued) **1000416441**

Activity Date:	2013-09-09 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2013-10-28 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2014-03-14 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2014-03-24 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2014-04-02 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069

EASTON UTILITIES COMM MUNI ELECT UTIL (Continued) **1000416441**

Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2014-04-07 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2014-04-08 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2014-04-27 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2014-09-16 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2014-09-22 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

EASTON UTILITIES COMM MUNI ELECT UTIL (Continued) **1000416441**

Region Code:	03
Programmatic ID:	AIR MD0000002404100029
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2009-09-09 00:00:00
Activity Status Date:	2009-09-09 00:00:00
Activity Group:	Enforcement Action
Activity Type:	Administrative - Informal
Activity Status:	Achieved

US AIRS MINOR:

Envid:	1000416441
Region Code:	03
Programmatic ID:	AIR MD0000002404100016
Facility Registry ID:	110000614069
D and B Number:	Not reported
Primary SIC Code:	8062
NAICS Code:	622110
Default Air Classification Code:	MIN
Facility Type of Ownership Code:	POF
Air CMS Category Code:	Not reported
HPV Status:	Not reported

US AIRS MINOR:

Region Code:	03
Programmatic ID:	AIR MD0000002404100016
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MIN
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	1985-06-06 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	03
Programmatic ID:	AIR MD0000002404100016
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MIN
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	1986-06-09 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	03
Programmatic ID:	AIR MD0000002404100016
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MIN
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

EASTON UTILITIES COMM MUNI ELECT UTIL (Continued) **1000416441**

Activity Date: 1987-05-28 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 03
Programmatic ID: AIR MD0000002404100016
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1987-12-10 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 03
Programmatic ID: AIR MD0000002404100016
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1988-06-23 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 03
Programmatic ID: AIR MD0000002404100016
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1989-06-15 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 03
Programmatic ID: AIR MD0000002404100016
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1990-06-27 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 03
Programmatic ID: AIR MD0000002404100016
Facility Registry ID: 110000614069

EASTON UTILITIES COMM MUNI ELECT UTIL (Continued) **1000416441**

Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1991-06-26 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 03
Programmatic ID: AIR MD0000002404100016
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1992-07-28 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 03
Programmatic ID: AIR MD0000002404100016
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1993-06-23 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 03
Programmatic ID: AIR MD0000002404100016
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1994-05-12 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 03
Programmatic ID: AIR MD0000002404100016
Facility Registry ID: 110000614069
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1995-09-08 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

EASTON UTILITIES COMM MUNI ELECT UTIL (Continued) **1000416441**

Region Code:	03
Programmatic ID:	AIR MD0000002404100016
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MIN
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	1996-01-24 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	03
Programmatic ID:	AIR MD0000002404100016
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MIN
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	1997-01-08 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	03
Programmatic ID:	AIR MD0000002404100016
Facility Registry ID:	110000614069
Air Operating Status Code:	OPR
Default Air Classification Code:	MIN
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	2001-03-20 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Count: 3 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
EASTON	S104616817	SERVICE AMERICA	AIRPORT INDUSTRIAL PARK GLEBE	21601	OCPCASES
EASTON	S104615977	ENVIRONMENTAL CONSTRUCTION CO	BROOKS DR	21601	OCPCASES
EASTON	S104614243	SOUTHERN STATES PETROLEUM	EASTON POINT RD	21601	OCPCASES

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 03/07/2016
Date Data Arrived at EDR: 04/05/2016
Date Made Active in Reports: 04/15/2016
Number of Days to Update: 10

Source: EPA
Telephone: N/A
Last EDR Contact: 04/05/2016
Next Scheduled EDR Contact: 04/18/2016
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 03/07/2016
Date Data Arrived at EDR: 04/05/2016
Date Made Active in Reports: 04/15/2016
Number of Days to Update: 10

Source: EPA
Telephone: N/A
Last EDR Contact: 04/05/2016
Next Scheduled EDR Contact: 04/18/2016
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 03/07/2016	Source: EPA
Date Data Arrived at EDR: 04/05/2016	Telephone: N/A
Date Made Active in Reports: 04/15/2016	Last EDR Contact: 04/05/2016
Number of Days to Update: 10	Next Scheduled EDR Contact: 04/18/2016
	Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 11/13/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 01/06/2016	Telephone: 703-603-8704
Date Made Active in Reports: 05/20/2016	Last EDR Contact: 04/08/2016
Number of Days to Update: 135	Next Scheduled EDR Contact: 07/18/2016
	Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 03/07/2016	Source: EPA
Date Data Arrived at EDR: 04/05/2016	Telephone: 800-424-9346
Date Made Active in Reports: 04/15/2016	Last EDR Contact: 04/05/2016
Number of Days to Update: 10	Next Scheduled EDR Contact: 08/01/2016
	Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 03/07/2016
Date Data Arrived at EDR: 04/05/2016
Date Made Active in Reports: 04/15/2016
Number of Days to Update: 10

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 04/05/2016
Next Scheduled EDR Contact: 08/01/2016
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report
CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 12/09/2015
Date Data Arrived at EDR: 03/02/2016
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 34

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 03/30/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 12/09/2015
Date Data Arrived at EDR: 03/02/2016
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 34

Source: Environmental Protection Agency
Telephone: 800-438-2474
Last EDR Contact: 03/30/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/09/2015
Date Data Arrived at EDR: 03/02/2016
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 34

Source: Environmental Protection Agency
Telephone: 800-438-2474
Last EDR Contact: 03/30/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 12/09/2015
Date Data Arrived at EDR: 03/02/2016
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 34

Source: Environmental Protection Agency
Telephone: 800-438-2474
Last EDR Contact: 03/30/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/09/2015
Date Data Arrived at EDR: 03/02/2016
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 34

Source: Environmental Protection Agency
Telephone: 800-438-2474
Last EDR Contact: 03/30/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Varies

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 05/28/2015
Date Data Arrived at EDR: 05/29/2015
Date Made Active in Reports: 06/11/2015
Number of Days to Update: 13

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 05/16/2016
Next Scheduled EDR Contact: 08/29/2016
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 09/10/2015
Date Data Arrived at EDR: 09/11/2015
Date Made Active in Reports: 11/03/2015
Number of Days to Update: 53

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/25/2016
Next Scheduled EDR Contact: 09/12/2016
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 09/10/2015
Date Data Arrived at EDR: 09/11/2015
Date Made Active in Reports: 11/03/2015
Number of Days to Update: 53

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/25/2016
Next Scheduled EDR Contact: 09/12/2016
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 03/28/2016
Date Data Arrived at EDR: 03/30/2016
Date Made Active in Reports: 05/20/2016
Number of Days to Update: 51

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 03/30/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Annually

State- and tribal - equivalent CERCLIS

SHWS: Notice of Potential Hazardous Waste Sites

State Hazardous Waste Sites. State hazardous waste site records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Available information varies by state.

Date of Government Version: 10/01/2009
Date Data Arrived at EDR: 12/11/2009
Date Made Active in Reports: 12/14/2009
Number of Days to Update: 3

Source: Department of the Environment
Telephone: 410-537-3000
Last EDR Contact: 05/06/2016
Next Scheduled EDR Contact: 08/22/2016
Data Release Frequency: Semi-Annually

State and tribal landfill and/or solid waste disposal site lists

SWF/LF: Permitted Solid Waste Disposal Facilities

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 04/26/2016
Date Data Arrived at EDR: 04/28/2016
Date Made Active in Reports: 05/19/2016
Number of Days to Update: 21

Source: Department of the Environment
Telephone: 410-537-3375
Last EDR Contact: 04/28/2016
Next Scheduled EDR Contact: 08/15/2016
Data Release Frequency: Annually

State and tribal leaking storage tank lists

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land

A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 10/27/2015
Date Data Arrived at EDR: 10/29/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 67

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 04/29/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/13/2015
Date Data Arrived at EDR: 10/23/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 118

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 04/27/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Quarterly

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 10/09/2015
Date Data Arrived at EDR: 02/12/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 112

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 04/29/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 12/11/2015
Date Data Arrived at EDR: 02/19/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 105

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 04/29/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 02/05/2016
Date Data Arrived at EDR: 04/29/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 35

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 04/26/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Semi-Annually

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 01/07/2016
Date Data Arrived at EDR: 01/08/2016
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 41

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 04/29/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Quarterly

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 02/17/2016
Date Data Arrived at EDR: 04/27/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 37

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 04/27/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 02/25/2016
Date Data Arrived at EDR: 04/27/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 37

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 04/27/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Quarterly

OCPCASES: Oil Control Program Cases
Cases monitored by the Oil Control Program. these cases can be leaking underground storage tanks and other belowground releases, leaking aboveground storage tanks, spills and inspections.

Date of Government Version: 03/07/2016
Date Data Arrived at EDR: 04/01/2016
Date Made Active in Reports: 05/17/2016
Number of Days to Update: 46

Source: Department of Environment
Telephone: 410-537-3433
Last EDR Contact: 06/09/2016
Next Scheduled EDR Contact: 09/26/2016
Data Release Frequency: Semi-Annually

HIST LUST: Recovery Sites

In 1999, the Department of the Environment stopped adding new sites to its Recovery Sites Database. Current leaking underground storage tank information maybe found in the OCPCASES database.

Date of Government Version: 03/01/1999
Date Data Arrived at EDR: 03/22/1999
Date Made Active in Reports: 04/16/1999
Number of Days to Update: 25

Source: Department of the Environment
Telephone: 410-537-3433
Last EDR Contact: 02/19/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010
Date Data Arrived at EDR: 02/16/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 55

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 04/11/2016
Next Scheduled EDR Contact: 07/25/2016
Data Release Frequency: Varies

UST: Registered Underground Storage Tank List

Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 03/07/2016
Date Data Arrived at EDR: 03/09/2016
Date Made Active in Reports: 05/09/2016
Number of Days to Update: 61

Source: Department of the Environment
Telephone: 410-537-3433
Last EDR Contact: 04/11/2016
Next Scheduled EDR Contact: 07/25/2016
Data Release Frequency: Varies

AST: Permitted Aboveground Storage Tanks

Registered Aboveground Storage Tanks.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 01/12/2015
Date Made Active in Reports: 01/21/2015
Number of Days to Update: 9

Source: Department of The Environment
Telephone: 410-537-3000
Last EDR Contact: 06/09/2016
Next Scheduled EDR Contact: 09/26/2016
Data Release Frequency: Quarterly

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 01/26/2016
Date Data Arrived at EDR: 02/05/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 119

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 04/29/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Quarterly

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 02/25/2016
Date Data Arrived at EDR: 04/27/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 37

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 04/27/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Quarterly

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 01/07/2016
Date Data Arrived at EDR: 01/08/2016
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 41

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 04/29/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Quarterly

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 09/23/2014
Date Data Arrived at EDR: 11/25/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 65

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 04/29/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 12/03/2015
Date Data Arrived at EDR: 02/04/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 120

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 04/29/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Semi-Annually

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 10/20/2015
Date Data Arrived at EDR: 10/29/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 67

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 04/29/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 02/05/2016
Date Data Arrived at EDR: 04/29/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 35

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 04/26/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Semi-Annually

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 11/05/2015
Date Data Arrived at EDR: 11/13/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 52

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 04/27/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Varies

State and tribal institutional control / engineering control registries

ENG CONTROLS: Engineering Controls Site listing
Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 11/10/2008
Date Data Arrived at EDR: 11/21/2008
Date Made Active in Reports: 12/17/2008
Number of Days to Update: 26

Source: Department of the Environment
Telephone: 410-537-3422
Last EDR Contact: 06/09/2016
Next Scheduled EDR Contact: 09/26/2016
Data Release Frequency: Varies

INST CONTROL: Voluntary Cleanup Program Applicants/Participants
Sites included in the Voluntary Cleanup Program Applicants/Participants listing that have Deed Restrictions.

Date of Government Version: 03/21/2016
Date Data Arrived at EDR: 04/01/2016
Date Made Active in Reports: 05/17/2016
Number of Days to Update: 46

Source: Department of the Environment
Telephone: 410-537-3493
Last EDR Contact: 06/09/2016
Next Scheduled EDR Contact: 09/26/2016
Data Release Frequency: Semi-Annually

State and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 04/01/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng
A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Applicants/Participants
The Voluntary Cleanup Program, administrated by the Dept. of the Environment, streamlines the environmental cleanup process for sites, usually industrial or commercial properties, that are contaminated, or perceived to be contaminated, by hazardous substances. Developers and lenders are provided with certain limitations on liability and participants in the program are provided certainty in the process by knowing exactly what will be required.

Date of Government Version: 04/21/2016
Date Data Arrived at EDR: 04/01/2016
Date Made Active in Reports: 05/17/2016
Number of Days to Update: 46

Source: Dept. of the Environment
Telephone: 410-537-3000
Last EDR Contact: 06/09/2016
Next Scheduled EDR Contact: 09/26/2016
Data Release Frequency: Semi-Annually

State and tribal Brownfields sites

BROWNFIELDS: Eligible Brownfields Properties
The Site Assessment Section of the State Superfund Division is responsible for conducting federally funded assessments of eligible brownfields properties. These assessments are undertaken to determine whether there are environmental cleanup requirements at these sites.

Date of Government Version: 01/04/2016
Date Data Arrived at EDR: 03/15/2016
Date Made Active in Reports: 05/09/2016
Number of Days to Update: 55

Source: Department of Environment
Telephone: 410-537-3000
Last EDR Contact: 06/07/2016
Next Scheduled EDR Contact: 09/19/2016
Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 12/22/2015
Date Data Arrived at EDR: 12/23/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 57

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 03/22/2016
Next Scheduled EDR Contact: 07/04/2016
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

SWRCY: Recycling Directory
A listing of recycling facilities.

Date of Government Version: 04/08/2016
Date Data Arrived at EDR: 04/12/2016
Date Made Active in Reports: 05/23/2016
Number of Days to Update: 41

Source: Department of the Environment
Telephone: 410-631-3314
Last EDR Contact: 03/21/2016
Next Scheduled EDR Contact: 07/04/2016
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 04/27/2016
Next Scheduled EDR Contact: 08/15/2016
Data Release Frequency: Varies

ODI: Open Dump Inventory
An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations
A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 04/21/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: No Update Planned

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 02/18/2016
Date Data Arrived at EDR: 03/07/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 88

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 03/01/2016
Next Scheduled EDR Contact: 06/13/2016
Data Release Frequency: No Update Planned

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 02/18/2016
Date Data Arrived at EDR: 03/07/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 88

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/31/2016
Next Scheduled EDR Contact: 09/12/2016
Data Release Frequency: Quarterly

Local Lists of Registered Storage Tanks

Historical UST: Historical UST Registered Database

In 1997 the Department of the Environment sent out registration forms to all the owner's listed in the UST database. Once they got the registration forms back they entered the information into a new UST database. we call this database UST. Because not all owners returned their forms, we kept the old UST database and labeled it HIST UST so that we would not be missing any past UST records. This listing is no longer updated or maintained by the agency. It is current through November 1996.

Date of Government Version: 11/21/1996
Date Data Arrived at EDR: 09/10/1997
Date Made Active in Reports: 10/22/1997
Number of Days to Update: 42

Source: Department of Environment
Telephone: 410-537-3433
Last EDR Contact: 05/15/2000
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Local Land Records

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/18/2014
Date Data Arrived at EDR: 03/18/2014
Date Made Active in Reports: 04/24/2014
Number of Days to Update: 37

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 04/26/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Varies

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System
Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 06/24/2015
Date Data Arrived at EDR: 06/26/2015
Date Made Active in Reports: 09/02/2015
Number of Days to Update: 68

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 03/30/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Annually

SPILLS 90: SPILLS90 data from FirstSearch
Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 07/15/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 03/06/2013
Number of Days to Update: 62

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 12/09/2015
Date Data Arrived at EDR: 03/02/2016
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 34

Source: Environmental Protection Agency
Telephone: 800-438-2474
Last EDR Contact: 03/30/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Varies

FUDS: Formerly Used Defense Sites
The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/31/2015
Date Data Arrived at EDR: 07/08/2015
Date Made Active in Reports: 10/13/2015
Number of Days to Update: 97

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 03/11/2016
Next Scheduled EDR Contact: 06/20/2016
Data Release Frequency: Varies

DOD: Department of Defense Sites
This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 04/15/2016
Next Scheduled EDR Contact: 07/25/2016
Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands
Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 04/15/2016
Next Scheduled EDR Contact: 07/25/2016
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 03/07/2011
Date Data Arrived at EDR: 03/09/2011
Date Made Active in Reports: 05/02/2011
Number of Days to Update: 54

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 05/20/2016
Next Scheduled EDR Contact: 08/29/2016
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 09/01/2015
Date Data Arrived at EDR: 09/03/2015
Date Made Active in Reports: 11/03/2015
Number of Days to Update: 61

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 05/18/2016
Next Scheduled EDR Contact: 08/29/2016
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 05/09/2016
Next Scheduled EDR Contact: 08/22/2016
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 04/22/2013
Date Data Arrived at EDR: 03/03/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 05/12/2016
Next Scheduled EDR Contact: 08/22/2016
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 01/15/2015
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 14

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 03/24/2016
Next Scheduled EDR Contact: 07/04/2016
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 11/24/2015
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 133

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 05/24/2016
Next Scheduled EDR Contact: 09/05/2016
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 04/25/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 11/25/2013
Date Data Arrived at EDR: 12/12/2013
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 74

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 06/07/2016
Next Scheduled EDR Contact: 09/19/2016
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 08/01/2015
Date Data Arrived at EDR: 08/26/2015
Date Made Active in Reports: 11/03/2015
Number of Days to Update: 69

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 04/25/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties
A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 10/17/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 3

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 05/12/2016
Next Scheduled EDR Contact: 08/22/2016
Data Release Frequency: Quarterly

PADS: PCB Activity Database System
PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 07/01/2014
Date Data Arrived at EDR: 10/15/2014
Date Made Active in Reports: 11/17/2014
Number of Days to Update: 33

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 04/12/2016
Next Scheduled EDR Contact: 07/25/2016
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System
The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 01/23/2015
Date Data Arrived at EDR: 02/06/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 31

Source: Environmental Protection Agency
Telephone: 202-564-5088
Last EDR Contact: 04/08/2016
Next Scheduled EDR Contact: 07/25/2016
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 05/20/2016
Next Scheduled EDR Contact: 09/05/2016
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 05/20/2016
Next Scheduled EDR Contact: 09/05/2016
Data Release Frequency: Quarterly

MLTS: Material Licensing Tracking System
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 03/07/2016
Date Data Arrived at EDR: 03/18/2016
Date Made Active in Reports: 04/15/2016
Number of Days to Update: 28

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 05/06/2016
Next Scheduled EDR Contact: 08/22/2016
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 04/15/2016
Next Scheduled EDR Contact: 07/25/2016
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014
Date Data Arrived at EDR: 09/10/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 03/11/2016
Next Scheduled EDR Contact: 06/20/2016
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011
Date Data Arrived at EDR: 10/19/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 83

Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 04/26/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/07/2015
Date Data Arrived at EDR: 07/09/2015
Date Made Active in Reports: 09/16/2015
Number of Days to Update: 69

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 04/08/2016
Next Scheduled EDR Contact: 07/18/2016
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 42

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 05/04/2016
Next Scheduled EDR Contact: 08/15/2016
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 04/17/2015
Date Made Active in Reports: 06/02/2015
Number of Days to Update: 46

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 03/24/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 02/24/2015
Date Made Active in Reports: 09/30/2015
Number of Days to Update: 218

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 05/27/2016
Next Scheduled EDR Contact: 09/05/2016
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 12/08/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 34

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 04/15/2016
Next Scheduled EDR Contact: 07/25/2016
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 03/11/2016
Date Data Arrived at EDR: 03/15/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 80

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 05/09/2016
Next Scheduled EDR Contact: 08/22/2016
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010
Date Data Arrived at EDR: 10/07/2011
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 146

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 05/23/2016
Next Scheduled EDR Contact: 09/05/2016
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites
A listing of former lead smelter site locations.

Date of Government Version: 11/25/2014
Date Data Arrived at EDR: 11/26/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 64

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 04/07/2016
Next Scheduled EDR Contact: 07/18/2016
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites
A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)
The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/20/2015
Date Data Arrived at EDR: 10/27/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 69

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 03/24/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data
A listing of minor source facilities.

Date of Government Version: 10/20/2015
Date Data Arrived at EDR: 10/27/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 69

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 03/24/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Annually

US MINES: Mines Master Index File
Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 02/09/2016
Date Data Arrived at EDR: 03/02/2016
Date Made Active in Reports: 04/15/2016
Number of Days to Update: 44

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 06/02/2016
Next Scheduled EDR Contact: 09/12/2016
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing
This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005
Date Data Arrived at EDR: 02/29/2008
Date Made Active in Reports: 04/18/2008
Number of Days to Update: 49

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 06/03/2016
Next Scheduled EDR Contact: 09/12/2016
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 06/03/2016
Next Scheduled EDR Contact: 09/12/2016
Data Release Frequency: Varies

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 07/20/2015
Date Data Arrived at EDR: 09/09/2015
Date Made Active in Reports: 11/03/2015
Number of Days to Update: 55

Source: EPA
Telephone: (215) 814-5000
Last EDR Contact: 06/08/2016
Next Scheduled EDR Contact: 09/19/2016
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 10/25/2015
Date Data Arrived at EDR: 01/29/2016
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 67

Source: Department of Defense
Telephone: 571-373-0407
Last EDR Contact: 04/18/2016
Next Scheduled EDR Contact: 07/04/2016
Data Release Frequency: Varies

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 03/01/2016
Date Data Arrived at EDR: 03/03/2016
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 33

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 05/25/2016
Next Scheduled EDR Contact: 09/12/2016
Data Release Frequency: Varies

AIRS: Permit and Facility Information Listing

A listing of permitted facilities and emissions information.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 10/15/2015
Date Made Active in Reports: 12/10/2015
Number of Days to Update: 56

Source: Department of the Environment
Telephone: 410-537-3220
Last EDR Contact: 04/11/2016
Next Scheduled EDR Contact: 07/25/2016
Data Release Frequency: Varies

COAL ASH: Coal Ash Disposal Site Listing

Coal combustion byproduct site locations.

Date of Government Version: 08/13/2010
Date Data Arrived at EDR: 01/05/2011
Date Made Active in Reports: 01/31/2011
Number of Days to Update: 26

Source: Department of the Environment
Telephone: 410-537-3507
Last EDR Contact: 03/24/2016
Next Scheduled EDR Contact: 07/04/2016
Data Release Frequency: Varies

DRYCLEANERS: Registered Drycleaning Facilities
A listing of registered drycleaning facilities.

Date of Government Version: 03/25/2016
Date Data Arrived at EDR: 04/14/2016
Date Made Active in Reports: 05/19/2016
Number of Days to Update: 35

Source: Department of the Environmental
Telephone: 410-537-3220
Last EDR Contact: 04/11/2016
Next Scheduled EDR Contact: 07/25/2016
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing
Financial Assurance information.

Date of Government Version: 05/01/2013
Date Data Arrived at EDR: 05/22/2013
Date Made Active in Reports: 06/27/2013
Number of Days to Update: 36

Source: Department of the Environment
Telephone: 410-537-3345
Last EDR Contact: 05/16/2016
Next Scheduled EDR Contact: 08/15/2016
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing
A listing of financial assurance information for storage tank sites.

Date of Government Version: 03/07/2016
Date Data Arrived at EDR: 03/09/2016
Date Made Active in Reports: 05/09/2016
Number of Days to Update: 61

Source: Department of the Environment
Telephone: 410-537-3461
Last EDR Contact: 04/11/2016
Next Scheduled EDR Contact: 07/25/2016
Data Release Frequency: Quarterly

LEAD: Lead Inspection Database
The Childhood Lead Poisoning Prevention Program data of lead inspection for the state.

Date of Government Version: 04/13/2016
Date Data Arrived at EDR: 04/15/2016
Date Made Active in Reports: 05/19/2016
Number of Days to Update: 34

Source: Department of Environment, Lead Poisoning Prevention Program
Telephone: 410-537-3000
Last EDR Contact: 04/11/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Varies

LRP: Land Restoration Program
A listing of Land Restoration Program sites. Site types included in the database are: Voluntary Cleanup Program, National Priority List, Brownfields, Site Assessment, Formerly Used Defense Site, State Master List, Non Master List, Groundwater Investigation and Federal Facility.

Date of Government Version: 02/16/2016
Date Data Arrived at EDR: 03/08/2016
Date Made Active in Reports: 05/09/2016
Number of Days to Update: 62

Source: Department of the Environment
Telephone: 410-537-3000
Last EDR Contact: 06/08/2016
Next Scheduled EDR Contact: 09/19/2016
Data Release Frequency: Quarterly

NPDES: Wastewater Permit Listing
A listing of wastewater permit locations.

Date of Government Version: 01/15/2016
Date Data Arrived at EDR: 02/25/2016
Date Made Active in Reports: 05/09/2016
Number of Days to Update: 74

Source: Department of the Environment
Telephone: 410-537-3507
Last EDR Contact: 05/24/2016
Next Scheduled EDR Contact: 09/05/2016
Data Release Frequency: Varies

UIC: Underground Injection Wells Database
A listing of underground injection well locations. The UIC Program is responsible for regulating the construction, operation, permitting, and closure of injection wells that place fluids underground for storage or disposal.

Date of Government Version: 05/04/2015
Date Data Arrived at EDR: 05/29/2015
Date Made Active in Reports: 07/07/2015
Number of Days to Update: 39

Source: Department of the Environment
Telephone: 410-537-3507
Last EDR Contact: 04/25/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing
This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 02/22/2016
Date Data Arrived at EDR: 02/24/2016
Date Made Active in Reports: 05/20/2016
Number of Days to Update: 86

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 05/25/2016
Next Scheduled EDR Contact: 09/05/2016
Data Release Frequency: Quarterly

ECHO: Enforcement & Compliance History Information
ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 09/20/2015
Date Data Arrived at EDR: 09/23/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 103

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 03/23/2016
Next Scheduled EDR Contact: 07/04/2016
Data Release Frequency: Quarterly

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants
The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historic Gas Stations
EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA HWS: Recovered Government Archive State Hazardous Waste Facilities List

The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of the Environment in Maryland.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/03/2014
Number of Days to Update: 186

Source: Department of the Environment
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of the Environment in Maryland.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/16/2014
Number of Days to Update: 199

Source: Department of the Environment
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of the Environment in Maryland from 1995-1999..

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/03/2014
Number of Days to Update: 186

Source: Department of the Environment
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 07/30/2013
Date Data Arrived at EDR: 08/19/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 45

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 05/13/2016
Next Scheduled EDR Contact: 08/29/2016
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 07/17/2015
Date Made Active in Reports: 08/12/2015
Number of Days to Update: 26

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 04/12/2016
Next Scheduled EDR Contact: 07/25/2016
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 02/01/2016
Date Data Arrived at EDR: 02/03/2016
Date Made Active in Reports: 03/22/2016
Number of Days to Update: 48

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 05/06/2016
Next Scheduled EDR Contact: 08/15/2016
Data Release Frequency: Annually

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/24/2015
Date Made Active in Reports: 08/18/2015
Number of Days to Update: 25

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 04/18/2016
Next Scheduled EDR Contact: 08/01/2016
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 06/19/2015
Date Made Active in Reports: 07/15/2015
Number of Days to Update: 26

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 06/06/2016
Next Scheduled EDR Contact: 09/05/2016
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 04/14/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 50

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 03/14/2016
Next Scheduled EDR Contact: 06/27/2016
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: PennWell Corporation
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Electric Power Transmission Line Data
Source: PennWell Corporation
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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Child Care Providers
Source: Department of Human Resources
Telephone: 410-767-7805

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

BLACK AND DECKER
28712 GLEBE ROAD
EASTON, MD 21601

TARGET PROPERTY COORDINATES

Latitude (North):	38.7908 - 38˚ 47’ 26.88’’
Longitude (West):	76.077 - 76˚ 4’ 37.20’’
Universal Tranverse Mercator:	Zone 18
UTM X (Meters):	406463.1
UTM Y (Meters):	4293905.0
Elevation:	23 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	6051138 EASTON, MD
Version Date:	2014

EDR’s GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

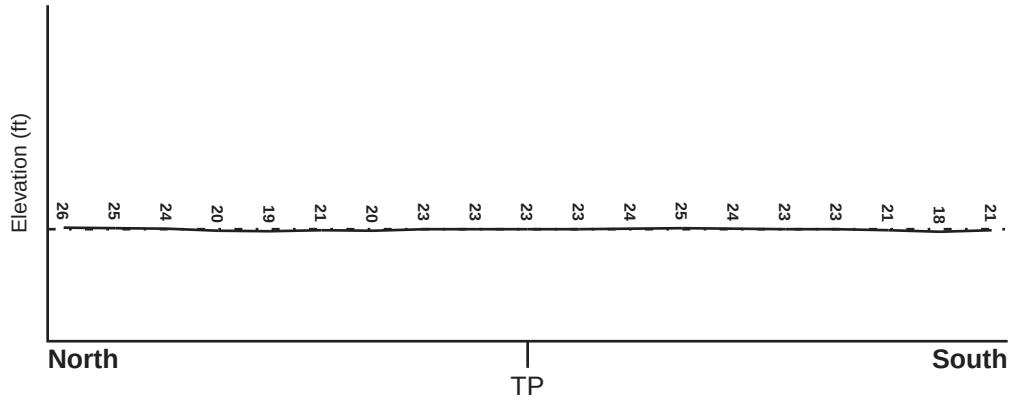
TOPOGRAPHIC INFORMATION

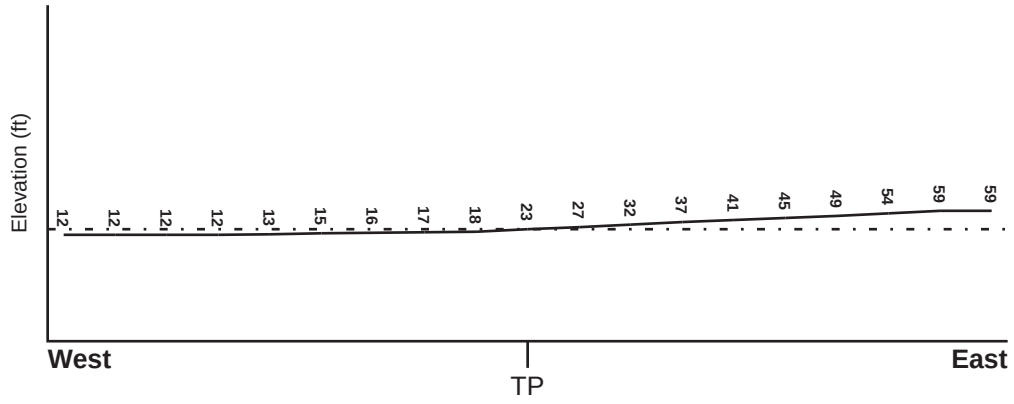
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General West

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Target Property Elevation: 23 ft.

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
TALBOT, MD	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property:	2400670001B - FEMA Q3 Flood data
Additional Panels in search area:	2400660024A - FEMA Q3 Flood data 2400660025A - FEMA Q3 Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
EASTON	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

Era:	Cenozoic
System:	Tertiary
Series:	Miocene
Code:	Tm *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratified Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name:	OTHELLO
Soil Surface Texture:	silt loam
Hydrologic Group:	Class C/D - Drained/undrained hydrology class of soils that can be drained and classified.
Soil Drainage Class:	Poorly. Soils may have a saturated zone, a layer of low hydraulic conductivity, or seepage. Depth to water table is less than 1 foot.

Hydric Status: Soil meets the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel:	HIGH
Depth to Bedrock Min:	> 60 inches
Depth to Bedrock Max:	> 60 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	Permeability Rate (in/hr)	Soil Reaction (pH)
1	0 inches	9 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 2.00 Min: 0.60	Max: 5.50 Min: 4.50
2	9 inches	29 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 0.60 Min: 0.20	Max: 5.50 Min: 3.60
3	29 inches	50 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 2.00 Min: 0.20	Max: 5.50 Min: 3.60
4	50 inches	72 inches	sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 6.00 Min: 2.00	Max: 5.50 Min: 3.60

OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures: mucky - loam
sandy loam
mucky-peat

Surficial Soil Types: mucky - loam
sandy loam
mucky-peat

Shallow Soil Types: loam

Deeper Soil Types: very fine sandy loam
stratified
silt loam
sandy loam

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 0.001 miles
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A1	USGS40000431689	1/8 - 1/4 Mile South
A3	USGS40000431686	1/8 - 1/4 Mile SSW
B4	USGS40000431690	1/8 - 1/4 Mile SW
B6	USGS40000431691	1/8 - 1/4 Mile SW
L55	USGS40000431678	1/4 - 1/2 Mile SW
N79	USGS40000431673	1/2 - 1 Mile SW
P86	USGS40000431719	1/2 - 1 Mile ENE
P87	USGS40000431720	1/2 - 1 Mile ENE
R119	USGS40000431629	1/2 - 1 Mile South
R120	USGS40000431628	1/2 - 1 Mile South
R121	USGS40000431627	1/2 - 1 Mile South
V123	USGS40000431622	1/2 - 1 Mile South
V124	USGS40000431623	1/2 - 1 Mile South
125	USGS40000431620	1/2 - 1 Mile South
130	USGS40000431750	1/2 - 1 Mile NW
X131	USGS40000431609	1/2 - 1 Mile South
X132	USGS40000431608	1/2 - 1 Mile South
X133	USGS40000431610	1/2 - 1 Mile South
X134	USGS40000431612	1/2 - 1 Mile South
X135	USGS40000431611	1/2 - 1 Mile South

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
2	MD7000000514684	1/8 - 1/4 Mile West

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
B5	MD7000000333572	1/8 - 1/4 Mile SW
C7	MD7000000478395	1/4 - 1/2 Mile SW
C8	MD7000000478396	1/4 - 1/2 Mile SW
C9	MD7000000295761	1/4 - 1/2 Mile SW
C10	MD7000000295952	1/4 - 1/2 Mile SW
C11	MD7000000478400	1/4 - 1/2 Mile SW
C12	MD7000000478401	1/4 - 1/2 Mile SW
C13	MD7000000478397	1/4 - 1/2 Mile SW
C14	MD7000000478399	1/4 - 1/2 Mile SW
D15	MD7000000449239	1/4 - 1/2 Mile NW
D16	MD7000000492575	1/4 - 1/2 Mile NW
D17	MD7000000522317	1/4 - 1/2 Mile NW
18	MD7000000449200	1/4 - 1/2 Mile NE
19	MD7000000335197	1/4 - 1/2 Mile South
E20	MD7000000514687	1/4 - 1/2 Mile West
E21	MD7000000522730	1/4 - 1/2 Mile West
F22	MD7000000292534	1/4 - 1/2 Mile East
F23	MD7000000292590	1/4 - 1/2 Mile East
F24	MD7000000292620	1/4 - 1/2 Mile East
F25	MD7000000292428	1/4 - 1/2 Mile East
F26	MD7000000291985	1/4 - 1/2 Mile East
F27	MD7000000292377	1/4 - 1/2 Mile East
F28	MD7000000292390	1/4 - 1/2 Mile East
F29	MD7000000293558	1/4 - 1/2 Mile East
F30	MD7000000293662	1/4 - 1/2 Mile East
F31	MD7000000293978	1/4 - 1/2 Mile East
F32	MD7000000293456	1/4 - 1/2 Mile East
F33	MD7000000292626	1/4 - 1/2 Mile East
F34	MD7000000292699	1/4 - 1/2 Mile East
F35	MD7000000292966	1/4 - 1/2 Mile East
G36	MD7000000448910	1/4 - 1/2 Mile North
G37	MD7000000466186	1/4 - 1/2 Mile North
G38	MD7000000521109	1/4 - 1/2 Mile North
H39	MD7000000361073	1/4 - 1/2 Mile SSW
H40	MD7000000529331	1/4 - 1/2 Mile SSW
41	MD7000000294998	1/4 - 1/2 Mile WSW
I42	MD7000000196436	1/4 - 1/2 Mile SSE
I43	MD7000000196460	1/4 - 1/2 Mile SSE
I44	MD7000000196032	1/4 - 1/2 Mile SSE
I45	MD7000000196427	1/4 - 1/2 Mile SSE
I46	MD7000000295648	1/4 - 1/2 Mile SSE
I47	MD7000000295649	1/4 - 1/2 Mile SSE
I48	MD7000000295646	1/4 - 1/2 Mile SSE
I49	MD7000000295647	1/4 - 1/2 Mile SSE
J50	MD7000000511525	1/4 - 1/2 Mile WNW
J51	MD7000000520636	1/4 - 1/2 Mile WNW
52	MD7000000542743	1/4 - 1/2 Mile ENE
K53	MD7000000544935	1/4 - 1/2 Mile NE
K54	MD7000000544934	1/4 - 1/2 Mile NE
56	MD7000000542051	1/2 - 1 Mile ESE
K57	MD7000000544933	1/2 - 1 Mile NE
K58	MD7000000544930	1/2 - 1 Mile NE

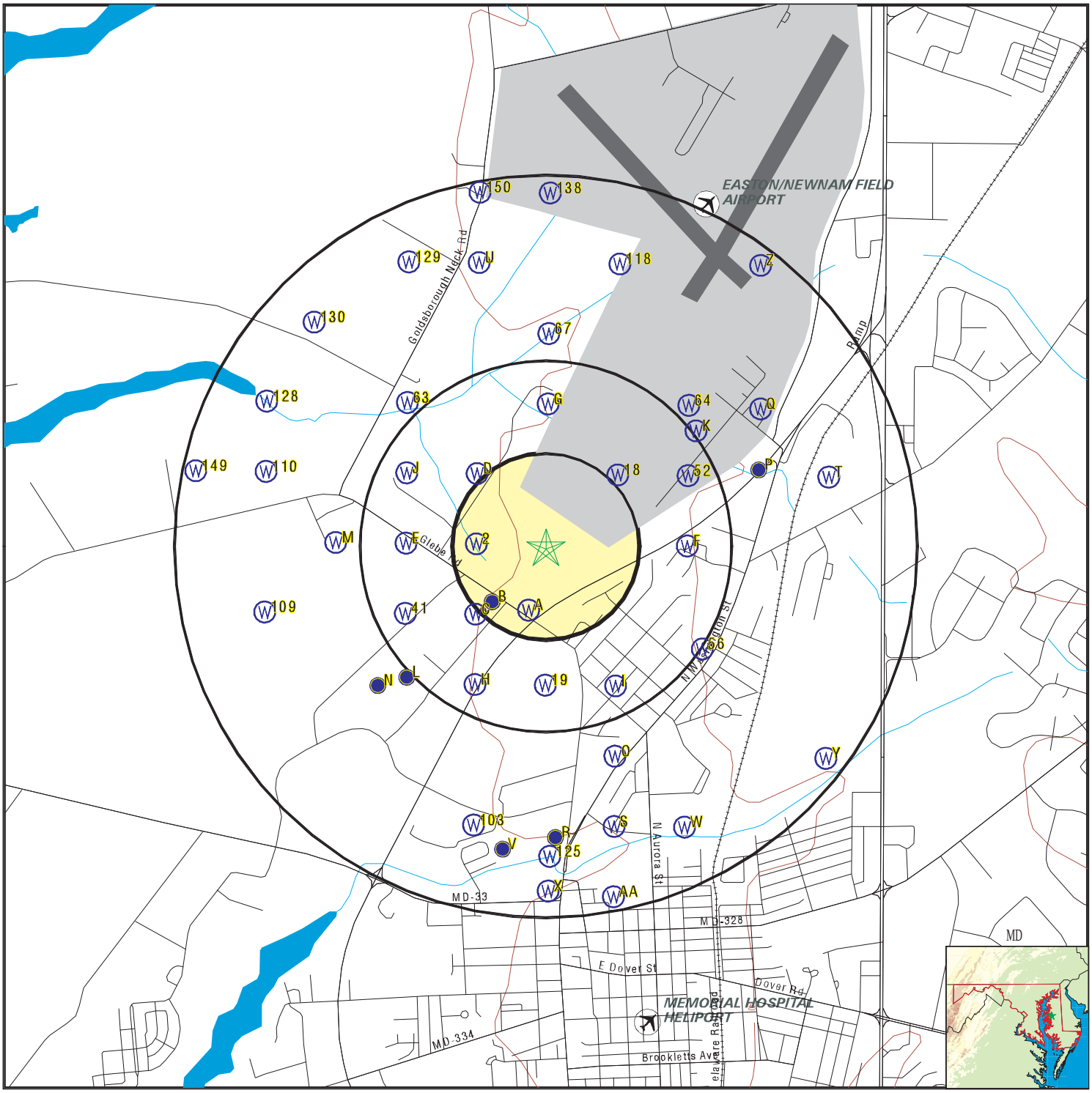
STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
K59	MD7000000544932	1/2 - 1 Mile NE
K60	MD7000000544931	1/2 - 1 Mile NE
L61	MD7000000333484	1/2 - 1 Mile SW
K62	MD7000000544936	1/2 - 1 Mile NE
63	MD7000000359970	1/2 - 1 Mile NW
64	MD7000000295266	1/2 - 1 Mile NE
M65	MD7000000293826	1/2 - 1 Mile West
M66	MD7000000527878	1/2 - 1 Mile West
67	MD7000000448851	1/2 - 1 Mile North
N68	MD7000000407345	1/2 - 1 Mile SW
O69	MD7000000294993	1/2 - 1 Mile SSE
O70	MD7000000295012	1/2 - 1 Mile SSE
O71	MD7000000294992	1/2 - 1 Mile SSE
O72	MD7000000294990	1/2 - 1 Mile SSE
O73	MD7000000294991	1/2 - 1 Mile SSE
O74	MD7000000295022	1/2 - 1 Mile SSE
O75	MD7000000295023	1/2 - 1 Mile SSE
O76	MD7000000295021	1/2 - 1 Mile SSE
O77	MD7000000295013	1/2 - 1 Mile SSE
O78	MD7000000295020	1/2 - 1 Mile SSE
P80	MD7000000415653	1/2 - 1 Mile ENE
P81	MD7000000413604	1/2 - 1 Mile ENE
P82	MD7000000413603	1/2 - 1 Mile ENE
P83	MD7000000449057	1/2 - 1 Mile ENE
P84	MD7000000449056	1/2 - 1 Mile ENE
P85	MD7000000449055	1/2 - 1 Mile ENE
Q88	MD7000000291357	1/2 - 1 Mile ENE
Q89	MD7000000414648	1/2 - 1 Mile ENE
Q90	MD7000000414649	1/2 - 1 Mile ENE
Q91	MD7000000414650	1/2 - 1 Mile ENE
Q92	MD7000000375633	1/2 - 1 Mile ENE
Q93	MD7000000375634	1/2 - 1 Mile ENE
Q94	MD7000000375635	1/2 - 1 Mile ENE
Q95	MD7000000448226	1/2 - 1 Mile ENE
Q96	MD7000000448227	1/2 - 1 Mile ENE
Q97	MD7000000448228	1/2 - 1 Mile ENE
Q98	MD7000000447824	1/2 - 1 Mile ENE
Q99	MD7000000448224	1/2 - 1 Mile ENE
Q100	MD7000000448225	1/2 - 1 Mile ENE
Q101	MD7000000332829	1/2 - 1 Mile ENE
R102	MD7000000295416	1/2 - 1 Mile South
103	MD7000000448876	1/2 - 1 Mile SSW
S104	MD7000000359927	1/2 - 1 Mile SSE
S105	MD7000000295014	1/2 - 1 Mile SSE
S106	MD7000000359928	1/2 - 1 Mile SSE
S107	MD7000000489844	1/2 - 1 Mile SSE
S108	MD7000000360954	1/2 - 1 Mile SSE
109	MD7000000294494	1/2 - 1 Mile WSW
110	MD7000000361013	1/2 - 1 Mile WNW
T111	MD7000000449019	1/2 - 1 Mile ENE
T112	MD7000000413601	1/2 - 1 Mile ENE
T113	MD7000000449020	1/2 - 1 Mile ENE

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
T114	MD7000000449034	1/2 - 1 Mile ENE
T115	MD7000000449021	1/2 - 1 Mile ENE
U116	MD7000000213690	1/2 - 1 Mile NNW
U117	MD7000000414825	1/2 - 1 Mile NNW
118	MD7000000335004	1/2 - 1 Mile NNE
V122	MD7000000290781	1/2 - 1 Mile South
W126	MD7000000335265	1/2 - 1 Mile SSE
W127	MD7000000413602	1/2 - 1 Mile SSE
128	MD7000000522731	1/2 - 1 Mile WNW
129	MD7000000295091	1/2 - 1 Mile NNW
Y136	MD7000000295024	1/2 - 1 Mile SE
Y137	MD7000000295025	1/2 - 1 Mile SE
138	MD7000000360789	1/2 - 1 Mile North
Z139	MD7000000415658	1/2 - 1 Mile NE
Z140	MD7000000415657	1/2 - 1 Mile NE
Z141	MD7000000415656	1/2 - 1 Mile NE
Z142	MD7000000415659	1/2 - 1 Mile NE
Z143	MD7000000470318	1/2 - 1 Mile NE
Z144	MD7000000415661	1/2 - 1 Mile NE
Z145	MD7000000415660	1/2 - 1 Mile NE
AA146	MD7000000334960	1/2 - 1 Mile South
AA147	MD7000000334961	1/2 - 1 Mile South
AA148	MD7000000334962	1/2 - 1 Mile South
149	MD7000000449138	1/2 - 1 Mile WNW
150	MD7000000295236	1/2 - 1 Mile North

PHYSICAL SETTING SOURCE MAP - 4643228.2s



County Boundary
Major Roads
Contour Lines
Airports
Earthquake epicenter, Richter 5 or greater
Water Wells
Public Water Supply Wells
Cluster of Multiple Icons

Groundwater Flow Direction
GI Indeterminate Groundwater Flow at Location
GV Groundwater Flow Varies at Location

SITE NAME: Black and Decker ADDRESS: 28712 Glebe Road Easton MD 21601 LAT/LONG: 38.7908 / 76.077	CLIENT: AECOM CONTACT: Peter Pecora INQUIRY #: 4643228.2s DATE: June 10, 2016 9:41 am

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Map ID Direction Distance Elevation	Database	EDR ID Number
A1 **South** **1/8 - 1/4 Mile** **Higher**	**FED USGS**	**USGS40000431689**

Org. Identifier:	USGS-MD		
Formal name:	USGS Maryland Water Science Center		
Monloc Identifier:	USGS-384718076044001		
Monloc name:	TA Ce 29		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	02060005	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	38.788449
Longitude:	-76.0774418	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	Northern Atlantic Coastal Plain aquifer system		
Formation type:	Upper Cretaceous Series		
Aquifer type:	Not Reported		
Construction date:	1942	Welldepth:	19
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1950-08-01	8.00	

---

2 **West** **1/8 - 1/4 Mile** **Lower**	**MD WELLS**	**MD7000000514684**

Object id:	514684	County let:	TA
Permit:	TA950838	Mgs id:	Not Reported
B1 seq:	0183	B1 recd:	200610 5
City:	SEAFORD	State:	DE
Zip:	19973	Driller na:	JOHN T. SHANNAHAN
Driller id:	MSD 146		
Est gpm pr:	20		
Use for wa:	I		
Approx dep:	580		
Drill meth:	ROTARY	Replacemen:	N
Wapid:	TA2006G008	Subdivisio:	TALBOT COMMERCE PK
Section:	Not Reported	Lot:	1
Nearest to:	EASTON	Town dista:	.1
Town direc:	NW	Road name:	8801 MISTLETOE DR
Road side:	E	Road dista:	Not Reported
Tax map:	25	Block:	16
Parcel:	46		
N grid83:	125197		
E grid83:	479885		
Lat dec de:	38.7909		

Lon dec de:	-76.080464		
Issue date:	20061117	Special fl:	Not Reported
C1 seq:	3320	C1 recd:	2006 126
Completion:	20061123		
Total dept:	596		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	BC		
Grout top:	4		
Grout bott:	160		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	240		
Casing hei:	+1	Screen typ:	PL
Top screen:	576		
Bottom scr:	596		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	2		
Flowing we:	Not Reported	Telescopin:	T
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	17		
Level befo:	73		
Level duri:	96		
Test pump :	A	Pump insta:	Y
Install pu:	S		
Capacity:	14		
Pump hp:	1		
Column len:	140		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000514684

A3
SSW **FED USGS** **USGS40000431686**
1/8 - 1/4 Mile
Higher

Org. Identifier:	USGS-MD		
Formal name:	USGS Maryland Water Science Center		
Monloc Identifier:	USGS-384717076044301		
Monloc name:	TA Ce 70		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	02060005	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	38.7881712
Longitude:	-76.0782752	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	25
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Northern Atlantic Coastal Plain aquifer system		
Formation type:	Upper Patapsco Aquifer In the Patapsco Formation		

Aquifer type:	Not Reported		
Construction date:	19880817	Welldepth:	1184
Welldepth units:	ft	Wellholedepth:	1225
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 3

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1997-11-04	46.68		1997-02-06	169.31	
1988-08-17	26				

B4
SW
1/8 - 1/4 Mile
Lower

FED USGS **USGS40000431690**

Org. Identifier:	USGS-MD		
Formal name:	USGS Maryland Water Science Center		
Monloc Identifier:	USGS-384718076044601		
Monloc name:	TA Ce 68		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	02060005	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	38.788449
Longitude:	-76.0791085	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	22
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Northern Atlantic Coastal Plain aquifer system		
Formation type:	Magothy Formation		
Aquifer type:	Not Reported		
Construction date:	19871006	Welldepth:	1210
Welldepth units:	ft	Wellholedepth:	1535
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 3

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1997-11-04	47.95		1997-02-06	93.36	
1987-10-13	21				

B5
SW
1/8 - 1/4 Mile
Lower

MD WELLS **MD7000000333572**

Object id:	333572	County let:	TA
Permit:	TA811967	Mgs id:	Not Reported
B1 seq:	6489	B1 recd:	1988 528
City:	EASTON	State:	MD
Zip:	21601	Driller na:	WM. JEFFERYS
Driller id:	MWD0407		
Est gpm pr:	1500		
Use for wa:	DW		
Approx dep:	1200		
Drill meth:	REV-ROT	Replacemen:	N

Wapid:	TA1971G205	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	1
Nearest to:	EASTON	Town dista:	0
Town direc:	N	Road name:	GLEBE RD.
Road side:	N	Road dista:	46 FT
Tax map:	25	Block:	22
Parcel:	233		
N grid83:	124989		
E grid83:	479905		
Lat dec de:	38.789027		
Lon dec de:	-76.080255		
Issue date:	1988 527	Special fl:	N
C1 seq:	7502	C1 recd:	1988 915
Completion:	1988 817		
Total dept:	1184		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	1135		
Casing typ:	ST		
Casing dia:	16		
Casing dep:	1143		
Casing hei:	1	Screen typ:	ST
Top screen:	1143		
Bottom scr:	1184		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	10		
Flowing we:	Not Reported	Telescopin:	T
Log type:	Not Reported		
Hrs pumped:	24		
Pumping ra:	1015		
Level befo:	26		
Level duri:	144		
Test pump :	T	Pump insta:	N
Install pu:	Not Reported		
Capacity:	750		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000333572

B6
SW
1/8 - 1/4 Mile
Lower

FED USGS **USGS40000431691**

Org. Identifier:	USGS-MD		
Formal name:	USGS Maryland Water Science Center		
Monloc Identifier:	USGS-384718076044801		
Monloc name:	TA Ce 69		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	02060005	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	38.788449
Longitude:	-76.0796641	Sourcemap scale:	24000

Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	20
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Northern Atlantic Coastal Plain aquifer system		
Formation type:	Aquia Formation		
Aquifer type:	Confined single aquifer		
Construction date:	19870706	Welldepth:	1104
Welldepth units:	ft	Wellholedepth:	1104
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1997-02-06	24.82	

C7
SW
1/4 - 1/2 Mile
Lower

MD WELLS **MD7000000478395**

Object id:	478395	County let:	Not Reported
Permit:	TA942218	Mgs id:	Not Reported
B1 seq:	5054	B1 recd:	2003 423
City:	EASTON	State:	MD
Zip:	21601	Driller na:	KEVIN P WEIGLE
Driller id:	MWD 522		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	20		
Drill meth:	Not Reported	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	MW-1
Nearest to:	EASTON	Town dista:	.5
Town direc:	N	Road name:	GLEBE ROAD
Road side:	N	Road dista:	50 FT
Tax map:	25	Block:	2
Parcel:	58		
N grid83:	124892		
E grid83:	479885		
Lat dec de:	38.788155		
Lon dec de:	-76.080499		
Issue date:	2003 422	Special fl:	Not Reported
C1 seq:	3454	C1 recd:	2004 728
Completion:	2003 424		
Total dept:	20		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	BC		
Grout top:	1		
Grout bott:	13		

Casing typ:	PL		
Casing dia:	1		
Casing dep:	15		
Casing hei:	Not Reported	Screen typ:	PL
Top screen:	15		
Bottom scr:	20		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	1		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	N
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000478395

C8
SW
1/4 - 1/2 Mile
Lower

MD WELLS **MD7000000478396**

Object id:	478396	County let:	Not Reported
Permit:	TA942219	Mgs id:	Not Reported
B1 seq:	5056	B1 recd:	2003 423
City:	EASTON	State:	MD
Zip:	21601	Driller na:	KEVIN P WEIGLE
Driller id:	MWD 522		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	20		
Drill meth:	Not Reported	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	MW-2
Nearest to:	EASTON	Town dista:	.5
Town direc:	N	Road name:	GLEBE
Road side:	N	Road dista:	50 FT
Tax map:	25	Block:	2
Parcel:	58		
N grid83:	124892		
E grid83:	479885		
Lat dec de:	38.788155		
Lon dec de:	-76.080499		
Issue date:	2003 422	Special fl:	Not Reported
C1 seq:	3455	C1 recd:	2004 728
Completion:	2003 424		
Total dept:	20		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	BC		
Grout top:	1		
Grout bott:	13		

Casing typ:	PL		
Casing dia:	1		
Casing dep:	15		
Casing hei:	Not Reported	Screen typ:	PL
Top screen:	15		
Bottom scr:	20		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	1		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	N
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000478396

C9
SW
1/4 - 1/2 Mile
Lower

MD WELLS **MD7000000295761**

Object id:	295761	County let:	TA
Permit:	TA811514	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	1987 413
City:	EASTON	State:	MD
Zip:	21601	Driller na:	SHANNAHAN, N. M.,III
Driller id:	MWD0024		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	1050		
Drill meth:	ROTARY	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	WALTER JOHNSON
Section:	Not Reported	Lot:	1
Nearest to:	EASTON	Town dista:	0 MI
Town direc:	Not Reported	Road name:	GLEBE RD
Road side:	W	Road dista:	100 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	124892		
E grid83:	479885		
Lat dec de:	38.788155		
Lon dec de:	-76.080499		
Issue date:	1987 518	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	19871015
Completion:	1987 7 6		
Total dept:	1104		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	100		

Casing typ:	ST		
Casing dia:	4		
Casing dep:	456		
Casing hei:	+01	Screen typ:	HO
Top screen:	456		
Bottom scr:	1104		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	1		
Level befo:	1		
Level duri:	1		
Test pump :	O	Pump insta:	Not Reported
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000295761

C10
SW
1/4 - 1/2 Mile
Lower

MD WELLS **MD7000000295952**

Object id:	295952	County let:	TA
Permit:	TA811709	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	1987 930
City:	EASTON	State:	MD
Zip:	21601	Driller na:	NELSON, DOUGLAS H.
Driller id:	MWD0376		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	1500		
Drill meth:	ROTARY	Replacemen:	N
Wapid:	TA1971G005	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	1
Nearest to:	EASTON	Town dista:	0 MI
Town direc:	NW	Road name:	GLEBE RD
Road side:	W	Road dista:	50 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	124892		
E grid83:	479885		
Lat dec de:	38.788155		
Lon dec de:	-76.080499		
Issue date:	198710 9	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	198711 3
Completion:	19871015		
Total dept:	1231		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	58		

Casing typ:	ST		
Casing dia:	4		
Casing dep:	210		
Casing hei:	+02	Screen typ:	ST
Top screen:	1140		
Bottom scr:	1180		
Screen t 1:	ST		
Top scre 1:	1200		
Bottom s 1:	1210		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	2		
Flowing we:	Not Reported	Telescopin:	T
Log type:	Not Reported		
Hrs pumped:	24		
Pumping ra:	80		
Level befo:	21		
Level duri:	79		
Test pump :	S	Pump insta:	Not Reported
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000295952

C11
SW
1/4 - 1/2 Mile
Lower

MD WELLS **MD7000000478400**

Object id:	478400	County let:	Not Reported
Permit:	TA942222	Mgs id:	Not Reported
B1 seq:	5067	B1 recd:	2003 423
City:	EASTON	State:	MD
Zip:	21601	Driller na:	KEVIN P WEIGLE
Driller id:	MWD 522		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	20		
Drill meth:	Not Reported	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	MW-5
Nearest to:	EASTON	Town dista:	.5
Town direc:	N	Road name:	GLEBE RD
Road side:	N	Road dista:	50 FT
Tax map:	25	Block:	2
Parcel:	58		
N grid83:	124892		
E grid83:	479885		
Lat dec de:	38.788155		
Lon dec de:	-76.080499		
Issue date:	2003 422	Special fl:	Not Reported
C1 seq:	3458	C1 recd:	2004 728
Completion:	2003 424		
Total dept:	20		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	BC		
Grout top:	1		
Grout bott:	13		

Casing typ:	PL		
Casing dia:	1		
Casing dep:	15		
Casing hei:	Not Reported	Screen typ:	PL
Top screen:	15		
Bottom scr:	20		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	1		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	N
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000478400

C12
SW
1/4 - 1/2 Mile
Lower

MD WELLS **MD7000000478401**

Object id:	478401	County let:	Not Reported
Permit:	TA942223	Mgs id:	Not Reported
B1 seq:	5053	B1 recd:	2003 423
City:	EASTON	State:	MD
Zip:	21601	Driller na:	KEVIN P WEIGLE
Driller id:	MWD 522		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	20		
Drill meth:	Not Reported	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	MW-7
Nearest to:	EASTON	Town dista:	.5
Town direc:	N	Road name:	GLEBE RD
Road side:	N	Road dista:	50 FT
Tax map:	25	Block:	2
Parcel:	58		
N grid83:	124892		
E grid83:	479885		
Lat dec de:	38.788155		
Lon dec de:	-76.080499		
Issue date:	2003 422	Special fl:	Not Reported
C1 seq:	3459	C1 recd:	2004 728
Completion:	2003 424		
Total dept:	20		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	BC		
Grout top:	1		
Grout bott:	13		

Casing typ:	PL		
Casing dia:	1		
Casing dep:	15		
Casing hei:	Not Reported	Screen typ:	PL
Top screen:	15		
Bottom scr:	20		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	1		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	N
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000478401

C13
SW
1/4 - 1/2 Mile
Lower

MD WELLS **MD7000000478397**

Object id:	478397	County let:	Not Reported
Permit:	TA942220	Mgs id:	Not Reported
B1 seq:	5055	B1 recd:	2003 423
City:	EASTON	State:	MD
Zip:	21601	Driller na:	KEVIN P WEIGLE
Driller id:	MWD 522		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	20		
Drill meth:	Not Reported	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	MW-3
Nearest to:	EASTON	Town dista:	.5
Town direc:	N	Road name:	GLEBE ROAD
Road side:	N	Road dista:	50 FT
Tax map:	25	Block:	2
Parcel:	58		
N grid83:	124892		
E grid83:	479885		
Lat dec de:	38.788155		
Lon dec de:	-76.080499		
Issue date:	2003 422	Special fl:	Not Reported
C1 seq:	3456	C1 recd:	2004 728
Completion:	2003 424		
Total dept:	20		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	BC		
Grout top:	1		
Grout bott:	13		

Casing typ:	PL		
Casing dia:	1		
Casing dep:	15		
Casing hei:	Not Reported	Screen typ:	PL
Top screen:	15		
Bottom scr:	20		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	1		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	N
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000478397

C14
SW
1/4 - 1/2 Mile
Lower

MD WELLS **MD7000000478399**

Object id:	478399	County let:	Not Reported
Permit:	TA942221	Mgs id:	Not Reported
B1 seq:	5066	B1 recd:	2003 423
City:	EASTON	State:	MD
Zip:	21601	Driller na:	KEVIN P WEIGLE
Driller id:	MWD 522		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	20		
Drill meth:	Not Reported	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	MW-4
Nearest to:	EASTON	Town dista:	.5
Town direc:	N	Road name:	GLEBE RD
Road side:	N	Road dista:	50 FT
Tax map:	25	Block:	2
Parcel:	58		
N grid83:	124892		
E grid83:	479885		
Lat dec de:	38.788155		
Lon dec de:	-76.080499		
Issue date:	2003 422	Special fl:	Not Reported
C1 seq:	3457	C1 recd:	2004 728
Completion:	2003 424		
Total dept:	20		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	BC		
Grout top:	1		
Grout bott:	13		

Casing typ:	PL		
Casing dia:	1		
Casing dep:	15		
Casing hei:	Not Reported	Screen typ:	PL
Top screen:	15		
Bottom scr:	20		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	1		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	N
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000478399

D15
NW
1/4 - 1/2 Mile
Lower

MD WELLS **MD7000000449239**

Object id:	449239	County let:	TA
Permit:	TA941472	Mgs id:	Not Reported
B1 seq:	0762	B1 recd:	20001129
City:	EASTON	State:	MD
Zip:	21601	Driller na:	N SHANNAHAN
Driller id:	MSD 145		
Est gpm pr:	15		
Use for wa:	I		
Approx dep:	600		
Drill meth:	ROTARY	Replacemen:	N
Wapid:	TA2000G017	Subdivisio:	TALBOT COMMERCE PARK
Section:	Not Reported	Lot:	5
Nearest to:	EASTON	Town dista:	.2
Town direc:	N	Road name:	MISTLETOE DRIVE
Road side:	S	Road dista:	60 FT
Tax map:	25	Block:	16
Parcel:	46		
N grid83:	125502		
E grid83:	479885		
Lat dec de:	38.793646		
Lon dec de:	-76.080428		
Issue date:	20001127	Special fl:	Not Reported
C1 seq:	4706	C1 recd:	2001 215
Completion:	2001 1 4		
Total dept:	621		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	BC		
Grout top:	4		
Grout bott:	160		

Casing typ:	PL		
Casing dia:	4		
Casing dep:	221		
Casing hei:	Not Reported	Screen typ:	PL
Top screen:	601		
Bottom scr:	621		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	2		
Flowing we:	Not Reported	Telescopin:	T
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	20		
Level befo:	70		
Level duri:	80		
Test pump :	A	Pump insta:	Y
Install pu:	S		
Capacity:	16		
Pump hp:	1		
Column len:	120		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000449239

D16
NW
1/4 - 1/2 Mile
Lower

MD WELLS **MD7000000492575**

Object id:	492575	County let:	TA
Permit:	TA950328	Mgs id:	Not Reported
B1 seq:	1204	B1 recd:	2005 3 7
City:	SALISBURY	State:	MD
Zip:	21804	Driller na:	MICHAEL T. HALL
Driller id:	MWD 461		
Est gpm pr:	20		
Use for wa:	I		
Approx dep:	400		
Drill meth:	ROTARY	Replacemen:	N
Wapid:	TA2005G002	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	4
Nearest to:	EASTON	Town dista:	.5
Town direc:	NW	Road name:	8885 MISTLETOE DRIVE
Road side:	E	Road dista:	220 FT
Tax map:	25	Block:	22
Parcel:	46		
N grid83:	125502		
E grid83:	479885		
Lat dec de:	38.793646		
Lon dec de:	-76.080428		
Issue date:	2005 3 3	Special fl:	Not Reported
C1 seq:	2522	C1 recd:	2005 5 4
Completion:	2005 4 6		
Total dept:	360		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	BC		
Grout top:	0		
Grout bott:	105		

Casing typ:	PL		
Casing dia:	4		
Casing dep:	310		
Casing hei:	+1	Screen typ:	PL
Top screen:	310		
Bottom scr:	360		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	4		
Pumping ra:	25		
Level befo:	15		
Level duri:	175		
Test pump :	S	Pump insta:	Y
Install pu:	S		
Capacity:	35		
Pump hp:	1.5		
Column len:	200		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000492575

D17
NW
1/4 - 1/2 Mile
Lower

MD WELLS **MD7000000522317**

Object id:	522317	County let:	TA
Permit:	TA950892	Mgs id:	Not Reported
B1 seq:	0270	B1 recd:	2007 3 8
City:	EASTON	State:	MD
Zip:	21601	Driller na:	JOHN T. SHANNANAH
Driller id:	MSD 146		
Est gpm pr:	25		
Use for wa:	I		
Approx dep:	580		
Drill meth:	ROTARY	Replacemen:	N
Wapid:	TA2005G011	Subdivisio:	TALBOT COMMER PARK
Section:	Not Reported	Lot:	13
Nearest to:	EASTON	Town dista:	.5
Town direc:	T	Road name:	MISTLETOE DRIVE
Road side:	W	Road dista:	80 FT
Tax map:	25	Block:	22
Parcel:	46		
N grid83:	125502		
E grid83:	479885		
Lat dec de:	38.793646		
Lon dec de:	-76.080428		
Issue date:	2007 3 5	Special fl:	Not Reported
C1 seq:	3369	C1 recd:	2007 629
Completion:	2007 412		
Total dept:	625		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	BC		
Grout top:	4		
Grout bott:	200		

Casing typ:	PL		
Casing dia:	4		
Casing dep:	280		
Casing hei:	+1	Screen typ:	PL
Top screen:	585		
Bottom scr:	625		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	2		
Flowing we:	Not Reported	Telescopin:	T
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	27		
Level befo:	69		
Level duri:	85		
Test pump :	A	Pump insta:	Y
Install pu:	S		
Capacity:	41		
Pump hp:	3		
Column len:	140		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000522317

18
NE
1/4 - 1/2 Mile
Higher

MD WELLS **MD7000000449200**

Object id:	449200	County let:	TA
Permit:	TA941501	Mgs id:	Not Reported
B1 seq:	8922	B1 recd:	20001228
City:	EASTON	State:	MD
Zip:	21601	Driller na:	W DAVID TULL
Driller id:	MSD 22		
Est gpm pr:	10		
Use for wa:	DW		
Approx dep:	200		
Drill meth:	ROTARY	Replacemen:	N
Wapid:	TA2000G002	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	6
Nearest to:	EASTON	Town dista:	.1
Town direc:	W	Road name:	MISTLETOE DR
Road side:	E	Road dista:	30 FT
Tax map:	25	Block:	16
Parcel:	46		
N grid83:	125502		
E grid83:	480494		
Lat dec de:	38.79359		
Lon dec de:	-76.073412		
Issue date:	20001222	Special fl:	Not Reported
C1 seq:	4730	C1 recd:	2001 824
Completion:	2001 1 6		
Total dept:	360		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	BC		
Grout top:	3		
Grout bott:	170		

Casing typ:	PL		
Casing dia:	4		
Casing dep:	164		
Casing hei:	+1	Screen typ:	PL
Top screen:	310		
Bottom scr:	360		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	2		
Flowing we:	Not Reported	Telescopin:	T
Log type:	Not Reported		
Hrs pumped:	6		
Pumping ra:	10		
Level befo:	15		
Level duri:	100		
Test pump :	A	Pump insta:	Y
Install pu:	S		
Capacity:	10		
Pump hp:	.5		
Column len:	140		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000449200

19
South
1/4 - 1/2 Mile
Higher

MD WELLS **MD7000000335197**

Object id:	335197	County let:	TA
Permit:	TA880724	Mgs id:	Not Reported
B1 seq:	4974	B1 recd:	1991 828
City:	WITTMAN	State:	MD
Zip:	21676	Driller na:	WILLIAM K. WOOD
Driller id:	MWD0070		
Est gpm pr:	10		
Use for wa:	DW		
Approx dep:	350		
Drill meth:	ROTARY	Replacemen:	Y
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	WITTMAN	Town dista:	.3
Town direc:	E	Road name:	SEWELL PT RD
Road side:	W	Road dista:	50 FT
Tax map:	22	Block:	20
Parcel:	188		
N grid83:	124587		
E grid83:	480190		
Lat dec de:	38.785381		
Lon dec de:	-76.077026		
Issue date:	1991 9 3	Special fl:	N
C1 seq:	5507	C1 recd:	19911021
Completion:	1991 9 9		
Total dept:	340		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	BC		
Grout top:	5		
Grout bott:	320		

Casing typ:	PL		
Casing dia:	4		
Casing dep:	180		
Casing hei:	+1	Screen typ:	PL
Top screen:	325		
Bottom scr:	340		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	2		
Flowing we:	Not Reported	Telescopin:	T
Log type:	Not Reported		
Hrs pumped:	5		
Pumping ra:	30		
Level befo:	19		
Level duri:	60		
Test pump :	A	Pump insta:	N
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000335197

E20
West
1/4 - 1/2 Mile
Lower

MD WELLS **MD7000000514687**

Object id:	514687	County let:	TA
Permit:	TA950847	Mgs id:	Not Reported
B1 seq:	0267	B1 recd:	200612 1
City:	EASTON	State:	MD
Zip:	21601	Driller na:	JOHN T. SHANNAHAN
Driller id:	MSD 146		
Est gpm pr:	15		
Use for wa:	I		
Approx dep:	580		
Drill meth:	ROTARY	Replacemen:	N
Wapid:	TA2006G009	Subdivisio:	TALBOT COMMERCE PK
Section:	Not Reported	Lot:	18
Nearest to:	EASTON	Town dista:	1
Town direc:	T	Road name:	28595 MARYS COURT
Road side:	S	Road dista:	170 FT
Tax map:	25	Block:	16
Parcel:	46		
N grid83:	125197		
E grid83:	479580		
Lat dec de:	38.790928		
Lon dec de:	-76.083972		
Issue date:	20061130	Special fl:	Not Reported
C1 seq:	3323	C1 recd:	2007 126
Completion:	20061219		
Total dept:	596		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	BC		
Grout top:	4		
Grout bott:	160		

Casing typ:	PL		
Casing dia:	4		
Casing dep:	242		
Casing hei:	+1	Screen typ:	PL
Top screen:	576		
Bottom scr:	596		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	2		
Flowing we:	Not Reported	Telescopin:	T
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	17		
Level befo:	73		
Level duri:	92		
Test pump :	A	Pump insta:	Y
Install pu:	S		
Capacity:	13		
Pump hp:	.75		
Column len:	140		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000514687

E21
West
1/4 - 1/2 Mile
Lower

MD WELLS **MD7000000522730**

Object id:	522730	County let:	TA
Permit:	TA951032	Mgs id:	Not Reported
B1 seq:	9212	B1 recd:	2007 913
City:	BALTIMORE	State:	MD
Zip:	21237	Driller na:	JOHN T. SHANNAHAN
Driller id:	MSD 146		
Est gpm pr:	15		
Use for wa:	I		
Approx dep:	620		
Drill meth:	ROTARY	Replacemen:	N
Wapid:	TA2007G009	Subdivisio:	TALBOT COMMER PARK
Section:	Not Reported	Lot:	19
Nearest to:	EASTON	Town dista:	1
Town direc:	NW	Road name:	28659 MARY'S COURT
Road side:	S	Road dista:	60 FT
Tax map:	25	Block:	16
Parcel:	46		
N grid83:	125197		
E grid83:	479580		
Lat dec de:	38.790928		
Lon dec de:	-76.083972		
Issue date:	2007 9 6	Special fl:	Not Reported
C1 seq:	6252	C1 recd:	20071213
Completion:	2007 926		
Total dept:	620		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	BC		
Grout top:	4		
Grout bott:	180		

Casing typ:	PL		
Casing dia:	4		
Casing dep:	244		
Casing hei:	+1	Screen typ:	PL
Top screen:	600		
Bottom scr:	620		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	2		
Flowing we:	Not Reported	Telescopin:	T
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	15		
Level befo:	92		
Level duri:	107		
Test pump :	A	Pump insta:	Y
Install pu:	S		
Capacity:	13		
Pump hp:	1		
Column len:	140		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000522730

F22
East
1/4 - 1/2 Mile
Higher

MD WELLS **MD7000000292534**

Object id:	292534	County let:	TA
Permit:	TA730085	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	19721120
City:	EASTON	State:	MD
Zip:	Not Reported	Driller na:	SHANNAHAN WELL CO
Driller id:	MWD0023		
Est gpm pr:	10		
Use for wa:	DW		
Approx dep:	200		
Drill meth:	ROTARY	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	NORTH EASTON
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	2 MI
Town direc:	N	Road name:	RT 50
Road side:	W	Road dista:	80 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	125197		
E grid83:	480799		
Lat dec de:	38.790817		
Lon dec de:	-76.069939		
Issue date:	19721117	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	1973 721
Completion:	1973 622		
Total dept:	215		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	24		

Casing typ:	ST		
Casing dia:	4		
Casing dep:	174		
Casing hei:	+01	Screen typ:	HO
Top screen:	174		
Bottom scr:	215		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	12		
Pumping ra:	25		
Level befo:	39		
Level duri:	63		
Test pump :	A	Pump insta:	Not Reported
Install pu:	S		
Capacity:	6		
Pump hp:	1		
Column len:	84		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000292534

F23
East
1/4 - 1/2 Mile
Higher

MD WELLS **MD7000000292590**

Object id:	292590	County let:	TA
Permit:	TA730141	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	1973 4 3
City:	EASTON	State:	MD
Zip:	Not Reported	Driller na:	LIFETIME WELL DRLG
Driller id:	MWD0070		
Est gpm pr:	10		
Use for wa:	DW		
Approx dep:	50		
Drill meth:	ROTARY	Replacemen:	Y
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	2 MI
Town direc:	NE	Road name:	KENNEDY ST
Road side:	S	Road dista:	30 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	125197		
E grid83:	480799		
Lat dec de:	38.790817		
Lon dec de:	-76.069939		
Issue date:	1973 4 2	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	1974 128
Completion:	1973 5 8		
Total dept:	35		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	5		
Grout bott:	25		

Casing typ:	PL		
Casing dia:	2		
Casing dep:	35		
Casing hei:	+01	Screen typ:	PL
Top screen:	30		
Bottom scr:	35		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	2		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	2		
Pumping ra:	10		
Level befo:	10		
Level duri:	30		
Test pump :	C	Pump insta:	Not Reported
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000292590

F24
East
1/4 - 1/2 Mile
Higher

MD WELLS **MD7000000292620**

Object id:	292620	County let:	TA
Permit:	TA730171	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	1973 530
City:	EASTON	State:	MD
Zip:	Not Reported	Driller na:	MALONEY, ROBERT D
Driller id:	MWD0151		
Est gpm pr:	10		
Use for wa:	DW		
Approx dep:	200		
Drill meth:	ROTARY	Replacemen:	S
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	1 MI
Town direc:	N	Road name:	RT 50
Road side:	W	Road dista:	63 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	125197		
E grid83:	480799		
Lat dec de:	38.790817		
Lon dec de:	-76.069939		
Issue date:	1973 525	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	1973 721
Completion:	1973 627		
Total dept:	200		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	3		
Grout bott:	26		

Casing typ:	PL		
Casing dia:	2		
Casing dep:	190		
Casing hei:	-03	Screen typ:	PL
Top screen:	190		
Bottom scr:	200		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	2		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	3		
Pumping ra:	14		
Level befo:	29		
Level duri:	42		
Test pump :	A	Pump insta:	Not Reported
Install pu:	J		
Capacity:	8		
Pump hp:	1		
Column len:	65		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000292620

F25
East
1/4 - 1/2 Mile
Higher

MD WELLS **MD7000000292428**

Object id:	292428	County let:	TA
Permit:	TA720162	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	1972 612
City:	EASTON	State:	MD
Zip:	Not Reported	Driller na:	MALONEY, ROBERT D
Driller id:	MWD0151		
Est gpm pr:	10		
Use for wa:	DW		
Approx dep:	200		
Drill meth:	ROTARY	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	CLEARVIEW
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	2 MI
Town direc:	NE	Road name:	RT 50
Road side:	E	Road dista:	500 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	125197		
E grid83:	480799		
Lat dec de:	38.790817		
Lon dec de:	-76.069939		
Issue date:	1972 6 8	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	1972 9 7
Completion:	1972 8 8		
Total dept:	180		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	2		
Grout bott:	21		

Casing typ:	PL		
Casing dia:	2		
Casing dep:	170		
Casing hei:	+02	Screen typ:	PL
Top screen:	170		
Bottom scr:	180		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	2		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	3		
Pumping ra:	11		
Level befo:	29		
Level duri:	47		
Test pump :	A	Pump insta:	Not Reported
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000292428

F26
East
1/4 - 1/2 Mile
Higher

MD WELLS **MD7000000291985**

Object id:	291985	County let:	TA
Permit:	TA700028	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	1969 820
City:	EASTON	State:	MD
Zip:	Not Reported	Driller na:	MALONEY, ROBERT D
Driller id:	MWD0151		
Est gpm pr:	6		
Use for wa:	DW		
Approx dep:	150		
Drill meth:	ROTARY	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	13
Nearest to:	EASTON	Town dista:	1 MI
Town direc:	NE	Road name:	RT 50 SLAUGHTER ST
Road side:	S	Road dista:	650 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	125197		
E grid83:	480799		
Lat dec de:	38.790817		
Lon dec de:	-76.069939		
Issue date:	1969 819	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	1969 924
Completion:	1969 9 5		
Total dept:	52		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	Not Reported		
Grout top:	3		
Grout bott:	29		

Casing typ:	PL		
Casing dia:	2		
Casing dep:	42		
Casing hei:	+01	Screen typ:	PL
Top screen:	42		
Bottom scr:	52		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	3		
Pumping ra:	18		
Level befo:	13		
Level duri:	19		
Test pump :	C	Pump insta:	Not Reported
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000291985

F27
East
1/4 - 1/2 Mile
Higher

MD WELLS **MD7000000292377**

Object id:	292377	County let:	TA
Permit:	TA720112	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	1972 225
City:	EASTON	State:	MD
Zip:	Not Reported	Driller na:	RUDE, CARVEL H
Driller id:	MWD0008		
Est gpm pr:	10		
Use for wa:	DW		
Approx dep:	185		
Drill meth:	JETTED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	NORTH EASTON
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	1 MI
Town direc:	N	Road name:	US 50
Road side:	W	Road dista:	45 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	125197		
E grid83:	480799		
Lat dec de:	38.790817		
Lon dec de:	-76.069939		
Issue date:	1972 224	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	1972 417
Completion:	1972 317		
Total dept:	190		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	BC		
Grout top:	0		
Grout bott:	147		

Casing typ:	ST		
Casing dia:	2		
Casing dep:	147		
Casing hei:	-02	Screen typ:	HO
Top screen:	147		
Bottom scr:	190		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	6		
Pumping ra:	20		
Level befo:	38		
Level duri:	147		
Test pump :	A	Pump insta:	Not Reported
Install pu:	Not Reported		
Capacity:	6		
Pump hp:	1		
Column len:	63		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000292377

F28
East
1/4 - 1/2 Mile
Higher

MD WELLS **MD7000000292390**

Object id:	292390	County let:	TA
Permit:	TA720125	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	1972 320
City:	EASTON	State:	MD
Zip:	Not Reported	Driller na:	SHANNAHAN WELL CO
Driller id:	MWD0023		
Est gpm pr:	10		
Use for wa:	DW		
Approx dep:	200		
Drill meth:	ROTARY	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	2 MI
Town direc:	N	Road name:	RT 50
Road side:	W	Road dista:	1000FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	125197		
E grid83:	480799		
Lat dec de:	38.790817		
Lon dec de:	-76.069939		
Issue date:	1972 315	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	1972 5 4
Completion:	1972 410		
Total dept:	209		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	168		

Casing typ:	ST		
Casing dia:	2		
Casing dep:	168		
Casing hei:	+01	Screen typ:	HO
Top screen:	168		
Bottom scr:	209		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	10		
Pumping ra:	35		
Level befo:	35		
Level duri:	100		
Test pump :	A	Pump insta:	Not Reported
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000292390

F29
East
1/4 - 1/2 Mile
Higher

MD WELLS **MD7000000293558**

Object id:	293558	County let:	TA
Permit:	TA731109	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	1977 9 8
City:	EASTON	State:	MD
Zip:	Not Reported	Driller na:	LIFETIME WELL DRLG
Driller id:	MWD0070		
Est gpm pr:	10		
Use for wa:	I		
Approx dep:	200		
Drill meth:	ROTARY	Replacemen:	Y
Wapid:	TA1977G007	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	2 MI
Town direc:	N	Road name:	50
Road side:	E	Road dista:	300 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	0		
E grid83:	480799		
Lat dec de:	38.790817		
Lon dec de:	-76.069939		
Issue date:	1977 9 7	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	1978 130
Completion:	1977 928		
Total dept:	214		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	BC		
Grout top:	3		
Grout bott:	20		

Casing typ:	PL		
Casing dia:	2		
Casing dep:	214		
Casing hei:	+01	Screen typ:	PL
Top screen:	174		
Bottom scr:	214		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	2		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	6		
Pumping ra:	20		
Level befo:	48		
Level duri:	100		
Test pump :	C	Pump insta:	Not Reported
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000293558

F30
East
1/4 - 1/2 Mile
Higher

MD WELLS **MD7000000293662**

Object id:	293662	County let:	TA
Permit:	TA731213	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	1978 711
City:	EASTON	State:	MD
Zip:	Not Reported	Driller na:	LIFETIME WELL DRLG
Driller id:	MWD0070		
Est gpm pr:	10		
Use for wa:	DW		
Approx dep:	120		
Drill meth:	ROTARY	Replacemen:	Y
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	NORTH EASTON	Town dista:	0 MI
Town direc:	Not Reported	Road name:	33
Road side:	E	Road dista:	50 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	125197		
E grid83:	480799		
Lat dec de:	38.790817		
Lon dec de:	-76.069939		
Issue date:	1978 710	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	1978 8 3
Completion:	1978 726		
Total dept:	203		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	BC		
Grout top:	3		
Grout bott:	20		

Casing typ:	PL		
Casing dia:	4		
Casing dep:	120		
Casing hei:	+01	Screen typ:	PL
Top screen:	163		
Bottom scr:	203		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	2		
Flowing we:	Not Reported	Telescopin:	T
Log type:	Not Reported		
Hrs pumped:	5		
Pumping ra:	12		
Level befo:	55		
Level duri:	120		
Test pump :	A	Pump insta:	Not Reported
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000293662

F31
East
1/4 - 1/2 Mile
Higher

MD WELLS **MD7000000293978**

Object id:	293978	County let:	TA
Permit:	TA731529	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	1980 4 1
City:	EASTON	State:	MD
Zip:	Not Reported	Driller na:	LIFETIME WELL DRLG
Driller id:	MWD0070		
Est gpm pr:	10		
Use for wa:	DW		
Approx dep:	200		
Drill meth:	ROTARY	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	1 MI
Town direc:	E	Road name:	CHAPEL
Road side:	N	Road dista:	400 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	125197		
E grid83:	480799		
Lat dec de:	38.790817		
Lon dec de:	-76.069939		
Issue date:	1980 328	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	1980 418
Completion:	1980 411		
Total dept:	193		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	BC		
Grout top:	3		
Grout bott:	20		

Casing typ:	PL		
Casing dia:	4		
Casing dep:	120		
Casing hei:	+01	Screen typ:	PL
Top screen:	168		
Bottom scr:	193		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	2		
Flowing we:	Not Reported	Telescopin:	T
Log type:	Not Reported		
Hrs pumped:	6		
Pumping ra:	15		
Level befo:	38		
Level duri:	100		
Test pump :	A	Pump insta:	Not Reported
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000293978

F32
East
1/4 - 1/2 Mile
Higher

MD WELLS **MD7000000293456**

Object id:	293456	County let:	TA
Permit:	TA731007	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	1977 8 1
City:	EASTON	State:	MD
Zip:	Not Reported	Driller na:	SHANNAHAN WELL CO
Driller id:	MWD0024		
Est gpm pr:	10		
Use for wa:	I		
Approx dep:	640		
Drill meth:	ROTARY	Replacemen:	N
Wapid:	TA1977G004	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	2 MI
Town direc:	N	Road name:	US RT 50
Road side:	E	Road dista:	150 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	125197		
E grid83:	480799		
Lat dec de:	38.790817		
Lon dec de:	-76.069939		
Issue date:	1977 6 7	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	19771229
Completion:	19771212		
Total dept:	643		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	40		

Casing typ:	ST		
Casing dia:	4		
Casing dep:	263		
Casing hei:	+01	Screen typ:	ST
Top screen:	623		
Bottom scr:	643		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	3		
Flowing we:	Not Reported	Telescopin:	T
Log type:	Not Reported		
Hrs pumped:	6		
Pumping ra:	20		
Level befo:	90		
Level duri:	130		
Test pump :	A	Pump insta:	Not Reported
Install pu:	S		
Capacity:	15		
Pump hp:	2		
Column len:	189		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000293456

F33
East
1/4 - 1/2 Mile
Higher

MD WELLS **MD7000000292626**

Object id:	292626	County let:	TA
Permit:	TA730177	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	1973 6 7
City:	EASTON	State:	MD
Zip:	Not Reported	Driller na:	LIFETIME WELL DRLG
Driller id:	MWD0070		
Est gpm pr:	10		
Use for wa:	DW		
Approx dep:	40		
Drill meth:	ROTARY	Replacemen:	Y
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	1 MI
Town direc:	NE	Road name:	RT 50
Road side:	W	Road dista:	40 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	125197		
E grid83:	480799		
Lat dec de:	38.790817		
Lon dec de:	-76.069939		
Issue date:	1973 6 5	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	1974 722
Completion:	1973 7 1		
Total dept:	31		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	5		
Grout bott:	20		

Casing typ:	PL		
Casing dia:	2		
Casing dep:	31		
Casing hei:	+01	Screen typ:	PL
Top screen:	25		
Bottom scr:	31		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	2		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	2		
Pumping ra:	10		
Level befo:	8		
Level duri:	25		
Test pump :	C	Pump insta:	Not Reported
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000292626

F34
East
1/4 - 1/2 Mile
Higher

MD WELLS **MD7000000292699**

Object id:	292699	County let:	TA
Permit:	TA730250	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	1973 920
City:	EASTON	State:	MD
Zip:	Not Reported	Driller na:	SHANNAHAN WELL CO
Driller id:	MWD0023		
Est gpm pr:	10		
Use for wa:	I		
Approx dep:	200		
Drill meth:	ROTARY	Replacemen:	N
Wapid:	TA1974G002	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	2 MI
Town direc:	N	Road name:	E KENNEDY ST
Road side:	N	Road dista:	500 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	125197		
E grid83:	480799		
Lat dec de:	38.790817		
Lon dec de:	-76.069939		
Issue date:	1973 918	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	19731226
Completion:	197312 7		
Total dept:	187		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	34		

Casing typ:	ST		
Casing dia:	4		
Casing dep:	177		
Casing hei:	+01	Screen typ:	PL
Top screen:	177		
Bottom scr:	187		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	6		
Pumping ra:	15		
Level befo:	45		
Level duri:	109		
Test pump :	A	Pump insta:	Not Reported
Install pu:	S		
Capacity:	10		
Pump hp:	1		
Column len:	133		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000292699

F35
East
1/4 - 1/2 Mile
Higher

MD WELLS **MD7000000292966**

Object id:	292966	County let:	TA
Permit:	TA730517	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	1975 2 6
City:	EASTON	State:	MD
Zip:	Not Reported	Driller na:	LIFETIME WELL DRLG
Driller id:	MWD0070		
Est gpm pr:	10		
Use for wa:	DW		
Approx dep:	200		
Drill meth:	ROTARY	Replacemen:	Y
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	1 MI
Town direc:	N	Road name:	RT 50
Road side:	W	Road dista:	40 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	125197		
E grid83:	480799		
Lat dec de:	38.790817		
Lon dec de:	-76.069939		
Issue date:	1975 2 4	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	1975 911
Completion:	1975 218		
Total dept:	142		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	BC		
Grout top:	2		
Grout bott:	100		

Casing typ:	PL		
Casing dia:	2		
Casing dep:	142		
Casing hei:	+01	Screen typ:	PL
Top screen:	122		
Bottom scr:	142		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	2		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	4		
Pumping ra:	20		
Level befo:	30		
Level duri:	80		
Test pump :	A	Pump insta:	Not Reported
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000292966

G36
North
1/4 - 1/2 Mile
Lower

MD WELLS **MD7000000448910**

Object id:	448910	County let:	TA
Permit:	TA941809	Mgs id:	Not Reported
B1 seq:	1765	B1 recd:	2002 117
City:	EASTON	State:	MD
Zip:	21601	Driller na:	N SHANNAHAN
Driller id:	MSD 145		
Est gpm pr:	10		
Use for wa:	DW		
Approx dep:	620		
Drill meth:	ROTARY	Replacemen:	N
Wapid:	TA2001G013	Subdivisio:	TALBOT BUSINESS PARK
Section:	Not Reported	Lot:	8
Nearest to:	EASTON	Town dista:	.3
Town direc:	NW	Road name:	MISTLETOW DR
Road side:	E	Road dista:	250 FT
Tax map:	25	Block:	16
Parcel:	46		
N grid83:	125806		
E grid83:	480190		
Lat dec de:	38.796364		
Lon dec de:	-76.076885		
Issue date:	2002 116	Special fl:	Not Reported
C1 seq:	5655	C1 recd:	2002 411
Completion:	2002 212		
Total dept:	639		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	BC		
Grout top:	4		
Grout bott:	160		

Casing typ:	PL		
Casing dia:	4		
Casing dep:	215		
Casing hei:	+1	Screen typ:	PL
Top screen:	619		
Bottom scr:	637		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	2		
Flowing we:	Not Reported	Telescopin:	T
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	20		
Level befo:	70		
Level duri:	80		
Test pump :	A	Pump insta:	Y
Install pu:	S		
Capacity:	15		
Pump hp:	1		
Column len:	120		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000448910

G37
North
1/4 - 1/2 Mile
Lower

MD WELLS **MD7000000466186**

Object id:	466186	County let:	TA
Permit:	TA942238	Mgs id:	Not Reported
B1 seq:	4256	B1 recd:	2003 514
City:	EASTON	State:	MD
Zip:	21601	Driller na:	W DAVID TULL
Driller id:	MSD 22		
Est gpm pr:	10		
Use for wa:	I		
Approx dep:	620		
Drill meth:	ROTARY	Replacemen:	N
Wapid:	TA2003G006	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	8
Nearest to:	EASTON	Town dista:	.1
Town direc:	W	Road name:	MISTLETOE DR
Road side:	E	Road dista:	300 FT
Tax map:	25	Block:	16
Parcel:	46		
N grid83:	125806		
E grid83:	480190		
Lat dec de:	38.796364		
Lon dec de:	-76.076885		
Issue date:	2003 5 9	Special fl:	Not Reported
C1 seq:	3474	C1 recd:	2003 8 5
Completion:	2003 7 1		
Total dept:	620		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	BC		
Grout top:	3		
Grout bott:	150		

Casing typ:	PL		
Casing dia:	4		
Casing dep:	230		
Casing hei:	+1	Screen typ:	PL
Top screen:	590		
Bottom scr:	620		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	2		
Flowing we:	Not Reported	Telescopin:	T
Log type:	Not Reported		
Hrs pumped:	6		
Pumping ra:	30		
Level befo:	67		
Level duri:	100		
Test pump :	A	Pump insta:	Y
Install pu:	S		
Capacity:	25		
Pump hp:	1.5		
Column len:	120		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000466186

G38
North
1/4 - 1/2 Mile
Lower

MD WELLS **MD7000000521109**

Object id:	521109	County let:	TA
Permit:	TA950950	Mgs id:	Not Reported
B1 seq:	4209	B1 recd:	2007 323
City:	OXFORD	State:	MD
Zip:	21654	Driller na:	W. DAVID TULL
Driller id:	MSD 022		
Est gpm pr:	10		
Use for wa:	DW		
Approx dep:	600		
Drill meth:	ROTARY	Replacemen:	N
Wapid:	TA2007G005	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	9B
Nearest to:	EASTON	Town dista:	.1 MI
Town direc:	W	Road name:	9055 BRYAN DR
Road side:	E	Road dista:	50 FT
Tax map:	25	Block:	4
Parcel:	46		
N grid83:	125806		
E grid83:	480190		
Lat dec de:	38.796364		
Lon dec de:	-76.076885		
Issue date:	2007 517	Special fl:	Not Reported
C1 seq:	3025	C1 recd:	20071126
Completion:	2007 426		
Total dept:	615		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	BC		
Grout top:	3		
Grout bott:	150		

Casing typ:	PL		
Casing dia:	4		
Casing dep:	232		
Casing hei:	+1	Screen typ:	PL
Top screen:	590		
Bottom scr:	615		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	2		
Flowing we:	Not Reported	Telescopin:	T
Log type:	Not Reported		
Hrs pumped:	6		
Pumping ra:	30		
Level befo:	78		
Level duri:	100		
Test pump :	A	Pump insta:	Y
Install pu:	S		
Capacity:	20		
Pump hp:	1		
Column len:	120		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000521109

H39
SSW
1/4 - 1/2 Mile
Lower

MD WELLS **MD7000000361073**

Object id:	361073	County let:	TA
Permit:	TA881328	Mgs id:	Not Reported
B1 seq:	4670	B1 recd:	1993 3 5
City:	EASTON	State:	MD
Zip:	21601	Driller na:	WM SHANNAHAN
Driller id:	MWD 24		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	1200		
Drill meth:	ROTARY	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	Not Reported
Town direc:	T	Road name:	COMMERCE DRIVE
Road side:	N	Road dista:	1000FT
Tax map:	101	Block:	7
Parcel:	16		
N grid83:	124587		
E grid83:	479885		
Lat dec de:	38.785409		
Lon dec de:	-76.080534		
Issue date:	1993 310	Special fl:	Not Reported
C1 seq:	5788	C1 recd:	1993 521
Completion:	1993 514		
Total dept:	1198		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	295		

Casing typ:	ST		
Casing dia:	4		
Casing dep:	295		
Casing hei:	+2	Screen typ:	ST
Top screen:	1137		
Bottom scr:	1158		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	2		
Flowing we:	Not Reported	Telescopin:	T
Log type:	Not Reported		
Hrs pumped:	9		
Pumping ra:	62		
Level befo:	50		
Level duri:	108		
Test pump :	S	Pump insta:	N
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000361073

H40
SSW
1/4 - 1/2 Mile
Lower

MD WELLS **MD7000000529331**

Object id:	529331	County let:	Not Reported
Permit:	TA951050	Mgs id:	Not Reported
B1 seq:	9222	B1 recd:	2007 927
City:	EASTON	State:	MD
Zip:	21601	Driller na:	JOHN T SHANNAHAN
Driller id:	MSD 146		
Est gpm pr:	15		
Use for wa:	I		
Approx dep:	130		
Drill meth:	ROTARY	Replacemen:	S
Wapid:	TA1988G024	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	14 & 15
Nearest to:	EASTON	Town dista:	Not Reported
Town direc:	T	Road name:	8958 COMMERCE DRIVE
Road side:	N	Road dista:	400 FT
Tax map:	101	Block:	Not Reported
Parcel:	4		
N grid83:	124587		
E grid83:	479885		
Lat dec de:	38.785409		
Lon dec de:	-76.080534		
Issue date:	2007 928	Special fl:	Not Reported
C1 seq:	6275	C1 recd:	20081030
Completion:	2008 221		
Total dept:	134		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	BC		
Grout top:	4		
Grout bott:	70		

Casing typ:	PL		
Casing dia:	4		
Casing dep:	104		
Casing hei:	+1	Screen typ:	PL
Top screen:	104		
Bottom scr:	134		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	5		
Level befo:	27		
Level duri:	57		
Test pump :	A	Pump insta:	Y
Install pu:	S		
Capacity:	10		
Pump hp:	.5		
Column len:	100		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000529331

41
WSW
1/4 - 1/2 Mile
Lower

MD WELLS **MD7000000294998**

Object id:	294998	County let:	TA
Permit:	TA810751	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	1985 117
City:	EASTON	State:	MD
Zip:	21601	Driller na:	SHANNAHAN, JOHN T.
Driller id:	MWD0022		
Est gpm pr:	10		
Use for wa:	DW		
Approx dep:	600		
Drill meth:	ROTARY	Replacemen:	Y
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	1.1 MI
Town direc:	NW	Road name:	GLEBE RD
Road side:	S	Road dista:	70 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	124892		
E grid83:	479580		
Lat dec de:	38.788182		
Lon dec de:	-76.084007		
Issue date:	1985 125	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	1985 318
Completion:	1985 214		
Total dept:	597		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	4		
Grout bott:	30		

Casing typ:	PL		
Casing dia:	4		
Casing dep:	170		
Casing hei:	+01	Screen typ:	PL
Top screen:	587		
Bottom scr:	597		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	2		
Flowing we:	Not Reported	Telescopin:	T
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	25		
Level befo:	60		
Level duri:	79		
Test pump :	A	Pump insta:	Not Reported
Install pu:	S		
Capacity:	10		
Pump hp:	.5		
Column len:	115		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000294998

I42
SSE
1/4 - 1/2 Mile
Higher

MD WELLS **MD7000000196436**

Object id:	196436	County let:	TA
Permit:	TA880534	Mgs id:	Not Reported
B1 seq:	4114	B1 recd:	19901129
City:	EASTON	State:	MD
Zip:	Not Reported	Driller na:	STEVE SAUL
Driller id:	MWD 421		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	20		
Drill meth:	AIR-ROT	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	Not Reported
Town direc:	T	Road name:	AURORA ST
Road side:	E	Road dista:	400 FT
Tax map:	103	Block:	2
Parcel:	550-1		
N grid83:	124587		
E grid83:	480494		
Lat dec de:	38.785353		
Lon dec de:	-76.073518		
Issue date:	199012 6	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	0
Completion:	0		
Total dept:	0		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Not Reported
Grout type:	Not Reported		
Grout top:	0		
Grout bott:	0		

Casing typ:	Not Reported		
Casing dia:	0		
Casing dep:	0		
Casing hei:	Not Reported	Screen typ:	Not Reported
Top screen:	0		
Bottom scr:	0		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	Not Reported
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Y
Abandon da:	2005 6 3	Site id:	MD7000000196436

I43
SSE
1/4 - 1/2 Mile
Higher

MD WELLS **MD7000000196460**

Object id:	196460	County let:	TA
Permit:	TA880533	Mgs id:	Not Reported
B1 seq:	4115	B1 recd:	19901129
City:	EASTON	State:	MD
Zip:	Not Reported	Driller na:	STEVE SAUL
Driller id:	MWD 421		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	20		
Drill meth:	AIR-ROT	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	Not Reported
Town direc:	T	Road name:	AURORA ST
Road side:	E	Road dista:	400 FT
Tax map:	103	Block:	2
Parcel:	550-1		
N grid83:	124587		
E grid83:	480494		
Lat dec de:	38.785353		
Lon dec de:	-76.073518		
Issue date:	199012 6	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	0
Completion:	0		
Total dept:	0		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Not Reported
Grout type:	Not Reported		
Grout top:	0		
Grout bott:	0		

Casing typ:	Not Reported		
Casing dia:	0		
Casing dep:	0		
Casing hei:	Not Reported	Screen typ:	Not Reported
Top screen:	0		
Bottom scr:	0		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	Not Reported
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	T
Abandon da:	2005 6 3	Site id:	MD7000000196460

I44
SSE **MD WELLS** **MD7000000196032**
1/4 - 1/2 Mile
Higher

Object id:	196032	County let:	TA
Permit:	TA880535	Mgs id:	Not Reported
B1 seq:	4113	B1 recd:	19901129
City:	EASTON	State:	MD
Zip:	Not Reported	Driller na:	STEVE SAUL
Driller id:	MWD 421		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	20		
Drill meth:	AIR-ROT	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	Not Reported
Town direc:	T	Road name:	AURORA
Road side:	E	Road dista:	400 FT
Tax map:	103	Block:	2
Parcel:	550-1		
N grid83:	124587		
E grid83:	480494		
Lat dec de:	38.785353		
Lon dec de:	-76.073518		
Issue date:	199012 6	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	0
Completion:	0		
Total dept:	0		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Not Reported
Grout type:	Not Reported		
Grout top:	0		
Grout bott:	0		

Casing typ:	Not Reported		
Casing dia:	0		
Casing dep:	0		
Casing hei:	Not Reported	Screen typ:	Not Reported
Top screen:	0		
Bottom scr:	0		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	Not Reported
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Y
Abandon da:	2005 6 3	Site id:	MD7000000196032

I45
SSE **MD WELLS** **MD7000000196427**
1/4 - 1/2 Mile
Higher

Object id:	196427	County let:	TA
Permit:	TA880532	Mgs id:	Not Reported
B1 seq:	4110	B1 recd:	19901129
City:	EASTON	State:	MD
Zip:	Not Reported	Driller na:	STEVE SAUL
Driller id:	MWD 421		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	20		
Drill meth:	AIR-ROT	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	Not Reported
Town direc:	T	Road name:	AURORA ST
Road side:	E	Road dista:	410 FT
Tax map:	103	Block:	2
Parcel:	550-1		
N grid83:	124587		
E grid83:	480494		
Lat dec de:	38.785353		
Lon dec de:	-76.073518		
Issue date:	199012 6	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	0
Completion:	0		
Total dept:	0		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Not Reported
Grout type:	Not Reported		
Grout top:	0		
Grout bott:	0		

Casing typ:	Not Reported		
Casing dia:	0		
Casing dep:	0		
Casing hei:	Not Reported	Screen typ:	Not Reported
Top screen:	0		
Bottom scr:	0		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	Not Reported
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Y
Abandon da:	2005 6 3	Site id:	MD7000000196427

I46
SSE
1/4 - 1/2 Mile
Higher

MD WELLS **MD7000000295648**

Object id:	295648	County let:	TA
Permit:	TA811401	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	1987 116
City:	EASTON	State:	MD
Zip:	21601	Driller na:	D'AMIANO, ANTHONY R.
Driller id:	MWD0346		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	20		
Drill meth:	AIR-ROT	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	0 MI
Town direc:	Not Reported	Road name:	N AURORA ST
Road side:	E	Road dista:	470 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	124587		
E grid83:	480494		
Lat dec de:	38.785353		
Lon dec de:	-76.073518		
Issue date:	1987 119	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	1987 127
Completion:	1987 116		
Total dept:	17		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	BC		
Grout top:	0		
Grout bott:	7		

Casing typ:	PL		
Casing dia:	4		
Casing dep:	7		
Casing hei:	+01	Screen typ:	PL
Top screen:	7		
Bottom scr:	17		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	1		
Level befo:	1		
Level duri:	1		
Test pump :	O	Pump insta:	Not Reported
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Y
Abandon da:	2005 6 3	Site id:	MD7000000295648

I47
SSE
1/4 - 1/2 Mile
Higher

MD WELLS **MD7000000295649**

Object id:	295649	County let:	TA
Permit:	TA811402	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	1987 116
City:	EASTON	State:	MD
Zip:	21601	Driller na:	D'AMIANO, ANTHONY R.
Driller id:	MWD0346		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	20		
Drill meth:	AIR-ROT	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	0 MI
Town direc:	Not Reported	Road name:	N AURORA ST
Road side:	E	Road dista:	440 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	124587		
E grid83:	480494		
Lat dec de:	38.785353		
Lon dec de:	-76.073518		
Issue date:	1987 119	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	1987 127
Completion:	1987 116		
Total dept:	17		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	BC		
Grout top:	0		
Grout bott:	7		

Casing typ:	PL		
Casing dia:	4		
Casing dep:	7		
Casing hei:	+01	Screen typ:	PL
Top screen:	7		
Bottom scr:	17		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	1		
Level befo:	1		
Level duri:	1		
Test pump :	O	Pump insta:	Not Reported
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Y
Abandon da:	2005 6 3	Site id:	MD7000000295649

I48
SSE
1/4 - 1/2 Mile
Higher

MD WELLS **MD7000000295646**

Object id:	295646	County let:	TA
Permit:	TA811399	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	1987 116
City:	EASTON	State:	MD
Zip:	21601	Driller na:	D'AMIANO, ANTHONY R.
Driller id:	MWD0346		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	20		
Drill meth:	AIR-ROT	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	0 MI
Town direc:	Not Reported	Road name:	N AURORA ST
Road side:	E	Road dista:	450 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	124587		
E grid83:	480494		
Lat dec de:	38.785353		
Lon dec de:	-76.073518		
Issue date:	1987 119	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	1987 127
Completion:	1987 116		
Total dept:	18		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	BC		
Grout top:	0		
Grout bott:	8		

Casing typ:	PL		
Casing dia:	4		
Casing dep:	8		
Casing hei:	+01	Screen typ:	PL
Top screen:	8		
Bottom scr:	18		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	1		
Level befo:	1		
Level duri:	1		
Test pump :	O	Pump insta:	Not Reported
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Y
Abandon da:	2005 6 3	Site id:	MD7000000295646

I49
SSE
1/4 - 1/2 Mile
Higher

MD WELLS **MD7000000295647**

Object id:	295647	County let:	TA
Permit:	TA811400	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	1987 116
City:	EASTON	State:	MD
Zip:	21601	Driller na:	D'AMIANO, ANTHONY R.
Driller id:	MWD0346		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	20		
Drill meth:	AIR-ROT	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	0 MI
Town direc:	Not Reported	Road name:	N AURORA ST
Road side:	E	Road dista:	450 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	124587		
E grid83:	480494		
Lat dec de:	38.785353		
Lon dec de:	-76.073518		
Issue date:	1987 119	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	1987 127
Completion:	1987 116		
Total dept:	17		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	BC		
Grout top:	0		
Grout bott:	7		

Casing typ:	PL		
Casing dia:	4		
Casing dep:	7		
Casing hei:	+01	Screen typ:	PL
Top screen:	7		
Bottom scr:	17		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	1		
Level befo:	1		
Level duri:	1		
Test pump :	O	Pump insta:	Not Reported
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Y
Abandon da:	2005 6 3	Site id:	MD7000000295647

J50
WNW
1/4 - 1/2 Mile
Lower

MD WELLS **MD7000000511525**

Object id:	511525	County let:	Not Reported
Permit:	TA950710	Mgs id:	Not Reported
B1 seq:	0111	B1 recd:	2006 7 6
City:	EASTON	State:	MD
Zip:	21601	Driller na:	JOHN T SHANNAHAM
Driller id:	MSD 146		
Est gpm pr:	25		
Use for wa:	I		
Approx dep:	600		
Drill meth:	ROTARY	Replacemen:	N
Wapid:	TA2006G005	Subdivisio:	TALBOT COMMERCE PARK
Section:	Not Reported	Lot:	16
Nearest to:	EASTON	Town dista:	1
Town direc:	NW	Road name:	28580 MARYS COURT
Road side:	W	Road dista:	60 FT
Tax map:	25	Block:	22
Parcel:	46		
N grid83:	125502		
E grid83:	479580		
Lat dec de:	38.793674		
Lon dec de:	-76.083937		
Issue date:	2006 7 5	Special fl:	Not Reported
C1 seq:	6195	C1 recd:	2006 925
Completion:	2006 717		
Total dept:	617		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	BC		
Grout top:	4		
Grout bott:	180		

Casing typ:	PL		
Casing dia:	4		
Casing dep:	256		
Casing hei:	+1	Screen typ:	PL
Top screen:	587		
Bottom scr:	617		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	2		
Flowing we:	Not Reported	Telescopin:	T
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	20		
Level befo:	72		
Level duri:	88		
Test pump :	A	Pump insta:	Y
Install pu:	S		
Capacity:	24		
Pump hp:	2		
Column len:	140		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000511525

J51
WNW
1/4 - 1/2 Mile
Lower

MD WELLS **MD7000000520636**

Object id:	520636	County let:	Not Reported
Permit:	TA950951	Mgs id:	Not Reported
B1 seq:	9339	B1 recd:	2007 328
City:	EASTON	State:	MD
Zip:	21601	Driller na:	JOHN T SHANNAHAN
Driller id:	MSD 146		
Est gpm pr:	20		
Use for wa:	I		
Approx dep:	600		
Drill meth:	ROTARY	Replacemen:	N
Wapid:	TA2007G004	Subdivisio:	TALBOT COMMERCE PARK
Section:	Not Reported	Lot:	15
Nearest to:	EASTON	Town dista:	1
Town direc:	T	Road name:	28600 MARYS COURT
Road side:	N	Road dista:	Not Reported
Tax map:	25	Block:	22
Parcel:	46		
N grid83:	125502		
E grid83:	479580		
Lat dec de:	38.793674		
Lon dec de:	-76.083937		
Issue date:	2007 517	Special fl:	Not Reported
C1 seq:	3026	C1 recd:	20071015
Completion:	2007 6 7		
Total dept:	600		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	BC		
Grout top:	4		
Grout bott:	180		

Casing typ:	PL		
Casing dia:	4		
Casing dep:	240		
Casing hei:	+1	Screen typ:	PL
Top screen:	580		
Bottom scr:	600		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	2		
Flowing we:	Not Reported	Telescopin:	T
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	17		
Level befo:	63		
Level duri:	98		
Test pump :	A	Pump insta:	Y
Install pu:	S		
Capacity:	20		
Pump hp:	1.5		
Column len:	140		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000520636

52
ENE
1/4 - 1/2 Mile
Higher

MD WELLS **MD7000000542743**

Object id:	542743	County let:	Not Reported
Permit:	TA951762	Mgs id:	Not Reported
B1 seq:	7724	B1 recd:	2011 622
City:	EASTON	State:	MD
Zip:	21601	Driller na:	KEVIN PUMPHREY
Driller id:	MGD 120		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	20		
Drill meth:	DR-POINT	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	8740 GLEBE PARK DR E
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	0
Town direc:	N	Road name:	GLEBE PARK DR
Road side:	W	Road dista:	200 FT
Tax map:	0100	Block:	Not Reported
Parcel:	0041		
N grid83:	125502		
E grid83:	480799		
Lat dec de:	38.793562		
Lon dec de:	-76.069903		
Issue date:	2011 7 1	Special fl:	Y
C1 seq:	0212	C1 recd:	20111014
Completion:	2011 7 5		
Total dept:	15		
Num unsucc:	0		
Hydrofract:	N	Grouted:	N
Grout type:	Not Reported		
Grout top:	0		
Grout bott:	0		

Casing typ:	PL		
Casing dia:	1		
Casing dep:	5		
Casing hei:	Not Reported	Screen typ:	PL
Top screen:	5		
Bottom scr:	15		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	1		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	8		
Level duri:	8		
Test pump :	Not Reported	Pump insta:	N
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Y
Abandon da:	2011 7 5	Site id:	MD7000000542743

K53
NE
1/4 - 1/2 Mile
Higher

MD WELLS **MD7000000544935**

Object id:	544935	County let:	Not Reported
Permit:	TA110048	Mgs id:	Not Reported
B1 seq:	1176	B1 recd:	2012 6 8
City:	EASTON	State:	MD
Zip:	21601	Driller na:	KEVIN PUMPHREY
Driller id:	MGD 120		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	30		
Drill meth:	Not Reported	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	DIST 01 ACT 049011
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	Not Reported
Town direc:	Not Reported	Road name:	8940 GLEBE PARK DR
Road side:	W	Road dista:	250 FT
Tax map:	100	Block:	Not Reported
Parcel:	41		
N grid83:	0		
E grid83:	0		
Lat dec de:	38.794853		
Lon dec de:	-76.069841		
Issue date:	2012 627	Special fl:	Not Reported
C1 seq:	2892	C1 recd:	2012 730
Completion:	2012 710		
Total dept:	18		
Num unsucc:	0		
Hydrofract:	N	Grouted:	Y
Grout type:	BC		
Grout top:	0		
Grout bott:	11		

Casing typ:	PL		
Casing dia:	1		
Casing dep:	13		
Casing hei:	-1	Screen typ:	PL
Top screen:	13		
Bottom scr:	18		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	2		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	6		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	N
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000544935

K54
NE
1/4 - 1/2 Mile
Higher

MD WELLS **MD7000000544934**

Object id:	544934	County let:	Not Reported
Permit:	TA110047	Mgs id:	Not Reported
B1 seq:	1175	B1 recd:	2012 6 8
City:	EASTON	State:	MD
Zip:	21601	Driller na:	KEVIN PUMPHREY
Driller id:	MGD 120		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	20		
Drill meth:	Not Reported	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	DIST 01 ACT 049011
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	Not Reported
Town direc:	Not Reported	Road name:	8940 GLEBE PARK DR
Road side:	W	Road dista:	250 FT
Tax map:	100	Block:	Not Reported
Parcel:	41		
N grid83:	0		
E grid83:	0		
Lat dec de:	38.79485		
Lon dec de:	-76.069832		
Issue date:	2012 627	Special fl:	Not Reported
C1 seq:	2891	C1 recd:	2012 730
Completion:	2012 710		
Total dept:	12		
Num unsucc:	0		
Hydrofract:	N	Grouted:	Y
Grout type:	BC		
Grout top:	0		
Grout bott:	5		

Casing typ:	PL		
Casing dia:	1		
Casing dep:	7		
Casing hei:	-1	Screen typ:	PL
Top screen:	7		
Bottom scr:	12		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	2		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	6		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	N
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000544934

L55
SW **FED USGS** **USGS40000431678**
1/4 - 1/2 Mile
Lower

Org. Identifier:	USGS-MD		
Formal name:	USGS Maryland Water Science Center		
Monloc Identifier:	USGS-384709076050301		
Monloc name:	TA Cd 57		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	02060005	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	38.7859491
Longitude:	-76.0838309	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	12
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Northern Atlantic Coastal Plain aquifer system		
Formation type:	Upper Patapsco Aquifer In the Patapsco Formation		
Aquifer type:	Confined single aquifer		
Construction date:	19930514	Welldepth:	1198
Welldepth units:	ft	Wellholedepth:	1198
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 98

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
2004-09-15	60.27		2004-02-18	62.02	
2004-01-21	62.17		2003-12-03	62.07	
2003-10-28	59.52		2003-09-29	59.04	
2003-08-27	64.67				
2003-08-06	66.67				
Note: A nearby site that taps the same aquifer had been pumped recently.					
2003-05-30	61.27				
2003-03-27	76.77				
Note: The site had been pumped recently.					
2003-03-03	33.96		2003-01-27	36.66	
2002-12-20	37.86		2002-11-26	100.57	
2002-10-29	47.18		2002-09-24	61.65	
2002-08-28	62.58		2002-07-29	61.73	
2002-06-24	60.43		2002-05-29	60.39	
2002-04-29	58.94		2002-03-25	54.80	
2002-02-25	53.20		2002-01-21	61.47	
2001-12-17	61.04		2001-11-30	60.87	
2001-10-22	54.45		2001-09-24	59.77	
2001-08-23	60.50		2001-07-26	60.08	
2001-06-25	59.28		2001-05-30	59.16	
2001-04-24	54.57		2001-02-21	54.19	
2001-01-18	39.13		2000-12-18	58.61	
2000-11-20	58.37		2000-10-25	59.76	
2000-09-15	59.73		2000-08-24	60.14	
2000-07-21	59.79		2000-06-27	58.79	
2000-05-17	59.40		2000-04-25	57.84	
2000-03-15	57.85		2000-02-16	56.19	
2000-01-10	43.06		1999-12-07	59.48	
1999-11-15	59.01		1999-10-26	57.07	
1999-09-29	55.14		1999-08-26	57.91	
1999-06-09	59.23		1999-05-13	58.58	
1999-04-08	56.69		1999-03-08	57.66	
1999-02-09	55.72		1999-01-07	57.92	
1998-12-01	55.92		1998-11-09	58.41	
1998-10-06	57.93		1998-09-10	58.02	
1998-08-04	57.90		1998-07-06	57.60	
1998-06-08	57.40		1998-05-07	55.27	
1998-04-01	57.18		1998-03-02	57.23	
1998-02-09	56.06		1998-01-05	57.40	
1997-12-08	57.01		1997-11-05	54.91	
1997-10-03	57.40		1997-09-04	57.25	
1997-08-03	57.37		1997-07-01	56.32	
1997-06-05	56.89		1997-05-06	56.96	
1997-04-02	56.92		1997-03-06	56.00	
1997-02-06	56.48		1997-01-03	49.10	
1996-11-04	56.69		1996-10-01	41.83	
1996-09-06	56.52		1996-08-02	55.85	
1996-07-02	55.61		1996-06-06	55.32	
1996-05-06	54.44		1996-04-02	51.32	
1996-03-04	30.42		1996-02-01	31.46	
1996-01-03	33.72		1995-12-04	51.09	
1995-11-01	53.06		1995-10-04	52.06	
1995-10-03	46.25		1993-05-14	50	

Map ID Direction Distance Elevation	Database	EDR ID Number
56 **ESE** **1/2 - 1 Mile** **Higher**	**MD WELLS**	**MD7000000542051**

Object id:	542051	County let:	Not Reported
Permit:	TA942460	Mgs id:	Not Reported
B1 seq:	8721	B1 recd:	20111215
City:	EASTON	State:	MD
Zip:	21601	Driller na:	MICHAEL T HALL
Driller id:	MWD 461		
Est gpm pr:	0		
Use for wa:	C		
Approx dep:	220		
Drill meth:	ROTARY	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	8
Nearest to:	EASTON	Town dista:	Not Reported
Town direc:	Not Reported	Road name:	609 N WASHINGTON ST
Road side:	W	Road dista:	121 FT
Tax map:	101	Block:	Not Reported
Parcel:	104		
N grid83:	0		
E grid83:	0		
Lat dec de:	38.786794		
Lon dec de:	-76.069191		
Issue date:	20111220	Special fl:	Y
C1 seq:	1321	C1 recd:	2012 2 8
Completion:	2012 112		
Total dept:	220		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	BC		
Grout top:	0		
Grout bott:	220		
Casing typ:	PL		
Casing dia:	75		
Casing dep:	220		
Casing hei:	-4	Screen typ:	Not Reported
Top screen:	0		
Bottom scr:	0		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	O	Pump insta:	N

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000542051

K57
NE
1/2 - 1 Mile
Higher

MD WELLS **MD7000000544933**

Object id:	544933	County let:	Not Reported
Permit:	TA110046	Mgs id:	Not Reported
B1 seq:	1174	B1 recd:	2012 6 8
City:	EASTON	State:	MD
Zip:	21601	Driller na:	KEVIN PUMPHREY
Driller id:	MGD 120		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	20		
Drill meth:	Not Reported	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	DIST 01 ACCT 049011
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	Not Reported
Town direc:	Not Reported	Road name:	8940 GLEBE PARK DR
Road side:	W	Road dista:	250 FT
Tax map:	100	Block:	Not Reported
Parcel:	41		
N grid83:	0		
E grid83:	0		
Lat dec de:	38.795285		
Lon dec de:	-76.069626		
Issue date:	2012 627	Special fl:	Not Reported
C1 seq:	2890	C1 recd:	2012 730
Completion:	2012 7 9		
Total dept:	18		
Num unsucc:	0		
Hydrofract:	Y	Grouted:	Y
Grout type:	BC		
Grout top:	0		
Grout bott:	11		
Casing typ:	PL		
Casing dia:	1		
Casing dep:	13		
Casing hei:	-1	Screen typ:	PL
Top screen:	13		
Bottom scr:	18		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	2		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	6		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	N

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000544933

K58
NE
1/2 - 1 Mile
Higher

MD WELLS **MD7000000544930**

Object id:	544930	County let:	Not Reported
Permit:	TA110043	Mgs id:	Not Reported
B1 seq:	1171	B1 recd:	2012 612
City:	EASTON	State:	MD
Zip:	21601	Driller na:	KEVIN PUMPHREY
Driller id:	MGD 120		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	20		
Drill meth:	Not Reported	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	DIST 01 ACCT 049011
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	Not Reported
Town direc:	Not Reported	Road name:	8940 GLEBE PARK DR
Road side:	W	Road dista:	325 FT
Tax map:	100	Block:	Not Reported
Parcel:	41		
N grid83:	0		
E grid83:	0		
Lat dec de:	38.795629		
Lon dec de:	-76.069565		
Issue date:	2012 627	Special fl:	Not Reported
C1 seq:	2887	C1 recd:	2012 730
Completion:	2012 7 9		
Total dept:	18		
Num unsucc:	0		
Hydrofract:	N	Grouted:	Y
Grout type:	BC		
Grout top:	0		
Grout bott:	11		
Casing typ:	PL		
Casing dia:	1		
Casing dep:	13		
Casing hei:	-1	Screen typ:	PL
Top screen:	13		
Bottom scr:	18		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	2		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	6		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	N

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000544930

K59
NE
1/2 - 1 Mile
Higher

MD WELLS **MD7000000544932**

Object id:	544932	County let:	Not Reported
Permit:	TA110045	Mgs id:	Not Reported
B1 seq:	1173	B1 recd:	2012 6 8
City:	EASTON	State:	MD
Zip:	21601	Driller na:	KEVIN PUMPHREY
Driller id:	MGD 120		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	30		
Drill meth:	Not Reported	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	DIST 01 ACCT 049011
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	Not Reported
Town direc:	Not Reported	Road name:	8940 GLEBE PARK DR
Road side:	W	Road dista:	200 FT
Tax map:	100	Block:	Not Reported
Parcel:	41		
N grid83:	0		
E grid83:	0		
Lat dec de:	38.795449		
Lon dec de:	-76.069198		
Issue date:	2012 627	Special fl:	Not Reported
C1 seq:	2889	C1 recd:	2012 730
Completion:	2012 7 9		
Total dept:	18		
Num unsucc:	0		
Hydrofract:	N	Grouted:	Y
Grout type:	BC		
Grout top:	0		
Grout bott:	11		
Casing typ:	PL		
Casing dia:	1		
Casing dep:	13		
Casing hei:	-1	Screen typ:	PL
Top screen:	13		
Bottom scr:	18		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	2		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	6		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	N

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000544932

K60
NE
1/2 - 1 Mile
Higher

MD WELLS **MD7000000544931**

Object id:	544931	County let:	Not Reported
Permit:	TA110044	Mgs id:	Not Reported
B1 seq:	1172	B1 recd:	2012 6 8
City:	EASTON	State:	MD
Zip:	21601	Driller na:	KEVIN PUMPHREY
Driller id:	MGD 120		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	20		
Drill meth:	Not Reported	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	DIST OF ACCT 049011
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	Not Reported
Town direc:	Not Reported	Road name:	8940 GLEBE PARK DR
Road side:	W	Road dista:	200 FT
Tax map:	100	Block:	Not Reported
Parcel:	41		
N grid83:	0		
E grid83:	0		
Lat dec de:	38.795449		
Lon dec de:	-76.069192		
Issue date:	2012 627	Special fl:	Not Reported
C1 seq:	2888	C1 recd:	2012 730
Completion:	2012 7 9		
Total dept:	12		
Num unsucc:	0		
Hydrofract:	N	Grouted:	Y
Grout type:	BC		
Grout top:	0		
Grout bott:	5		
Casing typ:	PL		
Casing dia:	1		
Casing dep:	7		
Casing hei:	-1	Screen typ:	PL
Top screen:	7		
Bottom scr:	12		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	2		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	N

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000544931

L61
SW
1/2 - 1 Mile
Lower

MD WELLS **MD7000000333484**

Object id:	333484	County let:	TA
Permit:	TA880042	Mgs id:	Not Reported
B1 seq:	3314	B1 recd:	19881229
City:	EASTON	State:	MD
Zip:	21601	Driller na:	NORMAN M. SHANNAHAN, III
Driller id:	MWD0024		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	200		
Drill meth:	ROTARY	Replacemen:	N
Wapid:	TA1988G024	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	16
Nearest to:	EASTON	Town dista:	0
Town direc:	T	Road name:	COMMERCE DRIVE
Road side:	N	Road dista:	200 FT
Tax map:	25	Block:	22
Parcel:	233		
N grid83:	124587		
E grid83:	479580		
Lat dec de:	38.785437		
Lon dec de:	-76.084042		
Issue date:	19881229	Special fl:	N
C1 seq:	6329	C1 recd:	1989 2 2
Completion:	1989 1 5		
Total dept:	131		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	4		
Grout bott:	50		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	111		
Casing hei:	+1	Screen typ:	PL
Top screen:	111		
Bottom scr:	131		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	20		
Level befo:	12		
Level duri:	34		
Test pump :	A	Pump insta:	N

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000333484

K62
NE
1/2 - 1 Mile
Higher

MD WELLS **MD7000000544936**

Object id:	544936	County let:	Not Reported
Permit:	TA110049	Mgs id:	Not Reported
B1 seq:	1177	B1 recd:	2012 6 8
City:	EASTON	State:	MD
Zip:	21601	Driller na:	KEVIN PUMPHREY
Driller id:	MGD 120		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	20		
Drill meth:	Not Reported	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	DIST 01 ACCT 049011
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	Not Reported
Town direc:	Not Reported	Road name:	8940 GLEBE PARK DR
Road side:	W	Road dista:	250 FT
Tax map:	100	Block:	Not Reported
Parcel:	41		
N grid83:	0		
E grid83:	0		
Lat dec de:	38.795655		
Lon dec de:	-76.069287		
Issue date:	2012 617	Special fl:	Y
C1 seq:	2893	C1 recd:	2012 730
Completion:	2012 7 9		
Total dept:	15		
Num unsucc:	0		
Hydrofract:	N	Grouted:	N
Grout type:	Not Reported		
Grout top:	0		
Grout bott:	0		
Casing typ:	PL		
Casing dia:	1		
Casing dep:	5		
Casing hei:	+1	Screen typ:	PL
Top screen:	5		
Bottom scr:	15		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	1		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	6		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	N

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000544936

63
NW
1/2 - 1 Mile
Lower

MD WELLS **MD7000000359970**

Object id:	359970	County let:	TA
Permit:	TA881146	Mgs id:	Not Reported
B1 seq:	1835	B1 recd:	1992 6 3
City:	EASTON	State:	MD
Zip:	21601	Driller na:	NORMAN M. SHANNAHAN, III
Driller id:	MWD 24		
Est gpm pr:	10		
Use for wa:	DW		
Approx dep:	590		
Drill meth:	ROTARY	Replacemen:	Y
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	.4
Town direc:	NW	Road name:	GOLDSBOROUGH NECK RD
Road side:	W	Road dista:	100 FT
Tax map:	25	Block:	15
Parcel:	73		
N grid83:	125806		
E grid83:	479580		
Lat dec de:	38.796419		
Lon dec de:	-76.083902		
Issue date:	1992 611	Special fl:	Not Reported
C1 seq:	1874	C1 recd:	1992 819
Completion:	1992 7 8		
Total dept:	578		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	4		
Grout bott:	220		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	202		
Casing hei:	+1	Screen typ:	PL
Top screen:	568		
Bottom scr:	578		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	2		
Flowing we:	Not Reported	Telescopin:	T
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	20		
Level befo:	50		
Level duri:	75		
Test pump :	A	Pump insta:	Y

Install pu:	S		
Capacity:	11		
Pump hp:	.5		
Column len:	107		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000359970

64
NE
1/2 - 1 Mile
Higher

MD WELLS **MD7000000295266**

Object id:	295266	County let:	TA
Permit:	TA811019	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	198510 7
City:	EASTON	State:	MD
Zip:	21606	Driller na:	KELLEY, EDWARD L.
Driller id:	MWD0143		
Est gpm pr:	100		
Use for wa:	I		
Approx dep:	600		
Drill meth:	ROTARY	Replacemen:	N
Wapid:	TA1985G015	Subdivisio:	INDUSTRIAL PARK
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	0 MI
Town direc:	Not Reported	Road name:	GLEBE PARK DR
Road side:	W	Road dista:	40 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	125806		
E grid83:	480799		
Lat dec de:	38.796308		
Lon dec de:	-76.069867		
Issue date:	1986 110	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	0
Completion:	0		
Total dept:	0		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Not Reported
Grout type:	Not Reported		
Grout top:	0		
Grout bott:	0		
Casing typ:	Not Reported		
Casing dia:	0		
Casing dep:	0		
Casing hei:	+00	Screen typ:	Not Reported
Top screen:	0		
Bottom scr:	0		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	Not Reported

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000295266

M65
West
1/2 - 1 Mile
Lower

MD WELLS **MD7000000293826**

Object id:	293826	County let:	TA
Permit:	TA731377	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	1979 6 2
City:	EASTON	State:	MD
Zip:	Not Reported	Driller na:	LARRIMORE, EARL
Driller id:	MWD0832		
Est gpm pr:	10		
Use for wa:	DW		
Approx dep:	40		
Drill meth:	JETTED	Replacemen:	Y
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	1 MI
Town direc:	W	Road name:	KENNEDY ST
Road side:	W	Road dista:	100 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	125197		
E grid83:	479275		
Lat dec de:	38.790955		
Lon dec de:	-76.08748		
Issue date:	1979 531	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	1979 615
Completion:	1979 6 1		
Total dept:	32		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	26		
Casing typ:	PL		
Casing dia:	6		
Casing dep:	32		
Casing hei:	+01	Screen typ:	Not Reported
Top screen:	0		
Bottom scr:	0		
Screen t 1:	PL		
Top scre 1:	26		
Bottom s 1:	32		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	2		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	9		
Level befo:	13		
Level duri:	14		
Test pump :	O	Pump insta:	Not Reported

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000293826

M66
West
1/2 - 1 Mile
Lower

MD WELLS **MD7000000527878**

Object id:	527878	County let:	Not Reported
Permit:	TA951120	Mgs id:	Not Reported
B1 seq:	4287	B1 recd:	20071218
City:	EASTON	State:	MD
Zip:	21601	Driller na:	W DAVID TULL
Driller id:	MSD 22		
Est gpm pr:	10		
Use for wa:	I		
Approx dep:	600		
Drill meth:	ROTARY	Replacemen:	N
Wapid:	TA2006G009	Subdivisio:	TALBBOT COMMERCE PAR
Section:	Not Reported	Lot:	17
Nearest to:	EASTON	Town dista:	.2
Town direc:	W	Road name:	28557 MARYS CT
Road side:	W	Road dista:	500 FT
Tax map:	25	Block:	16
Parcel:	46		
N grid83:	125197		
E grid83:	479275		
Lat dec de:	38.790955		
Lon dec de:	-76.08748		
Issue date:	20071219	Special fl:	Not Reported
C1 seq:	2746	C1 recd:	2008 916
Completion:	2008 729		
Total dept:	615		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	BC		
Grout top:	3		
Grout bott:	150		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	260		
Casing hei:	+1	Screen typ:	PL
Top screen:	588		
Bottom scr:	615		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	2		
Flowing we:	Not Reported	Telescopin:	T
Log type:	Not Reported		
Hrs pumped:	6		
Pumping ra:	30		
Level befo:	65		
Level duri:	100		
Test pump :	A	Pump insta:	Y

Install pu:	S		
Capacity:	25		
Pump hp:	1.5		
Column len:	110		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000527878

67
North
1/2 - 1 Mile
Lower

MD WELLS **MD7000000448851**

Object id:	448851	County let:	TA
Permit:	TA941817	Mgs id:	Not Reported
B1 seq:	1774	B1 recd:	2002 129
City:	ST MICHAELS	State:	MD
Zip:	21663	Driller na:	N SHANNAHAN
Driller id:	MSD 145		
Est gpm pr:	20		
Use for wa:	I		
Approx dep:	620		
Drill meth:	ROTARY	Replacemen:	N
Wapid:	TA2002G002	Subdivisio:	TALBOT COMMERCE PARK
Section:	Not Reported	Lot:	9
Nearest to:	EASTON	Town dista:	.6
Town direc:	NW	Road name:	MISTLETOW DRIVE
Road side:	W	Road dista:	80 FT
Tax map:	25	Block:	16
Parcel:	46		
N grid83:	126111		
E grid83:	480190		
Lat dec de:	38.79911		
Lon dec de:	-76.076849		
Issue date:	2002 125	Special fl:	Not Reported
C1 seq:	5664	C1 recd:	2002 520
Completion:	2002 2 1		
Total dept:	638		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	BC		
Grout top:	4		
Grout bott:	160		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	214		
Casing hei:	+1	Screen typ:	PL
Top screen:	618		
Bottom scr:	638		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	2		
Flowing we:	Not Reported	Telescopin:	T
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	20		
Level befo:	72		
Level duri:	86		
Test pump :	A	Pump insta:	Y

Install pu:	S		
Capacity:	25		
Pump hp:	2		
Column len:	126		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000448851

N68
SW
1/2 - 1 Mile
Lower

MD WELLS **MD7000000407345**

Object id:	407345	County let:	TA
Permit:	TA941915	Mgs id:	Not Reported
B1 seq:	5453	B1 recd:	2002 529
City:	EASTON	State:	MD
Zip:	21601	Driller na:	STEVEN UNDERWOOD
Driller id:	MWD514		
Est gpm pr:	500		
Use for wa:	DW		
Approx dep:	1050		
Drill meth:	ROTARY	Replacemen:	N
Wapid:	TA1971G205	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	16
Nearest to:	EASTON	Town dista:	0
Town direc:	T	Road name:	COMMERCE DR
Road side:	W	Road dista:	300 FT
Tax map:	101	Block:	Not Reported
Parcel:	4		
N grid83:	124589		
E grid83:	479479		
Lat dec de:	38.785462		
Lon dec de:	-76.085204		
Issue date:	2002 524	Special fl:	Not Reported
C1 seq:	4561	C1 recd:	2003 818
Completion:	2003 430		
Total dept:	1200		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	1130		
Casing typ:	ST		
Casing dia:	18		
Casing dep:	1130		
Casing hei:	+1	Screen typ:	ST
Top screen:	1137		
Bottom scr:	1157		
Screen t 1:	ST		
Top scre 1:	1175		
Bottom s 1:	1195		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	10		
Flowing we:	Not Reported	Telescopin:	T
Log type:	Not Reported		
Hrs pumped:	24		
Pumping ra:	902		
Level befo:	64		
Level duri:	175		
Test pump :	S	Pump insta:	Y

Install pu:	S		
Capacity:	750		
Pump hp:	75		
Column len:	294		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000407345

O69
SSE
1/2 - 1 Mile
Higher

MD WELLS **MD7000000294993**

Object id:	294993	County let:	TA
Permit:	TA810746	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	19841231
City:	FALLSTON	State:	MD
Zip:	21047	Driller na:	D'AMIANO, ANTHONY R.
Driller id:	MWD0346		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	25		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	0 MI
Town direc:	Not Reported	Road name:	AURORA
Road side:	W	Road dista:	50 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	124282		
E grid83:	480494		
Lat dec de:	38.782608		
Lon dec de:	-76.073554		
Issue date:	19841231	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	1985 110
Completion:	1985 1 2		
Total dept:	15		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	BC		
Grout top:	0		
Grout bott:	1		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	1		
Casing hei:	+01	Screen typ:	PL
Top screen:	1		
Bottom scr:	15		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	1		
Level befo:	1		
Level duri:	1		
Test pump :	O	Pump insta:	Not Reported

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000294993

O70
SSE
1/2 - 1 Mile
Higher

MD WELLS **MD7000000295012**

Object id:	295012	County let:	TA
Permit:	TA810765	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	1985 222
City:	EASTON	State:	MD
Zip:	21601	Driller na:	D'AMIANO, ANTHONY R.
Driller id:	MWD0346		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	20		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	0 MI
Town direc:	Not Reported	Road name:	N WASHINGTON AVE
Road side:	W	Road dista:	10 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	124282		
E grid83:	480494		
Lat dec de:	38.782608		
Lon dec de:	-76.073554		
Issue date:	1985 222	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	1985 313
Completion:	1985 223		
Total dept:	16		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	BC		
Grout top:	0		
Grout bott:	6		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	6		
Casing hei:	+01	Screen typ:	PL
Top screen:	6		
Bottom scr:	16		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	1		
Level befo:	1		
Level duri:	1		
Test pump :	O	Pump insta:	Not Reported

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000295012

O71
SSE
1/2 - 1 Mile
Higher

MD WELLS **MD7000000294992**

Object id:	294992	County let:	TA
Permit:	TA810745	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	19841231
City:	FALLSTON	State:	MD
Zip:	21047	Driller na:	D'AMIANO, ANTHONY R.
Driller id:	MWD0346		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	25		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	0 MI
Town direc:	Not Reported	Road name:	AURORA
Road side:	W	Road dista:	50 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	124282		
E grid83:	480494		
Lat dec de:	38.782608		
Lon dec de:	-76.073554		
Issue date:	19841231	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	0
Completion:	0		
Total dept:	0		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Not Reported
Grout type:	Not Reported		
Grout top:	0		
Grout bott:	0		
Casing typ:	Not Reported		
Casing dia:	0		
Casing dep:	0		
Casing hei:	+00	Screen typ:	Not Reported
Top screen:	0		
Bottom scr:	0		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	Not Reported

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	C	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000294992

O72
SSE
1/2 - 1 Mile
Higher

MD WELLS **MD7000000294990**

Object id:	294990	County let:	TA
Permit:	TA810743	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	19841231
City:	FALLSTON	State:	MD
Zip:	21047	Driller na:	D'AMIANO, ANTHONY R.
Driller id:	MWD0346		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	25		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	0 MI
Town direc:	Not Reported	Road name:	AURORA
Road side:	W	Road dista:	50 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	124282		
E grid83:	480494		
Lat dec de:	38.782608		
Lon dec de:	-76.073554		
Issue date:	19841231	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	1985 110
Completion:	1985 1 2		
Total dept:	15		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	BC		
Grout top:	0		
Grout bott:	5		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	5		
Casing hei:	+01	Screen typ:	PL
Top screen:	5		
Bottom scr:	15		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	1		
Level befo:	1		
Level duri:	1		
Test pump :	O	Pump insta:	Not Reported

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000294990

O73
SSE
1/2 - 1 Mile
Higher

MD WELLS **MD7000000294991**

Object id:	294991	County let:	TA
Permit:	TA810744	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	19841231
City:	FALLSTON	State:	MD
Zip:	21047	Driller na:	D'AMIANO, ANTHONY R.
Driller id:	MWD0346		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	25		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	0 MI
Town direc:	Not Reported	Road name:	AURORA
Road side:	Not Reported	Road dista:	50 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	124282		
E grid83:	480494		
Lat dec de:	38.782608		
Lon dec de:	-76.073554		
Issue date:	19841231	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	1985 110
Completion:	1985 1 2		
Total dept:	15		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	BC		
Grout top:	0		
Grout bott:	5		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	5		
Casing hei:	+01	Screen typ:	PL
Top screen:	5		
Bottom scr:	15		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	1		
Level befo:	1		
Level duri:	1		
Test pump :	O	Pump insta:	Not Reported

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000294991

O74
SSE
1/2 - 1 Mile
Higher

MD WELLS **MD7000000295022**

Object id:	295022	County let:	TA
Permit:	TA810775	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	1985 3 4
City:	FALLSTON	State:	MD
Zip:	21047	Driller na:	D'AMIANO, ANTHONY R.
Driller id:	MWD0346		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	25		
Drill meth:	AIR-ROT	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	0 MI
Town direc:	Not Reported	Road name:	AURORA
Road side:	W	Road dista:	75 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	124282		
E grid83:	480494		
Lat dec de:	38.782608		
Lon dec de:	-76.073554		
Issue date:	1985 3 5	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	1985 313
Completion:	1985 3 5		
Total dept:	15		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	BC		
Grout top:	0		
Grout bott:	5		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	5		
Casing hei:	+01	Screen typ:	PL
Top screen:	5		
Bottom scr:	15		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	1		
Level befo:	1		
Level duri:	1		
Test pump :	O	Pump insta:	Not Reported

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000295022

O75
SSE
1/2 - 1 Mile
Higher

MD WELLS **MD7000000295023**

Object id:	295023	County let:	TA
Permit:	TA810776	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	1985 3 4
City:	FALLSTON	State:	MD
Zip:	21047	Driller na:	D'AMIANO, ANTHONY R.
Driller id:	MWD0346		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	25		
Drill meth:	AIR-ROT	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	0 MI
Town direc:	Not Reported	Road name:	WASHINGTON
Road side:	E	Road dista:	20 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	124282		
E grid83:	480494		
Lat dec de:	38.782608		
Lon dec de:	-76.073554		
Issue date:	1985 3 5	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	1985 313
Completion:	1985 3 5		
Total dept:	15		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	BC		
Grout top:	0		
Grout bott:	5		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	5		
Casing hei:	+01	Screen typ:	PL
Top screen:	5		
Bottom scr:	15		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	1		
Level befo:	1		
Level duri:	1		
Test pump :	O	Pump insta:	Not Reported

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000295023

O76
SSE
1/2 - 1 Mile
Higher

MD WELLS **MD7000000295021**

Object id:	295021	County let:	TA
Permit:	TA810774	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	1985 3 4
City:	FALLSTON	State:	MD
Zip:	21047	Driller na:	D'AMIANO, ANTHONY R.
Driller id:	MWD0346		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	25		
Drill meth:	AIR-ROT	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	0 MI
Town direc:	Not Reported	Road name:	AURORA
Road side:	W	Road dista:	50 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	124282		
E grid83:	480494		
Lat dec de:	38.782608		
Lon dec de:	-76.073554		
Issue date:	1985 3 5	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	1985 313
Completion:	1985 3 5		
Total dept:	15		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	BC		
Grout top:	0		
Grout bott:	5		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	5		
Casing hei:	+01	Screen typ:	PL
Top screen:	5		
Bottom scr:	15		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	1		
Level befo:	1		
Level duri:	1		
Test pump :	O	Pump insta:	Not Reported

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000295021

O77
SSE
1/2 - 1 Mile
Higher

MD WELLS **MD7000000295013**

Object id:	295013	County let:	TA
Permit:	TA810766	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	1985 222
City:	EASTON	State:	MD
Zip:	21601	Driller na:	D'AMIANO, ANTHONY R.
Driller id:	MWD0346		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	20		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	0 MI
Town direc:	Not Reported	Road name:	N WASHINGTON AVE
Road side:	W	Road dista:	10 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	124282		
E grid83:	480494		
Lat dec de:	38.782608		
Lon dec de:	-76.073554		
Issue date:	1985 222	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	1985 313
Completion:	1985 223		
Total dept:	16		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	BC		
Grout top:	0		
Grout bott:	6		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	6		
Casing hei:	+01	Screen typ:	PL
Top screen:	6		
Bottom scr:	16		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	1		
Level befo:	1		
Level duri:	1		
Test pump :	O	Pump insta:	Not Reported

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000295013

O78
SSE
1/2 - 1 Mile
Higher

MD WELLS **MD7000000295020**

Object id:	295020	County let:	TA
Permit:	TA810773	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	1985 3 4
City:	FALLSTON	State:	MD
Zip:	21047	Driller na:	D'AMIANO, ANTHONY R.
Driller id:	MWD0346		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	25		
Drill meth:	AIR-ROT	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	0 MI
Town direc:	Not Reported	Road name:	AURORA
Road side:	W	Road dista:	25 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	124282		
E grid83:	480494		
Lat dec de:	38.782608		
Lon dec de:	-76.073554		
Issue date:	1985 3 5	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	1985 313
Completion:	1985 3 5		
Total dept:	15		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	BC		
Grout top:	0		
Grout bott:	5		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	5		
Casing hei:	+01	Screen typ:	PL
Top screen:	5		
Bottom scr:	15		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	1		
Level befo:	1		
Level duri:	1		
Test pump :	O	Pump insta:	Not Reported

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000295020

N79
SW
1/2 - 1 Mile
Lower

FED USGS **USGS40000431673**

Org. Identifier:	USGS-MD		
Formal name:	USGS Maryland Water Science Center		
Monloc Identifier:	USGS-384707076050801		
Monloc name:	TA Cd 66		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	02060005	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	38.7852778
Longitude:	-76.0855556	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	12
Vert measure units:	feet	Vertacc measure val:	20
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Upper Patapsco Aquifer In the Patapsco Formation		
Aquifer type:	Confined single aquifer		
Construction date:	20030430	Welldepth:	1200
Welldepth units:	ft	Wellholedepth:	1508
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

P80
ENE
1/2 - 1 Mile
Higher

MD WELLS **MD7000000415653**

Object id:	415653	County let:	TA
Permit:	TA940554	Mgs id:	Not Reported
B1 seq:	5026	B1 recd:	1998 424
City:	MILLVILLE	State:	NJ
Zip:	08332	Driller na:	STANLEY L COHEN
Driller id:	MGD 31		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	20		
Drill meth:	Not Reported	Replacemen:	N

Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	Not Reported
Town direc:	T	Road name:	AIR PARK DR
Road side:	W	Road dista:	30 FT
Tax map:	100	Block:	9
Parcel:	36		
N grid83:	125502		
E grid83:	481104		
Lat dec de:	38.793534		
Lon dec de:	-76.066395		
Issue date:	1998 320	Special fl:	Not Reported
C1 seq:	5355	C1 recd:	1998 5 6
Completion:	1998 320		
Total dept:	12		
Num unsucc:	0		
Hydrofract:	N	Grouted:	Y
Grout type:	BC		
Grout top:	0		
Grout bott:	12		
Casing typ:	Not Reported		
Casing dia:	0		
Casing dep:	0		
Casing hei:	Not Reported	Screen typ:	Not Reported
Top screen:	0		
Bottom scr:	0		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	1		
Level befo:	4		
Level duri:	4		
Test pump :	O	Pump insta:	N
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000415653

P81
ENE
1/2 - 1 Mile
Higher

MD WELLS **MD7000000413604**

Object id:	413604	County let:	TA
Permit:	TA940615	Mgs id:	Not Reported
B1 seq:	4418	B1 recd:	1998 529
City:	EASTON	State:	MD
Zip:	21601	Driller na:	JOHN D HYNES
Driller id:	MGD 27		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	17		
Drill meth:	BORED	Replacemen:	N

Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	Not Reported
Town direc:	T	Road name:	GLEBE PARK DRIVE
Road side:	E	Road dista:	20 FT
Tax map:	100	Block:	4
Parcel:	43		
N grid83:	125502		
E grid83:	481104		
Lat dec de:	38.793534		
Lon dec de:	-76.066395		
Issue date:	1998 6 1	Special fl:	Not Reported
C1 seq:	5264	C1 recd:	1999 1 8
Completion:	1998 6 2		
Total dept:	17		
Num unsucc:	0		
Hydrofract:	N	Grouted:	Y
Grout type:	BC		
Grout top:	0		
Grout bott:	1		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	2		
Casing hei:	-1	Screen typ:	PL
Top screen:	2		
Bottom scr:	17		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	N
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000413604

P82
ENE
1/2 - 1 Mile
Higher

MD WELLS **MD7000000413603**

Object id:	413603	County let:	TA
Permit:	TA940614	Mgs id:	Not Reported
B1 seq:	4419	B1 recd:	1998 529
City:	EASTON	State:	MD
Zip:	21601	Driller na:	JOHN D HYNES
Driller id:	MGD 27		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	17		
Drill meth:	BORED	Replacemen:	N

Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	Not Reported
Town direc:	T	Road name:	GLEBE PARK DRIVE
Road side:	E	Road dista:	100 FT
Tax map:	100	Block:	4
Parcel:	43		
N grid83:	125502		
E grid83:	481104		
Lat dec de:	38.793534		
Lon dec de:	-76.066395		
Issue date:	1998 6 1	Special fl:	Not Reported
C1 seq:	5263	C1 recd:	1999 1 8
Completion:	1998 6 2		
Total dept:	17		
Num unsucc:	0		
Hydrofract:	N	Grouted:	Y
Grout type:	BC		
Grout top:	0		
Grout bott:	1		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	2		
Casing hei:	-1	Screen typ:	PL
Top screen:	2		
Bottom scr:	17		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	N
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000413603

P83
ENE
1/2 - 1 Mile
Higher

MD WELLS **MD7000000449057**

Object id:	449057	County let:	TA
Permit:	TA941643	Mgs id:	Not Reported
B1 seq:	7852	B1 recd:	2001 713
City:	EASTON	State:	MD
Zip:	21601	Driller na:	STEPHEN SAUL
Driller id:	MGD 39		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	20		
Drill meth:	BORED	Replacemen:	N

Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	Not Reported
Town direc:	T	Road name:	N WASHINGTON ST
Road side:	E	Road dista:	120 FT
Tax map:	103	Block:	Not Reported
Parcel:	513		
N grid83:	125502		
E grid83:	481104		
Lat dec de:	38.793534		
Lon dec de:	-76.066395		
Issue date:	2001 712	Special fl:	Not Reported
C1 seq:	5164	C1 recd:	2001 920
Completion:	2001 9 5		
Total dept:	18		
Num unsucc:	0		
Hydrofract:	N	Grouted:	Y
Grout type:	BC		
Grout top:	0		
Grout bott:	3		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	5		
Casing hei:	Not Reported	Screen typ:	PL
Top screen:	5		
Bottom scr:	18		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	N
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000449057

P84
ENE
1/2 - 1 Mile
Higher

MD WELLS **MD7000000449056**

Object id:	449056	County let:	TA
Permit:	TA941642	Mgs id:	Not Reported
B1 seq:	7851	B1 recd:	2001 713
City:	EASTON	State:	MD
Zip:	21601	Driller na:	STEPHEN SAUL
Driller id:	MGD 39		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	20		
Drill meth:	BORED	Replacemen:	N

Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	Not Reported
Town direc:	T	Road name:	N WASHINGTON ST
Road side:	E	Road dista:	80 FT
Tax map:	103	Block:	Not Reported
Parcel:	513		
N grid83:	125502		
E grid83:	481104		
Lat dec de:	38.793534		
Lon dec de:	-76.066395		
Issue date:	2001 712	Special fl:	Not Reported
C1 seq:	5163	C1 recd:	2001 920
Completion:	2001 9 5		
Total dept:	18		
Num unsucc:	0		
Hydrofract:	N	Grouted:	Y
Grout type:	BC		
Grout top:	0		
Grout bott:	3		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	5		
Casing hei:	Not Reported	Screen typ:	PL
Top screen:	5		
Bottom scr:	18		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	N
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000449056

P85
ENE
1/2 - 1 Mile
Higher

MD WELLS **MD7000000449055**

Object id:	449055	County let:	TA
Permit:	TA941641	Mgs id:	Not Reported
B1 seq:	7850	B1 recd:	2001 713
City:	EASTON	State:	MD
Zip:	21601	Driller na:	STEPHEN SAUL
Driller id:	MGD 39		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	20		
Drill meth:	BORED	Replacemen:	N

Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	Not Reported
Town direc:	T	Road name:	N WASHINGTON ST
Road side:	E	Road dista:	40 FT
Tax map:	103	Block:	Not Reported
Parcel:	513		
N grid83:	125502		
E grid83:	481104		
Lat dec de:	38.793534		
Lon dec de:	-76.066395		
Issue date:	2001 712	Special fl:	Not Reported
C1 seq:	5162	C1 recd:	2001 920
Completion:	2001 9 5		
Total dept:	18		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	BC		
Grout top:	0		
Grout bott:	3		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	5		
Casing hei:	Not Reported	Screen typ:	PL
Top screen:	13		
Bottom scr:	18		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	N
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000449055

P86
ENE
1/2 - 1 Mile
Higher

FED USGS **USGS40000431719**

Org. Identifier:	USGS-MD		
Formal name:	USGS Maryland Water Science Center		
Monloc Identifier:	USGS-384740076040001		
Monloc name:	TA Ce 62		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	02060001	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	38.7945599
Longitude:	-76.0663303	Sourcemap scale:	24000

Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	40.00
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Basement		
Aquifer type:	Not Reported		
Construction date:	1965	Welldepth:	1200
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

P87
ENE
1/2 - 1 Mile
Higher

FED USGS **USGS40000431720**

Org. Identifier:	USGS-MD		
Formal name:	USGS Maryland Water Science Center		
Monloc Identifier:	USGS-384740076040002		
Monloc name:	TA Ce 67		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	02060005	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	38.7945599
Longitude:	-76.0663303	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	45.00
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Northern Atlantic Coastal Plain aquifer system		
Formation type:	Magothy Formation		
Aquifer type:	Not Reported		
Construction date:	19650920	Welldepth:	1092
Welldepth units:	ft	Wellholedepth:	1099
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1965-09-20	69.00	

Q88
ENE
1/2 - 1 Mile
Higher

MD WELLS **MD7000000291357**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Object id:	291357	County let:	TA
Permit:	TA660012	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	0
City:	EASTON	State:	MD
Zip:	Not Reported	Driller na:	SHANNAHAN ART WELL
Driller id:	MWD0000		
Est gpm pr:	0		
Use for wa:	DW		
Approx dep:	0		
Drill meth:	ROTARY	Replacemen:	Not Reported
Wapid:	TA1971G005	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	Not Reported
Town direc:	Not Reported	Road name:	Not Reported
Road side:	Not Reported	Road dista:	Not Reported
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	125690		
E grid83:	481099		
Lat dec de:	38.795232		
Lon dec de:	-76.06643		
Issue date:	0	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	0
Completion:	1965 920		
Total dept:	1092		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Not Reported
Grout type:	Not Reported		
Grout top:	0		
Grout bott:	0		
Casing typ:	Not Reported		
Casing dia:	16		
Casing dep:	550		
Casing hei:	P	Screen typ:	Not Reported
Top screen:	850		
Bottom scr:	877		
Screen t 1:	Not Reported		
Top scre 1:	1060		
Bottom s 1:	1092		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	T
Log type:	Not Reported		
Hrs pumped:	50		
Pumping ra:	500		
Level befo:	69		
Level duri:	271		
Test pump :	A	Pump insta:	N
Install pu:	Not Reported		
Capacity:	500		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000291357

Map ID Direction Distance Elevation	Database	EDR ID Number
Q89 **ENE** **1/2 - 1 Mile** **Higher**	**MD WELLS**	**MD7000000414648**

Object id:	414648	County let:	TA
Permit:	TA940276	Mgs id:	Not Reported
B1 seq:	3238	B1 recd:	1997 324
City:	EASTON	State:	MD
Zip:	21601	Driller na:	TIMOTHY PARKS
Driller id:	MWD 506		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	17		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	INDUSTRIAL PARK
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	Not Reported
Town direc:	T	Road name:	AIR PARK DR
Road side:	N	Road dista:	5 FT
Tax map:	100	Block:	4
Parcel:	43		
N grid83:	125806		
E grid83:	481104		
Lat dec de:	38.79628		
Lon dec de:	-76.066359		
Issue date:	1997 325	Special fl:	Not Reported
C1 seq:	6631	C1 recd:	1997 514
Completion:	1997 421		
Total dept:	17		
Num unsucc:	0		
Hydrofract:	N	Grouted:	Y
Grout type:	BC		
Grout top:	0		
Grout bott:	2		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	2		
Casing hei:	Not Reported	Screen typ:	PL
Top screen:	2		
Bottom scr:	17		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	N

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000414648

Q90
ENE
1/2 - 1 Mile
Higher

MD WELLS **MD7000000414649**

Object id:	414649	County let:	TA
Permit:	TA940277	Mgs id:	Not Reported
B1 seq:	3237	B1 recd:	1997 324
City:	EASTON	State:	MD
Zip:	21601	Driller na:	TIMOTHY PARKS
Driller id:	MWD 506		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	17		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	IDUSTRIAL PARK
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	Not Reported
Town direc:	T	Road name:	AIR PARK DR
Road side:	N	Road dista:	100 FT
Tax map:	100	Block:	4
Parcel:	43		
N grid83:	125806		
E grid83:	481104		
Lat dec de:	38.79628		
Lon dec de:	-76.066359		
Issue date:	1997 325	Special fl:	Not Reported
C1 seq:	6632	C1 recd:	1997 514
Completion:	1997 421		
Total dept:	17		
Num unsucc:	0		
Hydrofract:	N	Grouted:	Y
Grout type:	BC		
Grout top:	0		
Grout bott:	2		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	2		
Casing hei:	+1	Screen typ:	PL
Top screen:	2		
Bottom scr:	17		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	N

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000414649

Q91
ENE
1/2 - 1 Mile
Higher

MD WELLS **MD7000000414650**

Object id:	414650	County let:	TA
Permit:	TA940278	Mgs id:	Not Reported
B1 seq:	3235	B1 recd:	1997 324
City:	EASTON	State:	MD
Zip:	21601	Driller na:	TIMOTHY PARKS
Driller id:	MWD 506		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	17		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	INDUSTRIAL PARK
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	Not Reported
Town direc:	T	Road name:	AIR PARK DR
Road side:	N	Road dista:	150 FT
Tax map:	100	Block:	4
Parcel:	43		
N grid83:	125806		
E grid83:	481104		
Lat dec de:	38.79628		
Lon dec de:	-76.066359		
Issue date:	1997 325	Special fl:	Not Reported
C1 seq:	6630	C1 recd:	1997 514
Completion:	1997 421		
Total dept:	17		
Num unsucc:	0		
Hydrofract:	N	Grouted:	Y
Grout type:	BC		
Grout top:	0		
Grout bott:	2		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	2		
Casing hei:	+1	Screen typ:	PL
Top screen:	2		
Bottom scr:	17		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	N

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000414650

Q92
ENE
1/2 - 1 Mile
Higher

MD WELLS **MD7000000375633**

Object id:	375633	County let:	TA
Permit:	TA920430	Mgs id:	Not Reported
B1 seq:	9143	B1 recd:	199511 1
City:	EASTON	State:	MD
Zip:	21601	Driller na:	TIMOTHY J PARKS
Driller id:	MWD 506		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	28		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	INDUSTRIAL PARK
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	Not Reported
Town direc:	T	Road name:	AIR PARK DR
Road side:	N	Road dista:	100 FT
Tax map:	100	Block:	4
Parcel:	43		
N grid83:	125806		
E grid83:	481104		
Lat dec de:	38.79628		
Lon dec de:	-76.066359		
Issue date:	19951030	Special fl:	Not Reported
C1 seq:	6430	C1 recd:	199511 6
Completion:	19951030		
Total dept:	22		
Num unsucc:	0		
Hydrofract:	N	Grouted:	Y
Grout type:	BC		
Grout top:	0		
Grout bott:	3		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	6		
Casing hei:	Not Reported	Screen typ:	PL
Top screen:	6		
Bottom scr:	22		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	1		
Level befo:	9		
Level duri:	22		
Test pump :	S	Pump insta:	N

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000375633

Q93
ENE
1/2 - 1 Mile
Higher

MD WELLS **MD7000000375634**

Object id:	375634	County let:	TA
Permit:	TA920428	Mgs id:	Not Reported
B1 seq:	9141	B1 recd:	199511 1
City:	EASTON	State:	MD
Zip:	21601	Driller na:	TIMOTHY PARKS
Driller id:	MWD 506		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	28		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	INDUSTRIAL PARK
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	Not Reported
Town direc:	T	Road name:	AIR PARK DR
Road side:	N	Road dista:	100 FT
Tax map:	100	Block:	4
Parcel:	4B		
N grid83:	125806		
E grid83:	481104		
Lat dec de:	38.79628		
Lon dec de:	-76.066359		
Issue date:	19951030	Special fl:	Not Reported
C1 seq:	6432	C1 recd:	199511 6
Completion:	19951030		
Total dept:	21		
Num unsucc:	0		
Hydrofract:	N	Grouted:	Y
Grout type:	BC		
Grout top:	0		
Grout bott:	3		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	5		
Casing hei:	+1	Screen typ:	PL
Top screen:	5		
Bottom scr:	21		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	1		
Level befo:	4		
Level duri:	10		
Test pump :	S	Pump insta:	N

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000375634

Q94
ENE
1/2 - 1 Mile
Higher

MD WELLS **MD7000000375635**

Object id:	375635	County let:	TA
Permit:	TA920429	Mgs id:	Not Reported
B1 seq:	9140	B1 recd:	199511 1
City:	EASTON	State:	MD
Zip:	21601	Driller na:	TIMOTHY J PARKS
Driller id:	MWD 506		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	28		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	INDUSTRIAL PARK
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	Not Reported
Town direc:	T	Road name:	AIRPARK DR
Road side:	N	Road dista:	100 FT
Tax map:	100	Block:	4
Parcel:	43		
N grid83:	125806		
E grid83:	481104		
Lat dec de:	38.79628		
Lon dec de:	-76.066359		
Issue date:	19951030	Special fl:	Not Reported
C1 seq:	6431	C1 recd:	199511 6
Completion:	19951030		
Total dept:	22		
Num unsucc:	0		
Hydrofract:	N	Grouted:	Y
Grout type:	BC		
Grout top:	0		
Grout bott:	3		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	6		
Casing hei:	+1	Screen typ:	PL
Top screen:	6		
Bottom scr:	22		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	1		
Level befo:	9		
Level duri:	22		
Test pump :	S	Pump insta:	N

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000375635

Q95
ENE
1/2 - 1 Mile
Higher

MD WELLS **MD7000000448226**

Object id:	448226	County let:	TA
Permit:	TA942190	Mgs id:	Not Reported
B1 seq:	3976	B1 recd:	2003 4 1
City:	EASTON	State:	MD
Zip:	21601	Driller na:	DAN W FINCHAM
Driller id:	MGD 9		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	20		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	Not Reported
Town direc:	N	Road name:	GLEBE PARK DRIVE
Road side:	E	Road dista:	20 FT
Tax map:	100	Block:	4
Parcel:	43		
N grid83:	125806		
E grid83:	481104		
Lat dec de:	38.79628		
Lon dec de:	-76.066359		
Issue date:	0	Special fl:	Not Reported
C1 seq:	3425	C1 recd:	2003 4 8
Completion:	2003 4 3		
Total dept:	20		
Num unsucc:	0		
Hydrofract:	N	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	1		
Casing typ:	PL		
Casing dia:	2		
Casing dep:	3		
Casing hei:	Not Reported	Screen typ:	PL
Top screen:	3		
Bottom scr:	20		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	2		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	N

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000448226

Q96
ENE
1/2 - 1 Mile
Higher

MD WELLS **MD7000000448227**

Object id:	448227	County let:	TA
Permit:	TA942191	Mgs id:	Not Reported
B1 seq:	3974	B1 recd:	2003 4 1
City:	EASTON	State:	MD
Zip:	21601	Driller na:	DAN W FINCHAM
Driller id:	MGD 9		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	20		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	Not Reported
Town direc:	N	Road name:	AIR PARK DRIVE
Road side:	N	Road dista:	20 FT
Tax map:	100	Block:	4
Parcel:	43		
N grid83:	125806		
E grid83:	481104		
Lat dec de:	38.79628		
Lon dec de:	-76.066359		
Issue date:	2003 328	Special fl:	Not Reported
C1 seq:	3426	C1 recd:	2003 4 8
Completion:	2003 4 3		
Total dept:	20		
Num unsucc:	0		
Hydrofract:	N	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	1		
Casing typ:	PL		
Casing dia:	2		
Casing dep:	3		
Casing hei:	Not Reported	Screen typ:	PL
Top screen:	3		
Bottom scr:	20		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	2		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	N

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000448227

Q97
ENE
1/2 - 1 Mile
Higher

MD WELLS **MD7000000448228**

Object id:	448228	County let:	TA
Permit:	TA942192	Mgs id:	Not Reported
B1 seq:	3972	B1 recd:	2003 4 1
City:	EASTON	State:	MD
Zip:	21601	Driller na:	DAN W FINCHAM
Driller id:	MGD 9		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	20		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	Not Reported
Town direc:	N	Road name:	AIR PARK DRIVE
Road side:	N	Road dista:	20 FT
Tax map:	100	Block:	4
Parcel:	43		
N grid83:	125806		
E grid83:	481104		
Lat dec de:	38.79628		
Lon dec de:	-76.066359		
Issue date:	2003 328	Special fl:	Not Reported
C1 seq:	3427	C1 recd:	2003 4 8
Completion:	2003 4 2		
Total dept:	20		
Num unsucc:	0		
Hydrofract:	N	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	1		
Casing typ:	PL		
Casing dia:	2		
Casing dep:	3		
Casing hei:	Not Reported	Screen typ:	PL
Top screen:	3		
Bottom scr:	20		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	2		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	N

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000448228

Q98
ENE
1/2 - 1 Mile
Higher

MD WELLS **MD7000000447824**

Object id:	447824	County let:	TA
Permit:	TA941062	Mgs id:	Not Reported
B1 seq:	9545	B1 recd:	1999 716
City:	EASTON	State:	MD
Zip:	Not Reported	Driller na:	TUCKER MOORSHEAD
Driller id:	MWD 339		
Est gpm pr:	1		
Use for wa:	T		
Approx dep:	25		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	Not Reported
Town direc:	T	Road name:	WASHINGTON ST
Road side:	W	Road dista:	300 FT
Tax map:	101	Block:	100
Parcel:	Not Reported		
N grid83:	125806		
E grid83:	481104		
Lat dec de:	38.79628		
Lon dec de:	-76.066359		
Issue date:	1999 719	Special fl:	Not Reported
C1 seq:	8001	C1 recd:	1999 8 6
Completion:	1999 721		
Total dept:	25		
Num unsucc:	0		
Hydrofract:	N	Grouted:	Y
Grout type:	BC		
Grout top:	1		
Grout bott:	3		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	5		
Casing hei:	Not Reported	Screen typ:	PL
Top screen:	5		
Bottom scr:	15		
Screen t 1:	PL		
Top scre 1:	15		
Bottom s 1:	25		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	1		
Level befo:	1		
Level duri:	1		
Test pump :	O	Pump insta:	N

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000447824

Q99
ENE
1/2 - 1 Mile
Higher

MD WELLS **MD7000000448224**

Object id:	448224	County let:	TA
Permit:	TA942188	Mgs id:	Not Reported
B1 seq:	3978	B1 recd:	2003 4 1
City:	EASTON	State:	MD
Zip:	21601	Driller na:	DAN W FINCHAM
Driller id:	MGD 9		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	20		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	Not Reported
Town direc:	N	Road name:	GLEBE PARK DRIVE
Road side:	E	Road dista:	120 FT
Tax map:	100	Block:	4
Parcel:	43		
N grid83:	125806		
E grid83:	481104		
Lat dec de:	38.79628		
Lon dec de:	-76.066359		
Issue date:	2003 328	Special fl:	Not Reported
C1 seq:	3423	C1 recd:	2003 4 8
Completion:	2003 4 2		
Total dept:	20		
Num unsucc:	0		
Hydrofract:	N	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	1		
Casing typ:	PL		
Casing dia:	2		
Casing dep:	3		
Casing hei:	Not Reported	Screen typ:	PL
Top screen:	3		
Bottom scr:	20		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	2		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	N

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000448224

Q100
ENE
1/2 - 1 Mile
Higher

MD WELLS **MD7000000448225**

Object id:	448225	County let:	TA
Permit:	TA942189	Mgs id:	Not Reported
B1 seq:	3977	B1 recd:	2003 4 1
City:	EASTON	State:	MD
Zip:	21601	Driller na:	DAN W FINCHAM
Driller id:	MGD 9		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	20		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	Not Reported
Town direc:	N	Road name:	GLEBE PARK DRIVE
Road side:	E	Road dista:	120 FT
Tax map:	100	Block:	4
Parcel:	43		
N grid83:	125806		
E grid83:	481104		
Lat dec de:	38.79628		
Lon dec de:	-76.066359		
Issue date:	2003 328	Special fl:	Not Reported
C1 seq:	3424	C1 recd:	2003 4 8
Completion:	2003 4 2		
Total dept:	20		
Num unsucc:	0		
Hydrofract:	N	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	1		
Casing typ:	PL		
Casing dia:	2		
Casing dep:	3		
Casing hei:	Not Reported	Screen typ:	PL
Top screen:	3		
Bottom scr:	20		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	2		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	N

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000448225

Q101
ENE
1/2 - 1 Mile
Higher

MD WELLS **MD7000000332829**

Object id:	332829	County let:	TA
Permit:	TA812190	Mgs id:	Not Reported
B1 seq:	8715	B1 recd:	19881026
City:	EASTON	State:	MD
Zip:	21601	Driller na:	JOHN T. SHANNAHAN
Driller id:	MWD0022		
Est gpm pr:	10		
Use for wa:	DW		
Approx dep:	640		
Drill meth:	ROTARY	Replacemen:	Y
Wapid:	TA1988G010	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	.2
Town direc:	N	Road name:	OLD CENTREVILLE RD
Road side:	E	Road dista:	55 FT
Tax map:	25	Block:	17
Parcel:	71		
N grid83:	125749		
E grid83:	481197		
Lat dec de:	38.795754		
Lon dec de:	-76.065295		
Issue date:	19881027	Special fl:	N
C1 seq:	5754	C1 recd:	19881129
Completion:	198811 8		
Total dept:	660		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	4		
Grout bott:	40		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	284		
Casing hei:	+1	Screen typ:	PL
Top screen:	640		
Bottom scr:	660		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	2		
Flowing we:	Not Reported	Telescopin:	T
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	20		
Level befo:	112		
Level duri:	130		
Test pump :	A	Pump insta:	Y

Install pu:	S		
Capacity:	11		
Pump hp:	.7		
Column len:	168		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000332829

R102
South
1/2 - 1 Mile
Lower

MD WELLS **MD7000000295416**

Object id:	295416	County let:	TA
Permit:	TA811169	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	1986 5 8
City:	ST MICHAELS	State:	MD
Zip:	21663	Driller na:	SHANNAHAN, N. M.,III
Driller id:	MWD0024		
Est gpm pr:	10		
Use for wa:	DW		
Approx dep:	410		
Drill meth:	ROTARY	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	MT MISERY
Section:	Not Reported	Lot:	1
Nearest to:	ST MICHAELS	Town dista:	1.7 MI
Town direc:	W	Road name:	MT MISERY RD
Road side:	W	Road dista:	500 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	123978		
E grid83:	480190		
Lat dec de:	38.77989		
Lon dec de:	-76.077097		
Issue date:	1986 625	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	19861112
Completion:	1986 919		
Total dept:	404		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	4		
Grout bott:	30		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	169		
Casing hei:	+01	Screen typ:	PL
Top screen:	394		
Bottom scr:	404		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	2		
Flowing we:	Not Reported	Telescopin:	T
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	25		
Level befo:	27		
Level duri:	71		
Test pump :	A	Pump insta:	Not Reported

Install pu:	S		
Capacity:	12		
Pump hp:	.5		
Column len:	90		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000295416

103
SSW
1/2 - 1 Mile
Lower

MD WELLS **MD7000000448876**

Object id:	448876	County let:	TA
Permit:	TA941200	Mgs id:	Not Reported
B1 seq:	0645	B1 recd:	19991220
City:	EASTON	State:	MD
Zip:	21601	Driller na:	N SHANNAHAN
Driller id:	MSD 145		
Est gpm pr:	10		
Use for wa:	I		
Approx dep:	130		
Drill meth:	ROTARY	Replacemen:	Not Reported
Wapid:	TA1988G024	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	Not Reported
Town direc:	T	Road name:	COMMERCE DR
Road side:	N	Road dista:	400 FT
Tax map:	25	Block:	22
Parcel:	233		
N grid83:	123978		
E grid83:	479885		
Lat dec de:	38.779918		
Lon dec de:	-76.080605		
Issue date:	199912 6	Special fl:	Not Reported
C1 seq:	8233	C1 recd:	2000 214
Completion:	199912 9		
Total dept:	131		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	BC		
Grout top:	4		
Grout bott:	100		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	111		
Casing hei:	+1	Screen typ:	PL
Top screen:	111		
Bottom scr:	131		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	6		
Level befo:	21		
Level duri:	57		
Test pump :	A	Pump insta:	Y

Install pu:	S		
Capacity:	10		
Pump hp:	.75		
Column len:	100		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000448876

S104
SSE
1/2 - 1 Mile
Lower

MD WELLS **MD7000000359927**

Object id:	359927	County let:	TA
Permit:	TA881187	Mgs id:	Not Reported
B1 seq:	1902	B1 recd:	1992 731
City:	EASTON	State:	MD
Zip:	21601	Driller na:	DANIEL ROM
Driller id:	MWD 409		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	23		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	Not Reported
Town direc:	T	Road name:	GLEBE ROAD
Road side:	E	Road dista:	10 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	123978		
E grid83:	480494		
Lat dec de:	38.779862		
Lon dec de:	-76.073589		
Issue date:	1992 8 3	Special fl:	Not Reported
C1 seq:	7027	C1 recd:	1992 928
Completion:	1987 821		
Total dept:	25		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	2		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	5		
Casing hei:	-1	Screen typ:	PL
Top screen:	5		
Bottom scr:	25		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	1		
Level befo:	1		
Level duri:	1		
Test pump :	O	Pump insta:	N

Install pu:	Not Reported		
Capacity:	1		
Pump hp:	1		
Column len:	1		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000359927

S105
SSE
1/2 - 1 Mile
Lower

MD WELLS **MD7000000295014**

Object id:	295014	County let:	TA
Permit:	TA810767	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	1985 222
City:	EASTON	State:	MD
Zip:	21601	Driller na:	D'AMIANO, ANTHONY R.
Driller id:	MWD0346		
Est gpm pr:	15		
Use for wa:	I		
Approx dep:	26		
Drill meth:	BORED	Replacemen:	N
Wapid:	TA1985G008	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	0 MI
Town direc:	Not Reported	Road name:	WASHINGTON AVE
Road side:	E	Road dista:	25 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	123978		
E grid83:	480494		
Lat dec de:	38.779862		
Lon dec de:	-76.073589		
Issue date:	1985 222	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	1985 418
Completion:	1985 223		
Total dept:	26		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	BC		
Grout top:	0		
Grout bott:	6		
Casing typ:	ST		
Casing dia:	26		
Casing dep:	6		
Casing hei:	+01	Screen typ:	ST
Top screen:	6		
Bottom scr:	26		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	26		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	1		
Level befo:	1		
Level duri:	1		
Test pump :	O	Pump insta:	Not Reported

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000295014

S106
SSE
1/2 - 1 Mile
Lower

MD WELLS **MD7000000359928**

Object id:	359928	County let:	TA
Permit:	TA881188	Mgs id:	Not Reported
B1 seq:	1903	B1 recd:	1992 731
City:	EASTON	State:	MD
Zip:	21601	Driller na:	DANIEL ROM
Driller id:	MWD 409		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	23		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	Not Reported
Town direc:	T	Road name:	WASHINGTON STREET
Road side:	W	Road dista:	15 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	123978		
E grid83:	480494		
Lat dec de:	38.779862		
Lon dec de:	-76.073589		
Issue date:	1992 8 3	Special fl:	Not Reported
C1 seq:	7028	C1 recd:	1992 928
Completion:	1992 821		
Total dept:	25		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	2		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	5		
Casing hei:	-1	Screen typ:	PL
Top screen:	5		
Bottom scr:	25		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	1		
Level befo:	1		
Level duri:	1		
Test pump :	O	Pump insta:	N

Install pu:	Not Reported		
Capacity:	1		
Pump hp:	1		
Column len:	1		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000359928

S107
SSE
1/2 - 1 Mile
Lower

MD WELLS **MD7000000489844**

Object id:	489844	County let:	TA
Permit:	TA881186	Mgs id:	Not Reported
B1 seq:	1901	B1 recd:	1992 731
City:	EASTON	State:	MD
Zip:	21601	Driller na:	DANIEL ROM
Driller id:	MWD 409		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	23		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	0
Town direc:	T	Road name:	GLEBE ROAD
Road side:	E	Road dista:	5 FT
Tax map:	103	Block:	7
Parcel:	495		
N grid83:	123978		
E grid83:	480494		
Lat dec de:	38.779862		
Lon dec de:	-76.073589		
Issue date:	1992 8 3	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	0
Completion:	0		
Total dept:	0		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Not Reported
Grout type:	Not Reported		
Grout top:	0		
Grout bott:	0		
Casing typ:	Not Reported		
Casing dia:	0		
Casing dep:	0		
Casing hei:	Not Reported	Screen typ:	Not Reported
Top screen:	0		
Bottom scr:	0		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	Not Reported

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	C	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000489844

S108
SSE
1/2 - 1 Mile
Lower

MD WELLS **MD7000000360954**

Object id:	360954	County let:	TA
Permit:	TA881459	Mgs id:	Not Reported
B1 seq:	5814	B1 recd:	1993 824
City:	EASTON	State:	MD
Zip:	21601	Driller na:	THOMAS F SULLIVAN
Driller id:	MWD 449		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	10		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	Not Reported
Town direc:	T	Road name:	GLEBE RD
Road side:	W	Road dista:	15 FT
Tax map:	104	Block:	4
Parcel:	568		
N grid83:	123978		
E grid83:	480494		
Lat dec de:	38.779862		
Lon dec de:	-76.073589		
Issue date:	1993 9 1	Special fl:	Not Reported
C1 seq:	3293	C1 recd:	199310 7
Completion:	1993 914		
Total dept:	10		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	2		
Casing typ:	PL		
Casing dia:	2		
Casing dep:	5		
Casing hei:	Not Reported	Screen typ:	PL
Top screen:	5		
Bottom scr:	10		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	2		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	1		
Level befo:	8		
Level duri:	1		
Test pump :	O	Pump insta:	N

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000360954

109
WSW
1/2 - 1 Mile
Lower

MD WELLS **MD7000000294494**

Object id:	294494	County let:	TA
Permit:	TA810247	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	198211 5
City:	TRAPPE	State:	MD
Zip:	21673	Driller na:	WOOD, WM K.
Driller id:	MWD0070		
Est gpm pr:	10		
Use for wa:	DW		
Approx dep:	300		
Drill meth:	ROTARY	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	2 MI
Town direc:	NW	Road name:	GLEBE NECK RD
Road side:	W	Road dista:	150 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	124892		
E grid83:	478970		
Lat dec de:	38.788237		
Lon dec de:	-76.091024		
Issue date:	19821112	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	19821130
Completion:	19821123		
Total dept:	362		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	BC		
Grout top:	3		
Grout bott:	60		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	140		
Casing hei:	+01	Screen typ:	PL
Top screen:	337		
Bottom scr:	362		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	2		
Flowing we:	Not Reported	Telescopin:	T
Log type:	Not Reported		
Hrs pumped:	5		
Pumping ra:	15		
Level befo:	29		
Level duri:	100		
Test pump :	A	Pump insta:	Not Reported

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000294494

110
WNW
1/2 - 1 Mile
Lower

MD WELLS **MD7000000361013**

Object id:	361013	County let:	TA
Permit:	TA881397	Mgs id:	Not Reported
B1 seq:	4470	B1 recd:	1993 621
City:	EASTON	State:	MD
Zip:	21061	Driller na:	JOHN T. SHANNAHAN
Driller id:	MWD 22		
Est gpm pr:	15		
Use for wa:	DW		
Approx dep:	580		
Drill meth:	ROTARY	Replacemen:	Y
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	.8
Town direc:	NW	Road name:	GOLDSBOROUGH NECK RD
Road side:	W	Road dista:	300 FT
Tax map:	25	Block:	15
Parcel:	45		
N grid83:	125502		
E grid83:	478970		
Lat dec de:	38.793729		
Lon dec de:	-76.090954		
Issue date:	1993 622	Special fl:	Not Reported
C1 seq:	3227	C1 recd:	1993 716
Completion:	1993 622		
Total dept:	583		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	4		
Grout bott:	220		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	205		
Casing hei:	+1	Screen typ:	PL
Top screen:	573		
Bottom scr:	583		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	2		
Flowing we:	Not Reported	Telescopin:	T
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	20		
Level befo:	59		
Level duri:	86		
Test pump :	A	Pump insta:	Y

Install pu:	S		
Capacity:	9		
Pump hp:	.5		
Column len:	110		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000361013

T111
ENE
1/2 - 1 Mile
Higher

MD WELLS **MD7000000449019**

Object id:	449019	County let:	TA
Permit:	TA941679	Mgs id:	Not Reported
B1 seq:	7863	B1 recd:	2001 822
City:	EASTON	State:	MD
Zip:	21601	Driller na:	STEPHEN SAUL
Driller id:	MGD 39		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	20		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	Not Reported
Town direc:	T	Road name:	N WASHINGTON ST
Road side:	E	Road dista:	110 FT
Tax map:	103	Block:	Not Reported
Parcel:	513		
N grid83:	125502		
E grid83:	481409		
Lat dec de:	38.793506		
Lon dec de:	-76.062886		
Issue date:	2001 821	Special fl:	Not Reported
C1 seq:	5197	C1 recd:	2001 920
Completion:	2001 9 5		
Total dept:	15		
Num unsucc:	0		
Hydrofract:	N	Grouted:	Y
Grout type:	BC		
Grout top:	0		
Grout bott:	2		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	3		
Casing hei:	Not Reported	Screen typ:	PL
Top screen:	3		
Bottom scr:	15		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	N

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000449019

T112
ENE
1/2 - 1 Mile
Higher

MD WELLS **MD7000000413601**

Object id:	413601	County let:	TA
Permit:	TA940611	Mgs id:	Not Reported
B1 seq:	1120	B1 recd:	1998 518
City:	EASTON	State:	MD
Zip:	21601	Driller na:	J PETER DOW
Driller id:	MGD 85		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	20		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	Not Reported
Town direc:	N	Road name:	AURORA ST
Road side:	Not Reported	Road dista:	15 FT
Tax map:	103	Block:	2
Parcel:	513		
N grid83:	125502		
E grid83:	481409		
Lat dec de:	38.793506		
Lon dec de:	-76.062886		
Issue date:	1998 526	Special fl:	Not Reported
C1 seq:	5260	C1 recd:	1998 828
Completion:	1998 729		
Total dept:	18		
Num unsucc:	0		
Hydrofract:	N	Grouted:	Y
Grout type:	BC		
Grout top:	0		
Grout bott:	1		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	3		
Casing hei:	+3	Screen typ:	PL
Top screen:	4		
Bottom scr:	18		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	1		
Level befo:	1		
Level duri:	1		
Test pump :	Not Reported	Pump insta:	N

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000413601

T113
ENE
1/2 - 1 Mile
Higher

MD WELLS **MD7000000449020**

Object id:	449020	County let:	TA
Permit:	TA941680	Mgs id:	Not Reported
B1 seq:	7856	B1 recd:	2001 822
City:	EASTON	State:	MD
Zip:	21601	Driller na:	STEPHEN SAUL
Driller id:	MGD 39		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	20		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	Not Reported
Town direc:	T	Road name:	N WASHINGTON ST
Road side:	E	Road dista:	80 FT
Tax map:	103	Block:	Not Reported
Parcel:	513		
N grid83:	125502		
E grid83:	481409		
Lat dec de:	38.793506		
Lon dec de:	-76.062886		
Issue date:	2001 821	Special fl:	Not Reported
C1 seq:	5198	C1 recd:	2001 920
Completion:	2001 9 5		
Total dept:	18		
Num unsucc:	0		
Hydrofract:	N	Grouted:	Y
Grout type:	BC		
Grout top:	0		
Grout bott:	3		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	5		
Casing hei:	Not Reported	Screen typ:	PL
Top screen:	5		
Bottom scr:	18		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	N

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000449020

T114
ENE
1/2 - 1 Mile
Higher

MD WELLS **MD7000000449034**

Object id:	449034	County let:	TA
Permit:	TA941678	Mgs id:	Not Reported
B1 seq:	7864	B1 recd:	2001 822
City:	EASTON	State:	MD
Zip:	21601	Driller na:	STEPHEN SAUL
Driller id:	MGD 39		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	20		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	Not Reported
Town direc:	T	Road name:	N WASHINGTON ST
Road side:	E	Road dista:	150 FT
Tax map:	103	Block:	Not Reported
Parcel:	513		
N grid83:	125502		
E grid83:	481409		
Lat dec de:	38.793506		
Lon dec de:	-76.062886		
Issue date:	2001 821	Special fl:	Not Reported
C1 seq:	5196	C1 recd:	2001 920
Completion:	2001 9 5		
Total dept:	18		
Num unsucc:	0		
Hydrofract:	N	Grouted:	Y
Grout type:	BC		
Grout top:	0		
Grout bott:	3		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	5		
Casing hei:	Not Reported	Screen typ:	PL
Top screen:	5		
Bottom scr:	18		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	N

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000449034

T115
ENE
1/2 - 1 Mile
Higher

MD WELLS **MD7000000449021**

Object id:	449021	County let:	TA
Permit:	TA941681	Mgs id:	Not Reported
B1 seq:	7849	B1 recd:	2001 822
City:	EASTON	State:	MD
Zip:	21601	Driller na:	STEPHEN SAUL
Driller id:	MGD 39		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	20		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	Not Reported
Town direc:	T	Road name:	N WASHINGTON ST
Road side:	E	Road dista:	40 FT
Tax map:	103	Block:	Not Reported
Parcel:	513		
N grid83:	125502		
E grid83:	481409		
Lat dec de:	38.793506		
Lon dec de:	-76.062886		
Issue date:	2001 821	Special fl:	Not Reported
C1 seq:	5199	C1 recd:	2001 920
Completion:	2001 9 5		
Total dept:	15		
Num unsucc:	0		
Hydrofract:	N	Grouted:	Y
Grout type:	BC		
Grout top:	0		
Grout bott:	2		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	3		
Casing hei:	Not Reported	Screen typ:	PL
Top screen:	3		
Bottom scr:	15		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	N

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000449021

U116
NNW
1/2 - 1 Mile
Lower

MD WELLS **MD7000000213690**

Object id:	213690	County let:	TA
Permit:	TA881375	Mgs id:	Not Reported
B1 seq:	6903	B1 recd:	199310 8
City:	EASTON	State:	MD
Zip:	21601	Driller na:	MARK H COLLIER
Driller id:	MWD 324		
Est gpm pr:	10		
Use for wa:	DW		
Approx dep:	600		
Drill meth:	ROTARY	Replacemen:	Y
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	3
Nearest to:	EASTON	Town dista:	3
Town direc:	N	Road name:	GOLDSBORO NECK RD
Road side:	E	Road dista:	20 FT
Tax map:	25	Block:	10
Parcel:	98		
N grid83:	126416		
E grid83:	479885		
Lat dec de:	38.801883		
Lon dec de:	-76.080323		
Issue date:	19931012	Special fl:	Y
C1 seq:	Not Reported	C1 recd:	0
Completion:	0		
Total dept:	0		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Not Reported
Grout type:	Not Reported		
Grout top:	0		
Grout bott:	0		
Casing typ:	Not Reported		
Casing dia:	0		
Casing dep:	0		
Casing hei:	Not Reported	Screen typ:	Not Reported
Top screen:	0		
Bottom scr:	0		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	Not Reported

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000213690

U117
NNW
1/2 - 1 Mile
Lower

MD WELLS **MD7000000414825**

Object id:	414825	County let:	TA
Permit:	TA940114	Mgs id:	Not Reported
B1 seq:	3808	B1 recd:	1996 8 7
City:	EASTON	State:	MD
Zip:	21601	Driller na:	NORMAN SHANNAHAN III
Driller id:	MSD 145		
Est gpm pr:	10		
Use for wa:	DW		
Approx dep:	575		
Drill meth:	ROTARY	Replacemen:	Y
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	.5
Town direc:	NW	Road name:	GOLDSBOROUGH NECK RD
Road side:	E	Road dista:	200 FT
Tax map:	25	Block:	10
Parcel:	100		
N grid83:	126416		
E grid83:	479885		
Lat dec de:	38.801883		
Lon dec de:	-76.080323		
Issue date:	1996 8 8	Special fl:	Not Reported
C1 seq:	7169	C1 recd:	1996 925
Completion:	1996 822		
Total dept:	601		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	BC		
Grout top:	4		
Grout bott:	140		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	195		
Casing hei:	+1	Screen typ:	PL
Top screen:	581		
Bottom scr:	601		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	2		
Flowing we:	Not Reported	Telescopin:	T
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	13		
Level befo:	61		
Level duri:	75		
Test pump :	A	Pump insta:	Y

Install pu:	S		
Capacity:	1		
Pump hp:	20		
Column len:	131		
Closed:	A	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000414825

118
NNE
1/2 - 1 Mile
Higher

MD WELLS **MD7000000335004**

Object id:	335004	County let:	TA
Permit:	TA880521	Mgs id:	Not Reported
B1 seq:	6559	B1 recd:	19901127
City:	EASTON	State:	MD
Zip:	21601	Driller na:	THOMAS F SULLIVAN
Driller id:	MWD0449		
Est gpm pr:	3		
Use for wa:	T		
Approx dep:	2		
Drill meth:	Not Reported	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	RW-2
Nearest to:	EASTON	Town dista:	0
Town direc:	Not Reported	Road name:	WASHINGTON ST
Road side:	E	Road dista:	200 FT
Tax map:	104	Block:	16
Parcel:	1979		
N grid83:	126416		
E grid83:	480494		
Lat dec de:	38.801827		
Lon dec de:	-76.073305		
Issue date:	19901128	Special fl:	N
C1 seq:	5319	C1 recd:	1991 315
Completion:	1991 311		
Total dept:	14		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	BC		
Grout top:	0		
Grout bott:	3		
Casing typ:	PL		
Casing dia:	8		
Casing dep:	3		
Casing hei:	-.7	Screen typ:	ST
Top screen:	4		
Bottom scr:	14		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	8		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	5		
Level duri:	6		
Test pump :	O	Pump insta:	N

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000335004

R119
South
1/2 - 1 Mile
Lower

FED USGS **USGS40000431629**

Org. Identifier:	USGS-MD		
Formal name:	USGS Maryland Water Science Center		
Monloc Identifier:	USGS-384645076043604		
Monloc name:	TA Ce 8		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	02060001	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	38.7792824
Longitude:	-76.0763305	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	15.00
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Northern Atlantic Coastal Plain aquifer system		
Formation type:	Calvert Formation		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	102
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1948-10-01	43.00	

R120
South
1/2 - 1 Mile
Lower

FED USGS **USGS40000431628**

Org. Identifier:	USGS-MD		
Formal name:	USGS Maryland Water Science Center		
Monloc Identifier:	USGS-384645076043602		
Monloc name:	TA Ce 6		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	02060001	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	38.7792824
Longitude:	-76.0763305	Sourcemap scale:	24000

Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	15.00
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Northern Atlantic Coastal Plain aquifer system		
Formation type:	Calvert Formation		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	100
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1948-10-01	44.00	

R121
South
1/2 - 1 Mile
Lower

FED USGS **USGS40000431627**

Org. Identifier:	USGS-MD		
Formal name:	USGS Maryland Water Science Center		
Monloc Identifier:	USGS-384645076043601		
Monloc name:	TA Ce 4		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	02060001	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	38.7792824
Longitude:	-76.0763305	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	20
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Northern Atlantic Coastal Plain aquifer system		
Formation type:	Calvert Formation		
Aquifer type:	Not Reported		
Construction date:	1929	Welldepth:	112
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

V122
South
1/2 - 1 Mile
Lower

MD WELLS **MD7000000290781**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Object id:	290781	County let:	TA
Permit:	TA037628	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	0
City:	EASTON	State:	MD
Zip:	Not Reported	Driller na:	SHANNAHAN ARTESIAN
Driller id:	MWD0000		
Est gpm pr:	0		
Use for wa:	DW		
Approx dep:	0		
Drill meth:	ROTARY	Replacemen:	Not Reported
Wapid:	TA1971G005	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	Not Reported
Town direc:	Not Reported	Road name:	Not Reported
Road side:	Not Reported	Road dista:	Not Reported
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	123883		
E grid83:	480033		
Lat dec de:	38.779052		
Lon dec de:	-76.07891		
Issue date:	0	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	0
Completion:	1960 422		
Total dept:	1051		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Not Reported
Grout type:	Not Reported		
Grout top:	0		
Grout bott:	0		
Casing typ:	Not Reported		
Casing dia:	12		
Casing dep:	550		
Casing hei:	P	Screen typ:	Not Reported
Top screen:	1015		
Bottom scr:	1045		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	T
Log type:	Not Reported		
Hrs pumped:	24		
Pumping ra:	463		
Level befo:	43		
Level duri:	125		
Test pump :	Not Reported	Pump insta:	Not Reported
Install pu:	Not Reported		
Capacity:	400		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Y
Abandon da:	2008 128	Site id:	MD7000000290781

Map ID Direction Distance Elevation	Database	EDR ID Number
V123 **South** **1/2 - 1 Mile** **Lower**	**FED USGS**	**USGS40000431622**

Org. Identifier:	USGS-MD		
Formal name:	USGS Maryland Water Science Center		
Monloc Identifier:	USGS-384644076044601		
Monloc name:	TA Ce 60		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	02060005	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	38.7790047
Longitude:	-76.0791084	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	15.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Northern Atlantic Coastal Plain aquifer system		
Formation type:	Magothy Formation		
Aquifer type:	Not Reported		
Construction date:	19600422	Welldepth:	1045
Welldepth units:	ft	Wellholedepth:	1051
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1960-04-22	43.00	

V124 **South** **1/2 - 1 Mile** **Lower**	**FED USGS**	**USGS40000431623**

Org. Identifier:	USGS-MD		
Formal name:	USGS Maryland Water Science Center		
Monloc Identifier:	USGS-384644076044602		
Monloc name:	TA Ce 80		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	02060005	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	38.7788889
Longitude:	-76.0794444	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	15
Vert measure units:	feet	Vertacc measure val:	20
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Magothy Formation		

Aquifer type:	Confined single aquifer		
Construction date:	20080108	Welldepth:	1050
Welldepth units:	ft	Wellholedepth:	1060
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

125
South
1/2 - 1 Mile
Lower

FED USGS **USGS40000431620**

Org. Identifier:	USGS-MD		
Formal name:	USGS Maryland Water Science Center		
Monloc Identifier:	USGS-384643076043801		
Monloc name:	TA Ce 7		
Monloc type:	Well		
Monloc desc:	See C185.		
Huc code:	02060001	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	38.7786944
Longitude:	-76.0768056	Sourcemap scale:	24000
Horiz Acc measure:	.1	Horiz Acc measure units:	seconds
Horiz Collection method:	Global positioning system (GPS), uncorrected		
Horiz coord refsys:	NAD83	Vert measure val:	13
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Northern Atlantic Coastal Plain aquifer system		
Formation type:	Cheswold Aquifer		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	104
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 530

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
2005-02-15	1.62		2005-01-20	2.99	
2004-12-15	12.44		2004-11-17	12.85	
2004-10-15	21.23		2004-09-15	24.20	
2004-08-17	23.22		2004-07-21	22.33	
2004-06-21	20.13		2004-05-11	-0.70	
2004-04-13	-1.40		2004-03-23	-0.80	
2004-02-18	0.20		2004-01-21	1.38	
2003-12-31	2.74		2003-12-03	5.85	
2003-10-28	12.52		2003-09-29	24.30	
2003-08-27	23.38				
2003-08-06	22.02				
Note: A nearby site that taps the same aquifer had been pumped recently.					
2003-06-26	16.81				
Note: A nearby site that taps the same aquifer had been pumped recently.					
2003-05-30	3.02				
Note: A nearby site that taps the same aquifer was being pumped.					
2003-04-30	-0.27				
Note: A nearby site that taps the same aquifer was being pumped.					
2003-03-27	0.71		2003-03-03	1.71	

Ground-water levels, continued.

Date	Feet below Surface	Feet to Sealevel
2003-01-27	3.87	
2002-11-26	9.71	
2002-09-24	28.24	
2002-07-29	25.27	
2002-05-29	14.43	
2002-03-25	2.44	
2002-01-22	4.17	
2001-11-30	7.95	
2001-09-24	27.06	
2001-07-26	23.87	
2001-05-29	12.04	
2001-03-26	0.74	
2001-01-18	3.52	
2000-11-20	7.73	
2000-09-15	25.28	
2000-07-21	41.05	
2000-04-25	-0.25	
2000-02-16	1.78	
1999-12-07	6.65	
1999-10-26	13.31	
1999-08-26	25.98	
1999-06-09	18.77	
1999-04-08	2.91	
1999-02-09	2.68	
1998-12-01	8.00	
1998-10-06	19.56	
1998-08-04	23.10	
1998-06-08	15.16	
1998-04-01	7.05	
1998-02-09	1.40	
1997-12-08	6.42	
1997-10-03	25.74	
1997-08-04	23.46	
1997-06-05	16.90	
1997-04-02	0.95	
1997-02-06	1.26	
1996-11-04	11.17	
1996-09-05	25.59	
1996-07-02	19.74	
1996-05-06	10.20	
1996-03-04	1.40	
1996-01-03	4.54	
1995-11-01	13.70	
1995-09-05	25.86	
1995-07-05	22.19	
1995-05-03	3.84	
1995-03-02	1.25	
1995-01-03	3.44	
1994-11-03	8.72	
1994-09-01	25.47	
1994-07-06	20.82	
1994-05-03	7.20	
1994-02-01	3.12	
1993-12-01	9.53	
1993-10-12	17.72	

Date	Feet below Surface	Feet to Sealevel
2002-12-20	7.02	
2002-10-29	15.68	
2002-08-28	27.37	
2002-06-24	21.38	
2002-04-29	5.30	
2002-02-25	3.07	
2001-12-17	6.42	
2001-10-22	14.87	
2001-08-23	25.63	
2001-06-25	20.71	
2001-04-24	3.29	
2001-02-21	1.84	
2000-12-18	5.38	
2000-10-25	11.79	
2000-08-24	27.39	
2000-06-27	11.00	
2000-03-15	0.98	
2000-01-10	3.70	
1999-11-15	9.03	
1999-09-30	25.29	
1999-07-28	24.30	
1999-05-13	11.85	
1999-03-08	2.02	
1999-01-07	4.72	
1998-11-09	11.95	
1998-09-10	24.60	
1998-07-06	21.12	
1998-05-07	11.84	
1998-03-02	0.94	
1998-01-05	3.95	
1997-11-05	12.24	
1997-09-04	24.93	
1997-07-01	20.45	
1997-05-06	10.31	
1997-03-06	0.15	
1997-01-03	3.07	
1996-10-01	20.23	
1996-08-02	22.40	
1996-06-06	14.31	
1996-04-02	0.47	
1996-02-01	2.79	
1995-12-04	7.38	
1995-10-03	25.89	
1995-08-01	23.95	
1995-06-01	15.92	
1995-04-03	0.59	
1995-02-01	2.14	
1994-12-01	5.49	
1994-10-04	19.05	
1994-08-03	23.82	
1994-06-02	12.05	
1994-03-04	1.03	
1994-01-05	6.89	
1993-11-02	12.86	
1993-09-08	28.04	

Ground-water levels, continued.

Date	Feet below Surface	Feet to Sealevel
1993-08-09	26.02	
1993-06-03	18.00	
1993-04-06	4.33	
1993-02-01	6.42	
1992-12-09	9.85	
1992-10-07	20.40	
1992-08-04	26.69	
1992-06-02	10.70	
1992-05-12	10.45	
1992-03-04	7.07	
1992-01-06	9.40	
1991-11-05	15.39	
1991-09-04	30.16	
1991-07-03	24.88	
1991-06-05	21.06	
1991-04-02	5.65	
1991-02-04	6.99	
1990-12-05	10.36	
1990-11-05	14.72	
1990-09-06	27.11	
1990-08-09	26.10	
1990-06-05	16.96	
1990-04-05	5.86	
1990-02-21	5.93	
1990-01-04	7.40	
1989-11-07	12.23	
1989-09-05	28.27	
1989-07-07	24.00	
1989-05-09	5.43	
1989-03-10	6.30	
1989-01-10	8.18	
1988-10-21	15.19	
1988-07-20	22.76	
1988-04-22	6.04	
1988-02-04	7.70	
1987-12-04	10.10	
1987-09-03	24.79	
1987-05-18	9.50	
1987-03-05	6.14	
1986-12-18	9.40	
1986-10-20	16.62	
1986-08-07	24.34	
1986-05-28	14.48	
1986-02-20	6.70	
1985-12-06	10.61	
1985-09-23	20.84	
1985-07-09	21.11	
1985-04-08	5.58	
1985-01-15	5.92	
1984-11-19	6.54	
1984-09-05	17.92	
1984-05-22	6.59	
1984-03-16	1.50	
1984-01-10	3.63	
1983-10-24	9.47	

Date	Feet below Surface	Feet to Sealevel
1993-07-07	24.36	
1993-05-10	12.53	
1993-03-01	5.40	
1993-01-06	7.84	
1992-11-02	13.74	
1992-09-01	28.49	
1992-07-01	22.60	
1992-05-18	10.20	
1992-04-02	5.68	
1992-02-03	8.15	
1991-12-10	11.15	
1991-10-01	22.61	
1991-08-13	28.66	
1991-06-13	15.88	
1991-05-07	10.18	
1991-03-05	6.29	
1991-01-02	8.40	
1990-11-20	11.56	
1990-10-02	19.28	
1990-08-16	25.94	
1990-07-10	24.16	
1990-05-01	8.91	
1990-03-05	5.74	
1990-02-05	6.39	
1989-12-04	9.17	
1989-10-03	22.55	
1989-08-02	26.12	
1989-06-07	18.59	
1989-04-12	5.47	
1989-02-02	7.39	
1988-12-05	9.90	
1988-08-19	24.98	
1988-06-10	15.85	
1988-03-23	6.38	
1988-01-07	8.93	
1987-10-15	15.60	
1987-07-14	22.19	
1987-04-03	5.53	
1987-02-10	6.74	
1986-11-14	12.14	
1986-09-22	22.75	
1986-07-07	22.49	
1986-04-08	5.90	
1986-01-13	8.31	
1985-11-04	13.65	
1985-08-16	23.88	
1985-05-17	12.44	
1985-03-08	5.57	
1984-12-19	4.53	
1984-10-15	9.02	
1984-07-17	17.43	
1984-04-16	0.97	
1984-02-09	2.65	
1983-11-29	5.73	
1983-09-08	20.92	

Ground-water levels, continued.

Date	Feet below Surface	Feet to Sealevel
1983-07-20	17.64	
1983-05-19	4.04	
1983-03-03	2.98	
1982-12-20	6.25	
1982-09-20	22.03	
1982-07-12	31.81	
1982-04-20	4.78	
1982-02-02	3.90	
1981-11-24	7.88	
1981-09-21	23.32	
1981-07-13	21.34	
1981-05-04	2.88	
1981-02-18	4.87	
1981-01-05	6.34	
1980-10-21	14.20	
1980-08-14	24.50	
1980-05-21	11.18	
1980-03-04	6.98	
1979-11-23	18.25	
1979-09-14	30.38	
1979-06-18	22.63	
1979-03-15	8.11	
1979-01-04	14.79	
1978-11-15	21.11	
1978-09-06	33.18	
1978-04-12	10.69	
1978-01-05	16.40	
1977-11-09	21.47	
1977-08-09	36.07	
1977-05-07	12.94	
1977-02-18	9.14	
1976-12-15	13.27	
1976-10-07	27.54	
1976-08-05	34.51	
1976-05-19	22.15	
1976-02-23	12.00	
1975-11-21	24.91	
1975-09-18	30.96	
1975-06-03	23.91	
1975-02-28	12.64	
1975-01-03	19.48	
1974-10-11	29.41	
1974-07-18	36.02	
1974-04-18	20.07	
1974-02-14	21.68	
1973-12-13	22.73	
1973-10-11	36.69	
1973-08-09	36.50	
1973-06-05	29.28	
1973-04-05	18.76	
1973-02-08	21.07	
1972-12-08	26.13	
1972-10-11	57.47	
1972-07-13	62.84	
1972-05-10	52.12	

Date	Feet below Surface	Feet to Sealevel
1983-06-14	12.88	
1983-03-31	2.12	
1983-01-27	4.37	
1982-11-15	9.63	
1982-08-11	24.87	
1982-05-28	25.02	
1982-03-16	2.54	
1981-12-29	5.63	
1981-10-20	12.75	
1981-08-17	23.87	
1981-06-11	16.78	
1981-04-06	3.53	
1981-02-06	5.27	
1980-12-08	7.87	
1980-09-10	25.73	
1980-06-23	18.98	
1980-04-08	5.39	
1980-01-04	12.07	
1979-10-05	26.91	
1979-07-18	28.49	
1979-04-17	9.23	
1979-01-29	11.60	
1978-12-14	18.29	
1978-10-19	24.28	
1978-07-11	25.29	
1978-02-28	11.02	
1977-12-05	19.10	
1977-09-19	35.40	
1977-06-21	26.92	
1977-03-30	8.13	
1977-01-04	11.58	
1976-11-08	19.02	
1976-08-10	35.30	
1976-06-22	29.61	
1976-04-14	9.21	
1975-12-09	23.51	
1975-10-20	29.84	
1975-06-23	28.46	
1975-04-17	13.58	
1975-01-20	16.26	
1974-12-06	24.48	
1974-08-21	38.47	
1974-05-30	27.03	
1974-03-14	21.32	
1974-01-10	22.06	
1973-11-05	29.49	
1973-09-04	38.23	
1973-07-19	35.15	
1973-05-05	22.26	
1973-03-06	20.20	
1973-01-09	23.03	
1972-11-13	32.39	
1972-09-09	43.18	
1972-06-08	35.13	
1972-04-06	48.41	

Ground-water levels, continued.

Date	Feet below Surface	Feet to Sealevel
1972-03-08	21.83	
1972-01-11	29.80	
1971-11-09	58.40	
1971-06-14	26.60	
1971-03-25	16.89	
1971-01-26	20.74	
1970-10-08	34.34	
1970-07-13	41.91	
1970-04-20	19.73	
1970-02-03	39.85	
1969-10-30	31.67	
1969-07-25	47.66	
1969-05-05	52.83	
1969-02-24	58.80	
1969-01-02	30.55	
1968-09-30	67.55	
1968-07-12	63.08	
1968-04-30	49.25	
1968-02-21	19.65	
1967-12-04	53.07	
1967-09-21	40.49	
1967-06-21	65.58	
1967-04-11	42.03	
1967-02-02	23.66	
1966-12-13	43.53	
1966-10-13	32.32	
1966-08-02	75.36	
1966-04-28	57.10	
1966-03-15	54.71	
1966-01-04	29.79	
1965-11-05	45.60	
1965-09-08	65.48	
1965-07-08	39.04	
1965-05-18	32.90	
1965-03-19	53.43	
1965-01-08	20.10	
1964-11-13	25.89	
1964-09-02	41.45	
1964-06-30	64.02	
1964-05-06	41.48	
1964-03-03	54.10	
1964-01-23	22.30	
1963-11-20	29.57	
1963-09-05	52.33	
1963-06-10	34.38	
1963-04-08	23.42	
1963-02-15	22.99	
1962-12-12	62.30	
1962-10-11	33.86	
1962-08-07	43.73	
1962-06-07	32.49	
1962-04-03	58.10	
1962-02-08	21.82	
1961-12-07	22.51	
1961-10-04	66.10	

Date	Feet below Surface	Feet to Sealevel
1972-02-09	23.19	
1971-12-14	50.21	
1971-08-04	41.55	
1971-05-04	21.40	
1971-02-26	44.99	
1970-11-16	28.15	
1970-09-23	44.42	
1970-06-05	57.40	
1970-03-16	16.99	
1970-01-14	22.63	
1969-09-09	43.27	
1969-06-04	60.27	
1969-04-02	60.26	
1969-01-22	46.17	
1968-11-12	55.32	
1968-08-15	73.84	
1968-06-04	53.90	
1968-03-26	44.23	
1968-01-03	49.58	
1967-11-07	53.83	
1967-08-02	68.20	
1967-05-15	25.16	
1967-02-28	17.14	
1967-01-03	41.50	
1966-11-14	47.25	
1966-08-29	59.84	
1966-06-10	39.89	
1966-04-09	54.79	
1966-02-15	31.03	
1965-12-02	31.94	
1965-10-01	42.25	
1965-07-30	68.37	
1965-06-07	35.01	
1965-04-01	23.31	
1965-02-04	33.05	
1964-12-02	53.78	
1964-10-07	33.68	
1964-08-07	45.02	
1964-06-11	57.96	
1964-04-10	22.36	
1964-02-04	56.40	
1963-12-17	26.94	
1963-10-08	46.29	
1963-07-18	67.37	
1963-05-02	40.42	
1963-03-07	55.02	
1963-01-10	25.46	
1962-11-07	32.81	
1962-09-06	44.33	
1962-07-05	40.58	
1962-05-11	27.91	
1962-03-07	15.33	
1962-01-04	21.89	
1961-11-02	24.27	
1961-08-31	43.67	

Ground-water levels, continued.

Date	Feet below Surface	Feet to Sealevel
1961-08-03	34.62	
1961-06-01	21.05	
1961-04-06	14.42	
1961-02-02	27.84	
1960-12-09	27.98	
1960-10-11	25.45	
1960-08-03	45.51	
1960-06-06	56.39	
1960-04-11	18.76	
1960-02-04	22.68	
1959-11-12	32.17	
1959-09-03	44.54	
1959-07-01	39.03	
1959-05-07	26.52	
1959-03-05	25.62	
1958-12-30	53.26	
1958-11-06	44.47	
1958-09-09	49.34	
1958-07-02	59.54	
1958-05-08	26.54	
1958-03-06	28.65	
1958-01-15	33.21	
1957-11-14	39.05	
1957-09-11	61.93	
1957-07-09	59.52	
1957-05-02	35.57	
1957-03-07	24.35	
1957-01-08	34.78	
1956-11-01	48.49	
1956-09-06	66.94	
1956-07-05	54.66	
1956-05-03	60.72	
1948-10-07	43.00	
1961-06-30	53.70	
1961-05-04	15.78	
1961-03-06	15.81	
1961-01-05	56.65	
1960-11-03	26.22	
1960-09-06	43.41	
1960-07-06	47.85	
1960-05-04	34.06	
1960-03-01	20.66	
1960-01-07	22.96	
1959-10-13	34.88	
1959-08-07	45.34	
1959-06-08	54.36	
1959-04-02	19.96	
1959-02-05	42.42	
1958-12-04	51.98	
1958-10-02	43.02	
1958-08-06	62.87	
1958-06-05	38.39	
1958-04-07	26.19	
1958-02-10	34.04	
1957-12-09	35.85	
1957-10-03	56.49	
1957-08-20	73.20	
1957-05-29	37.31	
1957-04-05	21.91	
1957-02-11	34.33	
1956-12-06	32.30	
1956-10-04	53.63	
1956-08-02	72.37	
1956-06-07	58.79	
1956-04-05	50.44	

W126
SSE
1/2 - 1 Mile
Higher

MD WELLS **MD7000000335265**

Object id:	335265	County let:	TA
Permit:	TA880801	Mgs id:	Not Reported
B1 seq:	7248	B1 recd:	199111 8
City:	EASTON	State:	MD
Zip:	Not Reported	Driller na:	FRANK KLECKA
Driller id:	MWD0525		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	30		
Drill meth:	AIR-ROT	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	0
Town direc:	T	Road name:	N. AURORA ST.
Road side:	N	Road dista:	410 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	123978		
E grid83:	480799		
Lat dec de:	38.779834		

Lon dec de:	-76.070082		
Issue date:	199111 8	Special fl:	Y
C1 seq:	1016	C1 recd:	1992 626
Completion:	1992 514		
Total dept:	22		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	20		
Casing typ:	PL		
Casing dia:	8		
Casing dep:	20		
Casing hei:	-0	Screen typ:	PL
Top screen:	20		
Bottom scr:	22		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	6		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	1		
Level befo:	1		
Level duri:	1		
Test pump :	Not Reported	Pump insta:	N
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Y
Abandon da:	2005 6 7	Site id:	MD7000000335265

W127
SSE
1/2 - 1 Mile
Higher

MD WELLS **MD7000000413602**

Object id:	413602	County let:	TA
Permit:	TA940612	Mgs id:	Not Reported
B1 seq:	1117	B1 recd:	1998 518
City:	EASTON	State:	MD
Zip:	21601	Driller na:	J PETER DOW
Driller id:	MGD 85		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	20		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	Not Reported
Town direc:	N	Road name:	AURORA ST
Road side:	W	Road dista:	15 FT
Tax map:	103	Block:	2
Parcel:	513		
N grid83:	123978		
E grid83:	480799		
Lat dec de:	38.779834		

Lon dec de:	-76.070082		
Issue date:	1998 526	Special fl:	Not Reported
C1 seq:	5261	C1 recd:	1998 828
Completion:	1998 728		
Total dept:	18		
Num unsucc:	0		
Hydrofract:	N	Grouted:	Y
Grout type:	BC		
Grout top:	0		
Grout bott:	1		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	3		
Casing hei:	+3	Screen typ:	PL
Top screen:	3		
Bottom scr:	18		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	1		
Level befo:	1		
Level duri:	1		
Test pump :	Not Reported	Pump insta:	N
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000413602

128
WNW
1/2 - 1 Mile
Lower

MD WELLS **MD7000000522731**

Object id:	522731	County let:	TA
Permit:	TA951035	Mgs id:	Not Reported
B1 seq:	9205	B1 recd:	2007 913
City:	EASTON	State:	MD
Zip:	21601	Driller na:	JOHN T. SHANNAHAN
Driller id:	MSD 146		
Est gpm pr:	20		
Use for wa:	DW		
Approx dep:	600		
Drill meth:	ROTARY	Replacemen:	Y
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	1
Town direc:	NW	Road name:	9002 GOLDSBOROUGH NECK RD
Road side:	W	Road dista:	100 FT
Tax map:	25	Block:	15
Parcel:	159		
N grid83:	125806		
E grid83:	478970		
Lat dec de:	38.796474		

Lon dec de:	-76.090919		
Issue date:	2007 910	Special fl:	Not Reported
C1 seq:	6253	C1 recd:	20071213
Completion:	2007 9 6		
Total dept:	602		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	BC		
Grout top:	4		
Grout bott:	140		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	241		
Casing hei:	+1	Screen typ:	PL
Top screen:	582		
Bottom scr:	602		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	2		
Flowing we:	Not Reported	Telescopin:	T
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	14		
Level befo:	81		
Level duri:	95		
Test pump :	A	Pump insta:	Y
Install pu:	S		
Capacity:	14		
Pump hp:	.75		
Column len:	140		
Closed:	A	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000522731

129
NNW
1/2 - 1 Mile
Lower

MD WELLS **MD7000000295091**

Object id:	295091	County let:	TA
Permit:	TA810844	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	1985 528
City:	EASTON	State:	MD
Zip:	21601	Driller na:	TULL, WILLIAM D.
Driller id:	MWD0351		
Est gpm pr:	10		
Use for wa:	DW		
Approx dep:	600		
Drill meth:	ROTARY	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	1.9 MI
Town direc:	NW	Road name:	GOLDSBOROUGH NECK RD
Road side:	W	Road dista:	300 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	126416		
E grid83:	479580		
Lat dec de:	38.801911		

Lon dec de:	-76.083831		
Issue date:	1985 529	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	1985 724
Completion:	1985 6 6		
Total dept:	612		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	3		
Grout bott:	25		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	171		
Casing hei:	+01	Screen typ:	PL
Top screen:	592		
Bottom scr:	612		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	2		
Flowing we:	Not Reported	Telescopin:	T
Log type:	Not Reported		
Hrs pumped:	6		
Pumping ra:	20		
Level befo:	52		
Level duri:	100		
Test pump :	A	Pump insta:	Not Reported
Install pu:	S		
Capacity:	10		
Pump hp:	.5		
Column len:	100		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000295091

130
NW
1/2 - 1 Mile
Lower

FED USGS **USGS40000431750**

Org. Identifier:	USGS-MD		
Formal name:	USGS Maryland Water Science Center		
Monloc Identifier:	USGS-384758076052001		
Monloc name:	TA Cd 2		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	02060002	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	38.79956
Longitude:	-76.0885535	Sourcemap scale:	Not Reported
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	13.00
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Northern Atlantic Coastal Plain aquifer system		
Formation type:	Piney Point Formation		

Aquifer type:	Not Reported		
Construction date:	1943	Welldepth:	260
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

X131
South
1/2 - 1 Mile
Lower

FED USGS **USGS40000431609**

Org. Identifier:	USGS-MD		
Formal name:	USGS Maryland Water Science Center		
Monloc Identifier:	USGS-384638076043802		
Monloc name:	TA Ce 2		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	02060005	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	38.777338
Longitude:	-76.076886	Sourcemap scale:	Not Reported
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	20
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Northern Atlantic Coastal Plain aquifer system		
Formation type:	Calvert Formation		
Aquifer type:	Not Reported		
Construction date:	1910	Welldepth:	110
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

X132
South
1/2 - 1 Mile
Lower

FED USGS **USGS40000431608**

Org. Identifier:	USGS-MD		
Formal name:	USGS Maryland Water Science Center		
Monloc Identifier:	USGS-384638076043801		
Monloc name:	TA Ce 1		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	02060005	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	38.777338
Longitude:	-76.076886	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	15.00
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Northern Atlantic Coastal Plain aquifer system		
Formation type:	Monmouth Formation		

Aquifer type:	Not Reported		
Construction date:	1901	Welldepth:	158
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1948-10-01	46.00	

X133
South
1/2 - 1 Mile
Lower

FED USGS **USGS40000431610**

Org. Identifier:	USGS-MD		
Formal name:	USGS Maryland Water Science Center		
Monloc Identifier:	USGS-384638076043803		
Monloc name:	TA Ce 3		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	02060005	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	38.777338
Longitude:	-76.076886	Sourcemap scale:	Not Reported
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	15.00
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Northern Atlantic Coastal Plain aquifer system		
Formation type:	Matawan Formation		
Aquifer type:	Not Reported		
Construction date:	1929	Welldepth:	1025
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1948-10-01	42.00	

X134
South
1/2 - 1 Mile
Lower

FED USGS **USGS40000431612**

Org. Identifier:	USGS-MD		
Formal name:	USGS Maryland Water Science Center		
Monloc Identifier:	USGS-384638076043805		
Monloc name:	TA Ce 58		
Monloc type:	Well		
Monloc desc:	ABANDONED		
Huc code:	02060005	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	38.777338
Longitude:	-76.076886	Sourcemap scale:	24000

Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	25.00
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Northern Atlantic Coastal Plain aquifer system		
Formation type:	Calvert Formation		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	100
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

X135
South
1/2 - 1 Mile
Lower

FED USGS **USGS40000431611**

Org. Identifier:	USGS-MD		
Formal name:	USGS Maryland Water Science Center		
Monloc Identifier:	USGS-384638076043804		
Monloc name:	TA Ce 50		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	02060005	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	38.777338
Longitude:	-76.076886	Sourcemap scale:	Not Reported
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	25.00
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Northern Atlantic Coastal Plain aquifer system		
Formation type:	Aquia Formation		
Aquifer type:	Not Reported		
Construction date:	1952	Welldepth:	630
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1952-01-01	29.00	

Y136
SE
1/2 - 1 Mile
Higher

MD WELLS **MD7000000295024**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Object id:	295024	County let:	TA
Permit:	TA810777	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	1985 3 4
City:	FALLSTON	State:	MD
Zip:	21047	Driller na:	D'AMIANO, ANTHONY R.
Driller id:	MWD0346		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	25		
Drill meth:	AIR-ROT	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	0 MI
Town direc:	Not Reported	Road name:	AURORA ST
Road side:	W	Road dista:	25 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	124282		
E grid83:	481409		
Lat dec de:	38.782523		
Lon dec de:	-76.06303		
Issue date:	1985 3 5	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	1985 313
Completion:	1985 3 5		
Total dept:	16		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	BC		
Grout top:	0		
Grout bott:	6		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	6		
Casing hei:	+01	Screen typ:	PL
Top screen:	6		
Bottom scr:	16		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	1		
Level befo:	1		
Level duri:	1		
Test pump :	O	Pump insta:	Not Reported
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000295024

Map ID Direction Distance Elevation	Database	EDR ID Number
Y137 **SE** **1/2 - 1 Mile** **Higher**	**MD WELLS**	**MD7000000295025**

Object id:	295025	County let:	TA
Permit:	TA810778	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	1985 3 5
City:	FALLSTON	State:	MD
Zip:	21047	Driller na:	D'AMIANO, ANTHONY R.
Driller id:	MWD0346		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	25		
Drill meth:	AIR-ROT	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	0 MI
Town direc:	Not Reported	Road name:	WASHINGTON
Road side:	W	Road dista:	50 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	124282		
E grid83:	481409		
Lat dec de:	38.782523		
Lon dec de:	-76.06303		
Issue date:	1985 3 7	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	1985 313
Completion:	1985 3 5		
Total dept:	15		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	BC		
Grout top:	0		
Grout bott:	5		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	5		
Casing hei:	+01	Screen typ:	PL
Top screen:	5		
Bottom scr:	15		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	1		
Level befo:	1		
Level duri:	1		
Test pump :	O	Pump insta:	Not Reported

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000295025

138
North
1/2 - 1 Mile
Higher

MD WELLS **MD7000000360789**

Object id:	360789	County let:	TA
Permit:	TA881640	Mgs id:	Not Reported
B1 seq:	1936	B1 recd:	1994 328
City:	EASTON	State:	MD
Zip:	21601	Driller na:	JOHN T SHANNAHAN
Driller id:	MWD 22		
Est gpm pr:	15		
Use for wa:	DW		
Approx dep:	600		
Drill meth:	ROTARY	Replacemen:	Y
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	2
Town direc:	NW	Road name:	GOLDSBOROUGH NECK RD
Road side:	E	Road dista:	110 FT
Tax map:	25	Block:	10
Parcel:	98		
N grid83:	126721		
E grid83:	480190		
Lat dec de:	38.804601		
Lon dec de:	-76.076778		
Issue date:	1994 330	Special fl:	Not Reported
C1 seq:	3173	C1 recd:	1994 5 6
Completion:	1994 411		
Total dept:	625		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	4		
Grout bott:	280		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	240		
Casing hei:	+1	Screen typ:	PL
Top screen:	605		
Bottom scr:	625		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	2		
Flowing we:	Not Reported	Telescopin:	T
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	15		
Level befo:	60		
Level duri:	78		
Test pump :	A	Pump insta:	Y

Install pu:	S		
Capacity:	11		
Pump hp:	.7		
Column len:	127		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000360789

Z139
NE
1/2 - 1 Mile
Higher

MD WELLS **MD7000000415658**

Object id:	415658	County let:	TA
Permit:	TA940830	Mgs id:	Not Reported
B1 seq:	4437	B1 recd:	19981210
City:	EASTON	State:	MD
Zip:	21601	Driller na:	JOHN D HYNES
Driller id:	MGD 27		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	17		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	Not Reported
Town direc:	T	Road name:	AIRPARK DR
Road side:	N	Road dista:	140 FT
Tax map:	100	Block:	4
Parcel:	43		
N grid83:	126416		
E grid83:	481104		
Lat dec de:	38.801771		
Lon dec de:	-76.066287		
Issue date:	19981211	Special fl:	Not Reported
C1 seq:	7094	C1 recd:	1999 1 8
Completion:	19981214		
Total dept:	17		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	1		
Grout bott:	2		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	2		
Casing hei:	Not Reported	Screen typ:	PL
Top screen:	2		
Bottom scr:	17		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	N

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000415658

Z140
NE
1/2 - 1 Mile
Higher

MD WELLS **MD7000000415657**

Object id:	415657	County let:	TA
Permit:	TA940829	Mgs id:	Not Reported
B1 seq:	4438	B1 recd:	19981210
City:	EASTON	State:	MD
Zip:	21601	Driller na:	JOHN D HYNES
Driller id:	MGD 27		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	17		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	Not Reported
Town direc:	T	Road name:	AIRPARK DR
Road side:	N	Road dista:	140 FT
Tax map:	100	Block:	4
Parcel:	43		
N grid83:	126416		
E grid83:	481104		
Lat dec de:	38.801771		
Lon dec de:	-76.066287		
Issue date:	19981211	Special fl:	Not Reported
C1 seq:	7065	C1 recd:	1999 1 8
Completion:	19981215		
Total dept:	17		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	1		
Grout bott:	2		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	2		
Casing hei:	Not Reported	Screen typ:	PL
Top screen:	2		
Bottom scr:	17		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	N

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000415657

Z141
NE
1/2 - 1 Mile
Higher

MD WELLS **MD7000000415656**

Object id:	415656	County let:	TA
Permit:	TA940828	Mgs id:	Not Reported
B1 seq:	4435	B1 recd:	19981210
City:	EASTON	State:	MD
Zip:	21601	Driller na:	JOHN D HYNES
Driller id:	MGD 27		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	17		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	Not Reported
Town direc:	T	Road name:	AIRPARK DR
Road side:	N	Road dista:	95 FT
Tax map:	100	Block:	4
Parcel:	43		
N grid83:	126416		
E grid83:	481104		
Lat dec de:	38.801771		
Lon dec de:	-76.066287		
Issue date:	19981211	Special fl:	Not Reported
C1 seq:	0344	C1 recd:	1999 1 8
Completion:	19981215		
Total dept:	17		
Num unsucc:	0		
Hydrofract:	N	Grouted:	Y
Grout type:	CM		
Grout top:	1		
Grout bott:	2		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	2		
Casing hei:	Not Reported	Screen typ:	PL
Top screen:	2		
Bottom scr:	17		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	N

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000415656

Z142
NE
1/2 - 1 Mile
Higher

MD WELLS **MD7000000415659**

Object id:	415659	County let:	TA
Permit:	TA940831	Mgs id:	Not Reported
B1 seq:	4436	B1 recd:	19981210
City:	EASTON	State:	MD
Zip:	21601	Driller na:	JOHN D HYNES
Driller id:	MGD 27		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	17		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	Not Reported
Town direc:	T	Road name:	AIRPARK DR
Road side:	N	Road dista:	120 FT
Tax map:	100	Block:	4
Parcel:	43		
N grid83:	126416		
E grid83:	481104		
Lat dec de:	38.801771		
Lon dec de:	-76.066287		
Issue date:	19981211	Special fl:	Not Reported
C1 seq:	6299	C1 recd:	1999 1 8
Completion:	19981216		
Total dept:	17		
Num unsucc:	0		
Hydrofract:	N	Grouted:	Y
Grout type:	CM		
Grout top:	1		
Grout bott:	2		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	2		
Casing hei:	Not Reported	Screen typ:	PL
Top screen:	2		
Bottom scr:	17		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	N

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000415659

Z143
NE
1/2 - 1 Mile
Higher

MD WELLS **MD7000000470318**

Object id:	470318	County let:	Not Reported
Permit:	TA940833	Mgs id:	Not Reported
B1 seq:	4440	B1 recd:	19981210
City:	EASTON	State:	MD
Zip:	21601	Driller na:	JOHN D HYNES
Driller id:	MGD 27		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	17		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	PMW-10
Nearest to:	EASTON	Town dista:	Not Reported
Town direc:	T	Road name:	AIRPARK DR
Road side:	N	Road dista:	140 FT
Tax map:	100	Block:	4
Parcel:	43		
N grid83:	126416		
E grid83:	481104		
Lat dec de:	38.801771		
Lon dec de:	-76.066287		
Issue date:	19981211	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	0
Completion:	0		
Total dept:	0		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Not Reported
Grout type:	Not Reported		
Grout top:	0		
Grout bott:	0		
Casing typ:	Not Reported		
Casing dia:	0		
Casing dep:	0		
Casing hei:	Not Reported	Screen typ:	Not Reported
Top screen:	0		
Bottom scr:	0		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	Not Reported

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000470318

Z144
NE
1/2 - 1 Mile
Higher

MD WELLS **MD7000000415661**

Object id:	415661	County let:	TA
Permit:	TA940834	Mgs id:	Not Reported
B1 seq:	4441	B1 recd:	19981210
City:	EASTON	State:	MD
Zip:	21601	Driller na:	JOHN D HYNES
Driller id:	MGD 27		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	17		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	Not Reported
Town direc:	T	Road name:	AIRPARK DR
Road side:	N	Road dista:	140 FT
Tax map:	100	Block:	4
Parcel:	43		
N grid83:	126416		
E grid83:	481104		
Lat dec de:	38.801771		
Lon dec de:	-76.066287		
Issue date:	19981211	Special fl:	Not Reported
C1 seq:	6298	C1 recd:	1999 1 8
Completion:	19981215		
Total dept:	17		
Num unsucc:	0		
Hydrofract:	N	Grouted:	Y
Grout type:	CM		
Grout top:	1		
Grout bott:	2		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	2		
Casing hei:	Not Reported	Screen typ:	PL
Top screen:	2		
Bottom scr:	17		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	N

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000415661

Z145
NE
1/2 - 1 Mile
Higher

MD WELLS **MD7000000415660**

Object id:	415660	County let:	TA
Permit:	TA940832	Mgs id:	Not Reported
B1 seq:	4439	B1 recd:	19981210
City:	EASTON	State:	MD
Zip:	21601	Driller na:	JOHN D HYNES
Driller id:	MGD 27		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	17		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	Not Reported
Town direc:	T	Road name:	AIRPARK DR
Road side:	N	Road dista:	190 FT
Tax map:	100	Block:	4
Parcel:	43		
N grid83:	126416		
E grid83:	481104		
Lat dec de:	38.801771		
Lon dec de:	-76.066287		
Issue date:	19981211	Special fl:	Not Reported
C1 seq:	6263	C1 recd:	1999 1 8
Completion:	19981214		
Total dept:	17		
Num unsucc:	0		
Hydrofract:	N	Grouted:	Y
Grout type:	CM		
Grout top:	1		
Grout bott:	2		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	2		
Casing hei:	Not Reported	Screen typ:	PL
Top screen:	2		
Bottom scr:	17		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	N

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000415660

AA146
South
1/2 - 1 Mile
Higher

MD WELLS **MD7000000334960**

Object id:	334960	County let:	TA
Permit:	TA880452	Mgs id:	Not Reported
B1 seq:	6528	B1 recd:	1990 9 7
City:	EASTON	State:	MD
Zip:	21601	Driller na:	THOMAS F SULLIVAN
Driller id:	MWD0449		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	15		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	MW-1
Nearest to:	EASTON	Town dista:	0
Town direc:	T	Road name:	BAY STREET
Road side:	S	Road dista:	10 FT
Tax map:	104	Block:	3
Parcel:	609		
N grid83:	123673		
E grid83:	480494		
Lat dec de:	38.777116		
Lon dec de:	-76.073625		
Issue date:	1990 9 7	Special fl:	N
C1 seq:	3424	C1 recd:	19901012
Completion:	1990 920		
Total dept:	15		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	8		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	10		
Casing hei:	-.5	Screen typ:	PL
Top screen:	10		
Bottom scr:	15		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	1		
Level befo:	7		
Level duri:	14		
Test pump :	C	Pump insta:	N

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Y
Abandon da:	1998 611	Site id:	MD7000000334960

AA147
South
1/2 - 1 Mile
Higher

MD WELLS **MD7000000334961**

Object id:	334961	County let:	TA
Permit:	TA880453	Mgs id:	Not Reported
B1 seq:	6506	B1 recd:	1990 9 7
City:	EASTON	State:	MD
Zip:	21601	Driller na:	THOMAS F SULLIVAN
Driller id:	MWD0449		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	15		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	MW-2
Nearest to:	EASTON	Town dista:	0
Town direc:	T	Road name:	BAY ST
Road side:	S	Road dista:	25 FT
Tax map:	104	Block:	3
Parcel:	609		
N grid83:	123673		
E grid83:	480494		
Lat dec de:	38.777116		
Lon dec de:	-76.073625		
Issue date:	1990 9 7	Special fl:	N
C1 seq:	3425	C1 recd:	19901012
Completion:	1990 921		
Total dept:	9		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	BC		
Grout top:	0		
Grout bott:	2		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	2		
Casing hei:	-.5	Screen typ:	PL
Top screen:	2		
Bottom scr:	9		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	1		
Level befo:	7		
Level duri:	8		
Test pump :	C	Pump insta:	N

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Y
Abandon da:	1998 611	Site id:	MD7000000334961

AA148
South
1/2 - 1 Mile
Higher

MD WELLS **MD7000000334962**

Object id:	334962	County let:	TA
Permit:	TA880454	Mgs id:	Not Reported
B1 seq:	6505	B1 recd:	1990 9 7
City:	EASTON	State:	MD
Zip:	21601	Driller na:	THOMAS F SULLIVAN
Driller id:	MWD0449		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	15		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	MW-3
Nearest to:	EASTON	Town dista:	0
Town direc:	Not Reported	Road name:	BAY ST.
Road side:	S	Road dista:	50 FT
Tax map:	104	Block:	3
Parcel:	609		
N grid83:	123673		
E grid83:	480494		
Lat dec de:	38.777116		
Lon dec de:	-76.073625		
Issue date:	1990 9 7	Special fl:	N
C1 seq:	3426	C1 recd:	19901012
Completion:	1990 919		
Total dept:	13		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	BC		
Grout top:	0		
Grout bott:	7		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	8		
Casing hei:	-.5	Screen typ:	PL
Top screen:	8		
Bottom scr:	13		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	1		
Level befo:	7		
Level duri:	12		
Test pump :	C	Pump insta:	N

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Y
Abandon da:	1998 611	Site id:	MD7000000334962

149
WNW
1/2 - 1 Mile
Lower

MD WELLS **MD7000000449138**

Object id:	449138	County let:	TA
Permit:	TA941583	Mgs id:	Not Reported
B1 seq:	1890	B1 recd:	2001 5 3
City:	EASTON	State:	MD
Zip:	21601	Driller na:	JOHN T SHANNAHAN
Driller id:	MSD 146		
Est gpm pr:	20		
Use for wa:	DW		
Approx dep:	600		
Drill meth:	ROTARY	Replacemen:	Y
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	EASTON	Town dista:	Not Reported
Town direc:	NW	Road name:	28278 GLEBE RD
Road side:	N	Road dista:	1500FT
Tax map:	25	Block:	14
Parcel:	44		
N grid83:	125502		
E grid83:	478666		
Lat dec de:	38.793756		
Lon dec de:	-76.094462		
Issue date:	2001 5 2	Special fl:	Not Reported
C1 seq:	5109	C1 recd:	2001 627
Completion:	2001 510		
Total dept:	595		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	BC		
Grout top:	4		
Grout bott:	160		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	242		
Casing hei:	+1	Screen typ:	PL
Top screen:	575		
Bottom scr:	595		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	2		
Flowing we:	Not Reported	Telescopin:	T
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	18		
Level befo:	59		
Level duri:	71		
Test pump :	A	Pump insta:	Y

Install pu:	S		
Capacity:	13		
Pump hp:	.75		
Column len:	100		
Closed:	A	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000449138

150
North
1/2 - 1 Mile
Lower

MD WELLS **MD7000000295236**

Object id:	295236	County let:	TA
Permit:	TA810989	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	19851111
City:	EASTON	State:	MD
Zip:	21601	Driller na:	SHANNAHAN, JOHN T.
Driller id:	MWD0022		
Est gpm pr:	10		
Use for wa:	DW		
Approx dep:	600		
Drill meth:	ROTARY	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	5
Nearest to:	EASTON	Town dista:	2.1 MI
Town direc:	N	Road name:	GOLDSBOROUGH NECK RD
Road side:	W	Road dista:	25 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	126721		
E grid83:	479885		
Lat dec de:	38.804629		
Lon dec de:	-76.080287		
Issue date:	19851119	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	1986 715
Completion:	1986 527		
Total dept:	603		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	4		
Grout bott:	30		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	199		
Casing hei:	+01	Screen typ:	PL
Top screen:	593		
Bottom scr:	603		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	2		
Flowing we:	Not Reported	Telescopin:	T
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	17		
Level befo:	57		
Level duri:	93		
Test pump :	A	Pump insta:	Not Reported

Install pu:	S		
Capacity:	12		
Pump hp:	.75		
Column len:	130		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000295236

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

EPA Region 3 Statistical Summary Readings for Zip Code: 21601

Number of sites tested: 96.

Maximum Radon Level: 7.6 pCi/L.
Minimum Radon Level: -0.4 pCi/L.

pCi/L <4	pCi/L 4-10	pCi/L 10-20	pCi/L 20-50	pCi/L 50-100	pCi/L >100
95 (98.96%)	1 (1.04%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)

Federal EPA Radon Zone for TALBOT County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW[R] Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Maryland Public Supply Wells Database
Source: Department of the Environment
Telephone: 410-537-3702
Water use types included are farm (livestock watering and agricultural irrigation), geo-thermal, industrial-commercial-state and federal government, municipal, test-observation-monitoring.

OTHER STATE DATABASE INFORMATION

Oil and Gas Well Location Information
Source: Department of the Environment.
Telephone: 410-537-3557

RADON

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

EPA Region 3 Statistical Summary Readings
Source: Region 3 EPA
Telephone: 215-814-2082
Radon readings for Delaware, D.C., Maryland, Pennsylvania, Virginia and West Virginia.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

PHYSICAL SETTING SOURCE RECORDS SEARCHED

STREET AND ADDRESS INFORMATION

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APPENDIX C

HISTORICAL

DOCUMENTATION (on file with

AECOM)

APPENDIX D

PHOTOGRAPHS RECORDED DURING THE SUBJECT PROPERTY INSPECTION

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Talbot County	28712 Glebe Road, Easton, Maryland	60423280

Photo No.	Date:
1	6/15/16

Direction Photo Taken:

Northwest

Description:

View of the subject property from Easton Parkway (MD 322).

Photo No.	Date:
2	6/15/16

Direction Photo Taken:

Southeast

Description:

View of the northwestern portion of the subject property.

AECOM

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Talbot County	28712 Glebe Road, Easton, Maryland	60423280

Photo No.	Date:
3	6/15/16

Direction Photo Taken:

Northwest

Description:

View of the southwestern portion of the subject property.

Photo No.	Date:
4	6/15/16

Direction Photo Taken:

Southwest

Description:

View of the northeastern portion of the subject building.

AECOM

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Talbot County	28712 Glebe Road, Easton, Maryland	60423280

Photo No.	Date:
5	6/15/16

Direction Photo Taken:

Southwest

Description:

View of a typical bay associated with the warehouse (18 total) and a trash compactor with associated oil AST (see red arrow).

Photo No.	Date:
6	6/15/16

Direction Photo Taken:

North

Description:

View of the transformer area located along the southwestern exterior of the building.

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Talbot County	28712 Glebe Road, Easton, Maryland	60423280

Photo No.	Date:
7	6/15/16

Direction Photo Taken:

NA

Description:

View of the monitoring well adjacent to the maintenance area loading dock bays along the southwestern portion of the building.

Photo No.	Date:
8	6/15/16

Direction Photo Taken:

North

Description:

View of the enclosure/containment that formerly housed a 300-gallon double-walled steel diesel fuel tank used to fuel forklifts and equipment. This is located south of the maintenance area.

AECOM

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Talbot County	28712 Glebe Road, Easton, Maryland	60423280

Photo No.	Date:
9	6/15/16

Direction Photo Taken:

East

Description:

View of a typical stormwater drain. This is located adjacent to the monitoring well south of the maintenance area.

Photo No.	Date:
10	6/15/16

Direction Photo Taken:

North

Description:

View of an approximately 3.75-acre asphalt -paved lot previously used for container storage.

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Talbot County	28712 Glebe Road, Easton, Maryland	60423280

Photo No.	Date:
11	6/15/16

Direction Photo Taken:

Southwest

Description:

View of the guard house along the access road off of Glebe Road.

Photo No.	Date:
12	6/15/16

Direction Photo Taken:

West

Description:

View of a stormwater retention area located southeast of the access road.

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Talbot County	28712 Glebe Road, Easton, Maryland	60423280

Photo No.	Date:
13	6/15/16

Direction Photo Taken:

Northwest

Description:

View of the stormwater retention pond located northwest of the access road in the western corner of the subject property.

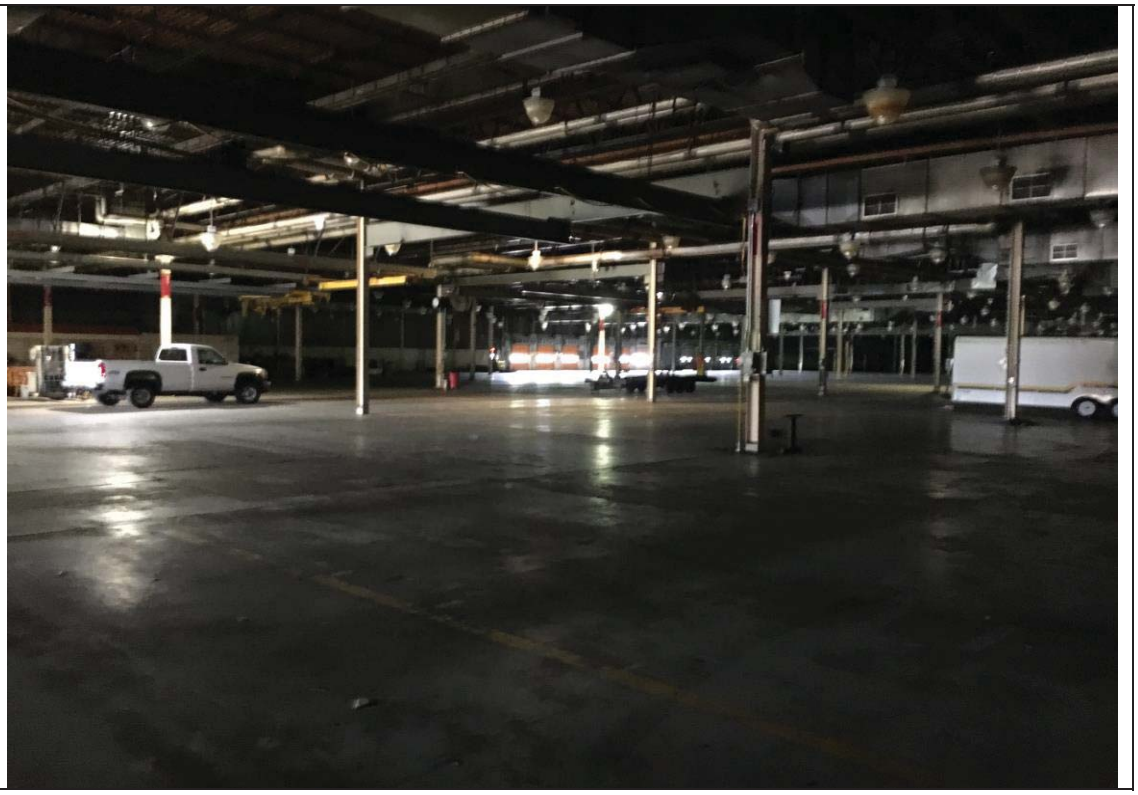
Photo No.	Date:
14	6/15/16

Direction Photo Taken:

NA

Description:

View of the interior of the warehouse portion of the subject building.



AECOM

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Talbot County	28712 Glebe Road, Easton, Maryland	60423280

Photo No. 15

Date: 6/15/16

Direction Photo Taken:

NA

Description:

View of the two ASTs located in the wastewater treatment room in the western portion of the subject building.

Photo No. 16

Date: 6/15/16

Direction Photo Taken:

NA

Description:

View of the holding tanks associated with the wastewater treatment system.

AECOM

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Talbot County	28712 Glebe Road, Easton, Maryland	60423280

Photo No.	Date:
17	6/15/16

Direction Photo Taken:

NA

Description:

View of surficial oil staining in the wastewater treatment area below the holding tank level on the concrete floor.

Photo No.	Date:
18	6/15/16

Direction Photo Taken:

NA

Description:

View of a janitorial sink located in a utility closet along the warehouse.

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Talbot County	28712 Glebe Road, Easton, Maryland	60423280

Photo No.	Date:
19	6/15/16

Direction Photo Taken:

NA

Description:

View of the occupied office space (Maverick Transportation).

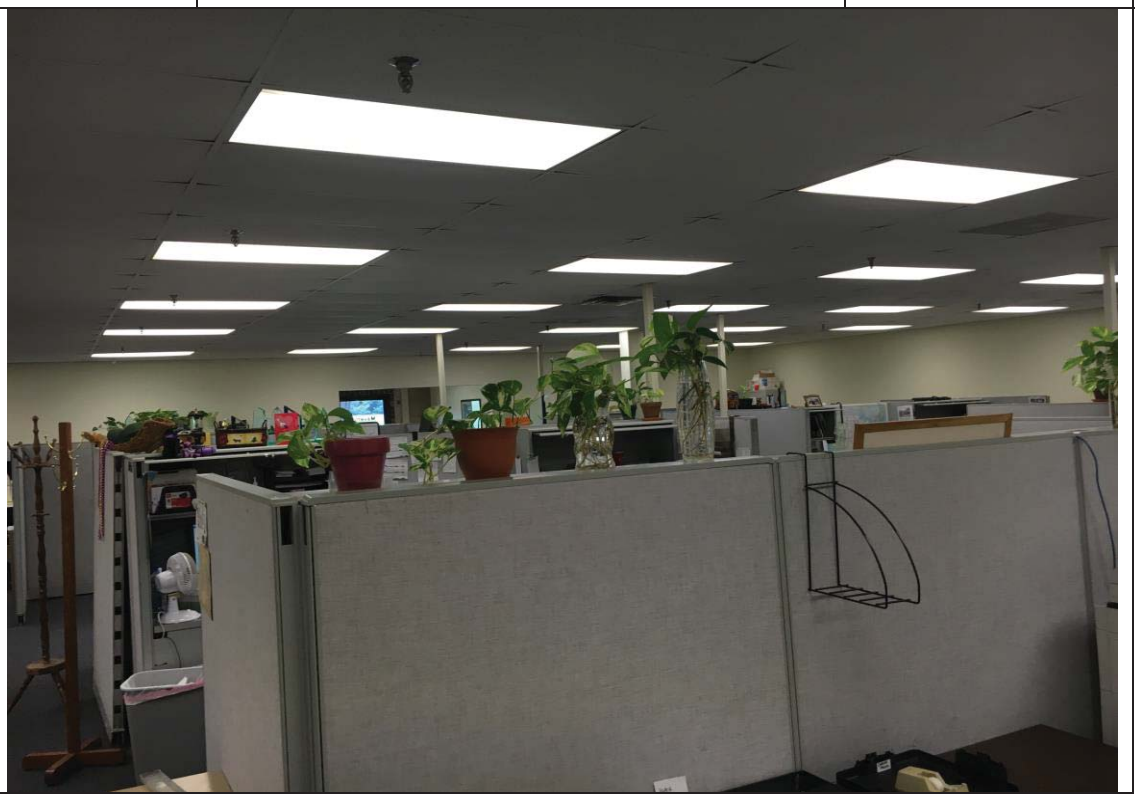


Photo No.	Date:
20	6/15/16

Direction Photo Taken:

NA

Description:

View of a vacant office space.

AECOM

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Talbot County	28712 Glebe Road, Easton, Maryland	60423280

Photo No. 21

Date: 6/15/16

Direction Photo Taken:

Southwest

Description:

View of the flat roof atop the office space.

Photo No. 22

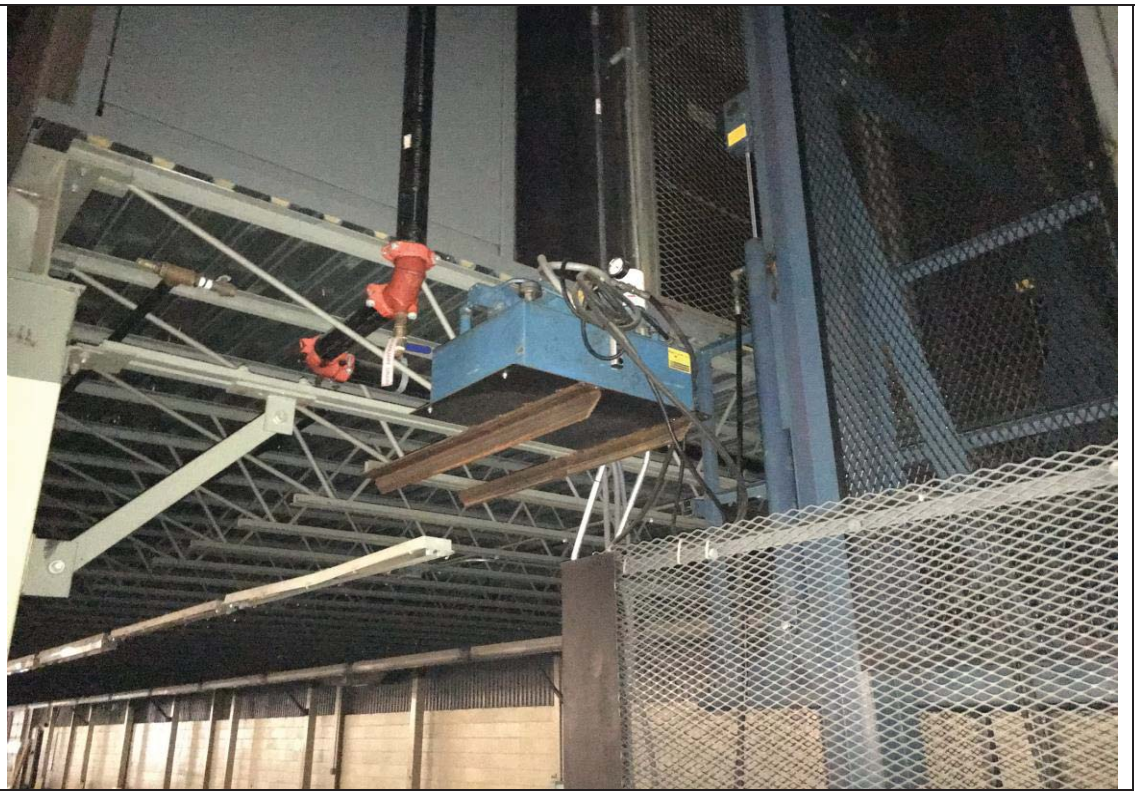
Date: 6/15/16

Direction Photo Taken:

NA

Description:

View of the hydraulic lift machinery located in the eastern portion of the warehouse.



AECOM

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Talbot County	28712 Glebe Road, Easton, Maryland	60423280

Photo No.	Date:
23	6/15/16

Direction Photo Taken:

NA

Description:

View of the hydraulic elevator equipment located in an elevator machine room in the office space.

Photo No.	Date:
24	6/15/16

Direction Photo Taken:

NA

Description:

View of the elevator shaft below the elevator.

AECOM

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Talbot County	28712 Glebe Road, Easton, Maryland	60423280

Photo No.	Date:
25	6/15/16

Direction Photo Taken:

NA

Description:

View of drum storage for oil and antifreeze located in the maintenance area.

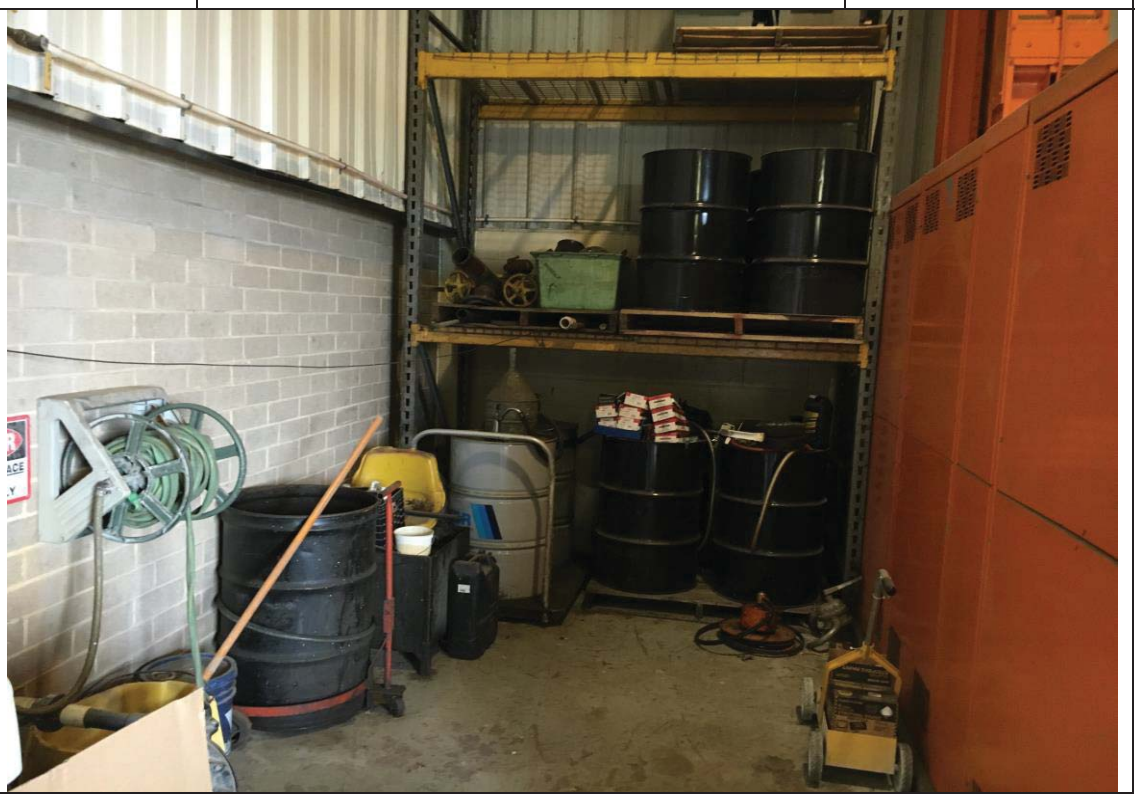


Photo No.	Date:
26	6/15/16

Direction Photo Taken:

NA

Description:

View of water treatment in the maintenance area. Note: the surficial oil stain on the concrete floor.

APPENDIX E
USER QUESTIONNAIRE

EASTON AIRPORT

AVIATION GATEWAY TO THE EASTERN SHORE

Environmental Due Diligence Audit (EDDA) Questionnaire

for the

Easton Airport - Black & Decker Property

Environmental Due Diligence Audit (EDDA)

Prospective Purchaser Copy

This EDDA Questionnaire is intended to obtain information that will aid in the determination of whether the subject property is known, or suspected, to contain hazardous materials or wastes, environmental contamination and/or other regulated substances. The feedback from this inquiry will be used in conjunction with other investigatory methods used in support of a Phase I EDDA. For ease of understanding and response, the inquiry is formulated in a Question & Answer (Q&A) format. The responses can either be typed or hand-written. If additional space is needed, the responses can be extended to, or provided on, a separate page. Attachments can also be provided and a map is attached for illustrative inputs.

— Black + Decker Petroneo 30 YR. SEARCH Title — 46 YR title Search

1. **Environmental Liens** - Are there any recorded land title records (or judicial records) that identify any environmental liens filed or recorded against the property. If yes, please explain.

   Reply: N/A

   # 16-061

2. **Activity or Use Limitations** - Are there any as engineering controls, land use restrictions or institutional controls that are in place at the property and/or have been filed or recorded against the property under federal, tribal, state, or local law? If yes, please explain.

   Reply: Clear Zone and Adjacent Transition Zone Easement and Agreement Liber 1044/folio 392 - (Attached)

3. **Specialized Knowledge or Experience** - Do you have any specialized knowledge or experience related to the Subject Property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the property or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business? If yes, please explain.

   Reply: NO.

4. **Purchase Price** - Does the purchase price being paid for this property reasonably reflect the fair market value of the property? If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the property? If yes, please explain.

   Reply: THE COUNTY HAD AN APPRASIAL COMPLETED AND OFFERED THE OWNES $5 MILLION. THE OWNER COUNTERED WITH $7 MILLION THE DIFFERENCE IN PRICE IS NOT DUE TO CONTAMINATION.

5. **Commonly Known or Reasonably Ascertainable Information** - Are you aware of commonly known or reasonably ascertainable information about the property that would help to identify conditions indicative of (i.) hazardous materials or wastes, (ii.) environmental contamination, (iii.) other regulated substances, (iv.) releases of any of these materials? For example,

   (a.) Do you know the past uses of the property? If yes, please explain. YES. BLACK & DECKER TOOL MANUFACTURE PLANT GLOBAL DEFENSE TECHNOLOGY MANUFACTURE PLANT.

   (b.) Do you know of any fuels or chemicals that are present or once were present at the property? If yes, please explain. NO.

   (c.) Do you know of spills or other releases that have taken place at the property? If yes, please explain. NO.

(d.) Do you know of any environmental cleanups that have taken place at the property? If yes, please explain. NO

(e.) Do you know of any former or existing under- or above-ground storage tanks, lagoons or ponds, waste disposal areas at the property? If yes, please explain. NO

6. **Adjoining Properties** - Based on your knowledge, are there any indicators or is there history of environmental conditions on any adjoin or nearby properties that could have an effect on the subject property? If yes, please explain. NO

Reply:

7. **Other Information** – Is there any other information about the property that would aid in understanding the environmental condition (either past or present) that may be relevant to this EDDA? If yes, please explain or provide. NO.

Reply:

Prepared by: MIKE HENRY (Print) (Signature)

Date: 4-13-16

200 0 200 400
SCALE IN FEET

Source AECOM, 2015 Date of Aerial: October 2015

EASTON/NEWNAM FIELD AIRPORT
EASTON, MARYLAND

AECOM

EASTON EXCHANGE LLC PROPERTY

EXHIBIT 1

FILE NAME: U:\Projects\E\ESN\60423280\CAD\CIVIL\MISC PLANNING EXHIBITS\C-EIDA-BD-PROPERTY.dwg LAYOUT NAME: EASTON EXCHANGE LLC PLOTTED: Monday, March 14, 2016 - 2:37pm

1044/392

CLEAR ZONE AND ADJACENT TRANSITION

ZONE EASEMENT AND AGREEMENT

THIS AGREEMENT made this 10th day of October, 2001, by and between Black and Decker (U.S.), a Maryland Corporation, hereinafter referred to as GRANTOR, and Talbot County, Maryland, hereinafter referred to as GRANTEE.

RECITALS

A. GRANTOR is legally capable of disposing of property, and is the owner of fee simple title to that certain tract of land designated as Parcel "A" shown on Exhibit "A" which is attached hereto and made a part hereof and more particularly described as follows:

Parcel "A" Airport Industrial Park - March 1970

Liber 530/373, Plat Book 24 Page 28

TRP FD SURC $ 5.00
RECORD FEE 20.00
TOTAL 25.00
Rect# 1482 Rcpt # 55665
MAS 5946 Bll: # 1626
Jan 24, 2002 09:31 am

B. Grantee, whose address is 11 North Washington Street, Easton, MD, is the owner of the Easton Airport situated in the County of Talbot and the State of Maryland.

NOW, THEREFORE, WITNESSETH:

1. The GRANTOR, for itself, its successors and assigns, hereby covenants and agrees with the GRANTEE hereof, subject to the undertakings of Grantee herein, that, for the benefit of the public in its use of the said airport, GRANTOR will not hereafter erect, or permit the erection or growth, of any structure, trees, or other object within or upon said Parcel "A" which lies within the clear zone approach area or adjacent transition areas of the Approach end of Runway 04 (which area is identified on Exhibit "B") to a height above the clear zone approach surface or adjacent transition surface for that approach area (as also identified on the said Exhibit "B"), said clear zone approach

LIBER 1044 FOLIO 392

TALBOT COUNTY CIRCUIT COURT (Land Records) MAS 1044 PG 0392 Printed 01/22/2024 JESSICA MARTINS, 11 N. Washington St., Easton, MD 21601

surface being an inclined plane with a slope of 50:1, i.e., one foot of elevation for each 50 feet of horizontal distance, located directly above the clear zone approach area, which inclined plane has an elevation of 37 feet (mean sea level) at its inner end and an elevation of 120 feet (mean sea level) at its outer and upper end as shown on said Exhibit "B", and said adjacent transition surface being an inclined plane with a slope of 7:1, i.e., one foot of elevation for each 7 feet of horizontal distance, located directly above the transition areas, which inclined plane has the same elevation as the clear zone approach surface along the lines common to both surfaces and which plane extends upward and outward at the aforementioned slope of 7:1 to the edge of the transition area as defined on said Exhibit "B" The aforementioned approach and transition surfaces will, in all instances, be determined in accordance with Federal Aviation Regulation Part 77-1 (Obstacle Height Limits For Land Adjacent to the Airport)

2. The GRANTOR, for itself, its successors and assigns, subject to paragraph 7 hereof, does hereby grant and convey unto the GRANTEE, its agents, servants, and employees a continuing right and easement to take any action necessary to prevent the erection or growth of any structure, tree or other object into the airspace above that part of said approach surface, above the above-described inclined plane located directly over Parcel "A", and to remove from such airspace, or mark or light as obstructions to air navigation any and all structures, together with the right of ingress to, egress from and passage over the land of the GRANTOR for such purpose.

3. Further, subject to paragraph 7 hereof, Grantor does hereby grant unto the Grantee a right to fell all trees which are located within the limits of the easement area as of the execution date of the Deed of Easement or at any later time. Grantee shall

have the additional right to cut any trees to a height ten feet below the minimum elevation of the easement, so as to keep the same below the described surface area.

4. Further, Grantor does hereby agree to preclude and prevent construction or development of facilities that will result in directed lighting or glare from the property onto the Airport.

5. Further Grantor does hereby agree in all instances to notify Grantee no later than twenty four (24) hours prior to accomplishing any maintenance, construction or alteration requiring use of a construction crane or other equipment where that equipment would penetrate the above described inclined plane located directly over parcel "A". Such use of a construction crane or other equipment shall only be permitted when weather conditions permit flight under Visual Flight Rules as defined by FAA regulations and when all requirements of FAA form 7460-1 are met.

6. Further, for the consideration as above set out, GRANTOR does hereby grant unto GRANTEE for use and benefit of the public a right of flight for passage of aircraft in the airspace above the said Parcel "A" in approach surface above the inclined plane as above described and as shown on Exhibit "B", together with the right to cause in said airspace such noise as may be inherent in the operation of aircraft using said airspace for landing at, taking off from, or operating at the airport.

7. GRANTEE shall plant and maintain primarily in evergreen trees and/or large shrubs the area cross-hatched in Exhibit B. GRANTEE shall be solely responsible, at its risk and expense, for cutting and clearing such trees and shrubs. GRANTEE shall replant after any future clearing required to prevent such trees and/or shrubs from interfering with the air easement area. GRANTEE shall give GRANTOR written notice before commencing any cutting, clearing or re-planting operations.

TALBOT COUNTY CIRCUIT COURT (Land Records) MAS 1044, p. 0394, MSA_CE91_981. Date available 01/02/2004. Printed 04/13/2016

8. These covenants and agreements shall be binding upon the GRANTOR and GRANTEE, and their successors and assigns and these covenants and agreements shall run with the land.

IN WITNESSETH WHEREOF, the GRANTOR and GRANTEE, by their authorized representatives, sign and seal this 10th day of October, 2001.

BLACK & DECKER (U.S.), INC.

By: _____

STATE OF Maryland, Baltimore COUNTY, TO WIT:

I HEREBY CERTIFY, that on this 10th day of October, 2001, before me, the subscriber, a Notary Public of the State and County aforesaid, personally appeared Thomas M. Johnson, who acknowleged himself to be the Vice-President of Black & Decker (U.S.), Inc. (the "Corporation"), and that he, as such officer, being authorized so to do, executed the foregoing instrument for the purposes contained therein by signing the name of the Corporation by himself as such officer.

JOANNE T. JOHNSON NOTARY PUBLIC BALTIMORE COUNTY, MD.

WITNESS my hand and notarial seal.

_____
Notary Public

My Commission Expires:

Joanne T. Johnson
My Com. Exp. 9/1/2005

TALBOT COUNTY, MARYLAND

By: _____
R. Andrew Hollis, County Manager

EAST1 503459 2BG-000000

LIBER 1044 FOLIO 395

STATE OF Maryland, Talbot COUNTY, TO WIT:

I HEREBY CERTIFY, that on this 4th day of October, 2001, before me, the subscriber, a Notary Public of the State and County aforesaid, personally appeared R. Andrew Hollis, County Manager, known to me (or satisfactorily proven) to be the person whose name is subscribed to the within instrument, and that being authorized so to do, he executed the foregoing instrument for the purposes contained therein

WITNESS my hand and notarial seal.

Jessica Morris
Notary Public

My Commission Expires: JESSICA K. MORRIS NOTARY PUBLIC STATE OF MARYLAND My Commission Expires September 10, 2003

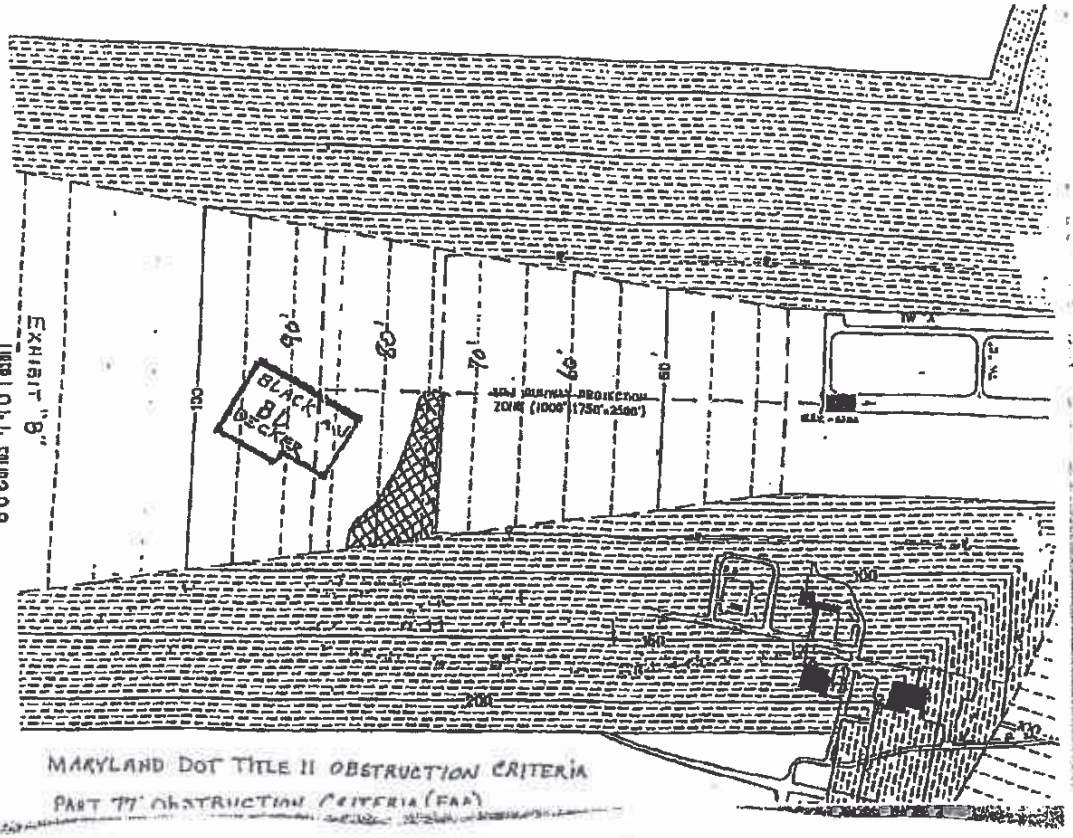
THE UNDERSIGNED, a member in good standing of the Bar of the Court of Appeals of Maryland, hereby certifies that this Easement was prepared by him or under his supervision.

John H. Murray
John H. Murray

TALBOT COUNTY CIRCUIT COURT (Land Records) MAS 1044, p. 0396, MSA_CE91_981 Date available 01/02/2004. Printed 04/13/2016

EXHIBIT "A"
AIRPORT INDUSTRIAL PARK
PARCEL "A" BLACK and DECKER INC
530/373 PLAT 24 page 28
LIBER 1044 FOLIO 397

TALBOT COUNTY CIRCUIT COURT (Land Records) MAS 1044, p. 0398, MSA_CE91_981 Date available 01/02/2004 Printed 04/13/2016



APPENDIX F
WELL LOCATIONS

LEGEND

Property Boundary

Groundwater Flow Direction

Approximate Monitoring Well Location (located)

Approximate Monitoring Well Location (Well not located)

250 0 500

1"=500'

AECOM

Black and Decker (U.S.) Inc. – Subject Property
28712 Glebe Road, Easton, MD 21601

Project No. 60423280

Well Location Map

DATE: 06/23/16 | DRWN:

FIGURE 4

APPENDIX G

SUPPORTING DOCUMENTATION – SUBJECT PROPERTY AND SURROUNDING PROPERTIES (on file with AECOM)

APPENDIX H

RESUMES OF ENVIRONMENTAL PROFESSIONALS

Marie Treiber,

Regional Sr. Project Manager

Years Experience: 29

Technical Specialties

- Environmental Site Assessments
- Remediation/Site Closure
- Property Transfer Assessments
- UST Investigation and Remedial Action
- Abestos Abatement
- CERCLA Assessments
- Construction Oversight
- Landfill Investigations
- Remediation Operation & Maintenance

Professional History

- ENSR Consulting and Engineering
- Fluor Daniel GTI, Inc.
- Greenhorne & O'Mara, Inc.
- Maryland Department of the Environment
- EA Engineering Science & Technology, Inc.

Education

- BS (Environmental Science) Towson State University
- Cert. (Principles of Toxicology) Johns Hopkins University
- Cert. (Groundwater Hydrology) Wright State University
- Cert. (Risk-Based Corrective Action (RBCA)) ASTM
- Cert. (Certified Hazardous Materials Manager)

Professional Registrations and Affiliations

- National Groundwater Assocation, Maryland
- Certified Hazardous Materials Manager, N/A
- AHERA Building Inspector, N/A
- OSHA 29 CFR 1910.120 40 Hour Safety Training, N/A
- OSHA 29 CFR 1910.120 8 Hour Supervisor Training, N/A

Representative Project Experience

PEPCO, Emergency Response/Oil Spill Clean-up, Chalk Point, Maryland. Provided quality control checks of work areas for PEPCO during the on-site clean-up of 110-gallon oil spill from an underground pipeline. Prepared documentation that the EPA's Incident Action Plan was being carried out by clean-up contractors at three on-site work areas encompassing from 200 to 300 workers on a 24-hour basis. Provided PEPCO feedback regarding the status of the work in progress and communicated daily with the clean-up management company any needs that should be addressed with PEPCO.

Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this proposal.

Asbestos Assessment

US Naval Academy, Asbestos/Lead Paint Inspection, Annapolis, Maryland. Conducted an asbestos and lead paint inspection for the renovation of the 1.7 million square foot Bancroft Hall building. Homogenous areas of suspected ACM and suspected lead paint surfaces were investigated. Bulk asbestos and lead paint samples were collected and analyzed.

CERCLA Assessment

Maryland Department of Environment, CERCLA Investigation, MD. Participated in the enforcement of Federal and State regulations regarding releases of toxic contaminants from uncontrolled hazardous waste sites. Ms. Fisher conducted pre-remedial site investigations of CERCLIS sites from the Preliminary Assessment (PA) stage through the Listing Site Inspection (LSI) stage for eligibility to the NPL. The sites were evaluated utilizing the USEPA Hazard Ranking System (HRS).

State of North Carolina, CERCLA Investigation, North Carolina. Conducted CERCLA pre-remedial assessments for over 100 CERCLIS sites for the State of North Carolina. Responsibilities included conducting site audits to determine waste quantities, characteristics, disposal methods, and site source areas, as well as compliance under both RCRA and CERCLA. Prepared Hazardous Ranking System (HRS) scoring and documentation packages to evaluate sites for possible inclusion on the National Priorities List (NPL).

Construction Oversight

7-Eleven, Inc., Construction Oversight, MD, VA, DE & WV. Provided environmental oversight of construction activities at over 50 7-Eleven convenience stores and gasoline stations. Worked closely with construction contractors to oversee the removal and proper disposal of contaminated soil encountered during construction activities. Oversaw the dewatering of sites for future tank installation and aquires all necessary permits for treatment and discharge of contaminated groundwater. Also oversaw the removal, assessment and proper disposal of any underground storage tanks encountered during construction activities. Ms. Fisher intereacts with state agencies during construction activities to ensure that all environmental laws are being met.

Due Diligence

Mulitple, Pre-Aquisition/Property Transfer Environmental Site Assessment, MD, DE, VA, WV & Puerto Rico. Conducted over 150 Phase I and Phase II environmental site assessments (ESAs) for real estate transfers for government agencies, petroleum companies, lending institutes, attorneys, and real estate developers. Tasks included investigating potential environmental impairment and liabilities by conducting historical title and background research, historical aerial photo interpretation, environmental database review, physical site reconniassance, and personal interviews. Also conducted quantitative investigations to confirm the presence or absence of contamination through sampling and analysis of soils, soil gas, groundwater and/or surface water for a variety of parameters including petroleum hydrocaronbs, chlorinated solvents, pesticides, PCBs and metals. Also oversaw geophysical surveys including magnectics and ground penetrating radar to investigate

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the presence of possible buried tanks. Presented findings in a report with conclusions and recommendations. Utilized protocols developed by establishements such as NationsBank, Resolution Trust Corporation, GSA, and ASTM.

Wellsford Commercial Properties Trust, Inc., Due Diligence, Rockville, MD. Conducted all aspects of project management for a Phase I/II Environmental Assessment of a 9-story office building in Rockville, Maryland (Wellsford Commercial Properties Trust). The assessment consisted of a Phase I assessment with limited asbestos survey. The Phase II investigation consisted of subsurface investigation to determine migration of contaminants from an off site source and from an on-site UST. Additional investigation included radon sampling, drinking water fountain samples for lead and, PCB sampling of a utility elevator hydraulic oil. During the limited asbestos survey non-friable ACMs were identified in the ceiling of the lobby, which were previously tested as non-ACM by previous consultant. Based on these findings, a comprehensive asbestos inspection was conducted. Pre-abatement and abatement oversight activities were conducted for the building including: development of a scope of work for abatement; request for bids from abatement contractors; walkthrough with potential contractors; air monitoring during asbestos removal; and final compliance reporting. ENSR also developed an O&M plan for ACMs that remained in the building. Ms. Fisher worked closely with the client to determine liability of the site and prepared all necessary reports.

7-Eleven, Inc., Due Diligence, MD, VA, NJ, PA, DE & WV. Conducted over 75 Phase I and Phase II due diligence environmental site assessments for future 7-Eleven stores. Assessments utilized 7-Eleven's Phase I/II protocol, which included the ASTM standard Phase I and subsurface investigations. Ms. Fisher made recommendations on how the findings from the ESAs would effect future construction activities and later resale of the property, and what actions the state agencies would take based on the contaminants present. The findings of the Phase I/II were also used by 7-Eleven in negotiations for purchase of the property. Ms. Fisher also provided 7-Eleven with cost estimates for disposal/treatment of contamination encountered during construction activities and long-term remedial costs.

EIS/EAs

General Services Administration, Environmental Assessment, Beltsville, Maryland. Project Manager responsible for coordinating and providing technical oversight on a comprehensive environmental site assessment (EA) for the US Food and Drug Administration (FDA) research facility. In addition to hazardous waste, UST, PCB, and asbestos investigations, a low-level radiological waste assessment was required to decommission the facility. The findings were integrated into a comprehensive report for the FDA, GSA and MDE.

US Coast Guard, Environmental Assessment (EA/EIS), San Juan, Puerto Rico. Assisted in the preparation of EA/EIS for the United States Coast Guard. Responsible for the hazardous waste element of this investigation, which included conducting a site audit, hazardous waste inventory control, facility interviews, and identifying all pertinent hazardous waste premits needed for remediation and renovation of the base.

Maryland State Highway Administration, Environmental Assessment, Gaithersburg, Maryland. Conducted a Phase II assessment for the Maryland State Highway Administration to address potential contamination from a former auto salvage yard. Oversaw the installation of monitoring wells. Collected groundwater and

Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this proposal.

subsurface soil samples for laboratory analysis. Provided cost estimates for remediation of the site.

Pennsylvania Department of Transportation, Environmental Assessment (EA/EIS), Bedford, PA. Conducted hazardous waste assessment in preparation of EIS, EA, categorical Exclusion Evaluations and Preliminary Alternative Analysis for highway construction project. Investigated the Route 219 corridor for possible alternative routes and widening. Conducted Phase I and II assessments to determine if hazardous contamination existed on the routes.

Environmental Assessments

Spaulding & Slye, Construction oversight/subsurface investigation, 140 M Street. SE, Washington D.C.. Ms. Fisher prepared and implemented a site characterization work plan to delineate soil contamination at a site previously occupied by an AAMCO Transmission shop. Ms. Fisher utilized geophisical investigation (EM and GPR) to identify any abandoned USTs and test pits and soil borings to characterize subsurface soils. Based on her findings as well as reviewing and analyzing previous consultants work at the site, Ms. Fisher prepared a contaminated soil volume and cost estimate to remove contaminated soil for an upcoming construction project. The project consists of an entire city block which will have a multi-story office building with underground parking. Ms. Fisher will advise the client on obtaining regulatory closure through the Volunteer Clean-up Program. In addition Ms. Fisher has managed the construction oversight of field screening soils. This project is a 12 week project with a field personnell onsite for 6-days a week, 12 hours per day. Ms. Fisher also aided client in obtaining a dewatering well dischage permit and collected all necessary samples and reporting acitivities required by the District DOH.

Environmental Site Assessments

Spaulding & Slye, Due Diligence, Rocville, MD. Conducted Phase I & II ESA for a multi-story office building in Rocville, MD. This facility had a previous diesel fuel release from a UST for an emergency gerenator. Developed a work scope to conduct subsurface investigation to determine extent of free- and dissolve-phase plume. Also conducted a remediation system audit to determine effectiviness of existing remediation system and make recommendations for improvements. This project was completed in a short turn around time with the Phase I and Phase II and remediation system audit all being completed within one week.

Field Construction Supervision

Spaulding & Slye, Construction oversight/subsurface investigation, Navy Yard, Washington D.C.. Oversaw the excavation of soil during construction efforts for a office building in SE D.C. Field screened soils during excavation activities for disposal purposes to reduce the clients cost of dirty vs. clean soil disposal. Also was involved with advising client on closure through the Volunteer Clean-up Program.

Landfill Investigation

Anne Arundel Community College, Landfill Investigation, Arnold, Maryland. Responsible for overseeing the installation of monitoring wells, screening for dangerous levels of methane and volatile organic compounds during drilling

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operations. Determined the extent of the former landfill. Performed soil gas survey to determine the extent of measurable quantities of methane generated from the landfill and potential migration of methane into on-site buildings.

Remediation/Remediation O&M

Bell Atlantic, Petroleum Assessment/Remediation, MD and VA. Managed all aspects of underground storage tank (UST)-related work at Bell Atlantic facilities in Maryland (10 active sites). This work included site assessments and characterizations; the design, installation, operation and maintenance of pump & treat, soil vapor extraction, dual-phase extraction; and air sparging remedial systems. Interfaced with regulatory agencies to ascertain client's obligations for obtaining site closure.

Chevron USA Products, UST Assessment/Remediation, MD, District of Columbia & Virginia. Managed all aspects of UST-related work at former Chevron retail petroleum gasoline stations (20 active sites) in Washington D.C., Maryland and Virginia. This work included site assessments, and characterizations; the design, installation, and operation and maintenance of pump & treat ; soil vapor extraction; dual-phase extraction; and bioremediation remedial systems. Ms. Fisher worked closely with Chevron's Research & Technolgy Corporation to develop the use of a mobile remediation trailer as an alternative to the installation of a permanent remediation system. Also participated in gaining acceptance with clients and regulators on its use. Interfaced with regulatory agencies to ascertain client's obligations for obtaining site closure.

7-Eleven, Inc., UST Remediation, Pikeside, WV. Managed the assessment and remediation of a 7-Eleven convenience store and gasoline station. A petroleum leak of the UST system occurred resulting in soil and groundwater contamination in Karst geology on the site which had migrated off site. Ms. Fisher oversaw the design, installation and permitting of a soil vapor extraction and groundwater pump & treat remediation system. Due to the extremely high hydrocarbon recovery during SVE a catalytic oxdizer was installed. Ms. Fisher obtain a permit from the West Virginia Underground Injection Control office for the installation of an injection well. Treated groundwater was discharged to the injection well. Based on the UIC permit treated groundwater must meet USEPA MCLs and MTBE concentrations below 20 ug/l. Free product was removed from the site shortly after the start-up of the SVE. Ms. Fisher prepared all necessary monitoring reports and interacted with the WVDEP and the State Reimbursement Tank Fund on 7-Eleven's behalf. Currently, Ms. Fisher oversees the operation and maintenance of the remediation system, including system sampling, troubleshooting and maintenance.

7-Eleven, Inc., UST Remediation, Taylorsville, MD. Managed the assessment and remediation of a 7-Eleven convenience store and gasoline station. A release of petroluem from the UST system resulted in soil and groundwater contamination. Ms. Fisher oversaw the operation & maintenance of a groundwater pump & treat and soil vapor extraction system previously installed. Ms. Fisher obatained permission to shut down the system, but the system had to be restarted due to hydrocarbon rebound. Ms. Fisher worked closely with the project engineer to maximize the remediation system efficiency to remove hydrocarbons. MTBE concentrations exceed the USEPA guideline of 20 ug/l and drinking water wells existed in the area. In order to obtain closure a risk assessment will be conducted to determine the risk to the near-by

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drinking water wells. Ms. Fisher prepared all necessary monitoring reports and interacted with MDE to ensure that all the requirements of the CAP were being met.

7-Eleven, Inc., UST Remediation, New Castle, DE. Managed the assessment and remediation of a 7-Eleven convenience store and gasoline station. A petroluem release from the UST system resulted in soil and groundwater contamination on the site. Ms. Fisher oversaw the groundwater remediation operation & maintenance of the soil vapor extraction system. An air sparge system was also installed at the site, but shut down due to potential pushing of contamination off site. Ms. Fisher conducted periodic groundwater pumping from select wells and the use of Oxygen Releasing Compounds (ORC) in order to enhance bioremediation of the site. Ms. Fisher also obtained the approval of DNREC to install an oxygen diffusion system (iSOC) at the site to enhance bioremediation of the groundwater. Ms. Fisher prepared all necessary monitoring reports and interacted with the DNREC as needed to obtain closure.

7-Eleven, Inc., UST assessment and monitoring, Thurmont, MD. Conducted groundwater monitoring of 7-Eleven convenience store and gasoline station. Persistent groundwater contamination existed in one well on site. Ms. Fisher conducted periodic groundwater pumping and the use of Oxygen Releasing Compounds (ORC) to enhance the biodegradation of hydrocarbons in this area. Also MTBE concentrations were above the USEPA guideline of 20 ug/l. Ms. Fisher obtained approval of the MDE to install an oxygen diffusion (iSOC) system at the site to enhance bioremediation of the groundwater. Ms. Fisher prepared necessary monitoring reports and intereacted with the MDE on 7-Eleven's behalf.

Safety Kleen Corporation, RCRA Remediation/Closure, Silver Spring, Maryland. Managed the operation and maintenance of a soil vapor extraction system to remediate subsurface soil and groundwater contamination of petroleum hydrocarbons, mineral spirits, and PCE. Participated in the preparation of a RCRA Part B Post Closure Permit Application and Corrective Action Plan, incorporating Dual-Phase High Vacuum Extraction to enhance remediation.

7-Eleven, Inc., UST remediation, Marlowe, WV. Managed the assessment and remediation of a 7-Eleven convenience store and gasoline station. Due to a petroleum line leak, soil and groundwater contamination existed in Karst geology on the site and had migrated off site. Groundwater contamination of two potable water wells had occured in vicinity of the site. One of the water wells was replaced and the second property Ms. Fisher coordinated the connection to the municipal water supply, eliminating the health threat and saving 7-Eleven from installing a new potable well. A soil vapor extraction and groundwater pumping system was installed on the site. Dissolved hydrocarbon treatment continues at the site, free-phase product has been removed. Ms. Fisher obtained a permit through the WVDEP, Underground Injection Control (UIC) office for the installation of an injection well. The injection well is used to discharge treated groundwater from the remediation system. The treated groundwater must meet the USEPA MCLs and MTBE concentrations must be below 20 ug/l. Due to the success of the on-going remediation, Ms. Fisher has negotiated well abandonement of outlying wells with the WVDEP. Ms Fisher prepared all necessary monitoring reports and interacted with the the WVDEP and the State Reimbursement Tank Fund as needed. Presently Ms. Fisher oversees the operation and maintenance of the remediation system including system sampling, troubleshooting and maintenance.

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7-Eleven, Inc., UST assessment/remediation, Maryland, Virginia, West Virginia, & Deleware. Managing all aspects of UST-related work at 7-Eleven stores (30 active sites) engaged in gasoline sales in Maryland, Virginia, Delaware and West Virginia. This work has included site assessments and characterizations; the design, installation, operation and monitoring of pump/treat, soil vapor extraction, air sparging, dual-phase extraction remedial systems; UST removals; UST upgrades; and removal and disposal of contaminated soils and tank wastes. Ms. Fisher interfaces with regulatory agencies to ascertain client's obligations for obtaining site closure. Ms. Fisher has prepared numerous reimbursement packages for stores located in the State of Virginia. She particapates in 7-Eleven's emergency response on-call system, and has coordinated numerous response events where she acted as liason between cleint, waste diposal contractor, regulator and emergency response personnel.

UST Investigations

Multiple, UST Investigations and Audits, Eastern United States & Puerto Rico. Conducted assessments and compliance audits of UST systems to address the potential for leakage and to determine compliance with applicable regulations. Oversaw tank removals, tank installations, and tightness testing, and performed field monitoring and media sampling when necessary. Prepared UST closure reports and performed implemented subsequent corrective action when required.

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PHASE II ENVIRONMENTAL SITE INVESTIGATION OF THE FORMER BLACK AND DECKER FACILITY

EASTON / NEWNAM FIELD AIRPORT

EASTON, MARYLAND

PREPARED FOR: TALBOT COUNTY

PREPARED BY: AECOM
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OCTOBER 2016

PHASE II SITE INVESTIGATION OF THE FORMER BLACK & DECKER FACILITY

28721 GLEBE ROAD

EASTON, MARYLAND

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1 Introduction

AECOM Technical Services, Inc. (AECOM) has prepared this Phase II Site Investigation on behalf of Talbot County to document the results of the assessment conducted at the former Black and Decker facility located at 28721 Glebe Road, Easton, Talbot County, Maryland (the Subject Property). The specific investigation tasks are summarized below.

AECOM completed a Phase I Environmental Due Diligence Audit (EDDA) for the Subject Property in July 2016. The Phase I EDDA revealed evidence that supports the potential for recognized environmental conditions (RECs) in connection with the Subject Property. A summary of the findings is summarized below.

1. A portion of the Subject Property's office space is currently occupied by Maverick Trucking. According to the site escort, Sotera Engineered Solutions (Sotera) occupied the Subject Property from approximately August 1, 2013 until approximately one year ago. During this time, Sotera used the office and warehouse space for the fabrication of plastics and appliances/furniture. Upon exiting the subject property, Sotera removed all components of their operation. The existing site materials observed during AECOM's site reconnaissance were reportedly from Black and Decker's former operations. Black and Decker occupied the Subject Property from approximately 1974 through June 2003. During this time, the facility maintained three USTs, two of which have reportedly been removed from the ground and one that was closed in-ground. Three records for the Subject Property were included in the Maryland Department of Environment (MDE) Closed Petroleum Investigation/Remediation Cases:

   - 92-1992TA, report closed in 1992 – removed 1,000-gallon underground storage tank (UST) (diesel);
   - 95-1065TA, report closed in 1997 – abandoned in-place 800-gallon UST (waste oil); and,
   - 04-0161TA, report closed in 2004 – abandoned in-place500-gallon UST (waste oil).

   The MDE Oil Control Program (OCP) completed a review of the three OCPCASES and issued a Site Status Letter in May 2004. The OCP stated that it specifically addressed only the petroleum contamination at the site. Based on the review, residual petroleum contamination remains on site; however, the OCP did not require further investigation or corrective action at that time. The three OCPCASES remain in closed status and no changes to the regulatory criteria were found as a result of this Phase I EDDA. The closed OCPCASES

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are considered historic recognized environmental conditions (HRECs), and the residual petroleum contamination is considered a REC.

2. The Subject Property once maintained 11 active above-ground storage tanks (ASTs). A 6,000-gallon water AST and a 2,500-gallon oil/water AST remain in the wastewater treatment area along the southwestern portion of the building, but are no longer in use. In addition, AECOM observed an enclosed containment area with a concrete pad along the southwestern exterior of the building that previously housed a 300-gallon double-walled diesel fuel tank until sometime in the last year (2016). This tank was used to fuel forklifts associated with site operations. Furthermore, an AST of unknown capacity and associated trash compactor was observed along the northern building exterior in the vicinity of the bay doors. No staining was observed in the vicinity of this active tank. Surficial staining from previous operations was observed on the concrete floor in the wastewater treatment room, which is situated in secondary containment. Additional minor surficial staining was observed in the maintenance area in the vicinity of the out-of-use wastewater treatment system. The surficial stains are considered de minimis conditions.

3. A Phase I Environmental Site Assessment, March 2003 (Phase I ESA – 2003) prepared for the Subject Property reported that an approximately 400-gallon concrete pit that was located in the puck area in front of the roll off container which was used to collect excess oil from the processing pucks. During the March 2003 site visit, oil staining was noted outside the facility in the puck processing area on the concrete foundation of the building. During the June 15, 2016 site visit, AECOM did not observe any oil staining in the vicinity. The area of the pit is considered an HREC.

4. The Phase I ESA – 2003 reported that the heat-treat ovens in the motor area have concrete catch pits that contain quench oil. During the June 15, 2016 site visit, AECOM did not observe heat-ovens in the motor area. The site escort indicated that these pits were cleaned and filled with concrete. The concrete catch pits are considered HRECs.

5. Black and Decker was registered as a large quantity generator of hazardous waste. The facility accumulated hazardous wastes in 55-gallon drums placed in the Flammable Storage Room. Currently, several 55-gallon drums reside in the maintenance area, two of which contain 14-year-old oil formerly used for the air compressors. The drums appeared to be in good condition with no signs of a release or staining on the floor in the vicinity. This area has floor drains that drain into the wastewater treatment room adjacent to the southeast. These storage practices are not considered to be RECs.

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6. According to the Phase I ESA – 2003, an oil spill occurred from the 200-hp air compressor in April 2000. Approximately 10 to 15 gallons of oil were released when an air compressor caught fire. Drip pans of oil overflowed and flowed out the door across the south parking lot onto a small grassy area (30 feet by 30 feet). During AECOM's Phase I EDDA site visit, the site escort indicated that a 10-yard dumpster was filled by Black and Decker for impacted soil removal offsite. Because no indication of confirmatory soil samples has been found to date, the oil spill is considered a REC.

7. On behalf of Black and Decker, Miles & Stockbridge, P.C. stated in a letter dated January 2004 that no floor drains were located in the plant during Black and Decker's operation and that the plant was not a transport storage disposal facility subject to the requirements of the Resource Conservation Recovery Act during the time Black and Decker owned and operated the plant.

8. Two additional sites were identified in the Environmental Data Resources Report as having the same physical address as the Subject Property. SFA Defense Products Division has a National Pollution Discharge Elimination System (NPDES) permit that expires in December 2018. Sotera Engineered Solutions was a Conditionally Exempt Small Quantity Generator (CESQG) of hazardous waste.

AECOM completed a Phase II Site Investigation at the Subject Property between August 31, 2016 and September 2, 2016 to determine the extent, if any, of subsurface contamination based on the former use of the Subject Property for manufacturing operations and the historical presence of at least three USTs, concrete pits, and surficial and underground releases that have been identified in historical reports.

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2 Site Background and Setting

The following sections provide a description of the Subject Property, historical Site use, and the general environmental setting.

2.1 Site Description

The subject property is located at 28721 Glebe Road, Easton, Talbot County, Maryland. The 58-acre parcel is located on the north side of Easton in the northwest quadrant of Glebe Road and Easton Parkway (MD 322), south of the Easton / Newnam Field Airport. The Maryland State Department of Assessments & Taxation (SDAT) website lists the Account Number for the Subject Property as District 01 - No. 002090; the property type is light manufacturing and the land use is light industrial. The site layout is depicted in **Figure 1**.

One unnamed paved roadway leading to the Subject Property is accessible from Glebe Road along the western property boundary. An unused guard house is situated at the end of the roadway that enters the Subject Property. This paved roadway provides access to the outdoor storage area (excess parking) west of the warehouse, to the docks located on the north and eastern sides of the warehouse, to an office entrance on the southwestern side of the warehouse, and to paved parking south of the warehouse.

One approximately 225,000 square foot (SF) vacant warehouse building is situated in the east area of the Subject Property. The warehouse contains twenty-one loading docks, all with levelers, seals, dock lights, and dock locks located on the north and eastern sides of the main building. The main office building located south of the warehouse includes Maverick Transportation (trucking company) that utilizes a portion of the office space with the remaining office spaces vacant.

2.2 Surrounding Area Description

A reconnaissance was conducted by vehicle of the adjoining properties. The general characteristic of the adjoining property uses are described below:

- North – The Easton / Newnam Field Airport is located north of the Subject Property. Whalen Company, the Easton Utilities Commission Plant No. 2, and Filter Networks are located northeast of the Subject Property on Glebe Park Drive. The Airport Industrial Park, also located northeast of the Subject Property, includes commercial and industrial properties and potentially other EPA-regulated facilities. Northwest of

the Subject Property consists of an Collision Repair (automotive repair facility), Potomac Valley Brick and Supply, offices, Easton Tile & Marble, and a K-9 Academy.

- South – Glebe Road runs along the south portion of the Subject Property. Commercial and industrial properties located south of Glebe Road include the Coca-Cola Distribution Facility, Lewis Auto Body, and potentially other EPA-regulated facilities.

- West –Aqua Pools and Spas is located in the northeast quadrant of Glebe Road and Mistletoe Drive. Other commercial properties located on the east side of Mistletoe Drive and adjacent to the Subject Property include Nelson's Auto Body Concepts, Eastern Shore Brick, Jerry's Painting, Briansfield Fence, Admiral Tire and Auto, and Harrisons Transmission and Automotive. Additional commercial properties are located further west of the Subject Property from Mistletoe Drive to Goldborough Neck Road. Glebe Creek is west of the Subject Property.

- East – MD 322 runs along the eastern portion of the Subject Property. Land northeast of the Glebe Road and MD 322 intersection is primarily residential. Lowes Home Center is located in the southeast quadrant of Glebe Road and MD 322 on Marlboro Road.

2.2.1 Historical Use

According to the Phase I EDDA prepared by AECOM in July 2016, the Subject Property was undeveloped prior to 1975. Black and Decker (power-tool assembly and manufacturing) occupied the Subject Property from approximately 1974 to 2003. According to the SDAT property record, the primary 224,735-SF structure was constructed in 1975. An article published in The New York Times, November 21, 2002, stated that Black and Decker was closing the facility in Easton, MD and moving their operations to Fayetteville, NC and Reynosa, Mexico. Black and Decker sold the Subject Property in June 2003 (recorded date) to Easton Exchange LLC. Sotera Engineered Solutions (Sotera) occupied the Subject Property from approximately August 1, 2013 until August 2015. During this time, Sotera used the office and warehouse space for the fabrication of plastics and appliances/furniture. Upon exiting the Subject Property, Sotera removed all components of their operation. The Subject Property is currently managed by Pettinaro Management, LLC.

According to a Phase I ESA prepared for the Subject Property by Environmental Resources Management Inc. in March 2003, Black and Decker's outdoor products such as lawn mowers and lawn edgers were originally manufactured at the Subject Property. Injection molding, dip and power coating, and vapor degreasing with 1,1,1-trichloroethane (TCA) were all performed during this time. Hazardous waste manifests from 1983-1993 indicated shipment of TCA offsite for disposal. Later in 1975, Black and Decker began manufacturing motors. Nickel-cadmium battery powered household products were brought in around 1979. Black and Decker began manufac-

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turing battery operated kitchen appliances and continued with similar injection molding, painting, and vapor degreasing as was done in the mid-1970s. By 1986, Black and Decker began the manufacture of electric tools. Two more vapor degreasers were brought to the facility, at which time the facility began machining, motor winding, and injection molding. In 1993, vapor degreasing was replaced by aqueous parts washers. In 1995, battery powered tools were brought into the facility and product assembly was introduced. At the time of the Phase I ESA – 2003, the facility was manufacturing and assembling drills, saws, and grinders.

2.3 Environmental Setting

The Subject Property is located in the Town of Easton in central Talbot County on the Eastern Shore of Maryland. The Soil Conservation Service data included in the Environmental Database Resources (EDR) report indicates the dominant soil composition in the general area of the Subject Property is Othello. The soil surface texture is silt loam and the hydrologic group is identified as C and D – drained/undrained hydrology class of soils that can be drained and classified. This poorly drained soil may have a saturated zone, a layer of low hydraulic conductivity, or seepage. The characteristic depth to water table for the Othello soil is less than 1 foot. This soil meets the requirements for classification as a hydric soil. Typically this soil has a surface layer of fine-grained soils, silts and clays about 9 inches thick. The underlying material extends to a depth of about 72 inches. The upper 50 inches is silt-clay materials, while the lower 22 inches is granular materials.

According to AECOM's site investigation, the on-site soils consist of silty clay and sand. A pronounced layer of peat soil was visible on the western portion of the Subject Property at approximately 9 feet below grade surface (bgs) and gradually became shallower traveling toward the eastern portion of the subject property which had a layer of peat moss at approximately 4 feet bgs.

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3 Investigation Tasks

The field investigation tasks were designed to characterize conditions in surface and subsurface soils related to the former manufacturing operations that were conducted at the Subject Property. Sampling locations were chosen based on information collected during the Phase I EDDA prepared by AECOM in July 2016. All field investigation activities were conducted in accordance with AECOM Standard Operating Procedures and were conducted in compliance with the site specific Health and Safety Plan (HASP).

3.1 Health and Safety Plan

AECOM developed a HASP that was specific to the Subject Property. The development of this plan is required by the Occupational Safety and Health Administration (OSHA) under Hazardous Waste Operations & Emergency Response 29 CFR 1910.120. The site HASP is designed to reduce the risk of physical or chemical exposures that may affect workers in the proposed work area. The site Health and Safety Plan includes information about potential chemicals on the site, health and safety procedures for working on-site and emergency response procedures. Other items included typical best safety practices while drilling, soil sampling, and mobilization/demobilization. The HASP is on file at AECOM and was implemented during the field activities.

3.2 Utility Clearance

In preparation for on-site drilling, GSI Mid-Atlantic, Inc. (GSI) of Bel Air, Maryland notified One Call regarding the planned drilling activities as required to identify underground utilities. Various underground utilities are present throughout the Subject Property including: water, fire suppression line system, gas, communication, telephone, storm drains, and electric. Overhead electrical lines are present along Glebe Road, the eastern boundary of the Subject Property. Prior to the start of intrusive operations, utility clearance was conducted by public and private utility locators in the proposed investigation areas. One Call was contacted for the identification of all recorded public utilities servicing the Subject Property. Following public utility identification, Enviroscan, Inc. (Enviroscan) of Lancaster, Pennsylvania, a private utility locating contractor, was utilized to identify and locate utilities/subsurface features.

On August 22 and 23, 2016, Enviroscan conducted a subsurface utility and ground-penetrating radar (GPR) survey to detect and delineate buried structures beneath the Subject Property and to provide utility clearance for proposed sub-surface investigation locations. The results of the utility survey are included in **Appendix A**.

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As an added level of utility clearance certainty, each boring location was cleared to five feet bgs using a hand auger by GSI Mid-Atlantic Inc. (GSI) of Bel Air, Maryland prior to drilling activities.

3.3 Geophysical Survey

Based on historical usage of the Subject Property identified during the Phase I EDDA, a geophysical survey was implemented to attempt to identify former and/or orphan USTs and subsurface utilities. On August 22 and 23, 2016, Enviroscan, completed the geophysical survey using standard practices of the geophysical industry and equipment representing the best available technology, including:

- a Radio detection RD8000 Multi-Frequency pipe and cable tracer;
- a Radio detection Cable Avoidance Tool (C.A.T.) and Genny pipe and cable locator/tracer;
- a Fisher TW-6 electromagnetic (EM) pipe and cable locator/tracer;
- a GSSI SIR-4000 ground penetrating radar (GPR) system; and,
- a Geonics Ltd. EM-61MK2 electromagnetic instrument.

The instruments were used to scan the investigation area in sequential transects. The data collected was uploaded to provide graphical interpretations of the findings, then super-imposed on an aerial photograph of the area. According to the Geophysical Survey Report, no orphan USTs were identified at the Subject Property. A few areas of subsurface anomalies were identified; however, they align with storm drain manholes and underground utilities. High levels of interference were observed in the northern and eastern loading docks due to reinforced concrete. The GPR signal penetrated to a depth of approximately 3.5 to 4 feet bgs. A complete summary of the survey and Enviroscan's narrative of findings, along with figures, is included as **Appendix A**.

3.4 Soil Sampling

Between August 31, 2016 and September 2, 2016, GSI advanced 28 soil borings (SB-1 through SB-28) at the Subject Property, under the supervision of AECOM. The borings were advanced utilizing Geoprobe® direct push technology and soil samples were continuously collected using a five-foot macro core sampler, at locations selected to investigate potential subsurface impacts to soil and groundwater beneath the Subject Property. Six soil borings (SB-1 through SB-6) were advanced inside the former manufacturing warehouse, five soil borings (SB-7 through SB-10 and SB-12) were advanced to the west of the structure, ten soil borings (SB-11, SB-13 through SB-21) were advanced to the north of the structure, two soil borings (SB-22 and SB-23) were advanced to the east of the structure, and five soil borings (SB-24 through SB-28) were advanced to the south of the structure. The soil boring

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locations are depicted on **Figure 1**. The soil borings were advanced to a maximum depth of 10 to 20 feet bgs. Groundwater was encountered in all exterior soil borings at depths ranging from 4.45 feet bgs in soil boring SB-15 (located in the northwestern corner) to 11.23 feet bgs in soil boring SB-13 (located south of the former 500-gallon waste oil UST). Groundwater was not encountered in the soil borings advanced inside the warehouse (SB-1 through SB-6) due to a drain system that is located under the on-site structure. Boring logs are presented in **Appendix B**.

Soil samples were continuously field screened with a photoionization detector (PID) to the terminal boring depth. The PID detects volatile organic vapors as they volatilize from the soil. The meter, calibrated with isobutylene, gives qualitative indications of volatile organic contamination. No elevated PID readings were observed during the installation of the soil borings with the exception of soil boring SB-8 which had a PID reading of 1.1 parts-per-million (ppm) with a slight petroleum odor. Soil boring SB-8 is located down-gradient of the former 800-gallon waste oil/water UST that was abandoned in place in 1994. PID readings are provided in the boring logs in **Appendix B**. Soil samples were collected from each boring at the highest PID reading or, if no PID readings were encountered, soil samples were collected at the groundwater interface. Bedrock refusal was not encountered during drilling activities.

The soil samples were placed in laboratory-supplied containers and packed with ice for transport to TestAmerica of Nashville, Tennessee under chain-of-custody protocol. Each sample was analyzed for volatile organic compounds (VOCs), EPA Method 8260B, polycyclic aromatic hydrocarbons (PAHs), EPA Method 8270C, and total petroleum hydrocarbons (TPH) gasoline/diesel range organics (GRO/DRO), EPA Method 8015C. In addition, ten soil samples (SB-7 through SB-13, SB-19, SB-22, and SB-25) were analyzed for polychlorinated biphenyls (PCBs), EPA Method 8082A, and RCRA metals, EPA Method 6010C/7471B.

After samples were collected, each boring was backfilled using the native material and capped with the existing surrounding surface of either concrete or asphalt patch. No excess soil cuttings were generated during soil boring activities.

3.5 Groundwater Sampling

Groundwater samples were collected from 13 soil borings (SB-7 through SB-13, SB-15, SB-19, SB-20, SB-22, SB-23, and SB-25) by installing a one-inch diameter temporary well. In addition, two previously installed monitoring wells (MW-West, and MW-North) were gauged and sampled. Groundwater was encountered in all exterior soil borings at depths ranging from 4.45 feet bgs in soil boring SB-15 to 11.23 feet bgs in soil boring SB-13. Groundwater was not encountered in the soil borings advanced inside the warehouse (SB-1 through SB-6) due to a drain system that is located under the on-site structure. The groundwater samples collected from the soil borings

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were extracted using dedicated tubing and a peristaltic pump. No sheen was observed on the groundwater during the collection of the groundwater samples.

The groundwater samples were placed in laboratory supplied containers and packed with ice for transport to TestAmerica, under chain-of-custody protocol. All of the groundwater samples were submitted for analysis of VOCs, TPH-GRO, TPH-DRO, and PAHs. In addition, groundwater samples SB-7 through SB-13, SB-19, SB-22, and SB-25 were submitted for analysis of RCRA Metals.

3.6 Quality Control Sampling

Various QA/QC samples were collected during the course of the Phase II Site Investigation. A total of three duplicate soil samples and two duplicate groundwater samples were collected, one on each day. No groundwater samples were collected on September 1, 2016. One field blank was collected utilizing a clean soil boring sleeve. All the QA/QC samples were analyzed for VOCs, PAHs, TPH-GRO, and TPH-DRO. In addition, a trip blank sample was analyzed for VOCs.

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4 Results and Findings

4.1 Soil Sampling Results

Based on review of the soil analytical results, no VOCs, PAHs, or PCBs were above the MDE Non-Residential Clean-up Standards in the analyzed soil samples. Metals were analyzed in 10 of the 28 soil samples. Arsenic was detected above the MDE Non-Residential Clean-up Standard in soil sample SB-10, SB-13 and SB-22. Several other metals including barium, chromium and lead were detected below the MDE Non-Residential Clean-up Standards. TPH-DRO was detected in soil samples SB-3 and SB-16 but below the MDE Non-Residential Clean-up Standard and above the MDE Non-Residential Clean-up Standard in SB-8. A summary of the soil analytical data is included in **Table 1**. The complete laboratory analytical results are included as **Appendix C**.

In the process of the soil sampling event, three duplicate samples were collected as part of the QA/QC. The results of those analyses are included in the lab reports included in **Table 1** and **Appendix C**.

4.2 Groundwater Sampling Results

Based on review of the groundwater analytical results, VOC, PAHs, or TPH-GRO were detected in the analyzed groundwater samples with the exception of groundwater sample SB-13 which has cis-1,2-Dichlorethene, trichloroethene, and vinyl chloride above the MDE Groundwater Clean-up Standards. Soil boring SB-13 was advanced down gradient of the former 500-gallon waste oil UST. Metals were analyzed in 10 of the 15 groundwater samples. Several metals including arsenic, barium, cadmium, chromium, lead, and selenium were detected above the MDE Groundwater Clean-up Standards in the analyzed samples. TPH-DRO was detected above the MDE Groundwater Cleanup Standard in groundwater sample soil boring SB-8 which was collected down-gradient from the abandoned 800-gallon waste oil/water UST. A summary of the groundwater analytical data is included in **Table 2**. The complete laboratory analytical results are included as **Appendix C**.

In the process of the groundwater sampling event, several QA/QC samples were collected: one trip blank, one field blank, and two duplicate samples. The results of those analyses are included in the lab reports included in **Appendix C**.

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5 Conclusions and Discussion

AECOM on behalf of Talbot County has completed a Phase II Site Investigation of the Subject Property located at 28721 Glebe Road, Easton, Talbot County, Maryland.

In the process of this Phase II investigation, AECOM collected sub-surface samples at 28 locations across the site in areas of historical interest. According to the soil analytical results, the soil did not detect any VOCs, PAHs, TPH-GRO/DRO or metals with the exception of arsenic in soil samples SB-10, SB-13, and SB-22 and TPH-DRO in soil sample SB-8 above the MDE Non-Residential Clean-up Standard.

Soil boring SB-13 was advanced down-gradient of the former 500-gallon waste oil UST, the analytical results for which revealed concentrations of cis-1,2-Dichloroethene, Trichloroethene and vinyl chloride above the MDE Groundwater Cleanup Levels. These exceedances are presumed to be associated with degreasing activities that occurred during the former facility operations. The groundwater sample collected from soil boring SB-8 located down-gradient of the abandoned 800-gallon waste oil/water UST, revealed concentrations of TPH-DRO above the MDE Groundwater Clean-up Level. Several metals were detected in groundwater throughout the Subject Property above the MDE Groundwater Clean-up Levels.

Based on the results of the Phase II Site Investigation, AECOM offers the following conclusions and recommendations for further action at the Subject Property:

- The property owner should be made aware of the soil and groundwater exceedances and report them to the MDE.
- The GPR survey did not identify any orphan USTs on the Subject Property, although the interference of reinforced concrete was found in the loading dock area.
- Low levels of chlorinated solvents exceeding screening levels were found in the groundwater of the soil boring SB-13 located near the former 500-gallon waste oil UST. The UST was abandoned in-place and a MDE case number 04-0161TA was associated with the closure of the UST. The Leak Summary and Tank Closure Form, July 2004, reports that a release was detected and cleanup was initiated. According to AECOM's site escort during the June 15, 2016 site reconnaissance, the 500-gallon UST was actually a concrete pit that was pumped, cleaned and filled with concrete as part of the abandonment procedure.

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- Chlorinated solvents are heavier than water and tend to concentrate toward the bottom of aquifers; therefore, AECOM recommends further sampling for chlorinated solvents in this area of the Subject Property be considered.

- In preparation for future site development, the former 500-gallon waste oil UST should be properly removed. Subsequently, soil and water should be disposed of properly during removal activities.

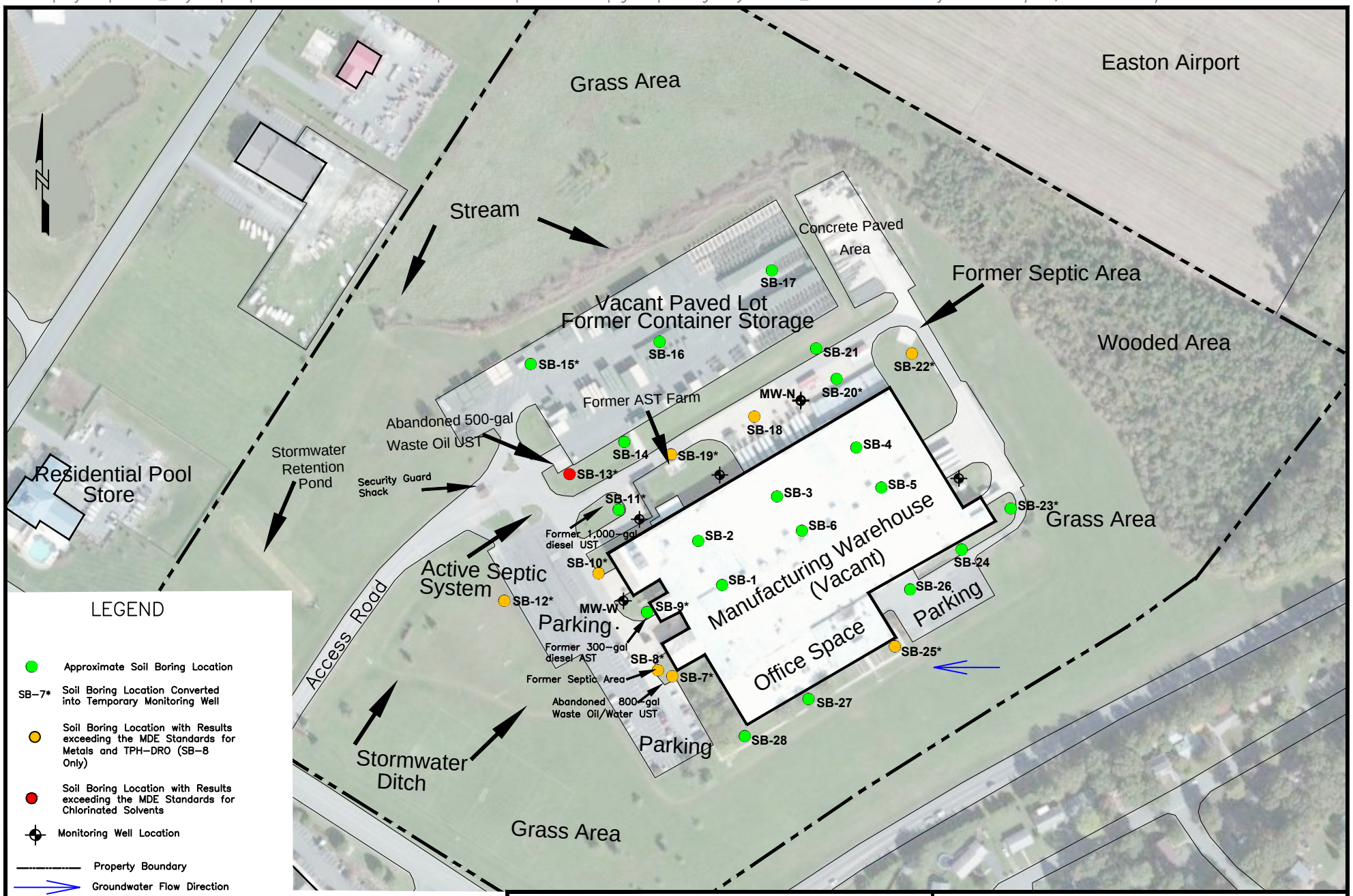
· TPH-DRO was reported in the soil sample of the boring located near the former 800-gallon waste oil UST. The UST was abandoned in-place and a MDE case number 95-1065TA was associated with the closure of the tank. According to the Removal of Waste Oil Underground Storage Tank Report, January 1995, prepared by O'Brien and Gere Engineers, Inc., prior to tank closure, approximately 100 gallons of fluid and sludge were removed from the tank. The top three feet of the tank was demolished and the tank was filled with fill and restored with topsoil and grass seed.

- In preparation for future site development, the former 800-gallon waste oil UST should be properly removed. Subsequently, soil and water should be disposed of properly during removal activities.

· The concentrations of metals found in the soil and groundwater are not at a level that would be considered hazardous waste and are not expected to pose a problem for disposal should they need to be excavated from the Subject Property during site development.

Figures

File: W:\Projects\USCLM1_Projects\PST\Black and Decker Easton MD\AECOM files\Phase I EDDA\Figures\SLU.dwg Layout: ANSI_A1-LJ User: colfleshj Plotted: Sep 16, 2016 - 12:51pm Xref's:



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Black and Decker (U.S.) Inc. – Subject Property
28712 Glebe Road, Easton, MD 21601
Project No. 60514611

Site Map with Soil Boring Locations

DATE: 06/23/16 | DRWN: JP | REV: PP

FIGURE 1

Tables

Table 1: Soil Analytical Results
Former Black & Decker Facility
28721 Glebe Road
Easton, Maryland

Sample ID	SB-1	SB-2	SB-3	SB-4	SB-5	SB-6	SB-7	SB-8	SB-9	SB-10	SB-11	SB-12	SB-13	SB-14	SB-15	MDE Non-Residential Clean-up Standards
Sample Date	8/31/2016	8/31/2016	8/31/2016	8/31/2016	8/31/2016	8/31/2016	8/31/2016	8/31/2016	8/31/2016	8/31/2016	8/31/2016	8/31/2016	9/1/2016	9/1/2016	9/1/2016	
Sample Depth	7.5-8'	7.5-8'	7.5-8'	7-7.5'	7.5-8'	7.5-8'	7.5-8'	7.5-8'	7.5-8'	8-8.5'	7.5-8'	8-8.5'	9.5-10'	8-8.5'	9.5-10'	
PID Reading (ppm)	0	0	0	0	0	0	0	1.1	0	0	0	0	0	0	0	
Volatile Organic Compounds (mg/Kg)																
Acetone	ND	ND	ND	ND	0.177	ND	ND	ND	ND	ND	ND	ND	ND	0.0722	ND	92,000
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	52
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8,200
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10,000
Xylenes	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20,000
MTBE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	720
cis-1,2-Dichlorethene	ND	ND	ND	ND	0.00292	ND	ND	ND	ND	ND	ND	ND	0.00626	ND	ND	1,000
Trichloroethene	ND	ND	ND	ND	0.00287	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7
Carbon Disulfide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10,000
Polychlorinated Biphenyls (PCBs) (mg/Kg)																
PCB-1016	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	NA	NA	41
PCB-1221	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	NA	NA	1.4
PCB-1232	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	NA	NA	1.4
PCB-1242	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	NA	NA	1.4
PCB-1248	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	NA	NA	1.4
PCB-1254	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	NA	NA	1.4
PCB-1260	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	NA	NA	1.4
Metals (mg/Kg)																
Arsenic	NA	NA	NA	NA	NA	NA	ND	ND	ND	5.12	ND	ND	2.25	NA	NA	1.9
Barium	NA	NA	NA	NA	NA	NA	22.8	19.6	79.9	72.7	50.8	45.1	35.5	NA	NA	20,000
Chromium	NA	NA	NA	NA	NA	NA	6.26	5.23	8.85	9.55	10.6	7.52	4.67	NA	NA	310
Lead	NA	NA	NA	NA	NA	NA	3.1	3.74	4.75	15.5	6.02	5.62	10.4	NA	NA	1,000
Total Petroleum Hydrocarbons (mg/Kg)																
TPH-GRO	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6,200
TPH-DRO	ND	ND	5.15	ND	ND	ND	ND	645	ND	ND	ND	ND	ND	ND	ND	6,200

ND: Not detected at the laboratory reporting limit
NA: Not analyzed
mg/Kg: milligrams-per-kilogram
ppm: parts-per-million
PID: Photoionization Detector

MTBE: Methyl tert-butyl ether
TPH-GRO: Total Petroleum Hydrocarbon Gasoline Range Organics
TPH-DRO: Total Petroleum Hydrocarbon Diesel Range Organics
Highlighted Bold: results exceed the MDE Non-Residential Clean-up Standard

Table 1 Continued: Soil Analytical Results
Former Black & Decker Facility
28721 Glebe Road
Easton, Maryland

Sample ID	SB-16	SB-17	SB-18	SB-19	SB-20	SB-21	SB-22	SB-23	SB-24	SB-25	SB-26	SB-27	SB-28	DUP-1	DUP-2	DUP-3	MDE Non-Residential Clean-up Standards
Sample Date	9/1/2016	9/1/2016	9/1/2016	9/1/2016	9/1/2016	9/1/2016	9/1/2016	9/1/2016	9/1/2016	9/1/2016	9/1/2016	9/2/2016	9/2/2016	8/31/2016	9/1/2016	9/2/2016	
Sample Depth	8-8.5'	7.5-8'	7.5-8'	8-8.5'	6.5-7'	8-8.5'	3.5-4'	3.5-4'	5-5.5'	6.5-7'	6.5-7'	5.5-6'	6.5-7'	8.5-9'	10-10.5'	6-6.5'	
PID Reading (ppm)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Volatile Organic Compounds (mg/Kg)																	
Acetone	ND	0.0773	ND	ND	ND	ND	ND	ND	ND	0.041	ND	ND	ND	0.248	ND	ND	92,000
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	52
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8,200
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10,000
Xylenes	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20,000
MTBE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	720
cis-1,2-Dichlorethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,000
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7
Carbon Disulfide	ND	ND	ND	ND	ND	ND	ND	ND	0.00544	ND	ND	ND	ND	ND	ND	ND	10,000
Polychlorinated Biphenyls (PCBs) (mg/Kg)																	
PCB-1016	NA	NA	NA	ND	NA	NA	ND	NA	NA	ND	NA	NA	NA	NA	NA	NA	41
PCB-1221	NA	NA	NA	ND	NA	NA	ND	NA	NA	ND	NA	NA	NA	NA	NA	NA	1.4
PCB-1232	NA	NA	NA	ND	NA	NA	ND	NA	NA	ND	NA	NA	NA	NA	NA	NA	1.4
PCB-1242	NA	NA	NA	ND	NA	NA	ND	NA	NA	ND	NA	NA	NA	NA	NA	NA	1.4
PCB-1248	NA	NA	NA	ND	NA	NA	ND	NA	NA	ND	NA	NA	NA	NA	NA	NA	1.4
PCB-1254	NA	NA	NA	ND	NA	NA	ND	NA	NA	ND	NA	NA	NA	NA	NA	NA	1.4
PCB-1260	NA	NA	NA	ND	NA	NA	ND	NA	NA	ND	NA	NA	NA	NA	NA	NA	1.4
Metals (mg/Kg)																	
Arsenic	NA	NA	NA	ND	NA	NA	3.26	NA	NA	ND	NA	NA	NA	NA	NA	NA	1.9
Barium	NA	NA	NA	18.4	NA	NA	58.5	NA	NA	4.02	NA	NA	NA	NA	NA	NA	20,000
Chromium	NA	NA	NA	2.2	NA	NA	8.51	NA	NA	1.15	NA	NA	NA	NA	NA	NA	310
Lead	NA	NA	NA	1.58	NA	NA	7.74	NA	NA	ND	NA	NA	NA	NA	NA	NA	1,000
Total Petroleum Hydrocarbons (mg/Kg)																	
TPH-GRO	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6,200
TPH-DRO	ND	5.33	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6,200

ND: Not detected at the laboratory reporting limit
NA: Not analyzed
mg/kg: milligrams-per-kilogram
ppm: parts-per-million
PID: Photoionization Detector

MTBE: Methyl tert-butyl ether
TPH-GRO: Total Petroleum Hydrocarbon Gasoline Range Organics
TPH-DRO: Total Petroleum Hydrocarbon Diesel Range Organics
Highligted Bold: results exceed the MDE Non-Residential Clean-up Standard

Table 2: Groundwater Analytical Results
Former Black & Decker Facility
28712 Glebe Road
Easton, Maryland

Sample ID	SB-7	SB-8	SB-9	SB-10	SB-11	SB-12	SB-13	SB-15	SB-19	SB-20	SB-22	SB-23	SB-25	MDE Groundwater Clean-up Standards
Sample Date	8/31/2016	8/31/2016	8/31/2016	8/31/2016	8/31/2016	8/31/2016	9/2/2016	9/2/2016	9/2/2016	9/2/2016	9/2/2016	9/2/2016	9/2/2016	
Volatile Organic Compounds (µg/L)														
Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	550
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,000
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	700
Xylenes	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10,000
MTBE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20
cis-1,2-Dichlorethene	1.38	ND	ND	15.4	2.81	ND	386	ND	4.36	ND	ND	ND	ND	70
1,1-Dichloroethane	ND	ND	6.48	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	90
Trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	4.59	ND	ND	ND	ND	ND	ND	100
Trichloroethene	ND	ND	ND	ND	ND	ND	8.46	ND	2.51	ND	ND	ND	ND	5
Vinyl chloride	ND	ND	ND	ND	ND	ND	3.97	ND	ND	ND	ND	ND	ND	2
Metals (mg/L)														
Arsenic	0.0266	0.256	ND	0.024	ND	ND	0.0313	NA	0.0297	NA	0.0112	NA	ND	0.01
Barium	0.163	0.17	0.0939	0.443	0.0472	0.345	0.128	NA	0.174	NA	0.0752	NA	0.215	2
Cadmium	0.0046	0.0042	ND	0.0022	ND	0.0016	0.0037	NA	0.005	NA	0.0028	NA	0.0026	0.005
Chromium	0.124	0.177	0.007	0.111	0.0061	0.184	0.0853	NA	0.129	NA	0.0384	NA	0.0695	0.01
Lead	0.0582	0.0782	0.008	0.075	0.0101	0.104	0.415	NA	0.0551	NA	0.0122	NA	0.016	0.015
Selenium	ND	0.0108	ND	ND	ND	ND	ND	NA	ND	NA	ND	NA	ND	0.05
Total Petroleum Hydrocarbons (mg/L)														
TPH-GRO	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.047
TPH-DRO	ND	0.191*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.047

ND: Not detected at the laboratory reporting limit
NA: Not analyzed
ug/L: micrograms-per-liter
mg/L: milligrams-per-liter
MTBE: Methyl tert-butyl ether
TPH-GRO: Total Petroleum Hydrocarbon Gasoline Range Organics
TPH-DRO: Total Petroleum Hydrocarbon Diesel Range Organics
Highligted Bold: results exceed the MDE Groundwater Clean-up Standard
* LCS or LCSD is outside acceptance limit

Table 2 Continued: Groundwater Analytical Results
Former Black & Decker Facility
28712 Glebe Road
Easton, Maryland

Sample ID	DUP-1	DUP-2	MW-N	MW-W	FB	Trip Blank	MDE Groundwater Clean-up Standards
Sample Date	8/31/2016	9/2/2016	9/2/2016	9/2/2016	9/1/2016	8/31/2016	
Volatile Organic Compounds (µg/L)							
Acetone	ND	0.0773	ND	ND	ND	ND	550
Benzene	ND	ND	ND	ND	ND	ND	5
Toluene	ND	ND	ND	ND	ND	ND	1,000
Ethylbenzene	ND	ND	ND	ND	ND	ND	700
Xylenes	ND	ND	ND	ND	ND	ND	10,000
MTBE	ND	ND	ND	ND	ND	ND	20
cis-1,2-Dichlorethene	17.7	ND	ND	ND	ND	ND	70
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	90
Trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	100
Trichloroethene	ND	ND	ND	ND	ND	ND	5
Vinyl chloride	ND	ND	ND	ND	ND	ND	2
Metals (mg/L)							
Arsenic	NA	NA	NA	NA	NA	NA	0.01
Barium	NA	NA	NA	NA	NA	NA	2
Cadmium	NA	NA	NA	NA	NA	NA	0.005
Chromium	NA	NA	NA	NA	NA	NA	0.01
Lead	NA	NA	NA	NA	NA	NA	0.015
Selenium	NA	NA	NA	NA	NA	NA	0.05
Total Petroleum Hydrocarbons (mg/L)							
TPH-GRO	ND	ND	ND	ND	ND	NA	0.047
TPH-DRO	ND	ND	ND	ND	ND	NA	0.047

ND: Not detected at the laboratory reporting limit
NA: Not analyzed
ug/L: micrograms-per-liter
mg/L: milligrams-per-liter
MTBE: Methyl tert-butyl ether
TPH-GRO: Total Petroleum Hydrocarbon Gasoline Range Organics
TPH-DRO: Total Petroleum Hydrocarbon Diesel Range Organics
Highligted Bold: results exceed the MDE Groundwater Clean-up Standard
* LCS or LCSD is outside acceptance limit

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Appendix A

Enviroscan Geophysical Report

Final Report
Geophysical Survey
Subsurface Utility and Structure Detection/Delineation
28712 Glebe Road
Easton, MD
Enviroscan Reference Number 071614

Prepared For: AECOM
Prepared By: Enviroscan, Inc.
August 26, 2016

1051 Columbia Avenue ● Lancaster, PA 17603 ● 717.396.8922 ● Fax 717.396.8746 ● email@enviroscan.com ● www.enviroscan.com

ENVIROSCAN, INC.

August 26, 2016

Mr. Peter Pecora
AECOM
8000 Virginia Manor Road
Beltsville, MD 20705

RE: Geophysical Survey
Subsurface Utility and Structure Detection/Delineation
28712 Glebe Road
Easton, MD
Enviroscan Reference Number 071614

Dear Mr. Pecora:

Pursuant to your request, Enviroscan, Inc. conducted a geophysical survey at the above-referenced site on August 22nd and 23rd, 2016. The purposes of the survey were to: 1) detect and delineate buried structures beneath accessible portions of the site, and 2) provide utility clearance at approximately 30 client-designated locations. Generally, the site was asphalt-and concrete-covered parking areas and grass lawn.

Methods

The survey was completed using standard and/or routinely accepted practices of the geophysical industry and equipment representing the best available technology, including:

- a Radiodetection RD8000 Multi-Frequency pipe and cable tracer;
- a Radiodetection C.A.T. and Genny pipe and cable locator/tracer;
- a Fisher TW-6 electromagnetic (EM) pipe and cable locator/tracer;
- a GSSI SIR-4000 ground penetrating radar (GPR) system; and
- a Geonics Ltd. EM-61MK2 electromagnetic instrument.

The principles of these techniques are detailed below.

RD8000

Utility tracing was conducted using a Radiodetection RD8000 digital cable and pipe tracer. The transmitter can be directly (conductively) coupled to exposed portions of a metallic pipe, cable or wire, or indirectly (inductively) to a subsurface metallic utility of known location/orientation. The transmitter remains stationary and energizes the metallic utility at a frequency selected by the operator (512 Hz, 8 kHz, 33 kHz, or 65 kHz), which is received at the ground surface by the digital locator. When the transmitter is directly coupled to the metallic utility, the digital receiver can also calculate the depth of the utility to an accuracy of ±10% of its actual depth. Please note the close proximity to bends in the traced line, or poor signal strength, can result in erroneous depth estimations.

C.A.T. and Genny

The survey areas were also scanned with a Radiodetection C.A.T. and Genny pipe and cable locator and tracer. In Power mode, the C.A.T. detects the 50 to 60 Hertz (Hz) electromagnetic field generated by live power cables and other metallic utilities to which a live line is grounded. In Radio mode, the C.A.T. detects buried conductors (cables or metallic pipes) as they conduct and re-transmit commercial broadcast radio energy. In Genny mode, the C.A.T. detects signal generated by the Genny transmitter. The Genny transmitter can be coupled directly (conductively) to exposed portions of a metallic pipe, cable or wire, or indirectly (inductively) to a subsurface metallic utility with known location and orientation.

TW-6

In order to detect unknown utilities, Enviroscan employed a Fisher TW-6 pipe and cable locator and tracer. In pipe and cable search mode, the TW-6 is essentially a deep-sensing metal detector that detects any highly electrically conductive materials (e.g. metals) by creating an electromagnetic field with a transmitting coil. A receiving coil at a fixed separation from the transmitter measures the field strength. As the instrument is swept along the ground surface, subsurface metallic bodies distort the transmitted field. The change in field strength/orientation is sensed by the receiver, setting off an audible alarm and/or causing deflection of an analog meter. The TW-6 can nominally detect a 2-inch metal pipe to a depth of 8 feet, and a 10-inch metal pipe to a depth of 14 feet.

GPR

GPR systems produce cross-sectional images of subsurface features and layers by continuously emitting pulses of radar-frequency energy from a scanning antenna as it is towed along a survey profile. The radar pulses are reflected by interfaces between materials with differing dielectric properties. The reflections return to the antenna and are displayed on a video monitor as a continuous cross section in real time. Since the electrical properties of metal are distinctly different from soil and backfill materials, metallic pipes and other structures commonly produce dramatic and characteristic reflections. Fiberglass, plastic, concrete, and terra-cotta pipes and structures also produce recognizable, but less dramatic, reflections. Scanning was performed using a GSSI SIR-2000 GPR controller with an internal hard drive and a color display, and a high-frequency, high-resolution 400 MegaHertz (MHz) antenna or transducer.

EM-61 MK2

The EM-61 MK2 uses a 1-meter by ½-meter coil to transmit 150 electromagnetic pulses per second into the ground at each measurement station. During the off-time between transmitted pulses, a receiver coil measures the decay of transient electrical currents induced by the transmitted pulses. The decay is characterized by recording the strength of the transient electrical currents (in milliVolts or mV) at four different delays or time gates following shut-off of the applied field. Electrical currents in moderately conductive earth materials (e.g. electrolytic soils) dissipate rapidly, leaving the more prolonged currents due to buried metallic objects. The EM-61 MK2 measures the surficial electrical potential due to the prolonged subsurface currents, providing a digital read-out of the relative metallic content of the subsurface.

To complete the EM-61 MK2 survey, a system of profiles (at approximately 5-foot intervals) was surveyed by hand-towing the EM-61 MK2 in each survey area. Data were collected at a rate of four readings per second (for an average station spacing of approximately one foot). Location control was maintained using a Topcon GMS-110 global positioning system (GPS) receiver. The GPS positions were collected with real-time differential correction, using the corrections from the Wide-Area Augmentation Service (WAAS). The resulting differential GPS (DGPS) positions have an accuracy of better than two feet. GPS and EM data were fed simultaneously to a Juniper System Allegro data logger running Trackmaker 61 software by Geomar, Inc. This software allows display of the data coverage in real time, to ensure complete site coverage.

For each reading, the EM-61 MK2 records four measurements spaced by time (time gates) after the initial transmit pulse. Gate 1 reads responses from metal targets of all depth and size within the range and sensitivity of the instrument. Gate 2 filters out the smallest targets. Gates 3 and 4 read responses from large targets, with Gate 4 showing the least interference from smaller targets. Channel 4 was selected for the best display of possible targets of interest.

Results Summary

The client-designated areas were scanned using the methods described above. Figure 1 illustrates the proposed boring locations and EM-61 data coverage. Figure 2 shows the contoured EM-61 response from Channel 4. The higher, linear responses (colors orange through red) indicate targets matching the suspected signature of metallic targets. Figure 2 illustrates the effects of surface metal interference around the building, near fences, bollards, vehicles, etc. The data also contours the footprint of the reinforced concrete slabs throughout the site. Figure 3 displays the combined results of the utility survey, mapping all the detected targets in this area. Final processing of the EM data was not completed until after the fieldwork was complete, so EM features were not marked in the field.

During the field survey, high levels of background noise/interference were observed with the various EM and metallic-detecting devices (reinforced concrete slabs). This condition causes a signal-to-noise ratio which may prevent the detection of subtle features. As discussed, the EM-61 can combat some of this interference by measuring in various time gates, but it is still possible for smaller/deeper targets to be masked.

Significant effort was taken to identify the locations of utility lines related to the fire-suppression water lines, sanitary system, and stormwater management, with little success. This can be the result of utility construction and/or utility depths beyond the capabilities of the tracing equipment. The suspected locations of these utilities based on surficial evidence are shown on Figure 3 as dashed lines, indicating a positive trace was not achieved. Locations of these systems should be confirmed with the facilities manager prior to drilling. All boring locations were scanned with GPR with a signal penetration depth of approximately 3.5 to 4.0 ft.

Limitations

The above-referenced geophysical survey was completed using standard and/or routinely accepted practices of the geophysical industry and equipment representing the best available technology. Enviroscan does not accept responsibility for survey limitations due to inherent technological limitations or unforeseen site-specific conditions. However, we make every effort to identify and notify the client of such limitations or conditions. In particular, please note the following specific limitations and recommendations:

- Enviroscan's field markings should be given a clearance of approximately +/-18 inches for single lines. In contrast, since electromagnetic tracing of duct banks provides only a centerline, banks may extend for 2 to 3 feet beyond the marked trace.

N

Geophysical Survey Legend

- EM-61 Survey Station (every 5th point posted)
- Proposed Boring Location
- Inaccessible w/ EM61 (Employee Parking)

Scale (ft)

0 60 120 180 240

Notes:

Base map image from USGS Arcgis Services, 1-foot Ortho. Historic Aerial Photographs.

EM-61 data from Geonics EM61 MK II Metal Detector (Channel 4) contoured with Surfer 13 by Golden Software.

The information depicted on this drawing represents survey results on the date surveyed and can only be considered to be indicative of the general conditions existing on the survey date.

Prepared by:	Title:	Project Location:		Figure
ENVIROSCAN, INC. **Enviroscan, Inc.** 1051 Columbia Ave. Lancaster PA 17603 717-396-8922 www.enviroscan.com	**Geophysical Data Coverage Map**	**Black and Decker (US) Inc.** **28712 Glebe Road** **Easton, MD**		1
		Project Number: 071614	Revision/Issue: 08/26/2016	
		Original Scale: 1" = 40'	Survey Ending Date: 08/23/2016	Drawn by: RJK / Approved by: FKB

EM-61 Response
Channel 4 (mV)

1 4 7 10 40 70 100 400 700 1000 4000 7000 10000

Scale (ft)

0 60 120 180 240

Notes:

Base map image from USGS Arcgis Services, 1-foot Ortho. Historic Aerial Photographs.

EM-61 data from Geonics EM61 MK II Metal Detector (Channel 4) contoured with Surfer 13 by Golden Software.

The information depicted on this drawing represents survey results on the date surveyed and can only be considered to be indicative of the general conditions existing on the survey date.

Prepared by:	Title:	Project Location:		Figure
ENVIROSCAN, INC. **Enviroscan, Inc.** 1051 Columbia Ave. Lancaster PA 17603 717-396-8922 www.enviroscan.com	**EM-61 Contour Map (Channel 4)**	**Black and Decker (US) Inc.** **28712 Glebe Road** **Easton, MD**		2
		Project Number: 071614	Revision/Issue: 08/26/2016	
		Original Scale: 1" = 40'	Survey Ending Date: 08/23/2016	Drawn by: RJK / Approved by: FKB

N

Geophysical Survey Legend

- EM-61Anomalies
- Electric/Power
- Water
- Tel/Comm.
- Stormwater/Sanitary
- Gas
- Metallic Unknowns

Notes:

Where utilities are dashed, their locations were not able to be traced but are estimated based on surface features (e.g. manholes).

Base map image from USGS Arcgis Services, 1-foot Ortho. Historic Aerial Photographs.

EM-61 data from Geonics EM61 MK II Metal Detector (Channel 4) contoured with Surfer 13 by Golden Software.

The information depicted on this drawing represents survey results on the date surveyed and can only be considered to be indicative of the general conditions existing on the survey date.

Scale (ft)

0 60 120 180 240

Prepared by:	Title:	Project Location:		Figure
ENVIROSCAN, INC. **Enviroscan, Inc.** 1051 Columbia Ave. Lancaster PA 17603 717-396-8922 www.enviroscan.com	**Geophysical Survey Results**	**Black and Decker (US) Inc.** **28712 Glebe Road** **Easton, MD**		3
		Project Number: 071614	Revision/Issue: 08/26/2016	
		Original Scale: 1" = 40'	Survey Ending Date: 08/23/2016	Drawn by: RJK / Approved by: FKB

The completion of this survey does not relieve any party of applicable legal obligations to notify the appropriate One-Call center prior to digging or drilling.

As always, we appreciate this opportunity to have worked with you again. If you have any questions, please do not hesitate to contact me.

Sincerely,
Enviroscan, Inc.

Robert J. Krause
Geophysics Project Manager

Technical Review By:
Enviroscan, Inc.

Felicia Kegel Bechtel, M.Sc., P.G.
President

enc.: Figure 1: Geophysical Data Coverage Map
Figure 2: EM-61 Contour Map
Figure 3: Geophysical Survey Results

AECOM

Appendix B

Soil Boring Logs

AECOM				
	Client:	Easton / Newnam Field Airport		***BORING ID:*** ***SB-1***
	Project Number:	60514611		
	Site Location:	28721 Glebe Road, Easton, Maryland		
	Drilling Method:	Geoprobe		Sheet: 1 of 1
	Sample Type(s):	Soil	**Elevation (ft):** 23	Monitoring Well Installed: No
	Coordinates:	38° 47' 24" N, 76° 04' 37" W		Screened Interval: N/A

Weather: *90 Degrees Fahrenheit*	Logged By: Jackie Porter	Start Date: 8/31/16	Depth of Boring: 9'
Drilling Contractor: GSI Mid-Atlantic, Inc.		Finish Date: 8/31/16	Water Level: unknown

Depth (ft)	Sample	Sample Depth (ft)	Recovery	Headspace (ppm)	Blow count/ Direct Push	**MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, sorting, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)**	Lab Sample ID (Depth)
1	-	0-5	N/A	0	Hand Dug	0-6" concrete	
2						6"-4' brown fine to medium grained SAND, tight compaction with gravels, dry, no odor	
3							
4						4'-4.5' dark gray silty clay, stiff, dry, no odor	
5						4.5'-5' dark gray CLAY, hard, dry, no odor	
6		5-9	90%	0	Direct Push	5'-5.5' SAA	SB-1 sample collected 7.5-8'
7						5.5'-6.5' light tan/brown clayey silt, dry, no odor	
8						6.5'-8.5' light brown medium to coarse grained SAND, moist, no odor	
9						8.5'-9.5' dark brown peat soil, soft, moist, no odor	

End of Boring 9 feet - No refusal encountered

NOTES: Boring ended at 9 feet bgs due to french drain system located under the building structure. Soil sample SB-1 was analyzed for BTEX, MTBE, TPH-GRO, TPH-DRO, and PAHs.

Date/Time	Depth to groundwater while drilling
8/31/2016	unknown

f-fine, m-medium, c-coarse

Checked by _____ Peter Pecora Date:_____ 9/16/16

AECOM	**Client:**	Easton / Newnam Field Airport	***BORING ID:*** ***SB-2***
	Project Number:	60514611	
	Site Location:	28721 Glebe Road, Easton, Maryland	
	Drilling Method:	Geoprobe	Sheet: 1 of 1
	Sample Type(s):	Soil **Elevation (ft):** 23	Monitoring Well Installed: No
	Coordinates:	38° 47' 25" N, 76° 04' 37" W	Screened Interval: N/A

Weather: *90 Degrees Fahrenheit*	Logged By: Jackie Porter	Start Date: 8/31/16	Depth of Boring: 9'
Drilling Contractor: GSI Mid-Atlantic, Inc.		Finish Date: 8/31/16	Water Level: unknown

Depth (ft)	Sample	Sample Depth (ft)	Recovery	Headspace (ppm)	Blow count/ Direct Push	**MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, sorting, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)**	Lab Sample ID (Depth)
1 2 3 4 5	-	0-5	N/A	0	Hand Dug	0-6" concrete 6"-1.5' brown fine to medium grained SAND, dense with gravels, dry, no odor 1.5'-5' dark gray CLAY, low to no plasticity, stiff, dry, no odor	
6 7 8 9		5-9	100%	0	Direct Push	5'-5.5' SAA 5.5'-7' light gray clayey silt, stiff, dry, no odor 7'-8.5' gray-brown medium to coarse grained SAND with gravels, slightly moist, no odor 8.5'-9.5' dark brown peat soil, soft, moist, no odor	SB-2 sample collected 7.5-8'

End of Boring 9 feet - No refusal encountered

NOTES: Boring ended at 9 feet bgs due to french drain system located under structure. Soil sample SB-2 analyzed for BTEX, MTBE, TPH-GRO, TPH-DRO, and PAHs.

Date/Time	Depth to groundwater while drilling
8/31/2016	unknown

f-fine, m-medium, c-coarse

Checked by _____ Peter Pecora Date:_____ 9/16/16

AECOM	**Client:**	Easton / Newnam Field Airport	***BORING ID:*** ***SB-3***
	Project Number:	60514611	
	Site Location:	28721 Glebe Road, Easton, Maryland	
	Drilling Method:	Geoprobe	Sheet: 1 of 1
	Sample Type(s):	Soil **Elevation (ft):** 23	Monitoring Well Installed: No
	Coordinates:	38° 47' 26" N, 76° 04' 36" W	Screened Interval: N/A

Weather: *90 Degrees Fahrenheit*	Logged By: Jackie Porter	Start Date: 8/31/16	Depth of Boring: 9'
Drilling Contractor: GSI Mid-Atlantic, Inc.		Finish Date: 8/31/16	Water Level: unknown

Depth (ft)	Sample	Sample Depth (ft)	Recovery	Headspace (ppm)	Blow count/ Direct Push	**MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, sorting, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)**	Lab Sample ID (Depth)
1 2 3 4 5	-	0-5	N/A	0	Hand Dug	0-6" concrete 6"-2' brown fine to medium grained SAND, dense with gravels, dry, no odor 2'-5' dark gray CLAY, low to no plasticity, medium-stiff, dry, no odor	
6 7 8 9		5-9	100%	0	Direct Push	5'-6.5' light gray silty CLAY, stiff, medium-stiff to soft, dry to moist at 6.5 feet, no odor 6.5'-8.5' light tan/brown medium to coarse grained SAND with gravels, loose, slightly moist, no odor 8.5'-9.5' dark brown peat soil, soft, moist, no odor	SB-3 sample collected 7.5-8'

End of Boring 9 feet - No refusal encountered

NOTES: Boring ended at 9 feet bgs due to french drain system located under structure. Soil sample SB-3 analyzed for BTEX, MTBE, TPH-GRO, TPH-DRO, and PAHs.

Date/Time	Depth to groundwater while drilling
8/31/2016	unknown

f-fine, m-medium, c-coarse

Checked by _____ Peter Pecora Date:_____ 9/16/16

AECOM	**Client:**	Easton / Newnam Field Airport	***BORING ID:*** ***SB-4***
	Project Number:	60514611	
	Site Location:	28721 Glebe Road, Easton, Maryland	
	Drilling Method:	Geoprobe	Sheet: 1 of 1
	Sample Type(s):	Soil **Elevation (ft):** 23	Monitoring Well Installed: No
	Coordinates:	38° 47' 27" N, 76° 04' 33" W	Screened Interval: N/A

Weather: *90 Degrees Fahrenheit*	Logged By: Jackie Porter	Start Date: 8/31/16	Depth of Boring: 9'
Drilling Contractor: GSI Mid-Atlantic, Inc.		Finish Date: 8/31/16	Water Level: unknown

Depth (ft)	Sample	Sample Depth (ft)	Recovery	Headspace (ppm)	Blow count/ Direct Push	**MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, sorting, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)**	Lab Sample ID (Depth)
1 2 3 4 5	-	0-5	N/A	0	Hand Dug	0-6" concrete 6"-1.5' brown-orange fine to medium grained SAND with gravels, dense, dry, no odor 1.5'-5' dark gray CLAY, low to no plasticity, medium-stiff, dry, no odor	
6 7 8 9		5-9	100%	0	Direct Push	5'-6' light gray with brown-orange silty clay, no plasticity, soft, dry, no odor 6'-7' light gray CLAY, very stiff, low to no plasticity, dry, no odor 7'-8.5' dark brown peat soil, soft, no odor 8.5'-9' light brown fine grained SAND, loose, saturated, no odor	SB-4 sample collected 7-7.5'

End of Boring 9 feet - No refusal encountered

NOTES: Boring ended at 9 feet bgs due to french drain system located under structure. Soil sample SB-4 analyzed for BTEX, MTBE, TPH-GRO, TPH-DRO, and PAHs.

Date/Time	Depth to groundwater while drilling
8/31/2016	unknown

f-fine, m-medium, c-coarse

Checked by _____ Peter Pecora Date:_____ 9/16/16

AECOM	**Client:**	Easton / Newnam Field Airport	***BORING ID:*** ***SB-5***
	Project Number:	60514611	
	Site Location:	28721 Glebe Road, Easton, Maryland	
	Drilling Method:	Geoprobe	Sheet: 1 of 1
	Sample Type(s):	Soil **Elevation (ft):** 23	Monitoring Well Installed: No
	Coordinates:	38° 47' 27" N, 76° 04' 33" W	Screened Interval: N/A

Weather: *90 Degrees Fahrenheit*	Logged By: Jackie Porter	Start Date: 8/31/16	Depth of Boring: 9'
Drilling Contractor: GSI Mid-Atlantic, Inc.		Finish Date: 8/31/16	Water Level: unknown

Depth (ft)	Sample	Sample Depth (ft)	Recovery	Headspace (ppm)	Blow count/ Direct Push	**MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, sorting, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)**	Lab Sample ID (Depth)
1 2 3 4 5	-	0-5	N/A	0	Hand Dug	0-6" concrete 6"-1.5' brown-orange fine to medium grained SAND with gravels, dense, dry, no odor 1.5'-5' dark gray CLAY, low to no plasticity, medium-stiff, dry, no odor	
6 7 8 9		5-9	100%	0	Direct Push	5'-6' light gray brown-orange clayey silty, low to no plasticity, very stiff, dry, no odor 6'-8' dark brown peat soil, soft, no odor 8'-9' dark brown medium to coarse grained SAND with gravels, loose, moist, no odor	SB-5 sample collected 7.5-8'

End of Boring 9 feet - No refusal encountered

NOTES: Boring ended at 9 feet bgs due to french drain system located under structure. Soil sample SB-5 analyzed for BTEX, MTBE, TPH-GRO, TPH-DRO, and PAHs.

Date/Time	Depth to groundwater while drilling
8/31/2016	unknown

f-fine, m-medium, c-coarse

Checked by _____ Peter Pecora Date:_____ 9/16/16

AECOM	**Client:**	Easton / Newnam Field Airport	***BORING ID:*** ***SB-6***
	Project Number:	60514611	
	Site Location:	28721 Glebe Road, Easton, Maryland	
	Drilling Method:	Geoprobe	Sheet: 1 of 1
	Sample Type(s):	Soil **Elevation (ft):** 23	Monitoring Well Installed: No
	Coordinates:	38° 47' 25" N, 76° 04' 35" W	Screened Interval: N/A

Weather: *90 Degrees Fahrenheit*	Logged By: Jackie Porter	Start Date: 8/31/16	Depth of Boring: 9'
Drilling Contractor: GSI Mid-Atlantic, Inc.		Finish Date: 8/31/16	Water Level: unknown

Depth (ft)	Sample	Sample Depth (ft)	Recovery	Headspace (ppm)	Blow count/ Direct Push	**MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, sorting, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)**	Lab Sample ID (Depth)
1 2 3 4 5	-	0-5	N/A	0	Hand Dug	0-6" concrete 6"-1.5' brown-orange fine to medium grained SAND with gravels, dense, dry, no odor 1.5'-5' dark gray CLAY, low to no plasticity, medium-stiff, dry, no odor	
6 7 8 9		5-9	100%	0	Direct Push	5'-6' light gray silty clay, low to no plasticity, very stiff, dry, no odor 6'-6.25' gray clayey sand, soft, dry, no odor 6.25'-8' light brown-tan medium to coarse grained SAND with some small gravels, loose, dry, no odor 8'-9' dark brown peat soil, with some brown medium grained SAND at bottom, soft to loose, very moist, no odor	SB-6 sample collected 7.5-8'

End of Boring 9 feet - No refusal encountered

NOTES: Boring ended at 9 feet bgs due to french drain system located under structure. Soil sample SB-5 analyzed for BTEX, MTBE, TPH-GRO, TPH-DRO, and PAHs.

Date/Time	Depth to groundwater while drilling
8/31/2016	unknown

f-fine, m-medium, c-coarse

Checked by _____ Peter Pecora Date:_____ 9/16/16

AECOM	**Client:**	Easton / Newnam Field Airport	***BORING ID:*** ***SB-7***
	Project Number:	60514611	
	Site Location:	28721 Glebe Road, Easton, Maryland	
	Drilling Method:	Geoprobe	Sheet: 1 of 1
	Sample Type(s):	Soil and Groundwater **Elevation (ft):** 23	Monitoring Well Installed: No
	Coordinates:	38° 47' 22" N, 76° 04' 38" W	Screened Interval: N/A

Weather: *90 Degrees Fahrenheit*	Logged By: Jackie Porter	Start Date: 8/31/16	Depth of Boring: 15'
Drilling Contractor: GSI Mid-Atlantic, Inc.		Finish Date: 8/31/16	Water Level: 8.59' bgs

Depth (ft)	Sample	Sample Depth (ft)	Recovery	Headspace (ppm)	Blow count/ Direct Push	**MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, sorting, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)**	Lab Sample ID (Depth)
1 2 3 4 5	-	0-5	N/A	0	Hand Dug	0-3" organic material (top soil) 3"-5' light brown fine to medium grained SAND with some gravels, dense, dry, no odor	
6 7 8 9 10		5-10	100%	0	Direct Push	5'-6' same as above 6'-8' gray/brown-orange sandy CLAY, low to no plasticity, stiff, dry, no odor 8'-10' gray/brown-orange CLAY, very stiff, low plasticity, lean, dry, no odor	SB-7 sample collected 7.5-8'
11 12 13 14 15		10-15	60%	0	Direct Push	10'-11' dark brown peat soil with brown sand at bottom, soft to loose, moist to saturated, no odor 11'-15' - dark gray fine to medium grained SAND, dense, saturated, no odor	
						End of Boring 15 feet - No refusal encountered	

NOTES: Soil sample SB-7 analyzed for BTEX, MTBE, TPH-GRO, TPH-DRO, PAHs, PCBs, and Metals. Soil boring SB-7 was converted into a temporary well and screened 5'-15'. Groundwater sample analyzed for BTEX, MTBE, TPH-GRO, TPH-DRO, PAHs, and Metals.

Date/Time	Depth to groundwater while drilling
8/31/2016	10'

f-fine, m-medium, c-coarse

Checked by _____ Peter Pecora Date:_____ 9/16/16

AECOM	**Client:**	Easton / Newnam Field Airport	***BORING ID:*** ***SB-8***
	Project Number:	60514611	
	Site Location:	28721 Glebe Road, Easton, Maryland	
	Drilling Method:	Geoprobe	Sheet: 1 of 1
	Sample Type(s):	Soil and Groundwater **Elevation (ft):** 23	Monitoring Well Installed: No
	Coordinates:	38° 47' 23" N, 76° 04' 38" W	Screened Interval: N/A

Weather: *90 Degrees Fahrenheit*	Logged By: Jackie Porter	Start Date: 8/31/16	Depth of Boring: 15'
Drilling Contractor: GSI Mid-Atlantic, Inc.		Finish Date: 8/31/16	Water Level: 7.88' bgs

Depth (ft)	Sample	Sample Depth (ft)	Recovery	Headspace (ppm)	Blow count/ Direct Push	**MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, sorting, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)**	Lab Sample ID (Depth)
1 2 3 4 5	-	0-5	N/A	0	Hand Dug	0-3" organic material (top soil) 3"-5' light brown fine to medium grained SAND with some gravels, dense, dry, no odor	
6 7 8 9 10		5-10	60%	0 1.1 0	Direct Push	5-9' light orange/brown/gray sandy CLAY, stiff, low to no plasticity, dry, no odor with the exception of a small pocket at 8' that had a slight petroleum odor 9'-10' dark brown peat soil with medium to coarse grained brown SAND at bottom, soft to loose, moist, no odor	SB-8 sample collected 7.5-8'
11 12 13 14 15		10-15	100%	0	Direct Push	10'-11.5' brown fine to medium grained SAND, medium dense, very moist, no odor 11.5'-15' dark gray fine to medium grained SAND with some clay, saturated, soft, no odor	
						End of Boring 15 feet - No refusal encountered	

NOTES: Soil sample SB-8 analyzed for BTEX, MTBE, TPH-GRO, TPH-DRO, PAHs, PCBs, and Metals. Soil boring SB-8 was converted into a temporary well and screened 5'-15'. Groundwater sample analyzed for BTEX, MTBE, TPH-GRO, TPH-DRO, PAHs, and Metals.

Date/Time	Depth to groundwater while drilling
8/31/2016	10'

f-fine, m-medium, c-coarse

Checked by _____ Peter Pecora Date:_____ 9/16/16

AECOM	**Client:**	Easton / Newnam Field Airport	***BORING ID:*** ***SB-9***
	Project Number:	60514611	
	Site Location:	28721 Glebe Road, Easton, Maryland	
	Drilling Method:	Geoprobe	Sheet: 1 of 1
	Sample Type(s):	Soil and Groundwater **Elevation (ft):** 23	Monitoring Well Installed: No
	Coordinates:	38° 47' 23" N, 76° 04' 38" W	Screened Interval: N/A

Weather: *90 Degrees Fahrenheit*	Logged By: Jackie Porter	Start Date: 8/31/16	Depth of Boring: 15'
Drilling Contractor: GSI Mid-Atlantic, Inc.		Finish Date: 8/31/16	Water Level: 8.02' bgs

Depth (ft)	Sample	Sample Depth (ft)	Recovery	Headspace (ppm)	Blow count/ Direct Push	**MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, sorting, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)**	Lab Sample ID (Depth)
1 2 3 4 5	-	0-5	N/A	0	Hand Dug	0-3" organic material (top soil) 3"-3' light brown fine to medium grained SAND with some gravels, dense, dry, no odor 3'-5' brown/gray/olive silty CLAY, no plasticity, dry, no odor	
6 7 8 9 10		5-10	60%	0	Direct Push	5-8' gray/orange-brown CLAY, low to no plasticity, very stiff, dry, no odor 8'-9' gray/orange-brown, sandy CLAY, medium to soft, moist, no odor 9'-10' dark brown fine to medium grained SAND with gravels, dense, moist, no odors	SB-9 sample collected 7.5-8'
11 12 13 14 15		10-15	100%	0	Direct Push	10'-11' brown clayey SAND, soft, saturated, no odor 11'-15' dark gray clayey SAND, soft, saturated, no odor	
						End of Boring 15 feet - No refusal encountered	

NOTES: Soil sample SB-9 analyzed for BTEX, MTBE, TPH-GRO, TPH-DRO, PAHs, PCBs, and Metals. Soil boring SB-9 was converted into a temporary well and screened 5'-15'. Groundwater sample anaylzed for BTEX, MTBE, TPH-GRO, TPH-DRO, PAHs, and Metals.

Date/Time	Depth to groundwater while drilling
8/31/2016	9'

f-fine, m-medium, c-coarse

Checked by _____ Peter Pecora Date:_____ 9/16/16

AECOM	**Client:**	Easton / Newnam Field Airport	***BORING ID:*** ***SB-10***
	Project Number:	60514611	
	Site Location:	28721 Glebe Road, Easton, Maryland	
	Drilling Method:	Geoprobe	Sheet: 1 of 1
	Sample Type(s):	Soil and Groundwater **Elevation (ft):** 23	Monitoring Well Installed: No
	Coordinates:	38° 47' 26" N, 76° 04' 41"W	Screened Interval: N/A
Weather: *90 Degrees Fahrenheit*	Logged By: Jackie Porter	Start Date: 9/1/16	Depth of Boring: 20'
Drilling Contractor: GSI Mid-Atlantic, Inc.		Finish Date: 9/1/16	Water Level: 9.9' bgs

Depth (ft)	Sample	Sample Depth (ft)	Recovery	Headspace (ppm)	Blow count/ Direct Push	**MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, sorting, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)**	Lab Sample ID (Depth)
1 2 3 4 5	-	0-5	N/A	0	Hand Dug	0-3" organic material (top soil) 3"-3' light brown fine to medium grained SAND with some gravels, dense, dry, no odor 3'-5' brown/gray-olive silty CLAY, no plasticity, dry, no odor	
6 7 8 9 10		5-10	98%	0	Direct Push	5'-10' brown/gray CLAY, very stiff, low plasticity, lean, dry, no odor	SB-10 sample collected 8-8.5'
11 12 13 14 15		10-15	60%	0	Direct Push	10-11.5' brown sandy CLAY, soft, moist, no odor 11.5-13' gray fine to medium grained SAND with trace of clay, dense, moist, no odor 13'-15' dark gray sandy CLAY, medium dense, moist, no odr	
16 17 18 19 20		15-20	100%	0	Direct Push	15'-20' dark gray sandy CLAY, soft to medium stiff, no plasticity, saturated to moist, no odor	
						End of Boring 20 feet - No refusal encountered	

NOTES: Soil sample SB-10 analyzed for BTEX, MTBE, TPH-GRO, TPH-DRO, PAHs, PCBs, and Metals. Soil boring SB-10 was converted into a temporary well and screened 10'-20'. Groundwater sample anaylzed for BTEX, MTBE, TPH-GRO, TPH-DRO, PAHs, and Metals.

Date/Time	Depth to groundwater while drilling
8/31/2016	10'

f-fine, m-medium, c-coarse

Checked by _____ Peter Pecora Date:_____ 9/16/16

AECOM	**Client:**	Easton / Newnam Field Airport	***BORING ID:*** ***SB-11***
	Project Number:	60514611	
	Site Location:	28721 Glebe Road, Easton, Maryland	
	Drilling Method:	Geoprobe	Sheet: 1 of 1
	Sample Type(s):	Soil and Groundwater **Elevation (ft):** 23	Monitoring Well Installed: No
	Coordinates:	38° 47' 25" N, 76° 04' 39" W	Screened Interval: N/A

Weather: *90 Degrees Fahrenheit*	Logged By: Jackie Porter	Start Date: 8/31/16	Depth of Boring: 15'
Drilling Contractor: GSI Mid-Atlantic, Inc.		Finish Date: 8/31/16	Water Level: 10.70' bgs

Depth (ft)	Sample	Sample Depth (ft)	Recovery	Headspace (ppm)	Blow count/ Direct Push	**MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, sorting, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)**	Lab Sample ID (Depth)
1 2 3 4 5	-	0-5	N/A	0	Hand Dug	0-3" organic material (top soil) 3"-4.5' light brown fine to medium grained SAND with some gravels, dense, dry, no odor 4.5'-5' gray silty CLAY, no plasticity, stiff, dry, no odor	SB-11 sample collected 7.5-8'
6 7 8 9 10		5-10	95%	0	Direct Push	5-9' gray CLAY, low to no plasticity, very stiff, dry, no odor 9'-10' dark brown to light brown fine to medium grained SAND with gravels, dense, moist, no odors	
11 12 13 14 15		10-15	100%	0	Direct Push	10'-12' light brown sandy CLAY, low to no plasticity, soft, saturated, no odor 11'-15' dark gray clayey SAND, soft, low to no plasticity, saturated, no odor	
						End of Boring 15 feet - No refusal encountered	

NOTES: Soil sample SB-11 analyzed for BTEX, MTBE, TPH-GRO, TPH-DRO, PAHs, PCBs, and Metals. Soil boring SB-11 was converted into a temporary well and screened 5'-15'. Groundwater sample anaylzed for BTEX, MTBE, TPH-GRO, TPH-DRO, PAHs, and Metals.

Date/Time	Depth to groundwater while drilling
8/31/2016	10'

f-fine, m-medium, c-coarse

Checked by _____ Peter Pecora Date:_____ 9/16/16

AECOM	**Client:**	Easton / Newnam Field Airport	***BORING ID:*** ***SB-12***
	Project Number:	60514611	
	Site Location:	28721 Glebe Road, Easton, Maryland	
	Drilling Method:	Geoprobe	Sheet: 1 of 1
	Sample Type(s):	Soil and Groundwater **Elevation (ft):** 23	Monitoring Well Installed: No
	Coordinates:	38° 47' 23" N, 76° 04' 38" W	Screened Interval: N/A

Weather: *90 Degrees Fahrenheit*	Logged By: Jackie Porter	Start Date: 8/31/16	Depth of Boring: 10'
Drilling Contractor: GSI Mid-Atlantic, Inc.		Finish Date: 8/31/16	Water Level: 5.98' bgs

Depth (ft)	Sample	Sample Depth (ft)	Recovery	Headspace (ppm)	Blow count/ Direct Push	**MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, sorting, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)**	Lab Sample ID (Depth)
1	-	0-5	N/A	0	Hand Dug	0-3" organic material (top soil)	
2							
3						3"-5' gray/orange-brown silty CLAY, stiff, low to no plasticity, dry, no odor	
4							
5							
6		5-10	70%	0	Direct Push	5'-7' gray/orange-brown silty CLAY, low to no plasticity, stiff, dry, no odor	
7							
8						7'-8' dark gray sandy CLAY, low to no plasticity, soft, moist, no odor	
9						8'-9' dark gray clayey SAND, soft, moist, no odor	SB-12 sample collected 8-8.5'
10						9'-10' light gray/orange-brown fine to medium grained SAND with trace of clay, soft, saturated, no odor	
						End of Boring 10 feet - No refusal encountered	

NOTES: Soil sample SB-12 analyzed for BTEX, MTBE, TPH-GRO, TPH-DRO, PAHs, PCBs, and Metals. Soil boring SB-12 was converted into a temporary well and screened 5'-10'. Groundwater sample anaylzed for BTEX, MTBE, TPH-GRO, TPH-DRO, PAHs, and Metals.

Date/Time	Depth to groundwater while drilling
8/31/2016	9'

f-fine, m-medium, c-coarse

Checked by _____ Peter Pecora Date:_____ 9/16/16

AECOM	**Client:**	Easton / Newnam Field Airport	***BORING ID:*** ***SB-13***
	Project Number:	60514611	
	Site Location:	28721 Glebe Road, Easton, Maryland	
	Drilling Method:	Geoprobe	Sheet: 1 of 1
	Sample Type(s):	Soil **Elevation (ft):** 23	Monitoring Well Installed: No
	Coordinates:	38° 47' 24" N, 76° 04' 37" W	Screened Interval: N/A
Weather: *90 Degrees Fahrenheit*	Logged By: Jackie Porter	Start Date: 8/31/16	Depth of Boring: 20'
Drilling Contractor: GSI Mid-Atlantic, Inc.		Finish Date: 8/31/16	Water Level: 11.23' bgs

Depth (ft)	Sample	Sample Depth (ft)	Recovery	Headspace (ppm)	Blow count/ Direct Push	**MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, sorting, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)**	Lab Sample ID (Depth)
1 2 3 4 5	-	0-5	N/A	0	Hand Dug	0-3" organic material (top soil) 3"-5' light brown fine to medium grained SAND, medium dense with some gray clay, dry, no odor	
6 7 8 9 10		5-10	80%	0	Direct Push	5'-6' brown/gray sandy CLAY, low to no plasticity, medium stiff, dry, no odor 6'-10' olive-gray/orange-brown CLAY, stiff, low plasticity, lean, moist, no odor	
11 12 13 14 15		10-15	70%	0	Direct Push	10-10.5' same as above 10.5'-11.5' brown olive-gray CLAY, low plasticity, lean, soft, saturated, no odor 11.5-12' dark brown to light brown clayey SAND, soft, saturated, no odor 12'-15' olive-gray clayey SAND, low to no plasticity, saturated, soft, no odor	SB-13 sample collected 9.5-10'
16 17 18 19 20		15-20	98%	0	Direct Push	15'-20' same as above	
						End of Boring 20 feet - No refusal encountered	

NOTES: Soil sample SB-13 analyzed for BTEX, MTBE, TPH-GRO, TPH-DRO, PAHs, PCBs, and Metals. Soil boring SB-13 was converted into a temporary well and screened 10'-20'. Groundwater sample anaylzed for BTEX, MTBE, TPH-GRO, TPH-DRO, PAHs, and Metals.

Date/Time	Depth to groundwater while drilling
9/1/2016	10.5'

f-fine, m-medium, c-coarse

Checked by _____ Peter Pecora Date:_____ 9/16/16

AECOM	**Client:**	Easton / Newnam Field Airport	***BORING ID:*** ***SB-14***
	Project Number:	60514611	
	Site Location:	28721 Glebe Road, Easton, Maryland	
	Drilling Method:	Geoprobe	Sheet: 1 of 1
	Sample Type(s):	Soil **Elevation (ft):** 23	Monitoring Well Installed: No
	Coordinates:	38° 47' 27" N, 76° 04' 39" W	Screened Interval: N/A

Weather: *90 Degrees Fahrenheit*	Logged By: Jackie Porter	Start Date: 9/1/16	Depth of Boring: 15'
Drilling Contractor: GSI Mid-Atlantic, Inc.		Finish Date: 9/1/16	Water Level: 11' bgs

Depth (ft)	Sample	Sample Depth (ft)	Recovery	Headspace (ppm)	Blow count/ Direct Push	**MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, sorting, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)**	Lab Sample ID (Depth)
1 2 3 4 5	-	0-5	N/A	0	Hand Dug	0-3" organic material (top soil) 3"-2' light brown fine to medium grained SAND with some gravels, dense, dry, no odor 2'-5' brown/gray-olive silty CLAY, low to no plasticity, moist, no odor	
6 7 8 9 10		5-10	70%	0	Direct Push	5-6.5' same as above 6.5'-7' brown fine to medium grained SAND with some gravels, medium dense, moist, no odor 7'-7.5' dark gray/orange-brown CLAY, stiff, low plasticity, lean, moist, no odor 7.5'-10' brown fine to medium grained SAND with gravels, loose, moist, no odor	SB-14 sample collected 8-8.5'
11 12 13 14 15		10-15	95%	0	Direct Push	10'-10.5' dark brown sandy CLAY, medium, low to no plasticity, moist 10.5'-11' light brown fine to medium grained SAND with gravels, medium dense, moist, no odor 11'-15' gray clayey SAND, moist to saturated, soft, no odor	
						End of Boring 15 feet - No refusal encountered	

NOTES: Soil sample SB-14 analyzed for BTEX, MTBE, TPH-GRO, TPH-DRO, and PAHs.

Date/Time	Depth to groundwater while drilling
9/1/2016	11'

f-fine, m-medium, c-coarse

Checked by _____ Peter Pecora Date:_____ 9/16/16

AECOM	**Client:**	Easton / Newnam Field Airport	***BORING ID:*** ***SB-15***
	Project Number:	60514611	
	Site Location:	28721 Glebe Road, Easton, Maryland	
	Drilling Method:	Geoprobe	Sheet: 1 of 1
	Sample Type(s):	Soil and Groundwater **Elevation (ft):** 23	Monitoring Well Installed: No
	Coordinates:	38° 47' 29" N, 76° 04' 41" W	Screened Interval: N/A
Weather: *90 Degrees Fahrenheit*	Logged By: Jackie Porter	Start Date: 9/1/16	Depth of Boring: 20'
Drilling Contractor: GSI Mid-Atlantic, Inc.		Finish Date: 9/1/16	Water Level: 4.45' bgs

Depth (ft)	Sample	Sample Depth (ft)	Recovery	Headspace (ppm)	Blow count/ Direct Push	**MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, sorting, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)**	Lab Sample ID (Depth)
1 2 3 4 5	-	0-5	N/A	0	Hand Dug	0-4" asphalt 3"-5' light brown medium fine grained SAND, medium dense with some gray clay, dry, no odor	
6 7 8 9 10		5-10	60%	0	Direct Push	5'-6' orange-brown/olive-gray clayey SAND, soft, moist, no odor 6'-10' olive-gray/orange-brown CLAY, stiff, low plasticity, lean, moist, no odor	
11 12 13 14 15		10-15	100%	0	Direct Push	10'-11.5' light brown to dark brown clayey SAND, low to no plasticity, soft, moist, no odor 11.5'-15' dark gray clayey SAND, low to no plasticity, saturated, soft, no odor	SB-15 sample collected 9.5-10'
16 17 18 19 20		15-20	100%	0	Direct Push	15'-19' same as above 19'-20' light gray CLAY, hard, low to no plasticity, moist, no odor	
						End of Boring 20 feet - No refusal encountered	

NOTES: Soil sample SB-15 analyzed for BTEX, MTBE, TPH-GRO, TPH-DRO, and PAHs. Soil boring SB-15 was converted into a temporary well and screened 10'-20'. Groundwater sample analyzed for BTEX, MTBE, TPH-GRO, TPH-DRO, and PAHs. (Dup-2 collected)

Date/Time	Depth to groundwater while drilling
9/1/2016	11.5'

f-fine, m-medium, c-coarse

Checked by _____ Peter Pecora Date:_____ 9/16/16

AECOM	**Client:**	Easton / Newnam Field Airport	***BORING ID:*** ***SB-16***
	Project Number:	60514611	
	Site Location:	28721 Glebe Road, Easton, Maryland	
	Drilling Method:	Geoprobe	Sheet: 1 of 1
	Sample Type(s):	Soil **Elevation (ft):** 23	Monitoring Well Installed: No
	Coordinates:	38° 47' 29" N, 76° 04' 38" W	Screened Interval: N/A

Weather: *90 Degrees Fahrenheit*	Logged By: Jackie Porter	Start Date: 9/1/16	Depth of Boring: 15'
Drilling Contractor: GSI Mid-Atlantic, Inc.		Finish Date: 9/1/16	Water Level: 9' bgs

Depth (ft)	Sample	Sample Depth (ft)	Recovery	Headspace (ppm)	Blow count/ Direct Push	**MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, sorting, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)**	Lab Sample ID (Depth)
1 2 3 4 5	-	0-5	N/A	0	Hand Dug	0-4" asphalt 4"-4.5' brown-orange sandy CLAY, stiff, low to no plasticity, moist, no odor 4.5'-5' gray/brown medium grained SAND with some clay medium dense, moist, no odor	
6 7 8 9 10		5-10	60%	0	Direct Push	5-8.5' light olive-gray/brown sandy CLAY, medium dense, moist, no odor 8.5'-9' dark brown clayey SAND, medium stiff, moist, no odor 9'-10' light brown/tan fine to medium grained SAND, very moist, medium dense, no odor	SB-16 sample collected 8-8.5'
11 12 13 14 15		10-15	95%	0	Direct Push	10'-13' light brown clayey SAND, soft, saturated no odor, 13'-15' dark gray clayey SAND, saturated, soft, no odor	
						End of Boring 15 feet - No refusal encountered	

NOTES: Soil sample SB-16 analyzed for BTEX, MTBE, TPH-GRO, TPH-DRO, and PAHs.

Date/Time	Depth to groundwater while drilling
9/1/2016	9'

f-fine, m-medium, c-coarse

Checked by _____ Peter Pecora Date:_____ 9/16/16

AECOM	**Client:**	Easton / Newnam Field Airport	***BORING ID:*** ***SB-17***
	Project Number:	60514611	
	Site Location:	28721 Glebe Road, Easton, Maryland	
	Drilling Method:	Geoprobe	Sheet: 1 of 1
	Sample Type(s):	Soil **Elevation (ft):** 23	Monitoring Well Installed: No
	Coordinates:	38° 47' 30" N, 76° 04' 36" W	Screened Interval: N/A
Weather: *90 Degrees Fahrenheit*	Logged By: Jackie Porter	Start Date: 9/1/16	Depth of Boring: 15'
Drilling Contractor: GSI Mid-Atlantic, Inc.		Finish Date: 9/1/16	Water Level: 9' bgs

Depth (ft)	Sample	Sample Depth (ft)	Recovery	Headspace (ppm)	Blow count/ Direct Push	**MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, sorting, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)**	Lab Sample ID (Depth)
1 2 3 4 5	-	0-5	N/A	0	Hand Dug	0-4" asphalt 3"-5' light brown fine to medium grained SAND, medium dense with some gray clay, dry, no odor	
6 7 8 9 10		5-10	80%	0	Direct Push	5'-7' light brown clayey SAND with some gravels, medium dense, saturated, no odor 7'-9' dark brown peat soil, moist, no odor 9'-10' dark brown to light brown fine to medium grained SAND with trace coarse sand, moist to saturated, medium dense, no odor	SB-17 sample collected 7.5-8'
11 12 13 14 15		10-15	100%	0	Direct Push	10'-15' dark gray clayey SAND, soft, no plasticity, saturated, no odor,	
						End of Boring 15 feet - No refusal encountered	

NOTES: Soil sample SB-17 analyzed for BTEX, MTBE, TPH-GRO, TPH-DRO, and PAHs.

Date/Time	Depth to groundwater while drilling
9/1/2016	9'

f-fine, m-medium, c-coarse

Checked by _____ Peter Pecora Date:_____ 9/16/16

AECOM	**Client:**	Easton / Newnam Field Airport	***BORING ID:*** ***SB-18***
	Project Number:	60514611	
	Site Location:	28721 Glebe Road, Easton, Maryland	
	Drilling Method:	Geoprobe	Sheet: 1 of 1
	Sample Type(s):	Soil **Elevation (ft):** 23	Monitoring Well Installed: No
	Coordinates:	38° 47' 27" N, 76° 04' 36" W	Screened Interval: N/A

Weather: *90 Degrees Fahrenheit*	Logged By: Jackie Porter	Start Date: 9/1/16	Depth of Boring: 15'
Drilling Contractor: GSI Mid-Atlantic, Inc.		Finish Date: 9/1/16	Water Level: 8' bgs

Depth (ft)	Sample	Sample Depth (ft)	Recovery	Headspace (ppm)	Blow count/ Direct Push	**MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, sorting, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)**	Lab Sample ID (Depth)
1 2 3 4 5	-	0-5	N/A	0	Hand Dug	0-3" concrete 3"-4' dark brown fine to medium grained SAND with some coarse sand and gravels, medium dense, dry, no odor 4'-5' light gray sandy CLAY, stiff, low to no plasticity, no odor	
6 7 8 9 10		5-10	60%	0	Direct Push	5'-6.5' dark brown fine to medium grained SAND with coarse sand and some gravels, dense, saturated, no odor 6.5'-8' light brown fine to medium grained SAND, medium dense, moist, no odor 8'-10' dark gray clayey SAND, soft, saturated, no odor	SB-18 sample collected 7.5-8'
11 12 13 14 15		10-15	100%	0	Direct Push	10'-15' same as above	
						End of Boring 15 feet - No refusal encountered	

NOTES: Soil sample SB-18 analyzed for BTEX, MTBE, TPH-GRO, TPH-DRO, and PAHs.

Date/Time	Depth to groundwater while drilling
9/1/2016	8'

f-fine, m-medium, c-coarse

Checked by _____ Peter Pecora Date:_____ 9/16/16

AECOM	**Client:**	Easton / Newnam Field Airport	***BORING ID:*** ***SB-19***
	Project Number:	60514611	
	Site Location:	28721 Glebe Road, Easton, Maryland	
	Drilling Method:	Geoprobe	Sheet: 1 of 1
	Sample Type(s):	Soil and Groundwater **Elevation (ft):** 23	Monitoring Well Installed: No
	Coordinates:	38° 47' 25" N, 76° 04' 39" W	Screened Interval: N/A

Weather: *90 Degrees Fahrenheit*	Logged By: Jackie Porter	Start Date: 8/31/16	Depth of Boring: 15'
Drilling Contractor: GSI Mid-Atlantic, Inc.		Finish Date: 8/31/16	Water Level: 7.07' bgs

Depth (ft)	Sample	Sample Depth (ft)	Recovery	Headspace (ppm)	Blow count/ Direct Push	**MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, sorting, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)**	Lab Sample ID (Depth)
1 2 3 4 5	-	0-5	N/A	0	Hand Dug	0-3" asphalt 3"-3' gray medium to coarse grained SAND with gravels, dry, no odor 3'-5' brown fine to medium grained SAND with coarse sand and some gravels, dry, no odor	SB-19 sample collected 8-8.5'
6 7 8 9 10		5-10	60%	0	Direct Push	5-5.5' gray-olive sandy CLAY, stiff, low to no plasticity, dry, no odor 5.5'-6' dark brown fine to medium grained SAND with coarse sand and small gravels, slightly dense 6'-8.5' dark brown fine to medium grained SAND, soft, saturated, no odor 8.5'-10' dark brown fine to medium grained SAND, loose, saturated, no odors	
11 12 13 14 15		10-15	100%	0	Direct Push	10'-15' dark gray clayey SAND, soft, saturated, no odor	
						End of Boring 15 feet - No refusal encountered	

NOTES: Soil sample SB-19 analyzed for BTEX, MTBE, TPH-GRO, TPH-DRO, PAHs, PCBs, and Metals. Soil boring SB-19 was converted into a temporary well and screened 5'-15'. Groundwater sample anaylzed for BTEX, MTBE, TPH-GRO, TPH-DRO, PAHs, and Metals.

Date/Time	Depth to groundwater while drilling
8/31/2016	8.5'

f-fine, m-medium, c-coarse

Checked by _____ Peter Pecora Date:_____ 9/16/16

AECOM	**Client:**	Easton / Newnam Field Airport	***BORING ID:*** ***SB-20***
	Project Number:	60514611	
	Site Location:	28721 Glebe Road, Easton, Maryland	
	Drilling Method:	Geoprobe	Sheet: 1 of 1
	Sample Type(s):	Soil **Elevation (ft):** 23	Monitoring Well Installed: No
	Coordinates:	38° 47' 28" N, 76° 04' 34" W	Screened Interval: N/A
Weather: *90 Degrees Fahrenheit*	Logged By: Jackie Porter	Start Date: 9/1/16	Depth of Boring: 15'
Drilling Contractor: GSI Mid-Atlantic, Inc.		Finish Date: 9/1/16	Water Level: 7' bgs

Depth (ft)	Sample	Sample Depth (ft)	Recovery	Headspace (ppm)	Blow count/ Direct Push	**MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, sorting, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)**	Lab Sample ID (Depth)
1 2 3 4 5	-	0-5	N/A	0	Hand Dug	0-2" concrete 2"-2' gray-olive clayey SAND, soft, low plasticity, slightly moist, no odor 2'-5' white to tan medium grained SAND with gravels, slightly moist, no odor	
6 7 8 9 10		5-10	95%	0	Direct Push	5'-9' dark brown to light brown fine to medium grained SAND, medium dense, moist to saturated, no odor 9'-10' gray clayey SAND, soft, no plasticity, saturated, no odor	SB-20 sample collected 6.5-7'
11 12 13 14 15		10-15	100%	0	Direct Push	10'-15' gray clayey SAND, soft, no plasticity, saturated, no odor,	
						End of Boring 15 feet - No refusal encountered	

NOTES: Soil sample SB-20 analyzed for BTEX, MTBE, TPH-GRO, TPH-DRO, and PAHs.

Date/Time	Depth to groundwater while drilling
9/1/2016	7'

f-fine, m-medium, c-coarse

Checked by _____ Peter Pecora Date:_____ 9/16/16

AECOM	**Client:**	Easton / Newnam Field Airport	***BORING ID:*** ***SB-21***
	Project Number:	60514611	
	Site Location:	28721 Glebe Road, Easton, Maryland	
	Drilling Method:	Geoprobe	Sheet: 1 of 1
	Sample Type(s):	Soil **Elevation (ft):** 23	Monitoring Well Installed: No
	Coordinates:	38° 47' 23" N, 76° 04' 38" W	Screened Interval: N/A

Weather: *90 Degrees Fahrenheit*	Logged By: Jackie Porter	Start Date: 8/31/16	Depth of Boring: 10'
Drilling Contractor: GSI Mid-Atlantic, Inc.		Finish Date: 8/31/16	Water Level: 8.5' bgs

Depth (ft)	Sample	Sample Depth (ft)	Recovery	Headspace (ppm)	Blow count/ Direct Push	**MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, sorting, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)**	Lab Sample ID (Depth)
1 2 3 4 5	-	0-5	N/A	0	Hand Dug	0-3" organic material (top soil) 3"-1' light brown silty SAND, medium dense, slightly moist, no odor 1'-3' orange-brown silty CLAY, stiff, dry, no odor 3'-4' tan and white coarse SAND with some gravels, loose, moist, no odor 4'-5' dark brown fine to medium grained SAND with small gravels, loose, no odors	
6 7 8 9 10		5-10	100%	0	Direct Push	5'-5.5' same as above 5.5'-8.5' light brown/tan fine to medium grained SAND, medium dense, moist, no odor 8.5'-10' dark gray fine to medium grained SAND with some clay, moist to saturated at bottom, no odor.	SB-21 sample collected 8-8.5'
						End of Boring 10 feet - No refusal encountered	

NOTES: Soil sample SB-21 analyzed for BTEX, MTBE, TPH-GRO, TPH-DRO, and PAHs.

Date/Time	Depth to groundwater while drilling
9/1/2016	8.5'

f-fine, m-medium, c-coarse

Checked by _____ Peter Pecora Date:_____ 9/16/16

AECOM	**Client:**	Easton / Newnam Field Airport	***BORING ID:*** ***SB-22***
	Project Number:	60514611	
	Site Location:	28721 Glebe Road, Easton, Maryland	
	Drilling Method:	Geoprobe	Sheet: 1 of 1
	Sample Type(s):	Soil and Groundwater **Elevation (ft):** 23	Monitoring Well Installed: No
	Coordinates:	38° 47' 29" N, 76° 04' 41" W	Screened Interval: N/A

Weather: *90 Degrees Fahrenheit*	Logged By: Jackie Porter	Start Date: 9/1/16	Depth of Boring: 15'
Drilling Contractor: GSI Mid-Atlantic, Inc.		Finish Date: 9/1/16	Water Level: 7.19' bgs

Depth (ft)	Sample	Sample Depth (ft)	Recovery	Headspace (ppm)	Blow count/ Direct Push	**MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, sorting, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)**	Lab Sample ID (Depth)
1 2 3 4 5	-	0-5	N/A	0	Hand Dug	0-3" organic material (top soil) 3"-2' light brown silty CLAY with some gravels, stiff, dry, no odor 2'-4' orange-brown/ gray-olive sandy CLAY, hard, low to medium plasticity, no odor 4'-5' dark brown peat soil, moist, no odor	SB-22 sample collected 3.5-4'
6 7 8 9 10		5-10	60%	0	Direct Push	5'-7' same as above 7'-8.5' brown medium to coarse SAND, loose, saturated, no odor 8.5'-10' light gray fine to medium grained SAND, soft, saturated, no odor	
11 12 13 14 15		10-15	100%	0	Direct Push	10'-15' dark gray clayey SAND, soft, saturated, no odor	
						End of Boring 15 feet - No refusal encountered	

Date/Time	Depth to groundwater while drilling
9/1/2016	7'

NOTES: Soil sample SB-22 analyzed for BTEX, MTBE, TPH-GRO, TPH-DRO, PAHs, PCBs and Metals. Soil boring SB-22 was converted into a temporary well and screened 5'-15'. Groundwater sample anaylzed for BTEX, MTBE, TPH-GRO, TPH-DRO, PAHs and Metals.

f-fine, m-medium, c-coarse

Checked by _____ Peter Pecora Date:_____ 9/16/16

AECOM	**Client:**	Easton / Newnam Field Airport	***BORING ID:*** ***SB-23***
	Project Number:	60514611	
	Site Location:	28721 Glebe Road, Easton, Maryland	
	Drilling Method:	Geoprobe	Sheet: 1 of 1
	Sample Type(s):	Soil and Groundwater **Elevation (ft):** 23	Monitoring Well Installed: No
	Coordinates:	38° 47' 25" N, 76° 04' 30" W	Screened Interval: N/A

Weather: *90 Degrees Fahrenheit*	Logged By: Jackie Porter	Start Date: 9/1/16	Depth of Boring: 15'
Drilling Contractor: GSI Mid-Atlantic, Inc.		Finish Date: 9/1/16	Water Level: 5.42' bgs

Depth (ft)	Sample	Sample Depth (ft)	Recovery	Headspace (ppm)	Blow count/ Direct Push	**MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, sorting, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)**	Lab Sample ID (Depth)
1 2 3 4 5	-	0-5	N/A	0	Hand Dug	0-3" organic material (top soil) 3"-1' light brown fine to medium grained SAND with some gravels, medium dense, dry, no odor 1'-3' orange-brown/ gray-olive silty CLAY, hard, low to medium plasticity, no odor 3'-3.5' light gray to dark gray SAND, soft to dense, with some clay 3.5'-4' olive-gray/brown, CLAY stiff, moist, low plasticity, no odor 4'-5' dark brown peat soil, moist, no odor	SB-23 sample collected 3.5-4'
6 7 8 9 10		5-10	70%	0	Direct Push	5'-5.5' same as above 5.5'-7' light brown fine to medium grained SAND, moist, medium dense, no odor 7'-10' dark gray fine to medium grained SAND, loose, moist to saturated, no odor	
11 12 13 14 15		10-15	100%	0	Direct Push	10'-15' dark gray clayey SAND, soft, saturated, no odor	
						End of Boring 15 feet - No refusal encountered	

NOTES: Soil sample SB-23 analyzed for BTEX, MTBE, TPH-GRO, TPH-DRO, and PAHs. Soil boring SB-23 was converted into a temporary well and screened 5'-15'. Groundwater sample analyzed for BTEX, MTBE, TPH-GRO, TPH-DRO, and PAHs.

Date/Time	Depth to groundwater while drilling
9/1/2016	7'

f-fine, m-medium, c-coarse

Checked by _____ Peter Pecora Date:_____ 9/16/16

AECOM	**Client:**	Easton / Newnam Field Airport	***BORING ID:*** ***SB-24***
	Project Number:	60514611	
	Site Location:	28721 Glebe Road, Easton, Maryland	
	Drilling Method:	Geoprobe	Sheet: 1 of 1
	Sample Type(s):	Soil **Elevation (ft):** 23	Monitoring Well Installed: No
	Coordinates:	38° 47' 25" N, 76° 04' 31" W	Screened Interval: N/A

Weather: *90 Degrees Fahrenheit*	Logged By: Jackie Porter	Start Date: 9/1/16	Depth of Boring: 10'
Drilling Contractor: GSI Mid-Atlantic, Inc.		Finish Date: 9/1/16	Water Level: 8.5' bgs

Depth (ft)	Sample	Sample Depth (ft)	Recovery	Headspace (ppm)	Blow count/ Direct Push	**MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, sorting, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)**	Lab Sample ID (Depth)
1 2 3 4 5	-	0-5	N/A	0	Hand Dug	0-3" organic material (top soil) 3"-1' orange-brown fine to medium grained SAND with some gravels, medium dense, moist, no odor 1'-5' gray-brown clayey SAND with some gravels, stiff to hard, very moist, no odor	
6 7 8 9 10		5-10	80%	0	Direct Push	5'-5.5' same as above 5.5'-6' gray CLAY, low to no plasticity, very moist, no odor 6'-6.5' brown fine to medium grained SAND with some gravels, loose, moist, no odor 6.5'-9.5' dark brown fine to medium grained SAND, medium dense to loose, saturated, no odors 9.5'-10' light gray fine to medium grained SAND, saturated, no odor	SB-24 sample collected 5-5.5'
						End of Boring 10 feet - No refusal encountered	

NOTES: Soil sample SB-24 analyzed for BTEX, MTBE, TPH-GRO, TPH-DRO, and PAHs.

Date/Time	Depth to groundwater while drilling
9/1/2016	8.5'

f-fine, m-medium, c-coarse

Checked by _____ Peter Pecora Date:_____ 9/16/16

AECOM	**Client:**	Easton / Newnam Field Airport	***BORING ID:*** ***SB-25***
	Project Number:	60514611	
	Site Location:	28721 Glebe Road, Easton, Maryland	
	Drilling Method:	Geoprobe	Sheet: 1 of 1
	Sample Type(s):	Soil and Groundwater **Elevation (ft):** 23	Monitoring Well Installed: No
	Coordinates:	38° 47' 23" N, 76° 04' 33" W	Screened Interval: N/A

Weather: *90 Degrees Fahrenheit*	Logged By: Jackie Porter	Start Date: 9/1/16	Depth of Boring: 15'
Drilling Contractor: GSI Mid-Atlantic, Inc.		Finish Date: 9/1/16	Water Level: 5.99' bgs

Depth (ft)	Sample	Sample Depth (ft)	Recovery	Headspace (ppm)	Blow count/ Direct Push	**MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, sorting, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)**	Lab Sample ID (Depth)
1 2 3 4 5	-	0-5	N/A	0	Hand Dug	0-3" organic material (top soil) 3"-5' brown medium to coarse grained SAND with some gravels, medium dense, moist, no odor	
6 7 8 9 10		5-10	90%	0	Direct Push	5'-6.5' same as above 6.5'-9' light brown fine to medium grained SAND, medium dense to loose, moist to saturated, no odor 9'-10' light gray to dark gray fine to medium grained SAND, loose, saturated, no odor	SB-25 sample collected 6.5-7'
11 12 13 14 15		10-15	100%	0	Direct Push	10'-15' dark gray clayey SAND, soft, saturated, no odor	
						End of Boring 15 feet - No refusal encountered	

NOTES: Soil sample SB-25 analyzed for BTEX, MTBE, TPH-GRO, TPH-DRO, PAHs, PCBs and Metals. Soil boring SB-25 was converted into a temporary well and screened 5'-15'. Groundwater sample anaylzed for BTEX, MTBE, TPH-GRO, TPH-DRO, PAHs and Metals.

Date/Time	Depth to groundwater while drilling
9/1/2016	7'

f-fine, m-medium, c-coarse

Checked by _____ Peter Pecora Date:_____ 9/16/16

AECOM	**Client:**	Easton / Newnam Field Airport	***BORING ID:*** ***SB-26***
	Project Number:	60514611	
	Site Location:	28721 Glebe Road, Easton, Maryland	
	Drilling Method:	Geoprobe	Sheet: 1 of 1
	Sample Type(s):	Soil **Elevation (ft):** 23	Monitoring Well Installed: No
	Coordinates:	38° 47' 24" N, 76° 04' 32" W	Screened Interval: N/A

Weather: *90 Degrees Fahrenheit*	Logged By: Jackie Porter	Start Date: 9/1/16	Depth of Boring: 10'
Drilling Contractor: GSI Mid-Atlantic, Inc.		Finish Date: 9/1/16	Water Level: 7' bgs

Depth (ft)	Sample	Sample Depth (ft)	Recovery	Headspace (ppm)	Blow count/ Direct Push	**MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, sorting, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)**	Lab Sample ID (Depth)
1 2 3 4 5	-	0-5	N/A	0	Hand Dug	0-3" organic material (top soil) 3"-5' brown medium to coarse grained SAND with some gravels, medium dense, moist, no odor	
6 7 8 9 10		5-10	100%	0	Direct Push	5'-7' brown medium to coarse grained SAND with some gravels, medium dense, moist, no odors 7'-9.5' light brown fine to medium grained SAND, medium dense to loose, moist to saturated, no odors 9.5'-10' light gray fine to medium grained SAND, saturated, no odor	SB-26 sample collected 6.5-7'
						End of Boring 10 feet - No refusal encountered	

NOTES: Soil sample SB-26 analyzed for BTEX, MTBE, TPH-GRO, TPH-DRO, and PAHs.

Date/Time	Depth to groundwater while drilling
9/1/2016	7'

f-fine, m-medium, c-coarse

Checked by _____ Peter Pecora Date:_____ 9/16/16

AECOM	**Client:**	Easton / Newnam Field Airport	***BORING ID:*** ***SB-27***
	Project Number:	60514611	
	Site Location:	28721 Glebe Road, Easton, Maryland	
	Drilling Method:	Geoprobe	Sheet: 1 of 1
	Sample Type(s):	Soil **Elevation (ft):** 23	Monitoring Well Installed: No
	Coordinates:	38° 47' 22" N, 76° 04' 36" W	Screened Interval: N/A

Weather: *80 Degrees Fahrenheit*	Logged By: Jackie Porter	Start Date: 9/2/16	Depth of Boring: 10'
Drilling Contractor: GSI Mid-Atlantic, Inc.		Finish Date: 9/2/16	Water Level: 6.5' bgs

Depth (ft)	Sample	Sample Depth (ft)	Recovery	Headspace (ppm)	Blow count/ Direct Push	**MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, sorting, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)**	Lab Sample ID (Depth)
1	-	0-5	N/A	0	Hand Dug	0-3" organic material (top soil)	
2						3"-4' light olive-gray/brown silty CLAY, stiff, low to no plasticity, dry, no odor	
3							
4						4'-5' light gray silty CLAY with trace of sand, stiff, low to no plasticity, dry, no odor	
5							
6		5-10	70%	0	Direct Push	5'-6' same as above	SB-27 sample collected 5.5-6'
						6'-6.5' dark gray sandy CLAY, medium, low to no plasticity, moist, no odor	
7						6.5'-8' gray medium to coarse grained SAND, loose, saturated, no odor	
8							
9						8'-9.5' brown medium to coarse grained SAND with gravels, loose, saturated, no odor	
10						9.5'-10' light gray medium to coarse grained SAND with some gravels, saturated, no odor	
						End of Boring 10 feet - No refusal encountered	

NOTES: Soil sample SB-27 analyzed for BTEX, MTBE, TPH-GRO, TPH-DRO, and PAHs.

Date/Time	Depth to groundwater while drilling
9/2/2016	6.5'

f-fine, m-medium, c-coarse

Checked by _____ Peter Pecora Date:_____9/16/16

AECOM	**Client:**	Easton / Newnam Field Airport	***BORING ID:*** ***SB-28***
	Project Number:	60514611	
	Site Location:	28721 Glebe Road, Easton, Maryland	
	Drilling Method:	Geoprobe	Sheet: 1 of 1
	Sample Type(s):	Soil **Elevation (ft):** 23	Monitoring Well Installed: No
	Coordinates:	38° 47' 21" N, 76° 04' 37" W	Screened Interval: N/A

Weather: *80 Degrees Fahrenheit*	Logged By: Jackie Porter	Start Date: 9/2/16	Depth of Boring: 10'
Drilling Contractor: GSI Mid-Atlantic, Inc.		Finish Date: 9/2/16	Water Level: 7' bgs

Depth (ft)	Sample	Sample Depth (ft)	Recovery	Headspace (ppm)	Blow count/ Direct Push	**MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, sorting, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)**	Lab Sample ID (Depth)
1	-	0-5	N/A	0	Hand Dug	0-3" organic material (top soil)	
2						3"-4' light olive-gray/brown silty CLAY, stiff, low to no plasticity, dry, no odor	
3							
4						4'-5' light gray silty CLAY with trace of sand, stiff, low to no plasticity, dry, no odor	
5							
6		5-10	70%	0	Direct Push	5'-6' same as above	SB-28 sample collected 6.5-7'
7						6'-7.5' gray/orange-brown silty CLAY, hard, dry to moist, low to no plasticity, no odor	
8						7.5'-9' dark brown peat moss, soft, very moist, no odor	
9							
10						9'-10' dark brown medium to coarse grained SAND, medium dense to loose, saturated, no odor	
						End of Boring 10 feet - No refusal encountered	

NOTES: Soil sample SB-28 analyzed for BTEX, MTBE, TPH-GRO, TPH-DRO, and PAHs.

Date/Time	Depth to groundwater while drilling
9/2/2016	7'

f-fine, m-medium, c-coarse

Checked by _____ Peter Pecora Date:_____ 9/16/16

AECOM

Appendix C

Laboratory Analytical Report

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-111143-1
TestAmerica SDG: 28712 Glebe Road, Easton, MD
Client Project/Site: Black and Decker – Talbot County, MD

For:
AECOM
8000 Virginia Manor Road
Suite 110
Beltsville, Maryland 20705

Attn: Ms. Marie Treiber

Jennifer Huckaba

Authorized for release by:
9/15/2016 5:11:26 PM
Jennifer Huckaba, Project Manager II
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Designee for

Sherry Salomon, Manager of Project Management Assistants
(615)301-5033
sherry.salomon@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-111143-1	SB-1	Solid	08/31/16 09:40	09/03/16 10:10
490-111143-2	SB-2	Solid	08/31/16 09:50	09/03/16 10:10
490-111143-3	SB-3	Solid	08/31/16 10:20	09/03/16 10:10
490-111143-4	SB-4	Solid	08/31/16 10:40	09/03/16 10:10
490-111143-5	SB-5	Solid	08/31/16 11:00	09/03/16 10:10
490-111143-6	SB-6	Solid	08/31/16 11:20	09/03/16 10:10
490-111143-7	SB-7	Solid	08/31/16 12:45	09/03/16 10:10
490-111143-8	SB-8	Solid	08/31/16 13:20	09/03/16 10:10
490-111143-9	SB-9	Solid	08/31/16 14:10	09/03/16 10:10
490-111143-10	SB-10	Solid	08/31/16 15:10	09/03/16 10:10
490-111143-11	SB-11	Solid	08/31/16 16:00	09/03/16 10:10
490-111143-12	SB-12	Solid	08/31/16 16:40	09/03/16 10:10
490-111143-13	SB-13	Solid	09/01/16 09:30	09/03/16 10:10
490-111143-14	SB-14	Solid	09/01/16 08:50	09/03/16 10:10
490-111143-15	SB-15	Solid	09/01/16 10:00	09/03/16 10:10
490-111143-16	SB-16	Solid	09/01/16 10:35	09/03/16 10:10
490-111143-17	SB-17	Solid	09/01/16 11:00	09/03/16 10:10
490-111143-18	SB-18	Solid	09/01/16 11:20	09/03/16 10:10
490-111143-19	SB-19	Solid	09/01/16 11:45	09/03/16 10:10
490-111143-20	SB-20	Solid	09/01/16 12:50	09/03/16 10:10
490-111143-21	SB-21	Solid	09/01/16 13:10	09/03/16 10:10
490-111143-22	SB-22	Solid	09/01/16 13:30	09/03/16 10:10
490-111143-23	SB-23	Solid	09/01/16 15:30	09/03/16 10:10
490-111143-24	SB-24	Solid	09/01/16 15:15	09/03/16 10:10
490-111143-25	SB-25	Solid	09/01/16 16:30	09/03/16 10:10
490-111143-26	SB-26	Solid	09/01/16 17:00	09/03/16 10:10
490-111143-27	SB-27	Solid	09/02/16 08:45	09/03/16 10:10
490-111143-28	SB-28	Solid	09/02/16 09:10	09/03/16 10:10
490-111143-29	DUP-1	Solid	08/31/16 15:15	09/03/16 10:10
490-111143-30	DUP-2	Solid	09/01/16 10:10	09/03/16 10:10
490-111143-31	DUP-3	Solid	09/02/16 09:20	09/03/16 10:10
490-111143-32	TB	Solid	08/31/16 01:01	09/03/16 10:10
490-111143-33	FB	Water	09/01/16 16:15	09/03/16 10:10
490-111143-34	SB-7	Water	08/31/16 17:11	09/03/16 10:10
490-111143-35	SB-8	Water	08/31/16 17:25	09/03/16 10:10
490-111143-36	SB-9	Water	08/31/16 17:40	09/03/16 10:10
490-111143-37	SB-10	Water	08/31/16 18:00	09/03/16 10:10
490-111143-38	SB-11	Water	08/31/16 18:15	09/03/16 10:10
490-111143-39	SB-12	Water	08/31/16 18:35	09/03/16 10:10
490-111143-40	SB-13	Water	09/02/16 10:05	09/03/16 10:10
490-111143-41	SB-15	Water	09/02/16 09:15	09/03/16 10:10
490-111143-42	SB-19	Water	09/02/16 09:50	09/03/16 10:10
490-111143-43	SB-20	Water	09/02/16 10:45	09/03/16 10:10
490-111143-44	SB-22	Water	09/02/16 11:00	09/03/16 10:10
490-111143-45	SB-23	Water	09/02/16 11:20	09/03/16 10:10
490-111143-46	SB-25	Water	09/02/16 11:30	09/03/16 10:10
490-111143-47	DUP1	Water	08/31/16 18:00	09/03/16 10:10
490-111143-48	DUP2	Water	09/02/16 09:20	09/03/16 10:10
490-111143-49	MW-N	Water	09/02/16 10:30	09/03/16 10:10
490-111143-50	MW-W	Water	09/02/16 08:30	09/03/16 10:10
490-111143-51	Trip Blank	Water	08/31/16 01:01	09/03/16 10:10

Job ID: 490-111143-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-111143-1

Comments
No additional comments.

Receipt
The samples were received on 9/3/2016 at 10:10 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 8 coolers at receipt time were 0.5º C, 0.7º C, 1.6º C, 2.2º C, 2.7º C, 3.9º C, 5.6º C and 6.4º C.

Receipt Exceptions
The following samples were received at the laboratory outside the required temperature criteria: SB-10 (490-111143-10), SB-11 (490-111143-11), SB-12 (490-111143-12), SB-15 (490-111143-15), SB-16 (490-111143-16), SB-18 (490-111143-18), SB-19 (490-111143-19), SB-27 (490-111143-27), SB-28 (490-111143-28), DUP-2 (490-111143-30) and DUP-3 (490-111143-31). Both the VOA vials and soil jars for these samples were received outside the temperature criteria. The client was contacted regarding this issue, and the laboratory was instructed to proceed with the analyses.

The following samples were received at the laboratory outside the required temperature criteria: SB-13 (490-111143-13), SB-14 (490-111143-14), SB-17 (490-111143-17), SB-27 (490-111143-27), SB-28 (490-111143-28), DUP-2 (490-111143-30) and DUP-3 (490-111143-31). The soil jars for these samples were received outside the temperature criteria. The client was contacted regarding this issue, and the laboratory was instructed to proceed with the analyses.

The container label for the following sample did not match the information listed on the Chain-of-Custody (COC): SB-19 (490-111143-19). We received 2 sets of SB-19 and no sets labeled SB-18. One set of SB-19 had a sample date and time of 9-1-16 at 1120 which matches SB-18 on the COC. Thus this sample was entered as sample #18, SB-18. The other set of SB-19 had 20 marked out. The sample date and time was recorded as 9-1-16 at 1145 which matched SB-19 and was entered as sample #19, SB-19

GC/MS VOA
Method(s) 8260B: Internal standard responses were outside of acceptance limits for the following samples: SB-5 (490-111143-5), SB-17 (490-111143-17) and SB-8 (490-111143-8). The samples show evidence of matrix interference.

Method(s) 8260B: Surrogate recovery for the following samples was outside control limits: SB-5 (490-111143-5), SB-17 (490-111143-17) and SB-8 (490-111143-8). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis were not performed without dilution.

Method(s) 8260B: The following samples were diluted due to the nature of the sample matrix: SB-5 (490-111143-5), SB-8 (490-111143-8) and SB-17 (490-111143-17). Elevated reporting limits (RLs) are provided.

Method(s) 8260B: Insufficient sample volumes were available to perform matrix spikes/matrix spike duplicates (MS/MSD) associated with analytical batches 490-369449 and 490-369613.

Method(s) 8260B: The laboratory control sample duplicate (LCSD) for analytical batch 490-369613 recovered outside control limits for the following analyte: Carbon Tetrachloride. This analyte was biased high in the LCSD and was not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for analytical batch 490-369935 recovered outside control limits for the following analyte(s): Chloroethane. Chloroethane has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed.

Method(s) 8260B: Surrogate recovery for the following QC samples was outside control limits: (490-111596-A-2-A MS) and (490-111596-A-2-A MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA

Job ID: 490-111143-1 (Continued)

Laboratory: TestAmerica Nashville (Continued)

Method(s) 8270C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 490-368363.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC VOA
Method(s) 8015C: Surrogate recovery was outside acceptance limits for the following matrix spike/matrix spike duplicate (MS/MSD) sample: (490-111143-A-20-A MS). The parent sample's surrogate recovery was within acceptance limits; therefore this MS/MSD sample has been qualified and reported.

Method(s) 8015C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 490-368519.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA
Method(s) 8015C: The laboratory control sample (LCS) for preparation batch 490-368125 recovered outside control limits for the following analyte: C10-C28. These analytes were biased high in the LCS and were not detected in the following associated samples; therefore, the data have been reported.

Method(s) 8015C: Insufficient sample volumes were available to perform matrix spikes/matrix spike duplicates (MS/MSD) associated with preparation batches 490-368125 and 490-368623.

Method(s) 8015C: Surrogate recovery for the following samples was outside control limits: SB-9 (490-111143-36) and DUP1 (490-111143-47). Re-extraction and/or re-analysis were performed outside of holding time with acceptable results. The hydrocarbon results were confirmed by re-extraction and re-analysis; therefore, the original data have been qualified and reported.

Method(s) 8015C: The laboratory control sample (LCS) for preparation batch 490-368125 recovered outside control limits for the following analyte: C10-C28. The following associated sample was re-prepared and re-analyzed outside holding time: SB-8 (490-111143-35). The out of hold re-extraction and re-analysis did not confirm the presence of hydrocarbons.

Method(s) 8015C: The following sample was diluted due to an abundance of target analytes: SB-8 (490-111143-8). As such, surrogate recoveries are below the calibration range or are not reported, and elevated reporting limits (RLs) are provided.

Method(s) 8015C: The continuing calibration verification (CCV) associated with batch 490-368830 recovered above the upper control limit for C10-C28. The samples associated with this CCV were non-detect or below the reporting limit for the affected analytes; therefore, the data have been reported. The following samples are impacted: SB-21 (490-111143-21), SB-22 (490-111143-22), SB-23 (490-111143-23), SB-24 (490-111143-24), SB-25 (490-111143-25), SB-26 (490-111143-26), SB-27 (490-111143-27), SB-28 (490-111143-28), DUP-1 (490-111143-29) and DUP-2 (490-111143-30).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
*	ISTD response or retention time outside acceptable limits
X	Surrogate is outside control limits
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
E	Result exceeded calibration range.

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
X	Surrogate is outside control limits

GC Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.
F2	MS/MSD RPD exceeds control limits
F1	MS and/or MSD Recovery is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-1

Date Collected: 08/31/16 09:40
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-1

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.0398	0.00669	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
Benzene	ND		0.00159	0.000533	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
Bromobenzene	ND		0.00159	0.000573	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
Bromochloromethane	ND		0.00159	0.000438	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
Bromodichloromethane	ND		0.00159	0.000438	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
Bromoform	ND		0.00159	0.000438	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
Bromomethane	ND		0.00159	0.000955	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
2-Butanone (MEK)	ND		0.0398	0.00406	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
Carbon disulfide	ND		0.00398	0.00287	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
Carbon tetrachloride	ND		0.00159	0.000533	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
Chlorobenzene	ND		0.00159	0.000533	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
Chlorodibromomethane	ND		0.00159	0.000271	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
Chloroethane	ND		0.00398	0.00151	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
Chloroform	ND		0.00159	0.000533	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
Chloromethane	ND		0.00159	0.000533	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
2-Chlorotoluene	ND		0.00159	0.000709	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
4-Chlorotoluene	ND		0.00159	0.000669	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
cis-1,2-Dichloroethene	ND		0.00159	0.000533	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
cis-1,3-Dichloropropene	ND		0.00159	0.000533	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
1,2-Dibromo-3-Chloropropane	ND		0.00398	0.000557	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
1,2-Dibromoethane (EDB)	ND		0.00159	0.000796	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
Dibromomethane	ND		0.00159	0.000446	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
1,2-Dichlorobenzene	ND		0.00159	0.000271	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
1,3-Dichlorobenzene	ND		0.00159	0.000533	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
1,4-Dichlorobenzene	ND		0.00159	0.000533	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
Dichlorodifluoromethane	ND		0.00159	0.000796	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
1,1-Dichloroethane	ND		0.00159	0.000533	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
1,2-Dichloroethane	ND		0.00159	0.000533	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
1,1-Dichloroethene	ND		0.00159	0.000454	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
1,2-Dichloropropane	ND		0.00159	0.000748	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
1,3-Dichloropropane	ND		0.00159	0.000748	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
2,2-Dichloropropane	ND		0.00159	0.000533	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
1,1-Dichloropropene	ND		0.00159	0.000406	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
Diisopropyl ether	ND		0.00159	0.000533	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
Ethylbenzene	ND		0.00159	0.000533	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
Ethyl tert-butyl ether	ND		0.00398	0.000796	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
Hexachlorobutadiene	ND		0.00398	0.000908	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
2-Hexanone	ND		0.0398	0.0133	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
Isopropylbenzene	ND		0.00159	0.000326	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
Methylene Chloride	ND		0.00796	0.000685	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
4-Methyl-2-pentanone (MIBK)	ND		0.0398	0.00151	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
Methyl tert-butyl ether	ND		0.00159	0.000764	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
Naphthalene	ND		0.00398	0.00135	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
n-Butylbenzene	ND		0.00159	0.000780	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
N-Propylbenzene	ND		0.00159	0.000533	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
p-Isopropyltoluene	ND		0.00159	0.000533	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
sec-Butylbenzene	ND		0.00159	0.000533	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
Styrene	ND		0.00159	0.000876	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
t-Amyl alcohol	ND		0.0159	0.00740	mg/Kg		08/31/16 09:40	09/12/16 19:41	1

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-1

Date Collected: 08/31/16 09:40
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-1

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl methyl ether	ND		0.00159	0.000247	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
tert-Butyl alcohol (TBA)	ND		0.0398	0.00892	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
tert-Butylbenzene	ND		0.00159	0.000717	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
1,1,1,2-Tetrachloroethane	ND		0.00159	0.000533	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
1,1,2,2-Tetrachloroethane	ND		0.00159	0.000796	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
Tetrachloroethene	ND		0.00159	0.000581	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
Toluene	ND		0.00159	0.000589	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
trans-1,2-Dichloroethene	ND		0.00159	0.000533	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
trans-1,3-Dichloropropene	ND		0.00159	0.000533	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
1,2,3-Trichlorobenzene	ND		0.00159	0.000303	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
1,2,4-Trichlorobenzene	ND		0.00159	0.000533	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
1,1,1-Trichloroethane	ND		0.00159	0.000732	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
1,1,2-Trichloroethane	ND		0.00398	0.00111	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
Trichloroethene	ND		0.00159	0.000764	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
Trichlorofluoromethane	ND		0.00159	0.000796	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
1,2,3-Trichloropropane	ND		0.00159	0.000438	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
1,2,4-Trimethylbenzene	ND		0.00159	0.000796	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
1,3,5-Trimethylbenzene	ND		0.00159	0.000597	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
Vinyl chloride	ND		0.00159	0.000876	mg/Kg		08/31/16 09:40	09/12/16 19:41	1
Xylenes, Total	ND		0.00478	0.000979	mg/Kg		08/31/16 09:40	09/12/16 19:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*08/31/16 09:40*	*09/12/16 19:41*	*1*
Dibromofluoromethane (Surr)	*104*		*70 - 130*	*08/31/16 09:40*	*09/12/16 19:41*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*	*08/31/16 09:40*	*09/12/16 19:41*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*	*08/31/16 09:40*	*09/12/16 19:41*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0660	0.0315	mg/Kg		09/08/16 10:22	09/09/16 14:22	1
Acenaphthylene	ND		0.0660	0.0286	mg/Kg		09/08/16 10:22	09/09/16 14:22	1
Anthracene	ND		0.0660	0.0286	mg/Kg		09/08/16 10:22	09/09/16 14:22	1
Benzo[a]anthracene	ND		0.0660	0.0296	mg/Kg		09/08/16 10:22	09/09/16 14:22	1
Benzo[a]pyrene	ND		0.0660	0.0266	mg/Kg		09/08/16 10:22	09/09/16 14:22	1
Benzo[b]fluoranthene	ND		0.0660	0.0276	mg/Kg		09/08/16 10:22	09/09/16 14:22	1
Benzo[g,h,i]perylene	ND		0.0660	0.0325	mg/Kg		09/08/16 10:22	09/09/16 14:22	1
Benzo[k]fluoranthene	ND		0.0660	0.0266	mg/Kg		09/08/16 10:22	09/09/16 14:22	1
Chrysene	ND		0.0660	0.0365	mg/Kg		09/08/16 10:22	09/09/16 14:22	1
Dibenz(a,h)anthracene	ND		0.0660	0.0315	mg/Kg		09/08/16 10:22	09/09/16 14:22	1
Fluoranthene	ND		0.0660	0.0335	mg/Kg		09/08/16 10:22	09/09/16 14:22	1
Fluorene	ND		0.0660	0.0286	mg/Kg		09/08/16 10:22	09/09/16 14:22	1
Indeno[1,2,3-cd]pyrene	ND		0.0660	0.0286	mg/Kg		09/08/16 10:22	09/09/16 14:22	1
1-Methylnaphthalene	ND		0.0660	0.0276	mg/Kg		09/08/16 10:22	09/09/16 14:22	1
2-Methylnaphthalene	ND		0.0660	0.0256	mg/Kg		09/08/16 10:22	09/09/16 14:22	1
Naphthalene	ND		0.0660	0.0286	mg/Kg		09/08/16 10:22	09/09/16 14:22	1
Phenanthrene	ND		0.0660	0.0335	mg/Kg		09/08/16 10:22	09/09/16 14:22	1
Pyrene	ND		0.0660	0.0335	mg/Kg		09/08/16 10:22	09/09/16 14:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*56*		*29 - 120*	*09/08/16 10:22*	*09/09/16 14:22*	*1*

Client Sample ID: SB-1

Lab Sample ID: 490-111143-1

Date Collected: 08/31/16 09:40
Matrix: Solid
Date Received: 09/03/16 10:10

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*56*		*27 - 120*	*09/08/16 10:22*	*09/09/16 14:22*	*1*
Terphenyl-d14 (Surr)	*69*		*13 - 120*	*09/08/16 10:22*	*09/09/16 14:22*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.23	2.12	mg/Kg		08/31/16 09:40	09/06/16 17:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*104*		*50 - 150*	*08/31/16 09:40*	*09/06/16 17:41*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.95	2.48	mg/Kg		09/08/16 11:38	09/09/16 12:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*94*		*50 - 150*	*09/08/16 11:38*	*09/09/16 12:48*	*1*

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-2

Date Collected: 08/31/16 09:50
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-2

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.0446	0.00749	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
Benzene	ND		0.00178	0.000598	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
Bromobenzene	ND		0.00178	0.000642	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
Bromochloromethane	ND		0.00178	0.000491	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
Bromodichloromethane	ND		0.00178	0.000491	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
Bromoform	ND		0.00178	0.000491	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
Bromomethane	ND		0.00178	0.00107	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
2-Butanone (MEK)	ND		0.0446	0.00455	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
Carbon disulfide	ND		0.00446	0.00321	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
Carbon tetrachloride	ND		0.00178	0.000598	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
Chlorobenzene	ND		0.00178	0.000598	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
Chlorodibromomethane	ND		0.00178	0.000303	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
Chloroethane	ND		0.00446	0.00169	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
Chloroform	ND		0.00178	0.000598	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
Chloromethane	ND		0.00178	0.000598	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
2-Chlorotoluene	ND		0.00178	0.000794	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
4-Chlorotoluene	ND		0.00178	0.000749	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
cis-1,2-Dichloroethene	ND		0.00178	0.000598	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
cis-1,3-Dichloropropene	ND		0.00178	0.000598	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
1,2-Dibromo-3-Chloropropane	ND		0.00446	0.000624	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
1,2-Dibromoethane (EDB)	ND		0.00178	0.000892	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
Dibromomethane	ND		0.00178	0.000499	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
1,2-Dichlorobenzene	ND		0.00178	0.000303	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
1,3-Dichlorobenzene	ND		0.00178	0.000598	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
1,4-Dichlorobenzene	ND		0.00178	0.000598	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
Dichlorodifluoromethane	ND		0.00178	0.000892	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
1,1-Dichloroethane	ND		0.00178	0.000598	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
1,2-Dichloroethane	ND		0.00178	0.000598	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
1,1-Dichloroethene	ND		0.00178	0.000508	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
1,2-Dichloropropane	ND		0.00178	0.000838	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
1,3-Dichloropropane	ND		0.00178	0.000838	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
2,2-Dichloropropane	ND		0.00178	0.000598	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
1,1-Dichloropropene	ND		0.00178	0.000455	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
Diisopropyl ether	ND		0.00178	0.000598	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
Ethylbenzene	ND		0.00178	0.000598	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
Ethyl tert-butyl ether	ND		0.00446	0.000892	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
Hexachlorobutadiene	ND		0.00446	0.00102	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
2-Hexanone	ND		0.0446	0.0149	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
Isopropylbenzene	ND		0.00178	0.000366	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
Methylene Chloride	ND		0.00892	0.000767	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
4-Methyl-2-pentanone (MIBK)	ND		0.0446	0.00169	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
Methyl tert-butyl ether	ND		0.00178	0.000856	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
Naphthalene	ND		0.00446	0.00152	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
n-Butylbenzene	ND		0.00178	0.000874	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
N-Propylbenzene	ND		0.00178	0.000598	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
p-Isopropyltoluene	ND		0.00178	0.000598	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
sec-Butylbenzene	ND		0.00178	0.000598	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
Styrene	ND		0.00178	0.000981	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
t-Amyl alcohol	ND		0.0178	0.00829	mg/Kg		08/31/16 09:50	09/12/16 20:09	1

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-2

Date Collected: 08/31/16 09:50
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-2

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl methyl ether	ND		0.00178	0.000276	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
tert-Butyl alcohol (TBA)	ND		0.0446	0.00999	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
tert-Butylbenzene	ND		0.00178	0.000803	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
1,1,1,2-Tetrachloroethane	ND		0.00178	0.000598	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
1,1,2,2-Tetrachloroethane	ND		0.00178	0.000892	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
Tetrachloroethene	ND		0.00178	0.000651	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
Toluene	ND		0.00178	0.000660	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
trans-1,2-Dichloroethene	ND		0.00178	0.000598	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
trans-1,3-Dichloropropene	ND		0.00178	0.000598	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
1,2,3-Trichlorobenzene	ND		0.00178	0.000339	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
1,2,4-Trichlorobenzene	ND		0.00178	0.000598	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
1,1,1-Trichloroethane	ND		0.00178	0.000821	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
1,1,2-Trichloroethane	ND		0.00446	0.00125	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
Trichloroethene	ND		0.00178	0.000856	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
Trichlorofluoromethane	ND		0.00178	0.000892	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
1,2,3-Trichloropropane	ND		0.00178	0.000491	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
1,2,4-Trimethylbenzene	ND		0.00178	0.000892	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
1,3,5-Trimethylbenzene	ND		0.00178	0.000669	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
Vinyl chloride	ND		0.00178	0.000981	mg/Kg		08/31/16 09:50	09/12/16 20:09	1
Xylenes, Total	ND		0.00535	0.00110	mg/Kg		08/31/16 09:50	09/12/16 20:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*08/31/16 09:50*	*09/12/16 20:09*	*1*
Dibromofluoromethane (Surr)	*111*		*70 - 130*	*08/31/16 09:50*	*09/12/16 20:09*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*	*08/31/16 09:50*	*09/12/16 20:09*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*	*08/31/16 09:50*	*09/12/16 20:09*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0655	0.0313	mg/Kg		09/08/16 10:22	09/09/16 15:21	1
Acenaphthylene	ND		0.0655	0.0283	mg/Kg		09/08/16 10:22	09/09/16 15:21	1
Anthracene	ND		0.0655	0.0283	mg/Kg		09/08/16 10:22	09/09/16 15:21	1
Benzo[a]anthracene	ND		0.0655	0.0293	mg/Kg		09/08/16 10:22	09/09/16 15:21	1
Benzo[a]pyrene	ND		0.0655	0.0264	mg/Kg		09/08/16 10:22	09/09/16 15:21	1
Benzo[b]fluoranthene	ND		0.0655	0.0274	mg/Kg		09/08/16 10:22	09/09/16 15:21	1
Benzo[g,h,i]perylene	ND		0.0655	0.0322	mg/Kg		09/08/16 10:22	09/09/16 15:21	1
Benzo[k]fluoranthene	ND		0.0655	0.0264	mg/Kg		09/08/16 10:22	09/09/16 15:21	1
Chrysene	ND		0.0655	0.0361	mg/Kg		09/08/16 10:22	09/09/16 15:21	1
Dibenz(a,h)anthracene	ND		0.0655	0.0313	mg/Kg		09/08/16 10:22	09/09/16 15:21	1
Fluoranthene	ND		0.0655	0.0332	mg/Kg		09/08/16 10:22	09/09/16 15:21	1
Fluorene	ND		0.0655	0.0283	mg/Kg		09/08/16 10:22	09/09/16 15:21	1
Indeno[1,2,3-cd]pyrene	ND		0.0655	0.0283	mg/Kg		09/08/16 10:22	09/09/16 15:21	1
1-Methylnaphthalene	ND		0.0655	0.0274	mg/Kg		09/08/16 10:22	09/09/16 15:21	1
2-Methylnaphthalene	ND		0.0655	0.0254	mg/Kg		09/08/16 10:22	09/09/16 15:21	1
Naphthalene	ND		0.0655	0.0283	mg/Kg		09/08/16 10:22	09/09/16 15:21	1
Phenanthrene	ND		0.0655	0.0332	mg/Kg		09/08/16 10:22	09/09/16 15:21	1
Pyrene	ND		0.0655	0.0332	mg/Kg		09/08/16 10:22	09/09/16 15:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*62*		*29 - 120*	*09/08/16 10:22*	*09/09/16 15:21*	*1*

Client Sample ID: SB-2

Lab Sample ID: 490-111143-2

Date Collected: 08/31/16 09:50
Matrix: Solid
Date Received: 09/03/16 10:10

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*64*		*27 - 120*	*09/08/16 10:22*	*09/09/16 15:21*	*1*
Terphenyl-d14 (Surr)	*70*		*13 - 120*	*09/08/16 10:22*	*09/09/16 15:21*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.35	2.17	mg/Kg		08/31/16 09:50	09/06/16 18:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*107*		*50 - 150*	*08/31/16 09:50*	*09/06/16 18:15*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.81	2.41	mg/Kg		09/08/16 11:38	09/09/16 13:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*119*		*50 - 150*	*09/08/16 11:38*	*09/09/16 13:06*	*1*

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-3

Date Collected: 08/31/16 10:20
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-3

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.0453	0.00761	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
Benzene	ND		0.00181	0.000607	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
Bromobenzene	ND		0.00181	0.000652	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
Bromochloromethane	ND		0.00181	0.000498	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
Bromodichloromethane	ND		0.00181	0.000498	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
Bromoform	ND		0.00181	0.000498	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
Bromomethane	ND		0.00181	0.00109	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
2-Butanone (MEK)	ND		0.0453	0.00462	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
Carbon disulfide	ND		0.00453	0.00326	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
Carbon tetrachloride	ND		0.00181	0.000607	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
Chlorobenzene	ND		0.00181	0.000607	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
Chlorodibromomethane	ND		0.00181	0.000308	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
Chloroethane	ND		0.00453	0.00172	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
Chloroform	ND		0.00181	0.000607	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
Chloromethane	ND		0.00181	0.000607	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
2-Chlorotoluene	ND		0.00181	0.000806	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
4-Chlorotoluene	ND		0.00181	0.000761	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
cis-1,2-Dichloroethene	ND		0.00181	0.000607	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
cis-1,3-Dichloropropene	ND		0.00181	0.000607	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
1,2-Dibromo-3-Chloropropane	ND		0.00453	0.000634	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
1,2-Dibromoethane (EDB)	ND		0.00181	0.000906	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
Dibromomethane	ND		0.00181	0.000507	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
1,2-Dichlorobenzene	ND		0.00181	0.000308	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
1,3-Dichlorobenzene	ND		0.00181	0.000607	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
1,4-Dichlorobenzene	ND		0.00181	0.000607	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
Dichlorodifluoromethane	ND		0.00181	0.000906	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
1,1-Dichloroethane	ND		0.00181	0.000607	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
1,2-Dichloroethane	ND		0.00181	0.000607	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
1,1-Dichloroethene	ND		0.00181	0.000516	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
1,2-Dichloropropane	ND		0.00181	0.000851	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
1,3-Dichloropropane	ND		0.00181	0.000851	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
2,2-Dichloropropane	ND		0.00181	0.000607	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
1,1-Dichloropropene	ND		0.00181	0.000462	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
Diisopropyl ether	ND		0.00181	0.000607	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
Ethylbenzene	ND		0.00181	0.000607	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
Ethyl tert-butyl ether	ND		0.00453	0.000906	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
Hexachlorobutadiene	ND		0.00453	0.00103	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
2-Hexanone	ND		0.0453	0.0151	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
Isopropylbenzene	ND		0.00181	0.000371	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
Methylene Chloride	ND		0.00906	0.000779	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
4-Methyl-2-pentanone (MIBK)	ND		0.0453	0.00172	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
Methyl tert-butyl ether	ND		0.00181	0.000870	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
Naphthalene	ND		0.00453	0.00154	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
n-Butylbenzene	ND		0.00181	0.000888	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
N-Propylbenzene	ND		0.00181	0.000607	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
p-Isopropyltoluene	ND		0.00181	0.000607	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
sec-Butylbenzene	ND		0.00181	0.000607	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
Styrene	ND		0.00181	0.000996	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
t-Amyl alcohol	ND		0.0181	0.00842	mg/Kg		08/31/16 10:20	09/12/16 20:36	1

Client Sample ID: SB-3

Date Collected: 08/31/16 10:20
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-3

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl methyl ether	ND		0.00181	0.000281	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
tert-Butyl alcohol (TBA)	ND		0.0453	0.0101	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
tert-Butylbenzene	ND		0.00181	0.000815	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
1,1,1,2-Tetrachloroethane	ND		0.00181	0.000607	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
1,1,2,2-Tetrachloroethane	ND		0.00181	0.000906	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
Tetrachloroethene	ND		0.00181	0.000661	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
Toluene	ND		0.00181	0.000670	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
trans-1,2-Dichloroethene	ND		0.00181	0.000607	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
trans-1,3-Dichloropropene	ND		0.00181	0.000607	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
1,2,3-Trichlorobenzene	ND		0.00181	0.000344	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
1,2,4-Trichlorobenzene	ND		0.00181	0.000607	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
1,1,1-Trichloroethane	ND		0.00181	0.000833	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
1,1,2-Trichloroethane	ND		0.00453	0.00127	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
Trichloroethene	ND		0.00181	0.000870	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
Trichlorofluoromethane	ND		0.00181	0.000906	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
1,2,3-Trichloropropane	ND		0.00181	0.000498	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
1,2,4-Trimethylbenzene	ND		0.00181	0.000906	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
1,3,5-Trimethylbenzene	ND		0.00181	0.000679	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
Vinyl chloride	ND		0.00181	0.000996	mg/Kg		08/31/16 10:20	09/12/16 20:36	1
Xylenes, Total	ND		0.00543	0.00111	mg/Kg		08/31/16 10:20	09/12/16 20:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*08/31/16 10:20*	*09/12/16 20:36*	*1*
Dibromofluoromethane (Surr)	*110*		*70 - 130*	*08/31/16 10:20*	*09/12/16 20:36*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*	*08/31/16 10:20*	*09/12/16 20:36*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*	*08/31/16 10:20*	*09/12/16 20:36*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0657	0.0314	mg/Kg		09/08/16 10:22	09/09/16 15:41	1
Acenaphthylene	ND		0.0657	0.0284	mg/Kg		09/08/16 10:22	09/09/16 15:41	1
Anthracene	ND		0.0657	0.0284	mg/Kg		09/08/16 10:22	09/09/16 15:41	1
Benzo[a]anthracene	ND		0.0657	0.0294	mg/Kg		09/08/16 10:22	09/09/16 15:41	1
Benzo[a]pyrene	ND		0.0657	0.0265	mg/Kg		09/08/16 10:22	09/09/16 15:41	1
Benzo[b]fluoranthene	ND		0.0657	0.0275	mg/Kg		09/08/16 10:22	09/09/16 15:41	1
Benzo[g,h,i]perylene	ND		0.0657	0.0324	mg/Kg		09/08/16 10:22	09/09/16 15:41	1
Benzo[k]fluoranthene	ND		0.0657	0.0265	mg/Kg		09/08/16 10:22	09/09/16 15:41	1
Chrysene	ND		0.0657	0.0363	mg/Kg		09/08/16 10:22	09/09/16 15:41	1
Dibenz(a,h)anthracene	ND		0.0657	0.0314	mg/Kg		09/08/16 10:22	09/09/16 15:41	1
Fluoranthene	ND		0.0657	0.0334	mg/Kg		09/08/16 10:22	09/09/16 15:41	1
Fluorene	ND		0.0657	0.0284	mg/Kg		09/08/16 10:22	09/09/16 15:41	1
Indeno[1,2,3-cd]pyrene	ND		0.0657	0.0284	mg/Kg		09/08/16 10:22	09/09/16 15:41	1
1-Methylnaphthalene	ND		0.0657	0.0275	mg/Kg		09/08/16 10:22	09/09/16 15:41	1
2-Methylnaphthalene	ND		0.0657	0.0255	mg/Kg		09/08/16 10:22	09/09/16 15:41	1
Naphthalene	ND		0.0657	0.0284	mg/Kg		09/08/16 10:22	09/09/16 15:41	1
Phenanthrene	ND		0.0657	0.0334	mg/Kg		09/08/16 10:22	09/09/16 15:41	1
Pyrene	ND		0.0657	0.0334	mg/Kg		09/08/16 10:22	09/09/16 15:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*69*		*29 - 120*	*09/08/16 10:22*	*09/09/16 15:41*	*1*

Client Sample ID: SB-3

Lab Sample ID: 490-111143-3

Date Collected: 08/31/16 10:20

Matrix: Solid

Date Received: 09/03/16 10:10

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*70*		*27 - 120*	*09/08/16 10:22*	*09/09/16 15:41*	*1*
Terphenyl-d14 (Surr)	*78*		*13 - 120*	*09/08/16 10:22*	*09/09/16 15:41*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.73	2.37	mg/Kg		08/31/16 10:20	09/06/16 18:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*107*		*50 - 150*	*08/31/16 10:20*	*09/06/16 18:48*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**5.15**		4.99	2.49	mg/Kg		09/08/16 11:38	09/09/16 13:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*124*		*50 - 150*	*09/08/16 11:38*	*09/09/16 13:25*	*1*

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-4

Date Collected: 08/31/16 10:40
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-4

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.0379	0.00637	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
Benzene	ND		0.00152	0.000508	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
Bromobenzene	ND		0.00152	0.000546	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
Bromochloromethane	ND		0.00152	0.000417	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
Bromodichloromethane	ND		0.00152	0.000417	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
Bromoform	ND		0.00152	0.000417	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
Bromomethane	ND		0.00152	0.000910	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
2-Butanone (MEK)	ND		0.0379	0.00387	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
Carbon disulfide	ND		0.00379	0.00273	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
Carbon tetrachloride	ND		0.00152	0.000508	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
Chlorobenzene	ND		0.00152	0.000508	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
Chlorodibromomethane	ND		0.00152	0.000258	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
Chloroethane	ND		0.00379	0.00144	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
Chloroform	ND		0.00152	0.000508	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
Chloromethane	ND		0.00152	0.000508	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
2-Chlorotoluene	ND		0.00152	0.000675	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
4-Chlorotoluene	ND		0.00152	0.000637	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
cis-1,2-Dichloroethene	ND		0.00152	0.000508	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
cis-1,3-Dichloropropene	ND		0.00152	0.000508	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
1,2-Dibromo-3-Chloropropane	ND		0.00379	0.000531	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
1,2-Dibromoethane (EDB)	ND		0.00152	0.000758	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
Dibromomethane	ND		0.00152	0.000425	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
1,2-Dichlorobenzene	ND		0.00152	0.000258	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
1,3-Dichlorobenzene	ND		0.00152	0.000508	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
1,4-Dichlorobenzene	ND		0.00152	0.000508	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
Dichlorodifluoromethane	ND		0.00152	0.000758	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
1,1-Dichloroethane	ND		0.00152	0.000508	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
1,2-Dichloroethane	ND		0.00152	0.000508	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
1,1-Dichloroethene	ND		0.00152	0.000432	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
1,2-Dichloropropane	ND		0.00152	0.000713	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
1,3-Dichloropropane	ND		0.00152	0.000713	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
2,2-Dichloropropane	ND		0.00152	0.000508	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
1,1-Dichloropropene	ND		0.00152	0.000387	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
Diisopropyl ether	ND		0.00152	0.000508	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
Ethylbenzene	ND		0.00152	0.000508	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
Ethyl tert-butyl ether	ND		0.00379	0.000758	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
Hexachlorobutadiene	ND		0.00379	0.000865	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
2-Hexanone	ND		0.0379	0.0127	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
Isopropylbenzene	ND		0.00152	0.000311	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
Methylene Chloride	ND		0.00758	0.000652	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
4-Methyl-2-pentanone (MIBK)	ND		0.0379	0.00144	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
Methyl tert-butyl ether	ND		0.00152	0.000728	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
Naphthalene	ND		0.00379	0.00129	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
n-Butylbenzene	ND		0.00152	0.000743	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
N-Propylbenzene	ND		0.00152	0.000508	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
p-Isopropyltoluene	ND		0.00152	0.000508	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
sec-Butylbenzene	ND		0.00152	0.000508	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
Styrene	ND		0.00152	0.000834	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
t-Amyl alcohol	ND		0.0152	0.00705	mg/Kg		08/31/16 10:40	09/12/16 21:03	1

Client Sample ID: SB-4

Date Collected: 08/31/16 10:40
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-4

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl methyl ether	ND		0.00152	0.000235	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
tert-Butyl alcohol (TBA)	ND		0.0379	0.00850	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
tert-Butylbenzene	ND		0.00152	0.000683	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
1,1,1,2-Tetrachloroethane	ND		0.00152	0.000508	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
1,1,2,2-Tetrachloroethane	ND		0.00152	0.000758	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
Tetrachloroethene	ND		0.00152	0.000554	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
Toluene	ND		0.00152	0.000561	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
trans-1,2-Dichloroethene	ND		0.00152	0.000508	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
trans-1,3-Dichloropropene	ND		0.00152	0.000508	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
1,2,3-Trichlorobenzene	ND		0.00152	0.000288	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
1,2,4-Trichlorobenzene	ND		0.00152	0.000508	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
1,1,1-Trichloroethane	ND		0.00152	0.000698	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
1,1,2-Trichloroethane	ND		0.00379	0.00106	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
Trichloroethene	ND		0.00152	0.000728	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
Trichlorofluoromethane	ND		0.00152	0.000758	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
1,2,3-Trichloropropane	ND		0.00152	0.000417	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
1,2,4-Trimethylbenzene	ND		0.00152	0.000758	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
1,3,5-Trimethylbenzene	ND		0.00152	0.000569	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
Vinyl chloride	ND		0.00152	0.000834	mg/Kg		08/31/16 10:40	09/12/16 21:03	1
Xylenes, Total	ND		0.00455	0.000933	mg/Kg		08/31/16 10:40	09/12/16 21:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*08/31/16 10:40*	*09/12/16 21:03*	*1*
Dibromofluoromethane (Surr)	*117*		*70 - 130*	*08/31/16 10:40*	*09/12/16 21:03*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*	*08/31/16 10:40*	*09/12/16 21:03*	*1*
Toluene-d8 (Surr)	*106*		*70 - 130*	*08/31/16 10:40*	*09/12/16 21:03*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0663	0.0317	mg/Kg		09/08/16 10:22	09/09/16 16:01	1
Acenaphthylene	ND		0.0663	0.0287	mg/Kg		09/08/16 10:22	09/09/16 16:01	1
Anthracene	ND		0.0663	0.0287	mg/Kg		09/08/16 10:22	09/09/16 16:01	1
Benzo[a]anthracene	ND		0.0663	0.0297	mg/Kg		09/08/16 10:22	09/09/16 16:01	1
Benzo[a]pyrene	ND		0.0663	0.0267	mg/Kg		09/08/16 10:22	09/09/16 16:01	1
Benzo[b]fluoranthene	ND		0.0663	0.0277	mg/Kg		09/08/16 10:22	09/09/16 16:01	1
Benzo[g,h,i]perylene	ND		0.0663	0.0326	mg/Kg		09/08/16 10:22	09/09/16 16:01	1
Benzo[k]fluoranthene	ND		0.0663	0.0267	mg/Kg		09/08/16 10:22	09/09/16 16:01	1
Chrysene	ND		0.0663	0.0366	mg/Kg		09/08/16 10:22	09/09/16 16:01	1
Dibenz(a,h)anthracene	ND		0.0663	0.0317	mg/Kg		09/08/16 10:22	09/09/16 16:01	1
Fluoranthene	ND		0.0663	0.0336	mg/Kg		09/08/16 10:22	09/09/16 16:01	1
Fluorene	ND		0.0663	0.0287	mg/Kg		09/08/16 10:22	09/09/16 16:01	1
Indeno[1,2,3-cd]pyrene	ND		0.0663	0.0287	mg/Kg		09/08/16 10:22	09/09/16 16:01	1
1-Methylnaphthalene	ND		0.0663	0.0277	mg/Kg		09/08/16 10:22	09/09/16 16:01	1
2-Methylnaphthalene	ND		0.0663	0.0257	mg/Kg		09/08/16 10:22	09/09/16 16:01	1
Naphthalene	ND		0.0663	0.0287	mg/Kg		09/08/16 10:22	09/09/16 16:01	1
Phenanthrene	ND		0.0663	0.0336	mg/Kg		09/08/16 10:22	09/09/16 16:01	1
Pyrene	ND		0.0663	0.0336	mg/Kg		09/08/16 10:22	09/09/16 16:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*55*		*29 - 120*	*09/08/16 10:22*	*09/09/16 16:01*	*1*

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-4
Date Collected: 08/31/16 10:40
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-4
Matrix: Solid

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	53		27 - 120	09/08/16 10:22	09/09/16 16:01	1
Terphenyl-d14 (Surr)	71		13 - 120	09/08/16 10:22	09/09/16 16:01	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		3.67	1.84	mg/Kg		08/31/16 10:40	09/06/16 19:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	107		50 - 150	08/31/16 10:40	09/06/16 19:22	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.98	2.49	mg/Kg		09/08/16 11:38	09/09/16 13:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	102		50 - 150	09/08/16 11:38	09/09/16 13:44	1

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-5

Date Collected: 08/31/16 11:00
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-5

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**0.177**		0.0476	0.00799	mg/Kg		08/31/16 11:00	09/12/16 21:31	1
Benzene	ND		0.00190	0.000637	mg/Kg		08/31/16 11:00	09/12/16 21:31	1
Bromobenzene	ND		0.0882	0.0317	mg/Kg		08/31/16 11:00	09/14/16 12:59	1
Bromochloromethane	ND		0.00190	0.000523	mg/Kg		08/31/16 11:00	09/12/16 21:31	1
Bromodichloromethane	ND		0.00190	0.000523	mg/Kg		08/31/16 11:00	09/12/16 21:31	1
Bromoform	ND		0.0882	0.0247	mg/Kg		08/31/16 11:00	09/14/16 12:59	1
Bromomethane	ND		0.00190	0.00114	mg/Kg		08/31/16 11:00	09/12/16 21:31	1
2-Butanone (MEK)	ND		0.0476	0.00485	mg/Kg		08/31/16 11:00	09/12/16 21:31	1
Carbon disulfide	ND		0.00476	0.00342	mg/Kg		08/31/16 11:00	09/12/16 21:31	1
Carbon tetrachloride	ND		0.00190	0.000637	mg/Kg		08/31/16 11:00	09/12/16 21:31	1
Chlorobenzene	ND		0.0882	0.0300	mg/Kg		08/31/16 11:00	09/14/16 12:59	1
Chlorodibromomethane	ND		0.0882	0.0150	mg/Kg		08/31/16 11:00	09/14/16 12:59	1
Chloroethane	ND		0.00476	0.00181	mg/Kg		08/31/16 11:00	09/12/16 21:31	1
Chloroform	ND		0.00190	0.000637	mg/Kg		08/31/16 11:00	09/12/16 21:31	1
Chloromethane	ND		0.00190	0.000637	mg/Kg		08/31/16 11:00	09/12/16 21:31	1
2-Chlorotoluene	ND		0.0882	0.0406	mg/Kg		08/31/16 11:00	09/14/16 12:59	1
4-Chlorotoluene	ND		0.0882	0.0370	mg/Kg		08/31/16 11:00	09/14/16 12:59	1
cis-1,2-Dichloroethene	**0.00292**		0.00190	0.000637	mg/Kg		08/31/16 11:00	09/12/16 21:31	1
cis-1,3-Dichloropropene	ND		0.0882	0.0300	mg/Kg		08/31/16 11:00	09/14/16 12:59	1
1,2-Dibromo-3-Chloropropane	ND		0.220	0.0309	mg/Kg		08/31/16 11:00	09/14/16 12:59	1
1,2-Dibromoethane (EDB)	ND		0.0882	0.0441	mg/Kg		08/31/16 11:00	09/14/16 12:59	1
Dibromomethane	ND		0.00190	0.000533	mg/Kg		08/31/16 11:00	09/12/16 21:31	1
1,2-Dichlorobenzene	ND		0.0882	0.0150	mg/Kg		08/31/16 11:00	09/14/16 12:59	1
1,3-Dichlorobenzene	ND		0.0882	0.0300	mg/Kg		08/31/16 11:00	09/14/16 12:59	1
1,4-Dichlorobenzene	ND		0.0882	0.0414	mg/Kg		08/31/16 11:00	09/14/16 12:59	1
Dichlorodifluoromethane	ND		0.00190	0.000951	mg/Kg		08/31/16 11:00	09/12/16 21:31	1
1,1-Dichloroethane	ND		0.00190	0.000637	mg/Kg		08/31/16 11:00	09/12/16 21:31	1
1,2-Dichloroethane	ND		0.00190	0.000637	mg/Kg		08/31/16 11:00	09/12/16 21:31	1
1,1-Dichloroethene	ND		0.00190	0.000542	mg/Kg		08/31/16 11:00	09/12/16 21:31	1
1,2-Dichloropropane	ND		0.00190	0.000894	mg/Kg		08/31/16 11:00	09/12/16 21:31	1
1,3-Dichloropropane	ND		0.0882	0.0414	mg/Kg		08/31/16 11:00	09/14/16 12:59	1
2,2-Dichloropropane	ND		0.00190	0.000637	mg/Kg		08/31/16 11:00	09/12/16 21:31	1
1,1-Dichloropropene	ND		0.00190	0.000485	mg/Kg		08/31/16 11:00	09/12/16 21:31	1
Diisopropyl ether	ND		0.00190	0.000637	mg/Kg		08/31/16 11:00	09/12/16 21:31	1
Ethylbenzene	ND		0.0882	0.0300	mg/Kg		08/31/16 11:00	09/14/16 12:59	1
Ethyl tert-butyl ether	ND		0.00476	0.000951	mg/Kg		08/31/16 11:00	09/12/16 21:31	1
Hexachlorobutadiene	ND		0.220	0.0485	mg/Kg		08/31/16 11:00	09/14/16 12:59	1
2-Hexanone	ND		2.20	0.741	mg/Kg		08/31/16 11:00	09/14/16 12:59	1
Isopropylbenzene	ND		0.0882	0.0185	mg/Kg		08/31/16 11:00	09/14/16 12:59	1
Methylene Chloride	ND		0.00951	0.000818	mg/Kg		08/31/16 11:00	09/12/16 21:31	1
4-Methyl-2-pentanone (MIBK)	ND		2.20	0.750	mg/Kg		08/31/16 11:00	09/14/16 12:59	1
Methyl tert-butyl ether	ND		0.00190	0.000913	mg/Kg		08/31/16 11:00	09/12/16 21:31	1
Naphthalene	ND		0.220	0.0750	mg/Kg		08/31/16 11:00	09/14/16 12:59	1
n-Butylbenzene	ND		0.0882	0.0441	mg/Kg		08/31/16 11:00	09/14/16 12:59	1
N-Propylbenzene	ND		0.0882	0.0300	mg/Kg		08/31/16 11:00	09/14/16 12:59	1
p-Isopropyltoluene	ND		0.0882	0.0300	mg/Kg		08/31/16 11:00	09/14/16 12:59	1
sec-Butylbenzene	ND		0.0882	0.0300	mg/Kg		08/31/16 11:00	09/14/16 12:59	1
Styrene	ND		0.0882	0.0485	mg/Kg		08/31/16 11:00	09/14/16 12:59	1
t-Amyl alcohol	ND		0.0190	0.00885	mg/Kg		08/31/16 11:00	09/12/16 21:31	1

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-5

Date Collected: 08/31/16 11:00
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-5

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl methyl ether	ND		0.00190	0.000295	mg/Kg		08/31/16 11:00	09/12/16 21:31	1
tert-Butyl alcohol (TBA)	ND		0.0476	0.0107	mg/Kg		08/31/16 11:00	09/12/16 21:31	1
tert-Butylbenzene	ND		0.0882	0.0441	mg/Kg		08/31/16 11:00	09/14/16 12:59	1
1,1,1,2-Tetrachloroethane	ND		0.0882	0.0300	mg/Kg		08/31/16 11:00	09/14/16 12:59	1
1,1,2,2-Tetrachloroethane	ND		0.0882	0.0441	mg/Kg		08/31/16 11:00	09/14/16 12:59	1
Tetrachloroethene	ND		0.0882	0.0300	mg/Kg		08/31/16 11:00	09/14/16 12:59	1
Toluene	ND		0.0882	0.0326	mg/Kg		08/31/16 11:00	09/14/16 12:59	1
trans-1,2-Dichloroethene	ND		0.00190	0.000637	mg/Kg		08/31/16 11:00	09/12/16 21:31	1
trans-1,3-Dichloropropene	ND		0.0882	0.0300	mg/Kg		08/31/16 11:00	09/14/16 12:59	1
1,2,3-Trichlorobenzene	ND		0.0882	0.0168	mg/Kg		08/31/16 11:00	09/14/16 12:59	1
1,2,4-Trichlorobenzene	ND		0.0882	0.0300	mg/Kg		08/31/16 11:00	09/14/16 12:59	1
1,1,1-Trichloroethane	ND		0.00190	0.000875	mg/Kg		08/31/16 11:00	09/12/16 21:31	1
1,1,2-Trichloroethane	ND		0.220	0.0617	mg/Kg		08/31/16 11:00	09/14/16 12:59	1
Trichloroethene	**0.00287**		0.00190	0.000913	mg/Kg		08/31/16 11:00	09/12/16 21:31	1
Trichlorofluoromethane	ND		0.00190	0.000951	mg/Kg		08/31/16 11:00	09/12/16 21:31	1
1,2,3-Trichloropropane	ND		0.0882	0.0247	mg/Kg		08/31/16 11:00	09/14/16 12:59	1
1,2,4-Trimethylbenzene	ND		0.0882	0.0441	mg/Kg		08/31/16 11:00	09/14/16 12:59	1
1,3,5-Trimethylbenzene	ND		0.0882	0.0335	mg/Kg		08/31/16 11:00	09/14/16 12:59	1
Vinyl chloride	ND		0.00190	0.00105	mg/Kg		08/31/16 11:00	09/12/16 21:31	1
Xylenes, Total	ND		0.132	0.0547	mg/Kg		08/31/16 11:00	09/14/16 12:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*188*	*X **	*70 - 130*	*08/31/16 11:00*	*09/12/16 21:31*	*1*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*08/31/16 11:00*	*09/14/16 12:59*	*1*
Dibromofluoromethane (Surr)	*116*		*70 - 130*	*08/31/16 11:00*	*09/12/16 21:31*	*1*
Dibromofluoromethane (Surr)	*90*		*70 - 130*	*08/31/16 11:00*	*09/14/16 12:59*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*	*08/31/16 11:00*	*09/12/16 21:31*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*	*08/31/16 11:00*	*09/14/16 12:59*	*1*
Toluene-d8 (Surr)	*157*	*X **	*70 - 130*	*08/31/16 11:00*	*09/12/16 21:31*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*	*08/31/16 11:00*	*09/14/16 12:59*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0664	0.0317	mg/Kg		09/08/16 10:22	09/09/16 16:20	1
Acenaphthylene	ND		0.0664	0.0287	mg/Kg		09/08/16 10:22	09/09/16 16:20	1
Anthracene	ND		0.0664	0.0287	mg/Kg		09/08/16 10:22	09/09/16 16:20	1
Benzo[a]anthracene	ND		0.0664	0.0297	mg/Kg		09/08/16 10:22	09/09/16 16:20	1
Benzo[a]pyrene	ND		0.0664	0.0268	mg/Kg		09/08/16 10:22	09/09/16 16:20	1
Benzo[b]fluoranthene	ND		0.0664	0.0278	mg/Kg		09/08/16 10:22	09/09/16 16:20	1
Benzo[g,h,i]perylene	ND		0.0664	0.0327	mg/Kg		09/08/16 10:22	09/09/16 16:20	1
Benzo[k]fluoranthene	ND		0.0664	0.0268	mg/Kg		09/08/16 10:22	09/09/16 16:20	1
Chrysene	ND		0.0664	0.0367	mg/Kg		09/08/16 10:22	09/09/16 16:20	1
Dibenz(a,h)anthracene	ND		0.0664	0.0317	mg/Kg		09/08/16 10:22	09/09/16 16:20	1
Fluoranthene	ND		0.0664	0.0337	mg/Kg		09/08/16 10:22	09/09/16 16:20	1
Fluorene	ND		0.0664	0.0287	mg/Kg		09/08/16 10:22	09/09/16 16:20	1
Indeno[1,2,3-cd]pyrene	ND		0.0664	0.0287	mg/Kg		09/08/16 10:22	09/09/16 16:20	1
1-Methylnaphthalene	ND		0.0664	0.0278	mg/Kg		09/08/16 10:22	09/09/16 16:20	1
2-Methylnaphthalene	ND		0.0664	0.0258	mg/Kg		09/08/16 10:22	09/09/16 16:20	1
Naphthalene	ND		0.0664	0.0287	mg/Kg		09/08/16 10:22	09/09/16 16:20	1
Phenanthrene	ND		0.0664	0.0337	mg/Kg		09/08/16 10:22	09/09/16 16:20	1

Client Sample ID: SB-5

Lab Sample ID: 490-111143-5

Date Collected: 08/31/16 11:00
Matrix: Solid
Date Received: 09/03/16 10:10

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	ND		0.0664	0.0337	mg/Kg		09/08/16 10:22	09/09/16 16:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*48*		*29 - 120*	*09/08/16 10:22*	*09/09/16 16:20*	*1*
Nitrobenzene-d5 (Surr)	*48*		*27 - 120*	*09/08/16 10:22*	*09/09/16 16:20*	*1*
Terphenyl-d14 (Surr)	*53*		*13 - 120*	*09/08/16 10:22*	*09/09/16 16:20*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		6.11	3.06	mg/Kg		08/31/16 11:00	09/06/16 19:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*107*		*50 - 150*	*08/31/16 11:00*	*09/06/16 19:55*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.94	2.47	mg/Kg		09/08/16 11:38	09/09/16 14:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*100*		*50 - 150*	*09/08/16 11:38*	*09/09/16 14:02*	*1*

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-6

Date Collected: 08/31/16 11:20
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-6

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.0461	0.00775	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
Benzene	ND		0.00184	0.000618	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
Bromobenzene	ND		0.00184	0.000664	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
Bromochloromethane	ND		0.00184	0.000507	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
Bromodichloromethane	ND		0.00184	0.000507	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
Bromoform	ND		0.00184	0.000507	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
Bromomethane	ND		0.00184	0.00111	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
2-Butanone (MEK)	ND		0.0461	0.00470	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
Carbon disulfide	ND		0.00461	0.00332	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
Carbon tetrachloride	ND		0.00184	0.000618	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
Chlorobenzene	ND		0.00184	0.000618	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
Chlorodibromomethane	ND		0.00184	0.000314	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
Chloroethane	ND		0.00461	0.00175	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
Chloroform	ND		0.00184	0.000618	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
Chloromethane	ND		0.00184	0.000618	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
2-Chlorotoluene	ND		0.00184	0.000821	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
4-Chlorotoluene	ND		0.00184	0.000775	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
cis-1,2-Dichloroethene	ND		0.00184	0.000618	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
cis-1,3-Dichloropropene	ND		0.00184	0.000618	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
1,2-Dibromo-3-Chloropropane	ND		0.00461	0.000646	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
1,2-Dibromoethane (EDB)	ND		0.00184	0.000922	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
Dibromomethane	ND		0.00184	0.000517	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
1,2-Dichlorobenzene	ND		0.00184	0.000314	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
1,3-Dichlorobenzene	ND		0.00184	0.000618	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
1,4-Dichlorobenzene	ND		0.00184	0.000618	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
Dichlorodifluoromethane	ND		0.00184	0.000922	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
1,1-Dichloroethane	ND		0.00184	0.000618	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
1,2-Dichloroethane	ND		0.00184	0.000618	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
1,1-Dichloroethene	ND		0.00184	0.000526	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
1,2-Dichloropropane	ND		0.00184	0.000867	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
1,3-Dichloropropane	ND		0.00184	0.000867	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
2,2-Dichloropropane	ND		0.00184	0.000618	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
1,1-Dichloropropene	ND		0.00184	0.000470	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
Diisopropyl ether	ND		0.00184	0.000618	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
Ethylbenzene	ND		0.00184	0.000618	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
Ethyl tert-butyl ether	ND		0.00461	0.000922	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
Hexachlorobutadiene	ND		0.00461	0.00105	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
2-Hexanone	ND		0.0461	0.0154	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
Isopropylbenzene	ND		0.00184	0.000378	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
Methylene Chloride	ND		0.00922	0.000793	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
4-Methyl-2-pentanone (MIBK)	ND		0.0461	0.00175	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
Methyl tert-butyl ether	ND		0.00184	0.000885	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
Naphthalene	ND		0.00461	0.00157	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
n-Butylbenzene	ND		0.00184	0.000904	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
N-Propylbenzene	ND		0.00184	0.000618	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
p-Isopropyltoluene	ND		0.00184	0.000618	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
sec-Butylbenzene	ND		0.00184	0.000618	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
Styrene	ND		0.00184	0.00101	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
t-Amyl alcohol	ND		0.0184	0.00858	mg/Kg		08/31/16 11:20	09/12/16 21:58	1

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-6

Date Collected: 08/31/16 11:20
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-6

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl methyl ether	ND		0.00184	0.000286	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
tert-Butyl alcohol (TBA)	ND		0.0461	0.0103	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
tert-Butylbenzene	ND		0.00184	0.000830	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
1,1,1,2-Tetrachloroethane	ND		0.00184	0.000618	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
1,1,2,2-Tetrachloroethane	ND		0.00184	0.000922	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
Tetrachloroethene	ND		0.00184	0.000673	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
Toluene	ND		0.00184	0.000683	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
trans-1,2-Dichloroethene	ND		0.00184	0.000618	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
trans-1,3-Dichloropropene	ND		0.00184	0.000618	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
1,2,3-Trichlorobenzene	ND		0.00184	0.000350	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
1,2,4-Trichlorobenzene	ND		0.00184	0.000618	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
1,1,1-Trichloroethane	ND		0.00184	0.000849	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
1,1,2-Trichloroethane	ND		0.00461	0.00129	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
Trichloroethene	ND		0.00184	0.000885	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
Trichlorofluoromethane	ND		0.00184	0.000922	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
1,2,3-Trichloropropane	ND		0.00184	0.000507	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
1,2,4-Trimethylbenzene	ND		0.00184	0.000922	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
1,3,5-Trimethylbenzene	ND		0.00184	0.000692	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
Vinyl chloride	ND		0.00184	0.00101	mg/Kg		08/31/16 11:20	09/12/16 21:58	1
Xylenes, Total	ND		0.00553	0.00113	mg/Kg		08/31/16 11:20	09/12/16 21:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*08/31/16 11:20*	*09/12/16 21:58*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*	*08/31/16 11:20*	*09/12/16 21:58*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*	*08/31/16 11:20*	*09/12/16 21:58*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*	*08/31/16 11:20*	*09/12/16 21:58*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0666	0.0318	mg/Kg		09/08/16 10:22	09/09/16 16:40	1
Acenaphthylene	ND		0.0666	0.0288	mg/Kg		09/08/16 10:22	09/09/16 16:40	1
Anthracene	ND		0.0666	0.0288	mg/Kg		09/08/16 10:22	09/09/16 16:40	1
Benzo[a]anthracene	ND		0.0666	0.0298	mg/Kg		09/08/16 10:22	09/09/16 16:40	1
Benzo[a]pyrene	ND		0.0666	0.0268	mg/Kg		09/08/16 10:22	09/09/16 16:40	1
Benzo[b]fluoranthene	ND		0.0666	0.0278	mg/Kg		09/08/16 10:22	09/09/16 16:40	1
Benzo[g,h,i]perylene	ND		0.0666	0.0328	mg/Kg		09/08/16 10:22	09/09/16 16:40	1
Benzo[k]fluoranthene	ND		0.0666	0.0268	mg/Kg		09/08/16 10:22	09/09/16 16:40	1
Chrysene	ND		0.0666	0.0368	mg/Kg		09/08/16 10:22	09/09/16 16:40	1
Dibenz(a,h)anthracene	ND		0.0666	0.0318	mg/Kg		09/08/16 10:22	09/09/16 16:40	1
Fluoranthene	ND		0.0666	0.0338	mg/Kg		09/08/16 10:22	09/09/16 16:40	1
Fluorene	ND		0.0666	0.0288	mg/Kg		09/08/16 10:22	09/09/16 16:40	1
Indeno[1,2,3-cd]pyrene	ND		0.0666	0.0288	mg/Kg		09/08/16 10:22	09/09/16 16:40	1
1-Methylnaphthalene	ND		0.0666	0.0278	mg/Kg		09/08/16 10:22	09/09/16 16:40	1
2-Methylnaphthalene	ND		0.0666	0.0258	mg/Kg		09/08/16 10:22	09/09/16 16:40	1
Naphthalene	ND		0.0666	0.0288	mg/Kg		09/08/16 10:22	09/09/16 16:40	1
Phenanthrene	ND		0.0666	0.0338	mg/Kg		09/08/16 10:22	09/09/16 16:40	1
Pyrene	ND		0.0666	0.0338	mg/Kg		09/08/16 10:22	09/09/16 16:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*47*		*29 - 120*	*09/08/16 10:22*	*09/09/16 16:40*	*1*

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-6

Lab Sample ID: 490-111143-6

Date Collected: 08/31/16 11:20
Matrix: Solid
Date Received: 09/03/16 10:10

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*49*		*27 - 120*	*09/08/16 10:22*	*09/09/16 16:40*	*1*
Terphenyl-d14 (Surr)	*54*		*13 - 120*	*09/08/16 10:22*	*09/09/16 16:40*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.59	2.29	mg/Kg		08/31/16 11:20	09/06/16 20:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*108*		*50 - 150*	*08/31/16 11:20*	*09/06/16 20:28*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.92	2.46	mg/Kg		09/08/16 11:38	09/09/16 14:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*86*		*50 - 150*	*09/08/16 11:38*	*09/09/16 14:21*	*1*

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-7

Date Collected: 08/31/16 12:45
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-7

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.0389	0.00654	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
Benzene	ND		0.00156	0.000522	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
Bromobenzene	ND		0.00156	0.000561	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
Bromochloromethane	ND		0.00156	0.000428	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
Bromodichloromethane	ND		0.00156	0.000428	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
Bromoform	ND		0.00156	0.000428	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
Bromomethane	ND		0.00156	0.000935	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
2-Butanone (MEK)	ND		0.0389	0.00397	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
Carbon disulfide	ND		0.00389	0.00280	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
Carbon tetrachloride	ND		0.00156	0.000522	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
Chlorobenzene	ND		0.00156	0.000522	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
Chlorodibromomethane	ND		0.00156	0.000265	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
Chloroethane	ND		0.00389	0.00148	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
Chloroform	ND		0.00156	0.000522	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
Chloromethane	ND		0.00156	0.000522	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
2-Chlorotoluene	ND		0.00156	0.000693	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
4-Chlorotoluene	ND		0.00156	0.000654	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
cis-1,2-Dichloroethene	ND		0.00156	0.000522	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
cis-1,3-Dichloropropene	ND		0.00156	0.000522	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
1,2-Dibromo-3-Chloropropane	ND		0.00389	0.000545	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
1,2-Dibromoethane (EDB)	ND		0.00156	0.000779	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
Dibromomethane	ND		0.00156	0.000436	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
1,2-Dichlorobenzene	ND		0.00156	0.000265	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
1,3-Dichlorobenzene	ND		0.00156	0.000522	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
1,4-Dichlorobenzene	ND		0.00156	0.000522	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
Dichlorodifluoromethane	ND		0.00156	0.000779	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
1,1-Dichloroethane	ND		0.00156	0.000522	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
1,2-Dichloroethane	ND		0.00156	0.000522	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
1,1-Dichloroethene	ND		0.00156	0.000444	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
1,2-Dichloropropane	ND		0.00156	0.000732	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
1,3-Dichloropropane	ND		0.00156	0.000732	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
2,2-Dichloropropane	ND		0.00156	0.000522	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
1,1-Dichloropropene	ND		0.00156	0.000397	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
Diisopropyl ether	ND		0.00156	0.000522	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
Ethylbenzene	ND		0.00156	0.000522	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
Ethyl tert-butyl ether	ND		0.00389	0.000779	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
Hexachlorobutadiene	ND		0.00389	0.000888	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
2-Hexanone	ND		0.0389	0.0130	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
Isopropylbenzene	ND		0.00156	0.000319	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
Methylene Chloride	ND		0.00779	0.000670	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
4-Methyl-2-pentanone (MIBK)	ND		0.0389	0.00148	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
Methyl tert-butyl ether	ND		0.00156	0.000748	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
Naphthalene	ND		0.00389	0.00132	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
n-Butylbenzene	ND		0.00156	0.000763	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
N-Propylbenzene	ND		0.00156	0.000522	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
p-Isopropyltoluene	ND		0.00156	0.000522	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
sec-Butylbenzene	ND		0.00156	0.000522	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
Styrene	ND		0.00156	0.000857	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
t-Amyl alcohol	ND		0.0156	0.00724	mg/Kg		08/31/16 12:45	09/12/16 22:26	1

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-7

Date Collected: 08/31/16 12:45
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-7

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl methyl ether	ND		0.00156	0.000241	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
tert-Butyl alcohol (TBA)	ND		0.0389	0.00872	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
tert-Butylbenzene	ND		0.00156	0.000701	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
1,1,1,2-Tetrachloroethane	ND		0.00156	0.000522	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
1,1,2,2-Tetrachloroethane	ND		0.00156	0.000779	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
Tetrachloroethene	ND		0.00156	0.000569	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
Toluene	ND		0.00156	0.000576	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
trans-1,2-Dichloroethene	ND		0.00156	0.000522	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
trans-1,3-Dichloropropene	ND		0.00156	0.000522	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
1,2,3-Trichlorobenzene	ND		0.00156	0.000296	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
1,2,4-Trichlorobenzene	ND		0.00156	0.000522	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
1,1,1-Trichloroethane	ND		0.00156	0.000717	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
1,1,2-Trichloroethane	ND		0.00389	0.00109	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
Trichloroethene	ND		0.00156	0.000748	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
Trichlorofluoromethane	ND		0.00156	0.000779	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
1,2,3-Trichloropropane	ND		0.00156	0.000428	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
1,2,4-Trimethylbenzene	ND		0.00156	0.000779	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
1,3,5-Trimethylbenzene	ND		0.00156	0.000584	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
Vinyl chloride	ND		0.00156	0.000857	mg/Kg		08/31/16 12:45	09/12/16 22:26	1
Xylenes, Total	ND		0.00467	0.000958	mg/Kg		08/31/16 12:45	09/12/16 22:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*08/31/16 12:45*	*09/12/16 22:26*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*	*08/31/16 12:45*	*09/12/16 22:26*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*	*08/31/16 12:45*	*09/12/16 22:26*	*1*
Toluene-d8 (Surr)	*105*		*70 - 130*	*08/31/16 12:45*	*09/12/16 22:26*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0668	0.0319	mg/Kg		09/08/16 10:22	09/09/16 17:00	1
Acenaphthylene	ND		0.0668	0.0289	mg/Kg		09/08/16 10:22	09/09/16 17:00	1
Anthracene	ND		0.0668	0.0289	mg/Kg		09/08/16 10:22	09/09/16 17:00	1
Benzo[a]anthracene	ND		0.0668	0.0299	mg/Kg		09/08/16 10:22	09/09/16 17:00	1
Benzo[a]pyrene	ND		0.0668	0.0269	mg/Kg		09/08/16 10:22	09/09/16 17:00	1
Benzo[b]fluoranthene	ND		0.0668	0.0279	mg/Kg		09/08/16 10:22	09/09/16 17:00	1
Benzo[g,h,i]perylene	ND		0.0668	0.0329	mg/Kg		09/08/16 10:22	09/09/16 17:00	1
Benzo[k]fluoranthene	ND		0.0668	0.0269	mg/Kg		09/08/16 10:22	09/09/16 17:00	1
Chrysene	ND		0.0668	0.0369	mg/Kg		09/08/16 10:22	09/09/16 17:00	1
Dibenz(a,h)anthracene	ND		0.0668	0.0319	mg/Kg		09/08/16 10:22	09/09/16 17:00	1
Fluoranthene	ND		0.0668	0.0339	mg/Kg		09/08/16 10:22	09/09/16 17:00	1
Fluorene	ND		0.0668	0.0289	mg/Kg		09/08/16 10:22	09/09/16 17:00	1
Indeno[1,2,3-cd]pyrene	ND		0.0668	0.0289	mg/Kg		09/08/16 10:22	09/09/16 17:00	1
1-Methylnaphthalene	ND		0.0668	0.0279	mg/Kg		09/08/16 10:22	09/09/16 17:00	1
2-Methylnaphthalene	ND		0.0668	0.0259	mg/Kg		09/08/16 10:22	09/09/16 17:00	1
Naphthalene	ND		0.0668	0.0289	mg/Kg		09/08/16 10:22	09/09/16 17:00	1
Phenanthrene	ND		0.0668	0.0339	mg/Kg		09/08/16 10:22	09/09/16 17:00	1
Pyrene	ND		0.0668	0.0339	mg/Kg		09/08/16 10:22	09/09/16 17:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*66*		*29 - 120*	*09/08/16 10:22*	*09/09/16 17:00*	*1*

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-7

Date Collected: 08/31/16 12:45
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-7

Matrix: Solid

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*69*		*27 - 120*	*09/08/16 10:22*	*09/09/16 17:00*	*1*
Terphenyl-d14 (Surr)	*79*		*13 - 120*	*09/08/16 10:22*	*09/09/16 17:00*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.00	2.00	mg/Kg		08/31/16 12:45	09/06/16 21:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*108*		*50 - 150*	*08/31/16 12:45*	*09/06/16 21:02*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.92	2.46	mg/Kg		09/08/16 11:38	09/09/16 14:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*78*		*50 - 150*	*09/08/16 11:38*	*09/09/16 14:40*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.0329	0.00989	mg/Kg		09/11/16 10:57	09/13/16 17:41	1
PCB-1221	ND		0.0329	0.00989	mg/Kg		09/11/16 10:57	09/13/16 17:41	1
PCB-1232	ND		0.0329	0.0198	mg/Kg		09/11/16 10:57	09/13/16 17:41	1
PCB-1242	ND		0.0329	0.00989	mg/Kg		09/11/16 10:57	09/13/16 17:41	1
PCB-1248	ND		0.0329	0.00989	mg/Kg		09/11/16 10:57	09/13/16 17:41	1
PCB-1254	ND		0.0329	0.00989	mg/Kg		09/11/16 10:57	09/13/16 17:41	1
PCB-1260	ND		0.0329	0.00989	mg/Kg		09/11/16 10:57	09/13/16 17:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*83*		*20 - 150*	*09/11/16 10:57*	*09/13/16 17:41*	*1*
Tetrachloro-m-xylene	*68*		*19 - 147*	*09/11/16 10:57*	*09/13/16 17:41*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		1.94	1.16	mg/Kg		09/13/16 13:22	09/13/16 22:10	1
Barium	**22.8**		1.94	0.969	mg/Kg		09/13/16 13:22	09/13/16 22:10	1
Cadmium	ND		0.969	0.0969	mg/Kg		09/13/16 13:22	09/13/16 22:10	1
Chromium	**6.26**		0.969	0.872	mg/Kg		09/13/16 13:22	09/13/16 22:10	1
Lead	**3.10**		0.969	0.484	mg/Kg		09/13/16 13:22	09/13/16 22:10	1
Selenium	ND		1.94	1.07	mg/Kg		09/13/16 13:22	09/13/16 22:10	1
Silver	ND		0.969	0.388	mg/Kg		09/13/16 13:22	09/13/16 22:10	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND	F1	0.0963	0.0289	mg/Kg		09/06/16 14:59	09/07/16 13:56	1

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-8

Date Collected: 08/31/16 13:20
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-8

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.0411	0.00690	mg/Kg		08/31/16 13:20	09/12/16 22:53	1
Benzene	ND		0.00164	0.000551	mg/Kg		08/31/16 13:20	09/12/16 22:53	1
Bromobenzene	ND		0.0686	0.0247	mg/Kg		08/31/16 13:20	09/14/16 13:26	1
Bromochloromethane	ND		0.00164	0.000452	mg/Kg		08/31/16 13:20	09/12/16 22:53	1
Bromodichloromethane	ND		0.00164	0.000452	mg/Kg		08/31/16 13:20	09/12/16 22:53	1
Bromoform	ND		0.00164	0.000452	mg/Kg		08/31/16 13:20	09/12/16 22:53	1
Bromomethane	ND		0.00164	0.000986	mg/Kg		08/31/16 13:20	09/12/16 22:53	1
2-Butanone (MEK)	ND		0.0411	0.00419	mg/Kg		08/31/16 13:20	09/12/16 22:53	1
Carbon disulfide	ND		0.00411	0.00296	mg/Kg		08/31/16 13:20	09/12/16 22:53	1
Carbon tetrachloride	ND		0.00164	0.000551	mg/Kg		08/31/16 13:20	09/12/16 22:53	1
Chlorobenzene	ND		0.00164	0.000551	mg/Kg		08/31/16 13:20	09/12/16 22:53	1
Chlorodibromomethane	ND		0.00164	0.000279	mg/Kg		08/31/16 13:20	09/12/16 22:53	1
Chloroethane	ND		0.00411	0.00156	mg/Kg		08/31/16 13:20	09/12/16 22:53	1
Chloroform	ND		0.00164	0.000551	mg/Kg		08/31/16 13:20	09/12/16 22:53	1
Chloromethane	ND		0.00164	0.000551	mg/Kg		08/31/16 13:20	09/12/16 22:53	1
2-Chlorotoluene	ND		0.0686	0.0316	mg/Kg		08/31/16 13:20	09/14/16 13:26	1
4-Chlorotoluene	ND		0.0686	0.0288	mg/Kg		08/31/16 13:20	09/14/16 13:26	1
cis-1,2-Dichloroethene	ND		0.00164	0.000551	mg/Kg		08/31/16 13:20	09/12/16 22:53	1
cis-1,3-Dichloropropene	ND		0.00164	0.000551	mg/Kg		08/31/16 13:20	09/12/16 22:53	1
1,2-Dibromo-3-Chloropropane	ND		0.171	0.0240	mg/Kg		08/31/16 13:20	09/14/16 13:26	1
1,2-Dibromoethane (EDB)	ND		0.00164	0.000822	mg/Kg		08/31/16 13:20	09/12/16 22:53	1
Dibromomethane	ND		0.00164	0.000460	mg/Kg		08/31/16 13:20	09/12/16 22:53	1
1,2-Dichlorobenzene	ND		0.0686	0.0117	mg/Kg		08/31/16 13:20	09/14/16 13:26	1
1,3-Dichlorobenzene	ND		0.0686	0.0233	mg/Kg		08/31/16 13:20	09/14/16 13:26	1
1,4-Dichlorobenzene	ND		0.0686	0.0322	mg/Kg		08/31/16 13:20	09/14/16 13:26	1
Dichlorodifluoromethane	ND		0.00164	0.000822	mg/Kg		08/31/16 13:20	09/12/16 22:53	1
1,1-Dichloroethane	ND		0.00164	0.000551	mg/Kg		08/31/16 13:20	09/12/16 22:53	1
1,2-Dichloroethane	ND		0.00164	0.000551	mg/Kg		08/31/16 13:20	09/12/16 22:53	1
1,1-Dichloroethene	ND		0.00164	0.000468	mg/Kg		08/31/16 13:20	09/12/16 22:53	1
1,2-Dichloropropane	ND		0.00164	0.000773	mg/Kg		08/31/16 13:20	09/12/16 22:53	1
1,3-Dichloropropane	ND		0.00164	0.000773	mg/Kg		08/31/16 13:20	09/12/16 22:53	1
2,2-Dichloropropane	ND		0.00164	0.000551	mg/Kg		08/31/16 13:20	09/12/16 22:53	1
1,1-Dichloropropene	ND		0.00164	0.000419	mg/Kg		08/31/16 13:20	09/12/16 22:53	1
Diisopropyl ether	ND		0.00164	0.000551	mg/Kg		08/31/16 13:20	09/12/16 22:53	1
Ethylbenzene	ND		0.00164	0.000551	mg/Kg		08/31/16 13:20	09/12/16 22:53	1
Ethyl tert-butyl ether	ND		0.00411	0.000822	mg/Kg		08/31/16 13:20	09/12/16 22:53	1
Hexachlorobutadiene	ND		0.171	0.0377	mg/Kg		08/31/16 13:20	09/14/16 13:26	1
2-Hexanone	ND		0.0411	0.0137	mg/Kg		08/31/16 13:20	09/12/16 22:53	1
Isopropylbenzene	ND		0.00164	0.000337	mg/Kg		08/31/16 13:20	09/12/16 22:53	1
Methylene Chloride	ND		0.00822	0.000707	mg/Kg		08/31/16 13:20	09/12/16 22:53	1
4-Methyl-2-pentanone (MIBK)	ND		0.0411	0.00156	mg/Kg		08/31/16 13:20	09/12/16 22:53	1
Methyl tert-butyl ether	ND		0.00164	0.000789	mg/Kg		08/31/16 13:20	09/12/16 22:53	1
Naphthalene	ND		0.171	0.0583	mg/Kg		08/31/16 13:20	09/14/16 13:26	1
n-Butylbenzene	ND		0.0686	0.0343	mg/Kg		08/31/16 13:20	09/14/16 13:26	1
N-Propylbenzene	ND		0.0686	0.0233	mg/Kg		08/31/16 13:20	09/14/16 13:26	1
p-Isopropyltoluene	ND		0.0686	0.0233	mg/Kg		08/31/16 13:20	09/14/16 13:26	1
sec-Butylbenzene	ND		0.0686	0.0233	mg/Kg		08/31/16 13:20	09/14/16 13:26	1
Styrene	ND		0.00164	0.000904	mg/Kg		08/31/16 13:20	09/12/16 22:53	1
t-Amyl alcohol	ND		0.0164	0.00764	mg/Kg		08/31/16 13:20	09/12/16 22:53	1

Client Sample ID: SB-8

Date Collected: 08/31/16 13:20
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-8

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl methyl ether	ND		0.00164	0.000255	mg/Kg		08/31/16 13:20	09/12/16 22:53	1
tert-Butyl alcohol (TBA)	ND		0.0411	0.00920	mg/Kg		08/31/16 13:20	09/12/16 22:53	1
tert-Butylbenzene	ND		0.0686	0.0343	mg/Kg		08/31/16 13:20	09/14/16 13:26	1
1,1,1,2-Tetrachloroethane	ND		0.00164	0.000551	mg/Kg		08/31/16 13:20	09/12/16 22:53	1
1,1,2,2-Tetrachloroethane	ND		0.0686	0.0343	mg/Kg		08/31/16 13:20	09/14/16 13:26	1
Tetrachloroethene	ND		0.00164	0.000600	mg/Kg		08/31/16 13:20	09/12/16 22:53	1
Toluene	ND		0.00164	0.000608	mg/Kg		08/31/16 13:20	09/12/16 22:53	1
trans-1,2-Dichloroethene	ND		0.00164	0.000551	mg/Kg		08/31/16 13:20	09/12/16 22:53	1
trans-1,3-Dichloropropene	ND		0.00164	0.000551	mg/Kg		08/31/16 13:20	09/12/16 22:53	1
1,2,3-Trichlorobenzene	ND		0.0686	0.0130	mg/Kg		08/31/16 13:20	09/14/16 13:26	1
1,2,4-Trichlorobenzene	ND		0.0686	0.0233	mg/Kg		08/31/16 13:20	09/14/16 13:26	1
1,1,1-Trichloroethane	ND		0.00164	0.000756	mg/Kg		08/31/16 13:20	09/12/16 22:53	1
1,1,2-Trichloroethane	ND		0.00411	0.00115	mg/Kg		08/31/16 13:20	09/12/16 22:53	1
Trichloroethene	ND		0.00164	0.000789	mg/Kg		08/31/16 13:20	09/12/16 22:53	1
Trichlorofluoromethane	ND		0.00164	0.000822	mg/Kg		08/31/16 13:20	09/12/16 22:53	1
1,2,3-Trichloropropane	ND		0.0686	0.0192	mg/Kg		08/31/16 13:20	09/14/16 13:26	1
1,2,4-Trimethylbenzene	ND		0.0686	0.0343	mg/Kg		08/31/16 13:20	09/14/16 13:26	1
1,3,5-Trimethylbenzene	ND		0.0686	0.0261	mg/Kg		08/31/16 13:20	09/14/16 13:26	1
Vinyl chloride	ND		0.00164	0.000904	mg/Kg		08/31/16 13:20	09/12/16 22:53	1
Xylenes, Total	ND		0.00493	0.00101	mg/Kg		08/31/16 13:20	09/12/16 22:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*163*	*X **	*70 - 130*	*08/31/16 13:20*	*09/12/16 22:53*	*1*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*08/31/16 13:20*	*09/14/16 13:26*	*1*
Dibromofluoromethane (Surr)	*111*		*70 - 130*	*08/31/16 13:20*	*09/12/16 22:53*	*1*
Dibromofluoromethane (Surr)	*90*		*70 - 130*	*08/31/16 13:20*	*09/14/16 13:26*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*	*08/31/16 13:20*	*09/12/16 22:53*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*	*08/31/16 13:20*	*09/14/16 13:26*	*1*
Toluene-d8 (Surr)	*105*		*70 - 130*	*08/31/16 13:20*	*09/12/16 22:53*	*1*
Toluene-d8 (Surr)	*93*		*70 - 130*	*08/31/16 13:20*	*09/14/16 13:26*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0653	0.0312	mg/Kg		09/08/16 10:22	09/09/16 17:20	1
Acenaphthylene	ND		0.0653	0.0283	mg/Kg		09/08/16 10:22	09/09/16 17:20	1
Anthracene	ND		0.0653	0.0283	mg/Kg		09/08/16 10:22	09/09/16 17:20	1
Benzo[a]anthracene	ND		0.0653	0.0293	mg/Kg		09/08/16 10:22	09/09/16 17:20	1
Benzo[a]pyrene	ND		0.0653	0.0263	mg/Kg		09/08/16 10:22	09/09/16 17:20	1
Benzo[b]fluoranthene	ND		0.0653	0.0273	mg/Kg		09/08/16 10:22	09/09/16 17:20	1
Benzo[g,h,i]perylene	ND		0.0653	0.0322	mg/Kg		09/08/16 10:22	09/09/16 17:20	1
Benzo[k]fluoranthene	ND		0.0653	0.0263	mg/Kg		09/08/16 10:22	09/09/16 17:20	1
Chrysene	ND		0.0653	0.0361	mg/Kg		09/08/16 10:22	09/09/16 17:20	1
Dibenz(a,h)anthracene	ND		0.0653	0.0312	mg/Kg		09/08/16 10:22	09/09/16 17:20	1
Fluoranthene	ND		0.0653	0.0332	mg/Kg		09/08/16 10:22	09/09/16 17:20	1
Fluorene	ND		0.0653	0.0283	mg/Kg		09/08/16 10:22	09/09/16 17:20	1
Indeno[1,2,3-cd]pyrene	ND		0.0653	0.0283	mg/Kg		09/08/16 10:22	09/09/16 17:20	1
1-Methylnaphthalene	ND		0.0653	0.0273	mg/Kg		09/08/16 10:22	09/09/16 17:20	1
2-Methylnaphthalene	ND		0.0653	0.0254	mg/Kg		09/08/16 10:22	09/09/16 17:20	1
Naphthalene	ND		0.0653	0.0283	mg/Kg		09/08/16 10:22	09/09/16 17:20	1
Phenanthrene	ND		0.0653	0.0332	mg/Kg		09/08/16 10:22	09/09/16 17:20	1

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-8

Date Collected: 08/31/16 13:20
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-8

Matrix: Solid

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	ND		0.0653	0.0332	mg/Kg		09/08/16 10:22	09/09/16 17:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*63*		*29 - 120*	*09/08/16 10:22*	*09/09/16 17:20*	*1*
Nitrobenzene-d5 (Surr)	*64*		*27 - 120*	*09/08/16 10:22*	*09/09/16 17:20*	*1*
Terphenyl-d14 (Surr)	*68*		*13 - 120*	*09/08/16 10:22*	*09/09/16 17:20*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		3.33	1.66	mg/Kg		08/31/16 13:20	09/06/16 21:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*107*		*50 - 150*	*08/31/16 13:20*	*09/06/16 21:35*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**645**		49.9	24.9	mg/Kg		09/08/16 11:38	09/09/16 21:15	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*204*	*X*	*50 - 150*	*09/08/16 11:38*	*09/09/16 21:15*	*10*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.0331	0.00995	mg/Kg		09/11/16 10:57	09/13/16 17:56	1
PCB-1221	ND		0.0331	0.00995	mg/Kg		09/11/16 10:57	09/13/16 17:56	1
PCB-1232	ND		0.0331	0.0199	mg/Kg		09/11/16 10:57	09/13/16 17:56	1
PCB-1242	ND		0.0331	0.00995	mg/Kg		09/11/16 10:57	09/13/16 17:56	1
PCB-1248	ND		0.0331	0.00995	mg/Kg		09/11/16 10:57	09/13/16 17:56	1
PCB-1254	ND		0.0331	0.00995	mg/Kg		09/11/16 10:57	09/13/16 17:56	1
PCB-1260	ND		0.0331	0.00995	mg/Kg		09/11/16 10:57	09/13/16 17:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*85*		*20 - 150*	*09/11/16 10:57*	*09/13/16 17:56*	*1*
Tetrachloro-m-xylene	*77*		*19 - 147*	*09/11/16 10:57*	*09/13/16 17:56*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		1.91	1.15	mg/Kg		09/13/16 13:22	09/13/16 22:15	1
Barium	**19.6**		1.91	0.954	mg/Kg		09/13/16 13:22	09/13/16 22:15	1
Cadmium	ND		0.954	0.0954	mg/Kg		09/13/16 13:22	09/13/16 22:15	1
Chromium	**5.23**		0.954	0.859	mg/Kg		09/13/16 13:22	09/13/16 22:15	1
Lead	**3.74**		0.954	0.477	mg/Kg		09/13/16 13:22	09/13/16 22:15	1
Selenium	ND		1.91	1.05	mg/Kg		09/13/16 13:22	09/13/16 22:15	1
Silver	ND		0.954	0.382	mg/Kg		09/13/16 13:22	09/13/16 22:15	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0968	0.0290	mg/Kg		09/06/16 14:59	09/07/16 14:04	1

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-9

Date Collected: 08/31/16 14:10
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-9

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.0353	0.00593	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
Benzene	ND		0.00141	0.000473	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
Bromobenzene	ND		0.00141	0.000508	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
Bromochloromethane	ND		0.00141	0.000388	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
Bromodichloromethane	ND		0.00141	0.000388	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
Bromoform	ND		0.00141	0.000388	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
Bromomethane	ND		0.00141	0.000847	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
2-Butanone (MEK)	ND		0.0353	0.00360	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
Carbon disulfide	ND		0.00353	0.00254	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
Carbon tetrachloride	ND		0.00141	0.000473	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
Chlorobenzene	ND		0.00141	0.000473	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
Chlorodibromomethane	ND		0.00141	0.000240	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
Chloroethane	ND		0.00353	0.00134	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
Chloroform	ND		0.00141	0.000473	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
Chloromethane	ND		0.00141	0.000473	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
2-Chlorotoluene	ND		0.00141	0.000628	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
4-Chlorotoluene	ND		0.00141	0.000593	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
cis-1,2-Dichloroethene	ND		0.00141	0.000473	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
cis-1,3-Dichloropropene	ND		0.00141	0.000473	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
1,2-Dibromo-3-Chloropropane	ND		0.00353	0.000494	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
1,2-Dibromoethane (EDB)	ND		0.00141	0.000706	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
Dibromomethane	ND		0.00141	0.000395	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
1,2-Dichlorobenzene	ND		0.00141	0.000240	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
1,3-Dichlorobenzene	ND		0.00141	0.000473	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
1,4-Dichlorobenzene	ND		0.00141	0.000473	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
Dichlorodifluoromethane	ND		0.00141	0.000706	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
1,1-Dichloroethane	ND		0.00141	0.000473	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
1,2-Dichloroethane	ND		0.00141	0.000473	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
1,1-Dichloroethene	ND		0.00141	0.000402	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
1,2-Dichloropropane	ND		0.00141	0.000664	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
1,3-Dichloropropane	ND		0.00141	0.000664	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
2,2-Dichloropropane	ND		0.00141	0.000473	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
1,1-Dichloropropene	ND		0.00141	0.000360	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
Diisopropyl ether	ND		0.00141	0.000473	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
Ethylbenzene	ND		0.00141	0.000473	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
Ethyl tert-butyl ether	ND		0.00353	0.000706	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
Hexachlorobutadiene	ND		0.00353	0.000805	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
2-Hexanone	ND		0.0353	0.0118	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
Isopropylbenzene	ND		0.00141	0.000289	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
Methylene Chloride	ND		0.00706	0.000607	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
4-Methyl-2-pentanone (MIBK)	ND		0.0353	0.00134	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
Methyl tert-butyl ether	ND		0.00141	0.000678	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
Naphthalene	ND		0.00353	0.00120	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
n-Butylbenzene	ND		0.00141	0.000692	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
N-Propylbenzene	ND		0.00141	0.000473	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
p-Isopropyltoluene	ND		0.00141	0.000473	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
sec-Butylbenzene	ND		0.00141	0.000473	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
Styrene	ND		0.00141	0.000777	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
t-Amyl alcohol	ND		0.0141	0.00657	mg/Kg		08/31/16 14:10	09/12/16 23:20	1

Client Sample ID: SB-9

Date Collected: 08/31/16 14:10
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-9

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl methyl ether	ND		0.00141	0.000219	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
tert-Butyl alcohol (TBA)	ND		0.0353	0.00791	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
tert-Butylbenzene	ND		0.00141	0.000635	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
1,1,1,2-Tetrachloroethane	ND		0.00141	0.000473	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
1,1,2,2-Tetrachloroethane	ND		0.00141	0.000706	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
Tetrachloroethene	ND		0.00141	0.000515	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
Toluene	ND		0.00141	0.000522	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
trans-1,2-Dichloroethene	ND		0.00141	0.000473	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
trans-1,3-Dichloropropene	ND		0.00141	0.000473	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
1,2,3-Trichlorobenzene	ND		0.00141	0.000268	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
1,2,4-Trichlorobenzene	ND		0.00141	0.000473	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
1,1,1-Trichloroethane	ND		0.00141	0.000649	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
1,1,2-Trichloroethane	ND		0.00353	0.000988	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
Trichloroethene	ND		0.00141	0.000678	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
Trichlorofluoromethane	ND		0.00141	0.000706	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
1,2,3-Trichloropropane	ND		0.00141	0.000388	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
1,2,4-Trimethylbenzene	ND		0.00141	0.000706	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
1,3,5-Trimethylbenzene	ND		0.00141	0.000529	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
Vinyl chloride	ND		0.00141	0.000777	mg/Kg		08/31/16 14:10	09/12/16 23:20	1
Xylenes, Total	ND		0.00424	0.000868	mg/Kg		08/31/16 14:10	09/12/16 23:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*08/31/16 14:10*	*09/12/16 23:20*	*1*
Dibromofluoromethane (Surr)	*115*		*70 - 130*	*08/31/16 14:10*	*09/12/16 23:20*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*	*08/31/16 14:10*	*09/12/16 23:20*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*	*08/31/16 14:10*	*09/12/16 23:20*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0651	0.0311	mg/Kg		09/08/16 10:22	09/09/16 17:40	1
Acenaphthylene	ND		0.0651	0.0282	mg/Kg		09/08/16 10:22	09/09/16 17:40	1
Anthracene	ND		0.0651	0.0282	mg/Kg		09/08/16 10:22	09/09/16 17:40	1
Benzo[a]anthracene	ND		0.0651	0.0291	mg/Kg		09/08/16 10:22	09/09/16 17:40	1
Benzo[a]pyrene	ND		0.0651	0.0262	mg/Kg		09/08/16 10:22	09/09/16 17:40	1
Benzo[b]fluoranthene	ND		0.0651	0.0272	mg/Kg		09/08/16 10:22	09/09/16 17:40	1
Benzo[g,h,i]perylene	ND		0.0651	0.0321	mg/Kg		09/08/16 10:22	09/09/16 17:40	1
Benzo[k]fluoranthene	ND		0.0651	0.0262	mg/Kg		09/08/16 10:22	09/09/16 17:40	1
Chrysene	ND		0.0651	0.0359	mg/Kg		09/08/16 10:22	09/09/16 17:40	1
Dibenz(a,h)anthracene	ND		0.0651	0.0311	mg/Kg		09/08/16 10:22	09/09/16 17:40	1
Fluoranthene	ND		0.0651	0.0330	mg/Kg		09/08/16 10:22	09/09/16 17:40	1
Fluorene	ND		0.0651	0.0282	mg/Kg		09/08/16 10:22	09/09/16 17:40	1
Indeno[1,2,3-cd]pyrene	ND		0.0651	0.0282	mg/Kg		09/08/16 10:22	09/09/16 17:40	1
1-Methylnaphthalene	ND		0.0651	0.0272	mg/Kg		09/08/16 10:22	09/09/16 17:40	1
2-Methylnaphthalene	ND		0.0651	0.0253	mg/Kg		09/08/16 10:22	09/09/16 17:40	1
Naphthalene	ND		0.0651	0.0282	mg/Kg		09/08/16 10:22	09/09/16 17:40	1
Phenanthrene	ND		0.0651	0.0330	mg/Kg		09/08/16 10:22	09/09/16 17:40	1
Pyrene	ND		0.0651	0.0330	mg/Kg		09/08/16 10:22	09/09/16 17:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*54*		*29 - 120*	*09/08/16 10:22*	*09/09/16 17:40*	*1*

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-9

Date Collected: 08/31/16 14:10
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-9

Matrix: Solid

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*57*		*27 - 120*	*09/08/16 10:22*	*09/09/16 17:40*	*1*
Terphenyl-d14 (Surr)	*70*		*13 - 120*	*09/08/16 10:22*	*09/09/16 17:40*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		3.49	1.74	mg/Kg		08/31/16 14:10	09/06/16 22:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*106*		*50 - 150*	*08/31/16 14:10*	*09/06/16 22:08*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.84	2.42	mg/Kg		09/08/16 11:38	09/09/16 15:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*89*		*50 - 150*	*09/08/16 11:38*	*09/09/16 15:17*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.0328	0.00986	mg/Kg		09/11/16 10:57	09/13/16 18:12	1
PCB-1221	ND		0.0328	0.00986	mg/Kg		09/11/16 10:57	09/13/16 18:12	1
PCB-1232	ND		0.0328	0.0197	mg/Kg		09/11/16 10:57	09/13/16 18:12	1
PCB-1242	ND		0.0328	0.00986	mg/Kg		09/11/16 10:57	09/13/16 18:12	1
PCB-1248	ND		0.0328	0.00986	mg/Kg		09/11/16 10:57	09/13/16 18:12	1
PCB-1254	ND		0.0328	0.00986	mg/Kg		09/11/16 10:57	09/13/16 18:12	1
PCB-1260	ND		0.0328	0.00986	mg/Kg		09/11/16 10:57	09/13/16 18:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*84*		*20 - 150*	*09/11/16 10:57*	*09/13/16 18:12*	*1*
Tetrachloro-m-xylene	*78*		*19 - 147*	*09/11/16 10:57*	*09/13/16 18:12*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		1.99	1.19	mg/Kg		09/13/16 13:22	09/13/16 22:20	1
Barium	**79.9**		1.99	0.994	mg/Kg		09/13/16 13:22	09/13/16 22:20	1
Cadmium	ND		0.994	0.0994	mg/Kg		09/13/16 13:22	09/13/16 22:20	1
Chromium	**8.85**		0.994	0.895	mg/Kg		09/13/16 13:22	09/13/16 22:20	1
Lead	**4.75**		0.994	0.497	mg/Kg		09/13/16 13:22	09/13/16 22:20	1
Selenium	ND		1.99	1.09	mg/Kg		09/13/16 13:22	09/13/16 22:20	1
Silver	ND		0.994	0.398	mg/Kg		09/13/16 13:22	09/13/16 22:20	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0960	0.0288	mg/Kg		09/06/16 14:59	09/07/16 14:07	1

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-10

Date Collected: 08/31/16 15:10
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-10

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.0357	0.00600	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
Benzene	ND		0.00143	0.000479	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
Bromobenzene	ND		0.00143	0.000514	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
Bromochloromethane	ND		0.00143	0.000393	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
Bromodichloromethane	ND		0.00143	0.000393	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
Bromoform	ND		0.00143	0.000393	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
Bromomethane	ND		0.00143	0.000857	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
2-Butanone (MEK)	ND		0.0357	0.00364	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
Carbon disulfide	ND		0.00357	0.00257	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
Carbon tetrachloride	ND		0.00143	0.000479	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
Chlorobenzene	ND		0.00143	0.000479	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
Chlorodibromomethane	ND		0.00143	0.000243	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
Chloroethane	ND		0.00357	0.00136	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
Chloroform	ND		0.00143	0.000479	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
Chloromethane	ND		0.00143	0.000479	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
2-Chlorotoluene	ND		0.00143	0.000636	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
4-Chlorotoluene	ND		0.00143	0.000600	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
cis-1,2-Dichloroethene	ND		0.00143	0.000479	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
cis-1,3-Dichloropropene	ND		0.00143	0.000479	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
1,2-Dibromo-3-Chloropropane	ND		0.00357	0.000500	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
1,2-Dibromoethane (EDB)	ND		0.00143	0.000714	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
Dibromomethane	ND		0.00143	0.000400	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
1,2-Dichlorobenzene	ND		0.00143	0.000243	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
1,3-Dichlorobenzene	ND		0.00143	0.000479	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
1,4-Dichlorobenzene	ND		0.00143	0.000479	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
Dichlorodifluoromethane	ND		0.00143	0.000714	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
1,1-Dichloroethane	ND		0.00143	0.000479	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
1,2-Dichloroethane	ND		0.00143	0.000479	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
1,1-Dichloroethene	ND		0.00143	0.000407	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
1,2-Dichloropropane	ND		0.00143	0.000671	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
1,3-Dichloropropane	ND		0.00143	0.000671	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
2,2-Dichloropropane	ND		0.00143	0.000479	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
1,1-Dichloropropene	ND		0.00143	0.000364	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
Diisopropyl ether	ND		0.00143	0.000479	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
Ethylbenzene	ND		0.00143	0.000479	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
Ethyl tert-butyl ether	ND		0.00357	0.000714	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
Hexachlorobutadiene	ND		0.00357	0.000814	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
2-Hexanone	ND		0.0357	0.0119	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
Isopropylbenzene	ND		0.00143	0.000293	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
Methylene Chloride	ND		0.00714	0.000614	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
4-Methyl-2-pentanone (MIBK)	ND		0.0357	0.00136	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
Methyl tert-butyl ether	ND		0.00143	0.000686	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
Naphthalene	ND		0.00357	0.00121	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
n-Butylbenzene	ND		0.00143	0.000700	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
N-Propylbenzene	ND		0.00143	0.000479	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
p-Isopropyltoluene	ND		0.00143	0.000479	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
sec-Butylbenzene	ND		0.00143	0.000479	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
Styrene	ND		0.00143	0.000786	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
t-Amyl alcohol	ND		0.0143	0.00664	mg/Kg		08/31/16 15:10	09/12/16 23:48	1

Client Sample ID: SB-10

Date Collected: 08/31/16 15:10
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-10

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl methyl ether	ND		0.00143	0.000221	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
tert-Butyl alcohol (TBA)	ND		0.0357	0.00800	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
tert-Butylbenzene	ND		0.00143	0.000643	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
1,1,1,2-Tetrachloroethane	ND		0.00143	0.000479	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
1,1,2,2-Tetrachloroethane	ND		0.00143	0.000714	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
Tetrachloroethene	ND		0.00143	0.000521	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
Toluene	ND		0.00143	0.000529	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
trans-1,2-Dichloroethene	ND		0.00143	0.000479	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
trans-1,3-Dichloropropene	ND		0.00143	0.000479	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
1,2,3-Trichlorobenzene	ND		0.00143	0.000271	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
1,2,4-Trichlorobenzene	ND		0.00143	0.000479	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
1,1,1-Trichloroethane	ND		0.00143	0.000657	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
1,1,2-Trichloroethane	ND		0.00357	0.00100	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
Trichloroethene	ND		0.00143	0.000686	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
Trichlorofluoromethane	ND		0.00143	0.000714	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
1,2,3-Trichloropropane	ND		0.00143	0.000393	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
1,2,4-Trimethylbenzene	ND		0.00143	0.000714	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
1,3,5-Trimethylbenzene	ND		0.00143	0.000536	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
Vinyl chloride	ND		0.00143	0.000786	mg/Kg		08/31/16 15:10	09/12/16 23:48	1
Xylenes, Total	ND		0.00429	0.000879	mg/Kg		08/31/16 15:10	09/12/16 23:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*126*		*70 - 130*	*08/31/16 15:10*	*09/12/16 23:48*	*1*
Dibromofluoromethane (Surr)	*108*		*70 - 130*	*08/31/16 15:10*	*09/12/16 23:48*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*	*08/31/16 15:10*	*09/12/16 23:48*	*1*
Toluene-d8 (Surr)	*109*		*70 - 130*	*08/31/16 15:10*	*09/12/16 23:48*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0650	0.0310	mg/Kg		09/08/16 10:22	09/09/16 18:00	1
Acenaphthylene	ND		0.0650	0.0281	mg/Kg		09/08/16 10:22	09/09/16 18:00	1
Anthracene	ND		0.0650	0.0281	mg/Kg		09/08/16 10:22	09/09/16 18:00	1
Benzo[a]anthracene	ND		0.0650	0.0291	mg/Kg		09/08/16 10:22	09/09/16 18:00	1
Benzo[a]pyrene	ND		0.0650	0.0262	mg/Kg		09/08/16 10:22	09/09/16 18:00	1
Benzo[b]fluoranthene	ND		0.0650	0.0272	mg/Kg		09/08/16 10:22	09/09/16 18:00	1
Benzo[g,h,i]perylene	ND		0.0650	0.0320	mg/Kg		09/08/16 10:22	09/09/16 18:00	1
Benzo[k]fluoranthene	ND		0.0650	0.0262	mg/Kg		09/08/16 10:22	09/09/16 18:00	1
Chrysene	ND		0.0650	0.0359	mg/Kg		09/08/16 10:22	09/09/16 18:00	1
Dibenz(a,h)anthracene	ND		0.0650	0.0310	mg/Kg		09/08/16 10:22	09/09/16 18:00	1
Fluoranthene	ND		0.0650	0.0330	mg/Kg		09/08/16 10:22	09/09/16 18:00	1
Fluorene	ND		0.0650	0.0281	mg/Kg		09/08/16 10:22	09/09/16 18:00	1
Indeno[1,2,3-cd]pyrene	ND		0.0650	0.0281	mg/Kg		09/08/16 10:22	09/09/16 18:00	1
1-Methylnaphthalene	ND		0.0650	0.0272	mg/Kg		09/08/16 10:22	09/09/16 18:00	1
2-Methylnaphthalene	ND		0.0650	0.0252	mg/Kg		09/08/16 10:22	09/09/16 18:00	1
Naphthalene	ND		0.0650	0.0281	mg/Kg		09/08/16 10:22	09/09/16 18:00	1
Phenanthrene	ND		0.0650	0.0330	mg/Kg		09/08/16 10:22	09/09/16 18:00	1
Pyrene	ND		0.0650	0.0330	mg/Kg		09/08/16 10:22	09/09/16 18:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*53*		*29 - 120*	*09/08/16 10:22*	*09/09/16 18:00*	*1*

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-10

Date Collected: 08/31/16 15:10
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-10

Matrix: Solid

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	56		27 - 120	09/08/16 10:22	09/09/16 18:00	1
Terphenyl-d14 (Surr)	65		13 - 120	09/08/16 10:22	09/09/16 18:00	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.02	2.01	mg/Kg		08/31/16 15:10	09/06/16 22:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	107		50 - 150	08/31/16 15:10	09/06/16 22:41	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.86	2.43	mg/Kg		09/08/16 11:38	09/09/16 15:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	101		50 - 150	09/08/16 11:38	09/09/16 15:36	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.0330	0.00990	mg/Kg		09/11/16 10:57	09/13/16 18:38	1
PCB-1221	ND		0.0330	0.00990	mg/Kg		09/11/16 10:57	09/13/16 18:38	1
PCB-1232	ND		0.0330	0.0198	mg/Kg		09/11/16 10:57	09/13/16 18:38	1
PCB-1242	ND		0.0330	0.00990	mg/Kg		09/11/16 10:57	09/13/16 18:38	1
PCB-1248	ND		0.0330	0.00990	mg/Kg		09/11/16 10:57	09/13/16 18:38	1
PCB-1254	ND		0.0330	0.00990	mg/Kg		09/11/16 10:57	09/13/16 18:38	1
PCB-1260	ND		0.0330	0.00990	mg/Kg		09/11/16 10:57	09/13/16 18:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	98		20 - 150	09/11/16 10:57	09/13/16 18:38	1
Tetrachloro-m-xylene	83		19 - 147	09/11/16 10:57	09/13/16 18:38	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**5.12**		1.96	1.18	mg/Kg		09/13/16 13:22	09/13/16 22:26	1
Barium	**72.7**		1.96	0.980	mg/Kg		09/13/16 13:22	09/13/16 22:26	1
Cadmium	ND		0.980	0.0980	mg/Kg		09/13/16 13:22	09/13/16 22:26	1
Chromium	**9.55**		0.980	0.882	mg/Kg		09/13/16 13:22	09/13/16 22:26	1
Lead	**15.5**		0.980	0.490	mg/Kg		09/13/16 13:22	09/13/16 22:26	1
Selenium	ND		1.96	1.08	mg/Kg		09/13/16 13:22	09/13/16 22:26	1
Silver	ND		0.980	0.392	mg/Kg		09/13/16 13:22	09/13/16 22:26	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.101	0.0303	mg/Kg		09/06/16 14:59	09/07/16 14:09	1

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-11

Date Collected: 08/31/16 16:00
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-11

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.0365	0.00613	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
Benzene	ND		0.00146	0.000489	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
Bromobenzene	ND		0.00146	0.000526	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
Bromochloromethane	ND		0.00146	0.000402	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
Bromodichloromethane	ND		0.00146	0.000402	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
Bromoform	ND		0.00146	0.000402	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
Bromomethane	ND		0.00146	0.000876	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
2-Butanone (MEK)	ND		0.0365	0.00372	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
Carbon disulfide	ND		0.00365	0.00263	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
Carbon tetrachloride	ND		0.00146	0.000489	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
Chlorobenzene	ND		0.00146	0.000489	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
Chlorodibromomethane	ND		0.00146	0.000248	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
Chloroethane	ND		0.00365	0.00139	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
Chloroform	ND		0.00146	0.000489	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
Chloromethane	ND		0.00146	0.000489	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
2-Chlorotoluene	ND		0.00146	0.000650	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
4-Chlorotoluene	ND		0.00146	0.000613	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
cis-1,2-Dichloroethene	ND		0.00146	0.000489	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
cis-1,3-Dichloropropene	ND		0.00146	0.000489	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
1,2-Dibromo-3-Chloropropane	ND		0.00365	0.000511	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
1,2-Dibromoethane (EDB)	ND		0.00146	0.000730	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
Dibromomethane	ND		0.00146	0.000409	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
1,2-Dichlorobenzene	ND		0.00146	0.000248	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
1,3-Dichlorobenzene	ND		0.00146	0.000489	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
1,4-Dichlorobenzene	ND		0.00146	0.000489	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
Dichlorodifluoromethane	ND		0.00146	0.000730	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
1,1-Dichloroethane	ND		0.00146	0.000489	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
1,2-Dichloroethane	ND		0.00146	0.000489	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
1,1-Dichloroethene	ND		0.00146	0.000416	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
1,2-Dichloropropane	ND		0.00146	0.000687	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
1,3-Dichloropropane	ND		0.00146	0.000687	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
2,2-Dichloropropane	ND		0.00146	0.000489	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
1,1-Dichloropropene	ND		0.00146	0.000372	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
Diisopropyl ether	ND		0.00146	0.000489	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
Ethylbenzene	ND		0.00146	0.000489	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
Ethyl tert-butyl ether	ND		0.00365	0.000730	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
Hexachlorobutadiene	ND		0.00365	0.000833	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
2-Hexanone	ND		0.0365	0.0122	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
Isopropylbenzene	ND		0.00146	0.000299	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
Methylene Chloride	ND		0.00730	0.000628	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
4-Methyl-2-pentanone (MIBK)	ND		0.0365	0.00139	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
Methyl tert-butyl ether	ND		0.00146	0.000701	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
Naphthalene	ND		0.00365	0.00124	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
n-Butylbenzene	ND		0.00146	0.000716	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
N-Propylbenzene	ND		0.00146	0.000489	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
p-Isopropyltoluene	ND		0.00146	0.000489	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
sec-Butylbenzene	ND		0.00146	0.000489	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
Styrene	ND		0.00146	0.000803	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
t-Amyl alcohol	ND		0.0146	0.00679	mg/Kg		08/31/16 16:00	09/13/16 00:15	1

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-11

Date Collected: 08/31/16 16:00
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-11

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl methyl ether	ND		0.00146	0.000226	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
tert-Butyl alcohol (TBA)	ND		0.0365	0.00818	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
tert-Butylbenzene	ND		0.00146	0.000657	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
1,1,1,2-Tetrachloroethane	ND		0.00146	0.000489	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
1,1,2,2-Tetrachloroethane	ND		0.00146	0.000730	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
Tetrachloroethene	ND		0.00146	0.000533	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
Toluene	ND		0.00146	0.000540	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
trans-1,2-Dichloroethene	ND		0.00146	0.000489	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
trans-1,3-Dichloropropene	ND		0.00146	0.000489	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
1,2,3-Trichlorobenzene	ND		0.00146	0.000278	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
1,2,4-Trichlorobenzene	ND		0.00146	0.000489	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
1,1,1-Trichloroethane	ND		0.00146	0.000672	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
1,1,2-Trichloroethane	ND		0.00365	0.00102	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
Trichloroethene	ND		0.00146	0.000701	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
Trichlorofluoromethane	ND		0.00146	0.000730	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
1,2,3-Trichloropropane	ND		0.00146	0.000402	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
1,2,4-Trimethylbenzene	ND		0.00146	0.000730	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
1,3,5-Trimethylbenzene	ND		0.00146	0.000548	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
Vinyl chloride	ND		0.00146	0.000803	mg/Kg		08/31/16 16:00	09/13/16 00:15	1
Xylenes, Total	ND		0.00438	0.000898	mg/Kg		08/31/16 16:00	09/13/16 00:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*08/31/16 16:00*	*09/13/16 00:15*	*1*
Dibromofluoromethane (Surr)	*108*		*70 - 130*	*08/31/16 16:00*	*09/13/16 00:15*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*	*08/31/16 16:00*	*09/13/16 00:15*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*	*08/31/16 16:00*	*09/13/16 00:15*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0666	0.0318	mg/Kg		09/08/16 10:22	09/09/16 18:20	1
Acenaphthylene	ND		0.0666	0.0288	mg/Kg		09/08/16 10:22	09/09/16 18:20	1
Anthracene	ND		0.0666	0.0288	mg/Kg		09/08/16 10:22	09/09/16 18:20	1
Benzo[a]anthracene	ND		0.0666	0.0298	mg/Kg		09/08/16 10:22	09/09/16 18:20	1
Benzo[a]pyrene	ND		0.0666	0.0269	mg/Kg		09/08/16 10:22	09/09/16 18:20	1
Benzo[b]fluoranthene	ND		0.0666	0.0279	mg/Kg		09/08/16 10:22	09/09/16 18:20	1
Benzo[g,h,i]perylene	ND		0.0666	0.0328	mg/Kg		09/08/16 10:22	09/09/16 18:20	1
Benzo[k]fluoranthene	ND		0.0666	0.0269	mg/Kg		09/08/16 10:22	09/09/16 18:20	1
Chrysene	ND		0.0666	0.0368	mg/Kg		09/08/16 10:22	09/09/16 18:20	1
Dibenz(a,h)anthracene	ND		0.0666	0.0318	mg/Kg		09/08/16 10:22	09/09/16 18:20	1
Fluoranthene	ND		0.0666	0.0338	mg/Kg		09/08/16 10:22	09/09/16 18:20	1
Fluorene	ND		0.0666	0.0288	mg/Kg		09/08/16 10:22	09/09/16 18:20	1
Indeno[1,2,3-cd]pyrene	ND		0.0666	0.0288	mg/Kg		09/08/16 10:22	09/09/16 18:20	1
1-Methylnaphthalene	ND		0.0666	0.0279	mg/Kg		09/08/16 10:22	09/09/16 18:20	1
2-Methylnaphthalene	ND		0.0666	0.0259	mg/Kg		09/08/16 10:22	09/09/16 18:20	1
Naphthalene	ND		0.0666	0.0288	mg/Kg		09/08/16 10:22	09/09/16 18:20	1
Phenanthrene	ND		0.0666	0.0338	mg/Kg		09/08/16 10:22	09/09/16 18:20	1
Pyrene	ND		0.0666	0.0338	mg/Kg		09/08/16 10:22	09/09/16 18:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*67*		*29 - 120*	*09/08/16 10:22*	*09/09/16 18:20*	*1*

Client Sample ID: SB-11

Date Collected: 08/31/16 16:00
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-11

Matrix: Solid

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*70*		*27 - 120*	*09/08/16 10:22*	*09/09/16 18:20*	*1*
Terphenyl-d14 (Surr)	*78*		*13 - 120*	*09/08/16 10:22*	*09/09/16 18:20*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.13	2.06	mg/Kg		08/31/16 16:00	09/06/16 23:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*108*		*50 - 150*	*08/31/16 16:00*	*09/06/16 23:14*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.96	2.48	mg/Kg		09/08/16 11:38	09/09/16 15:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*99*		*50 - 150*	*09/08/16 11:38*	*09/09/16 15:55*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.0329	0.00988	mg/Kg		09/11/16 10:57	09/13/16 18:53	1
PCB-1221	ND		0.0329	0.00988	mg/Kg		09/11/16 10:57	09/13/16 18:53	1
PCB-1232	ND		0.0329	0.0198	mg/Kg		09/11/16 10:57	09/13/16 18:53	1
PCB-1242	ND		0.0329	0.00988	mg/Kg		09/11/16 10:57	09/13/16 18:53	1
PCB-1248	ND		0.0329	0.00988	mg/Kg		09/11/16 10:57	09/13/16 18:53	1
PCB-1254	ND		0.0329	0.00988	mg/Kg		09/11/16 10:57	09/13/16 18:53	1
PCB-1260	ND		0.0329	0.00988	mg/Kg		09/11/16 10:57	09/13/16 18:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*95*		*20 - 150*	*09/11/16 10:57*	*09/13/16 18:53*	*1*
Tetrachloro-m-xylene	*82*		*19 - 147*	*09/11/16 10:57*	*09/13/16 18:53*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		1.93	1.16	mg/Kg		09/13/16 13:22	09/13/16 22:42	1
Barium	**50.8**		1.93	0.967	mg/Kg		09/13/16 13:22	09/13/16 22:42	1
Cadmium	ND		0.967	0.0967	mg/Kg		09/13/16 13:22	09/13/16 22:42	1
Chromium	**10.6**		0.967	0.870	mg/Kg		09/13/16 13:22	09/13/16 22:42	1
Lead	**6.02**		0.967	0.484	mg/Kg		09/13/16 13:22	09/13/16 22:42	1
Selenium	ND		1.93	1.06	mg/Kg		09/13/16 13:22	09/13/16 22:42	1
Silver	ND		0.967	0.387	mg/Kg		09/13/16 13:22	09/13/16 22:42	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0971	0.0291	mg/Kg		09/06/16 14:59	09/07/16 14:12	1

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-12

Date Collected: 08/31/16 16:40
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-12

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.0353	0.00593	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
Benzene	ND		0.00141	0.000473	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
Bromobenzene	ND		0.00141	0.000508	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
Bromochloromethane	ND		0.00141	0.000388	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
Bromodichloromethane	ND		0.00141	0.000388	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
Bromoform	ND		0.00141	0.000388	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
Bromomethane	ND		0.00141	0.000847	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
2-Butanone (MEK)	ND		0.0353	0.00360	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
Carbon disulfide	ND		0.00353	0.00254	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
Carbon tetrachloride	ND		0.00141	0.000473	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
Chlorobenzene	ND		0.00141	0.000473	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
Chlorodibromomethane	ND		0.00141	0.000240	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
Chloroethane	ND		0.00353	0.00134	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
Chloroform	ND		0.00141	0.000473	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
Chloromethane	ND		0.00141	0.000473	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
2-Chlorotoluene	ND		0.00141	0.000628	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
4-Chlorotoluene	ND		0.00141	0.000593	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
cis-1,2-Dichloroethene	ND		0.00141	0.000473	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
cis-1,3-Dichloropropene	ND		0.00141	0.000473	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
1,2-Dibromo-3-Chloropropane	ND		0.00353	0.000494	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
1,2-Dibromoethane (EDB)	ND		0.00141	0.000706	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
Dibromomethane	ND		0.00141	0.000395	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
1,2-Dichlorobenzene	ND		0.00141	0.000240	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
1,3-Dichlorobenzene	ND		0.00141	0.000473	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
1,4-Dichlorobenzene	ND		0.00141	0.000473	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
Dichlorodifluoromethane	ND		0.00141	0.000706	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
1,1-Dichloroethane	ND		0.00141	0.000473	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
1,2-Dichloroethane	ND		0.00141	0.000473	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
1,1-Dichloroethene	ND		0.00141	0.000402	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
1,2-Dichloropropane	ND		0.00141	0.000664	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
1,3-Dichloropropane	ND		0.00141	0.000664	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
2,2-Dichloropropane	ND		0.00141	0.000473	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
1,1-Dichloropropene	ND		0.00141	0.000360	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
Diisopropyl ether	ND		0.00141	0.000473	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
Ethylbenzene	ND		0.00141	0.000473	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
Ethyl tert-butyl ether	ND		0.00353	0.000706	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
Hexachlorobutadiene	ND		0.00353	0.000805	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
2-Hexanone	ND		0.0353	0.0118	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
Isopropylbenzene	ND		0.00141	0.000289	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
Methylene Chloride	ND		0.00706	0.000607	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
4-Methyl-2-pentanone (MIBK)	ND		0.0353	0.00134	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
Methyl tert-butyl ether	ND		0.00141	0.000678	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
Naphthalene	ND		0.00353	0.00120	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
n-Butylbenzene	ND		0.00141	0.000692	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
N-Propylbenzene	ND		0.00141	0.000473	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
p-Isopropyltoluene	ND		0.00141	0.000473	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
sec-Butylbenzene	ND		0.00141	0.000473	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
Styrene	ND		0.00141	0.000777	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
t-Amyl alcohol	ND		0.0141	0.00657	mg/Kg		08/31/16 16:40	09/13/16 00:43	1

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-12

Date Collected: 08/31/16 16:40
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-12

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl methyl ether	ND		0.00141	0.000219	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
tert-Butyl alcohol (TBA)	ND		0.0353	0.00791	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
tert-Butylbenzene	ND		0.00141	0.000635	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
1,1,1,2-Tetrachloroethane	ND		0.00141	0.000473	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
1,1,2,2-Tetrachloroethane	ND		0.00141	0.000706	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
Tetrachloroethene	ND		0.00141	0.000515	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
Toluene	ND		0.00141	0.000522	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
trans-1,2-Dichloroethene	ND		0.00141	0.000473	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
trans-1,3-Dichloropropene	ND		0.00141	0.000473	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
1,2,3-Trichlorobenzene	ND		0.00141	0.000268	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
1,2,4-Trichlorobenzene	ND		0.00141	0.000473	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
1,1,1-Trichloroethane	ND		0.00141	0.000650	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
1,1,2-Trichloroethane	ND		0.00353	0.000988	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
Trichloroethene	ND		0.00141	0.000678	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
Trichlorofluoromethane	ND		0.00141	0.000706	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
1,2,3-Trichloropropane	ND		0.00141	0.000388	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
1,2,4-Trimethylbenzene	ND		0.00141	0.000706	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
1,3,5-Trimethylbenzene	ND		0.00141	0.000530	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
Vinyl chloride	ND		0.00141	0.000777	mg/Kg		08/31/16 16:40	09/13/16 00:43	1
Xylenes, Total	ND		0.00424	0.000868	mg/Kg		08/31/16 16:40	09/13/16 00:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*08/31/16 16:40*	*09/13/16 00:43*	*1*
Dibromofluoromethane (Surr)	*109*		*70 - 130*	*08/31/16 16:40*	*09/13/16 00:43*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*	*08/31/16 16:40*	*09/13/16 00:43*	*1*
Toluene-d8 (Surr)	*94*		*70 - 130*	*08/31/16 16:40*	*09/13/16 00:43*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0659	0.0315	mg/Kg		09/08/16 10:22	09/09/16 18:40	1
Acenaphthylene	ND		0.0659	0.0285	mg/Kg		09/08/16 10:22	09/09/16 18:40	1
Anthracene	ND		0.0659	0.0285	mg/Kg		09/08/16 10:22	09/09/16 18:40	1
Benzo[a]anthracene	ND		0.0659	0.0295	mg/Kg		09/08/16 10:22	09/09/16 18:40	1
Benzo[a]pyrene	ND		0.0659	0.0266	mg/Kg		09/08/16 10:22	09/09/16 18:40	1
Benzo[b]fluoranthene	ND		0.0659	0.0275	mg/Kg		09/08/16 10:22	09/09/16 18:40	1
Benzo[g,h,i]perylene	ND		0.0659	0.0325	mg/Kg		09/08/16 10:22	09/09/16 18:40	1
Benzo[k]fluoranthene	ND		0.0659	0.0266	mg/Kg		09/08/16 10:22	09/09/16 18:40	1
Chrysene	ND		0.0659	0.0364	mg/Kg		09/08/16 10:22	09/09/16 18:40	1
Dibenz(a,h)anthracene	ND		0.0659	0.0315	mg/Kg		09/08/16 10:22	09/09/16 18:40	1
Fluoranthene	ND		0.0659	0.0334	mg/Kg		09/08/16 10:22	09/09/16 18:40	1
Fluorene	ND		0.0659	0.0285	mg/Kg		09/08/16 10:22	09/09/16 18:40	1
Indeno[1,2,3-cd]pyrene	ND		0.0659	0.0285	mg/Kg		09/08/16 10:22	09/09/16 18:40	1
1-Methylnaphthalene	ND		0.0659	0.0275	mg/Kg		09/08/16 10:22	09/09/16 18:40	1
2-Methylnaphthalene	ND		0.0659	0.0256	mg/Kg		09/08/16 10:22	09/09/16 18:40	1
Naphthalene	ND		0.0659	0.0285	mg/Kg		09/08/16 10:22	09/09/16 18:40	1
Phenanthrene	ND		0.0659	0.0334	mg/Kg		09/08/16 10:22	09/09/16 18:40	1
Pyrene	ND		0.0659	0.0334	mg/Kg		09/08/16 10:22	09/09/16 18:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*71*		*29 - 120*	*09/08/16 10:22*	*09/09/16 18:40*	*1*

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-12

Date Collected: 08/31/16 16:40
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-12

Matrix: Solid

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	75		27 - 120	09/08/16 10:22	09/09/16 18:40	1
Terphenyl-d14 (Surr)	80		13 - 120	09/08/16 10:22	09/09/16 18:40	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		3.62	1.81	mg/Kg		08/31/16 16:40	09/06/16 23:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	106		50 - 150	08/31/16 16:40	09/06/16 23:48	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.87	2.43	mg/Kg		09/08/16 11:38	09/09/16 17:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	103		50 - 150	09/08/16 11:38	09/09/16 17:48	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.0324	0.00973	mg/Kg		09/11/16 10:57	09/13/16 19:09	1
PCB-1221	ND		0.0324	0.00973	mg/Kg		09/11/16 10:57	09/13/16 19:09	1
PCB-1232	ND		0.0324	0.0195	mg/Kg		09/11/16 10:57	09/13/16 19:09	1
PCB-1242	ND		0.0324	0.00973	mg/Kg		09/11/16 10:57	09/13/16 19:09	1
PCB-1248	ND		0.0324	0.00973	mg/Kg		09/11/16 10:57	09/13/16 19:09	1
PCB-1254	ND		0.0324	0.00973	mg/Kg		09/11/16 10:57	09/13/16 19:09	1
PCB-1260	ND		0.0324	0.00973	mg/Kg		09/11/16 10:57	09/13/16 19:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	90		20 - 150	09/11/16 10:57	09/13/16 19:09	1
Tetrachloro-m-xylene	76		19 - 147	09/11/16 10:57	09/13/16 19:09	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		1.94	1.16	mg/Kg		09/13/16 13:22	09/13/16 22:47	1
Barium	**45.1**		1.94	0.969	mg/Kg		09/13/16 13:22	09/13/16 22:47	1
Cadmium	ND		0.969	0.0969	mg/Kg		09/13/16 13:22	09/13/16 22:47	1
Chromium	**7.52**		0.969	0.872	mg/Kg		09/13/16 13:22	09/13/16 22:47	1
Lead	**5.62**		0.969	0.484	mg/Kg		09/13/16 13:22	09/13/16 22:47	1
Selenium	ND		1.94	1.07	mg/Kg		09/13/16 13:22	09/13/16 22:47	1
Silver	ND		0.969	0.388	mg/Kg		09/13/16 13:22	09/13/16 22:47	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0979	0.0294	mg/Kg		09/06/16 14:59	09/07/16 14:15	1

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-13

Date Collected: 09/01/16 09:30
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-13

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.0375	0.00630	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
Benzene	ND		0.00150	0.000502	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
Bromobenzene	ND		0.00150	0.000540	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
Bromochloromethane	ND		0.00150	0.000412	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
Bromodichloromethane	ND		0.00150	0.000412	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
Bromoform	ND		0.00150	0.000412	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
Bromomethane	ND		0.00150	0.000900	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
2-Butanone (MEK)	ND		0.0375	0.00382	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
Carbon disulfide	ND		0.00375	0.00270	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
Carbon tetrachloride	ND		0.00150	0.000502	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
Chlorobenzene	ND		0.00150	0.000502	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
Chlorodibromomethane	ND		0.00150	0.000255	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
Chloroethane	ND		0.00375	0.00142	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
Chloroform	ND		0.00150	0.000502	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
Chloromethane	ND		0.00150	0.000502	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
2-Chlorotoluene	ND		0.00150	0.000667	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
4-Chlorotoluene	ND		0.00150	0.000630	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
cis-1,2-Dichloroethene	**0.00626**		0.00150	0.000502	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
cis-1,3-Dichloropropene	ND		0.00150	0.000502	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
1,2-Dibromo-3-Chloropropane	ND		0.00375	0.000525	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
1,2-Dibromoethane (EDB)	ND		0.00150	0.000750	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
Dibromomethane	ND		0.00150	0.000420	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
1,2-Dichlorobenzene	ND		0.00150	0.000255	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
1,3-Dichlorobenzene	ND		0.00150	0.000502	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
1,4-Dichlorobenzene	ND		0.00150	0.000502	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
Dichlorodifluoromethane	ND		0.00150	0.000750	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
1,1-Dichloroethane	ND		0.00150	0.000502	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
1,2-Dichloroethane	ND		0.00150	0.000502	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
1,1-Dichloroethene	ND		0.00150	0.000427	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
1,2-Dichloropropane	ND		0.00150	0.000705	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
1,3-Dichloropropane	ND		0.00150	0.000705	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
2,2-Dichloropropane	ND		0.00150	0.000502	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
1,1-Dichloropropene	ND		0.00150	0.000382	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
Diisopropyl ether	ND		0.00150	0.000502	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
Ethylbenzene	ND		0.00150	0.000502	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
Ethyl tert-butyl ether	ND		0.00375	0.000750	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
Hexachlorobutadiene	ND		0.00375	0.000855	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
2-Hexanone	ND		0.0375	0.0125	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
Isopropylbenzene	ND		0.00150	0.000307	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
Methylene Chloride	ND		0.00750	0.000645	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
4-Methyl-2-pentanone (MIBK)	ND		0.0375	0.00142	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
Methyl tert-butyl ether	ND		0.00150	0.000720	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
Naphthalene	ND		0.00375	0.00127	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
n-Butylbenzene	ND		0.00150	0.000735	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
N-Propylbenzene	ND		0.00150	0.000502	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
p-Isopropyltoluene	ND		0.00150	0.000502	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
sec-Butylbenzene	ND		0.00150	0.000502	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
Styrene	ND		0.00150	0.000825	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
t-Amyl alcohol	ND		0.0150	0.00697	mg/Kg		09/01/16 09:30	09/13/16 01:10	1

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-13

Date Collected: 09/01/16 09:30
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-13

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl methyl ether	ND		0.00150	0.000232	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
tert-Butyl alcohol (TBA)	ND		0.0375	0.00840	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
tert-Butylbenzene	ND		0.00150	0.000675	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
1,1,1,2-Tetrachloroethane	ND		0.00150	0.000502	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
1,1,2,2-Tetrachloroethane	ND		0.00150	0.000750	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
Tetrachloroethene	ND		0.00150	0.000547	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
Toluene	ND		0.00150	0.000555	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
trans-1,2-Dichloroethene	ND		0.00150	0.000502	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
trans-1,3-Dichloropropene	ND		0.00150	0.000502	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
1,2,3-Trichlorobenzene	ND		0.00150	0.000285	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
1,2,4-Trichlorobenzene	ND		0.00150	0.000502	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
1,1,1-Trichloroethane	ND		0.00150	0.000690	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
1,1,2-Trichloroethane	ND		0.00375	0.00105	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
Trichloroethene	ND		0.00150	0.000720	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
Trichlorofluoromethane	ND		0.00150	0.000750	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
1,2,3-Trichloropropane	ND		0.00150	0.000412	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
1,2,4-Trimethylbenzene	ND		0.00150	0.000750	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
1,3,5-Trimethylbenzene	ND		0.00150	0.000562	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
Vinyl chloride	ND		0.00150	0.000825	mg/Kg		09/01/16 09:30	09/13/16 01:10	1
Xylenes, Total	ND		0.00450	0.000922	mg/Kg		09/01/16 09:30	09/13/16 01:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*09/01/16 09:30*	*09/13/16 01:10*	*1*
Dibromofluoromethane (Surr)	*114*		*70 - 130*	*09/01/16 09:30*	*09/13/16 01:10*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*	*09/01/16 09:30*	*09/13/16 01:10*	*1*
Toluene-d8 (Surr)	*106*		*70 - 130*	*09/01/16 09:30*	*09/13/16 01:10*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0664	0.0317	mg/Kg		09/08/16 10:22	09/09/16 19:00	1
Acenaphthylene	ND		0.0664	0.0287	mg/Kg		09/08/16 10:22	09/09/16 19:00	1
Anthracene	ND		0.0664	0.0287	mg/Kg		09/08/16 10:22	09/09/16 19:00	1
Benzo[a]anthracene	ND		0.0664	0.0297	mg/Kg		09/08/16 10:22	09/09/16 19:00	1
Benzo[a]pyrene	ND		0.0664	0.0267	mg/Kg		09/08/16 10:22	09/09/16 19:00	1
Benzo[b]fluoranthene	ND		0.0664	0.0277	mg/Kg		09/08/16 10:22	09/09/16 19:00	1
Benzo[g,h,i]perylene	ND		0.0664	0.0327	mg/Kg		09/08/16 10:22	09/09/16 19:00	1
Benzo[k]fluoranthene	ND		0.0664	0.0267	mg/Kg		09/08/16 10:22	09/09/16 19:00	1
Chrysene	ND		0.0664	0.0366	mg/Kg		09/08/16 10:22	09/09/16 19:00	1
Dibenz(a,h)anthracene	ND		0.0664	0.0317	mg/Kg		09/08/16 10:22	09/09/16 19:00	1
Fluoranthene	ND		0.0664	0.0337	mg/Kg		09/08/16 10:22	09/09/16 19:00	1
Fluorene	ND		0.0664	0.0287	mg/Kg		09/08/16 10:22	09/09/16 19:00	1
Indeno[1,2,3-cd]pyrene	ND		0.0664	0.0287	mg/Kg		09/08/16 10:22	09/09/16 19:00	1
1-Methylnaphthalene	ND		0.0664	0.0277	mg/Kg		09/08/16 10:22	09/09/16 19:00	1
2-Methylnaphthalene	ND		0.0664	0.0258	mg/Kg		09/08/16 10:22	09/09/16 19:00	1
Naphthalene	ND		0.0664	0.0287	mg/Kg		09/08/16 10:22	09/09/16 19:00	1
Phenanthrene	ND		0.0664	0.0337	mg/Kg		09/08/16 10:22	09/09/16 19:00	1
Pyrene	ND		0.0664	0.0337	mg/Kg		09/08/16 10:22	09/09/16 19:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*61*		*29 - 120*	*09/08/16 10:22*	*09/09/16 19:00*	*1*

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-13

Date Collected: 09/01/16 09:30
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-13

Matrix: Solid

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	63		27 - 120	09/08/16 10:22	09/09/16 19:00	1
Terphenyl-d14 (Surr)	75		13 - 120	09/08/16 10:22	09/09/16 19:00	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		3.66	1.83	mg/Kg		09/01/16 09:30	09/07/16 00:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	107		50 - 150	09/01/16 09:30	09/07/16 00:21	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.98	2.49	mg/Kg		09/08/16 11:38	09/09/16 18:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	88		50 - 150	09/08/16 11:38	09/09/16 18:07	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.0322	0.00968	mg/Kg		09/11/16 10:57	09/13/16 19:24	1
PCB-1221	ND		0.0322	0.00968	mg/Kg		09/11/16 10:57	09/13/16 19:24	1
PCB-1232	ND		0.0322	0.0194	mg/Kg		09/11/16 10:57	09/13/16 19:24	1
PCB-1242	ND		0.0322	0.00968	mg/Kg		09/11/16 10:57	09/13/16 19:24	1
PCB-1248	ND		0.0322	0.00968	mg/Kg		09/11/16 10:57	09/13/16 19:24	1
PCB-1254	ND		0.0322	0.00968	mg/Kg		09/11/16 10:57	09/13/16 19:24	1
PCB-1260	ND		0.0322	0.00968	mg/Kg		09/11/16 10:57	09/13/16 19:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	110		20 - 150	09/11/16 10:57	09/13/16 19:24	1
Tetrachloro-m-xylene	92		19 - 147	09/11/16 10:57	09/13/16 19:24	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**2.25**		1.97	1.18	mg/Kg		09/13/16 13:22	09/13/16 22:52	1
Barium	**35.5**		1.97	0.986	mg/Kg		09/13/16 13:22	09/13/16 22:52	1
Cadmium	ND		0.986	0.0986	mg/Kg		09/13/16 13:22	09/13/16 22:52	1
Chromium	**4.67**		0.986	0.888	mg/Kg		09/13/16 13:22	09/13/16 22:52	1
Lead	**10.4**		0.986	0.493	mg/Kg		09/13/16 13:22	09/13/16 22:52	1
Selenium	ND		1.97	1.08	mg/Kg		09/13/16 13:22	09/13/16 22:52	1
Silver	ND		0.986	0.394	mg/Kg		09/13/16 13:22	09/13/16 22:52	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0993	0.0298	mg/Kg		09/06/16 14:59	09/07/16 14:23	1

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-14

Date Collected: 09/01/16 08:50
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-14

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.0722		0.0387	0.00651	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
Benzene	ND		0.00155	0.000519	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
Bromobenzene	ND		0.00155	0.000558	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
Bromochloromethane	ND		0.00155	0.000426	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
Bromodichloromethane	ND		0.00155	0.000426	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
Bromoform	ND		0.00155	0.000426	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
Bromomethane	ND		0.00155	0.000930	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
2-Butanone (MEK)	ND		0.0387	0.00395	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
Carbon disulfide	ND		0.00387	0.00279	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
Carbon tetrachloride	ND	*	0.00155	0.000519	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
Chlorobenzene	ND		0.00155	0.000519	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
Chlorodibromomethane	ND		0.00155	0.000263	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
Chloroethane	ND		0.00387	0.00147	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
Chloroform	ND		0.00155	0.000519	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
Chloromethane	ND		0.00155	0.000519	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
2-Chlorotoluene	ND		0.00155	0.000690	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
4-Chlorotoluene	ND		0.00155	0.000651	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
cis-1,2-Dichloroethene	ND		0.00155	0.000519	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
cis-1,3-Dichloropropene	ND		0.00155	0.000519	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
1,2-Dibromo-3-Chloropropane	ND		0.00387	0.000542	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
1,2-Dibromoethane (EDB)	ND		0.00155	0.000775	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
Dibromomethane	ND		0.00155	0.000434	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
1,2-Dichlorobenzene	ND		0.00155	0.000263	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
1,3-Dichlorobenzene	ND		0.00155	0.000519	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
1,4-Dichlorobenzene	ND		0.00155	0.000519	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
Dichlorodifluoromethane	ND		0.00155	0.000775	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
1,1-Dichloroethane	ND		0.00155	0.000519	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
1,2-Dichloroethane	ND		0.00155	0.000519	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
1,1-Dichloroethene	ND		0.00155	0.000442	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
1,2-Dichloropropane	ND		0.00155	0.000728	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
1,3-Dichloropropane	ND		0.00155	0.000728	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
2,2-Dichloropropane	ND		0.00155	0.000519	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
1,1-Dichloropropene	ND		0.00155	0.000395	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
Diisopropyl ether	ND		0.00155	0.000519	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
Ethylbenzene	ND		0.00155	0.000519	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
Ethyl tert-butyl ether	ND		0.00387	0.000775	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
Hexachlorobutadiene	ND		0.00387	0.000883	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
2-Hexanone	ND		0.0387	0.0129	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
Isopropylbenzene	ND		0.00155	0.000318	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
Methylene Chloride	ND		0.00775	0.000666	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
4-Methyl-2-pentanone (MIBK)	ND		0.0387	0.00147	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
Methyl tert-butyl ether	ND		0.00155	0.000744	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
Naphthalene	ND		0.00387	0.00132	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
n-Butylbenzene	ND		0.00155	0.000759	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
N-Propylbenzene	ND		0.00155	0.000519	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
p-Isopropyltoluene	ND		0.00155	0.000519	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
sec-Butylbenzene	ND		0.00155	0.000519	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
Styrene	ND		0.00155	0.000852	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
t-Amyl alcohol	ND		0.0155	0.00721	mg/Kg		09/01/16 08:50	09/13/16 15:10	1

Client Sample ID: SB-14

Date Collected: 09/01/16 08:50
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-14

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl methyl ether	ND		0.00155	0.000240	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
tert-Butyl alcohol (TBA)	ND		0.0387	0.00868	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
tert-Butylbenzene	ND		0.00155	0.000697	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
1,1,1,2-Tetrachloroethane	ND		0.00155	0.000519	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
1,1,2,2-Tetrachloroethane	ND		0.00155	0.000775	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
Tetrachloroethene	ND		0.00155	0.000566	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
Toluene	ND		0.00155	0.000573	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
trans-1,2-Dichloroethene	ND		0.00155	0.000519	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
trans-1,3-Dichloropropene	ND		0.00155	0.000519	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
1,2,3-Trichlorobenzene	ND		0.00155	0.000294	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
1,2,4-Trichlorobenzene	ND		0.00155	0.000519	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
1,1,1-Trichloroethane	ND		0.00155	0.000713	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
1,1,2-Trichloroethane	ND		0.00387	0.00108	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
Trichloroethene	ND		0.00155	0.000744	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
Trichlorofluoromethane	ND		0.00155	0.000775	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
1,2,3-Trichloropropane	ND		0.00155	0.000426	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
1,2,4-Trimethylbenzene	ND		0.00155	0.000775	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
1,3,5-Trimethylbenzene	ND		0.00155	0.000581	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
Vinyl chloride	ND		0.00155	0.000852	mg/Kg		09/01/16 08:50	09/13/16 15:10	1
Xylenes, Total	ND		0.00465	0.000953	mg/Kg		09/01/16 08:50	09/13/16 15:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*09/01/16 08:50*	*09/13/16 15:10*	*1*
Dibromofluoromethane (Surr)	*117*		*70 - 130*	*09/01/16 08:50*	*09/13/16 15:10*	*1*
1,2-Dichloroethane-d4 (Surr)	*116*		*70 - 130*	*09/01/16 08:50*	*09/13/16 15:10*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*	*09/01/16 08:50*	*09/13/16 15:10*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0660	0.0315	mg/Kg		09/08/16 10:22	09/09/16 19:20	1
Acenaphthylene	ND		0.0660	0.0286	mg/Kg		09/08/16 10:22	09/09/16 19:20	1
Anthracene	ND		0.0660	0.0286	mg/Kg		09/08/16 10:22	09/09/16 19:20	1
Benzo[a]anthracene	ND		0.0660	0.0295	mg/Kg		09/08/16 10:22	09/09/16 19:20	1
Benzo[a]pyrene	ND		0.0660	0.0266	mg/Kg		09/08/16 10:22	09/09/16 19:20	1
Benzo[b]fluoranthene	ND		0.0660	0.0276	mg/Kg		09/08/16 10:22	09/09/16 19:20	1
Benzo[g,h,i]perylene	ND		0.0660	0.0325	mg/Kg		09/08/16 10:22	09/09/16 19:20	1
Benzo[k]fluoranthene	ND		0.0660	0.0266	mg/Kg		09/08/16 10:22	09/09/16 19:20	1
Chrysene	ND		0.0660	0.0364	mg/Kg		09/08/16 10:22	09/09/16 19:20	1
Dibenz(a,h)anthracene	ND		0.0660	0.0315	mg/Kg		09/08/16 10:22	09/09/16 19:20	1
Fluoranthene	ND		0.0660	0.0335	mg/Kg		09/08/16 10:22	09/09/16 19:20	1
Fluorene	ND		0.0660	0.0286	mg/Kg		09/08/16 10:22	09/09/16 19:20	1
Indeno[1,2,3-cd]pyrene	ND		0.0660	0.0286	mg/Kg		09/08/16 10:22	09/09/16 19:20	1
1-Methylnaphthalene	ND		0.0660	0.0276	mg/Kg		09/08/16 10:22	09/09/16 19:20	1
2-Methylnaphthalene	ND		0.0660	0.0256	mg/Kg		09/08/16 10:22	09/09/16 19:20	1
Naphthalene	ND		0.0660	0.0286	mg/Kg		09/08/16 10:22	09/09/16 19:20	1
Phenanthrene	ND		0.0660	0.0335	mg/Kg		09/08/16 10:22	09/09/16 19:20	1
Pyrene	ND		0.0660	0.0335	mg/Kg		09/08/16 10:22	09/09/16 19:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*67*		*29 - 120*	*09/08/16 10:22*	*09/09/16 19:20*	*1*

Client Sample ID: SB-14

Lab Sample ID: 490-111143-14

Date Collected: 09/01/16 08:50

Matrix: Solid

Date Received: 09/03/16 10:10

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*69*		*27 - 120*	*09/08/16 10:22*	*09/09/16 19:20*	*1*
Terphenyl-d14 (Surr)	*80*		*13 - 120*	*09/08/16 10:22*	*09/09/16 19:20*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		3.66	1.83	mg/Kg		09/01/16 08:50	09/07/16 00:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*107*		*50 - 150*	*09/01/16 08:50*	*09/07/16 00:54*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.90	2.45	mg/Kg		09/08/16 11:38	09/09/16 18:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*81*		*50 - 150*	*09/08/16 11:38*	*09/09/16 18:26*	*1*

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-15

Date Collected: 09/01/16 10:00
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-15

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.0349	0.00586	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
Benzene	ND		0.00140	0.000467	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
Bromobenzene	ND		0.00140	0.000502	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
Bromochloromethane	ND		0.00140	0.000384	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
Bromodichloromethane	ND		0.00140	0.000384	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
Bromoform	ND		0.00140	0.000384	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
Bromomethane	ND		0.00140	0.000837	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
2-Butanone (MEK)	ND		0.0349	0.00356	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
Carbon disulfide	ND		0.00349	0.00251	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
Carbon tetrachloride	ND	*	0.00140	0.000467	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
Chlorobenzene	ND		0.00140	0.000467	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
Chlorodibromomethane	ND		0.00140	0.000237	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
Chloroethane	ND		0.00349	0.00133	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
Chloroform	ND		0.00140	0.000467	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
Chloromethane	ND		0.00140	0.000467	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
2-Chlorotoluene	ND		0.00140	0.000621	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
4-Chlorotoluene	ND		0.00140	0.000586	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
cis-1,2-Dichloroethene	ND		0.00140	0.000467	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
cis-1,3-Dichloropropene	ND		0.00140	0.000467	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
1,2-Dibromo-3-Chloropropane	ND		0.00349	0.000488	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
1,2-Dibromoethane (EDB)	ND		0.00140	0.000698	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
Dibromomethane	ND		0.00140	0.000391	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
1,2-Dichlorobenzene	ND		0.00140	0.000237	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
1,3-Dichlorobenzene	ND		0.00140	0.000467	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
1,4-Dichlorobenzene	ND		0.00140	0.000467	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
Dichlorodifluoromethane	ND		0.00140	0.000698	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
1,1-Dichloroethane	ND		0.00140	0.000467	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
1,2-Dichloroethane	ND		0.00140	0.000467	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
1,1-Dichloroethene	ND		0.00140	0.000398	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
1,2-Dichloropropane	ND		0.00140	0.000656	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
1,3-Dichloropropane	ND		0.00140	0.000656	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
2,2-Dichloropropane	ND		0.00140	0.000467	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
1,1-Dichloropropene	ND		0.00140	0.000356	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
Diisopropyl ether	ND		0.00140	0.000467	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
Ethylbenzene	ND		0.00140	0.000467	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
Ethyl tert-butyl ether	ND		0.00349	0.000698	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
Hexachlorobutadiene	ND		0.00349	0.000795	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
2-Hexanone	ND		0.0349	0.0117	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
Isopropylbenzene	ND		0.00140	0.000286	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
Methylene Chloride	ND		0.00698	0.000600	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
4-Methyl-2-pentanone (MIBK)	ND		0.0349	0.00133	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
Methyl tert-butyl ether	ND		0.00140	0.000670	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
Naphthalene	ND		0.00349	0.00119	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
n-Butylbenzene	ND		0.00140	0.000684	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
N-Propylbenzene	ND		0.00140	0.000467	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
p-Isopropyltoluene	ND		0.00140	0.000467	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
sec-Butylbenzene	ND		0.00140	0.000467	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
Styrene	ND		0.00140	0.000768	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
t-Amyl alcohol	ND		0.0140	0.00649	mg/Kg		09/01/16 10:00	09/13/16 15:38	1

Client Sample ID: SB-15

Date Collected: 09/01/16 10:00
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-15

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl methyl ether	ND		0.00140	0.000216	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
tert-Butyl alcohol (TBA)	ND		0.0349	0.00781	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
tert-Butylbenzene	ND		0.00140	0.000628	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
1,1,1,2-Tetrachloroethane	ND		0.00140	0.000467	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
1,1,2,2-Tetrachloroethane	ND		0.00140	0.000698	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
Tetrachloroethene	ND		0.00140	0.000509	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
Toluene	ND		0.00140	0.000516	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
trans-1,2-Dichloroethene	ND		0.00140	0.000467	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
trans-1,3-Dichloropropene	ND		0.00140	0.000467	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
1,2,3-Trichlorobenzene	ND		0.00140	0.000265	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
1,2,4-Trichlorobenzene	ND		0.00140	0.000467	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
1,1,1-Trichloroethane	ND		0.00140	0.000642	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
1,1,2-Trichloroethane	ND		0.00349	0.000977	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
Trichloroethene	ND		0.00140	0.000670	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
Trichlorofluoromethane	ND		0.00140	0.000698	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
1,2,3-Trichloropropane	ND		0.00140	0.000384	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
1,2,4-Trimethylbenzene	ND		0.00140	0.000698	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
1,3,5-Trimethylbenzene	ND		0.00140	0.000523	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
Vinyl chloride	ND		0.00140	0.000768	mg/Kg		09/01/16 10:00	09/13/16 15:38	1
Xylenes, Total	ND		0.00419	0.000858	mg/Kg		09/01/16 10:00	09/13/16 15:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*09/01/16 10:00*	*09/13/16 15:38*	*1*
Dibromofluoromethane (Surr)	*115*		*70 - 130*	*09/01/16 10:00*	*09/13/16 15:38*	*1*
1,2-Dichloroethane-d4 (Surr)	*119*		*70 - 130*	*09/01/16 10:00*	*09/13/16 15:38*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*	*09/01/16 10:00*	*09/13/16 15:38*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0654	0.0312	mg/Kg		09/08/16 10:22	09/09/16 19:39	1
Acenaphthylene	ND		0.0654	0.0283	mg/Kg		09/08/16 10:22	09/09/16 19:39	1
Anthracene	ND		0.0654	0.0283	mg/Kg		09/08/16 10:22	09/09/16 19:39	1
Benzo[a]anthracene	ND		0.0654	0.0293	mg/Kg		09/08/16 10:22	09/09/16 19:39	1
Benzo[a]pyrene	ND		0.0654	0.0264	mg/Kg		09/08/16 10:22	09/09/16 19:39	1
Benzo[b]fluoranthene	ND		0.0654	0.0273	mg/Kg		09/08/16 10:22	09/09/16 19:39	1
Benzo[g,h,i]perylene	ND		0.0654	0.0322	mg/Kg		09/08/16 10:22	09/09/16 19:39	1
Benzo[k]fluoranthene	ND		0.0654	0.0264	mg/Kg		09/08/16 10:22	09/09/16 19:39	1
Chrysene	ND		0.0654	0.0361	mg/Kg		09/08/16 10:22	09/09/16 19:39	1
Dibenz(a,h)anthracene	ND		0.0654	0.0312	mg/Kg		09/08/16 10:22	09/09/16 19:39	1
Fluoranthene	ND		0.0654	0.0332	mg/Kg		09/08/16 10:22	09/09/16 19:39	1
Fluorene	ND		0.0654	0.0283	mg/Kg		09/08/16 10:22	09/09/16 19:39	1
Indeno[1,2,3-cd]pyrene	ND		0.0654	0.0283	mg/Kg		09/08/16 10:22	09/09/16 19:39	1
1-Methylnaphthalene	ND		0.0654	0.0273	mg/Kg		09/08/16 10:22	09/09/16 19:39	1
2-Methylnaphthalene	ND		0.0654	0.0254	mg/Kg		09/08/16 10:22	09/09/16 19:39	1
Naphthalene	ND		0.0654	0.0283	mg/Kg		09/08/16 10:22	09/09/16 19:39	1
Phenanthrene	ND		0.0654	0.0332	mg/Kg		09/08/16 10:22	09/09/16 19:39	1
Pyrene	ND		0.0654	0.0332	mg/Kg		09/08/16 10:22	09/09/16 19:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*52*		*29 - 120*	*09/08/16 10:22*	*09/09/16 19:39*	*1*

Client Sample ID: SB-15

Lab Sample ID: 490-111143-15

Date Collected: 09/01/16 10:00

Matrix: Solid

Date Received: 09/03/16 10:10

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*52*		*27 - 120*	*09/08/16 10:22*	*09/09/16 19:39*	*1*
Terphenyl-d14 (Surr)	*67*		*13 - 120*	*09/08/16 10:22*	*09/09/16 19:39*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		3.58	1.79	mg/Kg		09/01/16 10:00	09/07/16 01:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*110*		*50 - 150*	*09/01/16 10:00*	*09/07/16 01:27*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.91	2.46	mg/Kg		09/08/16 11:38	09/09/16 18:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*103*		*50 - 150*	*09/08/16 11:38*	*09/09/16 18:45*	*1*

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-16

Date Collected: 09/01/16 10:35
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-16

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.0344	0.00578	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
Benzene	ND		0.00138	0.000461	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
Bromobenzene	ND		0.00138	0.000495	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
Bromochloromethane	ND		0.00138	0.000378	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
Bromodichloromethane	ND		0.00138	0.000378	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
Bromoform	ND		0.00138	0.000378	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
Bromomethane	ND		0.00138	0.000826	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
2-Butanone (MEK)	ND		0.0344	0.00351	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
Carbon disulfide	ND		0.00344	0.00248	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
Carbon tetrachloride	ND	*	0.00138	0.000461	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
Chlorobenzene	ND		0.00138	0.000461	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
Chlorodibromomethane	ND		0.00138	0.000234	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
Chloroethane	ND		0.00344	0.00131	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
Chloroform	ND		0.00138	0.000461	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
Chloromethane	ND		0.00138	0.000461	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
2-Chlorotoluene	ND		0.00138	0.000612	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
4-Chlorotoluene	ND		0.00138	0.000578	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
cis-1,2-Dichloroethene	ND		0.00138	0.000461	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
cis-1,3-Dichloropropene	ND		0.00138	0.000461	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
1,2-Dibromo-3-Chloropropane	ND		0.00344	0.000482	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
1,2-Dibromoethane (EDB)	ND		0.00138	0.000688	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
Dibromomethane	ND		0.00138	0.000385	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
1,2-Dichlorobenzene	ND		0.00138	0.000234	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
1,3-Dichlorobenzene	ND		0.00138	0.000461	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
1,4-Dichlorobenzene	ND		0.00138	0.000461	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
Dichlorodifluoromethane	ND		0.00138	0.000688	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
1,1-Dichloroethane	ND		0.00138	0.000461	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
1,2-Dichloroethane	ND		0.00138	0.000461	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
1,1-Dichloroethene	ND		0.00138	0.000392	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
1,2-Dichloropropane	ND		0.00138	0.000647	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
1,3-Dichloropropane	ND		0.00138	0.000647	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
2,2-Dichloropropane	ND		0.00138	0.000461	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
1,1-Dichloropropene	ND		0.00138	0.000351	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
Diisopropyl ether	ND		0.00138	0.000461	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
Ethylbenzene	ND		0.00138	0.000461	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
Ethyl tert-butyl ether	ND		0.00344	0.000688	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
Hexachlorobutadiene	ND		0.00344	0.000784	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
2-Hexanone	ND		0.0344	0.0115	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
Isopropylbenzene	ND		0.00138	0.000282	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
Methylene Chloride	ND		0.00688	0.000592	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
4-Methyl-2-pentanone (MIBK)	ND		0.0344	0.00131	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
Methyl tert-butyl ether	ND		0.00138	0.000660	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
Naphthalene	ND		0.00344	0.00117	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
n-Butylbenzene	ND		0.00138	0.000674	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
N-Propylbenzene	ND		0.00138	0.000461	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
p-Isopropyltoluene	ND		0.00138	0.000461	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
sec-Butylbenzene	ND		0.00138	0.000461	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
Styrene	ND		0.00138	0.000757	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
t-Amyl alcohol	ND		0.0138	0.00640	mg/Kg		09/01/16 10:35	09/13/16 16:05	1

Client Sample ID: SB-16

Date Collected: 09/01/16 10:35
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-16

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl methyl ether	ND		0.00138	0.000213	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
tert-Butyl alcohol (TBA)	ND		0.0344	0.00771	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
tert-Butylbenzene	ND		0.00138	0.000619	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
1,1,1,2-Tetrachloroethane	ND		0.00138	0.000461	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
1,1,2,2-Tetrachloroethane	ND		0.00138	0.000688	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
Tetrachloroethene	ND		0.00138	0.000502	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
Toluene	ND		0.00138	0.000509	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
trans-1,2-Dichloroethene	ND		0.00138	0.000461	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
trans-1,3-Dichloropropene	ND		0.00138	0.000461	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
1,2,3-Trichlorobenzene	ND		0.00138	0.000261	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
1,2,4-Trichlorobenzene	ND		0.00138	0.000461	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
1,1,1-Trichloroethane	ND		0.00138	0.000633	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
1,1,2-Trichloroethane	ND		0.00344	0.000963	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
Trichloroethene	ND		0.00138	0.000660	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
Trichlorofluoromethane	ND		0.00138	0.000688	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
1,2,3-Trichloropropane	ND		0.00138	0.000378	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
1,2,4-Trimethylbenzene	ND		0.00138	0.000688	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
1,3,5-Trimethylbenzene	ND		0.00138	0.000516	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
Vinyl chloride	ND		0.00138	0.000757	mg/Kg		09/01/16 10:35	09/13/16 16:05	1
Xylenes, Total	ND		0.00413	0.000846	mg/Kg		09/01/16 10:35	09/13/16 16:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*09/01/16 10:35*	*09/13/16 16:05*	*1*
Dibromofluoromethane (Surr)	*114*		*70 - 130*	*09/01/16 10:35*	*09/13/16 16:05*	*1*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 130*	*09/01/16 10:35*	*09/13/16 16:05*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*	*09/01/16 10:35*	*09/13/16 16:05*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0668	0.0319	mg/Kg		09/08/16 10:22	09/09/16 19:59	1
Acenaphthylene	ND		0.0668	0.0289	mg/Kg		09/08/16 10:22	09/09/16 19:59	1
Anthracene	ND		0.0668	0.0289	mg/Kg		09/08/16 10:22	09/09/16 19:59	1
Benzo[a]anthracene	ND		0.0668	0.0299	mg/Kg		09/08/16 10:22	09/09/16 19:59	1
Benzo[a]pyrene	ND		0.0668	0.0269	mg/Kg		09/08/16 10:22	09/09/16 19:59	1
Benzo[b]fluoranthene	ND		0.0668	0.0279	mg/Kg		09/08/16 10:22	09/09/16 19:59	1
Benzo[g,h,i]perylene	ND		0.0668	0.0329	mg/Kg		09/08/16 10:22	09/09/16 19:59	1
Benzo[k]fluoranthene	ND		0.0668	0.0269	mg/Kg		09/08/16 10:22	09/09/16 19:59	1
Chrysene	ND		0.0668	0.0369	mg/Kg		09/08/16 10:22	09/09/16 19:59	1
Dibenz(a,h)anthracene	ND		0.0668	0.0319	mg/Kg		09/08/16 10:22	09/09/16 19:59	1
Fluoranthene	ND		0.0668	0.0339	mg/Kg		09/08/16 10:22	09/09/16 19:59	1
Fluorene	ND		0.0668	0.0289	mg/Kg		09/08/16 10:22	09/09/16 19:59	1
Indeno[1,2,3-cd]pyrene	ND		0.0668	0.0289	mg/Kg		09/08/16 10:22	09/09/16 19:59	1
1-Methylnaphthalene	ND		0.0668	0.0279	mg/Kg		09/08/16 10:22	09/09/16 19:59	1
2-Methylnaphthalene	ND		0.0668	0.0259	mg/Kg		09/08/16 10:22	09/09/16 19:59	1
Naphthalene	ND		0.0668	0.0289	mg/Kg		09/08/16 10:22	09/09/16 19:59	1
Phenanthrene	ND		0.0668	0.0339	mg/Kg		09/08/16 10:22	09/09/16 19:59	1
Pyrene	ND		0.0668	0.0339	mg/Kg		09/08/16 10:22	09/09/16 19:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*58*		*29 - 120*	*09/08/16 10:22*	*09/09/16 19:59*	*1*

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-16

Lab Sample ID: 490-111143-16

Date Collected: 09/01/16 10:35
Matrix: Solid
Date Received: 09/03/16 10:10

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*61*		*27 - 120*	*09/08/16 10:22*	*09/09/16 19:59*	*1*
Terphenyl-d14 (Surr)	*69*		*13 - 120*	*09/08/16 10:22*	*09/09/16 19:59*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		3.53	1.76	mg/Kg		09/01/16 10:35	09/07/16 02:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*108*		*50 - 150*	*09/01/16 10:35*	*09/07/16 02:00*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.95	2.47	mg/Kg		09/08/16 11:38	09/09/16 19:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*84*		*50 - 150*	*09/08/16 11:38*	*09/09/16 19:04*	*1*

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-17

Date Collected: 09/01/16 11:00
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-17

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**0.0773**		0.0409	0.00687	mg/Kg		09/01/16 11:00	09/13/16 16:33	1
Benzene	ND		0.00164	0.000548	mg/Kg		09/01/16 11:00	09/13/16 16:33	1
Bromobenzene	ND		0.0825	0.0297	mg/Kg		09/01/16 11:00	09/14/16 13:53	1
Bromochloromethane	ND		0.00164	0.000450	mg/Kg		09/01/16 11:00	09/13/16 16:33	1
Bromodichloromethane	ND		0.00164	0.000450	mg/Kg		09/01/16 11:00	09/13/16 16:33	1
Bromoform	ND		0.00164	0.000450	mg/Kg		09/01/16 11:00	09/13/16 16:33	1
Bromomethane	ND		0.00164	0.000982	mg/Kg		09/01/16 11:00	09/13/16 16:33	1
2-Butanone (MEK)	ND		0.0409	0.00417	mg/Kg		09/01/16 11:00	09/13/16 16:33	1
Carbon disulfide	ND		0.00409	0.00295	mg/Kg		09/01/16 11:00	09/13/16 16:33	1
Carbon tetrachloride	ND	*	0.00164	0.000548	mg/Kg		09/01/16 11:00	09/13/16 16:33	1
Chlorobenzene	ND		0.00164	0.000548	mg/Kg		09/01/16 11:00	09/13/16 16:33	1
Chlorodibromomethane	ND		0.00164	0.000278	mg/Kg		09/01/16 11:00	09/13/16 16:33	1
Chloroethane	ND		0.00409	0.00155	mg/Kg		09/01/16 11:00	09/13/16 16:33	1
Chloroform	ND		0.00164	0.000548	mg/Kg		09/01/16 11:00	09/13/16 16:33	1
Chloromethane	ND		0.00164	0.000548	mg/Kg		09/01/16 11:00	09/13/16 16:33	1
2-Chlorotoluene	ND		0.0825	0.0380	mg/Kg		09/01/16 11:00	09/14/16 13:53	1
4-Chlorotoluene	ND		0.0825	0.0347	mg/Kg		09/01/16 11:00	09/14/16 13:53	1
cis-1,2-Dichloroethene	ND		0.00164	0.000548	mg/Kg		09/01/16 11:00	09/13/16 16:33	1
cis-1,3-Dichloropropene	ND		0.00164	0.000548	mg/Kg		09/01/16 11:00	09/13/16 16:33	1
1,2-Dibromo-3-Chloropropane	ND		0.206	0.0289	mg/Kg		09/01/16 11:00	09/14/16 13:53	1
1,2-Dibromoethane (EDB)	ND		0.00164	0.000818	mg/Kg		09/01/16 11:00	09/13/16 16:33	1
Dibromomethane	ND		0.00164	0.000458	mg/Kg		09/01/16 11:00	09/13/16 16:33	1
1,2-Dichlorobenzene	ND		0.0825	0.0140	mg/Kg		09/01/16 11:00	09/14/16 13:53	1
1,3-Dichlorobenzene	ND		0.0825	0.0281	mg/Kg		09/01/16 11:00	09/14/16 13:53	1
1,4-Dichlorobenzene	ND		0.0825	0.0388	mg/Kg		09/01/16 11:00	09/14/16 13:53	1
Dichlorodifluoromethane	ND		0.00164	0.000818	mg/Kg		09/01/16 11:00	09/13/16 16:33	1
1,1-Dichloroethane	ND		0.00164	0.000548	mg/Kg		09/01/16 11:00	09/13/16 16:33	1
1,2-Dichloroethane	ND		0.00164	0.000548	mg/Kg		09/01/16 11:00	09/13/16 16:33	1
1,1-Dichloroethene	ND		0.00164	0.000466	mg/Kg		09/01/16 11:00	09/13/16 16:33	1
1,2-Dichloropropane	ND		0.00164	0.000769	mg/Kg		09/01/16 11:00	09/13/16 16:33	1
1,3-Dichloropropane	ND		0.00164	0.000769	mg/Kg		09/01/16 11:00	09/13/16 16:33	1
2,2-Dichloropropane	ND		0.00164	0.000548	mg/Kg		09/01/16 11:00	09/13/16 16:33	1
1,1-Dichloropropene	ND		0.00164	0.000417	mg/Kg		09/01/16 11:00	09/13/16 16:33	1
Diisopropyl ether	ND		0.00164	0.000548	mg/Kg		09/01/16 11:00	09/13/16 16:33	1
Ethylbenzene	ND		0.00164	0.000548	mg/Kg		09/01/16 11:00	09/13/16 16:33	1
Ethyl tert-butyl ether	ND		0.00409	0.000818	mg/Kg		09/01/16 11:00	09/13/16 16:33	1
Hexachlorobutadiene	ND		0.206	0.0454	mg/Kg		09/01/16 11:00	09/14/16 13:53	1
2-Hexanone	ND		0.0409	0.0137	mg/Kg		09/01/16 11:00	09/13/16 16:33	1
Isopropylbenzene	ND		0.00164	0.000336	mg/Kg		09/01/16 11:00	09/13/16 16:33	1
Methylene Chloride	ND		0.00818	0.000704	mg/Kg		09/01/16 11:00	09/13/16 16:33	1
4-Methyl-2-pentanone (MIBK)	ND		0.0409	0.00155	mg/Kg		09/01/16 11:00	09/13/16 16:33	1
Methyl tert-butyl ether	ND		0.00164	0.000786	mg/Kg		09/01/16 11:00	09/13/16 16:33	1
Naphthalene	ND		0.206	0.0701	mg/Kg		09/01/16 11:00	09/14/16 13:53	1
n-Butylbenzene	ND		0.0825	0.0413	mg/Kg		09/01/16 11:00	09/14/16 13:53	1
N-Propylbenzene	ND		0.0825	0.0281	mg/Kg		09/01/16 11:00	09/14/16 13:53	1
p-Isopropyltoluene	ND		0.0825	0.0281	mg/Kg		09/01/16 11:00	09/14/16 13:53	1
sec-Butylbenzene	ND		0.0825	0.0281	mg/Kg		09/01/16 11:00	09/14/16 13:53	1
Styrene	ND		0.00164	0.000900	mg/Kg		09/01/16 11:00	09/13/16 16:33	1
t-Amyl alcohol	ND		0.0164	0.00761	mg/Kg		09/01/16 11:00	09/13/16 16:33	1

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-17

Date Collected: 09/01/16 11:00
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-17

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl methyl ether	ND		0.00164	0.000254	mg/Kg		09/01/16 11:00	09/13/16 16:33	1
tert-Butyl alcohol (TBA)	ND		0.0409	0.00917	mg/Kg		09/01/16 11:00	09/13/16 16:33	1
tert-Butylbenzene	ND		0.0825	0.0413	mg/Kg		09/01/16 11:00	09/14/16 13:53	1
1,1,1,2-Tetrachloroethane	ND		0.00164	0.000548	mg/Kg		09/01/16 11:00	09/13/16 16:33	1
1,1,2,2-Tetrachloroethane	ND		0.0825	0.0413	mg/Kg		09/01/16 11:00	09/14/16 13:53	1
Tetrachloroethene	ND		0.00164	0.000597	mg/Kg		09/01/16 11:00	09/13/16 16:33	1
Toluene	ND		0.00164	0.000606	mg/Kg		09/01/16 11:00	09/13/16 16:33	1
trans-1,2-Dichloroethene	ND		0.00164	0.000548	mg/Kg		09/01/16 11:00	09/13/16 16:33	1
trans-1,3-Dichloropropene	ND		0.00164	0.000548	mg/Kg		09/01/16 11:00	09/13/16 16:33	1
1,2,3-Trichlorobenzene	ND		0.0825	0.0157	mg/Kg		09/01/16 11:00	09/14/16 13:53	1
1,2,4-Trichlorobenzene	ND		0.0825	0.0281	mg/Kg		09/01/16 11:00	09/14/16 13:53	1
1,1,1-Trichloroethane	ND		0.00164	0.000753	mg/Kg		09/01/16 11:00	09/13/16 16:33	1
1,1,2-Trichloroethane	ND		0.00409	0.00115	mg/Kg		09/01/16 11:00	09/13/16 16:33	1
Trichloroethene	ND		0.00164	0.000786	mg/Kg		09/01/16 11:00	09/13/16 16:33	1
Trichlorofluoromethane	ND		0.00164	0.000818	mg/Kg		09/01/16 11:00	09/13/16 16:33	1
1,2,3-Trichloropropane	ND		0.0825	0.0231	mg/Kg		09/01/16 11:00	09/14/16 13:53	1
1,2,4-Trimethylbenzene	ND		0.0825	0.0413	mg/Kg		09/01/16 11:00	09/14/16 13:53	1
1,3,5-Trimethylbenzene	ND		0.0825	0.0314	mg/Kg		09/01/16 11:00	09/14/16 13:53	1
Vinyl chloride	ND		0.00164	0.000900	mg/Kg		09/01/16 11:00	09/13/16 16:33	1
Xylenes, Total	ND		0.00491	0.00101	mg/Kg		09/01/16 11:00	09/13/16 16:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*182*	*X **	*70 - 130*	*09/01/16 11:00*	*09/13/16 16:33*	*1*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*09/01/16 11:00*	*09/14/16 13:53*	*1*
Dibromofluoromethane (Surr)	*118*		*70 - 130*	*09/01/16 11:00*	*09/13/16 16:33*	*1*
Dibromofluoromethane (Surr)	*89*		*70 - 130*	*09/01/16 11:00*	*09/14/16 13:53*	*1*
1,2-Dichloroethane-d4 (Surr)	*115*		*70 - 130*	*09/01/16 11:00*	*09/13/16 16:33*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*	*09/01/16 11:00*	*09/14/16 13:53*	*1*
Toluene-d8 (Surr)	*139*	*X*	*70 - 130*	*09/01/16 11:00*	*09/13/16 16:33*	*1*
Toluene-d8 (Surr)	*93*		*70 - 130*	*09/01/16 11:00*	*09/14/16 13:53*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0667	0.0319	mg/Kg		09/08/16 10:22	09/09/16 20:19	1
Acenaphthylene	ND		0.0667	0.0289	mg/Kg		09/08/16 10:22	09/09/16 20:19	1
Anthracene	ND		0.0667	0.0289	mg/Kg		09/08/16 10:22	09/09/16 20:19	1
Benzo[a]anthracene	ND		0.0667	0.0299	mg/Kg		09/08/16 10:22	09/09/16 20:19	1
Benzo[a]pyrene	ND		0.0667	0.0269	mg/Kg		09/08/16 10:22	09/09/16 20:19	1
Benzo[b]fluoranthene	ND		0.0667	0.0279	mg/Kg		09/08/16 10:22	09/09/16 20:19	1
Benzo[g,h,i]perylene	ND		0.0667	0.0328	mg/Kg		09/08/16 10:22	09/09/16 20:19	1
Benzo[k]fluoranthene	ND		0.0667	0.0269	mg/Kg		09/08/16 10:22	09/09/16 20:19	1
Chrysene	ND		0.0667	0.0368	mg/Kg		09/08/16 10:22	09/09/16 20:19	1
Dibenz(a,h)anthracene	ND		0.0667	0.0319	mg/Kg		09/08/16 10:22	09/09/16 20:19	1
Fluoranthene	ND		0.0667	0.0338	mg/Kg		09/08/16 10:22	09/09/16 20:19	1
Fluorene	ND		0.0667	0.0289	mg/Kg		09/08/16 10:22	09/09/16 20:19	1
Indeno[1,2,3-cd]pyrene	ND		0.0667	0.0289	mg/Kg		09/08/16 10:22	09/09/16 20:19	1
1-Methylnaphthalene	ND		0.0667	0.0279	mg/Kg		09/08/16 10:22	09/09/16 20:19	1
2-Methylnaphthalene	ND		0.0667	0.0259	mg/Kg		09/08/16 10:22	09/09/16 20:19	1
Naphthalene	ND		0.0667	0.0289	mg/Kg		09/08/16 10:22	09/09/16 20:19	1
Phenanthrene	ND		0.0667	0.0338	mg/Kg		09/08/16 10:22	09/09/16 20:19	1

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-17

Date Collected: 09/01/16 11:00
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-17

Matrix: Solid

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	ND		0.0667	0.0338	mg/Kg		09/08/16 10:22	09/09/16 20:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*59*		*29 - 120*	*09/08/16 10:22*	*09/09/16 20:19*	*1*
Nitrobenzene-d5 (Surr)	*60*		*27 - 120*	*09/08/16 10:22*	*09/09/16 20:19*	*1*
Terphenyl-d14 (Surr)	*68*		*13 - 120*	*09/08/16 10:22*	*09/09/16 20:19*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.69	2.85	mg/Kg		09/01/16 11:00	09/07/16 02:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*107*		*50 - 150*	*09/01/16 11:00*	*09/07/16 02:33*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**5.33**		4.94	2.47	mg/Kg		09/08/16 11:38	09/09/16 19:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*104*		*50 - 150*	*09/08/16 11:38*	*09/09/16 19:23*	*1*

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-18

Date Collected: 09/01/16 11:20
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-18

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.0378	0.00635	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
Benzene	ND		0.00151	0.000506	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
Bromobenzene	ND		0.00151	0.000544	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
Bromochloromethane	ND		0.00151	0.000416	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
Bromodichloromethane	ND		0.00151	0.000416	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
Bromoform	ND		0.00151	0.000416	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
Bromomethane	ND		0.00151	0.000907	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
2-Butanone (MEK)	ND		0.0378	0.00385	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
Carbon disulfide	ND		0.00378	0.00272	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
Carbon tetrachloride	ND	*	0.00151	0.000506	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
Chlorobenzene	ND		0.00151	0.000506	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
Chlorodibromomethane	ND		0.00151	0.000257	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
Chloroethane	ND		0.00378	0.00144	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
Chloroform	ND		0.00151	0.000506	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
Chloromethane	ND		0.00151	0.000506	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
2-Chlorotoluene	ND		0.00151	0.000673	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
4-Chlorotoluene	ND		0.00151	0.000635	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
cis-1,2-Dichloroethene	ND		0.00151	0.000506	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
cis-1,3-Dichloropropene	ND		0.00151	0.000506	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
1,2-Dibromo-3-Chloropropane	ND		0.00378	0.000529	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
1,2-Dibromoethane (EDB)	ND		0.00151	0.000756	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
Dibromomethane	ND		0.00151	0.000423	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
1,2-Dichlorobenzene	ND		0.00151	0.000257	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
1,3-Dichlorobenzene	ND		0.00151	0.000506	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
1,4-Dichlorobenzene	ND		0.00151	0.000506	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
Dichlorodifluoromethane	ND		0.00151	0.000756	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
1,1-Dichloroethane	ND		0.00151	0.000506	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
1,2-Dichloroethane	ND		0.00151	0.000506	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
1,1-Dichloroethene	ND		0.00151	0.000431	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
1,2-Dichloropropane	ND		0.00151	0.000711	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
1,3-Dichloropropane	ND		0.00151	0.000711	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
2,2-Dichloropropane	ND		0.00151	0.000506	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
1,1-Dichloropropene	ND		0.00151	0.000385	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
Diisopropyl ether	ND		0.00151	0.000506	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
Ethylbenzene	ND		0.00151	0.000506	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
Ethyl tert-butyl ether	ND		0.00378	0.000756	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
Hexachlorobutadiene	ND		0.00378	0.000862	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
2-Hexanone	ND		0.0378	0.0126	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
Isopropylbenzene	ND		0.00151	0.000310	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
Methylene Chloride	ND		0.00756	0.000650	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
4-Methyl-2-pentanone (MIBK)	ND		0.0378	0.00144	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
Methyl tert-butyl ether	ND		0.00151	0.000726	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
Naphthalene	ND		0.00378	0.00128	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
n-Butylbenzene	ND		0.00151	0.000741	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
N-Propylbenzene	ND		0.00151	0.000506	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
p-Isopropyltoluene	ND		0.00151	0.000506	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
sec-Butylbenzene	ND		0.00151	0.000506	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
Styrene	ND		0.00151	0.000831	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
t-Amyl alcohol	ND		0.0151	0.00703	mg/Kg		09/01/16 11:20	09/13/16 17:00	1

Client Sample ID: SB-18

Date Collected: 09/01/16 11:20
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-18

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl methyl ether	ND		0.00151	0.000234	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
tert-Butyl alcohol (TBA)	ND		0.0378	0.00847	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
tert-Butylbenzene	ND		0.00151	0.000680	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
1,1,1,2-Tetrachloroethane	ND		0.00151	0.000506	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
1,1,2,2-Tetrachloroethane	ND		0.00151	0.000756	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
Tetrachloroethene	ND		0.00151	0.000552	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
Toluene	ND		0.00151	0.000559	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
trans-1,2-Dichloroethene	ND		0.00151	0.000506	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
trans-1,3-Dichloropropene	ND		0.00151	0.000506	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
1,2,3-Trichlorobenzene	ND		0.00151	0.000287	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
1,2,4-Trichlorobenzene	ND		0.00151	0.000506	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
1,1,1-Trichloroethane	ND		0.00151	0.000695	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
1,1,2-Trichloroethane	ND		0.00378	0.00106	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
Trichloroethene	ND		0.00151	0.000726	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
Trichlorofluoromethane	ND		0.00151	0.000756	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
1,2,3-Trichloropropane	ND		0.00151	0.000416	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
1,2,4-Trimethylbenzene	ND		0.00151	0.000756	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
1,3,5-Trimethylbenzene	ND		0.00151	0.000567	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
Vinyl chloride	ND		0.00151	0.000831	mg/Kg		09/01/16 11:20	09/13/16 17:00	1
Xylenes, Total	ND		0.00454	0.000930	mg/Kg		09/01/16 11:20	09/13/16 17:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*09/01/16 11:20*	*09/13/16 17:00*	*1*
Dibromofluoromethane (Surr)	*119*		*70 - 130*	*09/01/16 11:20*	*09/13/16 17:00*	*1*
1,2-Dichloroethane-d4 (Surr)	*119*		*70 - 130*	*09/01/16 11:20*	*09/13/16 17:00*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*	*09/01/16 11:20*	*09/13/16 17:00*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0662	0.0316	mg/Kg		09/08/16 10:22	09/09/16 20:39	1
Acenaphthylene	ND		0.0662	0.0286	mg/Kg		09/08/16 10:22	09/09/16 20:39	1
Anthracene	ND		0.0662	0.0286	mg/Kg		09/08/16 10:22	09/09/16 20:39	1
Benzo[a]anthracene	ND		0.0662	0.0296	mg/Kg		09/08/16 10:22	09/09/16 20:39	1
Benzo[a]pyrene	ND		0.0662	0.0267	mg/Kg		09/08/16 10:22	09/09/16 20:39	1
Benzo[b]fluoranthene	ND		0.0662	0.0276	mg/Kg		09/08/16 10:22	09/09/16 20:39	1
Benzo[g,h,i]perylene	ND		0.0662	0.0326	mg/Kg		09/08/16 10:22	09/09/16 20:39	1
Benzo[k]fluoranthene	ND		0.0662	0.0267	mg/Kg		09/08/16 10:22	09/09/16 20:39	1
Chrysene	ND		0.0662	0.0365	mg/Kg		09/08/16 10:22	09/09/16 20:39	1
Dibenz(a,h)anthracene	ND		0.0662	0.0316	mg/Kg		09/08/16 10:22	09/09/16 20:39	1
Fluoranthene	ND		0.0662	0.0336	mg/Kg		09/08/16 10:22	09/09/16 20:39	1
Fluorene	ND		0.0662	0.0286	mg/Kg		09/08/16 10:22	09/09/16 20:39	1
Indeno[1,2,3-cd]pyrene	ND		0.0662	0.0286	mg/Kg		09/08/16 10:22	09/09/16 20:39	1
1-Methylnaphthalene	ND		0.0662	0.0276	mg/Kg		09/08/16 10:22	09/09/16 20:39	1
2-Methylnaphthalene	ND		0.0662	0.0257	mg/Kg		09/08/16 10:22	09/09/16 20:39	1
Naphthalene	ND		0.0662	0.0286	mg/Kg		09/08/16 10:22	09/09/16 20:39	1
Phenanthrene	ND		0.0662	0.0336	mg/Kg		09/08/16 10:22	09/09/16 20:39	1
Pyrene	ND		0.0662	0.0336	mg/Kg		09/08/16 10:22	09/09/16 20:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*41*		*29 - 120*	*09/08/16 10:22*	*09/09/16 20:39*	*1*

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-18
Date Collected: 09/01/16 11:20
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-18
Matrix: Solid

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	43		27 - 120	09/08/16 10:22	09/09/16 20:39	1
Terphenyl-d14 (Surr)	54		13 - 120	09/08/16 10:22	09/09/16 20:39	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.17	2.08	mg/Kg		09/01/16 11:20	09/07/16 03:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	107		50 - 150	09/01/16 11:20	09/07/16 03:06	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.96	2.48	mg/Kg		09/08/16 11:38	09/09/16 19:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	122		50 - 150	09/08/16 11:38	09/09/16 19:41	1

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-19

Date Collected: 09/01/16 11:45
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-19

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.0493	0.00828	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
Benzene	ND		0.00197	0.000661	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
Bromobenzene	ND		0.00197	0.000710	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
Bromochloromethane	ND		0.00197	0.000542	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
Bromodichloromethane	ND		0.00197	0.000542	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
Bromoform	ND		0.00197	0.000542	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
Bromomethane	ND		0.00197	0.00118	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
2-Butanone (MEK)	ND		0.0493	0.00503	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
Carbon disulfide	ND		0.00493	0.00355	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
Carbon tetrachloride	ND	*	0.00197	0.000661	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
Chlorobenzene	ND		0.00197	0.000661	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
Chlorodibromomethane	ND		0.00197	0.000335	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
Chloroethane	ND		0.00493	0.00187	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
Chloroform	ND		0.00197	0.000661	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
Chloromethane	ND		0.00197	0.000661	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
2-Chlorotoluene	ND		0.00197	0.000878	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
4-Chlorotoluene	ND		0.00197	0.000828	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
cis-1,2-Dichloroethene	ND		0.00197	0.000661	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
cis-1,3-Dichloropropene	ND		0.00197	0.000661	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
1,2-Dibromo-3-Chloropropane	ND		0.00493	0.000690	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
1,2-Dibromoethane (EDB)	ND		0.00197	0.000986	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
Dibromomethane	ND		0.00197	0.000552	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
1,2-Dichlorobenzene	ND		0.00197	0.000335	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
1,3-Dichlorobenzene	ND		0.00197	0.000661	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
1,4-Dichlorobenzene	ND		0.00197	0.000661	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
Dichlorodifluoromethane	ND		0.00197	0.000986	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
1,1-Dichloroethane	ND		0.00197	0.000661	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
1,2-Dichloroethane	ND		0.00197	0.000661	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
1,1-Dichloroethene	ND		0.00197	0.000562	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
1,2-Dichloropropane	ND		0.00197	0.000927	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
1,3-Dichloropropane	ND		0.00197	0.000927	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
2,2-Dichloropropane	ND		0.00197	0.000661	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
1,1-Dichloropropene	ND		0.00197	0.000503	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
Diisopropyl ether	ND		0.00197	0.000661	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
Ethylbenzene	ND		0.00197	0.000661	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
Ethyl tert-butyl ether	ND		0.00493	0.000986	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
Hexachlorobutadiene	ND		0.00493	0.00112	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
2-Hexanone	ND		0.0493	0.0165	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
Isopropylbenzene	ND		0.00197	0.000404	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
Methylene Chloride	ND		0.00986	0.000848	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
4-Methyl-2-pentanone (MIBK)	ND		0.0493	0.00187	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
Methyl tert-butyl ether	ND		0.00197	0.000947	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
Naphthalene	ND		0.00493	0.00168	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
n-Butylbenzene	ND		0.00197	0.000966	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
N-Propylbenzene	ND		0.00197	0.000661	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
p-Isopropyltoluene	ND		0.00197	0.000661	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
sec-Butylbenzene	ND		0.00197	0.000661	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
Styrene	ND		0.00197	0.00108	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
t-Amyl alcohol	ND		0.0197	0.00917	mg/Kg		09/01/16 11:45	09/13/16 17:28	1

Client Sample ID: SB-19

Date Collected: 09/01/16 11:45
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-19

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl methyl ether	ND		0.00197	0.000306	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
tert-Butyl alcohol (TBA)	ND		0.0493	0.0110	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
tert-Butylbenzene	ND		0.00197	0.000888	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
1,1,1,2-Tetrachloroethane	ND		0.00197	0.000661	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
1,1,2,2-Tetrachloroethane	ND		0.00197	0.000986	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
Tetrachloroethene	ND		0.00197	0.000720	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
Toluene	ND		0.00197	0.000730	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
trans-1,2-Dichloroethene	ND		0.00197	0.000661	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
trans-1,3-Dichloropropene	ND		0.00197	0.000661	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
1,2,3-Trichlorobenzene	ND		0.00197	0.000375	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
1,2,4-Trichlorobenzene	ND		0.00197	0.000661	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
1,1,1-Trichloroethane	ND		0.00197	0.000907	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
1,1,2-Trichloroethane	ND		0.00493	0.00138	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
Trichloroethene	ND		0.00197	0.000947	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
Trichlorofluoromethane	ND		0.00197	0.000986	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
1,2,3-Trichloropropane	ND		0.00197	0.000542	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
1,2,4-Trimethylbenzene	ND		0.00197	0.000986	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
1,3,5-Trimethylbenzene	ND		0.00197	0.000740	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
Vinyl chloride	ND		0.00197	0.00108	mg/Kg		09/01/16 11:45	09/13/16 17:28	1
Xylenes, Total	ND		0.00592	0.00121	mg/Kg		09/01/16 11:45	09/13/16 17:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*09/01/16 11:45*	*09/13/16 17:28*	*1*
Dibromofluoromethane (Surr)	*116*		*70 - 130*	*09/01/16 11:45*	*09/13/16 17:28*	*1*
1,2-Dichloroethane-d4 (Surr)	*117*		*70 - 130*	*09/01/16 11:45*	*09/13/16 17:28*	*1*
Toluene-d8 (Surr)	*108*		*70 - 130*	*09/01/16 11:45*	*09/13/16 17:28*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0657	0.0314	mg/Kg		09/08/16 10:22	09/09/16 20:58	1
Acenaphthylene	ND		0.0657	0.0284	mg/Kg		09/08/16 10:22	09/09/16 20:58	1
Anthracene	ND		0.0657	0.0284	mg/Kg		09/08/16 10:22	09/09/16 20:58	1
Benzo[a]anthracene	ND		0.0657	0.0294	mg/Kg		09/08/16 10:22	09/09/16 20:58	1
Benzo[a]pyrene	ND		0.0657	0.0265	mg/Kg		09/08/16 10:22	09/09/16 20:58	1
Benzo[b]fluoranthene	ND		0.0657	0.0275	mg/Kg		09/08/16 10:22	09/09/16 20:58	1
Benzo[g,h,i]perylene	ND		0.0657	0.0324	mg/Kg		09/08/16 10:22	09/09/16 20:58	1
Benzo[k]fluoranthene	ND		0.0657	0.0265	mg/Kg		09/08/16 10:22	09/09/16 20:58	1
Chrysene	ND		0.0657	0.0363	mg/Kg		09/08/16 10:22	09/09/16 20:58	1
Dibenz(a,h)anthracene	ND		0.0657	0.0314	mg/Kg		09/08/16 10:22	09/09/16 20:58	1
Fluoranthene	ND		0.0657	0.0333	mg/Kg		09/08/16 10:22	09/09/16 20:58	1
Fluorene	ND		0.0657	0.0284	mg/Kg		09/08/16 10:22	09/09/16 20:58	1
Indeno[1,2,3-cd]pyrene	ND		0.0657	0.0284	mg/Kg		09/08/16 10:22	09/09/16 20:58	1
1-Methylnaphthalene	ND		0.0657	0.0275	mg/Kg		09/08/16 10:22	09/09/16 20:58	1
2-Methylnaphthalene	ND		0.0657	0.0255	mg/Kg		09/08/16 10:22	09/09/16 20:58	1
Naphthalene	ND		0.0657	0.0284	mg/Kg		09/08/16 10:22	09/09/16 20:58	1
Phenanthrene	ND		0.0657	0.0333	mg/Kg		09/08/16 10:22	09/09/16 20:58	1
Pyrene	ND		0.0657	0.0333	mg/Kg		09/08/16 10:22	09/09/16 20:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*49*		*29 - 120*	*09/08/16 10:22*	*09/09/16 20:58*	*1*

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-19

Date Collected: 09/01/16 11:45
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-19

Matrix: Solid

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*49*		*27 - 120*	*09/08/16 10:22*	*09/09/16 20:58*	*1*
Terphenyl-d14 (Surr)	*70*		*13 - 120*	*09/08/16 10:22*	*09/09/16 20:58*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.09	2.55	mg/Kg		09/01/16 11:45	09/07/16 03:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*108*		*50 - 150*	*09/01/16 11:45*	*09/07/16 03:39*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.84	2.42	mg/Kg		09/08/16 11:38	09/09/16 20:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*91*		*50 - 150*	*09/08/16 11:38*	*09/09/16 20:00*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.0332	0.00998	mg/Kg		09/11/16 10:57	09/13/16 19:40	1
PCB-1221	ND		0.0332	0.00998	mg/Kg		09/11/16 10:57	09/13/16 19:40	1
PCB-1232	ND		0.0332	0.0200	mg/Kg		09/11/16 10:57	09/13/16 19:40	1
PCB-1242	ND		0.0332	0.00998	mg/Kg		09/11/16 10:57	09/13/16 19:40	1
PCB-1248	ND		0.0332	0.00998	mg/Kg		09/11/16 10:57	09/13/16 19:40	1
PCB-1254	ND		0.0332	0.00998	mg/Kg		09/11/16 10:57	09/13/16 19:40	1
PCB-1260	ND		0.0332	0.00998	mg/Kg		09/11/16 10:57	09/13/16 19:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*98*		*20 - 150*	*09/11/16 10:57*	*09/13/16 19:40*	*1*
Tetrachloro-m-xylene	*84*		*19 - 147*	*09/11/16 10:57*	*09/13/16 19:40*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.00	1.20	mg/Kg		09/13/16 13:22	09/13/16 22:57	1
Barium	**18.4**		2.00	1.00	mg/Kg		09/13/16 13:22	09/13/16 22:57	1
Cadmium	ND		1.00	0.100	mg/Kg		09/13/16 13:22	09/13/16 22:57	1
Chromium	**2.20**		1.00	0.900	mg/Kg		09/13/16 13:22	09/13/16 22:57	1
Lead	**1.58**		1.00	0.500	mg/Kg		09/13/16 13:22	09/13/16 22:57	1
Selenium	ND		2.00	1.10	mg/Kg		09/13/16 13:22	09/13/16 22:57	1
Silver	ND		1.00	0.400	mg/Kg		09/13/16 13:22	09/13/16 22:57	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0992	0.0298	mg/Kg		09/06/16 14:59	09/07/16 14:26	1

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-20

Date Collected: 09/01/16 12:50
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-20

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.0462	0.00777	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
Benzene	ND		0.00185	0.000620	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
Bromobenzene	ND		0.00185	0.000666	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
Bromochloromethane	ND		0.00185	0.000509	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
Bromodichloromethane	ND		0.00185	0.000509	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
Bromoform	ND		0.00185	0.000509	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
Bromomethane	ND		0.00185	0.00111	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
2-Butanone (MEK)	ND		0.0462	0.00472	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
Carbon disulfide	ND		0.00462	0.00333	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
Carbon tetrachloride	ND	*	0.00185	0.000620	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
Chlorobenzene	ND		0.00185	0.000620	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
Chlorodibromomethane	ND		0.00185	0.000314	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
Chloroethane	ND		0.00462	0.00176	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
Chloroform	ND		0.00185	0.000620	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
Chloromethane	ND		0.00185	0.000620	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
2-Chlorotoluene	ND		0.00185	0.000823	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
4-Chlorotoluene	ND		0.00185	0.000777	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
cis-1,2-Dichloroethene	ND		0.00185	0.000620	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
cis-1,3-Dichloropropene	ND		0.00185	0.000620	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
1,2-Dibromo-3-Chloropropane	ND		0.00462	0.000647	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
1,2-Dibromoethane (EDB)	ND		0.00185	0.000925	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
Dibromomethane	ND		0.00185	0.000518	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
1,2-Dichlorobenzene	ND		0.00185	0.000314	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
1,3-Dichlorobenzene	ND		0.00185	0.000620	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
1,4-Dichlorobenzene	ND		0.00185	0.000620	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
Dichlorodifluoromethane	ND		0.00185	0.000925	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
1,1-Dichloroethane	ND		0.00185	0.000620	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
1,2-Dichloroethane	ND		0.00185	0.000620	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
1,1-Dichloroethene	ND		0.00185	0.000527	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
1,2-Dichloropropane	ND		0.00185	0.000869	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
1,3-Dichloropropane	ND		0.00185	0.000869	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
2,2-Dichloropropane	ND		0.00185	0.000620	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
1,1-Dichloropropene	ND		0.00185	0.000472	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
Diisopropyl ether	ND		0.00185	0.000620	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
Ethylbenzene	ND		0.00185	0.000620	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
Ethyl tert-butyl ether	ND		0.00462	0.000925	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
Hexachlorobutadiene	ND		0.00462	0.00105	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
2-Hexanone	ND		0.0462	0.0154	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
Isopropylbenzene	ND		0.00185	0.000379	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
Methylene Chloride	ND		0.00925	0.000795	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
4-Methyl-2-pentanone (MIBK)	ND		0.0462	0.00176	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
Methyl tert-butyl ether	ND		0.00185	0.000888	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
Naphthalene	ND		0.00462	0.00157	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
n-Butylbenzene	ND		0.00185	0.000906	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
N-Propylbenzene	ND		0.00185	0.000620	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
p-Isopropyltoluene	ND		0.00185	0.000620	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
sec-Butylbenzene	ND		0.00185	0.000620	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
Styrene	ND		0.00185	0.00102	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
t-Amyl alcohol	ND		0.0185	0.00860	mg/Kg		09/01/16 12:50	09/13/16 17:55	1

Client Sample ID: SB-20

Date Collected: 09/01/16 12:50
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-20

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl methyl ether	ND		0.00185	0.000287	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
tert-Butyl alcohol (TBA)	ND		0.0462	0.0104	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
tert-Butylbenzene	ND		0.00185	0.000832	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
1,1,1,2-Tetrachloroethane	ND		0.00185	0.000620	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
1,1,2,2-Tetrachloroethane	ND		0.00185	0.000925	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
Tetrachloroethene	ND		0.00185	0.000675	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
Toluene	ND		0.00185	0.000684	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
trans-1,2-Dichloroethene	ND		0.00185	0.000620	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
trans-1,3-Dichloropropene	ND		0.00185	0.000620	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
1,2,3-Trichlorobenzene	ND		0.00185	0.000351	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
1,2,4-Trichlorobenzene	ND		0.00185	0.000620	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
1,1,1-Trichloroethane	ND		0.00185	0.000851	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
1,1,2-Trichloroethane	ND		0.00462	0.00129	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
Trichloroethene	ND		0.00185	0.000888	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
Trichlorofluoromethane	ND		0.00185	0.000925	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
1,2,3-Trichloropropane	ND		0.00185	0.000509	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
1,2,4-Trimethylbenzene	ND		0.00185	0.000925	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
1,3,5-Trimethylbenzene	ND		0.00185	0.000694	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
Vinyl chloride	ND		0.00185	0.00102	mg/Kg		09/01/16 12:50	09/13/16 17:55	1
Xylenes, Total	ND		0.00555	0.00114	mg/Kg		09/01/16 12:50	09/13/16 17:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*09/01/16 12:50*	*09/13/16 17:55*	*1*
Dibromofluoromethane (Surr)	*116*		*70 - 130*	*09/01/16 12:50*	*09/13/16 17:55*	*1*
1,2-Dichloroethane-d4 (Surr)	*116*		*70 - 130*	*09/01/16 12:50*	*09/13/16 17:55*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*	*09/01/16 12:50*	*09/13/16 17:55*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0665	0.0318	mg/Kg		09/08/16 10:22	09/09/16 21:18	1
Acenaphthylene	ND		0.0665	0.0288	mg/Kg		09/08/16 10:22	09/09/16 21:18	1
Anthracene	ND		0.0665	0.0288	mg/Kg		09/08/16 10:22	09/09/16 21:18	1
Benzo[a]anthracene	ND		0.0665	0.0298	mg/Kg		09/08/16 10:22	09/09/16 21:18	1
Benzo[a]pyrene	ND		0.0665	0.0268	mg/Kg		09/08/16 10:22	09/09/16 21:18	1
Benzo[b]fluoranthene	ND		0.0665	0.0278	mg/Kg		09/08/16 10:22	09/09/16 21:18	1
Benzo[g,h,i]perylene	ND		0.0665	0.0328	mg/Kg		09/08/16 10:22	09/09/16 21:18	1
Benzo[k]fluoranthene	ND		0.0665	0.0268	mg/Kg		09/08/16 10:22	09/09/16 21:18	1
Chrysene	ND		0.0665	0.0367	mg/Kg		09/08/16 10:22	09/09/16 21:18	1
Dibenz(a,h)anthracene	ND		0.0665	0.0318	mg/Kg		09/08/16 10:22	09/09/16 21:18	1
Fluoranthene	ND		0.0665	0.0338	mg/Kg		09/08/16 10:22	09/09/16 21:18	1
Fluorene	ND		0.0665	0.0288	mg/Kg		09/08/16 10:22	09/09/16 21:18	1
Indeno[1,2,3-cd]pyrene	ND		0.0665	0.0288	mg/Kg		09/08/16 10:22	09/09/16 21:18	1
1-Methylnaphthalene	ND		0.0665	0.0278	mg/Kg		09/08/16 10:22	09/09/16 21:18	1
2-Methylnaphthalene	ND		0.0665	0.0258	mg/Kg		09/08/16 10:22	09/09/16 21:18	1
Naphthalene	ND		0.0665	0.0288	mg/Kg		09/08/16 10:22	09/09/16 21:18	1
Phenanthrene	ND		0.0665	0.0338	mg/Kg		09/08/16 10:22	09/09/16 21:18	1
Pyrene	ND		0.0665	0.0338	mg/Kg		09/08/16 10:22	09/09/16 21:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*65*		*29 - 120*	*09/08/16 10:22*	*09/09/16 21:18*	*1*

Client Sample ID: SB-20

Lab Sample ID: 490-111143-20

Date Collected: 09/01/16 12:50

Matrix: Solid

Date Received: 09/03/16 10:10

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*64*		*27 - 120*	*09/08/16 10:22*	*09/09/16 21:18*	*1*
Terphenyl-d14 (Surr)	*75*		*13 - 120*	*09/08/16 10:22*	*09/09/16 21:18*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND	F1 F2	4.46	2.23	mg/Kg		09/01/16 12:50	09/07/16 04:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*106*		*50 - 150*	*09/01/16 12:50*	*09/07/16 04:12*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.91	2.46	mg/Kg		09/08/16 11:38	09/09/16 20:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*87*		*50 - 150*	*09/08/16 11:38*	*09/09/16 20:19*	*1*

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-21

Date Collected: 09/01/16 13:10
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-21

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.0385	0.00646	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
Benzene	ND		0.00154	0.000515	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
Bromobenzene	ND		0.00154	0.000554	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
Bromochloromethane	ND		0.00154	0.000423	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
Bromodichloromethane	ND		0.00154	0.000423	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
Bromoform	ND		0.00154	0.000423	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
Bromomethane	ND		0.00154	0.000923	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
2-Butanone (MEK)	ND		0.0385	0.00392	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
Carbon disulfide	ND		0.00385	0.00277	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
Carbon tetrachloride	ND	*	0.00154	0.000515	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
Chlorobenzene	ND		0.00154	0.000515	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
Chlorodibromomethane	ND		0.00154	0.000262	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
Chloroethane	ND		0.00385	0.00146	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
Chloroform	ND		0.00154	0.000515	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
Chloromethane	ND		0.00154	0.000515	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
2-Chlorotoluene	ND		0.00154	0.000685	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
4-Chlorotoluene	ND		0.00154	0.000646	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
cis-1,2-Dichloroethene	ND		0.00154	0.000515	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
cis-1,3-Dichloropropene	ND		0.00154	0.000515	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
1,2-Dibromo-3-Chloropropane	ND		0.00385	0.000538	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
1,2-Dibromoethane (EDB)	ND		0.00154	0.000769	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
Dibromomethane	ND		0.00154	0.000431	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
1,2-Dichlorobenzene	ND		0.00154	0.000262	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
1,3-Dichlorobenzene	ND		0.00154	0.000515	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
1,4-Dichlorobenzene	ND		0.00154	0.000515	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
Dichlorodifluoromethane	ND		0.00154	0.000769	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
1,1-Dichloroethane	ND		0.00154	0.000515	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
1,2-Dichloroethane	ND		0.00154	0.000515	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
1,1-Dichloroethene	ND		0.00154	0.000438	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
1,2-Dichloropropane	ND		0.00154	0.000723	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
1,3-Dichloropropane	ND		0.00154	0.000723	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
2,2-Dichloropropane	ND		0.00154	0.000515	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
1,1-Dichloropropene	ND		0.00154	0.000392	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
Diisopropyl ether	ND		0.00154	0.000515	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
Ethylbenzene	ND		0.00154	0.000515	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
Ethyl tert-butyl ether	ND		0.00385	0.000769	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
Hexachlorobutadiene	ND		0.00385	0.000877	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
2-Hexanone	ND		0.0385	0.0128	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
Isopropylbenzene	ND		0.00154	0.000315	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
Methylene Chloride	ND		0.00769	0.000662	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
4-Methyl-2-pentanone (MIBK)	ND		0.0385	0.00146	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
Methyl tert-butyl ether	ND		0.00154	0.000738	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
Naphthalene	ND		0.00385	0.00131	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
n-Butylbenzene	ND		0.00154	0.000754	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
N-Propylbenzene	ND		0.00154	0.000515	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
p-Isopropyltoluene	ND		0.00154	0.000515	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
sec-Butylbenzene	ND		0.00154	0.000515	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
Styrene	ND		0.00154	0.000846	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
t-Amyl alcohol	ND		0.0154	0.00715	mg/Kg		09/01/16 13:10	09/13/16 18:23	1

Client Sample ID: SB-21

Date Collected: 09/01/16 13:10
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-21

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl methyl ether	ND		0.00154	0.000238	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
tert-Butyl alcohol (TBA)	ND		0.0385	0.00862	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
tert-Butylbenzene	ND		0.00154	0.000692	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
1,1,1,2-Tetrachloroethane	ND		0.00154	0.000515	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
1,1,2,2-Tetrachloroethane	ND		0.00154	0.000769	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
Tetrachloroethene	ND		0.00154	0.000562	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
Toluene	ND		0.00154	0.000569	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
trans-1,2-Dichloroethene	ND		0.00154	0.000515	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
trans-1,3-Dichloropropene	ND		0.00154	0.000515	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
1,2,3-Trichlorobenzene	ND		0.00154	0.000292	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
1,2,4-Trichlorobenzene	ND		0.00154	0.000515	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
1,1,1-Trichloroethane	ND		0.00154	0.000708	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
1,1,2-Trichloroethane	ND		0.00385	0.00108	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
Trichloroethene	ND		0.00154	0.000738	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
Trichlorofluoromethane	ND		0.00154	0.000769	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
1,2,3-Trichloropropane	ND		0.00154	0.000423	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
1,2,4-Trimethylbenzene	ND		0.00154	0.000769	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
1,3,5-Trimethylbenzene	ND		0.00154	0.000577	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
Vinyl chloride	ND		0.00154	0.000846	mg/Kg		09/01/16 13:10	09/13/16 18:23	1
Xylenes, Total	ND		0.00462	0.000946	mg/Kg		09/01/16 13:10	09/13/16 18:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*09/01/16 13:10*	*09/13/16 18:23*	*1*
Dibromofluoromethane (Surr)	*117*		*70 - 130*	*09/01/16 13:10*	*09/13/16 18:23*	*1*
1,2-Dichloroethane-d4 (Surr)	*116*		*70 - 130*	*09/01/16 13:10*	*09/13/16 18:23*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*	*09/01/16 13:10*	*09/13/16 18:23*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0654	0.0312	mg/Kg		09/09/16 16:02	09/10/16 15:39	1
Acenaphthylene	ND		0.0654	0.0283	mg/Kg		09/09/16 16:02	09/10/16 15:39	1
Anthracene	ND		0.0654	0.0283	mg/Kg		09/09/16 16:02	09/10/16 15:39	1
Benzo[a]anthracene	ND		0.0654	0.0293	mg/Kg		09/09/16 16:02	09/10/16 15:39	1
Benzo[a]pyrene	ND		0.0654	0.0263	mg/Kg		09/09/16 16:02	09/10/16 15:39	1
Benzo[b]fluoranthene	ND		0.0654	0.0273	mg/Kg		09/09/16 16:02	09/10/16 15:39	1
Benzo[g,h,i]perylene	ND		0.0654	0.0322	mg/Kg		09/09/16 16:02	09/10/16 15:39	1
Benzo[k]fluoranthene	ND		0.0654	0.0263	mg/Kg		09/09/16 16:02	09/10/16 15:39	1
Chrysene	ND		0.0654	0.0361	mg/Kg		09/09/16 16:02	09/10/16 15:39	1
Dibenz(a,h)anthracene	ND		0.0654	0.0312	mg/Kg		09/09/16 16:02	09/10/16 15:39	1
Fluoranthene	ND		0.0654	0.0332	mg/Kg		09/09/16 16:02	09/10/16 15:39	1
Fluorene	ND		0.0654	0.0283	mg/Kg		09/09/16 16:02	09/10/16 15:39	1
Indeno[1,2,3-cd]pyrene	ND		0.0654	0.0283	mg/Kg		09/09/16 16:02	09/10/16 15:39	1
1-Methylnaphthalene	ND		0.0654	0.0273	mg/Kg		09/09/16 16:02	09/10/16 15:39	1
2-Methylnaphthalene	ND		0.0654	0.0254	mg/Kg		09/09/16 16:02	09/10/16 15:39	1
Naphthalene	ND		0.0654	0.0283	mg/Kg		09/09/16 16:02	09/10/16 15:39	1
Phenanthrene	ND		0.0654	0.0332	mg/Kg		09/09/16 16:02	09/10/16 15:39	1
Pyrene	ND		0.0654	0.0332	mg/Kg		09/09/16 16:02	09/10/16 15:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*77*		*29 - 120*	*09/09/16 16:02*	*09/10/16 15:39*	*1*

Client Sample ID: SB-21

Lab Sample ID: 490-111143-21

Date Collected: 09/01/16 13:10

Matrix: Solid

Date Received: 09/03/16 10:10

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	79		27 - 120	09/09/16 16:02	09/10/16 15:39	1
Terphenyl-d14 (Surr)	84		13 - 120	09/09/16 16:02	09/10/16 15:39	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.19	2.09	mg/Kg		09/01/16 13:10	09/07/16 19:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	107		50 - 150	09/01/16 13:10	09/07/16 19:07	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.87	2.44	mg/Kg		09/09/16 10:00	09/09/16 16:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	95		50 - 150	09/09/16 10:00	09/09/16 16:02	1

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-22

Date Collected: 09/01/16 13:30
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-22

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.0363	0.00611	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
Benzene	ND		0.00145	0.000487	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
Bromobenzene	ND		0.00145	0.000523	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
Bromochloromethane	ND		0.00145	0.000400	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
Bromodichloromethane	ND		0.00145	0.000400	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
Bromoform	ND		0.00145	0.000400	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
Bromomethane	ND		0.00145	0.000872	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
2-Butanone (MEK)	ND		0.0363	0.00371	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
Carbon disulfide	ND		0.00363	0.00262	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
Carbon tetrachloride	ND		0.00145	0.000487	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
Chlorobenzene	ND		0.00145	0.000487	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
Chlorodibromomethane	ND		0.00145	0.000247	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
Chloroethane	ND		0.00363	0.00138	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
Chloroform	ND		0.00145	0.000487	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
Chloromethane	ND		0.00145	0.000487	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
2-Chlorotoluene	ND		0.00145	0.000647	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
4-Chlorotoluene	ND		0.00145	0.000611	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
cis-1,2-Dichloroethene	ND		0.00145	0.000487	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
cis-1,3-Dichloropropene	ND		0.00145	0.000487	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
1,2-Dibromo-3-Chloropropane	ND		0.00363	0.000509	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
1,2-Dibromoethane (EDB)	ND		0.00145	0.000727	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
Dibromomethane	ND		0.00145	0.000407	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
1,2-Dichlorobenzene	ND		0.00145	0.000247	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
1,3-Dichlorobenzene	ND		0.00145	0.000487	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
1,4-Dichlorobenzene	ND		0.00145	0.000487	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
Dichlorodifluoromethane	ND		0.00145	0.000727	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
1,1-Dichloroethane	ND		0.00145	0.000487	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
1,2-Dichloroethane	ND		0.00145	0.000487	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
1,1-Dichloroethene	ND		0.00145	0.000414	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
1,2-Dichloropropane	ND		0.00145	0.000683	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
1,3-Dichloropropane	ND		0.00145	0.000683	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
2,2-Dichloropropane	ND		0.00145	0.000487	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
1,1-Dichloropropene	ND		0.00145	0.000371	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
Diisopropyl ether	ND		0.00145	0.000487	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
Ethylbenzene	ND		0.00145	0.000487	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
Ethyl tert-butyl ether	ND		0.00363	0.000727	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
Hexachlorobutadiene	ND		0.00363	0.000829	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
2-Hexanone	ND		0.0363	0.0121	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
Isopropylbenzene	ND		0.00145	0.000298	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
Methylene Chloride	ND		0.00727	0.000625	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
4-Methyl-2-pentanone (MIBK)	ND		0.0363	0.00138	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
Methyl tert-butyl ether	ND		0.00145	0.000698	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
Naphthalene	ND		0.00363	0.00124	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
n-Butylbenzene	ND		0.00145	0.000712	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
N-Propylbenzene	ND		0.00145	0.000487	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
p-Isopropyltoluene	ND		0.00145	0.000487	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
sec-Butylbenzene	ND		0.00145	0.000487	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
Styrene	ND		0.00145	0.000800	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
t-Amyl alcohol	ND		0.0145	0.00676	mg/Kg		09/01/16 13:30	09/14/16 19:26	1

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-22

Date Collected: 09/01/16 13:30
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-22

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl methyl ether	ND		0.00145	0.000225	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
tert-Butyl alcohol (TBA)	ND		0.0363	0.00814	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
tert-Butylbenzene	ND		0.00145	0.000654	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
1,1,1,2-Tetrachloroethane	ND		0.00145	0.000487	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
1,1,2,2-Tetrachloroethane	ND		0.00145	0.000727	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
Tetrachloroethene	ND		0.00145	0.000531	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
Toluene	ND		0.00145	0.000538	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
trans-1,2-Dichloroethene	ND		0.00145	0.000487	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
trans-1,3-Dichloropropene	ND		0.00145	0.000487	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
1,2,3-Trichlorobenzene	ND		0.00145	0.000276	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
1,2,4-Trichlorobenzene	ND		0.00145	0.000487	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
1,1,1-Trichloroethane	ND		0.00145	0.000669	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
1,1,2-Trichloroethane	ND		0.00363	0.00102	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
Trichloroethene	ND		0.00145	0.000698	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
Trichlorofluoromethane	ND		0.00145	0.000727	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
1,2,3-Trichloropropane	ND		0.00145	0.000400	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
1,2,4-Trimethylbenzene	ND		0.00145	0.000727	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
1,3,5-Trimethylbenzene	ND		0.00145	0.000545	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
Vinyl chloride	ND		0.00145	0.000800	mg/Kg		09/01/16 13:30	09/14/16 19:26	1
Xylenes, Total	ND		0.00436	0.000894	mg/Kg		09/01/16 13:30	09/14/16 19:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*	*09/01/16 13:30*	*09/14/16 19:26*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*	*09/01/16 13:30*	*09/14/16 19:26*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*	*09/01/16 13:30*	*09/14/16 19:26*	*1*
Toluene-d8 (Surr)	*110*		*70 - 130*	*09/01/16 13:30*	*09/14/16 19:26*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0667	0.0319	mg/Kg		09/09/16 16:02	09/10/16 15:58	1
Acenaphthylene	ND		0.0667	0.0289	mg/Kg		09/09/16 16:02	09/10/16 15:58	1
Anthracene	ND		0.0667	0.0289	mg/Kg		09/09/16 16:02	09/10/16 15:58	1
Benzo[a]anthracene	ND		0.0667	0.0299	mg/Kg		09/09/16 16:02	09/10/16 15:58	1
Benzo[a]pyrene	ND		0.0667	0.0269	mg/Kg		09/09/16 16:02	09/10/16 15:58	1
Benzo[b]fluoranthene	ND		0.0667	0.0279	mg/Kg		09/09/16 16:02	09/10/16 15:58	1
Benzo[g,h,i]perylene	ND		0.0667	0.0329	mg/Kg		09/09/16 16:02	09/10/16 15:58	1
Benzo[k]fluoranthene	ND		0.0667	0.0269	mg/Kg		09/09/16 16:02	09/10/16 15:58	1
Chrysene	ND		0.0667	0.0369	mg/Kg		09/09/16 16:02	09/10/16 15:58	1
Dibenz(a,h)anthracene	ND		0.0667	0.0319	mg/Kg		09/09/16 16:02	09/10/16 15:58	1
Fluoranthene	ND		0.0667	0.0339	mg/Kg		09/09/16 16:02	09/10/16 15:58	1
Fluorene	ND		0.0667	0.0289	mg/Kg		09/09/16 16:02	09/10/16 15:58	1
Indeno[1,2,3-cd]pyrene	ND		0.0667	0.0289	mg/Kg		09/09/16 16:02	09/10/16 15:58	1
1-Methylnaphthalene	ND		0.0667	0.0279	mg/Kg		09/09/16 16:02	09/10/16 15:58	1
2-Methylnaphthalene	ND		0.0667	0.0259	mg/Kg		09/09/16 16:02	09/10/16 15:58	1
Naphthalene	ND		0.0667	0.0289	mg/Kg		09/09/16 16:02	09/10/16 15:58	1
Phenanthrene	ND		0.0667	0.0339	mg/Kg		09/09/16 16:02	09/10/16 15:58	1
Pyrene	ND		0.0667	0.0339	mg/Kg		09/09/16 16:02	09/10/16 15:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*67*		*29 - 120*	*09/09/16 16:02*	*09/10/16 15:58*	*1*

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-22

Date Collected: 09/01/16 13:30
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-22

Matrix: Solid

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	66		27 - 120	09/09/16 16:02	09/10/16 15:58	1
Terphenyl-d14 (Surr)	77		13 - 120	09/09/16 16:02	09/10/16 15:58	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		3.97	1.98	mg/Kg		09/01/16 13:30	09/07/16 19:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	108		50 - 150	09/01/16 13:30	09/07/16 19:41	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.90	2.45	mg/Kg		09/09/16 10:00	09/09/16 16:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	93		50 - 150	09/09/16 10:00	09/09/16 16:20	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.0332	0.00996	mg/Kg		09/11/16 10:57	09/13/16 19:55	1
PCB-1221	ND		0.0332	0.00996	mg/Kg		09/11/16 10:57	09/13/16 19:55	1
PCB-1232	ND		0.0332	0.0199	mg/Kg		09/11/16 10:57	09/13/16 19:55	1
PCB-1242	ND		0.0332	0.00996	mg/Kg		09/11/16 10:57	09/13/16 19:55	1
PCB-1248	ND		0.0332	0.00996	mg/Kg		09/11/16 10:57	09/13/16 19:55	1
PCB-1254	ND		0.0332	0.00996	mg/Kg		09/11/16 10:57	09/13/16 19:55	1
PCB-1260	ND		0.0332	0.00996	mg/Kg		09/11/16 10:57	09/13/16 19:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	95		20 - 150	09/11/16 10:57	09/13/16 19:55	1
Tetrachloro-m-xylene	78		19 - 147	09/11/16 10:57	09/13/16 19:55	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**3.26**		1.93	1.16	mg/Kg		09/13/16 13:22	09/13/16 23:02	1
Barium	**58.5**		1.93	0.965	mg/Kg		09/13/16 13:22	09/13/16 23:02	1
Cadmium	ND		0.965	0.0965	mg/Kg		09/13/16 13:22	09/13/16 23:02	1
Chromium	**8.51**		0.965	0.869	mg/Kg		09/13/16 13:22	09/13/16 23:02	1
Lead	**7.74**		0.965	0.483	mg/Kg		09/13/16 13:22	09/13/16 23:02	1
Selenium	ND		1.93	1.06	mg/Kg		09/13/16 13:22	09/13/16 23:02	1
Silver	ND		0.965	0.386	mg/Kg		09/13/16 13:22	09/13/16 23:02	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0993	0.0298	mg/Kg		09/06/16 14:59	09/07/16 14:28	1

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-23

Date Collected: 09/01/16 15:30
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-23

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.0352	0.00591	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
Benzene	ND		0.00141	0.000471	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
Bromobenzene	ND		0.00141	0.000506	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
Bromochloromethane	ND		0.00141	0.000387	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
Bromodichloromethane	ND		0.00141	0.000387	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
Bromoform	ND		0.00141	0.000387	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
Bromomethane	ND		0.00141	0.000844	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
2-Butanone (MEK)	ND		0.0352	0.00359	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
Carbon disulfide	ND		0.00352	0.00253	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
Carbon tetrachloride	ND	*	0.00141	0.000471	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
Chlorobenzene	ND		0.00141	0.000471	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
Chlorodibromomethane	ND		0.00141	0.000239	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
Chloroethane	ND		0.00352	0.00134	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
Chloroform	ND		0.00141	0.000471	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
Chloromethane	ND		0.00141	0.000471	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
2-Chlorotoluene	ND		0.00141	0.000626	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
4-Chlorotoluene	ND		0.00141	0.000591	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
cis-1,2-Dichloroethene	ND		0.00141	0.000471	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
cis-1,3-Dichloropropene	ND		0.00141	0.000471	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
1,2-Dibromo-3-Chloropropane	ND		0.00352	0.000492	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
1,2-Dibromoethane (EDB)	ND		0.00141	0.000703	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
Dibromomethane	ND		0.00141	0.000394	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
1,2-Dichlorobenzene	ND		0.00141	0.000239	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
1,3-Dichlorobenzene	ND		0.00141	0.000471	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
1,4-Dichlorobenzene	ND		0.00141	0.000471	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
Dichlorodifluoromethane	ND		0.00141	0.000703	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
1,1-Dichloroethane	ND		0.00141	0.000471	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
1,2-Dichloroethane	ND		0.00141	0.000471	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
1,1-Dichloroethene	ND		0.00141	0.000401	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
1,2-Dichloropropane	ND		0.00141	0.000661	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
1,3-Dichloropropane	ND		0.00141	0.000661	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
2,2-Dichloropropane	ND		0.00141	0.000471	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
1,1-Dichloropropene	ND		0.00141	0.000359	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
Diisopropyl ether	ND		0.00141	0.000471	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
Ethylbenzene	ND		0.00141	0.000471	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
Ethyl tert-butyl ether	ND		0.00352	0.000703	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
Hexachlorobutadiene	ND		0.00352	0.000801	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
2-Hexanone	ND		0.0352	0.0117	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
Isopropylbenzene	ND		0.00141	0.000288	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
Methylene Chloride	ND		0.00703	0.000605	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
4-Methyl-2-pentanone (MIBK)	ND		0.0352	0.00134	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
Methyl tert-butyl ether	ND		0.00141	0.000675	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
Naphthalene	ND		0.00352	0.00120	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
n-Butylbenzene	ND		0.00141	0.000689	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
N-Propylbenzene	ND		0.00141	0.000471	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
p-Isopropyltoluene	ND		0.00141	0.000471	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
sec-Butylbenzene	ND		0.00141	0.000471	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
Styrene	ND		0.00141	0.000773	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
t-Amyl alcohol	ND		0.0141	0.00654	mg/Kg		09/01/16 15:30	09/13/16 19:17	1

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-23

Date Collected: 09/01/16 15:30
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-23

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl methyl ether	ND		0.00141	0.000218	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
tert-Butyl alcohol (TBA)	ND		0.0352	0.00787	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
tert-Butylbenzene	ND		0.00141	0.000633	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
1,1,1,2-Tetrachloroethane	ND		0.00141	0.000471	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
1,1,2,2-Tetrachloroethane	ND		0.00141	0.000703	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
Tetrachloroethene	ND		0.00141	0.000513	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
Toluene	ND		0.00141	0.000520	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
trans-1,2-Dichloroethene	ND		0.00141	0.000471	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
trans-1,3-Dichloropropene	ND		0.00141	0.000471	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
1,2,3-Trichlorobenzene	ND		0.00141	0.000267	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
1,2,4-Trichlorobenzene	ND		0.00141	0.000471	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
1,1,1-Trichloroethane	ND		0.00141	0.000647	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
1,1,2-Trichloroethane	ND		0.00352	0.000984	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
Trichloroethene	ND		0.00141	0.000675	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
Trichlorofluoromethane	ND		0.00141	0.000703	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
1,2,3-Trichloropropane	ND		0.00141	0.000387	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
1,2,4-Trimethylbenzene	ND		0.00141	0.000703	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
1,3,5-Trimethylbenzene	ND		0.00141	0.000527	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
Vinyl chloride	ND		0.00141	0.000773	mg/Kg		09/01/16 15:30	09/13/16 19:17	1
Xylenes, Total	ND		0.00422	0.000865	mg/Kg		09/01/16 15:30	09/13/16 19:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*09/01/16 15:30*	*09/13/16 19:17*	*1*
Dibromofluoromethane (Surr)	*115*		*70 - 130*	*09/01/16 15:30*	*09/13/16 19:17*	*1*
1,2-Dichloroethane-d4 (Surr)	*120*		*70 - 130*	*09/01/16 15:30*	*09/13/16 19:17*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*	*09/01/16 15:30*	*09/13/16 19:17*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0666	0.0318	mg/Kg		09/09/16 16:02	09/10/16 16:18	1
Acenaphthylene	ND		0.0666	0.0288	mg/Kg		09/09/16 16:02	09/10/16 16:18	1
Anthracene	ND		0.0666	0.0288	mg/Kg		09/09/16 16:02	09/10/16 16:18	1
Benzo[a]anthracene	ND		0.0666	0.0298	mg/Kg		09/09/16 16:02	09/10/16 16:18	1
Benzo[a]pyrene	ND		0.0666	0.0268	mg/Kg		09/09/16 16:02	09/10/16 16:18	1
Benzo[b]fluoranthene	ND		0.0666	0.0278	mg/Kg		09/09/16 16:02	09/10/16 16:18	1
Benzo[g,h,i]perylene	ND		0.0666	0.0328	mg/Kg		09/09/16 16:02	09/10/16 16:18	1
Benzo[k]fluoranthene	ND		0.0666	0.0268	mg/Kg		09/09/16 16:02	09/10/16 16:18	1
Chrysene	ND		0.0666	0.0368	mg/Kg		09/09/16 16:02	09/10/16 16:18	1
Dibenz(a,h)anthracene	ND		0.0666	0.0318	mg/Kg		09/09/16 16:02	09/10/16 16:18	1
Fluoranthene	ND		0.0666	0.0338	mg/Kg		09/09/16 16:02	09/10/16 16:18	1
Fluorene	ND		0.0666	0.0288	mg/Kg		09/09/16 16:02	09/10/16 16:18	1
Indeno[1,2,3-cd]pyrene	ND		0.0666	0.0288	mg/Kg		09/09/16 16:02	09/10/16 16:18	1
1-Methylnaphthalene	ND		0.0666	0.0278	mg/Kg		09/09/16 16:02	09/10/16 16:18	1
2-Methylnaphthalene	ND		0.0666	0.0259	mg/Kg		09/09/16 16:02	09/10/16 16:18	1
Naphthalene	ND		0.0666	0.0288	mg/Kg		09/09/16 16:02	09/10/16 16:18	1
Phenanthrene	ND		0.0666	0.0338	mg/Kg		09/09/16 16:02	09/10/16 16:18	1
Pyrene	ND		0.0666	0.0338	mg/Kg		09/09/16 16:02	09/10/16 16:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*78*		*29 - 120*	*09/09/16 16:02*	*09/10/16 16:18*	*1*

Client Sample ID: SB-23

Lab Sample ID: 490-111143-23

Date Collected: 09/01/16 15:30

Matrix: Solid

Date Received: 09/03/16 10:10

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*81*		*27 - 120*	*09/09/16 16:02*	*09/10/16 16:18*	*1*
Terphenyl-d14 (Surr)	*84*		*13 - 120*	*09/09/16 16:02*	*09/10/16 16:18*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		3.78	1.89	mg/Kg		09/01/16 15:30	09/08/16 14:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*77*		*50 - 150*	*09/01/16 15:30*	*09/08/16 14:28*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.85	2.43	mg/Kg		09/09/16 10:00	09/09/16 16:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*98*		*50 - 150*	*09/09/16 10:00*	*09/09/16 16:37*	*1*

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-24

Date Collected: 09/01/16 15:15
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-24

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.0423	0.00711	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
Benzene	ND		0.00169	0.000567	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
Bromobenzene	ND		0.00169	0.000610	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
Bromochloromethane	ND		0.00169	0.000466	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
Bromodichloromethane	ND		0.00169	0.000466	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
Bromoform	ND		0.00169	0.000466	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
Bromomethane	ND		0.00169	0.00102	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
2-Butanone (MEK)	ND		0.0423	0.00432	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
Carbon disulfide	**0.00544**		0.00423	0.00305	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
Carbon tetrachloride	ND	*	0.00169	0.000567	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
Chlorobenzene	ND		0.00169	0.000567	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
Chlorodibromomethane	ND		0.00169	0.000288	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
Chloroethane	ND		0.00423	0.00161	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
Chloroform	ND		0.00169	0.000567	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
Chloromethane	ND		0.00169	0.000567	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
2-Chlorotoluene	ND		0.00169	0.000754	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
4-Chlorotoluene	ND		0.00169	0.000711	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
cis-1,2-Dichloroethene	ND		0.00169	0.000567	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
cis-1,3-Dichloropropene	ND		0.00169	0.000567	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
1,2-Dibromo-3-Chloropropane	ND		0.00423	0.000593	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
1,2-Dibromoethane (EDB)	ND		0.00169	0.000847	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
Dibromomethane	ND		0.00169	0.000474	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
1,2-Dichlorobenzene	ND		0.00169	0.000288	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
1,3-Dichlorobenzene	ND		0.00169	0.000567	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
1,4-Dichlorobenzene	ND		0.00169	0.000567	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
Dichlorodifluoromethane	ND		0.00169	0.000847	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
1,1-Dichloroethane	ND		0.00169	0.000567	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
1,2-Dichloroethane	ND		0.00169	0.000567	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
1,1-Dichloroethene	ND		0.00169	0.000483	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
1,2-Dichloropropane	ND		0.00169	0.000796	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
1,3-Dichloropropane	ND		0.00169	0.000796	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
2,2-Dichloropropane	ND		0.00169	0.000567	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
1,1-Dichloropropene	ND		0.00169	0.000432	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
Diisopropyl ether	ND		0.00169	0.000567	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
Ethylbenzene	ND		0.00169	0.000567	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
Ethyl tert-butyl ether	ND		0.00423	0.000847	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
Hexachlorobutadiene	ND		0.00423	0.000965	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
2-Hexanone	ND		0.0423	0.0141	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
Isopropylbenzene	ND		0.00169	0.000347	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
Methylene Chloride	ND		0.00847	0.000728	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
4-Methyl-2-pentanone (MIBK)	ND		0.0423	0.00161	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
Methyl tert-butyl ether	ND		0.00169	0.000813	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
Naphthalene	ND		0.00423	0.00144	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
n-Butylbenzene	ND		0.00169	0.000830	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
N-Propylbenzene	ND		0.00169	0.000567	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
p-Isopropyltoluene	ND		0.00169	0.000567	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
sec-Butylbenzene	ND		0.00169	0.000567	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
Styrene	ND		0.00169	0.000931	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
t-Amyl alcohol	ND		0.0169	0.00787	mg/Kg		09/01/16 15:15	09/13/16 19:45	1

Client Sample ID: SB-24

Date Collected: 09/01/16 15:15
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-24

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl methyl ether	ND		0.00169	0.000262	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
tert-Butyl alcohol (TBA)	ND		0.0423	0.00948	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
tert-Butylbenzene	ND		0.00169	0.000762	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
1,1,1,2-Tetrachloroethane	ND		0.00169	0.000567	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
1,1,2,2-Tetrachloroethane	ND		0.00169	0.000847	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
Tetrachloroethene	ND		0.00169	0.000618	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
Toluene	ND		0.00169	0.000627	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
trans-1,2-Dichloroethene	ND		0.00169	0.000567	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
trans-1,3-Dichloropropene	ND		0.00169	0.000567	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
1,2,3-Trichlorobenzene	ND		0.00169	0.000322	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
1,2,4-Trichlorobenzene	ND		0.00169	0.000567	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
1,1,1-Trichloroethane	ND		0.00169	0.000779	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
1,1,2-Trichloroethane	ND		0.00423	0.00119	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
Trichloroethene	ND		0.00169	0.000813	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
Trichlorofluoromethane	ND		0.00169	0.000847	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
1,2,3-Trichloropropane	ND		0.00169	0.000466	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
1,2,4-Trimethylbenzene	ND		0.00169	0.000847	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
1,3,5-Trimethylbenzene	ND		0.00169	0.000635	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
Vinyl chloride	ND		0.00169	0.000931	mg/Kg		09/01/16 15:15	09/13/16 19:45	1
Xylenes, Total	ND		0.00508	0.00104	mg/Kg		09/01/16 15:15	09/13/16 19:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*09/01/16 15:15*	*09/13/16 19:45*	*1*
Dibromofluoromethane (Surr)	*117*		*70 - 130*	*09/01/16 15:15*	*09/13/16 19:45*	*1*
1,2-Dichloroethane-d4 (Surr)	*116*		*70 - 130*	*09/01/16 15:15*	*09/13/16 19:45*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*	*09/01/16 15:15*	*09/13/16 19:45*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0668	0.0319	mg/Kg		09/09/16 16:02	09/10/16 16:38	1
Acenaphthylene	ND		0.0668	0.0289	mg/Kg		09/09/16 16:02	09/10/16 16:38	1
Anthracene	ND		0.0668	0.0289	mg/Kg		09/09/16 16:02	09/10/16 16:38	1
Benzo[a]anthracene	ND		0.0668	0.0299	mg/Kg		09/09/16 16:02	09/10/16 16:38	1
Benzo[a]pyrene	ND		0.0668	0.0269	mg/Kg		09/09/16 16:02	09/10/16 16:38	1
Benzo[b]fluoranthene	ND		0.0668	0.0279	mg/Kg		09/09/16 16:02	09/10/16 16:38	1
Benzo[g,h,i]perylene	ND		0.0668	0.0329	mg/Kg		09/09/16 16:02	09/10/16 16:38	1
Benzo[k]fluoranthene	ND		0.0668	0.0269	mg/Kg		09/09/16 16:02	09/10/16 16:38	1
Chrysene	ND		0.0668	0.0369	mg/Kg		09/09/16 16:02	09/10/16 16:38	1
Dibenz(a,h)anthracene	ND		0.0668	0.0319	mg/Kg		09/09/16 16:02	09/10/16 16:38	1
Fluoranthene	ND		0.0668	0.0339	mg/Kg		09/09/16 16:02	09/10/16 16:38	1
Fluorene	ND		0.0668	0.0289	mg/Kg		09/09/16 16:02	09/10/16 16:38	1
Indeno[1,2,3-cd]pyrene	ND		0.0668	0.0289	mg/Kg		09/09/16 16:02	09/10/16 16:38	1
1-Methylnaphthalene	ND		0.0668	0.0279	mg/Kg		09/09/16 16:02	09/10/16 16:38	1
2-Methylnaphthalene	ND		0.0668	0.0259	mg/Kg		09/09/16 16:02	09/10/16 16:38	1
Naphthalene	ND		0.0668	0.0289	mg/Kg		09/09/16 16:02	09/10/16 16:38	1
Phenanthrene	ND		0.0668	0.0339	mg/Kg		09/09/16 16:02	09/10/16 16:38	1
Pyrene	ND		0.0668	0.0339	mg/Kg		09/09/16 16:02	09/10/16 16:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*71*		*29 - 120*	*09/09/16 16:02*	*09/10/16 16:38*	*1*

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-24

Lab Sample ID: 490-111143-24

Date Collected: 09/01/16 15:15
Matrix: Solid
Date Received: 09/03/16 10:10

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	73		27 - 120	09/09/16 16:02	09/10/16 16:38	1
Terphenyl-d14 (Surr)	76		13 - 120	09/09/16 16:02	09/10/16 16:38	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.19	2.09	mg/Kg		09/01/16 15:15	09/07/16 20:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	109		50 - 150	09/01/16 15:15	09/07/16 20:47	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.97	2.49	mg/Kg		09/09/16 10:00	09/09/16 16:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	103		50 - 150	09/09/16 10:00	09/09/16 16:55	1

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-25

Date Collected: 09/01/16 16:30
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-25

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**0.0410**		0.0380	0.00639	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
Benzene	ND		0.00152	0.000510	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
Bromobenzene	ND		0.00152	0.000548	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
Bromochloromethane	ND		0.00152	0.000418	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
Bromodichloromethane	ND		0.00152	0.000418	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
Bromoform	ND		0.00152	0.000418	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
Bromomethane	ND		0.00152	0.000913	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
2-Butanone (MEK)	ND		0.0380	0.00388	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
Carbon disulfide	ND		0.00380	0.00274	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
Carbon tetrachloride	ND	*	0.00152	0.000510	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
Chlorobenzene	ND		0.00152	0.000510	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
Chlorodibromomethane	ND		0.00152	0.000259	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
Chloroethane	ND		0.00380	0.00145	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
Chloroform	ND		0.00152	0.000510	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
Chloromethane	ND		0.00152	0.000510	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
2-Chlorotoluene	ND		0.00152	0.000677	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
4-Chlorotoluene	ND		0.00152	0.000639	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
cis-1,2-Dichloroethene	ND		0.00152	0.000510	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
cis-1,3-Dichloropropene	ND		0.00152	0.000510	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
1,2-Dibromo-3-Chloropropane	ND		0.00380	0.000532	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
1,2-Dibromoethane (EDB)	ND		0.00152	0.000761	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
Dibromomethane	ND		0.00152	0.000426	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
1,2-Dichlorobenzene	ND		0.00152	0.000259	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
1,3-Dichlorobenzene	ND		0.00152	0.000510	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
1,4-Dichlorobenzene	ND		0.00152	0.000510	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
Dichlorodifluoromethane	ND		0.00152	0.000761	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
1,1-Dichloroethane	ND		0.00152	0.000510	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
1,2-Dichloroethane	ND		0.00152	0.000510	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
1,1-Dichloroethene	ND		0.00152	0.000434	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
1,2-Dichloropropane	ND		0.00152	0.000715	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
1,3-Dichloropropane	ND		0.00152	0.000715	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
2,2-Dichloropropane	ND		0.00152	0.000510	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
1,1-Dichloropropene	ND		0.00152	0.000388	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
Diisopropyl ether	ND		0.00152	0.000510	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
Ethylbenzene	ND		0.00152	0.000510	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
Ethyl tert-butyl ether	ND		0.00380	0.000761	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
Hexachlorobutadiene	ND		0.00380	0.000867	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
2-Hexanone	ND		0.0380	0.0127	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
Isopropylbenzene	ND		0.00152	0.000312	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
Methylene Chloride	ND		0.00761	0.000654	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
4-Methyl-2-pentanone (MIBK)	ND		0.0380	0.00145	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
Methyl tert-butyl ether	ND		0.00152	0.000730	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
Naphthalene	ND		0.00380	0.00129	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
n-Butylbenzene	ND		0.00152	0.000745	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
N-Propylbenzene	ND		0.00152	0.000510	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
p-Isopropyltoluene	ND		0.00152	0.000510	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
sec-Butylbenzene	ND		0.00152	0.000510	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
Styrene	ND		0.00152	0.000837	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
t-Amyl alcohol	ND		0.0152	0.00707	mg/Kg		09/01/16 16:30	09/13/16 20:12	1

Client Sample ID: SB-25

Date Collected: 09/01/16 16:30
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-25

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl methyl ether	ND		0.00152	0.000236	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
tert-Butyl alcohol (TBA)	ND		0.0380	0.00852	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
tert-Butylbenzene	ND		0.00152	0.000685	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
1,1,1,2-Tetrachloroethane	ND		0.00152	0.000510	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
1,1,2,2-Tetrachloroethane	ND		0.00152	0.000761	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
Tetrachloroethene	ND		0.00152	0.000555	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
Toluene	ND		0.00152	0.000563	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
trans-1,2-Dichloroethene	ND		0.00152	0.000510	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
trans-1,3-Dichloropropene	ND		0.00152	0.000510	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
1,2,3-Trichlorobenzene	ND		0.00152	0.000289	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
1,2,4-Trichlorobenzene	ND		0.00152	0.000510	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
1,1,1-Trichloroethane	ND		0.00152	0.000700	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
1,1,2-Trichloroethane	ND		0.00380	0.00106	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
Trichloroethene	ND		0.00152	0.000730	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
Trichlorofluoromethane	ND		0.00152	0.000761	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
1,2,3-Trichloropropane	ND		0.00152	0.000418	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
1,2,4-Trimethylbenzene	ND		0.00152	0.000761	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
1,3,5-Trimethylbenzene	ND		0.00152	0.000571	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
Vinyl chloride	ND		0.00152	0.000837	mg/Kg		09/01/16 16:30	09/13/16 20:12	1
Xylenes, Total	ND		0.00456	0.000936	mg/Kg		09/01/16 16:30	09/13/16 20:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*09/01/16 16:30*	*09/13/16 20:12*	*1*
Dibromofluoromethane (Surr)	*113*		*70 - 130*	*09/01/16 16:30*	*09/13/16 20:12*	*1*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 130*	*09/01/16 16:30*	*09/13/16 20:12*	*1*
Toluene-d8 (Surr)	*110*		*70 - 130*	*09/01/16 16:30*	*09/13/16 20:12*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0654	0.0313	mg/Kg		09/09/16 16:02	09/10/16 16:58	1
Acenaphthylene	ND		0.0654	0.0283	mg/Kg		09/09/16 16:02	09/10/16 16:58	1
Anthracene	ND		0.0654	0.0283	mg/Kg		09/09/16 16:02	09/10/16 16:58	1
Benzo[a]anthracene	ND		0.0654	0.0293	mg/Kg		09/09/16 16:02	09/10/16 16:58	1
Benzo[a]pyrene	ND		0.0654	0.0264	mg/Kg		09/09/16 16:02	09/10/16 16:58	1
Benzo[b]fluoranthene	ND		0.0654	0.0273	mg/Kg		09/09/16 16:02	09/10/16 16:58	1
Benzo[g,h,i]perylene	ND		0.0654	0.0322	mg/Kg		09/09/16 16:02	09/10/16 16:58	1
Benzo[k]fluoranthene	ND		0.0654	0.0264	mg/Kg		09/09/16 16:02	09/10/16 16:58	1
Chrysene	ND		0.0654	0.0361	mg/Kg		09/09/16 16:02	09/10/16 16:58	1
Dibenz(a,h)anthracene	ND		0.0654	0.0313	mg/Kg		09/09/16 16:02	09/10/16 16:58	1
Fluoranthene	ND		0.0654	0.0332	mg/Kg		09/09/16 16:02	09/10/16 16:58	1
Fluorene	ND		0.0654	0.0283	mg/Kg		09/09/16 16:02	09/10/16 16:58	1
Indeno[1,2,3-cd]pyrene	ND		0.0654	0.0283	mg/Kg		09/09/16 16:02	09/10/16 16:58	1
1-Methylnaphthalene	ND		0.0654	0.0273	mg/Kg		09/09/16 16:02	09/10/16 16:58	1
2-Methylnaphthalene	ND		0.0654	0.0254	mg/Kg		09/09/16 16:02	09/10/16 16:58	1
Naphthalene	ND		0.0654	0.0283	mg/Kg		09/09/16 16:02	09/10/16 16:58	1
Phenanthrene	ND		0.0654	0.0332	mg/Kg		09/09/16 16:02	09/10/16 16:58	1
Pyrene	ND		0.0654	0.0332	mg/Kg		09/09/16 16:02	09/10/16 16:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*83*		*29 - 120*	*09/09/16 16:02*	*09/10/16 16:58*	*1*

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-25

Date Collected: 09/01/16 16:30
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-25

Matrix: Solid

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	86		27 - 120	09/09/16 16:02	09/10/16 16:58	1
Terphenyl-d14 (Surr)	88		13 - 120	09/09/16 16:02	09/10/16 16:58	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		3.93	1.97	mg/Kg		09/01/16 16:30	09/07/16 21:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	110		50 - 150	09/01/16 16:30	09/07/16 21:21	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.85	2.43	mg/Kg		09/09/16 10:00	09/09/16 17:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	101		50 - 150	09/09/16 10:00	09/09/16 17:13	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.0326	0.00980	mg/Kg		09/11/16 10:57	09/13/16 20:11	1
PCB-1221	ND		0.0326	0.00980	mg/Kg		09/11/16 10:57	09/13/16 20:11	1
PCB-1232	ND		0.0326	0.0196	mg/Kg		09/11/16 10:57	09/13/16 20:11	1
PCB-1242	ND		0.0326	0.00980	mg/Kg		09/11/16 10:57	09/13/16 20:11	1
PCB-1248	ND		0.0326	0.00980	mg/Kg		09/11/16 10:57	09/13/16 20:11	1
PCB-1254	ND		0.0326	0.00980	mg/Kg		09/11/16 10:57	09/13/16 20:11	1
PCB-1260	ND		0.0326	0.00980	mg/Kg		09/11/16 10:57	09/13/16 20:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	95		20 - 150	09/11/16 10:57	09/13/16 20:11	1
Tetrachloro-m-xylene	80		19 - 147	09/11/16 10:57	09/13/16 20:11	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		1.99	1.19	mg/Kg		09/13/16 13:22	09/13/16 23:07	1
Barium	**4.02**		1.99	0.994	mg/Kg		09/13/16 13:22	09/13/16 23:07	1
Cadmium	ND		0.994	0.0994	mg/Kg		09/13/16 13:22	09/13/16 23:07	1
Chromium	**1.15**		0.994	0.895	mg/Kg		09/13/16 13:22	09/13/16 23:07	1
Lead	ND		0.994	0.497	mg/Kg		09/13/16 13:22	09/13/16 23:07	1
Selenium	ND		1.99	1.09	mg/Kg		09/13/16 13:22	09/13/16 23:07	1
Silver	ND		0.994	0.398	mg/Kg		09/13/16 13:22	09/13/16 23:07	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0993	0.0298	mg/Kg		09/06/16 14:59	09/08/16 10:11	1

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-26

Date Collected: 09/01/16 17:00
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-26

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.0398	0.00668	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
Benzene	ND		0.00159	0.000533	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
Bromobenzene	ND		0.00159	0.000573	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
Bromochloromethane	ND		0.00159	0.000438	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
Bromodichloromethane	ND		0.00159	0.000438	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
Bromoform	ND		0.00159	0.000438	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
Bromomethane	ND		0.00159	0.000955	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
2-Butanone (MEK)	ND		0.0398	0.00406	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
Carbon disulfide	ND		0.00398	0.00286	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
Carbon tetrachloride	ND	*	0.00159	0.000533	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
Chlorobenzene	ND		0.00159	0.000533	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
Chlorodibromomethane	ND		0.00159	0.000270	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
Chloroethane	ND		0.00398	0.00151	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
Chloroform	ND		0.00159	0.000533	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
Chloromethane	ND		0.00159	0.000533	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
2-Chlorotoluene	ND		0.00159	0.000708	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
4-Chlorotoluene	ND		0.00159	0.000668	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
cis-1,2-Dichloroethene	ND		0.00159	0.000533	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
cis-1,3-Dichloropropene	ND		0.00159	0.000533	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
1,2-Dibromo-3-Chloropropane	ND		0.00398	0.000557	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
1,2-Dibromoethane (EDB)	ND		0.00159	0.000796	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
Dibromomethane	ND		0.00159	0.000446	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
1,2-Dichlorobenzene	ND		0.00159	0.000270	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
1,3-Dichlorobenzene	ND		0.00159	0.000533	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
1,4-Dichlorobenzene	ND		0.00159	0.000533	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
Dichlorodifluoromethane	ND		0.00159	0.000796	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
1,1-Dichloroethane	ND		0.00159	0.000533	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
1,2-Dichloroethane	ND		0.00159	0.000533	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
1,1-Dichloroethene	ND		0.00159	0.000453	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
1,2-Dichloropropane	ND		0.00159	0.000748	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
1,3-Dichloropropane	ND		0.00159	0.000748	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
2,2-Dichloropropane	ND		0.00159	0.000533	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
1,1-Dichloropropene	ND		0.00159	0.000406	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
Diisopropyl ether	ND		0.00159	0.000533	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
Ethylbenzene	ND		0.00159	0.000533	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
Ethyl tert-butyl ether	ND		0.00398	0.000796	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
Hexachlorobutadiene	ND		0.00398	0.000907	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
2-Hexanone	ND		0.0398	0.0133	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
Isopropylbenzene	ND		0.00159	0.000326	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
Methylene Chloride	ND		0.00796	0.000684	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
4-Methyl-2-pentanone (MIBK)	ND		0.0398	0.00151	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
Methyl tert-butyl ether	ND		0.00159	0.000764	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
Naphthalene	ND		0.00398	0.00135	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
n-Butylbenzene	ND		0.00159	0.000780	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
N-Propylbenzene	ND		0.00159	0.000533	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
p-Isopropyltoluene	ND		0.00159	0.000533	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
sec-Butylbenzene	ND		0.00159	0.000533	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
Styrene	ND		0.00159	0.000875	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
t-Amyl alcohol	ND		0.0159	0.00740	mg/Kg		09/01/16 17:00	09/13/16 20:40	1

Client Sample ID: SB-26

Date Collected: 09/01/16 17:00
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-26

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl methyl ether	ND		0.00159	0.000247	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
tert-Butyl alcohol (TBA)	ND		0.0398	0.00891	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
tert-Butylbenzene	ND		0.00159	0.000716	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
1,1,1,2-Tetrachloroethane	ND		0.00159	0.000533	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
1,1,2,2-Tetrachloroethane	ND		0.00159	0.000796	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
Tetrachloroethene	ND		0.00159	0.000581	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
Toluene	ND		0.00159	0.000589	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
trans-1,2-Dichloroethene	ND		0.00159	0.000533	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
trans-1,3-Dichloropropene	ND		0.00159	0.000533	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
1,2,3-Trichlorobenzene	ND		0.00159	0.000302	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
1,2,4-Trichlorobenzene	ND		0.00159	0.000533	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
1,1,1-Trichloroethane	ND		0.00159	0.000732	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
1,1,2-Trichloroethane	ND		0.00398	0.00111	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
Trichloroethene	ND		0.00159	0.000764	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
Trichlorofluoromethane	ND		0.00159	0.000796	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
1,2,3-Trichloropropane	ND		0.00159	0.000438	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
1,2,4-Trimethylbenzene	ND		0.00159	0.000796	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
1,3,5-Trimethylbenzene	ND		0.00159	0.000597	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
Vinyl chloride	ND		0.00159	0.000875	mg/Kg		09/01/16 17:00	09/13/16 20:40	1
Xylenes, Total	ND		0.00477	0.000979	mg/Kg		09/01/16 17:00	09/13/16 20:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*09/01/16 17:00*	*09/13/16 20:40*	*1*
Dibromofluoromethane (Surr)	*114*		*70 - 130*	*09/01/16 17:00*	*09/13/16 20:40*	*1*
1,2-Dichloroethane-d4 (Surr)	*117*		*70 - 130*	*09/01/16 17:00*	*09/13/16 20:40*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*	*09/01/16 17:00*	*09/13/16 20:40*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0654	0.0312	mg/Kg		09/09/16 16:02	09/10/16 17:17	1
Acenaphthylene	ND		0.0654	0.0283	mg/Kg		09/09/16 16:02	09/10/16 17:17	1
Anthracene	ND		0.0654	0.0283	mg/Kg		09/09/16 16:02	09/10/16 17:17	1
Benzo[a]anthracene	ND		0.0654	0.0293	mg/Kg		09/09/16 16:02	09/10/16 17:17	1
Benzo[a]pyrene	ND		0.0654	0.0264	mg/Kg		09/09/16 16:02	09/10/16 17:17	1
Benzo[b]fluoranthene	ND		0.0654	0.0273	mg/Kg		09/09/16 16:02	09/10/16 17:17	1
Benzo[g,h,i]perylene	ND		0.0654	0.0322	mg/Kg		09/09/16 16:02	09/10/16 17:17	1
Benzo[k]fluoranthene	ND		0.0654	0.0264	mg/Kg		09/09/16 16:02	09/10/16 17:17	1
Chrysene	ND		0.0654	0.0361	mg/Kg		09/09/16 16:02	09/10/16 17:17	1
Dibenz(a,h)anthracene	ND		0.0654	0.0312	mg/Kg		09/09/16 16:02	09/10/16 17:17	1
Fluoranthene	ND		0.0654	0.0332	mg/Kg		09/09/16 16:02	09/10/16 17:17	1
Fluorene	ND		0.0654	0.0283	mg/Kg		09/09/16 16:02	09/10/16 17:17	1
Indeno[1,2,3-cd]pyrene	ND		0.0654	0.0283	mg/Kg		09/09/16 16:02	09/10/16 17:17	1
1-Methylnaphthalene	ND		0.0654	0.0273	mg/Kg		09/09/16 16:02	09/10/16 17:17	1
2-Methylnaphthalene	ND		0.0654	0.0254	mg/Kg		09/09/16 16:02	09/10/16 17:17	1
Naphthalene	ND		0.0654	0.0283	mg/Kg		09/09/16 16:02	09/10/16 17:17	1
Phenanthrene	ND		0.0654	0.0332	mg/Kg		09/09/16 16:02	09/10/16 17:17	1
Pyrene	ND		0.0654	0.0332	mg/Kg		09/09/16 16:02	09/10/16 17:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*71*		*29 - 120*	*09/09/16 16:02*	*09/10/16 17:17*	*1*

Client Sample ID: SB-26

Lab Sample ID: 490-111143-26

Date Collected: 09/01/16 17:00

Matrix: Solid

Date Received: 09/03/16 10:10

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*74*		*27 - 120*	*09/09/16 16:02*	*09/10/16 17:17*	*1*
Terphenyl-d14 (Surr)	*76*		*13 - 120*	*09/09/16 16:02*	*09/10/16 17:17*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.13	2.07	mg/Kg		09/01/16 17:00	09/07/16 21:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*111*		*50 - 150*	*09/01/16 17:00*	*09/07/16 21:54*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.94	2.47	mg/Kg		09/09/16 10:00	09/09/16 17:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*107*		*50 - 150*	*09/09/16 10:00*	*09/09/16 17:31*	*1*

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-27

Date Collected: 09/02/16 08:45
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-27

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.0367	0.00616	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
Benzene	ND		0.00147	0.000492	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
Bromobenzene	ND		0.00147	0.000528	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
Bromochloromethane	ND		0.00147	0.000404	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
Bromodichloromethane	ND		0.00147	0.000404	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
Bromoform	ND		0.00147	0.000404	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
Bromomethane	ND		0.00147	0.000881	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
2-Butanone (MEK)	ND		0.0367	0.00374	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
Carbon disulfide	ND		0.00367	0.00264	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
Carbon tetrachloride	ND	*	0.00147	0.000492	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
Chlorobenzene	ND		0.00147	0.000492	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
Chlorodibromomethane	ND		0.00147	0.000250	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
Chloroethane	ND		0.00367	0.00139	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
Chloroform	ND		0.00147	0.000492	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
Chloromethane	ND		0.00147	0.000492	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
2-Chlorotoluene	ND		0.00147	0.000653	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
4-Chlorotoluene	ND		0.00147	0.000616	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
cis-1,2-Dichloroethene	ND		0.00147	0.000492	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
cis-1,3-Dichloropropene	ND		0.00147	0.000492	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
1,2-Dibromo-3-Chloropropane	ND		0.00367	0.000514	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
1,2-Dibromoethane (EDB)	ND		0.00147	0.000734	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
Dibromomethane	ND		0.00147	0.000411	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
1,2-Dichlorobenzene	ND		0.00147	0.000250	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
1,3-Dichlorobenzene	ND		0.00147	0.000492	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
1,4-Dichlorobenzene	ND		0.00147	0.000492	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
Dichlorodifluoromethane	ND		0.00147	0.000734	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
1,1-Dichloroethane	ND		0.00147	0.000492	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
1,2-Dichloroethane	ND		0.00147	0.000492	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
1,1-Dichloroethene	ND		0.00147	0.000418	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
1,2-Dichloropropane	ND		0.00147	0.000690	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
1,3-Dichloropropane	ND		0.00147	0.000690	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
2,2-Dichloropropane	ND		0.00147	0.000492	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
1,1-Dichloropropene	ND		0.00147	0.000374	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
Diisopropyl ether	ND		0.00147	0.000492	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
Ethylbenzene	ND		0.00147	0.000492	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
Ethyl tert-butyl ether	ND		0.00367	0.000734	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
Hexachlorobutadiene	ND		0.00367	0.000837	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
2-Hexanone	ND		0.0367	0.0123	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
Isopropylbenzene	ND		0.00147	0.000301	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
Methylene Chloride	ND		0.00734	0.000631	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
4-Methyl-2-pentanone (MIBK)	ND		0.0367	0.00139	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
Methyl tert-butyl ether	ND		0.00147	0.000705	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
Naphthalene	ND		0.00367	0.00125	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
n-Butylbenzene	ND		0.00147	0.000719	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
N-Propylbenzene	ND		0.00147	0.000492	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
p-Isopropyltoluene	ND		0.00147	0.000492	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
sec-Butylbenzene	ND		0.00147	0.000492	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
Styrene	ND		0.00147	0.000807	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
t-Amyl alcohol	ND		0.0147	0.00683	mg/Kg		09/02/16 08:45	09/13/16 21:07	1

Client Sample ID: SB-27

Date Collected: 09/02/16 08:45
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-27

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl methyl ether	ND		0.00147	0.000228	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
tert-Butyl alcohol (TBA)	ND		0.0367	0.00822	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
tert-Butylbenzene	ND		0.00147	0.000661	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
1,1,1,2-Tetrachloroethane	ND		0.00147	0.000492	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
1,1,2,2-Tetrachloroethane	ND		0.00147	0.000734	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
Tetrachloroethene	ND		0.00147	0.000536	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
Toluene	ND		0.00147	0.000543	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
trans-1,2-Dichloroethene	ND		0.00147	0.000492	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
trans-1,3-Dichloropropene	ND		0.00147	0.000492	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
1,2,3-Trichlorobenzene	ND		0.00147	0.000279	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
1,2,4-Trichlorobenzene	ND		0.00147	0.000492	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
1,1,1-Trichloroethane	ND		0.00147	0.000675	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
1,1,2-Trichloroethane	ND		0.00367	0.00103	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
Trichloroethene	ND		0.00147	0.000705	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
Trichlorofluoromethane	ND		0.00147	0.000734	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
1,2,3-Trichloropropane	ND		0.00147	0.000404	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
1,2,4-Trimethylbenzene	ND		0.00147	0.000734	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
1,3,5-Trimethylbenzene	ND		0.00147	0.000550	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
Vinyl chloride	ND		0.00147	0.000807	mg/Kg		09/02/16 08:45	09/13/16 21:07	1
Xylenes, Total	ND		0.00440	0.000903	mg/Kg		09/02/16 08:45	09/13/16 21:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*09/02/16 08:45*	*09/13/16 21:07*	*1*
Dibromofluoromethane (Surr)	*125*		*70 - 130*	*09/02/16 08:45*	*09/13/16 21:07*	*1*
1,2-Dichloroethane-d4 (Surr)	*128*		*70 - 130*	*09/02/16 08:45*	*09/13/16 21:07*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*	*09/02/16 08:45*	*09/13/16 21:07*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0662	0.0316	mg/Kg		09/09/16 16:02	09/10/16 17:37	1
Acenaphthylene	ND		0.0662	0.0287	mg/Kg		09/09/16 16:02	09/10/16 17:37	1
Anthracene	ND		0.0662	0.0287	mg/Kg		09/09/16 16:02	09/10/16 17:37	1
Benzo[a]anthracene	ND		0.0662	0.0297	mg/Kg		09/09/16 16:02	09/10/16 17:37	1
Benzo[a]pyrene	ND		0.0662	0.0267	mg/Kg		09/09/16 16:02	09/10/16 17:37	1
Benzo[b]fluoranthene	ND		0.0662	0.0277	mg/Kg		09/09/16 16:02	09/10/16 17:37	1
Benzo[g,h,i]perylene	ND		0.0662	0.0326	mg/Kg		09/09/16 16:02	09/10/16 17:37	1
Benzo[k]fluoranthene	ND		0.0662	0.0267	mg/Kg		09/09/16 16:02	09/10/16 17:37	1
Chrysene	ND		0.0662	0.0366	mg/Kg		09/09/16 16:02	09/10/16 17:37	1
Dibenz(a,h)anthracene	ND		0.0662	0.0316	mg/Kg		09/09/16 16:02	09/10/16 17:37	1
Fluoranthene	ND		0.0662	0.0336	mg/Kg		09/09/16 16:02	09/10/16 17:37	1
Fluorene	ND		0.0662	0.0287	mg/Kg		09/09/16 16:02	09/10/16 17:37	1
Indeno[1,2,3-cd]pyrene	ND		0.0662	0.0287	mg/Kg		09/09/16 16:02	09/10/16 17:37	1
1-Methylnaphthalene	ND		0.0662	0.0277	mg/Kg		09/09/16 16:02	09/10/16 17:37	1
2-Methylnaphthalene	ND		0.0662	0.0257	mg/Kg		09/09/16 16:02	09/10/16 17:37	1
Naphthalene	ND		0.0662	0.0287	mg/Kg		09/09/16 16:02	09/10/16 17:37	1
Phenanthrene	ND		0.0662	0.0336	mg/Kg		09/09/16 16:02	09/10/16 17:37	1
Pyrene	ND		0.0662	0.0336	mg/Kg		09/09/16 16:02	09/10/16 17:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*83*		*29 - 120*	*09/09/16 16:02*	*09/10/16 17:37*	*1*

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-27

Lab Sample ID: 490-111143-27

Date Collected: 09/02/16 08:45
Matrix: Solid
Date Received: 09/03/16 10:10

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*86*		*27 - 120*	*09/09/16 16:02*	*09/10/16 17:37*	*1*
Terphenyl-d14 (Surr)	*90*		*13 - 120*	*09/09/16 16:02*	*09/10/16 17:37*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		3.71	1.86	mg/Kg		09/02/16 08:45	09/07/16 22:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*113*		*50 - 150*	*09/02/16 08:45*	*09/07/16 22:27*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.95	2.47	mg/Kg		09/09/16 10:00	09/09/16 17:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*102*		*50 - 150*	*09/09/16 10:00*	*09/09/16 17:49*	*1*

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-28

Date Collected: 09/02/16 09:10
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-28

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.0384	0.00645	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
Benzene	ND		0.00154	0.000515	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
Bromobenzene	ND		0.00154	0.000553	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
Bromochloromethane	ND		0.00154	0.000422	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
Bromodichloromethane	ND		0.00154	0.000422	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
Bromoform	ND		0.00154	0.000422	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
Bromomethane	ND		0.00154	0.000922	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
2-Butanone (MEK)	ND		0.0384	0.00392	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
Carbon disulfide	ND		0.00384	0.00276	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
Carbon tetrachloride	ND	*	0.00154	0.000515	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
Chlorobenzene	ND		0.00154	0.000515	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
Chlorodibromomethane	ND		0.00154	0.000261	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
Chloroethane	ND		0.00384	0.00146	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
Chloroform	ND		0.00154	0.000515	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
Chloromethane	ND		0.00154	0.000515	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
2-Chlorotoluene	ND		0.00154	0.000683	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
4-Chlorotoluene	ND		0.00154	0.000645	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
cis-1,2-Dichloroethene	ND		0.00154	0.000515	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
cis-1,3-Dichloropropene	ND		0.00154	0.000515	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
1,2-Dibromo-3-Chloropropane	ND		0.00384	0.000538	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
1,2-Dibromoethane (EDB)	ND		0.00154	0.000768	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
Dibromomethane	ND		0.00154	0.000430	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
1,2-Dichlorobenzene	ND		0.00154	0.000261	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
1,3-Dichlorobenzene	ND		0.00154	0.000515	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
1,4-Dichlorobenzene	ND		0.00154	0.000515	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
Dichlorodifluoromethane	ND		0.00154	0.000768	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
1,1-Dichloroethane	ND		0.00154	0.000515	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
1,2-Dichloroethane	ND		0.00154	0.000515	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
1,1-Dichloroethene	ND		0.00154	0.000438	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
1,2-Dichloropropane	ND		0.00154	0.000722	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
1,3-Dichloropropane	ND		0.00154	0.000722	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
2,2-Dichloropropane	ND		0.00154	0.000515	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
1,1-Dichloropropene	ND		0.00154	0.000392	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
Diisopropyl ether	ND		0.00154	0.000515	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
Ethylbenzene	ND		0.00154	0.000515	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
Ethyl tert-butyl ether	ND		0.00384	0.000768	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
Hexachlorobutadiene	ND		0.00384	0.000875	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
2-Hexanone	ND		0.0384	0.0128	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
Isopropylbenzene	ND		0.00154	0.000315	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
Methylene Chloride	ND		0.00768	0.000660	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
4-Methyl-2-pentanone (MIBK)	ND		0.0384	0.00146	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
Methyl tert-butyl ether	ND		0.00154	0.000737	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
Naphthalene	ND		0.00384	0.00131	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
n-Butylbenzene	ND		0.00154	0.000753	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
N-Propylbenzene	ND		0.00154	0.000515	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
p-Isopropyltoluene	ND		0.00154	0.000515	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
sec-Butylbenzene	ND		0.00154	0.000515	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
Styrene	ND		0.00154	0.000845	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
t-Amyl alcohol	ND		0.0154	0.00714	mg/Kg		09/02/16 09:10	09/13/16 21:35	1

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-28

Date Collected: 09/02/16 09:10
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-28

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl methyl ether	ND		0.00154	0.000238	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
tert-Butyl alcohol (TBA)	ND		0.0384	0.00860	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
tert-Butylbenzene	ND		0.00154	0.000691	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
1,1,1,2-Tetrachloroethane	ND		0.00154	0.000515	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
1,1,2,2-Tetrachloroethane	ND		0.00154	0.000768	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
Tetrachloroethene	ND		0.00154	0.000561	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
Toluene	ND		0.00154	0.000568	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
trans-1,2-Dichloroethene	ND		0.00154	0.000515	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
trans-1,3-Dichloropropene	ND		0.00154	0.000515	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
1,2,3-Trichlorobenzene	ND		0.00154	0.000292	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
1,2,4-Trichlorobenzene	ND		0.00154	0.000515	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
1,1,1-Trichloroethane	ND		0.00154	0.000706	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
1,1,2-Trichloroethane	ND		0.00384	0.00108	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
Trichloroethene	ND		0.00154	0.000737	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
Trichlorofluoromethane	ND		0.00154	0.000768	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
1,2,3-Trichloropropane	ND		0.00154	0.000422	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
1,2,4-Trimethylbenzene	ND		0.00154	0.000768	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
1,3,5-Trimethylbenzene	ND		0.00154	0.000576	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
Vinyl chloride	ND		0.00154	0.000845	mg/Kg		09/02/16 09:10	09/13/16 21:35	1
Xylenes, Total	ND		0.00461	0.000945	mg/Kg		09/02/16 09:10	09/13/16 21:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*	*09/02/16 09:10*	*09/13/16 21:35*	*1*
Dibromofluoromethane (Surr)	*117*		*70 - 130*	*09/02/16 09:10*	*09/13/16 21:35*	*1*
1,2-Dichloroethane-d4 (Surr)	*118*		*70 - 130*	*09/02/16 09:10*	*09/13/16 21:35*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*	*09/02/16 09:10*	*09/13/16 21:35*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0650	0.0311	mg/Kg		09/09/16 16:02	09/10/16 17:56	1
Acenaphthylene	ND		0.0650	0.0282	mg/Kg		09/09/16 16:02	09/10/16 17:56	1
Anthracene	ND		0.0650	0.0282	mg/Kg		09/09/16 16:02	09/10/16 17:56	1
Benzo[a]anthracene	ND		0.0650	0.0291	mg/Kg		09/09/16 16:02	09/10/16 17:56	1
Benzo[a]pyrene	ND		0.0650	0.0262	mg/Kg		09/09/16 16:02	09/10/16 17:56	1
Benzo[b]fluoranthene	ND		0.0650	0.0272	mg/Kg		09/09/16 16:02	09/10/16 17:56	1
Benzo[g,h,i]perylene	ND		0.0650	0.0320	mg/Kg		09/09/16 16:02	09/10/16 17:56	1
Benzo[k]fluoranthene	ND		0.0650	0.0262	mg/Kg		09/09/16 16:02	09/10/16 17:56	1
Chrysene	ND		0.0650	0.0359	mg/Kg		09/09/16 16:02	09/10/16 17:56	1
Dibenz(a,h)anthracene	ND		0.0650	0.0311	mg/Kg		09/09/16 16:02	09/10/16 17:56	1
Fluoranthene	ND		0.0650	0.0330	mg/Kg		09/09/16 16:02	09/10/16 17:56	1
Fluorene	ND		0.0650	0.0282	mg/Kg		09/09/16 16:02	09/10/16 17:56	1
Indeno[1,2,3-cd]pyrene	ND		0.0650	0.0282	mg/Kg		09/09/16 16:02	09/10/16 17:56	1
1-Methylnaphthalene	ND		0.0650	0.0272	mg/Kg		09/09/16 16:02	09/10/16 17:56	1
2-Methylnaphthalene	ND		0.0650	0.0252	mg/Kg		09/09/16 16:02	09/10/16 17:56	1
Naphthalene	ND		0.0650	0.0282	mg/Kg		09/09/16 16:02	09/10/16 17:56	1
Phenanthrene	ND		0.0650	0.0330	mg/Kg		09/09/16 16:02	09/10/16 17:56	1
Pyrene	ND		0.0650	0.0330	mg/Kg		09/09/16 16:02	09/10/16 17:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*77*		*29 - 120*	*09/09/16 16:02*	*09/10/16 17:56*	*1*

Client Sample ID: SB-28

Lab Sample ID: 490-111143-28

Date Collected: 09/02/16 09:10

Matrix: Solid

Date Received: 09/03/16 10:10

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*77*		*27 - 120*	*09/09/16 16:02*	*09/10/16 17:56*	*1*
Terphenyl-d14 (Surr)	*81*		*13 - 120*	*09/09/16 16:02*	*09/10/16 17:56*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.05	2.03	mg/Kg		09/02/16 09:10	09/07/16 23:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*110*		*50 - 150*	*09/02/16 09:10*	*09/07/16 23:00*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.96	2.48	mg/Kg		09/09/16 10:00	09/09/16 18:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*99*		*50 - 150*	*09/09/16 10:00*	*09/09/16 18:07*	*1*

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: DUP-1

Date Collected: 08/31/16 15:15
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-29

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**0.248**		0.0391	0.00656	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
Benzene	ND		0.00156	0.000523	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
Bromobenzene	ND		0.00156	0.000562	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
Bromochloromethane	ND		0.00156	0.000430	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
Bromodichloromethane	ND		0.00156	0.000430	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
Bromoform	ND		0.00156	0.000430	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
Bromomethane	ND		0.00156	0.000937	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
2-Butanone (MEK)	ND		0.0391	0.00398	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
Carbon disulfide	ND		0.00391	0.00281	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
Carbon tetrachloride	ND	*	0.00156	0.000523	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
Chlorobenzene	ND		0.00156	0.000523	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
Chlorodibromomethane	ND		0.00156	0.000266	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
Chloroethane	ND		0.00391	0.00148	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
Chloroform	ND		0.00156	0.000523	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
Chloromethane	ND		0.00156	0.000523	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
2-Chlorotoluene	ND		0.00156	0.000695	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
4-Chlorotoluene	ND		0.00156	0.000656	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
cis-1,2-Dichloroethene	ND		0.00156	0.000523	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
cis-1,3-Dichloropropene	ND		0.00156	0.000523	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
1,2-Dibromo-3-Chloropropane	ND		0.00391	0.000547	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
1,2-Dibromoethane (EDB)	ND		0.00156	0.000781	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
Dibromomethane	ND		0.00156	0.000437	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
1,2-Dichlorobenzene	ND		0.00156	0.000266	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
1,3-Dichlorobenzene	ND		0.00156	0.000523	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
1,4-Dichlorobenzene	ND		0.00156	0.000523	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
Dichlorodifluoromethane	ND		0.00156	0.000781	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
1,1-Dichloroethane	ND		0.00156	0.000523	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
1,2-Dichloroethane	ND		0.00156	0.000523	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
1,1-Dichloroethene	ND		0.00156	0.000445	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
1,2-Dichloropropane	ND		0.00156	0.000734	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
1,3-Dichloropropane	ND		0.00156	0.000734	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
2,2-Dichloropropane	ND		0.00156	0.000523	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
1,1-Dichloropropene	ND		0.00156	0.000398	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
Diisopropyl ether	ND		0.00156	0.000523	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
Ethylbenzene	ND		0.00156	0.000523	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
Ethyl tert-butyl ether	ND		0.00391	0.000781	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
Hexachlorobutadiene	ND		0.00391	0.000890	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
2-Hexanone	ND		0.0391	0.0130	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
Isopropylbenzene	ND		0.00156	0.000320	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
Methylene Chloride	ND		0.00781	0.000672	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
4-Methyl-2-pentanone (MIBK)	ND		0.0391	0.00148	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
Methyl tert-butyl ether	ND		0.00156	0.000750	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
Naphthalene	ND		0.00391	0.00133	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
n-Butylbenzene	ND		0.00156	0.000766	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
N-Propylbenzene	ND		0.00156	0.000523	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
p-Isopropyltoluene	ND		0.00156	0.000523	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
sec-Butylbenzene	ND		0.00156	0.000523	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
Styrene	ND		0.00156	0.000859	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
t-Amyl alcohol	ND		0.0156	0.00726	mg/Kg		08/31/16 15:15	09/13/16 14:43	1

Client Sample ID: DUP-1

Date Collected: 08/31/16 15:15
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-29

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl methyl ether	ND		0.00156	0.000242	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
tert-Butyl alcohol (TBA)	ND		0.0391	0.00875	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
tert-Butylbenzene	ND		0.00156	0.000703	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
1,1,1,2-Tetrachloroethane	ND		0.00156	0.000523	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
1,1,2,2-Tetrachloroethane	ND		0.00156	0.000781	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
Tetrachloroethene	ND		0.00156	0.000570	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
Toluene	ND		0.00156	0.000578	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
trans-1,2-Dichloroethene	ND		0.00156	0.000523	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
trans-1,3-Dichloropropene	ND		0.00156	0.000523	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
1,2,3-Trichlorobenzene	ND		0.00156	0.000297	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
1,2,4-Trichlorobenzene	ND		0.00156	0.000523	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
1,1,1-Trichloroethane	ND		0.00156	0.000719	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
1,1,2-Trichloroethane	ND		0.00391	0.00109	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
Trichloroethene	ND		0.00156	0.000750	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
Trichlorofluoromethane	ND		0.00156	0.000781	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
1,2,3-Trichloropropane	ND		0.00156	0.000430	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
1,2,4-Trimethylbenzene	ND		0.00156	0.000781	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
1,3,5-Trimethylbenzene	ND		0.00156	0.000586	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
Vinyl chloride	ND		0.00156	0.000859	mg/Kg		08/31/16 15:15	09/13/16 14:43	1
Xylenes, Total	ND		0.00469	0.000961	mg/Kg		08/31/16 15:15	09/13/16 14:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*08/31/16 15:15*	*09/13/16 14:43*	*1*
Dibromofluoromethane (Surr)	*112*		*70 - 130*	*08/31/16 15:15*	*09/13/16 14:43*	*1*
1,2-Dichloroethane-d4 (Surr)	*116*		*70 - 130*	*08/31/16 15:15*	*09/13/16 14:43*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*	*08/31/16 15:15*	*09/13/16 14:43*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0653	0.0312	mg/Kg		09/09/16 16:02	09/10/16 18:16	1
Acenaphthylene	ND		0.0653	0.0283	mg/Kg		09/09/16 16:02	09/10/16 18:16	1
Anthracene	ND		0.0653	0.0283	mg/Kg		09/09/16 16:02	09/10/16 18:16	1
Benzo[a]anthracene	ND		0.0653	0.0292	mg/Kg		09/09/16 16:02	09/10/16 18:16	1
Benzo[a]pyrene	ND		0.0653	0.0263	mg/Kg		09/09/16 16:02	09/10/16 18:16	1
Benzo[b]fluoranthene	ND		0.0653	0.0273	mg/Kg		09/09/16 16:02	09/10/16 18:16	1
Benzo[g,h,i]perylene	ND		0.0653	0.0322	mg/Kg		09/09/16 16:02	09/10/16 18:16	1
Benzo[k]fluoranthene	ND		0.0653	0.0263	mg/Kg		09/09/16 16:02	09/10/16 18:16	1
Chrysene	ND		0.0653	0.0361	mg/Kg		09/09/16 16:02	09/10/16 18:16	1
Dibenz(a,h)anthracene	ND		0.0653	0.0312	mg/Kg		09/09/16 16:02	09/10/16 18:16	1
Fluoranthene	ND		0.0653	0.0331	mg/Kg		09/09/16 16:02	09/10/16 18:16	1
Fluorene	ND		0.0653	0.0283	mg/Kg		09/09/16 16:02	09/10/16 18:16	1
Indeno[1,2,3-cd]pyrene	ND		0.0653	0.0283	mg/Kg		09/09/16 16:02	09/10/16 18:16	1
1-Methylnaphthalene	ND		0.0653	0.0273	mg/Kg		09/09/16 16:02	09/10/16 18:16	1
2-Methylnaphthalene	ND		0.0653	0.0253	mg/Kg		09/09/16 16:02	09/10/16 18:16	1
Naphthalene	ND		0.0653	0.0283	mg/Kg		09/09/16 16:02	09/10/16 18:16	1
Phenanthrene	ND		0.0653	0.0331	mg/Kg		09/09/16 16:02	09/10/16 18:16	1
Pyrene	ND		0.0653	0.0331	mg/Kg		09/09/16 16:02	09/10/16 18:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*75*		*29 - 120*	*09/09/16 16:02*	*09/10/16 18:16*	*1*

Client Sample ID: DUP-1

Lab Sample ID: 490-111143-29

Date Collected: 08/31/16 15:15
Matrix: Solid
Date Received: 09/03/16 10:10

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*78*		*27 - 120*	*09/09/16 16:02*	*09/10/16 18:16*	*1*
Terphenyl-d14 (Surr)	*80*		*13 - 120*	*09/09/16 16:02*	*09/10/16 18:16*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.26	2.13	mg/Kg		08/31/16 15:15	09/07/16 23:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*110*		*50 - 150*	*08/31/16 15:15*	*09/07/16 23:33*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.93	2.46	mg/Kg		09/09/16 10:00	09/09/16 18:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*103*		*50 - 150*	*09/09/16 10:00*	*09/09/16 18:25*	*1*

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: DUP-2

Date Collected: 09/01/16 10:10
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-30

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.0365	0.00613	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
Benzene	ND		0.00146	0.000489	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
Bromobenzene	ND		0.00146	0.000525	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
Bromochloromethane	ND		0.00146	0.000401	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
Bromodichloromethane	ND		0.00146	0.000401	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
Bromoform	ND		0.00146	0.000401	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
Bromomethane	ND		0.00146	0.000876	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
2-Butanone (MEK)	ND		0.0365	0.00372	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
Carbon disulfide	ND		0.00365	0.00263	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
Carbon tetrachloride	ND	*	0.00146	0.000489	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
Chlorobenzene	ND		0.00146	0.000489	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
Chlorodibromomethane	ND		0.00146	0.000248	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
Chloroethane	ND		0.00365	0.00139	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
Chloroform	ND		0.00146	0.000489	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
Chloromethane	ND		0.00146	0.000489	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
2-Chlorotoluene	ND		0.00146	0.000650	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
4-Chlorotoluene	ND		0.00146	0.000613	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
cis-1,2-Dichloroethene	ND		0.00146	0.000489	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
cis-1,3-Dichloropropene	ND		0.00146	0.000489	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
1,2-Dibromo-3-Chloropropane	ND		0.00365	0.000511	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
1,2-Dibromoethane (EDB)	ND		0.00146	0.000730	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
Dibromomethane	ND		0.00146	0.000409	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
1,2-Dichlorobenzene	ND		0.00146	0.000248	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
1,3-Dichlorobenzene	ND		0.00146	0.000489	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
1,4-Dichlorobenzene	ND		0.00146	0.000489	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
Dichlorodifluoromethane	ND		0.00146	0.000730	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
1,1-Dichloroethane	ND		0.00146	0.000489	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
1,2-Dichloroethane	ND		0.00146	0.000489	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
1,1-Dichloroethene	ND		0.00146	0.000416	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
1,2-Dichloropropane	ND		0.00146	0.000686	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
1,3-Dichloropropane	ND		0.00146	0.000686	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
2,2-Dichloropropane	ND		0.00146	0.000489	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
1,1-Dichloropropene	ND		0.00146	0.000372	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
Diisopropyl ether	ND		0.00146	0.000489	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
Ethylbenzene	ND		0.00146	0.000489	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
Ethyl tert-butyl ether	ND		0.00365	0.000730	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
Hexachlorobutadiene	ND		0.00365	0.000832	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
2-Hexanone	ND		0.0365	0.0122	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
Isopropylbenzene	ND		0.00146	0.000299	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
Methylene Chloride	ND		0.00730	0.000628	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
4-Methyl-2-pentanone (MIBK)	ND		0.0365	0.00139	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
Methyl tert-butyl ether	ND		0.00146	0.000701	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
Naphthalene	ND		0.00365	0.00124	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
n-Butylbenzene	ND		0.00146	0.000715	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
N-Propylbenzene	ND		0.00146	0.000489	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
p-Isopropyltoluene	ND		0.00146	0.000489	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
sec-Butylbenzene	ND		0.00146	0.000489	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
Styrene	ND		0.00146	0.000803	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
t-Amyl alcohol	ND		0.0146	0.00679	mg/Kg		09/01/16 10:10	09/13/16 22:02	1

Client Sample ID: DUP-2

Date Collected: 09/01/16 10:10
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-30

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl methyl ether	ND		0.00146	0.000226	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
tert-Butyl alcohol (TBA)	ND		0.0365	0.00817	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
tert-Butylbenzene	ND		0.00146	0.000657	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
1,1,1,2-Tetrachloroethane	ND		0.00146	0.000489	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
1,1,2,2-Tetrachloroethane	ND		0.00146	0.000730	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
Tetrachloroethene	ND		0.00146	0.000533	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
Toluene	ND		0.00146	0.000540	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
trans-1,2-Dichloroethene	ND		0.00146	0.000489	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
trans-1,3-Dichloropropene	ND		0.00146	0.000489	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
1,2,3-Trichlorobenzene	ND		0.00146	0.000277	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
1,2,4-Trichlorobenzene	ND		0.00146	0.000489	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
1,1,1-Trichloroethane	ND		0.00146	0.000671	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
1,1,2-Trichloroethane	ND		0.00365	0.00102	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
Trichloroethene	ND		0.00146	0.000701	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
Trichlorofluoromethane	ND		0.00146	0.000730	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
1,2,3-Trichloropropane	ND		0.00146	0.000401	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
1,2,4-Trimethylbenzene	ND		0.00146	0.000730	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
1,3,5-Trimethylbenzene	ND		0.00146	0.000547	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
Vinyl chloride	ND		0.00146	0.000803	mg/Kg		09/01/16 10:10	09/13/16 22:02	1
Xylenes, Total	ND		0.00438	0.000898	mg/Kg		09/01/16 10:10	09/13/16 22:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*09/01/16 10:10*	*09/13/16 22:02*	*1*
Dibromofluoromethane (Surr)	*114*		*70 - 130*	*09/01/16 10:10*	*09/13/16 22:02*	*1*
1,2-Dichloroethane-d4 (Surr)	*119*		*70 - 130*	*09/01/16 10:10*	*09/13/16 22:02*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*	*09/01/16 10:10*	*09/13/16 22:02*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0669	0.0320	mg/Kg		09/09/16 16:02	09/10/16 18:36	1
Acenaphthylene	ND		0.0669	0.0290	mg/Kg		09/09/16 16:02	09/10/16 18:36	1
Anthracene	ND		0.0669	0.0290	mg/Kg		09/09/16 16:02	09/10/16 18:36	1
Benzo[a]anthracene	ND		0.0669	0.0300	mg/Kg		09/09/16 16:02	09/10/16 18:36	1
Benzo[a]pyrene	ND		0.0669	0.0270	mg/Kg		09/09/16 16:02	09/10/16 18:36	1
Benzo[b]fluoranthene	ND		0.0669	0.0280	mg/Kg		09/09/16 16:02	09/10/16 18:36	1
Benzo[g,h,i]perylene	ND		0.0669	0.0330	mg/Kg		09/09/16 16:02	09/10/16 18:36	1
Benzo[k]fluoranthene	ND		0.0669	0.0270	mg/Kg		09/09/16 16:02	09/10/16 18:36	1
Chrysene	ND		0.0669	0.0370	mg/Kg		09/09/16 16:02	09/10/16 18:36	1
Dibenz(a,h)anthracene	ND		0.0669	0.0320	mg/Kg		09/09/16 16:02	09/10/16 18:36	1
Fluoranthene	ND		0.0669	0.0340	mg/Kg		09/09/16 16:02	09/10/16 18:36	1
Fluorene	ND		0.0669	0.0290	mg/Kg		09/09/16 16:02	09/10/16 18:36	1
Indeno[1,2,3-cd]pyrene	ND		0.0669	0.0290	mg/Kg		09/09/16 16:02	09/10/16 18:36	1
1-Methylnaphthalene	ND		0.0669	0.0280	mg/Kg		09/09/16 16:02	09/10/16 18:36	1
2-Methylnaphthalene	ND		0.0669	0.0260	mg/Kg		09/09/16 16:02	09/10/16 18:36	1
Naphthalene	ND		0.0669	0.0290	mg/Kg		09/09/16 16:02	09/10/16 18:36	1
Phenanthrene	ND		0.0669	0.0340	mg/Kg		09/09/16 16:02	09/10/16 18:36	1
Pyrene	ND		0.0669	0.0340	mg/Kg		09/09/16 16:02	09/10/16 18:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*66*		*29 - 120*	*09/09/16 16:02*	*09/10/16 18:36*	*1*

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: DUP-2

Lab Sample ID: 490-111143-30

Date Collected: 09/01/16 10:10
Matrix: Solid
Date Received: 09/03/16 10:10

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*67*		*27 - 120*	*09/09/16 16:02*	*09/10/16 18:36*	*1*
Terphenyl-d14 (Surr)	*74*		*13 - 120*	*09/09/16 16:02*	*09/10/16 18:36*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		3.77	1.89	mg/Kg		09/01/16 10:10	09/08/16 00:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*110*		*50 - 150*	*09/01/16 10:10*	*09/08/16 00:07*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.81	2.40	mg/Kg		09/09/16 10:00	09/09/16 18:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*81*		*50 - 150*	*09/09/16 10:00*	*09/09/16 18:43*	*1*

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: DUP-3

Date Collected: 09/02/16 09:20
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-31

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.0365	0.00614	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
Benzene	ND		0.00146	0.000490	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
Bromobenzene	ND		0.00146	0.000526	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
Bromochloromethane	ND		0.00146	0.000402	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
Bromodichloromethane	ND		0.00146	0.000402	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
Bromoform	ND		0.00146	0.000402	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
Bromomethane	ND		0.00146	0.000877	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
2-Butanone (MEK)	ND		0.0365	0.00373	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
Carbon disulfide	ND		0.00365	0.00263	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
Carbon tetrachloride	ND	*	0.00146	0.000490	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
Chlorobenzene	ND		0.00146	0.000490	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
Chlorodibromomethane	ND		0.00146	0.000249	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
Chloroethane	ND		0.00365	0.00139	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
Chloroform	ND		0.00146	0.000490	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
Chloromethane	ND		0.00146	0.000490	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
2-Chlorotoluene	ND		0.00146	0.000651	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
4-Chlorotoluene	ND		0.00146	0.000614	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
cis-1,2-Dichloroethene	ND		0.00146	0.000490	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
cis-1,3-Dichloropropene	ND		0.00146	0.000490	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
1,2-Dibromo-3-Chloropropane	ND		0.00365	0.000512	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
1,2-Dibromoethane (EDB)	ND		0.00146	0.000731	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
Dibromomethane	ND		0.00146	0.000409	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
1,2-Dichlorobenzene	ND		0.00146	0.000249	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
1,3-Dichlorobenzene	ND		0.00146	0.000490	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
1,4-Dichlorobenzene	ND		0.00146	0.000490	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
Dichlorodifluoromethane	ND		0.00146	0.000731	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
1,1-Dichloroethane	ND		0.00146	0.000490	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
1,2-Dichloroethane	ND		0.00146	0.000490	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
1,1-Dichloroethene	ND		0.00146	0.000417	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
1,2-Dichloropropane	ND		0.00146	0.000687	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
1,3-Dichloropropane	ND		0.00146	0.000687	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
2,2-Dichloropropane	ND		0.00146	0.000490	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
1,1-Dichloropropene	ND		0.00146	0.000373	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
Diisopropyl ether	ND		0.00146	0.000490	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
Ethylbenzene	ND		0.00146	0.000490	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
Ethyl tert-butyl ether	ND		0.00365	0.000731	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
Hexachlorobutadiene	ND		0.00365	0.000833	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
2-Hexanone	ND		0.0365	0.0122	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
Isopropylbenzene	ND		0.00146	0.000300	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
Methylene Chloride	ND		0.00731	0.000629	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
4-Methyl-2-pentanone (MIBK)	ND		0.0365	0.00139	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
Methyl tert-butyl ether	ND		0.00146	0.000702	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
Naphthalene	ND		0.00365	0.00124	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
n-Butylbenzene	ND		0.00146	0.000716	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
N-Propylbenzene	ND		0.00146	0.000490	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
p-Isopropyltoluene	ND		0.00146	0.000490	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
sec-Butylbenzene	ND		0.00146	0.000490	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
Styrene	ND		0.00146	0.000804	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
t-Amyl alcohol	ND		0.0146	0.00680	mg/Kg		09/02/16 09:20	09/13/16 22:29	1

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: DUP-3

Date Collected: 09/02/16 09:20
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-31

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl methyl ether	ND		0.00146	0.000227	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
tert-Butyl alcohol (TBA)	ND		0.0365	0.00819	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
tert-Butylbenzene	ND		0.00146	0.000658	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
1,1,1,2-Tetrachloroethane	ND		0.00146	0.000490	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
1,1,2,2-Tetrachloroethane	ND		0.00146	0.000731	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
Tetrachloroethene	ND		0.00146	0.000534	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
Toluene	ND		0.00146	0.000541	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
trans-1,2-Dichloroethene	ND		0.00146	0.000490	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
trans-1,3-Dichloropropene	ND		0.00146	0.000490	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
1,2,3-Trichlorobenzene	ND		0.00146	0.000278	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
1,2,4-Trichlorobenzene	ND		0.00146	0.000490	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
1,1,1-Trichloroethane	ND		0.00146	0.000673	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
1,1,2-Trichloroethane	ND		0.00365	0.00102	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
Trichloroethene	ND		0.00146	0.000702	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
Trichlorofluoromethane	ND		0.00146	0.000731	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
1,2,3-Trichloropropane	ND		0.00146	0.000402	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
1,2,4-Trimethylbenzene	ND		0.00146	0.000731	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
1,3,5-Trimethylbenzene	ND		0.00146	0.000548	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
Vinyl chloride	ND		0.00146	0.000804	mg/Kg		09/02/16 09:20	09/13/16 22:29	1
Xylenes, Total	ND		0.00439	0.000899	mg/Kg		09/02/16 09:20	09/13/16 22:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*09/02/16 09:20*	*09/13/16 22:29*	*1*
Dibromofluoromethane (Surr)	*122*		*70 - 130*	*09/02/16 09:20*	*09/13/16 22:29*	*1*
1,2-Dichloroethane-d4 (Surr)	*122*		*70 - 130*	*09/02/16 09:20*	*09/13/16 22:29*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*	*09/02/16 09:20*	*09/13/16 22:29*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0658	0.0314	mg/Kg		09/03/16 18:23	09/06/16 13:11	1
Acenaphthylene	ND		0.0658	0.0285	mg/Kg		09/03/16 18:23	09/06/16 13:11	1
Anthracene	ND		0.0658	0.0285	mg/Kg		09/03/16 18:23	09/06/16 13:11	1
Benzo[a]anthracene	ND		0.0658	0.0294	mg/Kg		09/03/16 18:23	09/06/16 13:11	1
Benzo[a]pyrene	ND		0.0658	0.0265	mg/Kg		09/03/16 18:23	09/06/16 13:11	1
Benzo[b]fluoranthene	ND		0.0658	0.0275	mg/Kg		09/03/16 18:23	09/06/16 13:11	1
Benzo[g,h,i]perylene	ND		0.0658	0.0324	mg/Kg		09/03/16 18:23	09/06/16 13:11	1
Benzo[k]fluoranthene	ND		0.0658	0.0265	mg/Kg		09/03/16 18:23	09/06/16 13:11	1
Chrysene	ND		0.0658	0.0363	mg/Kg		09/03/16 18:23	09/06/16 13:11	1
Dibenz(a,h)anthracene	ND		0.0658	0.0314	mg/Kg		09/03/16 18:23	09/06/16 13:11	1
Fluoranthene	ND		0.0658	0.0334	mg/Kg		09/03/16 18:23	09/06/16 13:11	1
Fluorene	ND		0.0658	0.0285	mg/Kg		09/03/16 18:23	09/06/16 13:11	1
Indeno[1,2,3-cd]pyrene	ND		0.0658	0.0285	mg/Kg		09/03/16 18:23	09/06/16 13:11	1
1-Methylnaphthalene	ND		0.0658	0.0275	mg/Kg		09/03/16 18:23	09/06/16 13:11	1
2-Methylnaphthalene	ND		0.0658	0.0255	mg/Kg		09/03/16 18:23	09/06/16 13:11	1
Naphthalene	ND		0.0658	0.0285	mg/Kg		09/03/16 18:23	09/06/16 13:11	1
Phenanthrene	ND		0.0658	0.0334	mg/Kg		09/03/16 18:23	09/06/16 13:11	1
Pyrene	ND		0.0658	0.0334	mg/Kg		09/03/16 18:23	09/06/16 13:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*50*		*29 - 120*	*09/03/16 18:23*	*09/06/16 13:11*	*1*

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: DUP-3

Lab Sample ID: 490-111143-31

Date Collected: 09/02/16 09:20
Matrix: Solid
Date Received: 09/03/16 10:10

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	53		27 - 120	09/03/16 18:23	09/06/16 13:11	1
Terphenyl-d14 (Surr)	57		13 - 120	09/03/16 18:23	09/06/16 13:11	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		3.79	1.90	mg/Kg		09/02/16 09:20	09/08/16 00:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	57		50 - 150	09/02/16 09:20	09/08/16 00:40	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.86	2.43	mg/Kg		09/03/16 18:18	09/04/16 10:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	91		50 - 150	09/03/16 18:18	09/04/16 10:45	1

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: TB

Date Collected: 08/31/16 01:01
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-32

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.0500	0.00840	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
Benzene	ND		0.00200	0.000670	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
Bromobenzene	ND		0.00200	0.000720	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
Bromochloromethane	ND		0.00200	0.000550	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
Bromodichloromethane	ND		0.00200	0.000550	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
Bromoform	ND		0.00200	0.000550	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
Bromomethane	ND		0.00200	0.00120	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
2-Butanone (MEK)	ND		0.0500	0.00510	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
Carbon disulfide	ND		0.00500	0.00360	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
Carbon tetrachloride	ND	*	0.00200	0.000670	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
Chlorobenzene	ND		0.00200	0.000670	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
Chlorodibromomethane	ND		0.00200	0.000340	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
Chloroethane	ND		0.00500	0.00190	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
Chloroform	ND		0.00200	0.000670	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
Chloromethane	ND		0.00200	0.000670	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
2-Chlorotoluene	ND		0.00200	0.000890	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
4-Chlorotoluene	ND		0.00200	0.000840	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
cis-1,2-Dichloroethene	ND		0.00200	0.000670	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
cis-1,3-Dichloropropene	ND		0.00200	0.000670	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
1,2-Dibromo-3-Chloropropane	ND		0.00500	0.000700	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
1,2-Dibromoethane (EDB)	ND		0.00200	0.00100	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
Dibromomethane	ND		0.00200	0.000560	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
1,2-Dichlorobenzene	ND		0.00200	0.000340	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
1,3-Dichlorobenzene	ND		0.00200	0.000670	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
1,4-Dichlorobenzene	ND		0.00200	0.000670	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
Dichlorodifluoromethane	ND		0.00200	0.00100	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
1,1-Dichloroethane	ND		0.00200	0.000670	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
1,2-Dichloroethane	ND		0.00200	0.000670	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
1,1-Dichloroethene	ND		0.00200	0.000570	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
1,2-Dichloropropane	ND		0.00200	0.000940	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
1,3-Dichloropropane	ND		0.00200	0.000940	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
2,2-Dichloropropane	ND		0.00200	0.000670	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
1,1-Dichloropropene	ND		0.00200	0.000510	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
Diisopropyl ether	ND		0.00200	0.000670	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
Ethylbenzene	ND		0.00200	0.000670	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
Ethyl tert-butyl ether	ND		0.00500	0.00100	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
Hexachlorobutadiene	ND		0.00500	0.00114	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
2-Hexanone	ND		0.0500	0.0167	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
Isopropylbenzene	ND		0.00200	0.000410	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
Methylene Chloride	ND		0.0100	0.000860	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
4-Methyl-2-pentanone (MIBK)	ND		0.0500	0.00190	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
Methyl tert-butyl ether	ND		0.00200	0.000960	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
Naphthalene	ND		0.00500	0.00170	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
n-Butylbenzene	ND		0.00200	0.000980	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
N-Propylbenzene	ND		0.00200	0.000670	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
p-Isopropyltoluene	ND		0.00200	0.000670	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
sec-Butylbenzene	ND		0.00200	0.000670	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
Styrene	ND		0.00200	0.00110	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
t-Amyl alcohol	ND		0.0200	0.00930	mg/Kg		08/31/16 01:01	09/13/16 14:16	1

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: TB

Lab Sample ID: 490-111143-32

Date Collected: 08/31/16 01:01
Matrix: Solid
Date Received: 09/03/16 10:10

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl methyl ether	ND		0.00200	0.000310	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
tert-Butyl alcohol (TBA)	ND		0.0500	0.0112	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
tert-Butylbenzene	ND		0.00200	0.000900	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
1,1,1,2-Tetrachloroethane	ND		0.00200	0.000670	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
1,1,2,2-Tetrachloroethane	ND		0.00200	0.00100	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
Tetrachloroethene	ND		0.00200	0.000730	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
Toluene	ND		0.00200	0.000740	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
trans-1,2-Dichloroethene	ND		0.00200	0.000670	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
trans-1,3-Dichloropropene	ND		0.00200	0.000670	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
1,2,3-Trichlorobenzene	ND		0.00200	0.000380	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
1,2,4-Trichlorobenzene	ND		0.00200	0.000670	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
1,1,1-Trichloroethane	ND		0.00200	0.000920	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
1,1,2-Trichloroethane	ND		0.00500	0.00140	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
Trichloroethene	ND		0.00200	0.000960	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
Trichlorofluoromethane	ND		0.00200	0.00100	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
1,2,3-Trichloropropane	ND		0.00200	0.000550	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
1,2,4-Trimethylbenzene	ND		0.00200	0.00100	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
1,3,5-Trimethylbenzene	ND		0.00200	0.000750	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
Vinyl chloride	ND		0.00200	0.00110	mg/Kg		08/31/16 01:01	09/13/16 14:16	1
Xylenes, Total	ND		0.00600	0.00123	mg/Kg		08/31/16 01:01	09/13/16 14:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*08/31/16 01:01*	*09/13/16 14:16*	*1*
Dibromofluoromethane (Surr)	*113*		*70 - 130*	*08/31/16 01:01*	*09/13/16 14:16*	*1*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 130*	*08/31/16 01:01*	*09/13/16 14:16*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*	*08/31/16 01:01*	*09/13/16 14:16*	*1*

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: FB

Date Collected: 09/01/16 16:15
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-33

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25.0	2.66	ug/L			09/13/16 03:10	1
Benzene	ND		1.00	0.200	ug/L			09/13/16 03:10	1
Bromobenzene	ND		1.00	0.210	ug/L			09/13/16 03:10	1
Bromochloromethane	ND		1.00	0.150	ug/L			09/13/16 03:10	1
Bromodichloromethane	ND		1.00	0.170	ug/L			09/13/16 03:10	1
Bromoform	ND		1.00	0.290	ug/L			09/13/16 03:10	1
Bromomethane	ND		1.00	0.350	ug/L			09/13/16 03:10	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			09/13/16 03:10	1
Carbon disulfide	ND		1.00	0.220	ug/L			09/13/16 03:10	1
Carbon tetrachloride	ND		1.00	0.180	ug/L			09/13/16 03:10	1
Chlorobenzene	ND		1.00	0.180	ug/L			09/13/16 03:10	1
Chlorodibromomethane	ND		1.00	0.250	ug/L			09/13/16 03:10	1
Chloroethane	ND		1.00	0.360	ug/L			09/13/16 03:10	1
Chloroform	ND		1.00	0.230	ug/L			09/13/16 03:10	1
Chloromethane	ND		1.00	0.360	ug/L			09/13/16 03:10	1
2-Chlorotoluene	ND		1.00	0.180	ug/L			09/13/16 03:10	1
4-Chlorotoluene	ND		1.00	0.170	ug/L			09/13/16 03:10	1
cis-1,2-Dichloroethene	ND		1.00	0.210	ug/L			09/13/16 03:10	1
cis-1,3-Dichloropropene	ND		1.00	0.170	ug/L			09/13/16 03:10	1
1,2-Dibromo-3-Chloropropane	ND		10.0	0.940	ug/L			09/13/16 03:10	1
1,2-Dibromoethane (EDB)	ND		1.00	0.210	ug/L			09/13/16 03:10	1
Dibromomethane	ND		1.00	0.450	ug/L			09/13/16 03:10	1
1,2-Dichlorobenzene	ND		1.00	0.190	ug/L			09/13/16 03:10	1
1,3-Dichlorobenzene	ND		1.00	0.180	ug/L			09/13/16 03:10	1
1,4-Dichlorobenzene	ND		1.00	0.170	ug/L			09/13/16 03:10	1
Dichlorodifluoromethane	ND		1.00	0.170	ug/L			09/13/16 03:10	1
1,1-Dichloroethane	ND		1.00	0.240	ug/L			09/13/16 03:10	1
1,2-Dichloroethane	ND		1.00	0.200	ug/L			09/13/16 03:10	1
1,1-Dichloroethene	ND		1.00	0.250	ug/L			09/13/16 03:10	1
1,2-Dichloropropane	ND		1.00	0.250	ug/L			09/13/16 03:10	1
1,3-Dichloropropane	ND		1.00	0.190	ug/L			09/13/16 03:10	1
2,2-Dichloropropane	ND		1.00	0.160	ug/L			09/13/16 03:10	1
1,1-Dichloropropene	ND		1.00	0.200	ug/L			09/13/16 03:10	1
Diisopropyl ether	ND		2.00	0.170	ug/L			09/13/16 03:10	1
Ethylbenzene	ND		1.00	0.190	ug/L			09/13/16 03:10	1
Ethyl tert-butyl ether	ND		1.00	0.210	ug/L			09/13/16 03:10	1
Hexachlorobutadiene	ND		2.00	0.380	ug/L			09/13/16 03:10	1
2-Hexanone	ND		10.0	1.28	ug/L			09/13/16 03:10	1
Isopropylbenzene	ND		1.00	0.330	ug/L			09/13/16 03:10	1
Methylene Chloride	ND		5.00	1.00	ug/L			09/13/16 03:10	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.810	ug/L			09/13/16 03:10	1
Methyl tert-butyl ether	ND		1.00	0.170	ug/L			09/13/16 03:10	1
Naphthalene	ND		5.00	0.210	ug/L			09/13/16 03:10	1
n-Butylbenzene	ND		1.00	0.240	ug/L			09/13/16 03:10	1
N-Propylbenzene	ND		1.00	0.170	ug/L			09/13/16 03:10	1
p-Isopropyltoluene	ND		1.00	0.170	ug/L			09/13/16 03:10	1
sec-Butylbenzene	ND		1.00	0.170	ug/L			09/13/16 03:10	1
Styrene	ND		1.00	0.280	ug/L			09/13/16 03:10	1
t-Amyl alcohol	ND		20.0	6.76	ug/L			09/13/16 03:10	1

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: FB

Lab Sample ID: 490-111143-33

Date Collected: 09/01/16 16:15
Date Received: 09/03/16 10:10

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl methyl ether	ND		1.00	0.170	ug/L			09/13/16 03:10	1
tert-Butyl alcohol (TBA)	ND		10.0	3.90	ug/L			09/13/16 03:10	1
tert-Butylbenzene	ND		1.00	0.170	ug/L			09/13/16 03:10	1
1,1,1,2-Tetrachloroethane	ND		1.00	0.150	ug/L			09/13/16 03:10	1
1,1,2,2-Tetrachloroethane	ND		1.00	0.190	ug/L			09/13/16 03:10	1
Tetrachloroethene	ND		1.00	0.140	ug/L			09/13/16 03:10	1
Toluene	ND		1.00	0.170	ug/L			09/13/16 03:10	1
trans-1,2-Dichloroethene	ND		1.00	0.230	ug/L			09/13/16 03:10	1
trans-1,3-Dichloropropene	ND		1.00	0.170	ug/L			09/13/16 03:10	1
1,2,3-Trichlorobenzene	ND		1.00	0.230	ug/L			09/13/16 03:10	1
1,2,4-Trichlorobenzene	ND		1.00	0.200	ug/L			09/13/16 03:10	1
1,1,1-Trichloroethane	ND		1.00	0.190	ug/L			09/13/16 03:10	1
1,1,2-Trichloroethane	ND		1.00	0.190	ug/L			09/13/16 03:10	1
Trichloroethene	ND		1.00	0.200	ug/L			09/13/16 03:10	1
Trichlorofluoromethane	ND		1.00	0.210	ug/L			09/13/16 03:10	1
1,2,3-Trichloropropane	ND		1.00	0.230	ug/L			09/13/16 03:10	1
1,2,4-Trimethylbenzene	ND		1.00	0.170	ug/L			09/13/16 03:10	1
1,3,5-Trimethylbenzene	ND		1.00	0.170	ug/L			09/13/16 03:10	1
Vinyl chloride	ND		1.00	0.180	ug/L			09/13/16 03:10	1
Xylenes, Total	ND		3.00	0.580	ug/L			09/13/16 15:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*09/13/16 03:10*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*09/13/16 15:17*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*		*09/13/16 03:10*	*1*
Dibromofluoromethane (Surr)	*97*		*70 - 130*		*09/13/16 15:17*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 130*		*09/13/16 03:10*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*		*09/13/16 15:17*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*09/13/16 03:10*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*09/13/16 15:17*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		1.92	0.308	ug/L		09/06/16 14:40	09/07/16 16:50	1
Acenaphthylene	ND		1.92	0.337	ug/L		09/06/16 14:40	09/07/16 16:50	1
Anthracene	ND		1.92	0.365	ug/L		09/06/16 14:40	09/07/16 16:50	1
Benzo[a]anthracene	ND		1.92	0.308	ug/L		09/06/16 14:40	09/07/16 16:50	1
Benzo[a]pyrene	ND		1.92	0.365	ug/L		09/06/16 14:40	09/07/16 16:50	1
Benzo[b]fluoranthene	ND		1.92	0.346	ug/L		09/06/16 14:40	09/07/16 16:50	1
Benzo[g,h,i]perylene	ND		1.92	0.596	ug/L		09/06/16 14:40	09/07/16 16:50	1
Benzo[k]fluoranthene	ND		1.92	0.356	ug/L		09/06/16 14:40	09/07/16 16:50	1
Chrysene	ND		1.92	0.317	ug/L		09/06/16 14:40	09/07/16 16:50	1
Dibenz(a,h)anthracene	ND		1.92	0.433	ug/L		09/06/16 14:40	09/07/16 16:50	1
Fluoranthene	ND		1.92	0.308	ug/L		09/06/16 14:40	09/07/16 16:50	1
Fluorene	ND		1.92	0.308	ug/L		09/06/16 14:40	09/07/16 16:50	1
Indeno[1,2,3-cd]pyrene	ND		1.92	0.394	ug/L		09/06/16 14:40	09/07/16 16:50	1
1-Methylnaphthalene	ND		1.92	0.346	ug/L		09/06/16 14:40	09/07/16 16:50	1
2-Methylnaphthalene	ND		1.92	0.385	ug/L		09/06/16 14:40	09/07/16 16:50	1
Naphthalene	ND		1.92	0.356	ug/L		09/06/16 14:40	09/07/16 16:50	1
Phenanthrene	ND		1.92	0.404	ug/L		09/06/16 14:40	09/07/16 16:50	1

Client Sample ID: FB

Lab Sample ID: 490-111143-33

Date Collected: 09/01/16 16:15
Matrix: Water
Date Received: 09/03/16 10:10

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	ND		1.92	0.337	ug/L		09/06/16 14:40	09/07/16 16:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*81*		*29 - 120*	*09/06/16 14:40*	*09/07/16 16:50*	*1*
Nitrobenzene-d5 (Surr)	*84*		*27 - 120*	*09/06/16 14:40*	*09/07/16 16:50*	*1*
Terphenyl-d14 (Surr)	*91*		*13 - 120*	*09/06/16 14:40*	*09/07/16 16:50*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		100	50.0	ug/L			09/12/16 21:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*93*		*50 - 150*		*09/12/16 21:53*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND	*	96.2	87.5	ug/L		09/06/16 17:09	09/07/16 11:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*58*		*50 - 150*	*09/06/16 17:09*	*09/07/16 11:43*	*1*

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-7

Date Collected: 08/31/16 17:11
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-34

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25.0	2.66	ug/L			09/12/16 17:14	1
Benzene	ND		1.00	0.200	ug/L			09/12/16 17:14	1
Bromobenzene	ND		1.00	0.210	ug/L			09/12/16 17:14	1
Bromochloromethane	ND		1.00	0.150	ug/L			09/12/16 17:14	1
Bromodichloromethane	ND		1.00	0.170	ug/L			09/12/16 17:14	1
Bromoform	ND		1.00	0.290	ug/L			09/12/16 17:14	1
Bromomethane	ND		1.00	0.350	ug/L			09/12/16 17:14	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			09/12/16 17:14	1
Carbon disulfide	**1.38**		1.00	0.220	ug/L			09/12/16 17:14	1
Carbon tetrachloride	ND		1.00	0.180	ug/L			09/12/16 17:14	1
Chlorobenzene	ND		1.00	0.180	ug/L			09/12/16 17:14	1
Chlorodibromomethane	ND		1.00	0.250	ug/L			09/12/16 17:14	1
Chloroethane	ND	F1	1.00	0.360	ug/L			09/12/16 17:14	1
Chloroform	ND		1.00	0.230	ug/L			09/12/16 17:14	1
Chloromethane	ND		1.00	0.360	ug/L			09/12/16 17:14	1
2-Chlorotoluene	ND		1.00	0.180	ug/L			09/12/16 17:14	1
4-Chlorotoluene	ND		1.00	0.170	ug/L			09/12/16 17:14	1
cis-1,2-Dichloroethene	ND	F1	1.00	0.210	ug/L			09/12/16 17:14	1
cis-1,3-Dichloropropene	ND		1.00	0.170	ug/L			09/12/16 17:14	1
1,2-Dibromo-3-Chloropropane	ND		10.0	0.940	ug/L			09/12/16 17:14	1
1,2-Dibromoethane (EDB)	ND		1.00	0.210	ug/L			09/12/16 17:14	1
Dibromomethane	ND		1.00	0.450	ug/L			09/12/16 17:14	1
1,2-Dichlorobenzene	ND		1.00	0.190	ug/L			09/12/16 17:14	1
1,3-Dichlorobenzene	ND		1.00	0.180	ug/L			09/12/16 17:14	1
1,4-Dichlorobenzene	ND		1.00	0.170	ug/L			09/12/16 17:14	1
Dichlorodifluoromethane	ND	F1	1.00	0.170	ug/L			09/12/16 17:14	1
1,1-Dichloroethane	ND		1.00	0.240	ug/L			09/12/16 17:14	1
1,2-Dichloroethane	ND		1.00	0.200	ug/L			09/12/16 17:14	1
1,1-Dichloroethene	ND		1.00	0.250	ug/L			09/12/16 17:14	1
1,2-Dichloropropane	ND	F1	1.00	0.250	ug/L			09/12/16 17:14	1
1,3-Dichloropropane	ND		1.00	0.190	ug/L			09/12/16 17:14	1
2,2-Dichloropropane	ND		1.00	0.160	ug/L			09/12/16 17:14	1
1,1-Dichloropropene	ND		1.00	0.200	ug/L			09/12/16 17:14	1
Diisopropyl ether	ND		2.00	0.170	ug/L			09/12/16 17:14	1
Ethylbenzene	ND		1.00	0.190	ug/L			09/12/16 17:14	1
Ethyl tert-butyl ether	ND		1.00	0.210	ug/L			09/12/16 17:14	1
Hexachlorobutadiene	ND		2.00	0.380	ug/L			09/12/16 17:14	1
2-Hexanone	ND		10.0	1.28	ug/L			09/12/16 17:14	1
Isopropylbenzene	ND		1.00	0.330	ug/L			09/12/16 17:14	1
Methylene Chloride	ND	F1	5.00	1.00	ug/L			09/12/16 17:14	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.810	ug/L			09/12/16 17:14	1
Methyl tert-butyl ether	ND		1.00	0.170	ug/L			09/12/16 17:14	1
Naphthalene	ND		5.00	0.210	ug/L			09/12/16 17:14	1
n-Butylbenzene	ND		1.00	0.240	ug/L			09/12/16 17:14	1
N-Propylbenzene	ND		1.00	0.170	ug/L			09/12/16 17:14	1
p-Isopropyltoluene	ND		1.00	0.170	ug/L			09/12/16 17:14	1
sec-Butylbenzene	ND		1.00	0.170	ug/L			09/12/16 17:14	1
Styrene	ND		1.00	0.280	ug/L			09/12/16 17:14	1
t-Amyl alcohol	ND		20.0	6.76	ug/L			09/12/16 17:14	1

Client Sample ID: SB-7

Date Collected: 08/31/16 17:11
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-34

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl methyl ether	ND		1.00	0.170	ug/L			09/12/16 17:14	1
tert-Butyl alcohol (TBA)	ND		10.0	3.90	ug/L			09/12/16 17:14	1
tert-Butylbenzene	ND		1.00	0.170	ug/L			09/12/16 17:14	1
1,1,1,2-Tetrachloroethane	ND		1.00	0.150	ug/L			09/12/16 17:14	1
1,1,2,2-Tetrachloroethane	ND		1.00	0.190	ug/L			09/12/16 17:14	1
Tetrachloroethene	ND		1.00	0.140	ug/L			09/12/16 17:14	1
Toluene	ND		1.00	0.170	ug/L			09/12/16 17:14	1
trans-1,2-Dichloroethene	ND		1.00	0.230	ug/L			09/12/16 17:14	1
trans-1,3-Dichloropropene	ND		1.00	0.170	ug/L			09/12/16 17:14	1
1,2,3-Trichlorobenzene	ND		1.00	0.230	ug/L			09/12/16 17:14	1
1,2,4-Trichlorobenzene	ND		1.00	0.200	ug/L			09/12/16 17:14	1
1,1,1-Trichloroethane	ND		1.00	0.190	ug/L			09/12/16 17:14	1
1,1,2-Trichloroethane	ND		1.00	0.190	ug/L			09/12/16 17:14	1
Trichloroethene	ND		1.00	0.200	ug/L			09/12/16 17:14	1
Trichlorofluoromethane	ND		1.00	0.210	ug/L			09/12/16 17:14	1
1,2,3-Trichloropropane	ND		1.00	0.230	ug/L			09/12/16 17:14	1
1,2,4-Trimethylbenzene	ND		1.00	0.170	ug/L			09/12/16 17:14	1
1,3,5-Trimethylbenzene	ND		1.00	0.170	ug/L			09/12/16 17:14	1
Vinyl chloride	ND		1.00	0.180	ug/L			09/12/16 17:14	1
Xylenes, Total	ND		3.00	0.580	ug/L			09/12/16 17:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*09/12/16 17:14*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*		*09/12/16 17:14*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*		*09/12/16 17:14*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*09/12/16 17:14*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		1.85	0.296	ug/L		09/06/16 14:40	09/07/16 17:10	1
Acenaphthylene	ND		1.85	0.324	ug/L		09/06/16 14:40	09/07/16 17:10	1
Anthracene	ND		1.85	0.352	ug/L		09/06/16 14:40	09/07/16 17:10	1
Benzo[a]anthracene	ND		1.85	0.296	ug/L		09/06/16 14:40	09/07/16 17:10	1
Benzo[a]pyrene	ND		1.85	0.352	ug/L		09/06/16 14:40	09/07/16 17:10	1
Benzo[b]fluoranthene	ND		1.85	0.333	ug/L		09/06/16 14:40	09/07/16 17:10	1
Benzo[g,h,i]perylene	ND		1.85	0.574	ug/L		09/06/16 14:40	09/07/16 17:10	1
Benzo[k]fluoranthene	ND		1.85	0.343	ug/L		09/06/16 14:40	09/07/16 17:10	1
Chrysene	ND		1.85	0.306	ug/L		09/06/16 14:40	09/07/16 17:10	1
Dibenz(a,h)anthracene	ND		1.85	0.417	ug/L		09/06/16 14:40	09/07/16 17:10	1
Fluoranthene	ND		1.85	0.296	ug/L		09/06/16 14:40	09/07/16 17:10	1
Fluorene	ND		1.85	0.296	ug/L		09/06/16 14:40	09/07/16 17:10	1
Indeno[1,2,3-cd]pyrene	ND		1.85	0.380	ug/L		09/06/16 14:40	09/07/16 17:10	1
1-Methylnaphthalene	ND		1.85	0.333	ug/L		09/06/16 14:40	09/07/16 17:10	1
2-Methylnaphthalene	ND		1.85	0.370	ug/L		09/06/16 14:40	09/07/16 17:10	1
Naphthalene	ND		1.85	0.343	ug/L		09/06/16 14:40	09/07/16 17:10	1
Phenanthrene	ND		1.85	0.389	ug/L		09/06/16 14:40	09/07/16 17:10	1
Pyrene	ND		1.85	0.324	ug/L		09/06/16 14:40	09/07/16 17:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*68*		*29 - 120*	*09/06/16 14:40*	*09/07/16 17:10*	*1*

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-7

Lab Sample ID: 490-111143-34

Date Collected: 08/31/16 17:11
Matrix: Water
Date Received: 09/03/16 10:10

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*66*		*27 - 120*	*09/06/16 14:40*	*09/07/16 17:10*	*1*
Terphenyl-d14 (Surr)	*59*		*13 - 120*	*09/06/16 14:40*	*09/07/16 17:10*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		100	50.0	ug/L			09/12/16 22:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*92*		*50 - 150*		*09/12/16 22:25*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND	*	92.6	84.3	ug/L		09/06/16 17:09	09/07/16 11:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*79*		*50 - 150*	*09/06/16 17:09*	*09/07/16 11:59*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0266**		0.0100	0.00860	mg/L		09/06/16 11:22	09/07/16 06:21	1
Barium	**0.163**		0.0100	0.00500	mg/L		09/06/16 11:22	09/07/16 06:21	1
Cadmium	**0.00460**		0.00100	0.000500	mg/L		09/06/16 11:22	09/07/16 06:21	1
Chromium	**0.124**		0.00500	0.00300	mg/L		09/06/16 11:22	09/07/16 06:21	1
Lead	**0.0582**		0.00500	0.00200	mg/L		09/06/16 11:22	09/07/16 06:21	1
Selenium	ND		0.0100	0.00500	mg/L		09/06/16 11:22	09/07/16 06:21	1
Silver	ND		0.00500	0.00300	mg/L		09/06/16 11:22	09/07/16 06:21	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.000200	0.000100	mg/L		09/06/16 08:01	09/06/16 14:49	1

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-8

Date Collected: 08/31/16 17:25
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-35

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25.0	2.66	ug/L			09/12/16 17:44	1
Benzene	ND		1.00	0.200	ug/L			09/12/16 17:44	1
Bromobenzene	ND		1.00	0.210	ug/L			09/12/16 17:44	1
Bromochloromethane	ND		1.00	0.150	ug/L			09/12/16 17:44	1
Bromodichloromethane	ND		1.00	0.170	ug/L			09/12/16 17:44	1
Bromoform	ND		1.00	0.290	ug/L			09/12/16 17:44	1
Bromomethane	ND		1.00	0.350	ug/L			09/12/16 17:44	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			09/12/16 17:44	1
Carbon disulfide	ND		1.00	0.220	ug/L			09/12/16 17:44	1
Carbon tetrachloride	ND		1.00	0.180	ug/L			09/12/16 17:44	1
Chlorobenzene	ND		1.00	0.180	ug/L			09/12/16 17:44	1
Chlorodibromomethane	ND		1.00	0.250	ug/L			09/12/16 17:44	1
Chloroethane	ND		1.00	0.360	ug/L			09/12/16 17:44	1
Chloroform	ND		1.00	0.230	ug/L			09/12/16 17:44	1
Chloromethane	ND		1.00	0.360	ug/L			09/12/16 17:44	1
2-Chlorotoluene	ND		1.00	0.180	ug/L			09/12/16 17:44	1
4-Chlorotoluene	ND		1.00	0.170	ug/L			09/12/16 17:44	1
cis-1,2-Dichloroethene	ND		1.00	0.210	ug/L			09/12/16 17:44	1
cis-1,3-Dichloropropene	ND		1.00	0.170	ug/L			09/12/16 17:44	1
1,2-Dibromo-3-Chloropropane	ND		10.0	0.940	ug/L			09/12/16 17:44	1
1,2-Dibromoethane (EDB)	ND		1.00	0.210	ug/L			09/12/16 17:44	1
Dibromomethane	ND		1.00	0.450	ug/L			09/12/16 17:44	1
1,2-Dichlorobenzene	ND		1.00	0.190	ug/L			09/12/16 17:44	1
1,3-Dichlorobenzene	ND		1.00	0.180	ug/L			09/12/16 17:44	1
1,4-Dichlorobenzene	ND		1.00	0.170	ug/L			09/12/16 17:44	1
Dichlorodifluoromethane	ND		1.00	0.170	ug/L			09/12/16 17:44	1
1,1-Dichloroethane	ND		1.00	0.240	ug/L			09/12/16 17:44	1
1,2-Dichloroethane	ND		1.00	0.200	ug/L			09/12/16 17:44	1
1,1-Dichloroethene	ND		1.00	0.250	ug/L			09/12/16 17:44	1
1,2-Dichloropropane	ND		1.00	0.250	ug/L			09/12/16 17:44	1
1,3-Dichloropropane	ND		1.00	0.190	ug/L			09/12/16 17:44	1
2,2-Dichloropropane	ND		1.00	0.160	ug/L			09/12/16 17:44	1
1,1-Dichloropropene	ND		1.00	0.200	ug/L			09/12/16 17:44	1
Diisopropyl ether	ND		2.00	0.170	ug/L			09/12/16 17:44	1
Ethylbenzene	ND		1.00	0.190	ug/L			09/12/16 17:44	1
Ethyl tert-butyl ether	ND		1.00	0.210	ug/L			09/12/16 17:44	1
Hexachlorobutadiene	ND		2.00	0.380	ug/L			09/12/16 17:44	1
2-Hexanone	ND		10.0	1.28	ug/L			09/12/16 17:44	1
Isopropylbenzene	ND		1.00	0.330	ug/L			09/12/16 17:44	1
Methylene Chloride	ND		5.00	1.00	ug/L			09/12/16 17:44	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.810	ug/L			09/12/16 17:44	1
Methyl tert-butyl ether	ND		1.00	0.170	ug/L			09/12/16 17:44	1
Naphthalene	ND		5.00	0.210	ug/L			09/12/16 17:44	1
n-Butylbenzene	ND		1.00	0.240	ug/L			09/12/16 17:44	1
N-Propylbenzene	ND		1.00	0.170	ug/L			09/12/16 17:44	1
p-Isopropyltoluene	ND		1.00	0.170	ug/L			09/12/16 17:44	1
sec-Butylbenzene	ND		1.00	0.170	ug/L			09/12/16 17:44	1
Styrene	ND		1.00	0.280	ug/L			09/12/16 17:44	1
t-Amyl alcohol	ND		20.0	6.76	ug/L			09/12/16 17:44	1

Client Sample ID: SB-8

Date Collected: 08/31/16 17:25
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-35

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl methyl ether	ND		1.00	0.170	ug/L			09/12/16 17:44	1
tert-Butyl alcohol (TBA)	ND		10.0	3.90	ug/L			09/12/16 17:44	1
tert-Butylbenzene	ND		1.00	0.170	ug/L			09/12/16 17:44	1
1,1,1,2-Tetrachloroethane	ND		1.00	0.150	ug/L			09/12/16 17:44	1
1,1,2,2-Tetrachloroethane	ND		1.00	0.190	ug/L			09/12/16 17:44	1
Tetrachloroethene	ND		1.00	0.140	ug/L			09/12/16 17:44	1
Toluene	ND		1.00	0.170	ug/L			09/12/16 17:44	1
trans-1,2-Dichloroethene	ND		1.00	0.230	ug/L			09/12/16 17:44	1
trans-1,3-Dichloropropene	ND		1.00	0.170	ug/L			09/12/16 17:44	1
1,2,3-Trichlorobenzene	ND		1.00	0.230	ug/L			09/12/16 17:44	1
1,2,4-Trichlorobenzene	ND		1.00	0.200	ug/L			09/12/16 17:44	1
1,1,1-Trichloroethane	ND		1.00	0.190	ug/L			09/12/16 17:44	1
1,1,2-Trichloroethane	ND		1.00	0.190	ug/L			09/12/16 17:44	1
Trichloroethene	ND		1.00	0.200	ug/L			09/12/16 17:44	1
Trichlorofluoromethane	ND		1.00	0.210	ug/L			09/12/16 17:44	1
1,2,3-Trichloropropane	ND		1.00	0.230	ug/L			09/12/16 17:44	1
1,2,4-Trimethylbenzene	ND		1.00	0.170	ug/L			09/12/16 17:44	1
1,3,5-Trimethylbenzene	ND		1.00	0.170	ug/L			09/12/16 17:44	1
Vinyl chloride	ND		1.00	0.180	ug/L			09/12/16 17:44	1
Xylenes, Total	ND		3.00	0.580	ug/L			09/12/16 17:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*09/12/16 17:44*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*09/12/16 17:44*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*		*09/12/16 17:44*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*09/12/16 17:44*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		1.85	0.296	ug/L		09/06/16 14:40	09/07/16 17:30	1
Acenaphthylene	ND		1.85	0.324	ug/L		09/06/16 14:40	09/07/16 17:30	1
Anthracene	ND		1.85	0.352	ug/L		09/06/16 14:40	09/07/16 17:30	1
Benzo[a]anthracene	ND		1.85	0.296	ug/L		09/06/16 14:40	09/07/16 17:30	1
Benzo[a]pyrene	ND		1.85	0.352	ug/L		09/06/16 14:40	09/07/16 17:30	1
Benzo[b]fluoranthene	ND		1.85	0.333	ug/L		09/06/16 14:40	09/07/16 17:30	1
Benzo[g,h,i]perylene	ND		1.85	0.574	ug/L		09/06/16 14:40	09/07/16 17:30	1
Benzo[k]fluoranthene	ND		1.85	0.343	ug/L		09/06/16 14:40	09/07/16 17:30	1
Chrysene	ND		1.85	0.306	ug/L		09/06/16 14:40	09/07/16 17:30	1
Dibenz(a,h)anthracene	ND		1.85	0.417	ug/L		09/06/16 14:40	09/07/16 17:30	1
Fluoranthene	ND		1.85	0.296	ug/L		09/06/16 14:40	09/07/16 17:30	1
Fluorene	ND		1.85	0.296	ug/L		09/06/16 14:40	09/07/16 17:30	1
Indeno[1,2,3-cd]pyrene	ND		1.85	0.380	ug/L		09/06/16 14:40	09/07/16 17:30	1
1-Methylnaphthalene	ND		1.85	0.333	ug/L		09/06/16 14:40	09/07/16 17:30	1
2-Methylnaphthalene	ND		1.85	0.370	ug/L		09/06/16 14:40	09/07/16 17:30	1
Naphthalene	ND		1.85	0.343	ug/L		09/06/16 14:40	09/07/16 17:30	1
Phenanthrene	ND		1.85	0.389	ug/L		09/06/16 14:40	09/07/16 17:30	1
Pyrene	ND		1.85	0.324	ug/L		09/06/16 14:40	09/07/16 17:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*78*		*29 - 120*	*09/06/16 14:40*	*09/07/16 17:30*	*1*

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-8

Lab Sample ID: 490-111143-35

Date Collected: 08/31/16 17:25
Matrix: Water
Date Received: 09/03/16 10:10

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*70*		*27 - 120*	*09/06/16 14:40*	*09/07/16 17:30*	*1*
Terphenyl-d14 (Surr)	*53*		*13 - 120*	*09/06/16 14:40*	*09/07/16 17:30*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		100	50.0	ug/L			09/12/16 22:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*92*		*50 - 150*		*09/12/16 22:57*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**191**	*	92.6	84.3	ug/L		09/06/16 17:09	09/07/16 12:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*55*		*50 - 150*	*09/06/16 17:09*	*09/07/16 12:15*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0256**		0.0100	0.00860	mg/L		09/06/16 11:22	09/07/16 06:26	1
Barium	**0.170**		0.0100	0.00500	mg/L		09/06/16 11:22	09/07/16 06:26	1
Cadmium	**0.00420**		0.00100	0.000500	mg/L		09/06/16 11:22	09/07/16 06:26	1
Chromium	**0.177**		0.00500	0.00300	mg/L		09/06/16 11:22	09/07/16 06:26	1
Lead	**0.0782**		0.00500	0.00200	mg/L		09/06/16 11:22	09/07/16 06:26	1
Selenium	**0.0108**		0.0100	0.00500	mg/L		09/06/16 11:22	09/07/16 06:26	1
Silver	ND		0.00500	0.00300	mg/L		09/06/16 11:22	09/07/16 06:26	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.000200	0.000100	mg/L		09/07/16 11:16	09/08/16 12:53	1

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-9

Date Collected: 08/31/16 17:40
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-36

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25.0	2.66	ug/L			09/12/16 18:14	1
Benzene	ND		1.00	0.200	ug/L			09/12/16 18:14	1
Bromobenzene	ND		1.00	0.210	ug/L			09/12/16 18:14	1
Bromochloromethane	ND		1.00	0.150	ug/L			09/12/16 18:14	1
Bromodichloromethane	ND		1.00	0.170	ug/L			09/12/16 18:14	1
Bromoform	ND		1.00	0.290	ug/L			09/12/16 18:14	1
Bromomethane	ND		1.00	0.350	ug/L			09/12/16 18:14	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			09/12/16 18:14	1
Carbon disulfide	ND		1.00	0.220	ug/L			09/12/16 18:14	1
Carbon tetrachloride	ND		1.00	0.180	ug/L			09/12/16 18:14	1
Chlorobenzene	ND		1.00	0.180	ug/L			09/12/16 18:14	1
Chlorodibromomethane	ND		1.00	0.250	ug/L			09/12/16 18:14	1
Chloroethane	ND		1.00	0.360	ug/L			09/12/16 18:14	1
Chloroform	ND		1.00	0.230	ug/L			09/12/16 18:14	1
Chloromethane	ND		1.00	0.360	ug/L			09/12/16 18:14	1
2-Chlorotoluene	ND		1.00	0.180	ug/L			09/12/16 18:14	1
4-Chlorotoluene	ND		1.00	0.170	ug/L			09/12/16 18:14	1
cis-1,2-Dichloroethene	ND		1.00	0.210	ug/L			09/12/16 18:14	1
cis-1,3-Dichloropropene	ND		1.00	0.170	ug/L			09/12/16 18:14	1
1,2-Dibromo-3-Chloropropane	ND		10.0	0.940	ug/L			09/12/16 18:14	1
1,2-Dibromoethane (EDB)	ND		1.00	0.210	ug/L			09/12/16 18:14	1
Dibromomethane	ND		1.00	0.450	ug/L			09/12/16 18:14	1
1,2-Dichlorobenzene	ND		1.00	0.190	ug/L			09/12/16 18:14	1
1,3-Dichlorobenzene	ND		1.00	0.180	ug/L			09/12/16 18:14	1
1,4-Dichlorobenzene	ND		1.00	0.170	ug/L			09/12/16 18:14	1
Dichlorodifluoromethane	ND		1.00	0.170	ug/L			09/12/16 18:14	1
1,1-Dichloroethane	**6.48**		1.00	0.240	ug/L			09/12/16 18:14	1
1,2-Dichloroethane	ND		1.00	0.200	ug/L			09/12/16 18:14	1
1,1-Dichloroethene	ND		1.00	0.250	ug/L			09/12/16 18:14	1
1,2-Dichloropropane	ND		1.00	0.250	ug/L			09/12/16 18:14	1
1,3-Dichloropropane	ND		1.00	0.190	ug/L			09/12/16 18:14	1
2,2-Dichloropropane	ND		1.00	0.160	ug/L			09/12/16 18:14	1
1,1-Dichloropropene	ND		1.00	0.200	ug/L			09/12/16 18:14	1
Diisopropyl ether	ND		2.00	0.170	ug/L			09/12/16 18:14	1
Ethylbenzene	ND		1.00	0.190	ug/L			09/12/16 18:14	1
Ethyl tert-butyl ether	ND		1.00	0.210	ug/L			09/12/16 18:14	1
Hexachlorobutadiene	ND		2.00	0.380	ug/L			09/12/16 18:14	1
2-Hexanone	ND		10.0	1.28	ug/L			09/12/16 18:14	1
Isopropylbenzene	ND		1.00	0.330	ug/L			09/12/16 18:14	1
Methylene Chloride	ND		5.00	1.00	ug/L			09/12/16 18:14	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.810	ug/L			09/12/16 18:14	1
Methyl tert-butyl ether	ND		1.00	0.170	ug/L			09/12/16 18:14	1
Naphthalene	ND		5.00	0.210	ug/L			09/12/16 18:14	1
n-Butylbenzene	ND		1.00	0.240	ug/L			09/12/16 18:14	1
N-Propylbenzene	ND		1.00	0.170	ug/L			09/12/16 18:14	1
p-Isopropyltoluene	ND		1.00	0.170	ug/L			09/12/16 18:14	1
sec-Butylbenzene	ND		1.00	0.170	ug/L			09/12/16 18:14	1
Styrene	ND		1.00	0.280	ug/L			09/12/16 18:14	1
t-Amyl alcohol	ND		20.0	6.76	ug/L			09/12/16 18:14	1

Client Sample ID: SB-9

Date Collected: 08/31/16 17:40
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-36

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl methyl ether	ND		1.00	0.170	ug/L			09/12/16 18:14	1
tert-Butyl alcohol (TBA)	ND		10.0	3.90	ug/L			09/12/16 18:14	1
tert-Butylbenzene	ND		1.00	0.170	ug/L			09/12/16 18:14	1
1,1,1,2-Tetrachloroethane	ND		1.00	0.150	ug/L			09/12/16 18:14	1
1,1,2,2-Tetrachloroethane	ND		1.00	0.190	ug/L			09/12/16 18:14	1
Tetrachloroethene	ND		1.00	0.140	ug/L			09/12/16 18:14	1
Toluene	ND		1.00	0.170	ug/L			09/12/16 18:14	1
trans-1,2-Dichloroethene	ND		1.00	0.230	ug/L			09/12/16 18:14	1
trans-1,3-Dichloropropene	ND		1.00	0.170	ug/L			09/12/16 18:14	1
1,2,3-Trichlorobenzene	ND		1.00	0.230	ug/L			09/12/16 18:14	1
1,2,4-Trichlorobenzene	ND		1.00	0.200	ug/L			09/12/16 18:14	1
1,1,1-Trichloroethane	ND		1.00	0.190	ug/L			09/12/16 18:14	1
1,1,2-Trichloroethane	ND		1.00	0.190	ug/L			09/12/16 18:14	1
Trichloroethene	ND		1.00	0.200	ug/L			09/12/16 18:14	1
Trichlorofluoromethane	ND		1.00	0.210	ug/L			09/12/16 18:14	1
1,2,3-Trichloropropane	ND		1.00	0.230	ug/L			09/12/16 18:14	1
1,2,4-Trimethylbenzene	ND		1.00	0.170	ug/L			09/12/16 18:14	1
1,3,5-Trimethylbenzene	ND		1.00	0.170	ug/L			09/12/16 18:14	1
Vinyl chloride	ND		1.00	0.180	ug/L			09/12/16 18:14	1
Xylenes, Total	ND		3.00	0.580	ug/L			09/12/16 18:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*09/12/16 18:14*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*09/12/16 18:14*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*		*09/12/16 18:14*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*09/12/16 18:14*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		1.85	0.296	ug/L		09/06/16 14:40	09/07/16 17:49	1
Acenaphthylene	ND		1.85	0.324	ug/L		09/06/16 14:40	09/07/16 17:49	1
Anthracene	ND		1.85	0.352	ug/L		09/06/16 14:40	09/07/16 17:49	1
Benzo[a]anthracene	ND		1.85	0.296	ug/L		09/06/16 14:40	09/07/16 17:49	1
Benzo[a]pyrene	ND		1.85	0.352	ug/L		09/06/16 14:40	09/07/16 17:49	1
Benzo[b]fluoranthene	ND		1.85	0.333	ug/L		09/06/16 14:40	09/07/16 17:49	1
Benzo[g,h,i]perylene	ND		1.85	0.574	ug/L		09/06/16 14:40	09/07/16 17:49	1
Benzo[k]fluoranthene	ND		1.85	0.343	ug/L		09/06/16 14:40	09/07/16 17:49	1
Chrysene	ND		1.85	0.306	ug/L		09/06/16 14:40	09/07/16 17:49	1
Dibenz(a,h)anthracene	ND		1.85	0.417	ug/L		09/06/16 14:40	09/07/16 17:49	1
Fluoranthene	ND		1.85	0.296	ug/L		09/06/16 14:40	09/07/16 17:49	1
Fluorene	ND		1.85	0.296	ug/L		09/06/16 14:40	09/07/16 17:49	1
Indeno[1,2,3-cd]pyrene	ND		1.85	0.380	ug/L		09/06/16 14:40	09/07/16 17:49	1
1-Methylnaphthalene	ND		1.85	0.333	ug/L		09/06/16 14:40	09/07/16 17:49	1
2-Methylnaphthalene	ND		1.85	0.370	ug/L		09/06/16 14:40	09/07/16 17:49	1
Naphthalene	ND		1.85	0.343	ug/L		09/06/16 14:40	09/07/16 17:49	1
Phenanthrene	ND		1.85	0.389	ug/L		09/06/16 14:40	09/07/16 17:49	1
Pyrene	ND		1.85	0.324	ug/L		09/06/16 14:40	09/07/16 17:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*79*		*29 - 120*	*09/06/16 14:40*	*09/07/16 17:49*	*1*

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-9

Lab Sample ID: 490-111143-36

Date Collected: 08/31/16 17:40
Matrix: Water
Date Received: 09/03/16 10:10

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*74*		*27 - 120*	*09/06/16 14:40*	*09/07/16 17:49*	*1*
Terphenyl-d14 (Surr)	*73*		*13 - 120*	*09/06/16 14:40*	*09/07/16 17:49*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		100	50.0	ug/L			09/12/16 23:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*92*		*50 - 150*		*09/12/16 23:29*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND	*	92.6	84.3	ug/L		09/06/16 17:09	09/07/16 12:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*49*	*X*	*50 - 150*	*09/06/16 17:09*	*09/07/16 12:31*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00860	mg/L		09/06/16 11:22	09/07/16 06:31	1
Barium	**0.0939**		0.0100	0.00500	mg/L		09/06/16 11:22	09/07/16 06:31	1
Cadmium	ND		0.00100	0.000500	mg/L		09/06/16 11:22	09/07/16 06:31	1
Chromium	**0.00700**		0.00500	0.00300	mg/L		09/06/16 11:22	09/07/16 06:31	1
Lead	**0.00800**		0.00500	0.00200	mg/L		09/06/16 11:22	09/07/16 06:31	1
Selenium	ND		0.0100	0.00500	mg/L		09/06/16 11:22	09/07/16 06:31	1
Silver	ND		0.00500	0.00300	mg/L		09/06/16 11:22	09/07/16 06:31	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.000200	0.000100	mg/L		09/06/16 08:01	09/06/16 14:52	1

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-10

Date Collected: 08/31/16 18:00
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-37

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25.0	2.66	ug/L			09/12/16 18:44	1
Benzene	ND		1.00	0.200	ug/L			09/12/16 18:44	1
Bromobenzene	ND		1.00	0.210	ug/L			09/12/16 18:44	1
Bromochloromethane	ND		1.00	0.150	ug/L			09/12/16 18:44	1
Bromodichloromethane	ND		1.00	0.170	ug/L			09/12/16 18:44	1
Bromoform	ND		1.00	0.290	ug/L			09/12/16 18:44	1
Bromomethane	ND		1.00	0.350	ug/L			09/12/16 18:44	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			09/12/16 18:44	1
Carbon disulfide	ND		1.00	0.220	ug/L			09/12/16 18:44	1
Carbon tetrachloride	ND		1.00	0.180	ug/L			09/12/16 18:44	1
Chlorobenzene	ND		1.00	0.180	ug/L			09/12/16 18:44	1
Chlorodibromomethane	ND		1.00	0.250	ug/L			09/12/16 18:44	1
Chloroethane	ND		1.00	0.360	ug/L			09/12/16 18:44	1
Chloroform	ND		1.00	0.230	ug/L			09/12/16 18:44	1
Chloromethane	ND		1.00	0.360	ug/L			09/12/16 18:44	1
2-Chlorotoluene	ND		1.00	0.180	ug/L			09/12/16 18:44	1
4-Chlorotoluene	ND		1.00	0.170	ug/L			09/12/16 18:44	1
cis-1,2-Dichloroethene	**15.4**		1.00	0.210	ug/L			09/12/16 18:44	1
cis-1,3-Dichloropropene	ND		1.00	0.170	ug/L			09/12/16 18:44	1
1,2-Dibromo-3-Chloropropane	ND		10.0	0.940	ug/L			09/12/16 18:44	1
1,2-Dibromoethane (EDB)	ND		1.00	0.210	ug/L			09/12/16 18:44	1
Dibromomethane	ND		1.00	0.450	ug/L			09/12/16 18:44	1
1,2-Dichlorobenzene	ND		1.00	0.190	ug/L			09/12/16 18:44	1
1,3-Dichlorobenzene	ND		1.00	0.180	ug/L			09/12/16 18:44	1
1,4-Dichlorobenzene	ND		1.00	0.170	ug/L			09/12/16 18:44	1
Dichlorodifluoromethane	ND		1.00	0.170	ug/L			09/12/16 18:44	1
1,1-Dichloroethane	ND		1.00	0.240	ug/L			09/12/16 18:44	1
1,2-Dichloroethane	ND		1.00	0.200	ug/L			09/12/16 18:44	1
1,1-Dichloroethene	ND		1.00	0.250	ug/L			09/12/16 18:44	1
1,2-Dichloropropane	ND		1.00	0.250	ug/L			09/12/16 18:44	1
1,3-Dichloropropane	ND		1.00	0.190	ug/L			09/12/16 18:44	1
2,2-Dichloropropane	ND		1.00	0.160	ug/L			09/12/16 18:44	1
1,1-Dichloropropene	ND		1.00	0.200	ug/L			09/12/16 18:44	1
Diisopropyl ether	ND		2.00	0.170	ug/L			09/12/16 18:44	1
Ethylbenzene	ND		1.00	0.190	ug/L			09/12/16 18:44	1
Ethyl tert-butyl ether	ND		1.00	0.210	ug/L			09/12/16 18:44	1
Hexachlorobutadiene	ND		2.00	0.380	ug/L			09/12/16 18:44	1
2-Hexanone	ND		10.0	1.28	ug/L			09/12/16 18:44	1
Isopropylbenzene	ND		1.00	0.330	ug/L			09/12/16 18:44	1
Methylene Chloride	ND		5.00	1.00	ug/L			09/12/16 18:44	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.810	ug/L			09/12/16 18:44	1
Methyl tert-butyl ether	ND		1.00	0.170	ug/L			09/12/16 18:44	1
Naphthalene	ND		5.00	0.210	ug/L			09/12/16 18:44	1
n-Butylbenzene	ND		1.00	0.240	ug/L			09/12/16 18:44	1
N-Propylbenzene	ND		1.00	0.170	ug/L			09/12/16 18:44	1
p-Isopropyltoluene	ND		1.00	0.170	ug/L			09/12/16 18:44	1
sec-Butylbenzene	ND		1.00	0.170	ug/L			09/12/16 18:44	1
Styrene	ND		1.00	0.280	ug/L			09/12/16 18:44	1
t-Amyl alcohol	ND		20.0	6.76	ug/L			09/12/16 18:44	1

Client Sample ID: SB-10

Date Collected: 08/31/16 18:00
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-37

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl methyl ether	ND		1.00	0.170	ug/L			09/12/16 18:44	1
tert-Butyl alcohol (TBA)	ND		10.0	3.90	ug/L			09/12/16 18:44	1
tert-Butylbenzene	ND		1.00	0.170	ug/L			09/12/16 18:44	1
1,1,1,2-Tetrachloroethane	ND		1.00	0.150	ug/L			09/12/16 18:44	1
1,1,2,2-Tetrachloroethane	ND		1.00	0.190	ug/L			09/12/16 18:44	1
Tetrachloroethene	ND		1.00	0.140	ug/L			09/12/16 18:44	1
Toluene	ND		1.00	0.170	ug/L			09/12/16 18:44	1
trans-1,2-Dichloroethene	ND		1.00	0.230	ug/L			09/12/16 18:44	1
trans-1,3-Dichloropropene	ND		1.00	0.170	ug/L			09/12/16 18:44	1
1,2,3-Trichlorobenzene	ND		1.00	0.230	ug/L			09/12/16 18:44	1
1,2,4-Trichlorobenzene	ND		1.00	0.200	ug/L			09/12/16 18:44	1
1,1,1-Trichloroethane	ND		1.00	0.190	ug/L			09/12/16 18:44	1
1,1,2-Trichloroethane	ND		1.00	0.190	ug/L			09/12/16 18:44	1
Trichloroethene	ND		1.00	0.200	ug/L			09/12/16 18:44	1
Trichlorofluoromethane	ND		1.00	0.210	ug/L			09/12/16 18:44	1
1,2,3-Trichloropropane	ND		1.00	0.230	ug/L			09/12/16 18:44	1
1,2,4-Trimethylbenzene	ND		1.00	0.170	ug/L			09/12/16 18:44	1
1,3,5-Trimethylbenzene	ND		1.00	0.170	ug/L			09/12/16 18:44	1
Vinyl chloride	ND		1.00	0.180	ug/L			09/12/16 18:44	1
Xylenes, Total	ND		3.00	0.580	ug/L			09/12/16 18:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*09/12/16 18:44*	*1*
Dibromofluoromethane (Surr)	*95*		*70 - 130*		*09/12/16 18:44*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*		*09/12/16 18:44*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*09/12/16 18:44*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		1.85	0.296	ug/L		09/06/16 14:40	09/07/16 18:09	1
Acenaphthylene	ND		1.85	0.324	ug/L		09/06/16 14:40	09/07/16 18:09	1
Anthracene	ND		1.85	0.352	ug/L		09/06/16 14:40	09/07/16 18:09	1
Benzo[a]anthracene	ND		1.85	0.296	ug/L		09/06/16 14:40	09/07/16 18:09	1
Benzo[a]pyrene	ND		1.85	0.352	ug/L		09/06/16 14:40	09/07/16 18:09	1
Benzo[b]fluoranthene	ND		1.85	0.333	ug/L		09/06/16 14:40	09/07/16 18:09	1
Benzo[g,h,i]perylene	ND		1.85	0.574	ug/L		09/06/16 14:40	09/07/16 18:09	1
Benzo[k]fluoranthene	ND		1.85	0.343	ug/L		09/06/16 14:40	09/07/16 18:09	1
Chrysene	ND		1.85	0.306	ug/L		09/06/16 14:40	09/07/16 18:09	1
Dibenz(a,h)anthracene	ND		1.85	0.417	ug/L		09/06/16 14:40	09/07/16 18:09	1
Fluoranthene	ND		1.85	0.296	ug/L		09/06/16 14:40	09/07/16 18:09	1
Fluorene	ND		1.85	0.296	ug/L		09/06/16 14:40	09/07/16 18:09	1
Indeno[1,2,3-cd]pyrene	ND		1.85	0.380	ug/L		09/06/16 14:40	09/07/16 18:09	1
1-Methylnaphthalene	ND		1.85	0.333	ug/L		09/06/16 14:40	09/07/16 18:09	1
2-Methylnaphthalene	ND		1.85	0.370	ug/L		09/06/16 14:40	09/07/16 18:09	1
Naphthalene	ND		1.85	0.343	ug/L		09/06/16 14:40	09/07/16 18:09	1
Phenanthrene	ND		1.85	0.389	ug/L		09/06/16 14:40	09/07/16 18:09	1
Pyrene	ND		1.85	0.324	ug/L		09/06/16 14:40	09/07/16 18:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*61*		*29 - 120*	*09/06/16 14:40*	*09/07/16 18:09*	*1*

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-10

Lab Sample ID: 490-111143-37

Date Collected: 08/31/16 18:00
Matrix: Water
Date Received: 09/03/16 10:10

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*57*		*27 - 120*	*09/06/16 14:40*	*09/07/16 18:09*	*1*
Terphenyl-d14 (Surr)	*54*		*13 - 120*	*09/06/16 14:40*	*09/07/16 18:09*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		100	50.0	ug/L			09/13/16 00:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*92*		*50 - 150*		*09/13/16 00:01*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND	*	92.6	84.3	ug/L		09/06/16 17:09	09/07/16 12:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*51*		*50 - 150*	*09/06/16 17:09*	*09/07/16 12:46*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0240**		0.0100	0.00860	mg/L		09/06/16 11:22	09/07/16 06:36	1
Barium	**0.443**		0.0100	0.00500	mg/L		09/06/16 11:22	09/07/16 06:36	1
Cadmium	**0.00220**		0.00100	0.000500	mg/L		09/06/16 11:22	09/07/16 06:36	1
Chromium	**0.111**		0.00500	0.00300	mg/L		09/06/16 11:22	09/07/16 06:36	1
Lead	**0.0750**		0.00500	0.00200	mg/L		09/06/16 11:22	09/07/16 06:36	1
Selenium	ND		0.0100	0.00500	mg/L		09/06/16 11:22	09/07/16 06:36	1
Silver	ND		0.00500	0.00300	mg/L		09/06/16 11:22	09/07/16 06:36	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.000200	0.000100	mg/L		09/06/16 08:01	09/06/16 14:55	1

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-11

Date Collected: 08/31/16 18:15
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-38

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25.0	2.66	ug/L			09/12/16 19:13	1
Benzene	ND		1.00	0.200	ug/L			09/12/16 19:13	1
Bromobenzene	ND		1.00	0.210	ug/L			09/12/16 19:13	1
Bromochloromethane	ND		1.00	0.150	ug/L			09/12/16 19:13	1
Bromodichloromethane	ND		1.00	0.170	ug/L			09/12/16 19:13	1
Bromoform	ND		1.00	0.290	ug/L			09/12/16 19:13	1
Bromomethane	ND		1.00	0.350	ug/L			09/12/16 19:13	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			09/12/16 19:13	1
Carbon disulfide	ND		1.00	0.220	ug/L			09/12/16 19:13	1
Carbon tetrachloride	ND		1.00	0.180	ug/L			09/12/16 19:13	1
Chlorobenzene	ND		1.00	0.180	ug/L			09/12/16 19:13	1
Chlorodibromomethane	ND		1.00	0.250	ug/L			09/12/16 19:13	1
Chloroethane	ND		1.00	0.360	ug/L			09/12/16 19:13	1
Chloroform	ND		1.00	0.230	ug/L			09/12/16 19:13	1
Chloromethane	ND		1.00	0.360	ug/L			09/12/16 19:13	1
2-Chlorotoluene	ND		1.00	0.180	ug/L			09/12/16 19:13	1
4-Chlorotoluene	ND		1.00	0.170	ug/L			09/12/16 19:13	1
cis-1,2-Dichloroethene	**2.81**		1.00	0.210	ug/L			09/12/16 19:13	1
cis-1,3-Dichloropropene	ND		1.00	0.170	ug/L			09/12/16 19:13	1
1,2-Dibromo-3-Chloropropane	ND		10.0	0.940	ug/L			09/12/16 19:13	1
1,2-Dibromoethane (EDB)	ND		1.00	0.210	ug/L			09/12/16 19:13	1
Dibromomethane	ND		1.00	0.450	ug/L			09/12/16 19:13	1
1,2-Dichlorobenzene	ND		1.00	0.190	ug/L			09/12/16 19:13	1
1,3-Dichlorobenzene	ND		1.00	0.180	ug/L			09/12/16 19:13	1
1,4-Dichlorobenzene	ND		1.00	0.170	ug/L			09/12/16 19:13	1
Dichlorodifluoromethane	ND		1.00	0.170	ug/L			09/12/16 19:13	1
1,1-Dichloroethane	ND		1.00	0.240	ug/L			09/12/16 19:13	1
1,2-Dichloroethane	ND		1.00	0.200	ug/L			09/12/16 19:13	1
1,1-Dichloroethene	ND		1.00	0.250	ug/L			09/12/16 19:13	1
1,2-Dichloropropane	ND		1.00	0.250	ug/L			09/12/16 19:13	1
1,3-Dichloropropane	ND		1.00	0.190	ug/L			09/12/16 19:13	1
2,2-Dichloropropane	ND		1.00	0.160	ug/L			09/12/16 19:13	1
1,1-Dichloropropene	ND		1.00	0.200	ug/L			09/12/16 19:13	1
Diisopropyl ether	ND		2.00	0.170	ug/L			09/12/16 19:13	1
Ethylbenzene	ND		1.00	0.190	ug/L			09/12/16 19:13	1
Ethyl tert-butyl ether	ND		1.00	0.210	ug/L			09/12/16 19:13	1
Hexachlorobutadiene	ND		2.00	0.380	ug/L			09/12/16 19:13	1
2-Hexanone	ND		10.0	1.28	ug/L			09/12/16 19:13	1
Isopropylbenzene	ND		1.00	0.330	ug/L			09/12/16 19:13	1
Methylene Chloride	ND		5.00	1.00	ug/L			09/12/16 19:13	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.810	ug/L			09/12/16 19:13	1
Methyl tert-butyl ether	ND		1.00	0.170	ug/L			09/12/16 19:13	1
Naphthalene	ND		5.00	0.210	ug/L			09/12/16 19:13	1
n-Butylbenzene	ND		1.00	0.240	ug/L			09/12/16 19:13	1
N-Propylbenzene	ND		1.00	0.170	ug/L			09/12/16 19:13	1
p-Isopropyltoluene	ND		1.00	0.170	ug/L			09/12/16 19:13	1
sec-Butylbenzene	ND		1.00	0.170	ug/L			09/12/16 19:13	1
Styrene	ND		1.00	0.280	ug/L			09/12/16 19:13	1
t-Amyl alcohol	ND		20.0	6.76	ug/L			09/12/16 19:13	1

Client Sample ID: SB-11

Date Collected: 08/31/16 18:15
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-38

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl methyl ether	ND		1.00	0.170	ug/L			09/12/16 19:13	1
tert-Butyl alcohol (TBA)	ND		10.0	3.90	ug/L			09/12/16 19:13	1
tert-Butylbenzene	ND		1.00	0.170	ug/L			09/12/16 19:13	1
1,1,1,2-Tetrachloroethane	ND		1.00	0.150	ug/L			09/12/16 19:13	1
1,1,2,2-Tetrachloroethane	ND		1.00	0.190	ug/L			09/12/16 19:13	1
Tetrachloroethene	ND		1.00	0.140	ug/L			09/12/16 19:13	1
Toluene	ND		1.00	0.170	ug/L			09/12/16 19:13	1
trans-1,2-Dichloroethene	ND		1.00	0.230	ug/L			09/12/16 19:13	1
trans-1,3-Dichloropropene	ND		1.00	0.170	ug/L			09/12/16 19:13	1
1,2,3-Trichlorobenzene	ND		1.00	0.230	ug/L			09/12/16 19:13	1
1,2,4-Trichlorobenzene	ND		1.00	0.200	ug/L			09/12/16 19:13	1
1,1,1-Trichloroethane	ND		1.00	0.190	ug/L			09/12/16 19:13	1
1,1,2-Trichloroethane	ND		1.00	0.190	ug/L			09/12/16 19:13	1
Trichloroethene	ND		1.00	0.200	ug/L			09/12/16 19:13	1
Trichlorofluoromethane	ND		1.00	0.210	ug/L			09/12/16 19:13	1
1,2,3-Trichloropropane	ND		1.00	0.230	ug/L			09/12/16 19:13	1
1,2,4-Trimethylbenzene	ND		1.00	0.170	ug/L			09/12/16 19:13	1
1,3,5-Trimethylbenzene	ND		1.00	0.170	ug/L			09/12/16 19:13	1
Vinyl chloride	ND		1.00	0.180	ug/L			09/12/16 19:13	1
Xylenes, Total	ND		3.00	0.580	ug/L			09/12/16 19:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*09/12/16 19:13*	*1*
Dibromofluoromethane (Surr)	*94*		*70 - 130*		*09/12/16 19:13*	*1*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 130*		*09/12/16 19:13*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*09/12/16 19:13*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		2.00	0.320	ug/L		09/06/16 14:40	09/07/16 18:29	1
Acenaphthylene	ND		2.00	0.350	ug/L		09/06/16 14:40	09/07/16 18:29	1
Anthracene	ND		2.00	0.380	ug/L		09/06/16 14:40	09/07/16 18:29	1
Benzo[a]anthracene	ND		2.00	0.320	ug/L		09/06/16 14:40	09/07/16 18:29	1
Benzo[a]pyrene	ND		2.00	0.380	ug/L		09/06/16 14:40	09/07/16 18:29	1
Benzo[b]fluoranthene	ND		2.00	0.360	ug/L		09/06/16 14:40	09/07/16 18:29	1
Benzo[g,h,i]perylene	ND		2.00	0.620	ug/L		09/06/16 14:40	09/07/16 18:29	1
Benzo[k]fluoranthene	ND		2.00	0.370	ug/L		09/06/16 14:40	09/07/16 18:29	1
Chrysene	ND		2.00	0.330	ug/L		09/06/16 14:40	09/07/16 18:29	1
Dibenz(a,h)anthracene	ND		2.00	0.450	ug/L		09/06/16 14:40	09/07/16 18:29	1
Fluoranthene	ND		2.00	0.320	ug/L		09/06/16 14:40	09/07/16 18:29	1
Fluorene	ND		2.00	0.320	ug/L		09/06/16 14:40	09/07/16 18:29	1
Indeno[1,2,3-cd]pyrene	ND		2.00	0.410	ug/L		09/06/16 14:40	09/07/16 18:29	1
1-Methylnaphthalene	ND		2.00	0.360	ug/L		09/06/16 14:40	09/07/16 18:29	1
2-Methylnaphthalene	ND		2.00	0.400	ug/L		09/06/16 14:40	09/07/16 18:29	1
Naphthalene	ND		2.00	0.370	ug/L		09/06/16 14:40	09/07/16 18:29	1
Phenanthrene	ND		2.00	0.420	ug/L		09/06/16 14:40	09/07/16 18:29	1
Pyrene	ND		2.00	0.350	ug/L		09/06/16 14:40	09/07/16 18:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*73*		*29 - 120*	*09/06/16 14:40*	*09/07/16 18:29*	*1*

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-11

Lab Sample ID: 490-111143-38

Date Collected: 08/31/16 18:15
Matrix: Water
Date Received: 09/03/16 10:10

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*71*		*27 - 120*	*09/06/16 14:40*	*09/07/16 18:29*	*1*
Terphenyl-d14 (Surr)	*75*		*13 - 120*	*09/06/16 14:40*	*09/07/16 18:29*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		100	50.0	ug/L			09/13/16 00:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*90*		*50 - 150*		*09/13/16 00:34*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND	*	92.6	84.3	ug/L		09/06/16 17:09	09/07/16 13:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*53*		*50 - 150*	*09/06/16 17:09*	*09/07/16 13:02*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00860	mg/L		09/06/16 11:22	09/07/16 06:41	1
Barium	**0.0472**		0.0100	0.00500	mg/L		09/06/16 11:22	09/07/16 06:41	1
Cadmium	ND		0.00100	0.000500	mg/L		09/06/16 11:22	09/07/16 06:41	1
Chromium	**0.00610**		0.00500	0.00300	mg/L		09/06/16 11:22	09/07/16 06:41	1
Lead	**0.0101**		0.00500	0.00200	mg/L		09/06/16 11:22	09/07/16 06:41	1
Selenium	ND		0.0100	0.00500	mg/L		09/06/16 11:22	09/07/16 06:41	1
Silver	ND		0.00500	0.00300	mg/L		09/06/16 11:22	09/07/16 06:41	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.000200	0.000100	mg/L		09/06/16 08:01	09/06/16 14:57	1

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-12

Date Collected: 08/31/16 18:35
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-39

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25.0	2.66	ug/L			09/12/16 19:43	1
Benzene	ND		1.00	0.200	ug/L			09/12/16 19:43	1
Bromobenzene	ND		1.00	0.210	ug/L			09/12/16 19:43	1
Bromochloromethane	ND		1.00	0.150	ug/L			09/12/16 19:43	1
Bromodichloromethane	ND		1.00	0.170	ug/L			09/12/16 19:43	1
Bromoform	ND		1.00	0.290	ug/L			09/12/16 19:43	1
Bromomethane	ND		1.00	0.350	ug/L			09/12/16 19:43	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			09/12/16 19:43	1
Carbon disulfide	ND		1.00	0.220	ug/L			09/12/16 19:43	1
Carbon tetrachloride	ND		1.00	0.180	ug/L			09/12/16 19:43	1
Chlorobenzene	ND		1.00	0.180	ug/L			09/12/16 19:43	1
Chlorodibromomethane	ND		1.00	0.250	ug/L			09/12/16 19:43	1
Chloroethane	ND		1.00	0.360	ug/L			09/12/16 19:43	1
Chloroform	ND		1.00	0.230	ug/L			09/12/16 19:43	1
Chloromethane	ND		1.00	0.360	ug/L			09/12/16 19:43	1
2-Chlorotoluene	ND		1.00	0.180	ug/L			09/12/16 19:43	1
4-Chlorotoluene	ND		1.00	0.170	ug/L			09/12/16 19:43	1
cis-1,2-Dichloroethene	ND		1.00	0.210	ug/L			09/12/16 19:43	1
cis-1,3-Dichloropropene	ND		1.00	0.170	ug/L			09/12/16 19:43	1
1,2-Dibromo-3-Chloropropane	ND		10.0	0.940	ug/L			09/12/16 19:43	1
1,2-Dibromoethane (EDB)	ND		1.00	0.210	ug/L			09/12/16 19:43	1
Dibromomethane	ND		1.00	0.450	ug/L			09/12/16 19:43	1
1,2-Dichlorobenzene	ND		1.00	0.190	ug/L			09/12/16 19:43	1
1,3-Dichlorobenzene	ND		1.00	0.180	ug/L			09/12/16 19:43	1
1,4-Dichlorobenzene	ND		1.00	0.170	ug/L			09/12/16 19:43	1
Dichlorodifluoromethane	ND		1.00	0.170	ug/L			09/12/16 19:43	1
1,1-Dichloroethane	ND		1.00	0.240	ug/L			09/12/16 19:43	1
1,2-Dichloroethane	ND		1.00	0.200	ug/L			09/12/16 19:43	1
1,1-Dichloroethene	ND		1.00	0.250	ug/L			09/12/16 19:43	1
1,2-Dichloropropane	ND		1.00	0.250	ug/L			09/12/16 19:43	1
1,3-Dichloropropane	ND		1.00	0.190	ug/L			09/12/16 19:43	1
2,2-Dichloropropane	ND		1.00	0.160	ug/L			09/12/16 19:43	1
1,1-Dichloropropene	ND		1.00	0.200	ug/L			09/12/16 19:43	1
Diisopropyl ether	ND		2.00	0.170	ug/L			09/12/16 19:43	1
Ethylbenzene	ND		1.00	0.190	ug/L			09/12/16 19:43	1
Ethyl tert-butyl ether	ND		1.00	0.210	ug/L			09/12/16 19:43	1
Hexachlorobutadiene	ND		2.00	0.380	ug/L			09/12/16 19:43	1
2-Hexanone	ND		10.0	1.28	ug/L			09/12/16 19:43	1
Isopropylbenzene	ND		1.00	0.330	ug/L			09/12/16 19:43	1
Methylene Chloride	ND		5.00	1.00	ug/L			09/12/16 19:43	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.810	ug/L			09/12/16 19:43	1
Methyl tert-butyl ether	ND		1.00	0.170	ug/L			09/12/16 19:43	1
Naphthalene	ND		5.00	0.210	ug/L			09/12/16 19:43	1
n-Butylbenzene	ND		1.00	0.240	ug/L			09/12/16 19:43	1
N-Propylbenzene	ND		1.00	0.170	ug/L			09/12/16 19:43	1
p-Isopropyltoluene	ND		1.00	0.170	ug/L			09/12/16 19:43	1
sec-Butylbenzene	ND		1.00	0.170	ug/L			09/12/16 19:43	1
Styrene	ND		1.00	0.280	ug/L			09/12/16 19:43	1
t-Amyl alcohol	ND		20.0	6.76	ug/L			09/12/16 19:43	1

Client Sample ID: SB-12

Date Collected: 08/31/16 18:35
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-39

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl methyl ether	ND		1.00	0.170	ug/L			09/12/16 19:43	1
tert-Butyl alcohol (TBA)	ND		10.0	3.90	ug/L			09/12/16 19:43	1
tert-Butylbenzene	ND		1.00	0.170	ug/L			09/12/16 19:43	1
1,1,1,2-Tetrachloroethane	ND		1.00	0.150	ug/L			09/12/16 19:43	1
1,1,2,2-Tetrachloroethane	ND		1.00	0.190	ug/L			09/12/16 19:43	1
Tetrachloroethene	ND		1.00	0.140	ug/L			09/12/16 19:43	1
Toluene	ND		1.00	0.170	ug/L			09/12/16 19:43	1
trans-1,2-Dichloroethene	ND		1.00	0.230	ug/L			09/12/16 19:43	1
trans-1,3-Dichloropropene	ND		1.00	0.170	ug/L			09/12/16 19:43	1
1,2,3-Trichlorobenzene	ND		1.00	0.230	ug/L			09/12/16 19:43	1
1,2,4-Trichlorobenzene	ND		1.00	0.200	ug/L			09/12/16 19:43	1
1,1,1-Trichloroethane	ND		1.00	0.190	ug/L			09/12/16 19:43	1
1,1,2-Trichloroethane	ND		1.00	0.190	ug/L			09/12/16 19:43	1
Trichloroethene	ND		1.00	0.200	ug/L			09/12/16 19:43	1
Trichlorofluoromethane	ND		1.00	0.210	ug/L			09/12/16 19:43	1
1,2,3-Trichloropropane	ND		1.00	0.230	ug/L			09/12/16 19:43	1
1,2,4-Trimethylbenzene	ND		1.00	0.170	ug/L			09/12/16 19:43	1
1,3,5-Trimethylbenzene	ND		1.00	0.170	ug/L			09/12/16 19:43	1
Vinyl chloride	ND		1.00	0.180	ug/L			09/12/16 19:43	1
Xylenes, Total	ND		3.00	0.580	ug/L			09/12/16 19:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*09/12/16 19:43*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*		*09/12/16 19:43*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*		*09/12/16 19:43*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*09/12/16 19:43*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		1.92	0.308	ug/L		09/06/16 14:40	09/07/16 18:48	1
Acenaphthylene	ND		1.92	0.337	ug/L		09/06/16 14:40	09/07/16 18:48	1
Anthracene	ND		1.92	0.365	ug/L		09/06/16 14:40	09/07/16 18:48	1
Benzo[a]anthracene	ND		1.92	0.308	ug/L		09/06/16 14:40	09/07/16 18:48	1
Benzo[a]pyrene	ND		1.92	0.365	ug/L		09/06/16 14:40	09/07/16 18:48	1
Benzo[b]fluoranthene	ND		1.92	0.346	ug/L		09/06/16 14:40	09/07/16 18:48	1
Benzo[g,h,i]perylene	ND		1.92	0.596	ug/L		09/06/16 14:40	09/07/16 18:48	1
Benzo[k]fluoranthene	ND		1.92	0.356	ug/L		09/06/16 14:40	09/07/16 18:48	1
Chrysene	ND		1.92	0.317	ug/L		09/06/16 14:40	09/07/16 18:48	1
Dibenz(a,h)anthracene	ND		1.92	0.433	ug/L		09/06/16 14:40	09/07/16 18:48	1
Fluoranthene	ND		1.92	0.308	ug/L		09/06/16 14:40	09/07/16 18:48	1
Fluorene	ND		1.92	0.308	ug/L		09/06/16 14:40	09/07/16 18:48	1
Indeno[1,2,3-cd]pyrene	ND		1.92	0.394	ug/L		09/06/16 14:40	09/07/16 18:48	1
1-Methylnaphthalene	ND		1.92	0.346	ug/L		09/06/16 14:40	09/07/16 18:48	1
2-Methylnaphthalene	ND		1.92	0.385	ug/L		09/06/16 14:40	09/07/16 18:48	1
Naphthalene	ND		1.92	0.356	ug/L		09/06/16 14:40	09/07/16 18:48	1
Phenanthrene	ND		1.92	0.404	ug/L		09/06/16 14:40	09/07/16 18:48	1
Pyrene	ND		1.92	0.337	ug/L		09/06/16 14:40	09/07/16 18:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*80*		*29 - 120*	*09/06/16 14:40*	*09/07/16 18:48*	*1*

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-12

Lab Sample ID: 490-111143-39

Date Collected: 08/31/16 18:35
Matrix: Water
Date Received: 09/03/16 10:10

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*80*		*27 - 120*	*09/06/16 14:40*	*09/07/16 18:48*	*1*
Terphenyl-d14 (Surr)	*75*		*13 - 120*	*09/06/16 14:40*	*09/07/16 18:48*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		100	50.0	ug/L			09/13/16 01:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*92*		*50 - 150*		*09/13/16 01:06*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND	*	92.6	84.3	ug/L		09/06/16 17:09	09/07/16 13:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*54*		*50 - 150*	*09/06/16 17:09*	*09/07/16 13:18*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00860	mg/L		09/07/16 08:20	09/09/16 10:56	1
Barium	**0.345**		0.0100	0.00500	mg/L		09/07/16 08:20	09/09/16 10:56	1
Cadmium	**0.00160**		0.00100	0.000500	mg/L		09/07/16 08:20	09/09/16 10:56	1
Chromium	**0.184**		0.00500	0.00300	mg/L		09/07/16 08:20	09/09/16 10:56	1
Lead	**0.104**		0.00500	0.00200	mg/L		09/07/16 08:20	09/09/16 10:56	1
Selenium	ND		0.0100	0.00500	mg/L		09/07/16 08:20	09/09/16 10:56	1
Silver	ND		0.0250	0.0150	mg/L		09/07/16 08:20	09/11/16 19:22	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.000200	0.000100	mg/L		09/06/16 08:01	09/06/16 15:05	1

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-13

Date Collected: 09/02/16 10:05
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-40

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25.0	2.66	ug/L			09/13/16 03:39	1
Benzene	ND		1.00	0.200	ug/L			09/13/16 03:39	1
Bromobenzene	ND		1.00	0.210	ug/L			09/13/16 03:39	1
Bromochloromethane	ND		1.00	0.150	ug/L			09/13/16 03:39	1
Bromodichloromethane	ND		1.00	0.170	ug/L			09/13/16 03:39	1
Bromoform	ND		1.00	0.290	ug/L			09/13/16 03:39	1
Bromomethane	ND		1.00	0.350	ug/L			09/13/16 03:39	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			09/13/16 03:39	1
Carbon disulfide	ND		1.00	0.220	ug/L			09/13/16 03:39	1
Carbon tetrachloride	ND		1.00	0.180	ug/L			09/13/16 03:39	1
Chlorobenzene	ND		1.00	0.180	ug/L			09/13/16 03:39	1
Chlorodibromomethane	ND		1.00	0.250	ug/L			09/13/16 03:39	1
Chloroethane	ND		1.00	0.360	ug/L			09/13/16 03:39	1
Chloroform	ND		1.00	0.230	ug/L			09/13/16 03:39	1
Chloromethane	ND		1.00	0.360	ug/L			09/13/16 03:39	1
2-Chlorotoluene	ND		1.00	0.180	ug/L			09/13/16 03:39	1
4-Chlorotoluene	ND		1.00	0.170	ug/L			09/13/16 03:39	1
cis-1,2-Dichloroethene	**386**		1.00	0.210	ug/L			09/13/16 17:16	1
cis-1,3-Dichloropropene	ND		1.00	0.170	ug/L			09/13/16 03:39	1
1,2-Dibromo-3-Chloropropane	ND		10.0	0.940	ug/L			09/13/16 03:39	1
1,2-Dibromoethane (EDB)	ND		1.00	0.210	ug/L			09/13/16 03:39	1
Dibromomethane	ND		1.00	0.450	ug/L			09/13/16 03:39	1
1,2-Dichlorobenzene	ND		1.00	0.190	ug/L			09/13/16 03:39	1
1,3-Dichlorobenzene	ND		1.00	0.180	ug/L			09/13/16 03:39	1
1,4-Dichlorobenzene	ND		1.00	0.170	ug/L			09/13/16 03:39	1
Dichlorodifluoromethane	ND		1.00	0.170	ug/L			09/13/16 03:39	1
1,1-Dichloroethane	ND		1.00	0.240	ug/L			09/13/16 03:39	1
1,2-Dichloroethane	ND		1.00	0.200	ug/L			09/13/16 03:39	1
1,1-Dichloroethene	ND		1.00	0.250	ug/L			09/13/16 03:39	1
1,2-Dichloropropane	ND		1.00	0.250	ug/L			09/13/16 03:39	1
1,3-Dichloropropane	ND		1.00	0.190	ug/L			09/13/16 03:39	1
2,2-Dichloropropane	ND		1.00	0.160	ug/L			09/13/16 03:39	1
1,1-Dichloropropene	ND		1.00	0.200	ug/L			09/13/16 03:39	1
Diisopropyl ether	ND		2.00	0.170	ug/L			09/13/16 03:39	1
Ethylbenzene	ND		1.00	0.190	ug/L			09/13/16 03:39	1
Ethyl tert-butyl ether	ND		1.00	0.210	ug/L			09/13/16 03:39	1
Hexachlorobutadiene	ND		2.00	0.380	ug/L			09/13/16 03:39	1
2-Hexanone	ND		10.0	1.28	ug/L			09/13/16 03:39	1
Isopropylbenzene	ND		1.00	0.330	ug/L			09/13/16 03:39	1
Methylene Chloride	ND		5.00	1.00	ug/L			09/13/16 03:39	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.810	ug/L			09/13/16 03:39	1
Methyl tert-butyl ether	ND		1.00	0.170	ug/L			09/13/16 03:39	1
Naphthalene	ND		5.00	0.210	ug/L			09/13/16 03:39	1
n-Butylbenzene	ND		1.00	0.240	ug/L			09/13/16 03:39	1
N-Propylbenzene	ND		1.00	0.170	ug/L			09/13/16 03:39	1
p-Isopropyltoluene	ND		1.00	0.170	ug/L			09/13/16 03:39	1
sec-Butylbenzene	ND		1.00	0.170	ug/L			09/13/16 03:39	1
Styrene	ND		1.00	0.280	ug/L			09/13/16 03:39	1
t-Amyl alcohol	ND		20.0	6.76	ug/L			09/13/16 03:39	1

Client Sample ID: SB-13

Date Collected: 09/02/16 10:05
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-40

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl methyl ether	ND		1.00	0.170	ug/L			09/13/16 03:39	1
tert-Butyl alcohol (TBA)	ND		10.0	3.90	ug/L			09/13/16 03:39	1
tert-Butylbenzene	ND		1.00	0.170	ug/L			09/13/16 03:39	1
1,1,1,2-Tetrachloroethane	ND		1.00	0.150	ug/L			09/13/16 03:39	1
1,1,2,2-Tetrachloroethane	ND		1.00	0.190	ug/L			09/13/16 03:39	1
Tetrachloroethene	ND		1.00	0.140	ug/L			09/13/16 03:39	1
Toluene	ND		1.00	0.170	ug/L			09/13/16 03:39	1
trans-1,2-Dichloroethene	**4.59**		1.00	0.230	ug/L			09/13/16 03:39	1
trans-1,3-Dichloropropene	ND		1.00	0.170	ug/L			09/13/16 03:39	1
1,2,3-Trichlorobenzene	ND		1.00	0.230	ug/L			09/13/16 03:39	1
1,2,4-Trichlorobenzene	ND		1.00	0.200	ug/L			09/13/16 03:39	1
1,1,1-Trichloroethane	ND		1.00	0.190	ug/L			09/13/16 03:39	1
1,1,2-Trichloroethane	ND		1.00	0.190	ug/L			09/13/16 03:39	1
Trichloroethene	**8.46**		1.00	0.200	ug/L			09/13/16 03:39	1
Trichlorofluoromethane	ND		1.00	0.210	ug/L			09/13/16 03:39	1
1,2,3-Trichloropropane	ND		1.00	0.230	ug/L			09/13/16 03:39	1
1,2,4-Trimethylbenzene	ND		1.00	0.170	ug/L			09/13/16 03:39	1
1,3,5-Trimethylbenzene	ND		1.00	0.170	ug/L			09/13/16 03:39	1
Vinyl chloride	**3.97**		1.00	0.180	ug/L			09/13/16 17:16	1
Xylenes, Total	ND		3.00	0.580	ug/L			09/13/16 03:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*09/13/16 03:39*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*09/13/16 17:16*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*		*09/13/16 03:39*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*		*09/13/16 17:16*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*		*09/13/16 03:39*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*		*09/13/16 17:16*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*09/13/16 03:39*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*09/13/16 17:16*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		1.85	0.296	ug/L		09/06/16 14:40	09/07/16 19:08	1
Acenaphthylene	ND		1.85	0.324	ug/L		09/06/16 14:40	09/07/16 19:08	1
Anthracene	ND		1.85	0.352	ug/L		09/06/16 14:40	09/07/16 19:08	1
Benzo[a]anthracene	ND		1.85	0.296	ug/L		09/06/16 14:40	09/07/16 19:08	1
Benzo[a]pyrene	ND		1.85	0.352	ug/L		09/06/16 14:40	09/07/16 19:08	1
Benzo[b]fluoranthene	ND		1.85	0.333	ug/L		09/06/16 14:40	09/07/16 19:08	1
Benzo[g,h,i]perylene	ND		1.85	0.574	ug/L		09/06/16 14:40	09/07/16 19:08	1
Benzo[k]fluoranthene	ND		1.85	0.343	ug/L		09/06/16 14:40	09/07/16 19:08	1
Chrysene	ND		1.85	0.306	ug/L		09/06/16 14:40	09/07/16 19:08	1
Dibenz(a,h)anthracene	ND		1.85	0.417	ug/L		09/06/16 14:40	09/07/16 19:08	1
Fluoranthene	ND		1.85	0.296	ug/L		09/06/16 14:40	09/07/16 19:08	1
Fluorene	ND		1.85	0.296	ug/L		09/06/16 14:40	09/07/16 19:08	1
Indeno[1,2,3-cd]pyrene	ND		1.85	0.380	ug/L		09/06/16 14:40	09/07/16 19:08	1
1-Methylnaphthalene	ND		1.85	0.333	ug/L		09/06/16 14:40	09/07/16 19:08	1
2-Methylnaphthalene	ND		1.85	0.370	ug/L		09/06/16 14:40	09/07/16 19:08	1
Naphthalene	ND		1.85	0.343	ug/L		09/06/16 14:40	09/07/16 19:08	1
Phenanthrene	ND		1.85	0.389	ug/L		09/06/16 14:40	09/07/16 19:08	1

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-13

Date Collected: 09/02/16 10:05
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-40

Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	ND		1.85	0.324	ug/L		09/06/16 14:40	09/07/16 19:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*71*		*29 - 120*	*09/06/16 14:40*	*09/07/16 19:08*	*1*
Nitrobenzene-d5 (Surr)	*76*		*27 - 120*	*09/06/16 14:40*	*09/07/16 19:08*	*1*
Terphenyl-d14 (Surr)	*73*		*13 - 120*	*09/06/16 14:40*	*09/07/16 19:08*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		100	50.0	ug/L			09/13/16 01:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*91*		*50 - 150*		*09/13/16 01:38*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND	*	92.6	84.3	ug/L		09/06/16 17:09	09/07/16 13:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*61*		*50 - 150*	*09/06/16 17:09*	*09/07/16 13:34*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0313**		0.0100	0.00860	mg/L		09/07/16 08:20	09/09/16 11:22	1
Barium	**0.128**		0.0100	0.00500	mg/L		09/07/16 08:20	09/09/16 11:22	1
Cadmium	**0.00370**		0.00100	0.000500	mg/L		09/07/16 08:20	09/09/16 11:22	1
Chromium	**0.0853**		0.00500	0.00300	mg/L		09/07/16 08:20	09/09/16 11:22	1
Lead	**0.0415**		0.00500	0.00200	mg/L		09/07/16 08:20	09/09/16 11:22	1
Selenium	ND		0.0100	0.00500	mg/L		09/07/16 08:20	09/09/16 11:22	1
Silver	ND		0.0250	0.0150	mg/L		09/07/16 08:20	09/11/16 19:37	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.000200	0.000100	mg/L		09/06/16 08:01	09/06/16 15:08	1

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-15

Date Collected: 09/02/16 09:15
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-41

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25.0	2.66	ug/L			09/13/16 04:09	1
Benzene	ND		1.00	0.200	ug/L			09/13/16 04:09	1
Bromobenzene	ND		1.00	0.210	ug/L			09/13/16 04:09	1
Bromochloromethane	ND		1.00	0.150	ug/L			09/13/16 04:09	1
Bromodichloromethane	ND		1.00	0.170	ug/L			09/13/16 04:09	1
Bromoform	ND		1.00	0.290	ug/L			09/13/16 04:09	1
Bromomethane	ND		1.00	0.350	ug/L			09/13/16 04:09	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			09/13/16 04:09	1
Carbon disulfide	ND		1.00	0.220	ug/L			09/13/16 04:09	1
Carbon tetrachloride	ND		1.00	0.180	ug/L			09/13/16 04:09	1
Chlorobenzene	ND		1.00	0.180	ug/L			09/13/16 04:09	1
Chlorodibromomethane	ND		1.00	0.250	ug/L			09/13/16 04:09	1
Chloroethane	ND		1.00	0.360	ug/L			09/13/16 04:09	1
Chloroform	ND		1.00	0.230	ug/L			09/13/16 04:09	1
Chloromethane	ND		1.00	0.360	ug/L			09/13/16 04:09	1
2-Chlorotoluene	ND		1.00	0.180	ug/L			09/13/16 04:09	1
4-Chlorotoluene	ND		1.00	0.170	ug/L			09/13/16 04:09	1
cis-1,2-Dichloroethene	ND		1.00	0.210	ug/L			09/13/16 18:16	1
cis-1,3-Dichloropropene	ND		1.00	0.170	ug/L			09/13/16 04:09	1
1,2-Dibromo-3-Chloropropane	ND		10.0	0.940	ug/L			09/13/16 04:09	1
1,2-Dibromoethane (EDB)	ND		1.00	0.210	ug/L			09/13/16 04:09	1
Dibromomethane	ND		1.00	0.450	ug/L			09/13/16 04:09	1
1,2-Dichlorobenzene	ND		1.00	0.190	ug/L			09/13/16 04:09	1
1,3-Dichlorobenzene	ND		1.00	0.180	ug/L			09/13/16 04:09	1
1,4-Dichlorobenzene	ND		1.00	0.170	ug/L			09/13/16 04:09	1
Dichlorodifluoromethane	ND		1.00	0.170	ug/L			09/13/16 04:09	1
1,1-Dichloroethane	ND		1.00	0.240	ug/L			09/13/16 04:09	1
1,2-Dichloroethane	ND		1.00	0.200	ug/L			09/13/16 04:09	1
1,1-Dichloroethene	ND		1.00	0.250	ug/L			09/13/16 04:09	1
1,2-Dichloropropane	ND		1.00	0.250	ug/L			09/13/16 04:09	1
1,3-Dichloropropane	ND		1.00	0.190	ug/L			09/13/16 04:09	1
2,2-Dichloropropane	ND		1.00	0.160	ug/L			09/13/16 04:09	1
1,1-Dichloropropene	ND		1.00	0.200	ug/L			09/13/16 04:09	1
Diisopropyl ether	ND		2.00	0.170	ug/L			09/13/16 04:09	1
Ethylbenzene	ND		1.00	0.190	ug/L			09/13/16 04:09	1
Ethyl tert-butyl ether	ND		1.00	0.210	ug/L			09/13/16 04:09	1
Hexachlorobutadiene	ND		2.00	0.380	ug/L			09/13/16 04:09	1
2-Hexanone	ND		10.0	1.28	ug/L			09/13/16 04:09	1
Isopropylbenzene	ND		1.00	0.330	ug/L			09/13/16 04:09	1
Methylene Chloride	ND		5.00	1.00	ug/L			09/13/16 04:09	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.810	ug/L			09/13/16 04:09	1
Methyl tert-butyl ether	ND		1.00	0.170	ug/L			09/13/16 04:09	1
Naphthalene	ND		5.00	0.210	ug/L			09/13/16 04:09	1
n-Butylbenzene	ND		1.00	0.240	ug/L			09/13/16 04:09	1
N-Propylbenzene	ND		1.00	0.170	ug/L			09/13/16 04:09	1
p-Isopropyltoluene	ND		1.00	0.170	ug/L			09/13/16 04:09	1
sec-Butylbenzene	ND		1.00	0.170	ug/L			09/13/16 04:09	1
Styrene	ND		1.00	0.280	ug/L			09/13/16 04:09	1
t-Amyl alcohol	ND		20.0	6.76	ug/L			09/13/16 04:09	1

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-15

Date Collected: 09/02/16 09:15
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-41

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl methyl ether	ND		1.00	0.170	ug/L			09/13/16 04:09	1
tert-Butyl alcohol (TBA)	ND		10.0	3.90	ug/L			09/13/16 04:09	1
tert-Butylbenzene	ND		1.00	0.170	ug/L			09/13/16 04:09	1
1,1,1,2-Tetrachloroethane	ND		1.00	0.150	ug/L			09/13/16 04:09	1
1,1,2,2-Tetrachloroethane	ND		1.00	0.190	ug/L			09/13/16 04:09	1
Tetrachloroethene	ND		1.00	0.140	ug/L			09/13/16 04:09	1
Toluene	ND		1.00	0.170	ug/L			09/13/16 04:09	1
trans-1,2-Dichloroethene	ND		1.00	0.230	ug/L			09/13/16 04:09	1
trans-1,3-Dichloropropene	ND		1.00	0.170	ug/L			09/13/16 04:09	1
1,2,3-Trichlorobenzene	ND		1.00	0.230	ug/L			09/13/16 04:09	1
1,2,4-Trichlorobenzene	ND		1.00	0.200	ug/L			09/13/16 04:09	1
1,1,1-Trichloroethane	ND		1.00	0.190	ug/L			09/13/16 04:09	1
1,1,2-Trichloroethane	ND		1.00	0.190	ug/L			09/13/16 04:09	1
Trichloroethene	ND		1.00	0.200	ug/L			09/13/16 04:09	1
Trichlorofluoromethane	ND		1.00	0.210	ug/L			09/13/16 04:09	1
1,2,3-Trichloropropane	ND		1.00	0.230	ug/L			09/13/16 04:09	1
1,2,4-Trimethylbenzene	ND		1.00	0.170	ug/L			09/13/16 04:09	1
1,3,5-Trimethylbenzene	ND		1.00	0.170	ug/L			09/13/16 04:09	1
Vinyl chloride	ND		1.00	0.180	ug/L			09/13/16 04:09	1
Xylenes, Total	ND		3.00	0.580	ug/L			09/13/16 04:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*09/13/16 04:09*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*09/13/16 18:16*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*		*09/13/16 04:09*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*09/13/16 18:16*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 130*		*09/13/16 04:09*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*		*09/13/16 18:16*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*09/13/16 04:09*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*09/13/16 18:16*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		1.85	0.296	ug/L		09/06/16 14:40	09/07/16 19:27	1
Acenaphthylene	ND		1.85	0.324	ug/L		09/06/16 14:40	09/07/16 19:27	1
Anthracene	ND		1.85	0.352	ug/L		09/06/16 14:40	09/07/16 19:27	1
Benzo[a]anthracene	ND		1.85	0.296	ug/L		09/06/16 14:40	09/07/16 19:27	1
Benzo[a]pyrene	ND		1.85	0.352	ug/L		09/06/16 14:40	09/07/16 19:27	1
Benzo[b]fluoranthene	ND		1.85	0.333	ug/L		09/06/16 14:40	09/07/16 19:27	1
Benzo[g,h,i]perylene	ND		1.85	0.574	ug/L		09/06/16 14:40	09/07/16 19:27	1
Benzo[k]fluoranthene	ND		1.85	0.343	ug/L		09/06/16 14:40	09/07/16 19:27	1
Chrysene	ND		1.85	0.306	ug/L		09/06/16 14:40	09/07/16 19:27	1
Dibenz(a,h)anthracene	ND		1.85	0.417	ug/L		09/06/16 14:40	09/07/16 19:27	1
Fluoranthene	ND		1.85	0.296	ug/L		09/06/16 14:40	09/07/16 19:27	1
Fluorene	ND		1.85	0.296	ug/L		09/06/16 14:40	09/07/16 19:27	1
Indeno[1,2,3-cd]pyrene	ND		1.85	0.380	ug/L		09/06/16 14:40	09/07/16 19:27	1
1-Methylnaphthalene	ND		1.85	0.333	ug/L		09/06/16 14:40	09/07/16 19:27	1
2-Methylnaphthalene	ND		1.85	0.370	ug/L		09/06/16 14:40	09/07/16 19:27	1
Naphthalene	ND		1.85	0.343	ug/L		09/06/16 14:40	09/07/16 19:27	1
Phenanthrene	ND		1.85	0.389	ug/L		09/06/16 14:40	09/07/16 19:27	1

Client Sample ID: SB-15

Lab Sample ID: 490-111143-41

Date Collected: 09/02/16 09:15
Date Received: 09/03/16 10:10

Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	ND		1.85	0.324	ug/L		09/06/16 14:40	09/07/16 19:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*88*		*29 - 120*	*09/06/16 14:40*	*09/07/16 19:27*	*1*
Nitrobenzene-d5 (Surr)	*86*		*27 - 120*	*09/06/16 14:40*	*09/07/16 19:27*	*1*
Terphenyl-d14 (Surr)	*78*		*13 - 120*	*09/06/16 14:40*	*09/07/16 19:27*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		100	50.0	ug/L			09/13/16 02:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*92*		*50 - 150*		*09/13/16 02:09*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		96.2	87.5	ug/L		09/08/16 12:01	09/08/16 16:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*58*		*50 - 150*	*09/08/16 12:01*	*09/08/16 16:37*	*1*

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-19

Date Collected: 09/02/16 09:50
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-42

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25.0	2.66	ug/L			09/13/16 04:39	1
Benzene	ND		1.00	0.200	ug/L			09/13/16 04:39	1
Bromobenzene	ND		1.00	0.210	ug/L			09/13/16 04:39	1
Bromochloromethane	ND		1.00	0.150	ug/L			09/13/16 04:39	1
Bromodichloromethane	ND		1.00	0.170	ug/L			09/13/16 04:39	1
Bromoform	ND		1.00	0.290	ug/L			09/13/16 04:39	1
Bromomethane	ND		1.00	0.350	ug/L			09/13/16 04:39	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			09/13/16 04:39	1
Carbon disulfide	ND		1.00	0.220	ug/L			09/13/16 04:39	1
Carbon tetrachloride	ND		1.00	0.180	ug/L			09/13/16 04:39	1
Chlorobenzene	ND		1.00	0.180	ug/L			09/13/16 04:39	1
Chlorodibromomethane	ND		1.00	0.250	ug/L			09/13/16 04:39	1
Chloroethane	ND		1.00	0.360	ug/L			09/13/16 04:39	1
Chloroform	ND		1.00	0.230	ug/L			09/13/16 04:39	1
Chloromethane	ND		1.00	0.360	ug/L			09/13/16 04:39	1
2-Chlorotoluene	ND		1.00	0.180	ug/L			09/13/16 04:39	1
4-Chlorotoluene	ND		1.00	0.170	ug/L			09/13/16 04:39	1
cis-1,2-Dichloroethene	**4.36**		1.00	0.210	ug/L			09/13/16 18:45	1
cis-1,3-Dichloropropene	ND		1.00	0.170	ug/L			09/13/16 04:39	1
1,2-Dibromo-3-Chloropropane	ND		10.0	0.940	ug/L			09/13/16 04:39	1
1,2-Dibromoethane (EDB)	ND		1.00	0.210	ug/L			09/13/16 04:39	1
Dibromomethane	ND		1.00	0.450	ug/L			09/13/16 04:39	1
1,2-Dichlorobenzene	ND		1.00	0.190	ug/L			09/13/16 04:39	1
1,3-Dichlorobenzene	ND		1.00	0.180	ug/L			09/13/16 04:39	1
1,4-Dichlorobenzene	ND		1.00	0.170	ug/L			09/13/16 04:39	1
Dichlorodifluoromethane	ND		1.00	0.170	ug/L			09/13/16 04:39	1
1,1-Dichloroethane	ND		1.00	0.240	ug/L			09/13/16 04:39	1
1,2-Dichloroethane	ND		1.00	0.200	ug/L			09/13/16 04:39	1
1,1-Dichloroethene	ND		1.00	0.250	ug/L			09/13/16 04:39	1
1,2-Dichloropropane	ND		1.00	0.250	ug/L			09/13/16 04:39	1
1,3-Dichloropropane	ND		1.00	0.190	ug/L			09/13/16 04:39	1
2,2-Dichloropropane	ND		1.00	0.160	ug/L			09/13/16 04:39	1
1,1-Dichloropropene	ND		1.00	0.200	ug/L			09/13/16 04:39	1
Diisopropyl ether	ND		2.00	0.170	ug/L			09/13/16 04:39	1
Ethylbenzene	ND		1.00	0.190	ug/L			09/13/16 04:39	1
Ethyl tert-butyl ether	ND		1.00	0.210	ug/L			09/13/16 04:39	1
Hexachlorobutadiene	ND		2.00	0.380	ug/L			09/13/16 04:39	1
2-Hexanone	ND		10.0	1.28	ug/L			09/13/16 04:39	1
Isopropylbenzene	ND		1.00	0.330	ug/L			09/13/16 04:39	1
Methylene Chloride	ND		5.00	1.00	ug/L			09/13/16 04:39	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.810	ug/L			09/13/16 04:39	1
Methyl tert-butyl ether	ND		1.00	0.170	ug/L			09/13/16 04:39	1
Naphthalene	ND		5.00	0.210	ug/L			09/13/16 04:39	1
n-Butylbenzene	ND		1.00	0.240	ug/L			09/13/16 04:39	1
N-Propylbenzene	ND		1.00	0.170	ug/L			09/13/16 04:39	1
p-Isopropyltoluene	ND		1.00	0.170	ug/L			09/13/16 04:39	1
sec-Butylbenzene	ND		1.00	0.170	ug/L			09/13/16 04:39	1
Styrene	ND		1.00	0.280	ug/L			09/13/16 04:39	1
t-Amyl alcohol	ND		20.0	6.76	ug/L			09/13/16 04:39	1

Client Sample ID: SB-19

Date Collected: 09/02/16 09:50
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-42

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl methyl ether	ND		1.00	0.170	ug/L			09/13/16 04:39	1
tert-Butyl alcohol (TBA)	ND		10.0	3.90	ug/L			09/13/16 04:39	1
tert-Butylbenzene	ND		1.00	0.170	ug/L			09/13/16 04:39	1
1,1,1,2-Tetrachloroethane	ND		1.00	0.150	ug/L			09/13/16 04:39	1
1,1,2,2-Tetrachloroethane	ND		1.00	0.190	ug/L			09/13/16 04:39	1
Tetrachloroethene	ND		1.00	0.140	ug/L			09/13/16 04:39	1
Toluene	ND		1.00	0.170	ug/L			09/13/16 04:39	1
trans-1,2-Dichloroethene	ND		1.00	0.230	ug/L			09/13/16 04:39	1
trans-1,3-Dichloropropene	ND		1.00	0.170	ug/L			09/13/16 04:39	1
1,2,3-Trichlorobenzene	ND		1.00	0.230	ug/L			09/13/16 04:39	1
1,2,4-Trichlorobenzene	ND		1.00	0.200	ug/L			09/13/16 04:39	1
1,1,1-Trichloroethane	ND		1.00	0.190	ug/L			09/13/16 04:39	1
1,1,2-Trichloroethane	ND		1.00	0.190	ug/L			09/13/16 04:39	1
Trichloroethene	**2.51**		1.00	0.200	ug/L			09/13/16 04:39	1
Trichlorofluoromethane	ND		1.00	0.210	ug/L			09/13/16 04:39	1
1,2,3-Trichloropropane	ND		1.00	0.230	ug/L			09/13/16 04:39	1
1,2,4-Trimethylbenzene	ND		1.00	0.170	ug/L			09/13/16 04:39	1
1,3,5-Trimethylbenzene	ND		1.00	0.170	ug/L			09/13/16 04:39	1
Vinyl chloride	ND		1.00	0.180	ug/L			09/13/16 04:39	1
Xylenes, Total	ND		3.00	0.580	ug/L			09/13/16 04:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*09/13/16 04:39*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*09/13/16 18:45*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*		*09/13/16 04:39*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*		*09/13/16 18:45*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 130*		*09/13/16 04:39*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*		*09/13/16 18:45*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*09/13/16 04:39*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*09/13/16 18:45*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		1.85	0.296	ug/L		09/06/16 14:40	09/07/16 19:47	1
Acenaphthylene	ND		1.85	0.324	ug/L		09/06/16 14:40	09/07/16 19:47	1
Anthracene	ND		1.85	0.352	ug/L		09/06/16 14:40	09/07/16 19:47	1
Benzo[a]anthracene	ND		1.85	0.296	ug/L		09/06/16 14:40	09/07/16 19:47	1
Benzo[a]pyrene	ND		1.85	0.352	ug/L		09/06/16 14:40	09/07/16 19:47	1
Benzo[b]fluoranthene	ND		1.85	0.333	ug/L		09/06/16 14:40	09/07/16 19:47	1
Benzo[g,h,i]perylene	ND		1.85	0.574	ug/L		09/06/16 14:40	09/07/16 19:47	1
Benzo[k]fluoranthene	ND		1.85	0.343	ug/L		09/06/16 14:40	09/07/16 19:47	1
Chrysene	ND		1.85	0.306	ug/L		09/06/16 14:40	09/07/16 19:47	1
Dibenz(a,h)anthracene	ND		1.85	0.417	ug/L		09/06/16 14:40	09/07/16 19:47	1
Fluoranthene	ND		1.85	0.296	ug/L		09/06/16 14:40	09/07/16 19:47	1
Fluorene	ND		1.85	0.296	ug/L		09/06/16 14:40	09/07/16 19:47	1
Indeno[1,2,3-cd]pyrene	ND		1.85	0.380	ug/L		09/06/16 14:40	09/07/16 19:47	1
1-Methylnaphthalene	ND		1.85	0.333	ug/L		09/06/16 14:40	09/07/16 19:47	1
2-Methylnaphthalene	ND		1.85	0.370	ug/L		09/06/16 14:40	09/07/16 19:47	1
Naphthalene	ND		1.85	0.343	ug/L		09/06/16 14:40	09/07/16 19:47	1
Phenanthrene	ND		1.85	0.389	ug/L		09/06/16 14:40	09/07/16 19:47	1

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-19

Date Collected: 09/02/16 09:50
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-42

Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	ND		1.85	0.324	ug/L		09/06/16 14:40	09/07/16 19:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*89*		*29 - 120*	*09/06/16 14:40*	*09/07/16 19:47*	*1*
Nitrobenzene-d5 (Surr)	*88*		*27 - 120*	*09/06/16 14:40*	*09/07/16 19:47*	*1*
Terphenyl-d14 (Surr)	*71*		*13 - 120*	*09/06/16 14:40*	*09/07/16 19:47*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		100	50.0	ug/L			09/13/16 02:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*90*		*50 - 150*		*09/13/16 02:41*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND	*	92.6	84.3	ug/L		09/06/16 17:09	09/07/16 14:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*56*		*50 - 150*	*09/06/16 17:09*	*09/07/16 14:06*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0297**		0.0100	0.00860	mg/L		09/07/16 08:20	09/09/16 11:27	1
Barium	**0.174**		0.0100	0.00500	mg/L		09/07/16 08:20	09/09/16 11:27	1
Cadmium	**0.00500**		0.00100	0.000500	mg/L		09/07/16 08:20	09/09/16 11:27	1
Chromium	**0.129**		0.00500	0.00300	mg/L		09/07/16 08:20	09/09/16 11:27	1
Lead	**0.0551**		0.00500	0.00200	mg/L		09/07/16 08:20	09/09/16 11:27	1
Selenium	ND		0.0100	0.00500	mg/L		09/07/16 08:20	09/09/16 11:27	1
Silver	ND		0.00500	0.00300	mg/L		09/07/16 08:20	09/11/16 19:53	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.000200	0.000100	mg/L		09/06/16 08:01	09/06/16 15:11	1

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-20

Date Collected: 09/02/16 10:45
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-43

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25.0	2.66	ug/L			09/13/16 05:09	1
Benzene	ND		1.00	0.200	ug/L			09/13/16 05:09	1
Bromobenzene	ND		1.00	0.210	ug/L			09/13/16 05:09	1
Bromochloromethane	ND		1.00	0.150	ug/L			09/13/16 05:09	1
Bromodichloromethane	ND		1.00	0.170	ug/L			09/13/16 05:09	1
Bromoform	ND		1.00	0.290	ug/L			09/13/16 05:09	1
Bromomethane	ND		1.00	0.350	ug/L			09/13/16 05:09	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			09/13/16 05:09	1
Carbon disulfide	ND		1.00	0.220	ug/L			09/13/16 05:09	1
Carbon tetrachloride	ND		1.00	0.180	ug/L			09/13/16 05:09	1
Chlorobenzene	ND		1.00	0.180	ug/L			09/13/16 05:09	1
Chlorodibromomethane	ND		1.00	0.250	ug/L			09/13/16 05:09	1
Chloroethane	ND		1.00	0.360	ug/L			09/13/16 05:09	1
Chloroform	ND		1.00	0.230	ug/L			09/13/16 05:09	1
Chloromethane	ND		1.00	0.360	ug/L			09/13/16 05:09	1
2-Chlorotoluene	ND		1.00	0.180	ug/L			09/13/16 05:09	1
4-Chlorotoluene	ND		1.00	0.170	ug/L			09/13/16 05:09	1
cis-1,2-Dichloroethene	ND		1.00	0.210	ug/L			09/13/16 19:15	1
cis-1,3-Dichloropropene	ND		1.00	0.170	ug/L			09/13/16 05:09	1
1,2-Dibromo-3-Chloropropane	ND		10.0	0.940	ug/L			09/13/16 05:09	1
1,2-Dibromoethane (EDB)	ND		1.00	0.210	ug/L			09/13/16 05:09	1
Dibromomethane	ND		1.00	0.450	ug/L			09/13/16 05:09	1
1,2-Dichlorobenzene	ND		1.00	0.190	ug/L			09/13/16 05:09	1
1,3-Dichlorobenzene	ND		1.00	0.180	ug/L			09/13/16 05:09	1
1,4-Dichlorobenzene	ND		1.00	0.170	ug/L			09/13/16 05:09	1
Dichlorodifluoromethane	ND		1.00	0.170	ug/L			09/13/16 05:09	1
1,1-Dichloroethane	ND		1.00	0.240	ug/L			09/13/16 05:09	1
1,2-Dichloroethane	ND		1.00	0.200	ug/L			09/13/16 05:09	1
1,1-Dichloroethene	ND		1.00	0.250	ug/L			09/13/16 05:09	1
1,2-Dichloropropane	ND		1.00	0.250	ug/L			09/13/16 05:09	1
1,3-Dichloropropane	ND		1.00	0.190	ug/L			09/13/16 05:09	1
2,2-Dichloropropane	ND		1.00	0.160	ug/L			09/13/16 05:09	1
1,1-Dichloropropene	ND		1.00	0.200	ug/L			09/13/16 05:09	1
Diisopropyl ether	ND		2.00	0.170	ug/L			09/13/16 05:09	1
Ethylbenzene	ND		1.00	0.190	ug/L			09/13/16 05:09	1
Ethyl tert-butyl ether	ND		1.00	0.210	ug/L			09/13/16 05:09	1
Hexachlorobutadiene	ND		2.00	0.380	ug/L			09/13/16 05:09	1
2-Hexanone	ND		10.0	1.28	ug/L			09/13/16 05:09	1
Isopropylbenzene	ND		1.00	0.330	ug/L			09/13/16 05:09	1
Methylene Chloride	ND		5.00	1.00	ug/L			09/13/16 05:09	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.810	ug/L			09/13/16 05:09	1
Methyl tert-butyl ether	ND		1.00	0.170	ug/L			09/13/16 05:09	1
Naphthalene	ND		5.00	0.210	ug/L			09/13/16 05:09	1
n-Butylbenzene	ND		1.00	0.240	ug/L			09/13/16 05:09	1
N-Propylbenzene	ND		1.00	0.170	ug/L			09/13/16 05:09	1
p-Isopropyltoluene	ND		1.00	0.170	ug/L			09/13/16 05:09	1
sec-Butylbenzene	ND		1.00	0.170	ug/L			09/13/16 05:09	1
Styrene	ND		1.00	0.280	ug/L			09/13/16 05:09	1
t-Amyl alcohol	ND		20.0	6.76	ug/L			09/13/16 05:09	1

Client Sample ID: SB-20

Date Collected: 09/02/16 10:45
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-43

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl methyl ether	ND		1.00	0.170	ug/L			09/13/16 05:09	1
tert-Butyl alcohol (TBA)	ND		10.0	3.90	ug/L			09/13/16 05:09	1
tert-Butylbenzene	ND		1.00	0.170	ug/L			09/13/16 05:09	1
1,1,1,2-Tetrachloroethane	ND		1.00	0.150	ug/L			09/13/16 05:09	1
1,1,2,2-Tetrachloroethane	ND		1.00	0.190	ug/L			09/13/16 05:09	1
Tetrachloroethene	ND		1.00	0.140	ug/L			09/13/16 05:09	1
Toluene	ND		1.00	0.170	ug/L			09/13/16 05:09	1
trans-1,2-Dichloroethene	ND		1.00	0.230	ug/L			09/13/16 05:09	1
trans-1,3-Dichloropropene	ND		1.00	0.170	ug/L			09/13/16 05:09	1
1,2,3-Trichlorobenzene	ND		1.00	0.230	ug/L			09/13/16 05:09	1
1,2,4-Trichlorobenzene	ND		1.00	0.200	ug/L			09/13/16 05:09	1
1,1,1-Trichloroethane	ND		1.00	0.190	ug/L			09/13/16 05:09	1
1,1,2-Trichloroethane	ND		1.00	0.190	ug/L			09/13/16 05:09	1
Trichloroethene	ND		1.00	0.200	ug/L			09/13/16 05:09	1
Trichlorofluoromethane	ND		1.00	0.210	ug/L			09/13/16 05:09	1
1,2,3-Trichloropropane	ND		1.00	0.230	ug/L			09/13/16 05:09	1
1,2,4-Trimethylbenzene	ND		1.00	0.170	ug/L			09/13/16 05:09	1
1,3,5-Trimethylbenzene	ND		1.00	0.170	ug/L			09/13/16 05:09	1
Vinyl chloride	ND		1.00	0.180	ug/L			09/13/16 05:09	1
Xylenes, Total	ND		3.00	0.580	ug/L			09/13/16 05:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*09/13/16 05:09*	*1*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*09/13/16 19:15*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*		*09/13/16 05:09*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*09/13/16 19:15*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*		*09/13/16 05:09*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*09/13/16 19:15*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*09/13/16 05:09*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*09/13/16 19:15*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		2.00	0.320	ug/L		09/06/16 14:40	09/07/16 20:06	1
Acenaphthylene	ND		2.00	0.350	ug/L		09/06/16 14:40	09/07/16 20:06	1
Anthracene	ND		2.00	0.380	ug/L		09/06/16 14:40	09/07/16 20:06	1
Benzo[a]anthracene	ND		2.00	0.320	ug/L		09/06/16 14:40	09/07/16 20:06	1
Benzo[a]pyrene	ND		2.00	0.380	ug/L		09/06/16 14:40	09/07/16 20:06	1
Benzo[b]fluoranthene	ND		2.00	0.360	ug/L		09/06/16 14:40	09/07/16 20:06	1
Benzo[g,h,i]perylene	ND		2.00	0.620	ug/L		09/06/16 14:40	09/07/16 20:06	1
Benzo[k]fluoranthene	ND		2.00	0.370	ug/L		09/06/16 14:40	09/07/16 20:06	1
Chrysene	ND		2.00	0.330	ug/L		09/06/16 14:40	09/07/16 20:06	1
Dibenz(a,h)anthracene	ND		2.00	0.450	ug/L		09/06/16 14:40	09/07/16 20:06	1
Fluoranthene	ND		2.00	0.320	ug/L		09/06/16 14:40	09/07/16 20:06	1
Fluorene	ND		2.00	0.320	ug/L		09/06/16 14:40	09/07/16 20:06	1
Indeno[1,2,3-cd]pyrene	ND		2.00	0.410	ug/L		09/06/16 14:40	09/07/16 20:06	1
1-Methylnaphthalene	ND		2.00	0.360	ug/L		09/06/16 14:40	09/07/16 20:06	1
2-Methylnaphthalene	ND		2.00	0.400	ug/L		09/06/16 14:40	09/07/16 20:06	1
Naphthalene	ND		2.00	0.370	ug/L		09/06/16 14:40	09/07/16 20:06	1
Phenanthrene	ND		2.00	0.420	ug/L		09/06/16 14:40	09/07/16 20:06	1

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-20

Date Collected: 09/02/16 10:45
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-43

Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	ND		2.00	0.350	ug/L		09/06/16 14:40	09/07/16 20:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*88*		*29 - 120*	*09/06/16 14:40*	*09/07/16 20:06*	*1*
Nitrobenzene-d5 (Surr)	*87*		*27 - 120*	*09/06/16 14:40*	*09/07/16 20:06*	*1*
Terphenyl-d14 (Surr)	*74*		*13 - 120*	*09/06/16 14:40*	*09/07/16 20:06*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		100	50.0	ug/L			09/13/16 03:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*91*		*50 - 150*		*09/13/16 03:13*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND	*	92.6	84.3	ug/L		09/06/16 17:09	09/07/16 14:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*62*		*50 - 150*	*09/06/16 17:09*	*09/07/16 14:21*	*1*

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-22

Date Collected: 09/02/16 11:00
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-44

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25.0	2.66	ug/L			09/13/16 05:39	1
Benzene	ND		1.00	0.200	ug/L			09/13/16 05:39	1
Bromobenzene	ND		1.00	0.210	ug/L			09/13/16 05:39	1
Bromochloromethane	ND		1.00	0.150	ug/L			09/13/16 05:39	1
Bromodichloromethane	ND		1.00	0.170	ug/L			09/13/16 05:39	1
Bromoform	ND		1.00	0.290	ug/L			09/13/16 05:39	1
Bromomethane	ND		1.00	0.350	ug/L			09/13/16 05:39	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			09/13/16 05:39	1
Carbon disulfide	ND		1.00	0.220	ug/L			09/13/16 05:39	1
Carbon tetrachloride	ND		1.00	0.180	ug/L			09/13/16 05:39	1
Chlorobenzene	ND		1.00	0.180	ug/L			09/13/16 05:39	1
Chlorodibromomethane	ND		1.00	0.250	ug/L			09/13/16 05:39	1
Chloroethane	ND		1.00	0.360	ug/L			09/13/16 05:39	1
Chloroform	ND		1.00	0.230	ug/L			09/13/16 05:39	1
Chloromethane	ND		1.00	0.360	ug/L			09/13/16 05:39	1
2-Chlorotoluene	ND		1.00	0.180	ug/L			09/13/16 05:39	1
4-Chlorotoluene	ND		1.00	0.170	ug/L			09/13/16 05:39	1
cis-1,2-Dichloroethene	ND		1.00	0.210	ug/L			09/13/16 05:39	1
cis-1,3-Dichloropropene	ND		1.00	0.170	ug/L			09/13/16 05:39	1
1,2-Dibromo-3-Chloropropane	ND		10.0	0.940	ug/L			09/13/16 05:39	1
1,2-Dibromoethane (EDB)	ND		1.00	0.210	ug/L			09/13/16 05:39	1
Dibromomethane	ND		1.00	0.450	ug/L			09/13/16 05:39	1
1,2-Dichlorobenzene	ND		1.00	0.190	ug/L			09/13/16 05:39	1
1,3-Dichlorobenzene	ND		1.00	0.180	ug/L			09/13/16 05:39	1
1,4-Dichlorobenzene	ND		1.00	0.170	ug/L			09/13/16 05:39	1
Dichlorodifluoromethane	ND		1.00	0.170	ug/L			09/13/16 05:39	1
1,1-Dichloroethane	ND		1.00	0.240	ug/L			09/13/16 05:39	1
1,2-Dichloroethane	ND		1.00	0.200	ug/L			09/13/16 05:39	1
1,1-Dichloroethene	ND		1.00	0.250	ug/L			09/13/16 05:39	1
1,2-Dichloropropane	ND		1.00	0.250	ug/L			09/13/16 05:39	1
1,3-Dichloropropane	ND		1.00	0.190	ug/L			09/13/16 05:39	1
2,2-Dichloropropane	ND		1.00	0.160	ug/L			09/13/16 05:39	1
1,1-Dichloropropene	ND		1.00	0.200	ug/L			09/13/16 05:39	1
Diisopropyl ether	ND		2.00	0.170	ug/L			09/13/16 05:39	1
Ethylbenzene	ND		1.00	0.190	ug/L			09/13/16 05:39	1
Ethyl tert-butyl ether	ND		1.00	0.210	ug/L			09/13/16 05:39	1
Hexachlorobutadiene	ND		2.00	0.380	ug/L			09/13/16 05:39	1
2-Hexanone	ND		10.0	1.28	ug/L			09/13/16 05:39	1
Isopropylbenzene	ND		1.00	0.330	ug/L			09/13/16 05:39	1
Methylene Chloride	ND		5.00	1.00	ug/L			09/13/16 05:39	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.810	ug/L			09/13/16 05:39	1
Methyl tert-butyl ether	ND		1.00	0.170	ug/L			09/13/16 05:39	1
Naphthalene	ND		5.00	0.210	ug/L			09/13/16 05:39	1
n-Butylbenzene	ND		1.00	0.240	ug/L			09/13/16 05:39	1
N-Propylbenzene	ND		1.00	0.170	ug/L			09/13/16 05:39	1
p-Isopropyltoluene	ND		1.00	0.170	ug/L			09/13/16 05:39	1
sec-Butylbenzene	ND		1.00	0.170	ug/L			09/13/16 05:39	1
Styrene	ND		1.00	0.280	ug/L			09/13/16 05:39	1
t-Amyl alcohol	ND		20.0	6.76	ug/L			09/13/16 05:39	1

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-22

Date Collected: 09/02/16 11:00
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-44

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl methyl ether	ND		1.00	0.170	ug/L			09/13/16 05:39	1
tert-Butyl alcohol (TBA)	ND		10.0	3.90	ug/L			09/13/16 05:39	1
tert-Butylbenzene	ND		1.00	0.170	ug/L			09/13/16 05:39	1
1,1,1,2-Tetrachloroethane	ND		1.00	0.150	ug/L			09/13/16 05:39	1
1,1,2,2-Tetrachloroethane	ND		1.00	0.190	ug/L			09/13/16 05:39	1
Tetrachloroethene	ND		1.00	0.140	ug/L			09/13/16 05:39	1
Toluene	ND		1.00	0.170	ug/L			09/13/16 05:39	1
trans-1,2-Dichloroethene	ND		1.00	0.230	ug/L			09/13/16 05:39	1
trans-1,3-Dichloropropene	ND		1.00	0.170	ug/L			09/13/16 05:39	1
1,2,3-Trichlorobenzene	ND		1.00	0.230	ug/L			09/13/16 05:39	1
1,2,4-Trichlorobenzene	ND		1.00	0.200	ug/L			09/13/16 05:39	1
1,1,1-Trichloroethane	ND		1.00	0.190	ug/L			09/13/16 05:39	1
1,1,2-Trichloroethane	ND		1.00	0.190	ug/L			09/13/16 05:39	1
Trichloroethene	ND		1.00	0.200	ug/L			09/13/16 05:39	1
Trichlorofluoromethane	ND		1.00	0.210	ug/L			09/13/16 05:39	1
1,2,3-Trichloropropane	ND		1.00	0.230	ug/L			09/13/16 05:39	1
1,2,4-Trimethylbenzene	ND		1.00	0.170	ug/L			09/13/16 05:39	1
1,3,5-Trimethylbenzene	ND		1.00	0.170	ug/L			09/13/16 05:39	1
Vinyl chloride	ND		1.00	0.180	ug/L			09/13/16 05:39	1
Xylenes, Total	ND		3.00	0.580	ug/L			09/13/16 05:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*09/13/16 05:39*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*		*09/13/16 05:39*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*		*09/13/16 05:39*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*09/13/16 05:39*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		2.00	0.320	ug/L		09/06/16 14:40	09/07/16 20:26	1
Acenaphthylene	ND		2.00	0.350	ug/L		09/06/16 14:40	09/07/16 20:26	1
Anthracene	ND		2.00	0.380	ug/L		09/06/16 14:40	09/07/16 20:26	1
Benzo[a]anthracene	ND		2.00	0.320	ug/L		09/06/16 14:40	09/07/16 20:26	1
Benzo[a]pyrene	ND		2.00	0.380	ug/L		09/06/16 14:40	09/07/16 20:26	1
Benzo[b]fluoranthene	ND		2.00	0.360	ug/L		09/06/16 14:40	09/07/16 20:26	1
Benzo[g,h,i]perylene	ND		2.00	0.620	ug/L		09/06/16 14:40	09/07/16 20:26	1
Benzo[k]fluoranthene	ND		2.00	0.370	ug/L		09/06/16 14:40	09/07/16 20:26	1
Chrysene	ND		2.00	0.330	ug/L		09/06/16 14:40	09/07/16 20:26	1
Dibenz(a,h)anthracene	ND		2.00	0.450	ug/L		09/06/16 14:40	09/07/16 20:26	1
Fluoranthene	ND		2.00	0.320	ug/L		09/06/16 14:40	09/07/16 20:26	1
Fluorene	ND		2.00	0.320	ug/L		09/06/16 14:40	09/07/16 20:26	1
Indeno[1,2,3-cd]pyrene	ND		2.00	0.410	ug/L		09/06/16 14:40	09/07/16 20:26	1
1-Methylnaphthalene	ND		2.00	0.360	ug/L		09/06/16 14:40	09/07/16 20:26	1
2-Methylnaphthalene	ND		2.00	0.400	ug/L		09/06/16 14:40	09/07/16 20:26	1
Naphthalene	ND		2.00	0.370	ug/L		09/06/16 14:40	09/07/16 20:26	1
Phenanthrene	ND		2.00	0.420	ug/L		09/06/16 14:40	09/07/16 20:26	1
Pyrene	ND		2.00	0.350	ug/L		09/06/16 14:40	09/07/16 20:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*76*		*29 - 120*	*09/06/16 14:40*	*09/07/16 20:26*	*1*

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-22

Lab Sample ID: 490-111143-44

Date Collected: 09/02/16 11:00
Date Received: 09/03/16 10:10

Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*73*		*27 - 120*	*09/06/16 14:40*	*09/07/16 20:26*	*1*
Terphenyl-d14 (Surr)	*67*		*13 - 120*	*09/06/16 14:40*	*09/07/16 20:26*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		100	50.0	ug/L			09/13/16 03:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*92*		*50 - 150*		*09/13/16 03:44*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND	*	92.6	84.3	ug/L		09/06/16 17:09	09/07/16 14:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*70*		*50 - 150*	*09/06/16 17:09*	*09/07/16 14:37*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0112**		0.0100	0.00860	mg/L		09/07/16 08:20	09/09/16 11:32	1
Barium	**0.0752**		0.0100	0.00500	mg/L		09/07/16 08:20	09/09/16 11:32	1
Cadmium	**0.00280**		0.00100	0.000500	mg/L		09/07/16 08:20	09/09/16 11:32	1
Chromium	**0.0384**		0.00500	0.00300	mg/L		09/07/16 08:20	09/09/16 11:32	1
Lead	**0.0122**		0.00500	0.00200	mg/L		09/07/16 08:20	09/09/16 11:32	1
Selenium	ND		0.0100	0.00500	mg/L		09/07/16 08:20	09/09/16 11:32	1
Silver	ND		0.0100	0.00600	mg/L		09/07/16 08:20	09/11/16 19:58	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.000200	0.000100	mg/L		09/06/16 08:01	09/06/16 15:14	1

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-23

Date Collected: 09/02/16 11:20
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-45

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25.0	2.66	ug/L			09/13/16 06:09	1
Benzene	ND		1.00	0.200	ug/L			09/13/16 06:09	1
Bromobenzene	ND		1.00	0.210	ug/L			09/13/16 06:09	1
Bromochloromethane	ND		1.00	0.150	ug/L			09/13/16 06:09	1
Bromodichloromethane	ND		1.00	0.170	ug/L			09/13/16 06:09	1
Bromoform	ND		1.00	0.290	ug/L			09/13/16 06:09	1
Bromomethane	ND		1.00	0.350	ug/L			09/13/16 06:09	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			09/13/16 06:09	1
Carbon disulfide	ND		1.00	0.220	ug/L			09/13/16 06:09	1
Carbon tetrachloride	ND		1.00	0.180	ug/L			09/13/16 06:09	1
Chlorobenzene	ND		1.00	0.180	ug/L			09/13/16 06:09	1
Chlorodibromomethane	ND		1.00	0.250	ug/L			09/13/16 06:09	1
Chloroethane	ND		1.00	0.360	ug/L			09/13/16 06:09	1
Chloroform	ND		1.00	0.230	ug/L			09/13/16 06:09	1
Chloromethane	ND		1.00	0.360	ug/L			09/13/16 06:09	1
2-Chlorotoluene	ND		1.00	0.180	ug/L			09/13/16 06:09	1
4-Chlorotoluene	ND		1.00	0.170	ug/L			09/13/16 06:09	1
cis-1,2-Dichloroethene	ND		1.00	0.210	ug/L			09/13/16 06:09	1
cis-1,3-Dichloropropene	ND		1.00	0.170	ug/L			09/13/16 06:09	1
1,2-Dibromo-3-Chloropropane	ND		10.0	0.940	ug/L			09/13/16 06:09	1
1,2-Dibromoethane (EDB)	ND		1.00	0.210	ug/L			09/13/16 06:09	1
Dibromomethane	ND		1.00	0.450	ug/L			09/13/16 06:09	1
1,2-Dichlorobenzene	ND		1.00	0.190	ug/L			09/13/16 06:09	1
1,3-Dichlorobenzene	ND		1.00	0.180	ug/L			09/13/16 06:09	1
1,4-Dichlorobenzene	ND		1.00	0.170	ug/L			09/13/16 06:09	1
Dichlorodifluoromethane	ND		1.00	0.170	ug/L			09/13/16 06:09	1
1,1-Dichloroethane	ND		1.00	0.240	ug/L			09/13/16 06:09	1
1,2-Dichloroethane	ND		1.00	0.200	ug/L			09/13/16 06:09	1
1,1-Dichloroethene	ND		1.00	0.250	ug/L			09/13/16 06:09	1
1,2-Dichloropropane	ND		1.00	0.250	ug/L			09/13/16 06:09	1
1,3-Dichloropropane	ND		1.00	0.190	ug/L			09/13/16 06:09	1
2,2-Dichloropropane	ND		1.00	0.160	ug/L			09/13/16 06:09	1
1,1-Dichloropropene	ND		1.00	0.200	ug/L			09/13/16 06:09	1
Diisopropyl ether	ND		2.00	0.170	ug/L			09/13/16 06:09	1
Ethylbenzene	ND		1.00	0.190	ug/L			09/13/16 06:09	1
Ethyl tert-butyl ether	ND		1.00	0.210	ug/L			09/13/16 06:09	1
Hexachlorobutadiene	ND		2.00	0.380	ug/L			09/13/16 06:09	1
2-Hexanone	ND		10.0	1.28	ug/L			09/13/16 06:09	1
Isopropylbenzene	ND		1.00	0.330	ug/L			09/13/16 06:09	1
Methylene Chloride	ND		5.00	1.00	ug/L			09/13/16 06:09	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.810	ug/L			09/13/16 06:09	1
Methyl tert-butyl ether	ND		1.00	0.170	ug/L			09/13/16 06:09	1
Naphthalene	ND		5.00	0.210	ug/L			09/13/16 06:09	1
n-Butylbenzene	ND		1.00	0.240	ug/L			09/13/16 06:09	1
N-Propylbenzene	ND		1.00	0.170	ug/L			09/13/16 06:09	1
p-Isopropyltoluene	ND		1.00	0.170	ug/L			09/13/16 06:09	1
sec-Butylbenzene	ND		1.00	0.170	ug/L			09/13/16 06:09	1
Styrene	ND		1.00	0.280	ug/L			09/13/16 06:09	1
t-Amyl alcohol	ND		20.0	6.76	ug/L			09/13/16 06:09	1

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-23

Date Collected: 09/02/16 11:20
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-45

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl methyl ether	ND		1.00	0.170	ug/L			09/13/16 06:09	1
tert-Butyl alcohol (TBA)	ND		10.0	3.90	ug/L			09/13/16 06:09	1
tert-Butylbenzene	ND		1.00	0.170	ug/L			09/13/16 06:09	1
1,1,1,2-Tetrachloroethane	ND		1.00	0.150	ug/L			09/13/16 06:09	1
1,1,2,2-Tetrachloroethane	ND		1.00	0.190	ug/L			09/13/16 06:09	1
Tetrachloroethene	ND		1.00	0.140	ug/L			09/13/16 06:09	1
Toluene	ND		1.00	0.170	ug/L			09/13/16 06:09	1
trans-1,2-Dichloroethene	ND		1.00	0.230	ug/L			09/13/16 06:09	1
trans-1,3-Dichloropropene	ND		1.00	0.170	ug/L			09/13/16 06:09	1
1,2,3-Trichlorobenzene	ND		1.00	0.230	ug/L			09/13/16 06:09	1
1,2,4-Trichlorobenzene	ND		1.00	0.200	ug/L			09/13/16 06:09	1
1,1,1-Trichloroethane	ND		1.00	0.190	ug/L			09/13/16 06:09	1
1,1,2-Trichloroethane	ND		1.00	0.190	ug/L			09/13/16 06:09	1
Trichloroethene	ND		1.00	0.200	ug/L			09/13/16 06:09	1
Trichlorofluoromethane	ND		1.00	0.210	ug/L			09/13/16 06:09	1
1,2,3-Trichloropropane	ND		1.00	0.230	ug/L			09/13/16 06:09	1
1,2,4-Trimethylbenzene	ND		1.00	0.170	ug/L			09/13/16 06:09	1
1,3,5-Trimethylbenzene	ND		1.00	0.170	ug/L			09/13/16 06:09	1
Vinyl chloride	ND		1.00	0.180	ug/L			09/13/16 06:09	1
Xylenes, Total	ND		3.00	0.580	ug/L			09/13/16 06:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*09/13/16 06:09*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*		*09/13/16 06:09*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*		*09/13/16 06:09*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*09/13/16 06:09*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		1.85	0.296	ug/L		09/06/16 14:40	09/07/16 20:45	1
Acenaphthylene	ND		1.85	0.324	ug/L		09/06/16 14:40	09/07/16 20:45	1
Anthracene	ND		1.85	0.352	ug/L		09/06/16 14:40	09/07/16 20:45	1
Benzo[a]anthracene	ND		1.85	0.296	ug/L		09/06/16 14:40	09/07/16 20:45	1
Benzo[a]pyrene	ND		1.85	0.352	ug/L		09/06/16 14:40	09/07/16 20:45	1
Benzo[b]fluoranthene	ND		1.85	0.333	ug/L		09/06/16 14:40	09/07/16 20:45	1
Benzo[g,h,i]perylene	ND		1.85	0.574	ug/L		09/06/16 14:40	09/07/16 20:45	1
Benzo[k]fluoranthene	ND		1.85	0.343	ug/L		09/06/16 14:40	09/07/16 20:45	1
Chrysene	ND		1.85	0.306	ug/L		09/06/16 14:40	09/07/16 20:45	1
Dibenz(a,h)anthracene	ND		1.85	0.417	ug/L		09/06/16 14:40	09/07/16 20:45	1
Fluoranthene	ND		1.85	0.296	ug/L		09/06/16 14:40	09/07/16 20:45	1
Fluorene	ND		1.85	0.296	ug/L		09/06/16 14:40	09/07/16 20:45	1
Indeno[1,2,3-cd]pyrene	ND		1.85	0.380	ug/L		09/06/16 14:40	09/07/16 20:45	1
1-Methylnaphthalene	ND		1.85	0.333	ug/L		09/06/16 14:40	09/07/16 20:45	1
2-Methylnaphthalene	ND		1.85	0.370	ug/L		09/06/16 14:40	09/07/16 20:45	1
Naphthalene	ND		1.85	0.343	ug/L		09/06/16 14:40	09/07/16 20:45	1
Phenanthrene	ND		1.85	0.389	ug/L		09/06/16 14:40	09/07/16 20:45	1
Pyrene	ND		1.85	0.324	ug/L		09/06/16 14:40	09/07/16 20:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*83*		*29 - 120*	*09/06/16 14:40*	*09/07/16 20:45*	*1*

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-23
Date Collected: 09/02/16 11:20
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-45
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*80*		*27 - 120*	*09/06/16 14:40*	*09/07/16 20:45*	*1*
Terphenyl-d14 (Surr)	*70*		*13 - 120*	*09/06/16 14:40*	*09/07/16 20:45*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		100	50.0	ug/L			09/13/16 04:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*90*		*50 - 150*		*09/13/16 04:16*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND	*	92.6	84.3	ug/L		09/06/16 17:09	09/07/16 14:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*76*		*50 - 150*	*09/06/16 17:09*	*09/07/16 14:53*	*1*

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-25

Date Collected: 09/02/16 11:30
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-46

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25.0	2.66	ug/L			09/13/16 06:38	1
Benzene	ND		1.00	0.200	ug/L			09/13/16 06:38	1
Bromobenzene	ND		1.00	0.210	ug/L			09/13/16 06:38	1
Bromochloromethane	ND		1.00	0.150	ug/L			09/13/16 06:38	1
Bromodichloromethane	ND		1.00	0.170	ug/L			09/13/16 06:38	1
Bromoform	ND		1.00	0.290	ug/L			09/13/16 06:38	1
Bromomethane	ND		1.00	0.350	ug/L			09/13/16 06:38	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			09/13/16 06:38	1
Carbon disulfide	ND		1.00	0.220	ug/L			09/13/16 06:38	1
Carbon tetrachloride	ND		1.00	0.180	ug/L			09/13/16 06:38	1
Chlorobenzene	ND		1.00	0.180	ug/L			09/13/16 06:38	1
Chlorodibromomethane	ND		1.00	0.250	ug/L			09/13/16 06:38	1
Chloroethane	ND		1.00	0.360	ug/L			09/13/16 06:38	1
Chloroform	ND		1.00	0.230	ug/L			09/13/16 06:38	1
Chloromethane	ND		1.00	0.360	ug/L			09/13/16 06:38	1
2-Chlorotoluene	ND		1.00	0.180	ug/L			09/13/16 06:38	1
4-Chlorotoluene	ND		1.00	0.170	ug/L			09/13/16 06:38	1
cis-1,2-Dichloroethene	ND		1.00	0.210	ug/L			09/13/16 06:38	1
cis-1,3-Dichloropropene	ND		1.00	0.170	ug/L			09/13/16 06:38	1
1,2-Dibromo-3-Chloropropane	ND		10.0	0.940	ug/L			09/13/16 06:38	1
1,2-Dibromoethane (EDB)	ND		1.00	0.210	ug/L			09/13/16 06:38	1
Dibromomethane	ND		1.00	0.450	ug/L			09/13/16 06:38	1
1,2-Dichlorobenzene	ND		1.00	0.190	ug/L			09/13/16 06:38	1
1,3-Dichlorobenzene	ND		1.00	0.180	ug/L			09/13/16 06:38	1
1,4-Dichlorobenzene	ND		1.00	0.170	ug/L			09/13/16 06:38	1
Dichlorodifluoromethane	ND		1.00	0.170	ug/L			09/13/16 06:38	1
1,1-Dichloroethane	ND		1.00	0.240	ug/L			09/13/16 06:38	1
1,2-Dichloroethane	ND		1.00	0.200	ug/L			09/13/16 06:38	1
1,1-Dichloroethene	ND		1.00	0.250	ug/L			09/13/16 06:38	1
1,2-Dichloropropane	ND		1.00	0.250	ug/L			09/13/16 06:38	1
1,3-Dichloropropane	ND		1.00	0.190	ug/L			09/13/16 06:38	1
2,2-Dichloropropane	ND		1.00	0.160	ug/L			09/13/16 06:38	1
1,1-Dichloropropene	ND		1.00	0.200	ug/L			09/13/16 06:38	1
Diisopropyl ether	ND		2.00	0.170	ug/L			09/13/16 06:38	1
Ethylbenzene	ND		1.00	0.190	ug/L			09/13/16 06:38	1
Ethyl tert-butyl ether	ND		1.00	0.210	ug/L			09/13/16 06:38	1
Hexachlorobutadiene	ND		2.00	0.380	ug/L			09/13/16 06:38	1
2-Hexanone	ND		10.0	1.28	ug/L			09/13/16 06:38	1
Isopropylbenzene	ND		1.00	0.330	ug/L			09/13/16 06:38	1
Methylene Chloride	ND		5.00	1.00	ug/L			09/13/16 06:38	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.810	ug/L			09/13/16 06:38	1
Methyl tert-butyl ether	ND		1.00	0.170	ug/L			09/13/16 06:38	1
Naphthalene	ND		5.00	0.210	ug/L			09/13/16 06:38	1
n-Butylbenzene	ND		1.00	0.240	ug/L			09/13/16 06:38	1
N-Propylbenzene	ND		1.00	0.170	ug/L			09/13/16 06:38	1
p-Isopropyltoluene	ND		1.00	0.170	ug/L			09/13/16 06:38	1
sec-Butylbenzene	ND		1.00	0.170	ug/L			09/13/16 06:38	1
Styrene	ND		1.00	0.280	ug/L			09/13/16 06:38	1
t-Amyl alcohol	ND		20.0	6.76	ug/L			09/13/16 06:38	1

Client Sample ID: SB-25

Date Collected: 09/02/16 11:30
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-46

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl methyl ether	ND		1.00	0.170	ug/L			09/13/16 06:38	1
tert-Butyl alcohol (TBA)	ND		10.0	3.90	ug/L			09/13/16 06:38	1
tert-Butylbenzene	ND		1.00	0.170	ug/L			09/13/16 06:38	1
1,1,1,2-Tetrachloroethane	ND		1.00	0.150	ug/L			09/13/16 06:38	1
1,1,2,2-Tetrachloroethane	ND		1.00	0.190	ug/L			09/13/16 06:38	1
Tetrachloroethene	ND		1.00	0.140	ug/L			09/13/16 06:38	1
Toluene	ND		1.00	0.170	ug/L			09/13/16 06:38	1
trans-1,2-Dichloroethene	ND		1.00	0.230	ug/L			09/13/16 06:38	1
trans-1,3-Dichloropropene	ND		1.00	0.170	ug/L			09/13/16 06:38	1
1,2,3-Trichlorobenzene	ND		1.00	0.230	ug/L			09/13/16 06:38	1
1,2,4-Trichlorobenzene	ND		1.00	0.200	ug/L			09/13/16 06:38	1
1,1,1-Trichloroethane	ND		1.00	0.190	ug/L			09/13/16 06:38	1
1,1,2-Trichloroethane	ND		1.00	0.190	ug/L			09/13/16 06:38	1
Trichloroethene	ND		1.00	0.200	ug/L			09/13/16 06:38	1
Trichlorofluoromethane	ND		1.00	0.210	ug/L			09/13/16 06:38	1
1,2,3-Trichloropropane	ND		1.00	0.230	ug/L			09/13/16 06:38	1
1,2,4-Trimethylbenzene	ND		1.00	0.170	ug/L			09/13/16 06:38	1
1,3,5-Trimethylbenzene	ND		1.00	0.170	ug/L			09/13/16 06:38	1
Vinyl chloride	ND		1.00	0.180	ug/L			09/13/16 06:38	1
Xylenes, Total	ND		3.00	0.580	ug/L			09/13/16 06:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*09/13/16 06:38*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*		*09/13/16 06:38*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*		*09/13/16 06:38*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*09/13/16 06:38*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		1.85	0.296	ug/L		09/06/16 14:40	09/07/16 21:05	1
Acenaphthylene	ND		1.85	0.324	ug/L		09/06/16 14:40	09/07/16 21:05	1
Anthracene	ND		1.85	0.352	ug/L		09/06/16 14:40	09/07/16 21:05	1
Benzo[a]anthracene	ND		1.85	0.296	ug/L		09/06/16 14:40	09/07/16 21:05	1
Benzo[a]pyrene	ND		1.85	0.352	ug/L		09/06/16 14:40	09/07/16 21:05	1
Benzo[b]fluoranthene	ND		1.85	0.333	ug/L		09/06/16 14:40	09/07/16 21:05	1
Benzo[g,h,i]perylene	ND		1.85	0.574	ug/L		09/06/16 14:40	09/07/16 21:05	1
Benzo[k]fluoranthene	ND		1.85	0.343	ug/L		09/06/16 14:40	09/07/16 21:05	1
Chrysene	ND		1.85	0.306	ug/L		09/06/16 14:40	09/07/16 21:05	1
Dibenz(a,h)anthracene	ND		1.85	0.417	ug/L		09/06/16 14:40	09/07/16 21:05	1
Fluoranthene	ND		1.85	0.296	ug/L		09/06/16 14:40	09/07/16 21:05	1
Fluorene	ND		1.85	0.296	ug/L		09/06/16 14:40	09/07/16 21:05	1
Indeno[1,2,3-cd]pyrene	ND		1.85	0.380	ug/L		09/06/16 14:40	09/07/16 21:05	1
1-Methylnaphthalene	ND		1.85	0.333	ug/L		09/06/16 14:40	09/07/16 21:05	1
2-Methylnaphthalene	ND		1.85	0.370	ug/L		09/06/16 14:40	09/07/16 21:05	1
Naphthalene	ND		1.85	0.343	ug/L		09/06/16 14:40	09/07/16 21:05	1
Phenanthrene	ND		1.85	0.389	ug/L		09/06/16 14:40	09/07/16 21:05	1
Pyrene	ND		1.85	0.324	ug/L		09/06/16 14:40	09/07/16 21:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*72*		*29 - 120*	*09/06/16 14:40*	*09/07/16 21:05*	*1*

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-25

Date Collected: 09/02/16 11:30
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-46

Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*67*		*27 - 120*	*09/06/16 14:40*	*09/07/16 21:05*	*1*
Terphenyl-d14 (Surr)	*69*		*13 - 120*	*09/06/16 14:40*	*09/07/16 21:05*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		100	50.0	ug/L			09/13/16 04:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*90*		*50 - 150*		*09/13/16 04:48*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND	*	92.6	84.3	ug/L		09/06/16 17:09	09/07/16 15:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*54*		*50 - 150*	*09/06/16 17:09*	*09/07/16 15:09*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00860	mg/L		09/07/16 08:20	09/09/16 11:42	1
Barium	**0.215**		0.0100	0.00500	mg/L		09/07/16 08:20	09/09/16 11:42	1
Cadmium	**0.00260**		0.00100	0.000500	mg/L		09/07/16 08:20	09/09/16 11:42	1
Chromium	**0.0695**		0.00500	0.00300	mg/L		09/07/16 08:20	09/09/16 11:42	1
Lead	**0.0160**		0.00500	0.00200	mg/L		09/07/16 08:20	09/09/16 11:42	1
Selenium	ND		0.0100	0.00500	mg/L		09/07/16 08:20	09/09/16 11:42	1
Silver	ND		0.0100	0.00600	mg/L		09/07/16 08:20	09/11/16 20:03	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.000200	0.000100	mg/L		09/06/16 08:01	09/06/16 15:16	1

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: DUP1

Date Collected: 08/31/16 18:00
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-47

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25.0	2.66	ug/L			09/13/16 07:08	1
Benzene	ND		1.00	0.200	ug/L			09/13/16 07:08	1
Bromobenzene	ND		1.00	0.210	ug/L			09/13/16 07:08	1
Bromochloromethane	ND		1.00	0.150	ug/L			09/13/16 07:08	1
Bromodichloromethane	ND		1.00	0.170	ug/L			09/13/16 07:08	1
Bromoform	ND		1.00	0.290	ug/L			09/13/16 07:08	1
Bromomethane	ND		1.00	0.350	ug/L			09/13/16 07:08	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			09/13/16 07:08	1
Carbon disulfide	ND		1.00	0.220	ug/L			09/13/16 07:08	1
Carbon tetrachloride	ND		1.00	0.180	ug/L			09/13/16 07:08	1
Chlorobenzene	ND		1.00	0.180	ug/L			09/13/16 07:08	1
Chlorodibromomethane	ND		1.00	0.250	ug/L			09/13/16 07:08	1
Chloroethane	ND		1.00	0.360	ug/L			09/13/16 07:08	1
Chloroform	ND		1.00	0.230	ug/L			09/13/16 07:08	1
Chloromethane	ND		1.00	0.360	ug/L			09/13/16 07:08	1
2-Chlorotoluene	ND		1.00	0.180	ug/L			09/13/16 07:08	1
4-Chlorotoluene	ND		1.00	0.170	ug/L			09/13/16 07:08	1
cis-1,2-Dichloroethene	**17.7**		1.00	0.210	ug/L			09/13/16 07:08	1
cis-1,3-Dichloropropene	ND		1.00	0.170	ug/L			09/13/16 07:08	1
1,2-Dibromo-3-Chloropropane	ND		10.0	0.940	ug/L			09/13/16 07:08	1
1,2-Dibromoethane (EDB)	ND		1.00	0.210	ug/L			09/13/16 07:08	1
Dibromomethane	ND		1.00	0.450	ug/L			09/13/16 07:08	1
1,2-Dichlorobenzene	ND		1.00	0.190	ug/L			09/13/16 07:08	1
1,3-Dichlorobenzene	ND		1.00	0.180	ug/L			09/13/16 07:08	1
1,4-Dichlorobenzene	ND		1.00	0.170	ug/L			09/13/16 07:08	1
Dichlorodifluoromethane	ND		1.00	0.170	ug/L			09/13/16 07:08	1
1,1-Dichloroethane	ND		1.00	0.240	ug/L			09/13/16 07:08	1
1,2-Dichloroethane	ND		1.00	0.200	ug/L			09/13/16 07:08	1
1,1-Dichloroethene	ND		1.00	0.250	ug/L			09/13/16 07:08	1
1,2-Dichloropropane	ND		1.00	0.250	ug/L			09/13/16 07:08	1
1,3-Dichloropropane	ND		1.00	0.190	ug/L			09/13/16 07:08	1
2,2-Dichloropropane	ND		1.00	0.160	ug/L			09/13/16 07:08	1
1,1-Dichloropropene	ND		1.00	0.200	ug/L			09/13/16 07:08	1
Diisopropyl ether	ND		2.00	0.170	ug/L			09/13/16 07:08	1
Ethylbenzene	ND		1.00	0.190	ug/L			09/13/16 07:08	1
Ethyl tert-butyl ether	ND		1.00	0.210	ug/L			09/13/16 07:08	1
Hexachlorobutadiene	ND		2.00	0.380	ug/L			09/13/16 07:08	1
2-Hexanone	ND		10.0	1.28	ug/L			09/13/16 07:08	1
Isopropylbenzene	ND		1.00	0.330	ug/L			09/13/16 07:08	1
Methylene Chloride	ND		5.00	1.00	ug/L			09/13/16 07:08	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.810	ug/L			09/13/16 07:08	1
Methyl tert-butyl ether	ND		1.00	0.170	ug/L			09/13/16 07:08	1
Naphthalene	ND		5.00	0.210	ug/L			09/13/16 07:08	1
n-Butylbenzene	ND		1.00	0.240	ug/L			09/13/16 07:08	1
N-Propylbenzene	ND		1.00	0.170	ug/L			09/13/16 07:08	1
p-Isopropyltoluene	ND		1.00	0.170	ug/L			09/13/16 07:08	1
sec-Butylbenzene	ND		1.00	0.170	ug/L			09/13/16 07:08	1
Styrene	ND		1.00	0.280	ug/L			09/13/16 07:08	1
t-Amyl alcohol	ND		20.0	6.76	ug/L			09/13/16 07:08	1

Client Sample ID: DUP1

Lab Sample ID: 490-111143-47

Date Collected: 08/31/16 18:00
Matrix: Water
Date Received: 09/03/16 10:10

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl methyl ether	ND		1.00	0.170	ug/L			09/13/16 07:08	1
tert-Butyl alcohol (TBA)	ND		10.0	3.90	ug/L			09/13/16 07:08	1
tert-Butylbenzene	ND		1.00	0.170	ug/L			09/13/16 07:08	1
1,1,1,2-Tetrachloroethane	ND		1.00	0.150	ug/L			09/13/16 07:08	1
1,1,2,2-Tetrachloroethane	ND		1.00	0.190	ug/L			09/13/16 07:08	1
Tetrachloroethene	ND		1.00	0.140	ug/L			09/13/16 07:08	1
Toluene	ND		1.00	0.170	ug/L			09/13/16 07:08	1
trans-1,2-Dichloroethene	ND		1.00	0.230	ug/L			09/13/16 07:08	1
trans-1,3-Dichloropropene	ND		1.00	0.170	ug/L			09/13/16 07:08	1
1,2,3-Trichlorobenzene	ND		1.00	0.230	ug/L			09/13/16 07:08	1
1,2,4-Trichlorobenzene	ND		1.00	0.200	ug/L			09/13/16 07:08	1
1,1,1-Trichloroethane	ND		1.00	0.190	ug/L			09/13/16 07:08	1
1,1,2-Trichloroethane	ND		1.00	0.190	ug/L			09/13/16 07:08	1
Trichloroethene	ND		1.00	0.200	ug/L			09/13/16 07:08	1
Trichlorofluoromethane	ND		1.00	0.210	ug/L			09/13/16 07:08	1
1,2,3-Trichloropropane	ND		1.00	0.230	ug/L			09/13/16 07:08	1
1,2,4-Trimethylbenzene	ND		1.00	0.170	ug/L			09/13/16 07:08	1
1,3,5-Trimethylbenzene	ND		1.00	0.170	ug/L			09/13/16 07:08	1
Vinyl chloride	ND		1.00	0.180	ug/L			09/13/16 07:08	1
Xylenes, Total	ND		3.00	0.580	ug/L			09/13/16 07:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*09/13/16 07:08*	*1*
Dibromofluoromethane (Surr)	*97*		*70 - 130*		*09/13/16 07:08*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*		*09/13/16 07:08*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*09/13/16 07:08*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		1.85	0.296	ug/L		09/06/16 14:40	09/07/16 21:24	1
Acenaphthylene	ND		1.85	0.324	ug/L		09/06/16 14:40	09/07/16 21:24	1
Anthracene	ND		1.85	0.352	ug/L		09/06/16 14:40	09/07/16 21:24	1
Benzo[a]anthracene	ND		1.85	0.296	ug/L		09/06/16 14:40	09/07/16 21:24	1
Benzo[a]pyrene	ND		1.85	0.352	ug/L		09/06/16 14:40	09/07/16 21:24	1
Benzo[b]fluoranthene	ND		1.85	0.333	ug/L		09/06/16 14:40	09/07/16 21:24	1
Benzo[g,h,i]perylene	ND		1.85	0.574	ug/L		09/06/16 14:40	09/07/16 21:24	1
Benzo[k]fluoranthene	ND		1.85	0.343	ug/L		09/06/16 14:40	09/07/16 21:24	1
Chrysene	ND		1.85	0.306	ug/L		09/06/16 14:40	09/07/16 21:24	1
Dibenz(a,h)anthracene	ND		1.85	0.417	ug/L		09/06/16 14:40	09/07/16 21:24	1
Fluoranthene	ND		1.85	0.296	ug/L		09/06/16 14:40	09/07/16 21:24	1
Fluorene	ND		1.85	0.296	ug/L		09/06/16 14:40	09/07/16 21:24	1
Indeno[1,2,3-cd]pyrene	ND		1.85	0.380	ug/L		09/06/16 14:40	09/07/16 21:24	1
1-Methylnaphthalene	ND		1.85	0.333	ug/L		09/06/16 14:40	09/07/16 21:24	1
2-Methylnaphthalene	ND		1.85	0.370	ug/L		09/06/16 14:40	09/07/16 21:24	1
Naphthalene	ND		1.85	0.343	ug/L		09/06/16 14:40	09/07/16 21:24	1
Phenanthrene	ND		1.85	0.389	ug/L		09/06/16 14:40	09/07/16 21:24	1
Pyrene	ND		1.85	0.324	ug/L		09/06/16 14:40	09/07/16 21:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*76*		*29 - 120*	*09/06/16 14:40*	*09/07/16 21:24*	*1*

Client Sample ID: DUP1

Lab Sample ID: 490-111143-47

Date Collected: 08/31/16 18:00
Matrix: Water
Date Received: 09/03/16 10:10

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*73*		*27 - 120*	*09/06/16 14:40*	*09/07/16 21:24*	*1*
Terphenyl-d14 (Surr)	*71*		*13 - 120*	*09/06/16 14:40*	*09/07/16 21:24*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		100	50.0	ug/L			09/13/16 05:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*90*		*50 - 150*		*09/13/16 05:20*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND	*	92.6	84.3	ug/L		09/06/16 17:09	09/07/16 15:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*47*	*X*	*50 - 150*	*09/06/16 17:09*	*09/07/16 15:25*	*1*

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: DUP2

Lab Sample ID: 490-111143-48

Date Collected: 09/02/16 09:20
Date Received: 09/03/16 10:10

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25.0	2.66	ug/L			09/13/16 07:38	1
Benzene	ND		1.00	0.200	ug/L			09/13/16 07:38	1
Bromobenzene	ND		1.00	0.210	ug/L			09/13/16 07:38	1
Bromochloromethane	ND		1.00	0.150	ug/L			09/13/16 07:38	1
Bromodichloromethane	ND		1.00	0.170	ug/L			09/13/16 07:38	1
Bromoform	ND		1.00	0.290	ug/L			09/13/16 07:38	1
Bromomethane	ND		1.00	0.350	ug/L			09/13/16 07:38	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			09/13/16 07:38	1
Carbon disulfide	ND		1.00	0.220	ug/L			09/13/16 07:38	1
Carbon tetrachloride	ND		1.00	0.180	ug/L			09/13/16 07:38	1
Chlorobenzene	ND		1.00	0.180	ug/L			09/13/16 07:38	1
Chlorodibromomethane	ND		1.00	0.250	ug/L			09/13/16 07:38	1
Chloroethane	ND		1.00	0.360	ug/L			09/13/16 07:38	1
Chloroform	ND		1.00	0.230	ug/L			09/13/16 07:38	1
Chloromethane	ND		1.00	0.360	ug/L			09/13/16 07:38	1
2-Chlorotoluene	ND		1.00	0.180	ug/L			09/13/16 07:38	1
4-Chlorotoluene	ND		1.00	0.170	ug/L			09/13/16 07:38	1
cis-1,2-Dichloroethene	ND		1.00	0.210	ug/L			09/13/16 07:38	1
cis-1,3-Dichloropropene	ND		1.00	0.170	ug/L			09/13/16 07:38	1
1,2-Dibromo-3-Chloropropane	ND		10.0	0.940	ug/L			09/13/16 07:38	1
1,2-Dibromoethane (EDB)	ND		1.00	0.210	ug/L			09/13/16 07:38	1
Dibromomethane	ND		1.00	0.450	ug/L			09/13/16 07:38	1
1,2-Dichlorobenzene	ND		1.00	0.190	ug/L			09/13/16 07:38	1
1,3-Dichlorobenzene	ND		1.00	0.180	ug/L			09/13/16 07:38	1
1,4-Dichlorobenzene	ND		1.00	0.170	ug/L			09/13/16 07:38	1
Dichlorodifluoromethane	ND		1.00	0.170	ug/L			09/13/16 07:38	1
1,1-Dichloroethane	ND		1.00	0.240	ug/L			09/13/16 07:38	1
1,2-Dichloroethane	ND		1.00	0.200	ug/L			09/13/16 07:38	1
1,1-Dichloroethene	ND		1.00	0.250	ug/L			09/13/16 07:38	1
1,2-Dichloropropane	ND		1.00	0.250	ug/L			09/13/16 07:38	1
1,3-Dichloropropane	ND		1.00	0.190	ug/L			09/13/16 07:38	1
2,2-Dichloropropane	ND		1.00	0.160	ug/L			09/13/16 07:38	1
1,1-Dichloropropene	ND		1.00	0.200	ug/L			09/13/16 07:38	1
Diisopropyl ether	ND		2.00	0.170	ug/L			09/13/16 07:38	1
Ethylbenzene	ND		1.00	0.190	ug/L			09/13/16 07:38	1
Ethyl tert-butyl ether	ND		1.00	0.210	ug/L			09/13/16 07:38	1
Hexachlorobutadiene	ND		2.00	0.380	ug/L			09/13/16 07:38	1
2-Hexanone	ND		10.0	1.28	ug/L			09/13/16 07:38	1
Isopropylbenzene	ND		1.00	0.330	ug/L			09/13/16 07:38	1
Methylene Chloride	ND		5.00	1.00	ug/L			09/13/16 07:38	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.810	ug/L			09/13/16 07:38	1
Methyl tert-butyl ether	ND		1.00	0.170	ug/L			09/13/16 07:38	1
Naphthalene	ND		5.00	0.210	ug/L			09/13/16 07:38	1
n-Butylbenzene	ND		1.00	0.240	ug/L			09/13/16 07:38	1
N-Propylbenzene	ND		1.00	0.170	ug/L			09/13/16 07:38	1
p-Isopropyltoluene	ND		1.00	0.170	ug/L			09/13/16 07:38	1
sec-Butylbenzene	ND		1.00	0.170	ug/L			09/13/16 07:38	1
Styrene	ND		1.00	0.280	ug/L			09/13/16 07:38	1
t-Amyl alcohol	ND		20.0	6.76	ug/L			09/13/16 07:38	1

Client Sample ID: DUP2

Date Collected: 09/02/16 09:20
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-48

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl methyl ether	ND		1.00	0.170	ug/L			09/13/16 07:38	1
tert-Butyl alcohol (TBA)	ND		10.0	3.90	ug/L			09/13/16 07:38	1
tert-Butylbenzene	ND		1.00	0.170	ug/L			09/13/16 07:38	1
1,1,1,2-Tetrachloroethane	ND		1.00	0.150	ug/L			09/13/16 07:38	1
1,1,2,2-Tetrachloroethane	ND		1.00	0.190	ug/L			09/13/16 07:38	1
Tetrachloroethene	ND		1.00	0.140	ug/L			09/13/16 07:38	1
Toluene	ND		1.00	0.170	ug/L			09/13/16 07:38	1
trans-1,2-Dichloroethene	ND		1.00	0.230	ug/L			09/13/16 07:38	1
trans-1,3-Dichloropropene	ND		1.00	0.170	ug/L			09/13/16 07:38	1
1,2,3-Trichlorobenzene	ND		1.00	0.230	ug/L			09/13/16 07:38	1
1,2,4-Trichlorobenzene	ND		1.00	0.200	ug/L			09/13/16 07:38	1
1,1,1-Trichloroethane	ND		1.00	0.190	ug/L			09/13/16 07:38	1
1,1,2-Trichloroethane	ND		1.00	0.190	ug/L			09/13/16 07:38	1
Trichloroethene	ND		1.00	0.200	ug/L			09/13/16 07:38	1
Trichlorofluoromethane	ND		1.00	0.210	ug/L			09/13/16 07:38	1
1,2,3-Trichloropropane	ND		1.00	0.230	ug/L			09/13/16 07:38	1
1,2,4-Trimethylbenzene	ND		1.00	0.170	ug/L			09/13/16 07:38	1
1,3,5-Trimethylbenzene	ND		1.00	0.170	ug/L			09/13/16 07:38	1
Vinyl chloride	ND		1.00	0.180	ug/L			09/13/16 07:38	1
Xylenes, Total	ND		3.00	0.580	ug/L			09/13/16 07:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*09/13/16 07:38*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*		*09/13/16 07:38*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*		*09/13/16 07:38*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*09/13/16 07:38*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		1.92	0.308	ug/L		09/06/16 14:40	09/07/16 21:44	1
Acenaphthylene	ND		1.92	0.337	ug/L		09/06/16 14:40	09/07/16 21:44	1
Anthracene	ND		1.92	0.365	ug/L		09/06/16 14:40	09/07/16 21:44	1
Benzo[a]anthracene	ND		1.92	0.308	ug/L		09/06/16 14:40	09/07/16 21:44	1
Benzo[a]pyrene	ND		1.92	0.365	ug/L		09/06/16 14:40	09/07/16 21:44	1
Benzo[b]fluoranthene	ND		1.92	0.346	ug/L		09/06/16 14:40	09/07/16 21:44	1
Benzo[g,h,i]perylene	ND		1.92	0.596	ug/L		09/06/16 14:40	09/07/16 21:44	1
Benzo[k]fluoranthene	ND		1.92	0.356	ug/L		09/06/16 14:40	09/07/16 21:44	1
Chrysene	ND		1.92	0.317	ug/L		09/06/16 14:40	09/07/16 21:44	1
Dibenz(a,h)anthracene	ND		1.92	0.433	ug/L		09/06/16 14:40	09/07/16 21:44	1
Fluoranthene	ND		1.92	0.308	ug/L		09/06/16 14:40	09/07/16 21:44	1
Fluorene	ND		1.92	0.308	ug/L		09/06/16 14:40	09/07/16 21:44	1
Indeno[1,2,3-cd]pyrene	ND		1.92	0.394	ug/L		09/06/16 14:40	09/07/16 21:44	1
1-Methylnaphthalene	ND		1.92	0.346	ug/L		09/06/16 14:40	09/07/16 21:44	1
2-Methylnaphthalene	ND		1.92	0.385	ug/L		09/06/16 14:40	09/07/16 21:44	1
Naphthalene	ND		1.92	0.356	ug/L		09/06/16 14:40	09/07/16 21:44	1
Phenanthrene	ND		1.92	0.404	ug/L		09/06/16 14:40	09/07/16 21:44	1
Pyrene	ND		1.92	0.337	ug/L		09/06/16 14:40	09/07/16 21:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*74*		*29 - 120*	*09/06/16 14:40*	*09/07/16 21:44*	*1*

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: DUP2

Lab Sample ID: 490-111143-48

Date Collected: 09/02/16 09:20
Date Received: 09/03/16 10:10

Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	74		27 - 120	09/06/16 14:40	09/07/16 21:44	1
Terphenyl-d14 (Surr)	75		13 - 120	09/06/16 14:40	09/07/16 21:44	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		100	50.0	ug/L			09/13/16 05:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	90		50 - 150		09/13/16 05:52	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND	*	96.2	87.5	ug/L		09/06/16 17:09	09/07/16 15:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	60		50 - 150	09/06/16 17:09	09/07/16 15:41	1

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: MW-N

Lab Sample ID: 490-111143-49

Date Collected: 09/02/16 10:30
Date Received: 09/03/16 10:10

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25.0	2.66	ug/L			09/13/16 08:08	1
Benzene	ND		1.00	0.200	ug/L			09/13/16 08:08	1
Bromobenzene	ND		1.00	0.210	ug/L			09/13/16 08:08	1
Bromochloromethane	ND		1.00	0.150	ug/L			09/13/16 08:08	1
Bromodichloromethane	ND		1.00	0.170	ug/L			09/13/16 08:08	1
Bromoform	ND		1.00	0.290	ug/L			09/13/16 08:08	1
Bromomethane	ND		1.00	0.350	ug/L			09/13/16 08:08	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			09/13/16 08:08	1
Carbon disulfide	ND		1.00	0.220	ug/L			09/13/16 08:08	1
Carbon tetrachloride	ND		1.00	0.180	ug/L			09/13/16 08:08	1
Chlorobenzene	ND		1.00	0.180	ug/L			09/13/16 08:08	1
Chlorodibromomethane	ND		1.00	0.250	ug/L			09/13/16 08:08	1
Chloroethane	ND		1.00	0.360	ug/L			09/13/16 08:08	1
Chloroform	ND		1.00	0.230	ug/L			09/13/16 08:08	1
Chloromethane	ND		1.00	0.360	ug/L			09/13/16 08:08	1
2-Chlorotoluene	ND		1.00	0.180	ug/L			09/13/16 08:08	1
4-Chlorotoluene	ND		1.00	0.170	ug/L			09/13/16 08:08	1
cis-1,2-Dichloroethene	ND		1.00	0.210	ug/L			09/13/16 08:08	1
cis-1,3-Dichloropropene	ND		1.00	0.170	ug/L			09/13/16 08:08	1
1,2-Dibromo-3-Chloropropane	ND		10.0	0.940	ug/L			09/13/16 08:08	1
1,2-Dibromoethane (EDB)	ND		1.00	0.210	ug/L			09/13/16 08:08	1
Dibromomethane	ND		1.00	0.450	ug/L			09/13/16 08:08	1
1,2-Dichlorobenzene	ND		1.00	0.190	ug/L			09/13/16 08:08	1
1,3-Dichlorobenzene	ND		1.00	0.180	ug/L			09/13/16 08:08	1
1,4-Dichlorobenzene	ND		1.00	0.170	ug/L			09/13/16 08:08	1
Dichlorodifluoromethane	ND		1.00	0.170	ug/L			09/13/16 08:08	1
1,1-Dichloroethane	ND		1.00	0.240	ug/L			09/13/16 08:08	1
1,2-Dichloroethane	ND		1.00	0.200	ug/L			09/13/16 08:08	1
1,1-Dichloroethene	ND		1.00	0.250	ug/L			09/13/16 08:08	1
1,2-Dichloropropane	ND		1.00	0.250	ug/L			09/13/16 08:08	1
1,3-Dichloropropane	ND		1.00	0.190	ug/L			09/13/16 08:08	1
2,2-Dichloropropane	ND		1.00	0.160	ug/L			09/13/16 08:08	1
1,1-Dichloropropene	ND		1.00	0.200	ug/L			09/13/16 08:08	1
Diisopropyl ether	ND		2.00	0.170	ug/L			09/13/16 08:08	1
Ethylbenzene	ND		1.00	0.190	ug/L			09/13/16 08:08	1
Ethyl tert-butyl ether	ND		1.00	0.210	ug/L			09/13/16 08:08	1
Hexachlorobutadiene	ND		2.00	0.380	ug/L			09/13/16 08:08	1
2-Hexanone	ND		10.0	1.28	ug/L			09/13/16 08:08	1
Isopropylbenzene	ND		1.00	0.330	ug/L			09/13/16 08:08	1
Methylene Chloride	ND		5.00	1.00	ug/L			09/13/16 08:08	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.810	ug/L			09/13/16 08:08	1
Methyl tert-butyl ether	ND		1.00	0.170	ug/L			09/13/16 08:08	1
Naphthalene	ND		5.00	0.210	ug/L			09/13/16 08:08	1
n-Butylbenzene	ND		1.00	0.240	ug/L			09/13/16 08:08	1
N-Propylbenzene	ND		1.00	0.170	ug/L			09/13/16 08:08	1
p-Isopropyltoluene	ND		1.00	0.170	ug/L			09/13/16 08:08	1
sec-Butylbenzene	ND		1.00	0.170	ug/L			09/13/16 08:08	1
Styrene	ND		1.00	0.280	ug/L			09/13/16 08:08	1
t-Amyl alcohol	ND		20.0	6.76	ug/L			09/13/16 08:08	1

Client Sample ID: MW-N

Lab Sample ID: 490-111143-49

Date Collected: 09/02/16 10:30
Date Received: 09/03/16 10:10

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl methyl ether	ND		1.00	0.170	ug/L			09/13/16 08:08	1
tert-Butyl alcohol (TBA)	ND		10.0	3.90	ug/L			09/13/16 08:08	1
tert-Butylbenzene	ND		1.00	0.170	ug/L			09/13/16 08:08	1
1,1,1,2-Tetrachloroethane	ND		1.00	0.150	ug/L			09/13/16 08:08	1
1,1,2,2-Tetrachloroethane	ND		1.00	0.190	ug/L			09/13/16 08:08	1
Tetrachloroethene	ND		1.00	0.140	ug/L			09/13/16 08:08	1
Toluene	ND		1.00	0.170	ug/L			09/13/16 08:08	1
trans-1,2-Dichloroethene	ND		1.00	0.230	ug/L			09/13/16 08:08	1
trans-1,3-Dichloropropene	ND		1.00	0.170	ug/L			09/13/16 08:08	1
1,2,3-Trichlorobenzene	ND		1.00	0.230	ug/L			09/13/16 08:08	1
1,2,4-Trichlorobenzene	ND		1.00	0.200	ug/L			09/13/16 08:08	1
1,1,1-Trichloroethane	ND		1.00	0.190	ug/L			09/13/16 08:08	1
1,1,2-Trichloroethane	ND		1.00	0.190	ug/L			09/13/16 08:08	1
Trichloroethene	ND		1.00	0.200	ug/L			09/13/16 08:08	1
Trichlorofluoromethane	ND		1.00	0.210	ug/L			09/13/16 08:08	1
1,2,3-Trichloropropane	ND		1.00	0.230	ug/L			09/13/16 08:08	1
1,2,4-Trimethylbenzene	ND		1.00	0.170	ug/L			09/13/16 08:08	1
1,3,5-Trimethylbenzene	ND		1.00	0.170	ug/L			09/13/16 08:08	1
Vinyl chloride	ND		1.00	0.180	ug/L			09/13/16 08:08	1
Xylenes, Total	ND		3.00	0.580	ug/L			09/13/16 08:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*09/13/16 08:08*	*1*
Dibromofluoromethane (Surr)	*94*		*70 - 130*		*09/13/16 08:08*	*1*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 130*		*09/13/16 08:08*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*09/13/16 08:08*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		1.85	0.296	ug/L		09/06/16 14:40	09/07/16 22:03	1
Acenaphthylene	ND		1.85	0.324	ug/L		09/06/16 14:40	09/07/16 22:03	1
Anthracene	ND		1.85	0.352	ug/L		09/06/16 14:40	09/07/16 22:03	1
Benzo[a]anthracene	ND		1.85	0.296	ug/L		09/06/16 14:40	09/07/16 22:03	1
Benzo[a]pyrene	ND		1.85	0.352	ug/L		09/06/16 14:40	09/07/16 22:03	1
Benzo[b]fluoranthene	ND		1.85	0.333	ug/L		09/06/16 14:40	09/07/16 22:03	1
Benzo[g,h,i]perylene	ND		1.85	0.574	ug/L		09/06/16 14:40	09/07/16 22:03	1
Benzo[k]fluoranthene	ND		1.85	0.343	ug/L		09/06/16 14:40	09/07/16 22:03	1
Chrysene	ND		1.85	0.306	ug/L		09/06/16 14:40	09/07/16 22:03	1
Dibenz(a,h)anthracene	ND		1.85	0.417	ug/L		09/06/16 14:40	09/07/16 22:03	1
Fluoranthene	ND		1.85	0.296	ug/L		09/06/16 14:40	09/07/16 22:03	1
Fluorene	ND		1.85	0.296	ug/L		09/06/16 14:40	09/07/16 22:03	1
Indeno[1,2,3-cd]pyrene	ND		1.85	0.380	ug/L		09/06/16 14:40	09/07/16 22:03	1
1-Methylnaphthalene	ND		1.85	0.333	ug/L		09/06/16 14:40	09/07/16 22:03	1
2-Methylnaphthalene	ND		1.85	0.370	ug/L		09/06/16 14:40	09/07/16 22:03	1
Naphthalene	ND		1.85	0.343	ug/L		09/06/16 14:40	09/07/16 22:03	1
Phenanthrene	ND		1.85	0.389	ug/L		09/06/16 14:40	09/07/16 22:03	1
Pyrene	ND		1.85	0.324	ug/L		09/06/16 14:40	09/07/16 22:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*90*		*29 - 120*	*09/06/16 14:40*	*09/07/16 22:03*	*1*

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: MW-N
Date Collected: 09/02/16 10:30
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-49
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*80*		*27 - 120*	*09/06/16 14:40*	*09/07/16 22:03*	*1*
Terphenyl-d14 (Surr)	*76*		*13 - 120*	*09/06/16 14:40*	*09/07/16 22:03*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		100	50.0	ug/L			09/13/16 06:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*90*		*50 - 150*		*09/13/16 06:24*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND	*	92.6	84.3	ug/L		09/06/16 17:09	09/07/16 15:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*59*		*50 - 150*	*09/06/16 17:09*	*09/07/16 15:57*	*1*

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: MW-W

Date Collected: 09/02/16 08:30
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-50

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25.0	2.66	ug/L			09/13/16 08:38	1
Benzene	ND		1.00	0.200	ug/L			09/13/16 08:38	1
Bromobenzene	ND		1.00	0.210	ug/L			09/13/16 08:38	1
Bromochloromethane	ND		1.00	0.150	ug/L			09/13/16 08:38	1
Bromodichloromethane	ND		1.00	0.170	ug/L			09/13/16 08:38	1
Bromoform	ND		1.00	0.290	ug/L			09/13/16 08:38	1
Bromomethane	ND		1.00	0.350	ug/L			09/13/16 08:38	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			09/13/16 08:38	1
Carbon disulfide	ND		1.00	0.220	ug/L			09/13/16 08:38	1
Carbon tetrachloride	ND		1.00	0.180	ug/L			09/13/16 08:38	1
Chlorobenzene	ND		1.00	0.180	ug/L			09/13/16 08:38	1
Chlorodibromomethane	ND		1.00	0.250	ug/L			09/13/16 08:38	1
Chloroethane	ND		1.00	0.360	ug/L			09/13/16 08:38	1
Chloroform	ND		1.00	0.230	ug/L			09/13/16 08:38	1
Chloromethane	ND		1.00	0.360	ug/L			09/13/16 08:38	1
2-Chlorotoluene	ND		1.00	0.180	ug/L			09/13/16 08:38	1
4-Chlorotoluene	ND		1.00	0.170	ug/L			09/13/16 08:38	1
cis-1,2-Dichloroethene	ND		1.00	0.210	ug/L			09/13/16 08:38	1
cis-1,3-Dichloropropene	ND		1.00	0.170	ug/L			09/13/16 08:38	1
1,2-Dibromo-3-Chloropropane	ND		10.0	0.940	ug/L			09/13/16 08:38	1
1,2-Dibromoethane (EDB)	ND		1.00	0.210	ug/L			09/13/16 08:38	1
Dibromomethane	ND		1.00	0.450	ug/L			09/13/16 08:38	1
1,2-Dichlorobenzene	ND		1.00	0.190	ug/L			09/13/16 08:38	1
1,3-Dichlorobenzene	ND		1.00	0.180	ug/L			09/13/16 08:38	1
1,4-Dichlorobenzene	ND		1.00	0.170	ug/L			09/13/16 08:38	1
Dichlorodifluoromethane	ND		1.00	0.170	ug/L			09/13/16 08:38	1
1,1-Dichloroethane	ND		1.00	0.240	ug/L			09/13/16 08:38	1
1,2-Dichloroethane	ND		1.00	0.200	ug/L			09/13/16 08:38	1
1,1-Dichloroethene	ND		1.00	0.250	ug/L			09/13/16 08:38	1
1,2-Dichloropropane	ND		1.00	0.250	ug/L			09/13/16 08:38	1
1,3-Dichloropropane	ND		1.00	0.190	ug/L			09/13/16 08:38	1
2,2-Dichloropropane	ND		1.00	0.160	ug/L			09/13/16 08:38	1
1,1-Dichloropropene	ND		1.00	0.200	ug/L			09/13/16 08:38	1
Diisopropyl ether	ND		2.00	0.170	ug/L			09/13/16 08:38	1
Ethylbenzene	ND		1.00	0.190	ug/L			09/13/16 08:38	1
Ethyl tert-butyl ether	ND		1.00	0.210	ug/L			09/13/16 08:38	1
Hexachlorobutadiene	ND		2.00	0.380	ug/L			09/13/16 08:38	1
2-Hexanone	ND		10.0	1.28	ug/L			09/13/16 08:38	1
Isopropylbenzene	ND		1.00	0.330	ug/L			09/13/16 08:38	1
Methylene Chloride	ND		5.00	1.00	ug/L			09/13/16 08:38	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.810	ug/L			09/13/16 08:38	1
Methyl tert-butyl ether	ND		1.00	0.170	ug/L			09/13/16 08:38	1
Naphthalene	ND		5.00	0.210	ug/L			09/13/16 08:38	1
n-Butylbenzene	ND		1.00	0.240	ug/L			09/13/16 08:38	1
N-Propylbenzene	ND		1.00	0.170	ug/L			09/13/16 08:38	1
p-Isopropyltoluene	ND		1.00	0.170	ug/L			09/13/16 08:38	1
sec-Butylbenzene	ND		1.00	0.170	ug/L			09/13/16 08:38	1
Styrene	ND		1.00	0.280	ug/L			09/13/16 08:38	1
t-Amyl alcohol	ND		20.0	6.76	ug/L			09/13/16 08:38	1

Client Sample ID: MW-W

Lab Sample ID: 490-111143-50

Date Collected: 09/02/16 08:30
Matrix: Water
Date Received: 09/03/16 10:10

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl methyl ether	ND		1.00	0.170	ug/L			09/13/16 08:38	1
tert-Butyl alcohol (TBA)	ND		10.0	3.90	ug/L			09/13/16 08:38	1
tert-Butylbenzene	ND		1.00	0.170	ug/L			09/13/16 08:38	1
1,1,1,2-Tetrachloroethane	ND		1.00	0.150	ug/L			09/13/16 08:38	1
1,1,2,2-Tetrachloroethane	ND		1.00	0.190	ug/L			09/13/16 08:38	1
Tetrachloroethene	ND		1.00	0.140	ug/L			09/13/16 08:38	1
Toluene	ND		1.00	0.170	ug/L			09/13/16 08:38	1
trans-1,2-Dichloroethene	ND		1.00	0.230	ug/L			09/13/16 08:38	1
trans-1,3-Dichloropropene	ND		1.00	0.170	ug/L			09/13/16 08:38	1
1,2,3-Trichlorobenzene	ND		1.00	0.230	ug/L			09/13/16 08:38	1
1,2,4-Trichlorobenzene	ND		1.00	0.200	ug/L			09/13/16 08:38	1
1,1,1-Trichloroethane	ND		1.00	0.190	ug/L			09/13/16 08:38	1
1,1,2-Trichloroethane	ND		1.00	0.190	ug/L			09/13/16 08:38	1
Trichloroethene	ND		1.00	0.200	ug/L			09/13/16 08:38	1
Trichlorofluoromethane	ND		1.00	0.210	ug/L			09/13/16 08:38	1
1,2,3-Trichloropropane	ND		1.00	0.230	ug/L			09/13/16 08:38	1
1,2,4-Trimethylbenzene	ND		1.00	0.170	ug/L			09/13/16 08:38	1
1,3,5-Trimethylbenzene	ND		1.00	0.170	ug/L			09/13/16 08:38	1
Vinyl chloride	ND		1.00	0.180	ug/L			09/13/16 08:38	1
Xylenes, Total	ND		3.00	0.580	ug/L			09/13/16 08:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*09/13/16 08:38*	*1*
Dibromofluoromethane (Surr)	*97*		*70 - 130*		*09/13/16 08:38*	*1*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 130*		*09/13/16 08:38*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*09/13/16 08:38*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		1.92	0.308	ug/L		09/06/16 14:40	09/07/16 22:23	1
Acenaphthylene	ND		1.92	0.337	ug/L		09/06/16 14:40	09/07/16 22:23	1
Anthracene	ND		1.92	0.365	ug/L		09/06/16 14:40	09/07/16 22:23	1
Benzo[a]anthracene	ND		1.92	0.308	ug/L		09/06/16 14:40	09/07/16 22:23	1
Benzo[a]pyrene	ND		1.92	0.365	ug/L		09/06/16 14:40	09/07/16 22:23	1
Benzo[b]fluoranthene	ND		1.92	0.346	ug/L		09/06/16 14:40	09/07/16 22:23	1
Benzo[g,h,i]perylene	ND		1.92	0.596	ug/L		09/06/16 14:40	09/07/16 22:23	1
Benzo[k]fluoranthene	ND		1.92	0.356	ug/L		09/06/16 14:40	09/07/16 22:23	1
Chrysene	ND		1.92	0.317	ug/L		09/06/16 14:40	09/07/16 22:23	1
Dibenz(a,h)anthracene	ND		1.92	0.433	ug/L		09/06/16 14:40	09/07/16 22:23	1
Fluoranthene	ND		1.92	0.308	ug/L		09/06/16 14:40	09/07/16 22:23	1
Fluorene	ND		1.92	0.308	ug/L		09/06/16 14:40	09/07/16 22:23	1
Indeno[1,2,3-cd]pyrene	ND		1.92	0.394	ug/L		09/06/16 14:40	09/07/16 22:23	1
1-Methylnaphthalene	ND		1.92	0.346	ug/L		09/06/16 14:40	09/07/16 22:23	1
2-Methylnaphthalene	ND		1.92	0.385	ug/L		09/06/16 14:40	09/07/16 22:23	1
Naphthalene	ND		1.92	0.356	ug/L		09/06/16 14:40	09/07/16 22:23	1
Phenanthrene	ND		1.92	0.404	ug/L		09/06/16 14:40	09/07/16 22:23	1
Pyrene	ND		1.92	0.337	ug/L		09/06/16 14:40	09/07/16 22:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*61*		*29 - 120*	*09/06/16 14:40*	*09/07/16 22:23*	*1*

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: MW-W
Date Collected: 09/02/16 08:30
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-50
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	66		27 - 120	09/06/16 14:40	09/07/16 22:23	1
Terphenyl-d14 (Surr)	64		13 - 120	09/06/16 14:40	09/07/16 22:23	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		100	50.0	ug/L			09/13/16 06:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	89		50 - 150		09/13/16 06:55	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND	*	92.6	84.3	ug/L		09/06/16 17:09	09/07/16 16:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	71		50 - 150	09/06/16 17:09	09/07/16 16:13	1

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: Trip Blank

Lab Sample ID: 490-111143-51

Date Collected: 08/31/16 01:01
Date Received: 09/03/16 10:10

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25.0	2.66	ug/L			09/13/16 02:40	1
Benzene	ND		1.00	0.200	ug/L			09/13/16 02:40	1
Bromobenzene	ND		1.00	0.210	ug/L			09/13/16 02:40	1
Bromochloromethane	ND		1.00	0.150	ug/L			09/13/16 02:40	1
Bromodichloromethane	ND		1.00	0.170	ug/L			09/13/16 02:40	1
Bromoform	ND		1.00	0.290	ug/L			09/13/16 02:40	1
Bromomethane	ND		1.00	0.350	ug/L			09/13/16 02:40	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			09/13/16 02:40	1
Carbon disulfide	ND		1.00	0.220	ug/L			09/13/16 02:40	1
Carbon tetrachloride	ND		1.00	0.180	ug/L			09/13/16 02:40	1
Chlorobenzene	ND		1.00	0.180	ug/L			09/13/16 02:40	1
Chlorodibromomethane	ND		1.00	0.250	ug/L			09/13/16 02:40	1
Chloroethane	ND		1.00	0.360	ug/L			09/13/16 02:40	1
Chloroform	ND		1.00	0.230	ug/L			09/13/16 02:40	1
Chloromethane	ND		1.00	0.360	ug/L			09/13/16 02:40	1
2-Chlorotoluene	ND		1.00	0.180	ug/L			09/13/16 02:40	1
4-Chlorotoluene	ND		1.00	0.170	ug/L			09/13/16 02:40	1
cis-1,2-Dichloroethene	ND		1.00	0.210	ug/L			09/13/16 02:40	1
cis-1,3-Dichloropropene	ND		1.00	0.170	ug/L			09/13/16 02:40	1
1,2-Dibromo-3-Chloropropane	ND		10.0	0.940	ug/L			09/13/16 02:40	1
1,2-Dibromoethane (EDB)	ND		1.00	0.210	ug/L			09/13/16 02:40	1
Dibromomethane	ND		1.00	0.450	ug/L			09/13/16 02:40	1
1,2-Dichlorobenzene	ND		1.00	0.190	ug/L			09/13/16 02:40	1
1,3-Dichlorobenzene	ND		1.00	0.180	ug/L			09/13/16 02:40	1
1,4-Dichlorobenzene	ND		1.00	0.170	ug/L			09/13/16 02:40	1
Dichlorodifluoromethane	ND		1.00	0.170	ug/L			09/13/16 02:40	1
1,1-Dichloroethane	ND		1.00	0.240	ug/L			09/13/16 02:40	1
1,2-Dichloroethane	ND		1.00	0.200	ug/L			09/13/16 02:40	1
1,1-Dichloroethene	ND		1.00	0.250	ug/L			09/13/16 02:40	1
1,2-Dichloropropane	ND		1.00	0.250	ug/L			09/13/16 02:40	1
1,3-Dichloropropane	ND		1.00	0.190	ug/L			09/13/16 02:40	1
2,2-Dichloropropane	ND		1.00	0.160	ug/L			09/13/16 02:40	1
1,1-Dichloropropene	ND		1.00	0.200	ug/L			09/13/16 02:40	1
Diisopropyl ether	ND		2.00	0.170	ug/L			09/13/16 02:40	1
Ethylbenzene	ND		1.00	0.190	ug/L			09/13/16 02:40	1
Ethyl tert-butyl ether	ND		1.00	0.210	ug/L			09/13/16 02:40	1
Hexachlorobutadiene	ND		2.00	0.380	ug/L			09/13/16 02:40	1
2-Hexanone	ND		10.0	1.28	ug/L			09/13/16 02:40	1
Isopropylbenzene	ND		1.00	0.330	ug/L			09/13/16 02:40	1
Methylene Chloride	ND		5.00	1.00	ug/L			09/13/16 02:40	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.810	ug/L			09/13/16 02:40	1
Methyl tert-butyl ether	ND		1.00	0.170	ug/L			09/13/16 02:40	1
Naphthalene	ND		5.00	0.210	ug/L			09/13/16 02:40	1
n-Butylbenzene	ND		1.00	0.240	ug/L			09/13/16 02:40	1
N-Propylbenzene	ND		1.00	0.170	ug/L			09/13/16 02:40	1
p-Isopropyltoluene	ND		1.00	0.170	ug/L			09/13/16 02:40	1
sec-Butylbenzene	ND		1.00	0.170	ug/L			09/13/16 02:40	1
Styrene	ND		1.00	0.280	ug/L			09/13/16 02:40	1
t-Amyl alcohol	ND		20.0	6.76	ug/L			09/13/16 02:40	1

Client Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: Trip Blank

Lab Sample ID: 490-111143-51

Date Collected: 08/31/16 01:01
Matrix: Water
Date Received: 09/03/16 10:10

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl methyl ether	ND		1.00	0.170	ug/L			09/13/16 02:40	1
tert-Butyl alcohol (TBA)	ND		10.0	3.90	ug/L			09/13/16 02:40	1
tert-Butylbenzene	ND		1.00	0.170	ug/L			09/13/16 02:40	1
1,1,1,2-Tetrachloroethane	ND		1.00	0.150	ug/L			09/13/16 02:40	1
1,1,2,2-Tetrachloroethane	ND		1.00	0.190	ug/L			09/13/16 02:40	1
Tetrachloroethene	ND		1.00	0.140	ug/L			09/13/16 02:40	1
Toluene	ND		1.00	0.170	ug/L			09/13/16 02:40	1
trans-1,2-Dichloroethene	ND		1.00	0.230	ug/L			09/13/16 02:40	1
trans-1,3-Dichloropropene	ND		1.00	0.170	ug/L			09/13/16 02:40	1
1,2,3-Trichlorobenzene	ND		1.00	0.230	ug/L			09/13/16 02:40	1
1,2,4-Trichlorobenzene	ND		1.00	0.200	ug/L			09/13/16 02:40	1
1,1,1-Trichloroethane	ND		1.00	0.190	ug/L			09/13/16 02:40	1
1,1,2-Trichloroethane	ND		1.00	0.190	ug/L			09/13/16 02:40	1
Trichloroethene	ND		1.00	0.200	ug/L			09/13/16 02:40	1
Trichlorofluoromethane	ND		1.00	0.210	ug/L			09/13/16 02:40	1
1,2,3-Trichloropropane	ND		1.00	0.230	ug/L			09/13/16 02:40	1
1,2,4-Trimethylbenzene	ND		1.00	0.170	ug/L			09/13/16 02:40	1
1,3,5-Trimethylbenzene	ND		1.00	0.170	ug/L			09/13/16 02:40	1
Vinyl chloride	ND		1.00	0.180	ug/L			09/13/16 02:40	1
Xylenes, Total	ND		3.00	0.580	ug/L			09/13/16 02:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*09/13/16 02:40*	*1*
Dibromofluoromethane (Surr)	*95*		*70 - 130*		*09/13/16 02:40*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 130*		*09/13/16 02:40*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*09/13/16 02:40*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-369449/6
Matrix: Solid
Analysis Batch: 369449

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.0500	0.00840	mg/Kg			09/12/16 16:57	1
Benzene	ND		0.00200	0.000670	mg/Kg			09/12/16 16:57	1
Bromobenzene	ND		0.00200	0.000720	mg/Kg			09/12/16 16:57	1
Bromochloromethane	ND		0.00200	0.000550	mg/Kg			09/12/16 16:57	1
Bromodichloromethane	ND		0.00200	0.000550	mg/Kg			09/12/16 16:57	1
Bromoform	ND		0.00200	0.000550	mg/Kg			09/12/16 16:57	1
Bromomethane	ND		0.00200	0.00120	mg/Kg			09/12/16 16:57	1
2-Butanone (MEK)	ND		0.0500	0.00510	mg/Kg			09/12/16 16:57	1
Carbon disulfide	ND		0.00500	0.00360	mg/Kg			09/12/16 16:57	1
Carbon tetrachloride	ND		0.00200	0.000670	mg/Kg			09/12/16 16:57	1
Chlorobenzene	ND		0.00200	0.000670	mg/Kg			09/12/16 16:57	1
Chlorodibromomethane	ND		0.00200	0.000340	mg/Kg			09/12/16 16:57	1
Chloroethane	ND		0.00500	0.00190	mg/Kg			09/12/16 16:57	1
Chloroform	ND		0.00200	0.000670	mg/Kg			09/12/16 16:57	1
Chloromethane	ND		0.00200	0.000670	mg/Kg			09/12/16 16:57	1
2-Chlorotoluene	ND		0.00200	0.000890	mg/Kg			09/12/16 16:57	1
4-Chlorotoluene	ND		0.00200	0.000840	mg/Kg			09/12/16 16:57	1
cis-1,2-Dichloroethene	ND		0.00200	0.000670	mg/Kg			09/12/16 16:57	1
cis-1,3-Dichloropropene	ND		0.00200	0.000670	mg/Kg			09/12/16 16:57	1
1,2-Dibromo-3-Chloropropane	ND		0.00500	0.000700	mg/Kg			09/12/16 16:57	1
1,2-Dibromoethane (EDB)	ND		0.00200	0.00100	mg/Kg			09/12/16 16:57	1
Dibromomethane	ND		0.00200	0.000560	mg/Kg			09/12/16 16:57	1
1,2-Dichlorobenzene	ND		0.00200	0.000340	mg/Kg			09/12/16 16:57	1
1,3-Dichlorobenzene	ND		0.00200	0.000670	mg/Kg			09/12/16 16:57	1
1,4-Dichlorobenzene	ND		0.00200	0.000670	mg/Kg			09/12/16 16:57	1
Dichlorodifluoromethane	ND		0.00200	0.00100	mg/Kg			09/12/16 16:57	1
1,1-Dichloroethane	ND		0.00200	0.000670	mg/Kg			09/12/16 16:57	1
1,2-Dichloroethane	ND		0.00200	0.000670	mg/Kg			09/12/16 16:57	1
1,1-Dichloroethene	ND		0.00200	0.000570	mg/Kg			09/12/16 16:57	1
1,2-Dichloropropane	ND		0.00200	0.000940	mg/Kg			09/12/16 16:57	1
1,3-Dichloropropane	ND		0.00200	0.000940	mg/Kg			09/12/16 16:57	1
2,2-Dichloropropane	ND		0.00200	0.000670	mg/Kg			09/12/16 16:57	1
1,1-Dichloropropene	ND		0.00200	0.000510	mg/Kg			09/12/16 16:57	1
Diisopropyl ether	ND		0.00200	0.000670	mg/Kg			09/12/16 16:57	1
Ethylbenzene	ND		0.00200	0.000670	mg/Kg			09/12/16 16:57	1
Ethyl tert-butyl ether	ND		0.00500	0.00100	mg/Kg			09/12/16 16:57	1
Hexachlorobutadiene	ND		0.00500	0.00114	mg/Kg			09/12/16 16:57	1
2-Hexanone	ND		0.0500	0.0167	mg/Kg			09/12/16 16:57	1
Isopropylbenzene	ND		0.00200	0.000410	mg/Kg			09/12/16 16:57	1
Methylene Chloride	ND		0.0100	0.000860	mg/Kg			09/12/16 16:57	1
4-Methyl-2-pentanone (MIBK)	ND		0.0500	0.00190	mg/Kg			09/12/16 16:57	1
Methyl tert-butyl ether	ND		0.00200	0.000960	mg/Kg			09/12/16 16:57	1
Naphthalene	ND		0.00500	0.00170	mg/Kg			09/12/16 16:57	1
n-Butylbenzene	ND		0.00200	0.000980	mg/Kg			09/12/16 16:57	1
N-Propylbenzene	ND		0.00200	0.000670	mg/Kg			09/12/16 16:57	1
p-Isopropyltoluene	ND		0.00200	0.000670	mg/Kg			09/12/16 16:57	1
sec-Butylbenzene	ND		0.00200	0.000670	mg/Kg			09/12/16 16:57	1
Styrene	ND		0.00200	0.00110	mg/Kg			09/12/16 16:57	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-369449/6
Matrix: Solid
Analysis Batch: 369449

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
t-Amyl alcohol	ND		0.0200	0.00930	mg/Kg			09/12/16 16:57	1
Tert-amyl methyl ether	ND		0.00200	0.000310	mg/Kg			09/12/16 16:57	1
tert-Butyl alcohol (TBA)	ND		0.0500	0.0112	mg/Kg			09/12/16 16:57	1
tert-Butylbenzene	ND		0.00200	0.000900	mg/Kg			09/12/16 16:57	1
1,1,1,2-Tetrachloroethane	ND		0.00200	0.000670	mg/Kg			09/12/16 16:57	1
1,1,2,2-Tetrachloroethane	ND		0.00200	0.00100	mg/Kg			09/12/16 16:57	1
Tetrachloroethene	ND		0.00200	0.000730	mg/Kg			09/12/16 16:57	1
Toluene	ND		0.00200	0.000740	mg/Kg			09/12/16 16:57	1
trans-1,2-Dichloroethene	ND		0.00200	0.000670	mg/Kg			09/12/16 16:57	1
trans-1,3-Dichloropropene	ND		0.00200	0.000670	mg/Kg			09/12/16 16:57	1
1,2,3-Trichlorobenzene	ND		0.00200	0.000380	mg/Kg			09/12/16 16:57	1
1,2,4-Trichlorobenzene	ND		0.00200	0.000670	mg/Kg			09/12/16 16:57	1
1,1,1-Trichloroethane	ND		0.00200	0.000920	mg/Kg			09/12/16 16:57	1
1,1,2-Trichloroethane	ND		0.00500	0.00140	mg/Kg			09/12/16 16:57	1
Trichloroethene	ND		0.00200	0.000960	mg/Kg			09/12/16 16:57	1
Trichlorofluoromethane	ND		0.00200	0.00100	mg/Kg			09/12/16 16:57	1
1,2,3-Trichloropropane	ND		0.00200	0.000550	mg/Kg			09/12/16 16:57	1
1,2,4-Trimethylbenzene	ND		0.00200	0.00100	mg/Kg			09/12/16 16:57	1
1,3,5-Trimethylbenzene	ND		0.00200	0.000750	mg/Kg			09/12/16 16:57	1
Vinyl chloride	ND		0.00200	0.00110	mg/Kg			09/12/16 16:57	1
Xylenes, Total	ND		0.00600	0.00123	mg/Kg			09/12/16 16:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*09/12/16 16:57*	*1*
Dibromofluoromethane (Surr)	*110*		*70 - 130*		*09/12/16 16:57*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*09/12/16 16:57*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*09/12/16 16:57*	*1*

Lab Sample ID: LCS 490-369449/3
Matrix: Solid
Analysis Batch: 369449

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.250	0.2538		mg/Kg		102	45 - 145
Benzene	0.0500	0.05581		mg/Kg		112	70 - 130
Bromobenzene	0.0500	0.05723		mg/Kg		114	67 - 130
Bromochloromethane	0.0500	0.05959		mg/Kg		119	70 - 133
Bromodichloromethane	0.0500	0.05423		mg/Kg		108	70 - 130
Bromoform	0.0500	0.05492		mg/Kg		110	59 - 137
Bromomethane	0.0500	0.05194		mg/Kg		104	32 - 150
2-Butanone (MEK)	0.250	0.2406		mg/Kg		96	50 - 149
Carbon disulfide	0.0500	0.05599		mg/Kg		112	66 - 138
Carbon tetrachloride	0.0500	0.05891		mg/Kg		118	70 - 131
Chlorobenzene	0.0500	0.05834		mg/Kg		117	70 - 130
Chlorodibromomethane	0.0500	0.05689		mg/Kg		114	70 - 130
Chloroethane	0.0500	0.05820		mg/Kg		116	37 - 150
Chloroform	0.0500	0.05629		mg/Kg		113	70 - 130
Chloromethane	0.0500	0.04375		mg/Kg		88	53 - 150

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-369449/3
Matrix: Solid
Analysis Batch: 369449

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chlorotoluene	0.0500	0.05940		mg/Kg		119	70 - 132
4-Chlorotoluene	0.0500	0.05836		mg/Kg		117	67 - 135
cis-1,2-Dichloroethene	0.0500	0.05722		mg/Kg		114	70 - 132
cis-1,3-Dichloropropene	0.0500	0.05338		mg/Kg		107	70 - 130
1,2-Dibromo-3-Chloropropane	0.0500	0.05355		mg/Kg		107	47 - 144
1,2-Dibromoethane (EDB)	0.0500	0.05704		mg/Kg		114	69 - 130
Dibromomethane	0.0500	0.05664		mg/Kg		113	70 - 130
1,2-Dichlorobenzene	0.0500	0.05641		mg/Kg		113	70 - 134
1,3-Dichlorobenzene	0.0500	0.05766		mg/Kg		115	69 - 137
1,4-Dichlorobenzene	0.0500	0.05759		mg/Kg		115	66 - 134
Dichlorodifluoromethane	0.0500	0.05205		mg/Kg		104	32 - 150
1,1-Dichloroethane	0.0500	0.05563		mg/Kg		111	70 - 130
1,2-Dichloroethane	0.0500	0.05315		mg/Kg		106	65 - 134
1,1-Dichloroethene	0.0500	0.05778		mg/Kg		116	70 - 131
1,2-Dichloropropane	0.0500	0.05406		mg/Kg		108	70 - 130
1,3-Dichloropropane	0.0500	0.05684		mg/Kg		114	70 - 130
2,2-Dichloropropane	0.0500	0.05544		mg/Kg		111	57 - 150
1,1-Dichloropropene	0.0500	0.05602		mg/Kg		112	70 - 130
Diisopropyl ether	0.0500	0.05504		mg/Kg		110	68 - 134
Ethylbenzene	0.0500	0.05822		mg/Kg		116	70 - 130
Ethyl tert-butyl ether	0.0500	0.05304		mg/Kg		106	19 - 150
Hexachlorobutadiene	0.0500	0.04869		mg/Kg		97	64 - 137
2-Hexanone	0.250	0.2543		mg/Kg		102	47 - 148
Isopropylbenzene	0.0500	0.05839		mg/Kg		117	70 - 130
Methylene Chloride	0.0500	0.05834		mg/Kg		117	69 - 130
4-Methyl-2-pentanone (MIBK)	0.250	0.2358		mg/Kg		94	48 - 150
Methyl tert-butyl ether	0.0500	0.05523		mg/Kg		110	54 - 145
Naphthalene	0.0500	0.05377		mg/Kg		108	55 - 149
n-Butylbenzene	0.0500	0.05566		mg/Kg		111	57 - 150
N-Propylbenzene	0.0500	0.06034		mg/Kg		121	62 - 150
p-Isopropyltoluene	0.0500	0.05839		mg/Kg		117	66 - 147
sec-Butylbenzene	0.0500	0.06031		mg/Kg		121	68 - 147
Styrene	0.0500	0.05659		mg/Kg		113	70 - 131
t-Amyl alcohol	0.500	0.4406		mg/Kg		88	10 - 150
Tert-amyl methyl ether	0.0500	0.05298		mg/Kg		106	10 - 150
tert-Butyl alcohol (TBA)	0.500	0.4615		mg/Kg		92	10 - 150
tert-Butylbenzene	0.0500	0.06062		mg/Kg		121	70 - 138
1,1,1,2-Tetrachloroethane	0.0500	0.05654		mg/Kg		113	70 - 130
1,1,2,2-Tetrachloroethane	0.0500	0.05720		mg/Kg		114	61 - 134
Tetrachloroethene	0.0500	0.05683		mg/Kg		114	70 - 130
Toluene	0.0500	0.05425		mg/Kg		108	70 - 130
trans-1,2-Dichloroethene	0.0500	0.05786		mg/Kg		116	70 - 130
trans-1,3-Dichloropropene	0.0500	0.05758		mg/Kg		115	67 - 130
1,2,3-Trichlorobenzene	0.0500	0.05057		mg/Kg		101	57 - 146
1,2,4-Trichlorobenzene	0.0500	0.05190		mg/Kg		104	47 - 150
1,1,1-Trichloroethane	0.0500	0.05797		mg/Kg		116	70 - 130
1,1,2-Trichloroethane	0.0500	0.05544		mg/Kg		111	70 - 130
Trichloroethene	0.0500	0.06011		mg/Kg		120	70 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-369449/3
Matrix: Solid
Analysis Batch: 369449

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Trichlorofluoromethane	0.0500	0.05458		mg/Kg		109	53 - 150
1,2,3-Trichloropropane	0.0500	0.05711		mg/Kg		114	60 - 139
1,2,4-Trimethylbenzene	0.0500	0.05938		mg/Kg		119	70 - 140
1,3,5-Trimethylbenzene	0.0500	0.05953		mg/Kg		119	69 - 141
Vinyl chloride	0.0500	0.04987		mg/Kg		100	63 - 150
Xylenes, Total	0.100	0.1143		mg/Kg		114	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*
Dibromofluoromethane (Surr)	*106*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*

Lab Sample ID: LCSD 490-369449/4
Matrix: Solid
Analysis Batch: 369449

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	0.250	0.2698		mg/Kg		108	45 - 145	6	38
Benzene	0.0500	0.05577		mg/Kg		112	70 - 130	0	37
Bromobenzene	0.0500	0.06015		mg/Kg		120	67 - 130	5	40
Bromochloromethane	0.0500	0.06009		mg/Kg		120	70 - 133	1	15
Bromodichloromethane	0.0500	0.05437		mg/Kg		109	70 - 130	0	20
Bromoform	0.0500	0.05614		mg/Kg		112	59 - 137	2	17
Bromomethane	0.0500	0.05413		mg/Kg		108	32 - 150	4	45
2-Butanone (MEK)	0.250	0.2569		mg/Kg		103	50 - 149	7	39
Carbon disulfide	0.0500	0.05700		mg/Kg		114	66 - 138	2	41
Carbon tetrachloride	0.0500	0.06069		mg/Kg		121	70 - 131	3	41
Chlorobenzene	0.0500	0.05933		mg/Kg		119	70 - 130	2	40
Chlorodibromomethane	0.0500	0.05744		mg/Kg		115	70 - 130	1	14
Chloroethane	0.0500	0.05772		mg/Kg		115	37 - 150	1	50
Chloroform	0.0500	0.05689		mg/Kg		114	70 - 130	1	15
Chloromethane	0.0500	0.04510		mg/Kg		90	53 - 150	3	47
2-Chlorotoluene	0.0500	0.05904		mg/Kg		118	70 - 132	1	41
4-Chlorotoluene	0.0500	0.05763		mg/Kg		115	67 - 135	1	41
cis-1,2-Dichloroethene	0.0500	0.06000		mg/Kg		120	70 - 132	5	18
cis-1,3-Dichloropropene	0.0500	0.05354		mg/Kg		107	70 - 130	0	42
1,2-Dibromo-3-Chloropropane	0.0500	0.05178		mg/Kg		104	47 - 144	3	38
1,2-Dibromoethane (EDB)	0.0500	0.05649		mg/Kg		113	69 - 130	1	17
Dibromomethane	0.0500	0.05688		mg/Kg		114	70 - 130	0	19
1,2-Dichlorobenzene	0.0500	0.05858		mg/Kg		117	70 - 134	4	40
1,3-Dichlorobenzene	0.0500	0.05865		mg/Kg		117	69 - 137	2	41
1,4-Dichlorobenzene	0.0500	0.05693		mg/Kg		114	66 - 134	1	41
Dichlorodifluoromethane	0.0500	0.05186		mg/Kg		104	32 - 150	0	50
1,1-Dichloroethane	0.0500	0.05529		mg/Kg		111	70 - 130	1	42
1,2-Dichloroethane	0.0500	0.05380		mg/Kg		108	65 - 134	1	16
1,1-Dichloroethene	0.0500	0.05760		mg/Kg		115	70 - 131	0	43
1,2-Dichloropropane	0.0500	0.05488		mg/Kg		110	70 - 130	1	15

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-369449/4
Matrix: Solid
Analysis Batch: 369449

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3-Dichloropropane	0.0500	0.05728		mg/Kg		115	70 - 130	1	15
2,2-Dichloropropane	0.0500	0.05673		mg/Kg		113	57 - 150	2	42
1,1-Dichloropropene	0.0500	0.05688		mg/Kg		114	70 - 130	2	41
Diisopropyl ether	0.0500	0.05647		mg/Kg		113	68 - 134	3	36
Ethylbenzene	0.0500	0.05890		mg/Kg		118	70 - 130	1	38
Ethyl tert-butyl ether	0.0500	0.05377		mg/Kg		108	19 - 150	1	37
Hexachlorobutadiene	0.0500	0.04982		mg/Kg		100	64 - 137	2	44
2-Hexanone	0.250	0.2602		mg/Kg		104	47 - 148	2	38
Isopropylbenzene	0.0500	0.06018		mg/Kg		120	70 - 130	3	39
Methylene Chloride	0.0500	0.05799		mg/Kg		116	69 - 130	1	19
4-Methyl-2-pentanone (MIBK)	0.250	0.2361		mg/Kg		94	48 - 150	0	41
Methyl tert-butyl ether	0.0500	0.05506		mg/Kg		110	54 - 145	0	36
Naphthalene	0.0500	0.05445		mg/Kg		109	55 - 149	1	37
n-Butylbenzene	0.0500	0.05628		mg/Kg		113	57 - 150	1	39
N-Propylbenzene	0.0500	0.06234		mg/Kg		125	62 - 150	3	38
p-Isopropyltoluene	0.0500	0.05865		mg/Kg		117	66 - 147	0	38
sec-Butylbenzene	0.0500	0.05962		mg/Kg		119	68 - 147	1	38
Styrene	0.0500	0.05834		mg/Kg		117	70 - 131	3	40
t-Amyl alcohol	0.500	0.4232		mg/Kg		85	10 - 150	4	50
Tert-amyl methyl ether	0.0500	0.05246		mg/Kg		105	10 - 150	1	50
tert-Butyl alcohol (TBA)	0.500	0.4568		mg/Kg		91	10 - 150	1	50
tert-Butylbenzene	0.0500	0.05981		mg/Kg		120	70 - 138	1	38
1,1,1,2-Tetrachloroethane	0.0500	0.05741		mg/Kg		115	70 - 130	2	41
1,1,2,2-Tetrachloroethane	0.0500	0.05760		mg/Kg		115	61 - 134	1	16
Tetrachloroethene	0.0500	0.05803		mg/Kg		116	70 - 130	2	41
Toluene	0.0500	0.05581		mg/Kg		112	70 - 130	3	40
trans-1,2-Dichloroethene	0.0500	0.05778		mg/Kg		116	70 - 130	0	41
trans-1,3-Dichloropropene	0.0500	0.05311		mg/Kg		106	67 - 130	8	41
1,2,3-Trichlorobenzene	0.0500	0.05332		mg/Kg		107	57 - 146	5	42
1,2,4-Trichlorobenzene	0.0500	0.05319		mg/Kg		106	47 - 150	2	43
1,1,1-Trichloroethane	0.0500	0.05856		mg/Kg		117	70 - 130	1	41
1,1,2-Trichloroethane	0.0500	0.05440		mg/Kg		109	70 - 130	2	17
Trichloroethene	0.0500	0.05971		mg/Kg		119	70 - 130	1	41
Trichlorofluoromethane	0.0500	0.05409		mg/Kg		108	53 - 150	1	49
1,2,3-Trichloropropane	0.0500	0.05979		mg/Kg		120	60 - 139	5	16
1,2,4-Trimethylbenzene	0.0500	0.05944		mg/Kg		119	70 - 140	0	38
1,3,5-Trimethylbenzene	0.0500	0.05955		mg/Kg		119	69 - 141	0	38
Vinyl chloride	0.0500	0.05048		mg/Kg		101	63 - 150	1	46
Xylenes, Total	0.100	0.1159		mg/Kg		116	70 - 130	1	38

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*
Dibromofluoromethane (Surr)	*107*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*
Toluene-d8 (Surr)	*97*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-369526/7
Matrix: Water
Analysis Batch: 369526

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25.0	2.66	ug/L			09/12/16 13:26	1
Benzene	ND		1.00	0.200	ug/L			09/12/16 13:26	1
Bromobenzene	ND		1.00	0.210	ug/L			09/12/16 13:26	1
Bromochloromethane	ND		1.00	0.150	ug/L			09/12/16 13:26	1
Bromodichloromethane	ND		1.00	0.170	ug/L			09/12/16 13:26	1
Bromoform	ND		1.00	0.290	ug/L			09/12/16 13:26	1
Bromomethane	ND		1.00	0.350	ug/L			09/12/16 13:26	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			09/12/16 13:26	1
Carbon disulfide	ND		1.00	0.220	ug/L			09/12/16 13:26	1
Carbon tetrachloride	ND		1.00	0.180	ug/L			09/12/16 13:26	1
Chlorobenzene	ND		1.00	0.180	ug/L			09/12/16 13:26	1
Chlorodibromomethane	ND		1.00	0.250	ug/L			09/12/16 13:26	1
Chloroethane	ND		1.00	0.360	ug/L			09/12/16 13:26	1
Chloroform	ND		1.00	0.230	ug/L			09/12/16 13:26	1
Chloromethane	ND		1.00	0.360	ug/L			09/12/16 13:26	1
2-Chlorotoluene	ND		1.00	0.180	ug/L			09/12/16 13:26	1
4-Chlorotoluene	ND		1.00	0.170	ug/L			09/12/16 13:26	1
cis-1,2-Dichloroethene	ND		1.00	0.210	ug/L			09/12/16 13:26	1
cis-1,3-Dichloropropene	ND		1.00	0.170	ug/L			09/12/16 13:26	1
1,2-Dibromo-3-Chloropropane	ND		10.0	0.940	ug/L			09/12/16 13:26	1
1,2-Dibromoethane (EDB)	ND		1.00	0.210	ug/L			09/12/16 13:26	1
Dibromomethane	ND		1.00	0.450	ug/L			09/12/16 13:26	1
1,2-Dichlorobenzene	ND		1.00	0.190	ug/L			09/12/16 13:26	1
1,3-Dichlorobenzene	ND		1.00	0.180	ug/L			09/12/16 13:26	1
1,4-Dichlorobenzene	ND		1.00	0.170	ug/L			09/12/16 13:26	1
Dichlorodifluoromethane	ND		1.00	0.170	ug/L			09/12/16 13:26	1
1,1-Dichloroethane	ND		1.00	0.240	ug/L			09/12/16 13:26	1
1,2-Dichloroethane	ND		1.00	0.200	ug/L			09/12/16 13:26	1
1,1-Dichloroethene	ND		1.00	0.250	ug/L			09/12/16 13:26	1
1,2-Dichloropropane	ND		1.00	0.250	ug/L			09/12/16 13:26	1
1,3-Dichloropropane	ND		1.00	0.190	ug/L			09/12/16 13:26	1
2,2-Dichloropropane	ND		1.00	0.160	ug/L			09/12/16 13:26	1
1,1-Dichloropropene	ND		1.00	0.200	ug/L			09/12/16 13:26	1
Diisopropyl ether	ND		2.00	0.170	ug/L			09/12/16 13:26	1
Ethylbenzene	ND		1.00	0.190	ug/L			09/12/16 13:26	1
Ethyl tert-butyl ether	ND		1.00	0.210	ug/L			09/12/16 13:26	1
Hexachlorobutadiene	ND		2.00	0.380	ug/L			09/12/16 13:26	1
2-Hexanone	ND		10.0	1.28	ug/L			09/12/16 13:26	1
Isopropylbenzene	ND		1.00	0.330	ug/L			09/12/16 13:26	1
Methylene Chloride	ND		5.00	1.00	ug/L			09/12/16 13:26	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.810	ug/L			09/12/16 13:26	1
Methyl tert-butyl ether	ND		1.00	0.170	ug/L			09/12/16 13:26	1
Naphthalene	ND		5.00	0.210	ug/L			09/12/16 13:26	1
n-Butylbenzene	ND		1.00	0.240	ug/L			09/12/16 13:26	1
N-Propylbenzene	ND		1.00	0.170	ug/L			09/12/16 13:26	1
p-Isopropyltoluene	ND		1.00	0.170	ug/L			09/12/16 13:26	1
sec-Butylbenzene	ND		1.00	0.170	ug/L			09/12/16 13:26	1
Styrene	ND		1.00	0.280	ug/L			09/12/16 13:26	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-369526/7
Matrix: Water
Analysis Batch: 369526

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
t-Amyl alcohol	ND		20.0	6.76	ug/L			09/12/16 13:26	1
Tert-amyl methyl ether	ND		1.00	0.170	ug/L			09/12/16 13:26	1
tert-Butyl alcohol (TBA)	ND		10.0	3.90	ug/L			09/12/16 13:26	1
tert-Butylbenzene	ND		1.00	0.170	ug/L			09/12/16 13:26	1
1,1,1,2-Tetrachloroethane	ND		1.00	0.150	ug/L			09/12/16 13:26	1
1,1,2,2-Tetrachloroethane	ND		1.00	0.190	ug/L			09/12/16 13:26	1
Tetrachloroethene	ND		1.00	0.140	ug/L			09/12/16 13:26	1
Toluene	ND		1.00	0.170	ug/L			09/12/16 13:26	1
trans-1,2-Dichloroethene	ND		1.00	0.230	ug/L			09/12/16 13:26	1
trans-1,3-Dichloropropene	ND		1.00	0.170	ug/L			09/12/16 13:26	1
1,2,3-Trichlorobenzene	ND		1.00	0.230	ug/L			09/12/16 13:26	1
1,2,4-Trichlorobenzene	ND		1.00	0.200	ug/L			09/12/16 13:26	1
1,1,1-Trichloroethane	ND		1.00	0.190	ug/L			09/12/16 13:26	1
1,1,2-Trichloroethane	ND		1.00	0.190	ug/L			09/12/16 13:26	1
Trichloroethene	ND		1.00	0.200	ug/L			09/12/16 13:26	1
Trichlorofluoromethane	ND		1.00	0.210	ug/L			09/12/16 13:26	1
1,2,3-Trichloropropane	ND		1.00	0.230	ug/L			09/12/16 13:26	1
1,2,4-Trimethylbenzene	ND		1.00	0.170	ug/L			09/12/16 13:26	1
1,3,5-Trimethylbenzene	ND		1.00	0.170	ug/L			09/12/16 13:26	1
Vinyl chloride	ND		1.00	0.180	ug/L			09/12/16 13:26	1
Xylenes, Total	ND		3.00	0.580	ug/L			09/12/16 13:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*09/12/16 13:26*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*09/12/16 13:26*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*09/12/16 13:26*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*09/12/16 13:26*	*1*

Lab Sample ID: LCS 490-369526/3
Matrix: Water
Analysis Batch: 369526

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	99.98		ug/L		100	39 - 150
Benzene	20.0	19.58		ug/L		98	70 - 130
Bromobenzene	20.0	19.31		ug/L		97	70 - 130
Bromochloromethane	20.0	19.43		ug/L		97	70 - 130
Bromodichloromethane	20.0	19.25		ug/L		96	70 - 130
Bromoform	20.0	20.13		ug/L		101	70 - 137
Bromomethane	20.0	19.38		ug/L		97	53 - 150
2-Butanone (MEK)	100	96.99		ug/L		97	55 - 143
Carbon disulfide	20.0	19.73		ug/L		99	64 - 135
Carbon tetrachloride	20.0	18.35		ug/L		92	70 - 147
Chlorobenzene	20.0	19.67		ug/L		98	70 - 130
Chlorodibromomethane	20.0	20.09		ug/L		100	70 - 133
Chloroethane	20.0	20.13		ug/L		101	60 - 138
Chloroform	20.0	19.16		ug/L		96	70 - 130
Chloromethane	20.0	20.44		ug/L		102	33 - 150

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-369526/3
Matrix: Water
Analysis Batch: 369526

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chlorotoluene	20.0	18.34		ug/L		92	70 - 130
4-Chlorotoluene	20.0	18.22		ug/L		91	70 - 130
cis-1,2-Dichloroethene	20.0	19.17		ug/L		96	70 - 130
cis-1,3-Dichloropropene	20.0	20.21		ug/L		101	70 - 133
1,2-Dibromo-3-Chloropropane	20.0	20.44		ug/L		102	45 - 138
1,2-Dibromoethane (EDB)	20.0	20.12		ug/L		101	70 - 130
Dibromomethane	20.0	19.63		ug/L		98	70 - 130
1,2-Dichlorobenzene	20.0	20.08		ug/L		100	70 - 130
1,3-Dichlorobenzene	20.0	18.90		ug/L		95	70 - 130
1,4-Dichlorobenzene	20.0	18.51		ug/L		93	70 - 130
Dichlorodifluoromethane	20.0	22.76		ug/L		114	48 - 150
1,1-Dichloroethane	20.0	18.91		ug/L		95	70 - 130
1,2-Dichloroethane	20.0	19.76		ug/L		99	70 - 130
1,1-Dichloroethene	20.0	19.12		ug/L		96	70 - 132
1,2-Dichloropropane	20.0	19.25		ug/L		96	70 - 130
1,3-Dichloropropane	20.0	19.61		ug/L		98	70 - 130
2,2-Dichloropropane	20.0	19.96		ug/L		100	60 - 143
1,1-Dichloropropene	20.0	19.66		ug/L		98	70 - 130
Diisopropyl ether	20.0	19.35		ug/L		97	66 - 142
Ethylbenzene	20.0	19.38		ug/L		97	70 - 130
Ethyl tert-butyl ether	20.0	19.26		ug/L		96	63 - 135
Hexachlorobutadiene	20.0	22.45		ug/L		112	70 - 138
2-Hexanone	100	99.39		ug/L		99	54 - 142
Isopropylbenzene	20.0	19.44		ug/L		97	70 - 131
Methylene Chloride	20.0	19.87		ug/L		99	70 - 130
4-Methyl-2-pentanone (MIBK)	100	97.57		ug/L		98	60 - 137
Methyl tert-butyl ether	20.0	19.64		ug/L		98	70 - 130
Naphthalene	20.0	21.00		ug/L		105	54 - 150
n-Butylbenzene	20.0	20.47		ug/L		102	68 - 137
N-Propylbenzene	20.0	19.71		ug/L		99	70 - 134
p-Isopropyltoluene	20.0	19.01		ug/L		95	66 - 130
sec-Butylbenzene	20.0	18.78		ug/L		94	70 - 135
Styrene	20.0	19.68		ug/L		98	70 - 130
t-Amyl alcohol	200	231.7		ug/L		116	19 - 150
Tert-amyl methyl ether	20.0	19.60		ug/L		98	63 - 135
tert-Butyl alcohol (TBA)	200	210.2		ug/L		105	12 - 150
tert-Butylbenzene	20.0	19.02		ug/L		95	70 - 130
1,1,1,2-Tetrachloroethane	20.0	18.27		ug/L		91	70 - 130
1,1,2,2-Tetrachloroethane	20.0	19.70		ug/L		99	69 - 131
Tetrachloroethene	20.0	20.51		ug/L		103	70 - 130
Toluene	20.0	19.87		ug/L		99	70 - 130
trans-1,2-Dichloroethene	20.0	19.26		ug/L		96	70 - 130
trans-1,3-Dichloropropene	20.0	19.78		ug/L		99	63 - 142
1,2,3-Trichlorobenzene	20.0	21.23		ug/L		106	46 - 150
1,2,4-Trichlorobenzene	20.0	21.03		ug/L		105	58 - 147
1,1,1-Trichloroethane	20.0	19.33		ug/L		97	70 - 135
1,1,2-Trichloroethane	20.0	19.54		ug/L		98	70 - 130
Trichloroethene	20.0	19.22		ug/L		96	70 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-369526/3
Matrix: Water
Analysis Batch: 369526

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Trichlorofluoromethane	20.0	19.65		ug/L		98	59 - 150
1,2,3-Trichloropropane	20.0	20.06		ug/L		100	70 - 131
1,2,4-Trimethylbenzene	20.0	19.50		ug/L		98	70 - 130
1,3,5-Trimethylbenzene	20.0	18.15		ug/L		91	70 - 130
Vinyl chloride	20.0	20.81		ug/L		104	57 - 137
Xylenes, Total	40.0	39.23		ug/L		98	70 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
Dibromofluoromethane (Surr)	*100*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

Lab Sample ID: LCSD 490-369526/4
Matrix: Water
Analysis Batch: 369526

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	100	104.2		ug/L		104	39 - 150	4	23
Benzene	20.0	19.70		ug/L		98	70 - 130	1	12
Bromobenzene	20.0	18.71		ug/L		94	70 - 130	3	16
Bromochloromethane	20.0	19.81		ug/L		99	70 - 130	2	16
Bromodichloromethane	20.0	19.49		ug/L		97	70 - 130	1	14
Bromoform	20.0	20.28		ug/L		101	70 - 137	1	14
Bromomethane	20.0	20.54		ug/L		103	53 - 150	6	19
2-Butanone (MEK)	100	100.3		ug/L		100	55 - 143	3	19
Carbon disulfide	20.0	20.77		ug/L		104	64 - 135	5	16
Carbon tetrachloride	20.0	18.17		ug/L		91	70 - 147	1	16
Chlorobenzene	20.0	19.42		ug/L		97	70 - 130	1	12
Chlorodibromomethane	20.0	19.44		ug/L		97	70 - 133	3	13
Chloroethane	20.0	21.29		ug/L		106	60 - 138	6	15
Chloroform	20.0	19.27		ug/L		96	70 - 130	1	14
Chloromethane	20.0	20.52		ug/L		103	33 - 150	0	20
2-Chlorotoluene	20.0	17.30		ug/L		86	70 - 130	6	15
4-Chlorotoluene	20.0	17.67		ug/L		88	70 - 130	3	15
cis-1,2-Dichloroethene	20.0	19.49		ug/L		97	70 - 130	2	15
cis-1,3-Dichloropropene	20.0	20.08		ug/L		100	70 - 133	1	15
1,2-Dibromo-3-Chloropropane	20.0	20.88		ug/L		104	45 - 138	2	19
1,2-Dibromoethane (EDB)	20.0	20.18		ug/L		101	70 - 130	0	13
Dibromomethane	20.0	20.35		ug/L		102	70 - 130	4	14
1,2-Dichlorobenzene	20.0	19.73		ug/L		99	70 - 130	2	12
1,3-Dichlorobenzene	20.0	18.67		ug/L		93	70 - 130	1	13
1,4-Dichlorobenzene	20.0	18.43		ug/L		92	70 - 130	0	12
Dichlorodifluoromethane	20.0	23.43		ug/L		117	48 - 150	3	16
1,1-Dichloroethane	20.0	19.17		ug/L		96	70 - 130	1	17
1,2-Dichloroethane	20.0	20.14		ug/L		101	70 - 130	2	13
1,1-Dichloroethene	20.0	19.42		ug/L		97	70 - 132	2	20
1,2-Dichloropropane	20.0	20.30		ug/L		101	70 - 130	5	15

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-369526/4
Matrix: Water
Analysis Batch: 369526

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3-Dichloropropane	20.0	19.84		ug/L		99	70 - 130	1	12
2,2-Dichloropropane	20.0	19.90		ug/L		99	60 - 143	0	20
1,1-Dichloropropene	20.0	19.69		ug/L		98	70 - 130	0	16
Diisopropyl ether	20.0	19.66		ug/L		98	66 - 142	2	14
Ethylbenzene	20.0	19.05		ug/L		95	70 - 130	2	12
Ethyl tert-butyl ether	20.0	19.51		ug/L		98	63 - 135	1	15
Hexachlorobutadiene	20.0	23.11		ug/L		116	70 - 138	3	16
2-Hexanone	100	99.58		ug/L		100	54 - 142	0	17
Isopropylbenzene	20.0	19.44		ug/L		97	70 - 131	0	13
Methylene Chloride	20.0	20.37		ug/L		102	70 - 130	2	15
4-Methyl-2-pentanone (MIBK)	100	98.43		ug/L		98	60 - 137	1	21
Methyl tert-butyl ether	20.0	19.43		ug/L		97	70 - 130	1	16
Naphthalene	20.0	20.94		ug/L		105	54 - 150	0	15
n-Butylbenzene	20.0	20.51		ug/L		103	68 - 137	0	14
N-Propylbenzene	20.0	18.64		ug/L		93	70 - 134	6	14
p-Isopropyltoluene	20.0	18.64		ug/L		93	66 - 130	2	13
sec-Butylbenzene	20.0	18.45		ug/L		92	70 - 135	2	14
Styrene	20.0	19.24		ug/L		96	70 - 130	2	12
t-Amyl alcohol	200	239.2		ug/L		120	19 - 150	3	50
Tert-amyl methyl ether	20.0	20.19		ug/L		101	63 - 135	3	15
tert-Butyl alcohol (TBA)	200	215.4		ug/L		108	12 - 150	2	46
tert-Butylbenzene	20.0	18.56		ug/L		93	70 - 130	2	14
1,1,1,2-Tetrachloroethane	20.0	18.11		ug/L		91	70 - 130	1	13
1,1,2,2-Tetrachloroethane	20.0	19.45		ug/L		97	69 - 131	1	15
Tetrachloroethene	20.0	19.90		ug/L		99	70 - 130	3	17
Toluene	20.0	19.81		ug/L		99	70 - 130	0	13
trans-1,2-Dichloroethene	20.0	19.08		ug/L		95	70 - 130	1	15
trans-1,3-Dichloropropene	20.0	19.78		ug/L		99	63 - 142	0	13
1,2,3-Trichlorobenzene	20.0	21.57		ug/L		108	46 - 150	2	16
1,2,4-Trichlorobenzene	20.0	21.13		ug/L		106	58 - 147	0	15
1,1,1-Trichloroethane	20.0	19.49		ug/L		97	70 - 135	1	15
1,1,2-Trichloroethane	20.0	19.30		ug/L		97	70 - 130	1	13
Trichloroethene	20.0	20.00		ug/L		100	70 - 130	4	14
Trichlorofluoromethane	20.0	19.97		ug/L		100	59 - 150	2	22
1,2,3-Trichloropropane	20.0	19.29		ug/L		96	70 - 131	4	14
1,2,4-Trimethylbenzene	20.0	19.25		ug/L		96	70 - 130	1	13
1,3,5-Trimethylbenzene	20.0	17.84		ug/L		89	70 - 130	2	14
Vinyl chloride	20.0	21.26		ug/L		106	57 - 137	2	15
Xylenes, Total	40.0	38.92		ug/L		97	70 - 132	1	11

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
Dibromofluoromethane (Surr)	*103*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-111143-34 MS
Matrix: Water
Analysis Batch: 369526

Client Sample ID: SB-7
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		100	113.0		ug/L		103	39 - 150
Benzene	ND		20.0	24.48		ug/L		122	55 - 147
Bromobenzene	ND		20.0	21.86		ug/L		109	60 - 133
Bromochloromethane	ND		20.0	22.49		ug/L		112	59 - 132
Bromodichloromethane	ND		20.0	22.98		ug/L		115	70 - 140
Bromoform	ND		20.0	21.17		ug/L		106	53 - 150
Bromomethane	ND		20.0	20.37		ug/L		102	30 - 150
2-Butanone (MEK)	ND		100	103.6		ug/L		104	50 - 143
Carbon disulfide	1.38		20.0	23.86		ug/L		112	35 - 150
Carbon tetrachloride	ND		20.0	23.28		ug/L		116	56 - 150
Chlorobenzene	ND		20.0	23.26		ug/L		116	70 - 130
Chlorodibromomethane	ND		20.0	22.50		ug/L		112	66 - 140
Chloroethane	ND	F1	20.0	26.75		ug/L		134	58 - 141
Chloroform	ND		20.0	24.29		ug/L		121	66 - 138
Chloromethane	ND		20.0	24.79		ug/L		124	10 - 150
2-Chlorotoluene	ND		20.0	21.24		ug/L		106	67 - 138
4-Chlorotoluene	ND		20.0	21.70		ug/L		107	69 - 138
cis-1,2-Dichloroethene	ND	F1	20.0	24.20		ug/L		121	68 - 131
cis-1,3-Dichloropropene	ND		20.0	23.38		ug/L		117	70 - 133
1,2-Dibromo-3-Chloropropane	ND		20.0	20.01		ug/L		100	38 - 138
1,2-Dibromoethane (EDB)	ND		20.0	21.99		ug/L		110	65 - 137
Dibromomethane	ND		20.0	21.90		ug/L		109	70 - 130
1,2-Dichlorobenzene	ND		20.0	22.50		ug/L		113	70 - 130
1,3-Dichlorobenzene	ND		20.0	21.96		ug/L		109	68 - 131
1,4-Dichlorobenzene	ND		20.0	21.40		ug/L		107	70 - 130
Dichlorodifluoromethane	ND	F1	20.0	28.57		ug/L		143	10 - 150
1,1-Dichloroethane	ND		20.0	23.85		ug/L		119	61 - 139
1,2-Dichloroethane	ND		20.0	22.75		ug/L		114	64 - 136
1,1-Dichloroethene	ND		20.0	24.36		ug/L		122	54 - 150
1,2-Dichloropropane	ND	F1	20.0	23.85		ug/L		119	67 - 130
1,3-Dichloropropane	ND		20.0	22.39		ug/L		112	70 - 130
2,2-Dichloropropane	ND		20.0	25.00		ug/L		125	50 - 146
1,1-Dichloropropene	ND		20.0	24.96		ug/L		123	54 - 150
Diisopropyl ether	ND		20.0	23.48		ug/L		117	56 - 142
Ethylbenzene	ND		20.0	23.97		ug/L		120	65 - 139
Ethyl tert-butyl ether	ND		20.0	22.62		ug/L		113	53 - 138
Hexachlorobutadiene	ND		20.0	20.51		ug/L		103	61 - 141
2-Hexanone	ND		100	100.5		ug/L		101	44 - 150
Isopropylbenzene	ND		20.0	23.84		ug/L		119	70 - 137
Methylene Chloride	ND	F1	20.0	23.20		ug/L		116	64 - 130
4-Methyl-2-pentanone (MIBK)	ND		100	103.2		ug/L		103	50 - 140
Methyl tert-butyl ether	ND		20.0	22.21		ug/L		111	55 - 141
Naphthalene	ND		20.0	20.68		ug/L		103	32 - 150
n-Butylbenzene	ND		20.0	22.52		ug/L		113	61 - 141
N-Propylbenzene	ND		20.0	23.57		ug/L		118	53 - 150
p-Isopropyltoluene	ND		20.0	21.91		ug/L		110	66 - 137
sec-Butylbenzene	ND		20.0	21.76		ug/L		109	55 - 136
Styrene	ND		20.0	23.69		ug/L		118	70 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-111143-34 MS
Matrix: Water
Analysis Batch: 369526

Client Sample ID: SB-7
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
t-Amyl alcohol	ND		200	206.4		ug/L		103	10 - 150
Tert-amyl methyl ether	ND		20.0	22.49		ug/L		112	47 - 148
tert-Butyl alcohol (TBA)	ND		200	200.8		ug/L		100	10 - 150
tert-Butylbenzene	ND		20.0	23.06		ug/L		115	70 - 138
1,1,1,2-Tetrachloroethane	ND		20.0	21.98		ug/L		110	70 - 131
1,1,2,2-Tetrachloroethane	ND		20.0	20.84		ug/L		104	56 - 145
Tetrachloroethene	ND		20.0	24.77		ug/L		124	57 - 138
Toluene	ND		20.0	24.42		ug/L		122	64 - 136
trans-1,2-Dichloroethene	ND		20.0	23.81		ug/L		117	59 - 143
trans-1,3-Dichloropropene	ND		20.0	22.73		ug/L		114	63 - 142
1,2,3-Trichlorobenzene	ND		20.0	20.55		ug/L		103	36 - 150
1,2,4-Trichlorobenzene	ND		20.0	21.24		ug/L		106	47 - 147
1,1,1-Trichloroethane	ND		20.0	24.54		ug/L		123	68 - 144
1,1,2-Trichloroethane	ND		20.0	21.81		ug/L		109	70 - 130
Trichloroethene	ND		20.0	24.28		ug/L		120	63 - 135
Trichlorofluoromethane	ND		20.0	25.76		ug/L		129	44 - 150
1,2,3-Trichloropropane	ND		20.0	20.96		ug/L		105	65 - 131
1,2,4-Trimethylbenzene	ND		20.0	23.04		ug/L		115	64 - 136
1,3,5-Trimethylbenzene	ND		20.0	21.52		ug/L		108	69 - 139
Vinyl chloride	ND		20.0	26.34		ug/L		130	57 - 150
Xylenes, Total	ND		40.0	48.30		ug/L		121	69 - 132

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
Dibromofluoromethane (Surr)	*101*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

Lab Sample ID: 490-111143-34 MSD
Matrix: Water
Analysis Batch: 369526

Client Sample ID: SB-7
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		100	125.5		ug/L		115	39 - 150	10	28
Benzene	ND		20.0	27.74		ug/L		139	55 - 147	12	22
Bromobenzene	ND		20.0	24.39		ug/L		122	60 - 133	11	18
Bromochloromethane	ND		20.0	25.04		ug/L		125	59 - 132	11	21
Bromodichloromethane	ND		20.0	25.78		ug/L		129	70 - 140	11	196
Bromoform	ND		20.0	23.27		ug/L		116	53 - 150	9	20
Bromomethane	ND		20.0	23.68		ug/L		118	30 - 150	15	44
2-Butanone (MEK)	ND		100	116.4		ug/L		116	50 - 143	12	28
Carbon disulfide	1.38		20.0	26.53		ug/L		126	35 - 150	11	34
Carbon tetrachloride	ND		20.0	25.81		ug/L		129	56 - 150	10	18
Chlorobenzene	ND		20.0	25.62		ug/L		128	70 - 130	10	15
Chlorodibromomethane	ND		20.0	24.87		ug/L		124	66 - 140	10	19
Chloroethane	ND	F1	20.0	29.73	F1	ug/L		149	58 - 141	11	31
Chloroform	ND		20.0	26.65		ug/L		133	66 - 138	9	21
Chloromethane	ND		20.0	28.07		ug/L		140	10 - 150	12	43

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-111143-34 MSD
Matrix: Water
Analysis Batch: 369526

Client Sample ID: SB-7
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Chlorotoluene	ND		20.0	23.95		ug/L		120	67 - 138	12	17
4-Chlorotoluene	ND		20.0	23.51		ug/L		117	69 - 138	8	15
cis-1,2-Dichloroethene	ND	F1	20.0	26.71	F1	ug/L		134	68 - 131	10	21
cis-1,3-Dichloropropene	ND		20.0	26.29		ug/L		131	70 - 133	12	19
1,2-Dibromo-3-Chloropropane	ND		20.0	22.71		ug/L		114	38 - 138	13	26
1,2-Dibromoethane (EDB)	ND		20.0	24.23		ug/L		121	65 - 137	10	21
Dibromomethane	ND		20.0	24.54		ug/L		123	70 - 130	11	19
1,2-Dichlorobenzene	ND		20.0	24.67		ug/L		123	70 - 130	9	15
1,3-Dichlorobenzene	ND		20.0	24.03		ug/L		119	68 - 131	9	14
1,4-Dichlorobenzene	ND		20.0	23.14		ug/L		116	70 - 130	8	14
Dichlorodifluoromethane	ND	F1	20.0	32.11	F1	ug/L		161	10 - 150	12	50
1,1-Dichloroethane	ND		20.0	26.77		ug/L		134	61 - 139	12	23
1,2-Dichloroethane	ND		20.0	25.76		ug/L		129	64 - 136	12	22
1,1-Dichloroethene	ND		20.0	27.21		ug/L		136	54 - 150	11	24
1,2-Dichloropropane	ND	F1	20.0	26.18	F1	ug/L		131	67 - 130	9	19
1,3-Dichloropropane	ND		20.0	24.55		ug/L		123	70 - 130	9	17
2,2-Dichloropropane	ND		20.0	27.95		ug/L		140	50 - 146	11	20
1,1-Dichloropropene	ND		20.0	27.31		ug/L		135	54 - 150	9	24
Diisopropyl ether	ND		20.0	26.44		ug/L		132	56 - 142	12	22
Ethylbenzene	ND		20.0	26.25		ug/L		131	65 - 139	9	18
Ethyl tert-butyl ether	ND		20.0	25.61		ug/L		128	53 - 138	12	22
Hexachlorobutadiene	ND		20.0	22.63		ug/L		113	61 - 141	10	26
2-Hexanone	ND		100	110.3		ug/L		110	44 - 150	9	21
Isopropylbenzene	ND		20.0	26.03		ug/L		130	70 - 137	9	17
Methylene Chloride	ND	F1	20.0	26.32	F1	ug/L		132	64 - 130	13	22
4-Methyl-2-pentanone (MIBK)	ND		100	112.9		ug/L		113	50 - 140	9	24
Methyl tert-butyl ether	ND		20.0	25.05		ug/L		125	55 - 141	12	24
Naphthalene	ND		20.0	23.22		ug/L		116	32 - 150	12	40
n-Butylbenzene	ND		20.0	24.95		ug/L		125	61 - 141	10	17
N-Propylbenzene	ND		20.0	25.67		ug/L		128	53 - 150	9	18
p-Isopropyltoluene	ND		20.0	23.84		ug/L		119	66 - 137	8	16
sec-Butylbenzene	ND		20.0	23.81		ug/L		119	55 - 136	9	50
Styrene	ND		20.0	25.28		ug/L		126	70 - 130	6	16
t-Amyl alcohol	ND		200	233.2		ug/L		117	10 - 150	12	50
Tert-amyl methyl ether	ND		20.0	25.22		ug/L		126	47 - 148	11	23
tert-Butyl alcohol (TBA)	ND		200	236.4		ug/L		118	10 - 150	16	47
tert-Butylbenzene	ND		20.0	24.81		ug/L		124	70 - 138	7	17
1,1,1,2-Tetrachloroethane	ND		20.0	24.20		ug/L		121	70 - 131	10	16
1,1,2,2-Tetrachloroethane	ND		20.0	22.43		ug/L		112	56 - 145	7	19
Tetrachloroethene	ND		20.0	27.39		ug/L		137	57 - 138	10	17
Toluene	ND		20.0	26.99		ug/L		135	64 - 136	10	18
trans-1,2-Dichloroethene	ND		20.0	26.68		ug/L		132	59 - 143	11	25
trans-1,3-Dichloropropene	ND		20.0	25.05		ug/L		125	63 - 142	10	18
1,2,3-Trichlorobenzene	ND		20.0	23.49		ug/L		117	36 - 150	13	43
1,2,4-Trichlorobenzene	ND		20.0	23.86		ug/L		119	47 - 147	12	24
1,1,1-Trichloroethane	ND		20.0	27.27		ug/L		136	68 - 144	11	17
1,1,2-Trichloroethane	ND		20.0	24.61		ug/L		123	70 - 130	12	18
Trichloroethene	ND		20.0	26.77		ug/L		133	63 - 135	10	17

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-111143-34 MSD
Matrix: Water
Analysis Batch: 369526

Client Sample ID: SB-7
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Trichlorofluoromethane	ND		20.0	28.99		ug/L		145	44 - 150	12	32
1,2,3-Trichloropropane	ND		20.0	22.83		ug/L		114	65 - 131	9	19
1,2,4-Trimethylbenzene	ND		20.0	25.32		ug/L		127	64 - 136	9	18
1,3,5-Trimethylbenzene	ND		20.0	23.48		ug/L		117	69 - 139	9	17
Vinyl chloride	ND		20.0	29.28		ug/L		145	57 - 150	11	37
Xylenes, Total	ND		40.0	52.31		ug/L		131	69 - 132	8	17

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
Dibromofluoromethane (Surr)	*100*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

Lab Sample ID: MB 490-369547/7
Matrix: Water
Analysis Batch: 369547

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25.0	2.66	ug/L			09/13/16 02:10	1
Benzene	ND		1.00	0.200	ug/L			09/13/16 02:10	1
Bromobenzene	ND		1.00	0.210	ug/L			09/13/16 02:10	1
Bromochloromethane	ND		1.00	0.150	ug/L			09/13/16 02:10	1
Bromodichloromethane	ND		1.00	0.170	ug/L			09/13/16 02:10	1
Bromoform	ND		1.00	0.290	ug/L			09/13/16 02:10	1
Bromomethane	ND		1.00	0.350	ug/L			09/13/16 02:10	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			09/13/16 02:10	1
Carbon disulfide	ND		1.00	0.220	ug/L			09/13/16 02:10	1
Carbon tetrachloride	ND		1.00	0.180	ug/L			09/13/16 02:10	1
Chlorobenzene	ND		1.00	0.180	ug/L			09/13/16 02:10	1
Chlorodibromomethane	ND		1.00	0.250	ug/L			09/13/16 02:10	1
Chloroethane	ND		1.00	0.360	ug/L			09/13/16 02:10	1
Chloroform	ND		1.00	0.230	ug/L			09/13/16 02:10	1
Chloromethane	ND		1.00	0.360	ug/L			09/13/16 02:10	1
2-Chlorotoluene	ND		1.00	0.180	ug/L			09/13/16 02:10	1
4-Chlorotoluene	ND		1.00	0.170	ug/L			09/13/16 02:10	1
cis-1,2-Dichloroethene	ND		1.00	0.210	ug/L			09/13/16 02:10	1
cis-1,3-Dichloropropene	ND		1.00	0.170	ug/L			09/13/16 02:10	1
1,2-Dibromo-3-Chloropropane	ND		10.0	0.940	ug/L			09/13/16 02:10	1
1,2-Dibromoethane (EDB)	ND		1.00	0.210	ug/L			09/13/16 02:10	1
Dibromomethane	ND		1.00	0.450	ug/L			09/13/16 02:10	1
1,2-Dichlorobenzene	ND		1.00	0.190	ug/L			09/13/16 02:10	1
1,3-Dichlorobenzene	ND		1.00	0.180	ug/L			09/13/16 02:10	1
1,4-Dichlorobenzene	ND		1.00	0.170	ug/L			09/13/16 02:10	1
Dichlorodifluoromethane	ND		1.00	0.170	ug/L			09/13/16 02:10	1
1,1-Dichloroethane	ND		1.00	0.240	ug/L			09/13/16 02:10	1
1,2-Dichloroethane	ND		1.00	0.200	ug/L			09/13/16 02:10	1
1,1-Dichloroethene	ND		1.00	0.250	ug/L			09/13/16 02:10	1
1,2-Dichloropropane	ND		1.00	0.250	ug/L			09/13/16 02:10	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-369547/7
Matrix: Water
Analysis Batch: 369547

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichloropropane	ND		1.00	0.190	ug/L			09/13/16 02:10	1
2,2-Dichloropropane	ND		1.00	0.160	ug/L			09/13/16 02:10	1
1,1-Dichloropropene	ND		1.00	0.200	ug/L			09/13/16 02:10	1
Diisopropyl ether	ND		2.00	0.170	ug/L			09/13/16 02:10	1
Ethylbenzene	ND		1.00	0.190	ug/L			09/13/16 02:10	1
Ethyl tert-butyl ether	ND		1.00	0.210	ug/L			09/13/16 02:10	1
Hexachlorobutadiene	ND		2.00	0.380	ug/L			09/13/16 02:10	1
2-Hexanone	ND		10.0	1.28	ug/L			09/13/16 02:10	1
Isopropylbenzene	ND		1.00	0.330	ug/L			09/13/16 02:10	1
Methylene Chloride	ND		5.00	1.00	ug/L			09/13/16 02:10	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.810	ug/L			09/13/16 02:10	1
Methyl tert-butyl ether	ND		1.00	0.170	ug/L			09/13/16 02:10	1
Naphthalene	ND		5.00	0.210	ug/L			09/13/16 02:10	1
n-Butylbenzene	ND		1.00	0.240	ug/L			09/13/16 02:10	1
N-Propylbenzene	ND		1.00	0.170	ug/L			09/13/16 02:10	1
p-Isopropyltoluene	ND		1.00	0.170	ug/L			09/13/16 02:10	1
sec-Butylbenzene	ND		1.00	0.170	ug/L			09/13/16 02:10	1
Styrene	ND		1.00	0.280	ug/L			09/13/16 02:10	1
t-Amyl alcohol	ND		20.0	6.76	ug/L			09/13/16 02:10	1
Tert-amyl methyl ether	ND		1.00	0.170	ug/L			09/13/16 02:10	1
tert-Butyl alcohol (TBA)	ND		10.0	3.90	ug/L			09/13/16 02:10	1
tert-Butylbenzene	ND		1.00	0.170	ug/L			09/13/16 02:10	1
1,1,1,2-Tetrachloroethane	ND		1.00	0.150	ug/L			09/13/16 02:10	1
1,1,2,2-Tetrachloroethane	ND		1.00	0.190	ug/L			09/13/16 02:10	1
Tetrachloroethene	ND		1.00	0.140	ug/L			09/13/16 02:10	1
Toluene	ND		1.00	0.170	ug/L			09/13/16 02:10	1
trans-1,2-Dichloroethene	ND		1.00	0.230	ug/L			09/13/16 02:10	1
trans-1,3-Dichloropropene	ND		1.00	0.170	ug/L			09/13/16 02:10	1
1,2,3-Trichlorobenzene	ND		1.00	0.230	ug/L			09/13/16 02:10	1
1,2,4-Trichlorobenzene	ND		1.00	0.200	ug/L			09/13/16 02:10	1
1,1,1-Trichloroethane	ND		1.00	0.190	ug/L			09/13/16 02:10	1
1,1,2-Trichloroethane	ND		1.00	0.190	ug/L			09/13/16 02:10	1
Trichloroethene	ND		1.00	0.200	ug/L			09/13/16 02:10	1
Trichlorofluoromethane	ND		1.00	0.210	ug/L			09/13/16 02:10	1
1,2,3-Trichloropropane	ND		1.00	0.230	ug/L			09/13/16 02:10	1
1,2,4-Trimethylbenzene	ND		1.00	0.170	ug/L			09/13/16 02:10	1
1,3,5-Trimethylbenzene	ND		1.00	0.170	ug/L			09/13/16 02:10	1
Vinyl chloride	ND		1.00	0.180	ug/L			09/13/16 02:10	1
Xylenes, Total	ND		3.00	0.580	ug/L			09/13/16 02:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*09/13/16 02:10*	*1*
Dibromofluoromethane (Surr)	*95*		*70 - 130*		*09/13/16 02:10*	*1*
1,2-Dichloroethane-d4 (Surr)	*88*		*70 - 130*		*09/13/16 02:10*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*09/13/16 02:10*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-369547/3
Matrix: Water
Analysis Batch: 369547

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	90.44		ug/L		90	39 - 150
Benzene	20.0	22.99		ug/L		115	70 - 130
Bromobenzene	20.0	21.18		ug/L		106	70 - 130
Bromochloromethane	20.0	21.16		ug/L		106	70 - 130
Bromodichloromethane	20.0	21.42		ug/L		107	70 - 130
Bromoform	20.0	19.28		ug/L		96	70 - 137
Bromomethane	20.0	19.24		ug/L		96	53 - 150
2-Butanone (MEK)	100	90.14		ug/L		90	55 - 143
Carbon disulfide	20.0	23.45		ug/L		117	64 - 135
Carbon tetrachloride	20.0	21.70		ug/L		108	70 - 147
Chlorobenzene	20.0	23.10		ug/L		116	70 - 130
Chlorodibromomethane	20.0	20.96		ug/L		105	70 - 133
Chloroethane	20.0	25.05		ug/L		125	60 - 138
Chloroform	20.0	22.78		ug/L		114	70 - 130
Chloromethane	20.0	25.05		ug/L		125	33 - 150
2-Chlorotoluene	20.0	21.55		ug/L		108	70 - 130
4-Chlorotoluene	20.0	21.24		ug/L		106	70 - 130
cis-1,2-Dichloroethene	20.0	22.83		ug/L		114	70 - 130
cis-1,3-Dichloropropene	20.0	22.49		ug/L		112	70 - 133
1,2-Dibromo-3-Chloropropane	20.0	17.91		ug/L		90	45 - 138
1,2-Dibromoethane (EDB)	20.0	20.54		ug/L		103	70 - 130
Dibromomethane	20.0	21.06		ug/L		105	70 - 130
1,2-Dichlorobenzene	20.0	22.71		ug/L		114	70 - 130
1,3-Dichlorobenzene	20.0	21.88		ug/L		109	70 - 130
1,4-Dichlorobenzene	20.0	21.39		ug/L		107	70 - 130
Dichlorodifluoromethane	20.0	26.70		ug/L		134	48 - 150
1,1-Dichloroethane	20.0	22.76		ug/L		114	70 - 130
1,2-Dichloroethane	20.0	21.09		ug/L		105	70 - 130
1,1-Dichloroethene	20.0	22.95		ug/L		115	70 - 132
1,2-Dichloropropane	20.0	22.30		ug/L		111	70 - 130
1,3-Dichloropropane	20.0	20.82		ug/L		104	70 - 130
2,2-Dichloropropane	20.0	21.97		ug/L		110	60 - 143
1,1-Dichloropropene	20.0	22.92		ug/L		115	70 - 130
Diisopropyl ether	20.0	22.28		ug/L		111	66 - 142
Ethylbenzene	20.0	23.57		ug/L		118	70 - 130
Ethyl tert-butyl ether	20.0	20.66		ug/L		103	63 - 135
Hexachlorobutadiene	20.0	24.75		ug/L		124	70 - 138
2-Hexanone	100	91.27		ug/L		91	54 - 142
Isopropylbenzene	20.0	23.92		ug/L		120	70 - 131
Methylene Chloride	20.0	23.34		ug/L		117	70 - 130
4-Methyl-2-pentanone (MIBK)	100	91.82		ug/L		92	60 - 137
Methyl tert-butyl ether	20.0	20.00		ug/L		100	70 - 130
Naphthalene	20.0	20.28		ug/L		101	54 - 150
n-Butylbenzene	20.0	23.42		ug/L		117	68 - 137
N-Propylbenzene	20.0	23.28		ug/L		116	70 - 134
p-Isopropyltoluene	20.0	21.93		ug/L		110	66 - 130
sec-Butylbenzene	20.0	22.08		ug/L		110	70 - 135
Styrene	20.0	23.12		ug/L		116	70 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-369547/3
Matrix: Water
Analysis Batch: 369547

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
t-Amyl alcohol	200	182.9		ug/L		91	19 - 150
Tert-amyl methyl ether	20.0	20.14		ug/L		101	63 - 135
tert-Butyl alcohol (TBA)	200	178.9		ug/L		89	12 - 150
tert-Butylbenzene	20.0	22.45		ug/L		112	70 - 130
1,1,1,2-Tetrachloroethane	20.0	20.87		ug/L		104	70 - 130
1,1,2,2-Tetrachloroethane	20.0	18.66		ug/L		93	69 - 131
Tetrachloroethene	20.0	24.58		ug/L		123	70 - 130
Toluene	20.0	23.74		ug/L		119	70 - 130
trans-1,2-Dichloroethene	20.0	22.77		ug/L		114	70 - 130
trans-1,3-Dichloropropene	20.0	21.15		ug/L		106	63 - 142
1,2,3-Trichlorobenzene	20.0	21.97		ug/L		110	46 - 150
1,2,4-Trichlorobenzene	20.0	22.67		ug/L		113	58 - 147
1,1,1-Trichloroethane	20.0	23.04		ug/L		115	70 - 135
1,1,2-Trichloroethane	20.0	20.76		ug/L		104	70 - 130
Trichloroethene	20.0	23.49		ug/L		117	70 - 130
Trichlorofluoromethane	20.0	23.79		ug/L		119	59 - 150
1,2,3-Trichloropropane	20.0	19.33		ug/L		97	70 - 131
1,2,4-Trimethylbenzene	20.0	23.12		ug/L		116	70 - 130
1,3,5-Trimethylbenzene	20.0	21.49		ug/L		107	70 - 130
Vinyl chloride	20.0	24.60		ug/L		123	57 - 137
Xylenes, Total	40.0	47.11		ug/L		118	70 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
Dibromofluoromethane (Surr)	*98*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*88*		*70 - 130*
Toluene-d8 (Surr)	*103*		*70 - 130*

Lab Sample ID: LCSD 490-369547/4
Matrix: Water
Analysis Batch: 369547

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	100	90.14		ug/L		90	39 - 150	0	23
Benzene	20.0	23.63		ug/L		118	70 - 130	3	12
Bromobenzene	20.0	21.54		ug/L		108	70 - 130	2	16
Bromochloromethane	20.0	21.40		ug/L		107	70 - 130	1	16
Bromodichloromethane	20.0	22.02		ug/L		110	70 - 130	3	14
Bromoform	20.0	19.82		ug/L		99	70 - 137	3	14
Bromomethane	20.0	21.09		ug/L		105	53 - 150	9	19
2-Butanone (MEK)	100	87.92		ug/L		88	55 - 143	2	19
Carbon disulfide	20.0	24.26		ug/L		121	64 - 135	3	16
Carbon tetrachloride	20.0	22.44		ug/L		112	70 - 147	3	16
Chlorobenzene	20.0	23.83		ug/L		119	70 - 130	3	12
Chlorodibromomethane	20.0	21.61		ug/L		108	70 - 133	3	13
Chloroethane	20.0	25.24		ug/L		126	60 - 138	1	15
Chloroform	20.0	23.45		ug/L		117	70 - 130	3	14
Chloromethane	20.0	23.47		ug/L		117	33 - 150	7	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-369547/4
Matrix: Water
Analysis Batch: 369547

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Chlorotoluene	20.0	22.24		ug/L		111	70 - 130	3	15
4-Chlorotoluene	20.0	21.72		ug/L		109	70 - 130	2	15
cis-1,2-Dichloroethene	20.0	23.36		ug/L		117	70 - 130	2	15
cis-1,3-Dichloropropene	20.0	22.92		ug/L		115	70 - 133	2	15
1,2-Dibromo-3-Chloropropane	20.0	18.29		ug/L		91	45 - 138	2	19
1,2-Dibromoethane (EDB)	20.0	21.02		ug/L		105	70 - 130	2	13
Dibromomethane	20.0	20.60		ug/L		103	70 - 130	2	14
1,2-Dichlorobenzene	20.0	22.82		ug/L		114	70 - 130	0	12
1,3-Dichlorobenzene	20.0	22.32		ug/L		112	70 - 130	2	13
1,4-Dichlorobenzene	20.0	21.71		ug/L		109	70 - 130	2	12
Dichlorodifluoromethane	20.0	26.09		ug/L		130	48 - 150	2	16
1,1-Dichloroethane	20.0	22.93		ug/L		115	70 - 130	1	17
1,2-Dichloroethane	20.0	21.31		ug/L		107	70 - 130	1	13
1,1-Dichloroethene	20.0	23.72		ug/L		119	70 - 132	3	20
1,2-Dichloropropane	20.0	23.09		ug/L		115	70 - 130	3	15
1,3-Dichloropropane	20.0	21.23		ug/L		106	70 - 130	2	12
2,2-Dichloropropane	20.0	21.92		ug/L		110	60 - 143	0	20
1,1-Dichloropropene	20.0	23.42		ug/L		117	70 - 130	2	16
Diisopropyl ether	20.0	22.53		ug/L		113	66 - 142	1	14
Ethylbenzene	20.0	24.20		ug/L		121	70 - 130	3	12
Ethyl tert-butyl ether	20.0	21.10		ug/L		105	63 - 135	2	15
Hexachlorobutadiene	20.0	25.03		ug/L		125	70 - 138	1	16
2-Hexanone	100	92.66		ug/L		93	54 - 142	2	17
Isopropylbenzene	20.0	24.54		ug/L		123	70 - 131	3	13
Methylene Chloride	20.0	23.62		ug/L		118	70 - 130	1	15
4-Methyl-2-pentanone (MIBK)	100	92.97		ug/L		93	60 - 137	1	21
Methyl tert-butyl ether	20.0	20.10		ug/L		100	70 - 130	1	16
Naphthalene	20.0	20.16		ug/L		101	54 - 150	1	15
n-Butylbenzene	20.0	23.96		ug/L		120	68 - 137	2	14
N-Propylbenzene	20.0	23.43		ug/L		117	70 - 134	1	14
p-Isopropyltoluene	20.0	22.70		ug/L		114	66 - 130	3	13
sec-Butylbenzene	20.0	22.59		ug/L		113	70 - 135	2	14
Styrene	20.0	23.72		ug/L		119	70 - 130	3	12
t-Amyl alcohol	200	179.8		ug/L		90	19 - 150	2	50
Tert-amyl methyl ether	20.0	19.19		ug/L		96	63 - 135	5	15
tert-Butyl alcohol (TBA)	200	177.3		ug/L		89	12 - 150	1	46
tert-Butylbenzene	20.0	23.92		ug/L		120	70 - 130	6	14
1,1,1,2-Tetrachloroethane	20.0	21.85		ug/L		109	70 - 130	5	13
1,1,2,2-Tetrachloroethane	20.0	18.88		ug/L		94	69 - 131	1	15
Tetrachloroethene	20.0	25.35		ug/L		127	70 - 130	3	17
Toluene	20.0	24.58		ug/L		123	70 - 130	4	13
trans-1,2-Dichloroethene	20.0	23.74		ug/L		119	70 - 130	4	15
trans-1,3-Dichloropropene	20.0	21.70		ug/L		108	63 - 142	3	13
1,2,3-Trichlorobenzene	20.0	22.41		ug/L		112	46 - 150	2	16
1,2,4-Trichlorobenzene	20.0	22.46		ug/L		112	58 - 147	1	15
1,1,1-Trichloroethane	20.0	23.50		ug/L		117	70 - 135	2	15
1,1,2-Trichloroethane	20.0	21.13		ug/L		106	70 - 130	2	13
Trichloroethene	20.0	24.35		ug/L		122	70 - 130	4	14

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-369547/4
Matrix: Water
Analysis Batch: 369547

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Trichlorofluoromethane			20.0	24.38		ug/L		122	59 - 150	2	22
1,2,3-Trichloropropane			20.0	18.85		ug/L		94	70 - 131	3	14
1,2,4-Trimethylbenzene			20.0	23.66		ug/L		118	70 - 130	2	13
1,3,5-Trimethylbenzene			20.0	22.06		ug/L		110	70 - 130	3	14
Vinyl chloride			20.0	24.99		ug/L		125	57 - 137	2	15
Xylenes, Total			40.0	49.31		ug/L		123	70 - 132	5	11

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
Dibromofluoromethane (Surr)	*96*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*87*		*70 - 130*
Toluene-d8 (Surr)	*104*		*70 - 130*

Lab Sample ID: 490-111143-49 MS
Matrix: Water
Analysis Batch: 369547

Client Sample ID: MW-N
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Acetone	ND		100	88.38		ug/L		88	39 - 150		
Benzene	ND		20.0	21.88		ug/L		109	55 - 147		
Bromobenzene	ND		20.0	20.65		ug/L		103	60 - 133		
Bromochloromethane	ND		20.0	20.11		ug/L		101	59 - 132		
Bromodichloromethane	ND		20.0	21.11		ug/L		106	70 - 140		
Bromoform	ND		20.0	18.71		ug/L		94	53 - 150		
Bromomethane	ND		20.0	15.36		ug/L		77	30 - 150		
2-Butanone (MEK)	ND		100	86.41		ug/L		86	50 - 143		
Carbon disulfide	ND		20.0	22.59		ug/L		113	35 - 150		
Carbon tetrachloride	ND		20.0	20.82		ug/L		104	56 - 150		
Chlorobenzene	ND		20.0	22.44		ug/L		112	70 - 130		
Chlorodibromomethane	ND		20.0	20.05		ug/L		100	66 - 140		
Chloroethane	ND		20.0	23.71		ug/L		119	58 - 141		
Chloroform	ND		20.0	21.66		ug/L		108	66 - 138		
Chloromethane	ND		20.0	23.40		ug/L		117	10 - 150		
2-Chlorotoluene	ND		20.0	20.28		ug/L		101	67 - 138		
4-Chlorotoluene	ND		20.0	20.84		ug/L		104	69 - 138		
cis-1,2-Dichloroethene	ND		20.0	21.94		ug/L		110	68 - 131		
cis-1,3-Dichloropropene	ND		20.0	21.46		ug/L		107	70 - 133		
1,2-Dibromo-3-Chloropropane	ND		20.0	16.48		ug/L		82	38 - 138		
1,2-Dibromoethane (EDB)	ND		20.0	19.78		ug/L		99	65 - 137		
Dibromomethane	ND		20.0	19.81		ug/L		99	70 - 130		
1,2-Dichlorobenzene	ND		20.0	21.23		ug/L		106	70 - 130		
1,3-Dichlorobenzene	ND		20.0	21.31		ug/L		107	68 - 131		
1,4-Dichlorobenzene	ND		20.0	20.68		ug/L		103	70 - 130		
Dichlorodifluoromethane	ND		20.0	25.87		ug/L		129	10 - 150		
1,1-Dichloroethane	ND		20.0	21.72		ug/L		109	61 - 139		
1,2-Dichloroethane	ND		20.0	19.95		ug/L		100	64 - 136		
1,1-Dichloroethene	ND		20.0	22.22		ug/L		111	54 - 150		
1,2-Dichloropropane	ND		20.0	20.97		ug/L		105	67 - 130		

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-111143-49 MS
Matrix: Water
Analysis Batch: 369547

Client Sample ID: MW-N
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3-Dichloropropane	ND		20.0	19.50		ug/L		98	70 - 130
2,2-Dichloropropane	ND		20.0	22.82		ug/L		114	50 - 146
1,1-Dichloropropene	ND		20.0	22.56		ug/L		113	54 - 150
Diisopropyl ether	ND		20.0	20.88		ug/L		104	56 - 142
Ethylbenzene	ND		20.0	22.65		ug/L		113	65 - 139
Ethyl tert-butyl ether	ND		20.0	19.39		ug/L		97	53 - 138
Hexachlorobutadiene	ND		20.0	25.36		ug/L		127	61 - 141
2-Hexanone	ND		100	85.56		ug/L		86	44 - 150
Isopropylbenzene	ND		20.0	22.72		ug/L		114	70 - 137
Methylene Chloride	ND		20.0	21.30		ug/L		107	64 - 130
4-Methyl-2-pentanone (MIBK)	ND		100	86.87		ug/L		87	50 - 140
Methyl tert-butyl ether	ND		20.0	18.79		ug/L		94	55 - 141
Naphthalene	ND		20.0	18.36		ug/L		92	32 - 150
n-Butylbenzene	ND		20.0	24.27		ug/L		121	61 - 141
N-Propylbenzene	ND		20.0	22.77		ug/L		114	53 - 150
p-Isopropyltoluene	ND		20.0	22.06		ug/L		110	66 - 137
sec-Butylbenzene	ND		20.0	22.10		ug/L		110	55 - 136
Styrene	ND		20.0	22.38		ug/L		112	70 - 130
t-Amyl alcohol	ND		200	157.4		ug/L		79	10 - 150
Tert-amyl methyl ether	ND		20.0	18.82		ug/L		94	47 - 148
tert-Butyl alcohol (TBA)	ND		200	169.0		ug/L		85	10 - 150
tert-Butylbenzene	ND		20.0	22.08		ug/L		110	70 - 138
1,1,1,2-Tetrachloroethane	ND		20.0	20.27		ug/L		101	70 - 131
1,1,2,2-Tetrachloroethane	ND		20.0	17.94		ug/L		90	56 - 145
Tetrachloroethene	ND		20.0	24.18		ug/L		121	57 - 138
Toluene	ND		20.0	22.68		ug/L		113	64 - 136
trans-1,2-Dichloroethene	ND		20.0	21.91		ug/L		110	59 - 143
trans-1,3-Dichloropropene	ND		20.0	20.65		ug/L		103	63 - 142
1,2,3-Trichlorobenzene	ND		20.0	19.97		ug/L		100	36 - 150
1,2,4-Trichlorobenzene	ND		20.0	20.95		ug/L		105	47 - 147
1,1,1-Trichloroethane	ND		20.0	21.95		ug/L		110	68 - 144
1,1,2-Trichloroethane	ND		20.0	19.53		ug/L		98	70 - 130
Trichloroethene	ND		20.0	22.33		ug/L		112	63 - 135
Trichlorofluoromethane	ND		20.0	23.64		ug/L		118	44 - 150
1,2,3-Trichloropropane	ND		20.0	18.48		ug/L		92	65 - 131
1,2,4-Trimethylbenzene	ND		20.0	22.51		ug/L		113	64 - 136
1,3,5-Trimethylbenzene	ND		20.0	20.81		ug/L		104	69 - 139
Vinyl chloride	ND		20.0	23.99		ug/L		120	57 - 150
Xylenes, Total	ND		40.0	45.01		ug/L		113	69 - 132

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
Dibromofluoromethane (Surr)	*98*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 130*
Toluene-d8 (Surr)	*103*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-111143-49 MSD
Matrix: Water
Analysis Batch: 369547

Client Sample ID: MW-N
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		100	100.9		ug/L		101	39 - 150	13	28
Benzene	ND		20.0	24.41		ug/L		122	55 - 147	11	22
Bromobenzene	ND		20.0	21.57		ug/L		108	60 - 133	4	18
Bromochloromethane	ND		20.0	22.35		ug/L		112	59 - 132	11	21
Bromodichloromethane	ND		20.0	23.22		ug/L		116	70 - 140	10	196
Bromoform	ND		20.0	19.90		ug/L		100	53 - 150	6	20
Bromomethane	ND		20.0	21.77		ug/L		109	30 - 150	35	44
2-Butanone (MEK)	ND		100	99.91		ug/L		100	50 - 143	14	28
Carbon disulfide	ND		20.0	24.54		ug/L		123	35 - 150	8	34
Carbon tetrachloride	ND		20.0	23.60		ug/L		118	56 - 150	13	18
Chlorobenzene	ND		20.0	23.78		ug/L		119	70 - 130	6	15
Chlorodibromomethane	ND		20.0	21.72		ug/L		109	66 - 140	8	19
Chloroethane	ND		20.0	26.78		ug/L		134	58 - 141	12	31
Chloroform	ND		20.0	24.50		ug/L		122	66 - 138	12	21
Chloromethane	ND		20.0	24.18		ug/L		121	10 - 150	3	43
2-Chlorotoluene	ND		20.0	22.11		ug/L		111	67 - 138	9	17
4-Chlorotoluene	ND		20.0	22.04		ug/L		110	69 - 138	6	15
cis-1,2-Dichloroethene	ND		20.0	24.38		ug/L		122	68 - 131	11	21
cis-1,3-Dichloropropene	ND		20.0	22.98		ug/L		115	70 - 133	7	19
1,2-Dibromo-3-Chloropropane	ND		20.0	19.10		ug/L		95	38 - 138	15	26
1,2-Dibromoethane (EDB)	ND		20.0	21.04		ug/L		105	65 - 137	6	21
Dibromomethane	ND		20.0	21.88		ug/L		109	70 - 130	10	19
1,2-Dichlorobenzene	ND		20.0	23.15		ug/L		116	70 - 130	9	15
1,3-Dichlorobenzene	ND		20.0	22.74		ug/L		114	68 - 131	6	14
1,4-Dichlorobenzene	ND		20.0	21.77		ug/L		109	70 - 130	5	14
Dichlorodifluoromethane	ND		20.0	28.13		ug/L		141	10 - 150	8	50
1,1-Dichloroethane	ND		20.0	24.04		ug/L		120	61 - 139	10	23
1,2-Dichloroethane	ND		20.0	22.39		ug/L		112	64 - 136	12	22
1,1-Dichloroethene	ND		20.0	25.04		ug/L		125	54 - 150	12	24
1,2-Dichloropropane	ND		20.0	23.57		ug/L		118	67 - 130	12	19
1,3-Dichloropropane	ND		20.0	21.44		ug/L		107	70 - 130	9	17
2,2-Dichloropropane	ND		20.0	25.93		ug/L		130	50 - 146	13	20
1,1-Dichloropropene	ND		20.0	25.13		ug/L		126	54 - 150	11	24
Diisopropyl ether	ND		20.0	23.42		ug/L		117	56 - 142	11	22
Ethylbenzene	ND		20.0	24.00		ug/L		120	65 - 139	6	18
Ethyl tert-butyl ether	ND		20.0	22.21		ug/L		111	53 - 138	14	22
Hexachlorobutadiene	ND		20.0	26.42		ug/L		132	61 - 141	4	26
2-Hexanone	ND		100	94.52		ug/L		95	44 - 150	10	21
Isopropylbenzene	ND		20.0	24.37		ug/L		122	70 - 137	7	17
Methylene Chloride	ND		20.0	23.63		ug/L		118	64 - 130	10	22
4-Methyl-2-pentanone (MIBK)	ND		100	96.12		ug/L		96	50 - 140	10	24
Methyl tert-butyl ether	ND		20.0	21.74		ug/L		109	55 - 141	15	24
Naphthalene	ND		20.0	21.37		ug/L		107	32 - 150	15	40
n-Butylbenzene	ND		20.0	24.99		ug/L		125	61 - 141	3	17
N-Propylbenzene	ND		20.0	24.20		ug/L		121	53 - 150	6	18
p-Isopropyltoluene	ND		20.0	23.09		ug/L		115	66 - 137	5	16
sec-Butylbenzene	ND		20.0	22.72		ug/L		114	55 - 136	3	50
Styrene	ND		20.0	24.00		ug/L		120	70 - 130	7	16

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-111143-49 MSD
Matrix: Water
Analysis Batch: 369547

Client Sample ID: MW-N
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
t-Amyl alcohol	ND		200	194.4		ug/L		97	10 - 150	21	50
Tert-amyl methyl ether	ND		20.0	21.45		ug/L		107	47 - 148	13	23
tert-Butyl alcohol (TBA)	ND		200	209.6		ug/L		105	10 - 150	21	47
tert-Butylbenzene	ND		20.0	23.29		ug/L		116	70 - 138	5	17
1,1,1,2-Tetrachloroethane	ND		20.0	21.78		ug/L		109	70 - 131	7	16
1,1,2,2-Tetrachloroethane	ND		20.0	20.23		ug/L		101	56 - 145	12	19
Tetrachloroethene	ND		20.0	26.07		ug/L		130	57 - 138	8	17
Toluene	ND		20.0	24.57		ug/L		123	64 - 136	8	18
trans-1,2-Dichloroethene	ND		20.0	24.40		ug/L		122	59 - 143	11	25
trans-1,3-Dichloropropene	ND		20.0	22.13		ug/L		111	63 - 142	7	18
1,2,3-Trichlorobenzene	ND		20.0	23.11		ug/L		116	36 - 150	15	43
1,2,4-Trichlorobenzene	ND		20.0	23.81		ug/L		119	47 - 147	13	24
1,1,1-Trichloroethane	ND		20.0	25.00		ug/L		125	68 - 144	13	17
1,1,2-Trichloroethane	ND		20.0	21.26		ug/L		106	70 - 130	8	18
Trichloroethene	ND		20.0	25.10		ug/L		126	63 - 135	12	17
Trichlorofluoromethane	ND		20.0	26.88		ug/L		134	44 - 150	13	32
1,2,3-Trichloropropane	ND		20.0	19.53		ug/L		98	65 - 131	6	19
1,2,4-Trimethylbenzene	ND		20.0	23.65		ug/L		118	64 - 136	5	18
1,3,5-Trimethylbenzene	ND		20.0	21.71		ug/L		109	69 - 139	4	17
Vinyl chloride	ND		20.0	27.05		ug/L		135	57 - 150	12	37
Xylenes, Total	ND		40.0	48.93		ug/L		122	69 - 132	8	17

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
Dibromofluoromethane (Surr)	*98*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*
Toluene-d8 (Surr)	*102*		*70 - 130*

Lab Sample ID: MB 490-369613/6
Matrix: Solid
Analysis Batch: 369613

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.0500	0.00840	mg/Kg			09/13/16 13:48	1
Benzene	ND		0.00200	0.000670	mg/Kg			09/13/16 13:48	1
Bromobenzene	ND		0.00200	0.000720	mg/Kg			09/13/16 13:48	1
Bromochloromethane	ND		0.00200	0.000550	mg/Kg			09/13/16 13:48	1
Bromodichloromethane	ND		0.00200	0.000550	mg/Kg			09/13/16 13:48	1
Bromoform	ND		0.00200	0.000550	mg/Kg			09/13/16 13:48	1
Bromomethane	ND		0.00200	0.00120	mg/Kg			09/13/16 13:48	1
2-Butanone (MEK)	ND		0.0500	0.00510	mg/Kg			09/13/16 13:48	1
Carbon disulfide	ND		0.00500	0.00360	mg/Kg			09/13/16 13:48	1
Carbon tetrachloride	ND		0.00200	0.000670	mg/Kg			09/13/16 13:48	1
Chlorobenzene	ND		0.00200	0.000670	mg/Kg			09/13/16 13:48	1
Chlorodibromomethane	ND		0.00200	0.000340	mg/Kg			09/13/16 13:48	1
Chloroethane	ND		0.00500	0.00190	mg/Kg			09/13/16 13:48	1
Chloroform	ND		0.00200	0.000670	mg/Kg			09/13/16 13:48	1
Chloromethane	ND		0.00200	0.000670	mg/Kg			09/13/16 13:48	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-369613/6
Matrix: Solid
Analysis Batch: 369613

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorotoluene	ND		0.00200	0.000890	mg/Kg			09/13/16 13:48	1
4-Chlorotoluene	ND		0.00200	0.000840	mg/Kg			09/13/16 13:48	1
cis-1,2-Dichloroethene	ND		0.00200	0.000670	mg/Kg			09/13/16 13:48	1
cis-1,3-Dichloropropene	ND		0.00200	0.000670	mg/Kg			09/13/16 13:48	1
1,2-Dibromo-3-Chloropropane	ND		0.00500	0.000700	mg/Kg			09/13/16 13:48	1
1,2-Dibromoethane (EDB)	ND		0.00200	0.00100	mg/Kg			09/13/16 13:48	1
Dibromomethane	ND		0.00200	0.000560	mg/Kg			09/13/16 13:48	1
1,2-Dichlorobenzene	ND		0.00200	0.000340	mg/Kg			09/13/16 13:48	1
1,3-Dichlorobenzene	ND		0.00200	0.000670	mg/Kg			09/13/16 13:48	1
1,4-Dichlorobenzene	ND		0.00200	0.000670	mg/Kg			09/13/16 13:48	1
Dichlorodifluoromethane	ND		0.00200	0.00100	mg/Kg			09/13/16 13:48	1
1,1-Dichloroethane	ND		0.00200	0.000670	mg/Kg			09/13/16 13:48	1
1,2-Dichloroethane	ND		0.00200	0.000670	mg/Kg			09/13/16 13:48	1
1,1-Dichloroethene	ND		0.00200	0.000570	mg/Kg			09/13/16 13:48	1
1,2-Dichloropropane	ND		0.00200	0.000940	mg/Kg			09/13/16 13:48	1
1,3-Dichloropropane	ND		0.00200	0.000940	mg/Kg			09/13/16 13:48	1
2,2-Dichloropropane	ND		0.00200	0.000670	mg/Kg			09/13/16 13:48	1
1,1-Dichloropropene	ND		0.00200	0.000510	mg/Kg			09/13/16 13:48	1
Diisopropyl ether	ND		0.00200	0.000670	mg/Kg			09/13/16 13:48	1
Ethylbenzene	ND		0.00200	0.000670	mg/Kg			09/13/16 13:48	1
Ethyl tert-butyl ether	ND		0.00500	0.00100	mg/Kg			09/13/16 13:48	1
Hexachlorobutadiene	ND		0.00500	0.00114	mg/Kg			09/13/16 13:48	1
2-Hexanone	ND		0.0500	0.0167	mg/Kg			09/13/16 13:48	1
Isopropylbenzene	ND		0.00200	0.000410	mg/Kg			09/13/16 13:48	1
Methylene Chloride	ND		0.0100	0.000860	mg/Kg			09/13/16 13:48	1
4-Methyl-2-pentanone (MIBK)	ND		0.0500	0.00190	mg/Kg			09/13/16 13:48	1
Methyl tert-butyl ether	ND		0.00200	0.000960	mg/Kg			09/13/16 13:48	1
Naphthalene	ND		0.00500	0.00170	mg/Kg			09/13/16 13:48	1
n-Butylbenzene	ND		0.00200	0.000980	mg/Kg			09/13/16 13:48	1
N-Propylbenzene	ND		0.00200	0.000670	mg/Kg			09/13/16 13:48	1
p-Isopropyltoluene	ND		0.00200	0.000670	mg/Kg			09/13/16 13:48	1
sec-Butylbenzene	ND		0.00200	0.000670	mg/Kg			09/13/16 13:48	1
Styrene	ND		0.00200	0.00110	mg/Kg			09/13/16 13:48	1
t-Amyl alcohol	ND		0.0200	0.00930	mg/Kg			09/13/16 13:48	1
Tert-amyl methyl ether	ND		0.00200	0.000310	mg/Kg			09/13/16 13:48	1
tert-Butyl alcohol (TBA)	ND		0.0500	0.0112	mg/Kg			09/13/16 13:48	1
tert-Butylbenzene	ND		0.00200	0.000900	mg/Kg			09/13/16 13:48	1
1,1,1,2-Tetrachloroethane	ND		0.00200	0.000670	mg/Kg			09/13/16 13:48	1
1,1,2,2-Tetrachloroethane	ND		0.00200	0.00100	mg/Kg			09/13/16 13:48	1
Tetrachloroethene	ND		0.00200	0.000730	mg/Kg			09/13/16 13:48	1
Toluene	ND		0.00200	0.000740	mg/Kg			09/13/16 13:48	1
trans-1,2-Dichloroethene	ND		0.00200	0.000670	mg/Kg			09/13/16 13:48	1
trans-1,3-Dichloropropene	ND		0.00200	0.000670	mg/Kg			09/13/16 13:48	1
1,2,3-Trichlorobenzene	ND		0.00200	0.000380	mg/Kg			09/13/16 13:48	1
1,2,4-Trichlorobenzene	ND		0.00200	0.000670	mg/Kg			09/13/16 13:48	1
1,1,1-Trichloroethane	ND		0.00200	0.000920	mg/Kg			09/13/16 13:48	1
1,1,2-Trichloroethane	ND		0.00500	0.00140	mg/Kg			09/13/16 13:48	1
Trichloroethene	ND		0.00200	0.000960	mg/Kg			09/13/16 13:48	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-369613/6
Matrix: Solid
Analysis Batch: 369613

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	ND		0.00200	0.00100	mg/Kg			09/13/16 13:48	1
1,2,3-Trichloropropane	ND		0.00200	0.000550	mg/Kg			09/13/16 13:48	1
1,2,4-Trimethylbenzene	ND		0.00200	0.00100	mg/Kg			09/13/16 13:48	1
1,3,5-Trimethylbenzene	ND		0.00200	0.000750	mg/Kg			09/13/16 13:48	1
Vinyl chloride	ND		0.00200	0.00110	mg/Kg			09/13/16 13:48	1
Xylenes, Total	ND		0.00600	0.00123	mg/Kg			09/13/16 13:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*		*09/13/16 13:48*	*1*
Dibromofluoromethane (Surr)	*114*		*70 - 130*		*09/13/16 13:48*	*1*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 130*		*09/13/16 13:48*	*1*
Toluene-d8 (Surr)	*110*		*70 - 130*		*09/13/16 13:48*	*1*

Lab Sample ID: LCS 490-369613/3
Matrix: Solid
Analysis Batch: 369613

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.250	0.2256		mg/Kg		90	45 - 145
Benzene	0.0500	0.05295		mg/Kg		106	70 - 130
Bromobenzene	0.0500	0.05029		mg/Kg		101	67 - 130
Bromochloromethane	0.0500	0.05925		mg/Kg		118	70 - 133
Bromodichloromethane	0.0500	0.05614		mg/Kg		112	70 - 130
Bromoform	0.0500	0.05419		mg/Kg		108	59 - 137
Bromomethane	0.0500	0.05447		mg/Kg		109	32 - 150
2-Butanone (MEK)	0.250	0.2306		mg/Kg		92	50 - 149
Carbon disulfide	0.0500	0.05459		mg/Kg		109	66 - 138
Carbon tetrachloride	0.0500	0.06484		mg/Kg		130	70 - 131
Chlorobenzene	0.0500	0.05597		mg/Kg		112	70 - 130
Chlorodibromomethane	0.0500	0.05566		mg/Kg		111	70 - 130
Chloroethane	0.0500	0.05395		mg/Kg		108	37 - 150
Chloroform	0.0500	0.05670		mg/Kg		113	70 - 130
Chloromethane	0.0500	0.04341		mg/Kg		87	53 - 150
2-Chlorotoluene	0.0500	0.05608		mg/Kg		112	70 - 132
4-Chlorotoluene	0.0500	0.05589		mg/Kg		112	67 - 135
cis-1,2-Dichloroethene	0.0500	0.05573		mg/Kg		111	70 - 132
cis-1,3-Dichloropropene	0.0500	0.05187		mg/Kg		104	70 - 130
1,2-Dibromo-3-Chloropropane	0.0500	0.04880		mg/Kg		98	47 - 144
1,2-Dibromoethane (EDB)	0.0500	0.05312		mg/Kg		106	69 - 130
Dibromomethane	0.0500	0.05632		mg/Kg		113	70 - 130
1,2-Dichlorobenzene	0.0500	0.05718		mg/Kg		114	70 - 134
1,3-Dichlorobenzene	0.0500	0.05624		mg/Kg		112	69 - 137
1,4-Dichlorobenzene	0.0500	0.06001		mg/Kg		120	66 - 134
Dichlorodifluoromethane	0.0500	0.05886		mg/Kg		118	32 - 150
1,1-Dichloroethane	0.0500	0.05090		mg/Kg		102	70 - 130
1,2-Dichloroethane	0.0500	0.05709		mg/Kg		114	65 - 134
1,1-Dichloroethene	0.0500	0.05622		mg/Kg		112	70 - 131
1,2-Dichloropropane	0.0500	0.05067		mg/Kg		101	70 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-369613/3
Matrix: Solid
Analysis Batch: 369613

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3-Dichloropropane	0.0500	0.05162		mg/Kg		103	70 - 130
2,2-Dichloropropane	0.0500	0.05673		mg/Kg		113	57 - 150
1,1-Dichloropropene	0.0500	0.05542		mg/Kg		111	70 - 130
Diisopropyl ether	0.0500	0.04967		mg/Kg		99	68 - 134
Ethylbenzene	0.0500	0.05512		mg/Kg		110	70 - 130
Ethyl tert-butyl ether	0.0500	0.04922		mg/Kg		98	19 - 150
Hexachlorobutadiene	0.0500	0.05245		mg/Kg		105	64 - 137
2-Hexanone	0.250	0.2153		mg/Kg		86	47 - 148
Isopropylbenzene	0.0500	0.05289		mg/Kg		106	70 - 130
Methylene Chloride	0.0500	0.05452		mg/Kg		109	69 - 130
4-Methyl-2-pentanone (MIBK)	0.250	0.2246		mg/Kg		90	48 - 150
Methyl tert-butyl ether	0.0500	0.05197		mg/Kg		104	54 - 145
Naphthalene	0.0500	0.04936		mg/Kg		99	55 - 149
n-Butylbenzene	0.0500	0.05568		mg/Kg		111	57 - 150
N-Propylbenzene	0.0500	0.05579		mg/Kg		112	62 - 150
p-Isopropyltoluene	0.0500	0.05731		mg/Kg		115	66 - 147
sec-Butylbenzene	0.0500	0.05713		mg/Kg		114	68 - 147
Styrene	0.0500	0.05058		mg/Kg		101	70 - 131
t-Amyl alcohol	0.500	0.3930		mg/Kg		79	10 - 150
Tert-amyl methyl ether	0.0500	0.04934		mg/Kg		99	10 - 150
tert-Butyl alcohol (TBA)	0.500	0.3974		mg/Kg		79	10 - 150
tert-Butylbenzene	0.0500	0.05619		mg/Kg		112	70 - 138
1,1,1,2-Tetrachloroethane	0.0500	0.05706		mg/Kg		114	70 - 130
1,1,2,2-Tetrachloroethane	0.0500	0.04928		mg/Kg		99	61 - 134
Tetrachloroethene	0.0500	0.05715		mg/Kg		114	70 - 130
Toluene	0.0500	0.05452		mg/Kg		109	70 - 130
trans-1,2-Dichloroethene	0.0500	0.05333		mg/Kg		107	70 - 130
trans-1,3-Dichloropropene	0.0500	0.05373		mg/Kg		107	67 - 130
1,2,3-Trichlorobenzene	0.0500	0.05360		mg/Kg		107	57 - 146
1,2,4-Trichlorobenzene	0.0500	0.05456		mg/Kg		109	47 - 150
1,1,1-Trichloroethane	0.0500	0.06142		mg/Kg		123	70 - 130
1,1,2-Trichloroethane	0.0500	0.05131		mg/Kg		103	70 - 130
Trichloroethene	0.0500	0.05988		mg/Kg		120	70 - 130
Trichlorofluoromethane	0.0500	0.06161		mg/Kg		123	53 - 150
1,2,3-Trichloropropane	0.0500	0.05281		mg/Kg		106	60 - 139
1,2,4-Trimethylbenzene	0.0500	0.05578		mg/Kg		112	70 - 140
1,3,5-Trimethylbenzene	0.0500	0.05672		mg/Kg		113	69 - 141
Vinyl chloride	0.0500	0.04981		mg/Kg		100	63 - 150
Xylenes, Total	0.100	0.1038		mg/Kg		104	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
Dibromofluoromethane (Surr)	*112*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*
Toluene-d8 (Surr)	*102*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-369613/4
Matrix: Solid
Analysis Batch: 369613

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	0.250	0.2573		mg/Kg		103	45 - 145	13	38
Benzene	0.0500	0.05424		mg/Kg		108	70 - 130	2	37
Bromobenzene	0.0500	0.05720		mg/Kg		114	67 - 130	13	40
Bromochloromethane	0.0500	0.05996		mg/Kg		120	70 - 133	1	15
Bromodichloromethane	0.0500	0.05819		mg/Kg		116	70 - 130	4	20
Bromoform	0.0500	0.05719		mg/Kg		114	59 - 137	5	17
Bromomethane	0.0500	0.05611		mg/Kg		112	32 - 150	3	45
2-Butanone (MEK)	0.250	0.2413		mg/Kg		97	50 - 149	5	39
Carbon disulfide	0.0500	0.05757		mg/Kg		115	66 - 138	5	41
Carbon tetrachloride	0.0500	0.06910	*	mg/Kg		138	70 - 131	6	41
Chlorobenzene	0.0500	0.05839		mg/Kg		117	70 - 130	4	40
Chlorodibromomethane	0.0500	0.05833		mg/Kg		117	70 - 130	5	14
Chloroethane	0.0500	0.05350		mg/Kg		107	37 - 150	1	50
Chloroform	0.0500	0.06056		mg/Kg		121	70 - 130	7	15
Chloromethane	0.0500	0.04524		mg/Kg		90	53 - 150	4	47
2-Chlorotoluene	0.0500	0.06225		mg/Kg		125	70 - 132	10	41
4-Chlorotoluene	0.0500	0.06054		mg/Kg		121	67 - 135	8	41
cis-1,2-Dichloroethene	0.0500	0.05778		mg/Kg		116	70 - 132	4	18
cis-1,3-Dichloropropene	0.0500	0.05561		mg/Kg		111	70 - 130	7	42
1,2-Dibromo-3-Chloropropane	0.0500	0.05366		mg/Kg		107	47 - 144	9	38
1,2-Dibromoethane (EDB)	0.0500	0.05513		mg/Kg		110	69 - 130	4	17
Dibromomethane	0.0500	0.05665		mg/Kg		113	70 - 130	1	19
1,2-Dichlorobenzene	0.0500	0.05748		mg/Kg		115	70 - 134	1	40
1,3-Dichlorobenzene	0.0500	0.05765		mg/Kg		115	69 - 137	2	41
1,4-Dichlorobenzene	0.0500	0.05886		mg/Kg		118	66 - 134	2	41
Dichlorodifluoromethane	0.0500	0.06204		mg/Kg		124	32 - 150	5	50
1,1-Dichloroethane	0.0500	0.05294		mg/Kg		106	70 - 130	4	42
1,2-Dichloroethane	0.0500	0.05930		mg/Kg		119	65 - 134	4	16
1,1-Dichloroethene	0.0500	0.05935		mg/Kg		119	70 - 131	5	43
1,2-Dichloropropane	0.0500	0.05347		mg/Kg		107	70 - 130	5	15
1,3-Dichloropropane	0.0500	0.05382		mg/Kg		108	70 - 130	4	15
2,2-Dichloropropane	0.0500	0.06068		mg/Kg		121	57 - 150	7	42
1,1-Dichloropropene	0.0500	0.05745		mg/Kg		115	70 - 130	4	41
Diisopropyl ether	0.0500	0.05242		mg/Kg		105	68 - 134	5	36
Ethylbenzene	0.0500	0.05788		mg/Kg		116	70 - 130	5	38
Ethyl tert-butyl ether	0.0500	0.05139		mg/Kg		103	19 - 150	4	37
Hexachlorobutadiene	0.0500	0.05413		mg/Kg		108	64 - 137	3	44
2-Hexanone	0.250	0.2267		mg/Kg		91	47 - 148	5	38
Isopropylbenzene	0.0500	0.05940		mg/Kg		119	70 - 130	12	39
Methylene Chloride	0.0500	0.05861		mg/Kg		117	69 - 130	7	19
4-Methyl-2-pentanone (MIBK)	0.250	0.2352		mg/Kg		94	48 - 150	5	41
Methyl tert-butyl ether	0.0500	0.05317		mg/Kg		106	54 - 145	2	36
Naphthalene	0.0500	0.05053		mg/Kg		101	55 - 149	2	37
n-Butylbenzene	0.0500	0.05649		mg/Kg		113	57 - 150	1	39
N-Propylbenzene	0.0500	0.06223		mg/Kg		124	62 - 150	11	38
p-Isopropyltoluene	0.0500	0.05994		mg/Kg		120	66 - 147	4	38
sec-Butylbenzene	0.0500	0.06021		mg/Kg		120	68 - 147	5	38
Styrene	0.0500	0.05629		mg/Kg		113	70 - 131	11	40

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-369613/4
Matrix: Solid
Analysis Batch: 369613

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
t-Amyl alcohol	0.500	0.4151		mg/Kg		83	10 - 150	5	50
Tert-amyl methyl ether	0.0500	0.05120		mg/Kg		102	10 - 150	4	50
tert-Butyl alcohol (TBA)	0.500	0.4372		mg/Kg		87	10 - 150	10	50
tert-Butylbenzene	0.0500	0.06313		mg/Kg		126	70 - 138	12	38
1,1,1,2-Tetrachloroethane	0.0500	0.05972		mg/Kg		119	70 - 130	5	41
1,1,2,2-Tetrachloroethane	0.0500	0.05328		mg/Kg		107	61 - 134	8	16
Tetrachloroethene	0.0500	0.06002		mg/Kg		120	70 - 130	5	41
Toluene	0.0500	0.05761		mg/Kg		115	70 - 130	6	40
trans-1,2-Dichloroethene	0.0500	0.05736		mg/Kg		115	70 - 130	7	41
trans-1,3-Dichloropropene	0.0500	0.05616		mg/Kg		112	67 - 130	4	41
1,2,3-Trichlorobenzene	0.0500	0.05395		mg/Kg		108	57 - 146	1	42
1,2,4-Trichlorobenzene	0.0500	0.05077		mg/Kg		102	47 - 150	7	43
1,1,1-Trichloroethane	0.0500	0.06507		mg/Kg		130	70 - 130	6	41
1,1,2-Trichloroethane	0.0500	0.05178		mg/Kg		104	70 - 130	1	17
Trichloroethene	0.0500	0.06276		mg/Kg		126	70 - 130	5	41
Trichlorofluoromethane	0.0500	0.06434		mg/Kg		129	53 - 150	4	49
1,2,3-Trichloropropane	0.0500	0.05986		mg/Kg		120	60 - 139	13	16
1,2,4-Trimethylbenzene	0.0500	0.06230		mg/Kg		125	70 - 140	11	38
1,3,5-Trimethylbenzene	0.0500	0.06283		mg/Kg		126	69 - 141	10	38
Vinyl chloride	0.0500	0.05147		mg/Kg		103	63 - 150	3	46
Xylenes, Total	0.100	0.1115		mg/Kg		111	70 - 130	7	38

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
Dibromofluoromethane (Surr)	*108*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

Lab Sample ID: MB 490-369700/7
Matrix: Water
Analysis Batch: 369700

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25.0	2.66	ug/L			09/13/16 14:17	1
Benzene	ND		1.00	0.200	ug/L			09/13/16 14:17	1
Bromobenzene	ND		1.00	0.210	ug/L			09/13/16 14:17	1
Bromochloromethane	ND		1.00	0.150	ug/L			09/13/16 14:17	1
Bromodichloromethane	ND		1.00	0.170	ug/L			09/13/16 14:17	1
Bromoform	ND		1.00	0.290	ug/L			09/13/16 14:17	1
Bromomethane	ND		1.00	0.350	ug/L			09/13/16 14:17	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			09/13/16 14:17	1
Carbon disulfide	ND		1.00	0.220	ug/L			09/13/16 14:17	1
Carbon tetrachloride	ND		1.00	0.180	ug/L			09/13/16 14:17	1
Chlorobenzene	ND		1.00	0.180	ug/L			09/13/16 14:17	1
Chlorodibromomethane	ND		1.00	0.250	ug/L			09/13/16 14:17	1
Chloroethane	ND		1.00	0.360	ug/L			09/13/16 14:17	1
Chloroform	ND		1.00	0.230	ug/L			09/13/16 14:17	1
Chloromethane	ND		1.00	0.360	ug/L			09/13/16 14:17	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-369700/7
Matrix: Water
Analysis Batch: 369700

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorotoluene	ND		1.00	0.180	ug/L			09/13/16 14:17	1
4-Chlorotoluene	ND		1.00	0.170	ug/L			09/13/16 14:17	1
cis-1,2-Dichloroethene	ND		1.00	0.210	ug/L			09/13/16 14:17	1
cis-1,3-Dichloropropene	ND		1.00	0.170	ug/L			09/13/16 14:17	1
1,2-Dibromo-3-Chloropropane	ND		10.0	0.940	ug/L			09/13/16 14:17	1
1,2-Dibromoethane (EDB)	ND		1.00	0.210	ug/L			09/13/16 14:17	1
Dibromomethane	ND		1.00	0.450	ug/L			09/13/16 14:17	1
1,2-Dichlorobenzene	ND		1.00	0.190	ug/L			09/13/16 14:17	1
1,3-Dichlorobenzene	ND		1.00	0.180	ug/L			09/13/16 14:17	1
1,4-Dichlorobenzene	ND		1.00	0.170	ug/L			09/13/16 14:17	1
Dichlorodifluoromethane	ND		1.00	0.170	ug/L			09/13/16 14:17	1
1,1-Dichloroethane	ND		1.00	0.240	ug/L			09/13/16 14:17	1
1,2-Dichloroethane	ND		1.00	0.200	ug/L			09/13/16 14:17	1
1,1-Dichloroethene	ND		1.00	0.250	ug/L			09/13/16 14:17	1
1,2-Dichloropropane	ND		1.00	0.250	ug/L			09/13/16 14:17	1
1,3-Dichloropropane	ND		1.00	0.190	ug/L			09/13/16 14:17	1
2,2-Dichloropropane	ND		1.00	0.160	ug/L			09/13/16 14:17	1
1,1-Dichloropropene	ND		1.00	0.200	ug/L			09/13/16 14:17	1
Diisopropyl ether	ND		2.00	0.170	ug/L			09/13/16 14:17	1
Ethylbenzene	ND		1.00	0.190	ug/L			09/13/16 14:17	1
Ethyl tert-butyl ether	ND		1.00	0.210	ug/L			09/13/16 14:17	1
Hexachlorobutadiene	ND		2.00	0.380	ug/L			09/13/16 14:17	1
2-Hexanone	ND		10.0	1.28	ug/L			09/13/16 14:17	1
Isopropylbenzene	ND		1.00	0.330	ug/L			09/13/16 14:17	1
Methylene Chloride	ND		5.00	1.00	ug/L			09/13/16 14:17	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.810	ug/L			09/13/16 14:17	1
Methyl tert-butyl ether	ND		1.00	0.170	ug/L			09/13/16 14:17	1
Naphthalene	ND		5.00	0.210	ug/L			09/13/16 14:17	1
n-Butylbenzene	ND		1.00	0.240	ug/L			09/13/16 14:17	1
N-Propylbenzene	ND		1.00	0.170	ug/L			09/13/16 14:17	1
p-Isopropyltoluene	ND		1.00	0.170	ug/L			09/13/16 14:17	1
sec-Butylbenzene	ND		1.00	0.170	ug/L			09/13/16 14:17	1
Styrene	ND		1.00	0.280	ug/L			09/13/16 14:17	1
t-Amyl alcohol	ND		20.0	6.76	ug/L			09/13/16 14:17	1
Tert-amyl methyl ether	ND		1.00	0.170	ug/L			09/13/16 14:17	1
tert-Butyl alcohol (TBA)	ND		10.0	3.90	ug/L			09/13/16 14:17	1
tert-Butylbenzene	ND		1.00	0.170	ug/L			09/13/16 14:17	1
1,1,1,2-Tetrachloroethane	ND		1.00	0.150	ug/L			09/13/16 14:17	1
1,1,2,2-Tetrachloroethane	ND		1.00	0.190	ug/L			09/13/16 14:17	1
Tetrachloroethene	ND		1.00	0.140	ug/L			09/13/16 14:17	1
Toluene	ND		1.00	0.170	ug/L			09/13/16 14:17	1
trans-1,2-Dichloroethene	ND		1.00	0.230	ug/L			09/13/16 14:17	1
trans-1,3-Dichloropropene	ND		1.00	0.170	ug/L			09/13/16 14:17	1
1,2,3-Trichlorobenzene	ND		1.00	0.230	ug/L			09/13/16 14:17	1
1,2,4-Trichlorobenzene	ND		1.00	0.200	ug/L			09/13/16 14:17	1
1,1,1-Trichloroethane	ND		1.00	0.190	ug/L			09/13/16 14:17	1
1,1,2-Trichloroethane	ND		1.00	0.190	ug/L			09/13/16 14:17	1
Trichloroethene	ND		1.00	0.200	ug/L			09/13/16 14:17	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-369700/7
Matrix: Water
Analysis Batch: 369700

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	ND		1.00	0.210	ug/L			09/13/16 14:17	1
1,2,3-Trichloropropane	ND		1.00	0.230	ug/L			09/13/16 14:17	1
1,2,4-Trimethylbenzene	ND		1.00	0.170	ug/L			09/13/16 14:17	1
1,3,5-Trimethylbenzene	ND		1.00	0.170	ug/L			09/13/16 14:17	1
Vinyl chloride	ND		1.00	0.180	ug/L			09/13/16 14:17	1
Xylenes, Total	ND		3.00	0.580	ug/L			09/13/16 14:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*09/13/16 14:17*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*09/13/16 14:17*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*		*09/13/16 14:17*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*09/13/16 14:17*	*1*

Lab Sample ID: LCS 490-369700/3
Matrix: Water
Analysis Batch: 369700

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	115.9		ug/L		116	39 - 150
Benzene	20.0	22.24		ug/L		111	70 - 130
Bromobenzene	20.0	21.29		ug/L		106	70 - 130
Bromochloromethane	20.0	21.76		ug/L		109	70 - 130
Bromodichloromethane	20.0	21.44		ug/L		107	70 - 130
Bromoform	20.0	20.19		ug/L		101	70 - 137
Bromomethane	20.0	20.60		ug/L		103	53 - 150
2-Butanone (MEK)	100	105.0		ug/L		105	55 - 143
Carbon disulfide	20.0	21.98		ug/L		110	64 - 135
Carbon tetrachloride	20.0	20.96		ug/L		105	70 - 147
Chlorobenzene	20.0	21.99		ug/L		110	70 - 130
Chlorodibromomethane	20.0	21.21		ug/L		106	70 - 133
Chloroethane	20.0	25.19		ug/L		126	60 - 138
Chloroform	20.0	22.06		ug/L		110	70 - 130
Chloromethane	20.0	24.38		ug/L		122	33 - 150
2-Chlorotoluene	20.0	20.22		ug/L		101	70 - 130
4-Chlorotoluene	20.0	19.95		ug/L		100	70 - 130
cis-1,2-Dichloroethene	20.0	21.86		ug/L		109	70 - 130
cis-1,3-Dichloropropene	20.0	22.88		ug/L		114	70 - 133
1,2-Dibromo-3-Chloropropane	20.0	21.24		ug/L		106	45 - 138
1,2-Dibromoethane (EDB)	20.0	21.07		ug/L		105	70 - 130
Dibromomethane	20.0	21.99		ug/L		110	70 - 130
1,2-Dichlorobenzene	20.0	22.58		ug/L		113	70 - 130
1,3-Dichlorobenzene	20.0	21.49		ug/L		107	70 - 130
1,4-Dichlorobenzene	20.0	21.13		ug/L		106	70 - 130
Dichlorodifluoromethane	20.0	25.25		ug/L		126	48 - 150
1,1-Dichloroethane	20.0	22.13		ug/L		111	70 - 130
1,2-Dichloroethane	20.0	22.71		ug/L		114	70 - 130
1,1-Dichloroethene	20.0	21.28		ug/L		106	70 - 132
1,2-Dichloropropane	20.0	22.62		ug/L		113	70 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-369700/3
Matrix: Water
Analysis Batch: 369700

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3-Dichloropropane	20.0	21.97		ug/L		110	70 - 130
2,2-Dichloropropane	20.0	23.08		ug/L		115	60 - 143
1,1-Dichloropropene	20.0	22.63		ug/L		113	70 - 130
Diisopropyl ether	20.0	22.97		ug/L		115	66 - 142
Ethylbenzene	20.0	22.17		ug/L		111	70 - 130
Ethyl tert-butyl ether	20.0	22.00		ug/L		110	63 - 135
Hexachlorobutadiene	20.0	25.38		ug/L		127	70 - 138
2-Hexanone	100	107.1		ug/L		107	54 - 142
Isopropylbenzene	20.0	22.15		ug/L		111	70 - 131
Methylene Chloride	20.0	22.98		ug/L		115	70 - 130
4-Methyl-2-pentanone (MIBK)	100	109.6		ug/L		110	60 - 137
Methyl tert-butyl ether	20.0	21.47		ug/L		107	70 - 130
Naphthalene	20.0	23.04		ug/L		115	54 - 150
n-Butylbenzene	20.0	23.10		ug/L		115	68 - 137
N-Propylbenzene	20.0	22.47		ug/L		112	70 - 134
p-Isopropyltoluene	20.0	21.42		ug/L		107	66 - 130
sec-Butylbenzene	20.0	21.18		ug/L		106	70 - 135
Styrene	20.0	21.66		ug/L		108	70 - 130
t-Amyl alcohol	200	252.7		ug/L		126	19 - 150
Tert-amyl methyl ether	20.0	21.97		ug/L		110	63 - 135
tert-Butyl alcohol (TBA)	200	228.9		ug/L		114	12 - 150
tert-Butylbenzene	20.0	21.61		ug/L		108	70 - 130
1,1,1,2-Tetrachloroethane	20.0	20.52		ug/L		103	70 - 130
1,1,2,2-Tetrachloroethane	20.0	21.48		ug/L		107	69 - 131
Tetrachloroethene	20.0	22.67		ug/L		113	70 - 130
Toluene	20.0	22.46		ug/L		112	70 - 130
trans-1,2-Dichloroethene	20.0	22.39		ug/L		112	70 - 130
trans-1,3-Dichloropropene	20.0	21.92		ug/L		110	63 - 142
1,2,3-Trichlorobenzene	20.0	24.64		ug/L		123	46 - 150
1,2,4-Trichlorobenzene	20.0	24.06		ug/L		120	58 - 147
1,1,1-Trichloroethane	20.0	21.89		ug/L		109	70 - 135
1,1,2-Trichloroethane	20.0	21.41		ug/L		107	70 - 130
Trichloroethene	20.0	22.49		ug/L		112	70 - 130
Trichlorofluoromethane	20.0	22.99		ug/L		115	59 - 150
1,2,3-Trichloropropane	20.0	21.56		ug/L		108	70 - 131
1,2,4-Trimethylbenzene	20.0	22.33		ug/L		112	70 - 130
1,3,5-Trimethylbenzene	20.0	20.14		ug/L		101	70 - 130
Vinyl chloride	20.0	24.75		ug/L		124	57 - 137
Xylenes, Total	40.0	44.65		ug/L		112	70 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
Dibromofluoromethane (Surr)	*98*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-369700/4
Matrix: Water
Analysis Batch: 369700

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	100	112.0		ug/L		112	39 - 150	3	23
Benzene	20.0	22.89		ug/L		114	70 - 130	3	12
Bromobenzene	20.0	21.67		ug/L		108	70 - 130	2	16
Bromochloromethane	20.0	21.59		ug/L		108	70 - 130	1	16
Bromodichloromethane	20.0	21.34		ug/L		107	70 - 130	0	14
Bromoform	20.0	20.43		ug/L		102	70 - 137	1	14
Bromomethane	20.0	20.13		ug/L		101	53 - 150	2	19
2-Butanone (MEK)	100	104.4		ug/L		104	55 - 143	1	19
Carbon disulfide	20.0	22.03		ug/L		110	64 - 135	0	16
Carbon tetrachloride	20.0	21.23		ug/L		106	70 - 147	1	16
Chlorobenzene	20.0	23.07		ug/L		115	70 - 130	5	12
Chlorodibromomethane	20.0	21.59		ug/L		108	70 - 133	2	13
Chloroethane	20.0	24.87		ug/L		124	60 - 138	1	15
Chloroform	20.0	22.18		ug/L		111	70 - 130	1	14
Chloromethane	20.0	22.26		ug/L		111	33 - 150	9	20
2-Chlorotoluene	20.0	21.26		ug/L		106	70 - 130	5	15
4-Chlorotoluene	20.0	21.52		ug/L		108	70 - 130	8	15
cis-1,2-Dichloroethene	20.0	22.26		ug/L		111	70 - 130	2	15
cis-1,3-Dichloropropene	20.0	22.75		ug/L		114	70 - 133	1	15
1,2-Dibromo-3-Chloropropane	20.0	22.01		ug/L		110	45 - 138	4	19
1,2-Dibromoethane (EDB)	20.0	21.52		ug/L		108	70 - 130	2	13
Dibromomethane	20.0	21.27		ug/L		106	70 - 130	3	14
1,2-Dichlorobenzene	20.0	22.66		ug/L		113	70 - 130	0	12
1,3-Dichlorobenzene	20.0	21.74		ug/L		109	70 - 130	1	13
1,4-Dichlorobenzene	20.0	21.23		ug/L		106	70 - 130	0	12
Dichlorodifluoromethane	20.0	24.80		ug/L		124	48 - 150	2	16
1,1-Dichloroethane	20.0	22.33		ug/L		112	70 - 130	1	17
1,2-Dichloroethane	20.0	23.01		ug/L		115	70 - 130	1	13
1,1-Dichloroethene	20.0	21.53		ug/L		108	70 - 132	1	20
1,2-Dichloropropane	20.0	22.22		ug/L		111	70 - 130	2	15
1,3-Dichloropropane	20.0	22.17		ug/L		111	70 - 130	1	12
2,2-Dichloropropane	20.0	22.72		ug/L		114	60 - 143	2	20
1,1-Dichloropropene	20.0	22.93		ug/L		115	70 - 130	1	16
Diisopropyl ether	20.0	23.43		ug/L		117	66 - 142	2	14
Ethylbenzene	20.0	22.64		ug/L		113	70 - 130	2	12
Ethyl tert-butyl ether	20.0	22.16		ug/L		111	63 - 135	1	15
Hexachlorobutadiene	20.0	25.65		ug/L		128	70 - 138	1	16
2-Hexanone	100	109.3		ug/L		109	54 - 142	2	17
Isopropylbenzene	20.0	22.73		ug/L		114	70 - 131	3	13
Methylene Chloride	20.0	22.92		ug/L		115	70 - 130	0	15
4-Methyl-2-pentanone (MIBK)	100	107.9		ug/L		108	60 - 137	2	21
Methyl tert-butyl ether	20.0	22.02		ug/L		110	70 - 130	3	16
Naphthalene	20.0	22.41		ug/L		112	54 - 150	3	15
n-Butylbenzene	20.0	23.68		ug/L		118	68 - 137	2	14
N-Propylbenzene	20.0	22.83		ug/L		114	70 - 134	2	14
p-Isopropyltoluene	20.0	21.86		ug/L		109	66 - 130	2	13
sec-Butylbenzene	20.0	21.45		ug/L		107	70 - 135	1	14
Styrene	20.0	22.58		ug/L		113	70 - 130	4	12

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-369700/4
Matrix: Water
Analysis Batch: 369700

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
t-Amyl alcohol	200	242.6		ug/L		121	19 - 150	4	50
Tert-amyl methyl ether	20.0	22.09		ug/L		110	63 - 135	1	15
tert-Butyl alcohol (TBA)	200	224.5		ug/L		112	12 - 150	2	46
tert-Butylbenzene	20.0	22.04		ug/L		110	70 - 130	2	14
1,1,1,2-Tetrachloroethane	20.0	21.02		ug/L		105	70 - 130	2	13
1,1,2,2-Tetrachloroethane	20.0	20.73		ug/L		104	69 - 131	4	15
Tetrachloroethene	20.0	23.30		ug/L		116	70 - 130	3	17
Toluene	20.0	22.66		ug/L		113	70 - 130	1	13
trans-1,2-Dichloroethene	20.0	22.85		ug/L		114	70 - 130	2	15
trans-1,3-Dichloropropene	20.0	22.62		ug/L		113	63 - 142	3	13
1,2,3-Trichlorobenzene	20.0	24.35		ug/L		122	46 - 150	1	16
1,2,4-Trichlorobenzene	20.0	24.52		ug/L		123	58 - 147	2	15
1,1,1-Trichloroethane	20.0	22.43		ug/L		112	70 - 135	2	15
1,1,2-Trichloroethane	20.0	21.46		ug/L		107	70 - 130	0	13
Trichloroethene	20.0	22.79		ug/L		114	70 - 130	1	14
Trichlorofluoromethane	20.0	23.14		ug/L		116	59 - 150	1	22
1,2,3-Trichloropropane	20.0	20.85		ug/L		104	70 - 131	3	14
1,2,4-Trimethylbenzene	20.0	22.71		ug/L		114	70 - 130	2	13
1,3,5-Trimethylbenzene	20.0	21.23		ug/L		106	70 - 130	5	14
Vinyl chloride	20.0	24.44		ug/L		122	57 - 137	1	15
Xylenes, Total	40.0	45.70		ug/L		114	70 - 132	2	11

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
Dibromofluoromethane (Surr)	*100*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*
Toluene-d8 (Surr)	*102*		*70 - 130*

Lab Sample ID: 490-111154-B-1 MS
Matrix: Water
Analysis Batch: 369700

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		100	113.1		ug/L		113	39 - 150
Benzene	11.1		20.0	35.89		ug/L		124	55 - 147
Bromobenzene	ND		20.0	23.82		ug/L		119	60 - 133
Bromochloromethane	ND		20.0	23.11		ug/L		116	59 - 132
Bromodichloromethane	ND		20.0	23.16		ug/L		116	70 - 140
Bromoform	ND		20.0	21.00		ug/L		105	53 - 150
Bromomethane	ND		20.0	18.32		ug/L		92	30 - 150
2-Butanone (MEK)	ND		100	103.4		ug/L		103	50 - 143
Carbon disulfide	ND		20.0	22.90		ug/L		114	35 - 150
Carbon tetrachloride	ND		20.0	24.17		ug/L		121	56 - 150
Chlorobenzene	ND		20.0	25.27		ug/L		126	70 - 130
Chlorodibromomethane	ND		20.0	22.63		ug/L		113	66 - 140
Chloroethane	ND	F1	20.0	28.42	F1	ug/L		142	58 - 141
Chloroform	ND		20.0	24.23		ug/L		121	66 - 138
Chloromethane	ND		20.0	24.60		ug/L		123	10 - 150

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-111154-B-1 MS
Matrix: Water
Analysis Batch: 369700

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chlorotoluene	ND		20.0	23.31		ug/L		117	67 - 138
4-Chlorotoluene	ND		20.0	22.70		ug/L		113	69 - 138
cis-1,2-Dichloroethene	ND		20.0	23.80		ug/L		119	68 - 131
cis-1,3-Dichloropropene	ND		20.0	24.23		ug/L		121	70 - 133
1,2-Dibromo-3-Chloropropane	ND		20.0	20.59		ug/L		103	38 - 138
1,2-Dibromoethane (EDB)	ND		20.0	22.40		ug/L		112	65 - 137
Dibromomethane	ND		20.0	22.65		ug/L		113	70 - 130
1,2-Dichlorobenzene	ND		20.0	24.83		ug/L		124	70 - 130
1,3-Dichlorobenzene	ND		20.0	23.73		ug/L		119	68 - 131
1,4-Dichlorobenzene	ND		20.0	23.10		ug/L		116	70 - 130
Dichlorodifluoromethane	ND		20.0	30.01		ug/L		150	10 - 150
1,1-Dichloroethane	ND		20.0	24.74		ug/L		124	61 - 139
1,2-Dichloroethane	ND		20.0	23.56		ug/L		118	64 - 136
1,1-Dichloroethene	ND		20.0	24.38		ug/L		122	54 - 150
1,2-Dichloropropane	ND		20.0	24.27		ug/L		121	67 - 130
1,3-Dichloropropane	ND		20.0	23.17		ug/L		116	70 - 130
2,2-Dichloropropane	ND		20.0	25.05		ug/L		125	50 - 146
1,1-Dichloropropene	ND		20.0	25.73		ug/L		129	54 - 150
Diisopropyl ether	ND		20.0	25.21		ug/L		126	56 - 142
Ethylbenzene	ND		20.0	25.43		ug/L		127	65 - 139
Ethyl tert-butyl ether	ND		20.0	23.51		ug/L		118	53 - 138
Hexachlorobutadiene	ND		20.0	23.21		ug/L		116	61 - 141
2-Hexanone	ND		100	107.8		ug/L		108	44 - 150
Isopropylbenzene	ND		20.0	25.35		ug/L		127	70 - 137
Methylene Chloride	ND		20.0	24.24		ug/L		121	64 - 130
4-Methyl-2-pentanone (MIBK)	ND		100	110.0		ug/L		110	50 - 140
Methyl tert-butyl ether	ND		20.0	22.59		ug/L		113	55 - 141
Naphthalene	ND		20.0	23.33		ug/L		117	32 - 150
n-Butylbenzene	ND		20.0	24.85		ug/L		124	61 - 141
N-Propylbenzene	ND		20.0	25.25		ug/L		126	53 - 150
p-Isopropyltoluene	ND		20.0	23.63		ug/L		118	66 - 137
sec-Butylbenzene	ND		20.0	23.52		ug/L		118	55 - 136
Styrene	ND		20.0	24.69		ug/L		123	70 - 130
t-Amyl alcohol	ND		200	229.5		ug/L		115	10 - 150
Tert-amyl methyl ether	ND		20.0	23.28		ug/L		116	47 - 148
tert-Butyl alcohol (TBA)	ND		200	223.3		ug/L		112	10 - 150
tert-Butylbenzene	ND		20.0	24.51		ug/L		123	70 - 138
1,1,1,2-Tetrachloroethane	ND		20.0	22.44		ug/L		112	70 - 131
1,1,2,2-Tetrachloroethane	ND		20.0	22.06		ug/L		110	56 - 145
Tetrachloroethene	ND		20.0	26.27		ug/L		131	57 - 138
Toluene	6.42		20.0	32.28		ug/L		129	64 - 136
trans-1,2-Dichloroethene	ND		20.0	24.59		ug/L		123	59 - 143
trans-1,3-Dichloropropene	ND		20.0	23.08		ug/L		115	63 - 142
1,2,3-Trichlorobenzene	ND		20.0	24.27		ug/L		121	36 - 150
1,2,4-Trichlorobenzene	ND		20.0	24.55		ug/L		123	47 - 147
1,1,1-Trichloroethane	ND		20.0	25.21		ug/L		126	68 - 144
1,1,2-Trichloroethane	ND		20.0	22.39		ug/L		112	70 - 130
Trichloroethene	ND		20.0	24.89		ug/L		124	63 - 135

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-111154-B-1 MS
Matrix: Water
Analysis Batch: 369700

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Trichlorofluoromethane	ND		20.0	26.91		ug/L		135	44 - 150
1,2,3-Trichloropropane	ND		20.0	22.34		ug/L		112	65 - 131
1,2,4-Trimethylbenzene	ND		20.0	24.70		ug/L		124	64 - 136
1,3,5-Trimethylbenzene	ND		20.0	23.31		ug/L		117	69 - 139
Vinyl chloride	ND		20.0	27.36		ug/L		137	57 - 150
Xylenes, Total	ND		40.0	52.96		ug/L		127	69 - 132

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
Dibromofluoromethane (Surr)	*98*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*
Toluene-d8 (Surr)	*103*		*70 - 130*

Lab Sample ID: 490-111154-C-1 MSD
Matrix: Water
Analysis Batch: 369700

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		100	111.6		ug/L		112	39 - 150	1	28
Benzene	11.1		20.0	35.73		ug/L		123	55 - 147	0	22
Bromobenzene	ND		20.0	22.98		ug/L		115	60 - 133	4	18
Bromochloromethane	ND		20.0	22.66		ug/L		113	59 - 132	2	21
Bromodichloromethane	ND		20.0	23.26		ug/L		116	70 - 140	0	196
Bromoform	ND		20.0	20.98		ug/L		105	53 - 150	0	20
Bromomethane	ND		20.0	22.16		ug/L		111	30 - 150	19	44
2-Butanone (MEK)	ND		100	102.5		ug/L		103	50 - 143	1	28
Carbon disulfide	ND		20.0	23.20		ug/L		116	35 - 150	1	34
Carbon tetrachloride	ND		20.0	23.77		ug/L		119	56 - 150	2	18
Chlorobenzene	ND		20.0	24.21		ug/L		121	70 - 130	4	15
Chlorodibromomethane	ND		20.0	21.99		ug/L		110	66 - 140	3	19
Chloroethane	ND	F1	20.0	27.63		ug/L		138	58 - 141	3	31
Chloroform	ND		20.0	23.92		ug/L		120	66 - 138	1	21
Chloromethane	ND		20.0	23.11		ug/L		116	10 - 150	6	43
2-Chlorotoluene	ND		20.0	22.33		ug/L		112	67 - 138	4	17
4-Chlorotoluene	ND		20.0	21.68		ug/L		108	69 - 138	5	15
cis-1,2-Dichloroethene	ND		20.0	23.86		ug/L		119	68 - 131	0	21
cis-1,3-Dichloropropene	ND		20.0	23.52		ug/L		118	70 - 133	3	19
1,2-Dibromo-3-Chloropropane	ND		20.0	21.23		ug/L		106	38 - 138	3	26
1,2-Dibromoethane (EDB)	ND		20.0	22.16		ug/L		111	65 - 137	1	21
Dibromomethane	ND		20.0	22.82		ug/L		114	70 - 130	1	19
1,2-Dichlorobenzene	ND		20.0	24.26		ug/L		121	70 - 130	2	15
1,3-Dichlorobenzene	ND		20.0	23.16		ug/L		116	68 - 131	2	14
1,4-Dichlorobenzene	ND		20.0	22.77		ug/L		114	70 - 130	1	14
Dichlorodifluoromethane	ND		20.0	29.78		ug/L		149	10 - 150	1	50
1,1-Dichloroethane	ND		20.0	24.58		ug/L		123	61 - 139	1	23
1,2-Dichloroethane	ND		20.0	23.51		ug/L		118	64 - 136	0	22
1,1-Dichloroethene	ND		20.0	24.52		ug/L		123	54 - 150	1	24
1,2-Dichloropropane	ND		20.0	24.87		ug/L		124	67 - 130	2	19

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-111154-C-1 MSD
Matrix: Water
Analysis Batch: 369700

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3-Dichloropropane	ND		20.0	22.79		ug/L		114	70 - 130	2	17
2,2-Dichloropropane	ND		20.0	24.71		ug/L		124	50 - 146	1	20
1,1-Dichloropropene	ND		20.0	25.12		ug/L		126	54 - 150	2	24
Diisopropyl ether	ND		20.0	24.72		ug/L		124	56 - 142	2	22
Ethylbenzene	ND		20.0	24.66		ug/L		123	65 - 139	3	18
Ethyl tert-butyl ether	ND		20.0	22.96		ug/L		115	53 - 138	2	22
Hexachlorobutadiene	ND		20.0	25.18		ug/L		126	61 - 141	8	26
2-Hexanone	ND		100	105.8		ug/L		106	44 - 150	2	21
Isopropylbenzene	ND		20.0	24.79		ug/L		124	70 - 137	2	17
Methylene Chloride	ND		20.0	24.19		ug/L		121	64 - 130	0	22
4-Methyl-2-pentanone (MIBK)	ND		100	109.2		ug/L		109	50 - 140	1	24
Methyl tert-butyl ether	ND		20.0	22.45		ug/L		112	55 - 141	1	24
Naphthalene	ND		20.0	24.54		ug/L		123	32 - 150	5	40
n-Butylbenzene	ND		20.0	24.74		ug/L		124	61 - 141	0	17
N-Propylbenzene	ND		20.0	24.22		ug/L		121	53 - 150	4	18
p-Isopropyltoluene	ND		20.0	23.18		ug/L		116	66 - 137	2	16
sec-Butylbenzene	ND		20.0	23.04		ug/L		115	55 - 136	2	50
Styrene	ND		20.0	23.92		ug/L		120	70 - 130	3	16
t-Amyl alcohol	ND		200	241.7		ug/L		121	10 - 150	5	50
Tert-amyl methyl ether	ND		20.0	22.00		ug/L		110	47 - 148	6	23
tert-Butyl alcohol (TBA)	ND		200	218.8		ug/L		109	10 - 150	2	47
tert-Butylbenzene	ND		20.0	23.99		ug/L		120	70 - 138	2	17
1,1,1,2-Tetrachloroethane	ND		20.0	22.41		ug/L		112	70 - 131	0	16
1,1,2,2-Tetrachloroethane	ND		20.0	20.78		ug/L		104	56 - 145	6	19
Tetrachloroethene	ND		20.0	25.73		ug/L		129	57 - 138	2	17
Toluene	6.42		20.0	31.48		ug/L		125	64 - 136	3	18
trans-1,2-Dichloroethene	ND		20.0	24.27		ug/L		121	59 - 143	1	25
trans-1,3-Dichloropropene	ND		20.0	22.69		ug/L		113	63 - 142	2	18
1,2,3-Trichlorobenzene	ND		20.0	25.33		ug/L		127	36 - 150	4	43
1,2,4-Trichlorobenzene	ND		20.0	25.75		ug/L		129	47 - 147	5	24
1,1,1-Trichloroethane	ND		20.0	24.82		ug/L		124	68 - 144	2	17
1,1,2-Trichloroethane	ND		20.0	22.03		ug/L		110	70 - 130	2	18
Trichloroethene	ND		20.0	25.25		ug/L		126	63 - 135	1	17
Trichlorofluoromethane	ND		20.0	26.71		ug/L		134	44 - 150	1	32
1,2,3-Trichloropropane	ND		20.0	21.02		ug/L		105	65 - 131	6	19
1,2,4-Trimethylbenzene	ND		20.0	24.40		ug/L		122	64 - 136	1	18
1,3,5-Trimethylbenzene	ND		20.0	22.82		ug/L		114	69 - 139	2	17
Vinyl chloride	ND		20.0	27.64		ug/L		138	57 - 150	1	37
Xylenes, Total	ND		40.0	52.15		ug/L		125	69 - 132	2	17

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
Dibromofluoromethane (Surr)	*97*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*
Toluene-d8 (Surr)	*102*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-369935/7
Matrix: Solid
Analysis Batch: 369935

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		2.50	2.00	mg/Kg			09/14/16 12:31	1
Benzene	ND		0.100	0.0340	mg/Kg			09/14/16 12:31	1
Bromobenzene	ND		0.100	0.0360	mg/Kg			09/14/16 12:31	1
Bromochloromethane	ND		0.100	0.0280	mg/Kg			09/14/16 12:31	1
Bromodichloromethane	ND		0.100	0.0280	mg/Kg			09/14/16 12:31	1
Bromoform	ND		0.100	0.0280	mg/Kg			09/14/16 12:31	1
Bromomethane	ND		0.100	0.0600	mg/Kg			09/14/16 12:31	1
2-Butanone (MEK)	ND		2.50	0.260	mg/Kg			09/14/16 12:31	1
Carbon disulfide	ND		0.250	0.180	mg/Kg			09/14/16 12:31	1
Carbon tetrachloride	ND		0.100	0.0340	mg/Kg			09/14/16 12:31	1
Chlorobenzene	ND		0.100	0.0340	mg/Kg			09/14/16 12:31	1
Chlorodibromomethane	ND		0.100	0.0170	mg/Kg			09/14/16 12:31	1
Chloroethane	ND		0.250	0.0950	mg/Kg			09/14/16 12:31	1
Chloroform	ND		0.100	0.0340	mg/Kg			09/14/16 12:31	1
Chloromethane	ND		0.100	0.0340	mg/Kg			09/14/16 12:31	1
2-Chlorotoluene	ND		0.100	0.0460	mg/Kg			09/14/16 12:31	1
4-Chlorotoluene	ND		0.100	0.0420	mg/Kg			09/14/16 12:31	1
cis-1,2-Dichloroethene	ND		0.100	0.0340	mg/Kg			09/14/16 12:31	1
cis-1,3-Dichloropropene	ND		0.100	0.0340	mg/Kg			09/14/16 12:31	1
1,2-Dibromo-3-Chloropropane	ND		0.250	0.0350	mg/Kg			09/14/16 12:31	1
1,2-Dibromoethane (EDB)	ND		0.100	0.0500	mg/Kg			09/14/16 12:31	1
Dibromomethane	ND		0.100	0.0280	mg/Kg			09/14/16 12:31	1
1,2-Dichlorobenzene	ND		0.100	0.0170	mg/Kg			09/14/16 12:31	1
1,3-Dichlorobenzene	ND		0.100	0.0340	mg/Kg			09/14/16 12:31	1
1,4-Dichlorobenzene	ND		0.100	0.0470	mg/Kg			09/14/16 12:31	1
Dichlorodifluoromethane	ND		0.100	0.0500	mg/Kg			09/14/16 12:31	1
1,1-Dichloroethane	ND		0.100	0.0340	mg/Kg			09/14/16 12:31	1
1,2-Dichloroethane	ND		0.100	0.0340	mg/Kg			09/14/16 12:31	1
1,1-Dichloroethene	ND		0.100	0.0290	mg/Kg			09/14/16 12:31	1
1,2-Dichloropropane	ND		0.100	0.0470	mg/Kg			09/14/16 12:31	1
1,3-Dichloropropane	ND		0.100	0.0470	mg/Kg			09/14/16 12:31	1
2,2-Dichloropropane	ND		0.100	0.0340	mg/Kg			09/14/16 12:31	1
1,1-Dichloropropene	ND		0.100	0.0260	mg/Kg			09/14/16 12:31	1
Diisopropyl ether	ND		0.100	0.0340	mg/Kg			09/14/16 12:31	1
Ethylbenzene	ND		0.100	0.0340	mg/Kg			09/14/16 12:31	1
Ethyl tert-butyl ether	ND		0.250	0.0500	mg/Kg			09/14/16 12:31	1
Hexachlorobutadiene	ND		0.250	0.0550	mg/Kg			09/14/16 12:31	1
2-Hexanone	ND		2.50	0.840	mg/Kg			09/14/16 12:31	1
Isopropylbenzene	ND		0.100	0.0210	mg/Kg			09/14/16 12:31	1
Methylene Chloride	ND		0.500	0.0500	mg/Kg			09/14/16 12:31	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.850	mg/Kg			09/14/16 12:31	1
Methyl tert-butyl ether	ND		0.100	0.0500	mg/Kg			09/14/16 12:31	1
Naphthalene	ND		0.250	0.0850	mg/Kg			09/14/16 12:31	1
n-Butylbenzene	ND		0.100	0.0500	mg/Kg			09/14/16 12:31	1
N-Propylbenzene	ND		0.100	0.0340	mg/Kg			09/14/16 12:31	1
p-Isopropyltoluene	ND		0.100	0.0340	mg/Kg			09/14/16 12:31	1
sec-Butylbenzene	ND		0.100	0.0340	mg/Kg			09/14/16 12:31	1
Styrene	ND		0.100	0.0550	mg/Kg			09/14/16 12:31	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-369935/7
Matrix: Solid
Analysis Batch: 369935

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
t-Amyl alcohol	ND		1.00	0.470	mg/Kg			09/14/16 12:31	1
Tert-amyl methyl ether	ND		0.100	0.0160	mg/Kg			09/14/16 12:31	1
tert-Butyl alcohol (TBA)	ND		2.50	0.560	mg/Kg			09/14/16 12:31	1
tert-Butylbenzene	ND		0.100	0.0500	mg/Kg			09/14/16 12:31	1
1,1,1,2-Tetrachloroethane	ND		0.100	0.0340	mg/Kg			09/14/16 12:31	1
1,1,2,2-Tetrachloroethane	ND		0.100	0.0500	mg/Kg			09/14/16 12:31	1
Tetrachloroethene	ND		0.100	0.0340	mg/Kg			09/14/16 12:31	1
Toluene	ND		0.100	0.0370	mg/Kg			09/14/16 12:31	1
trans-1,2-Dichloroethene	ND		0.100	0.0340	mg/Kg			09/14/16 12:31	1
trans-1,3-Dichloropropene	ND		0.100	0.0340	mg/Kg			09/14/16 12:31	1
1,2,3-Trichlorobenzene	ND		0.100	0.0190	mg/Kg			09/14/16 12:31	1
1,2,4-Trichlorobenzene	ND		0.100	0.0340	mg/Kg			09/14/16 12:31	1
1,1,1-Trichloroethane	ND		0.100	0.0460	mg/Kg			09/14/16 12:31	1
1,1,2-Trichloroethane	ND		0.250	0.0700	mg/Kg			09/14/16 12:31	1
Trichloroethene	ND		0.100	0.0500	mg/Kg			09/14/16 12:31	1
Trichlorofluoromethane	ND		0.100	0.0500	mg/Kg			09/14/16 12:31	1
1,2,3-Trichloropropane	ND		0.100	0.0280	mg/Kg			09/14/16 12:31	1
1,2,4-Trimethylbenzene	ND		0.100	0.0500	mg/Kg			09/14/16 12:31	1
1,3,5-Trimethylbenzene	ND		0.100	0.0380	mg/Kg			09/14/16 12:31	1
Vinyl chloride	ND		0.100	0.0550	mg/Kg			09/14/16 12:31	1
Xylenes, Total	ND		0.150	0.0620	mg/Kg			09/14/16 12:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*		*09/14/16 12:31*	*1*
Dibromofluoromethane (Surr)	*89*		*70 - 130*		*09/14/16 12:31*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*		*09/14/16 12:31*	*1*
Toluene-d8 (Surr)	*94*		*70 - 130*		*09/14/16 12:31*	*1*

Lab Sample ID: LCS 490-369935/3
Matrix: Solid
Analysis Batch: 369935

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	5.00	4.457		mg/Kg		89	45 - 145
Benzene	1.00	0.9424		mg/Kg		94	70 - 130
Bromobenzene	1.00	0.9733		mg/Kg		97	67 - 130
Bromochloromethane	1.00	0.8519		mg/Kg		85	70 - 133
Bromodichloromethane	1.00	0.8466		mg/Kg		85	70 - 130
Bromoform	1.00	0.8847		mg/Kg		88	59 - 137
Bromomethane	1.00	0.4138		mg/Kg		41	32 - 150
2-Butanone (MEK)	5.00	4.206		mg/Kg		84	50 - 149
Carbon disulfide	1.00	0.9048		mg/Kg		90	66 - 138
Carbon tetrachloride	1.00	0.9176		mg/Kg		92	70 - 131
Chlorobenzene	1.00	0.9556		mg/Kg		96	70 - 130
Chlorodibromomethane	1.00	1.007	E	mg/Kg		101	70 - 130
Chloroethane	1.00	0.3251	*	mg/Kg		33	37 - 150
Chloroform	1.00	0.8379		mg/Kg		84	70 - 130
Chloromethane	1.00	0.8807		mg/Kg		88	53 - 150

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-369935/3
Matrix: Solid
Analysis Batch: 369935

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chlorotoluene	1.00	1.188		mg/Kg		119	70 - 132
4-Chlorotoluene	1.00	1.088		mg/Kg		109	67 - 135
cis-1,2-Dichloroethene	1.00	0.9497		mg/Kg		95	70 - 132
cis-1,3-Dichloropropene	1.00	0.9142		mg/Kg		91	70 - 130
1,2-Dibromo-3-Chloropropane	1.00	0.8944		mg/Kg		89	47 - 144
1,2-Dibromoethane (EDB)	1.00	0.9100		mg/Kg		91	69 - 130
Dibromomethane	1.00	0.8593		mg/Kg		86	70 - 130
1,2-Dichlorobenzene	1.00	0.9430		mg/Kg		94	70 - 134
1,3-Dichlorobenzene	1.00	1.017		mg/Kg		102	69 - 137
1,4-Dichlorobenzene	1.00	0.9917		mg/Kg		99	66 - 134
Dichlorodifluoromethane	1.00	0.8371		mg/Kg		84	32 - 150
1,1-Dichloroethane	1.00	0.9079		mg/Kg		91	70 - 130
1,2-Dichloroethane	1.00	0.8494		mg/Kg		85	65 - 134
1,1-Dichloroethene	1.00	0.8922		mg/Kg		89	70 - 131
1,2-Dichloropropane	1.00	0.9453		mg/Kg		95	70 - 130
1,3-Dichloropropane	1.00	0.8627		mg/Kg		86	70 - 130
2,2-Dichloropropane	1.00	0.9679		mg/Kg		97	57 - 150
1,1-Dichloropropene	1.00	0.8970		mg/Kg		90	70 - 130
Diisopropyl ether	1.00	0.9795		mg/Kg		98	68 - 134
Ethylbenzene	1.00	1.010		mg/Kg		101	70 - 130
Ethyl tert-butyl ether	1.00	0.9498		mg/Kg		95	19 - 150
Hexachlorobutadiene	1.00	0.9057		mg/Kg		91	64 - 137
2-Hexanone	5.00	4.865		mg/Kg		97	47 - 148
Isopropylbenzene	1.00	0.9471		mg/Kg		95	70 - 130
Methylene Chloride	1.00	0.9052		mg/Kg		91	69 - 130
4-Methyl-2-pentanone (MIBK)	5.00	4.298		mg/Kg		86	48 - 150
Methyl tert-butyl ether	1.00	0.8771		mg/Kg		88	54 - 145
Naphthalene	1.00	0.9159		mg/Kg		92	55 - 149
n-Butylbenzene	1.00	1.101		mg/Kg		110	57 - 150
N-Propylbenzene	1.00	1.083		mg/Kg		108	62 - 150
p-Isopropyltoluene	1.00	1.014		mg/Kg		101	66 - 147
sec-Butylbenzene	1.00	1.035		mg/Kg		104	68 - 147
Styrene	1.00	0.9354		mg/Kg		94	70 - 131
t-Amyl alcohol	10.0	11.10		mg/Kg		111	10 - 150
Tert-amyl methyl ether	1.00	0.9883		mg/Kg		99	10 - 150
tert-Butyl alcohol (TBA)	10.0	10.55		mg/Kg		105	10 - 150
tert-Butylbenzene	1.00	0.9990		mg/Kg		100	70 - 138
1,1,1,2-Tetrachloroethane	1.00	0.9695		mg/Kg		97	70 - 130
1,1,2,2-Tetrachloroethane	1.00	0.9932		mg/Kg		99	61 - 134
Tetrachloroethene	1.00	0.8334		mg/Kg		83	70 - 130
Toluene	1.00	0.9092		mg/Kg		91	70 - 130
trans-1,2-Dichloroethene	1.00	0.9337		mg/Kg		93	70 - 130
trans-1,3-Dichloropropene	1.00	0.9187		mg/Kg		92	67 - 130
1,2,3-Trichlorobenzene	1.00	0.9293		mg/Kg		93	57 - 146
1,2,4-Trichlorobenzene	1.00	0.9984		mg/Kg		100	47 - 150
1,1,1-Trichloroethane	1.00	0.8726		mg/Kg		87	70 - 130
1,1,2-Trichloroethane	1.00	0.8770		mg/Kg		88	70 - 130
Trichloroethene	1.00	0.8702		mg/Kg		87	70 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-369935/3
Matrix: Solid
Analysis Batch: 369935

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Trichlorofluoromethane	1.00	0.7480		mg/Kg		75	53 - 150
1,2,3-Trichloropropane	1.00	0.9884		mg/Kg		99	60 - 139
1,2,4-Trimethylbenzene	1.00	1.023		mg/Kg		102	70 - 140
1,3,5-Trimethylbenzene	1.00	1.106		mg/Kg		111	69 - 141
Vinyl chloride	1.00	0.8742		mg/Kg		87	63 - 150
Xylenes, Total	2.00	1.850		mg/Kg		92	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*
Dibromofluoromethane (Surr)	*91*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 130*
Toluene-d8 (Surr)	*93*		*70 - 130*

Lab Sample ID: LCSD 490-369935/4
Matrix: Solid
Analysis Batch: 369935

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	5.00	4.345		mg/Kg		87	45 - 145	3	38
Benzene	1.00	0.9093		mg/Kg		91	70 - 130	4	37
Bromobenzene	1.00	0.9290		mg/Kg		93	67 - 130	5	40
Bromochloromethane	1.00	0.8318		mg/Kg		83	70 - 133	2	15
Bromodichloromethane	1.00	0.8109		mg/Kg		81	70 - 130	4	20
Bromoform	1.00	0.8406		mg/Kg		84	59 - 137	5	17
Bromomethane	1.00	0.4200		mg/Kg		42	32 - 150	1	45
2-Butanone (MEK)	5.00	4.008		mg/Kg		80	50 - 149	5	39
Carbon disulfide	1.00	0.8653		mg/Kg		87	66 - 138	4	41
Carbon tetrachloride	1.00	0.8918		mg/Kg		89	70 - 131	3	41
Chlorobenzene	1.00	0.9318		mg/Kg		93	70 - 130	3	40
Chlorodibromomethane	1.00	0.9904		mg/Kg		99	70 - 130	2	14
Chloroethane	1.00	0.3088	*	mg/Kg		31	37 - 150	5	50
Chloroform	1.00	0.8211		mg/Kg		82	70 - 130	2	15
Chloromethane	1.00	0.8620		mg/Kg		86	53 - 150	2	47
2-Chlorotoluene	1.00	1.171		mg/Kg		117	70 - 132	1	41
4-Chlorotoluene	1.00	1.115		mg/Kg		111	67 - 135	2	41
cis-1,2-Dichloroethene	1.00	0.9240		mg/Kg		92	70 - 132	3	18
cis-1,3-Dichloropropene	1.00	0.8828		mg/Kg		88	70 - 130	3	42
1,2-Dibromo-3-Chloropropane	1.00	0.8674		mg/Kg		87	47 - 144	3	38
1,2-Dibromoethane (EDB)	1.00	0.9002		mg/Kg		90	69 - 130	1	17
Dibromomethane	1.00	0.8243		mg/Kg		82	70 - 130	4	19
1,2-Dichlorobenzene	1.00	0.9378		mg/Kg		94	70 - 134	1	40
1,3-Dichlorobenzene	1.00	1.021		mg/Kg		102	69 - 137	0	41
1,4-Dichlorobenzene	1.00	0.9698		mg/Kg		97	66 - 134	2	41
Dichlorodifluoromethane	1.00	0.8072		mg/Kg		81	32 - 150	4	50
1,1-Dichloroethane	1.00	0.8708		mg/Kg		87	70 - 130	4	42
1,2-Dichloroethane	1.00	0.8253		mg/Kg		83	65 - 134	3	16
1,1-Dichloroethene	1.00	0.8725		mg/Kg		87	70 - 131	2	43
1,2-Dichloropropane	1.00	0.9250		mg/Kg		93	70 - 130	2	15

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-369935/4
Matrix: Solid
Analysis Batch: 369935

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3-Dichloropropane			1.00	0.8259		mg/Kg		83	70 - 130	4	15
2,2-Dichloropropane			1.00	0.9452		mg/Kg		95	57 - 150	2	42
1,1-Dichloropropene			1.00	0.8734		mg/Kg		87	70 - 130	3	41
Diisopropyl ether			1.00	0.9455		mg/Kg		95	68 - 134	4	36
Ethylbenzene			1.00	0.9864		mg/Kg		99	70 - 130	2	38
Ethyl tert-butyl ether			1.00	0.9103		mg/Kg		91	19 - 150	4	37
Hexachlorobutadiene			1.00	0.9126		mg/Kg		91	64 - 137	1	44
2-Hexanone			5.00	4.808		mg/Kg		96	47 - 148	1	38
Isopropylbenzene			1.00	0.9186		mg/Kg		92	70 - 130	3	39
Methylene Chloride			1.00	0.8771		mg/Kg		88	69 - 130	3	19
4-Methyl-2-pentanone (MIBK)			5.00	4.085		mg/Kg		82	48 - 150	5	41
Methyl tert-butyl ether			1.00	0.8506		mg/Kg		85	54 - 145	3	36
Naphthalene			1.00	0.9205		mg/Kg		92	55 - 149	1	37
n-Butylbenzene			1.00	1.107		mg/Kg		111	57 - 150	1	39
N-Propylbenzene			1.00	1.067		mg/Kg		107	62 - 150	1	38
p-Isopropyltoluene			1.00	1.003		mg/Kg		100	66 - 147	1	38
sec-Butylbenzene			1.00	1.048		mg/Kg		105	68 - 147	1	38
Styrene			1.00	0.9098		mg/Kg		91	70 - 131	3	40
t-Amyl alcohol			10.0	10.51		mg/Kg		105	10 - 150	5	50
Tert-amyl methyl ether			1.00	0.9529		mg/Kg		95	10 - 150	4	50
tert-Butyl alcohol (TBA)			10.0	10.76		mg/Kg		108	10 - 150	2	50
tert-Butylbenzene			1.00	1.005		mg/Kg		100	70 - 138	1	38
1,1,1,2-Tetrachloroethane			1.00	0.9360		mg/Kg		94	70 - 130	4	41
1,1,2,2-Tetrachloroethane			1.00	0.9701		mg/Kg		97	61 - 134	2	16
Tetrachloroethene			1.00	0.8000		mg/Kg		80	70 - 130	4	41
Toluene			1.00	0.8754		mg/Kg		88	70 - 130	4	40
trans-1,2-Dichloroethene			1.00	0.9194		mg/Kg		92	70 - 130	2	41
trans-1,3-Dichloropropene			1.00	0.8823		mg/Kg		88	67 - 130	4	41
1,2,3-Trichlorobenzene			1.00	0.9078		mg/Kg		91	57 - 146	2	42
1,2,4-Trichlorobenzene			1.00	0.9880		mg/Kg		99	47 - 150	1	43
1,1,1-Trichloroethane			1.00	0.8387		mg/Kg		84	70 - 130	4	41
1,1,2-Trichloroethane			1.00	0.8382		mg/Kg		84	70 - 130	5	17
Trichloroethene			1.00	0.8493		mg/Kg		85	70 - 130	2	41
Trichlorofluoromethane			1.00	0.7246		mg/Kg		72	53 - 150	3	49
1,2,3-Trichloropropane			1.00	0.9628		mg/Kg		96	60 - 139	3	16
1,2,4-Trimethylbenzene			1.00	1.030		mg/Kg		103	70 - 140	1	38
1,3,5-Trimethylbenzene			1.00	1.123		mg/Kg		112	69 - 141	2	38
Vinyl chloride			1.00	0.8389		mg/Kg		84	63 - 150	4	46
Xylenes, Total			2.00	1.810		mg/Kg		90	70 - 130	2	38

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*
Dibromofluoromethane (Surr)	*91*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 130*
Toluene-d8 (Surr)	*91*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-111596-A-2-A MS
Matrix: Solid
Analysis Batch: 369935

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 369964

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		4.84	3.041		mg/Kg		63	10 - 150
Benzene	0.306		0.969	1.463		mg/Kg		119	21 - 150
Bromobenzene	ND		0.969	1.194		mg/Kg		123	10 - 150
Bromochloromethane	ND		0.969	0.8513		mg/Kg		88	10 - 150
Bromodichloromethane	ND		0.969	0.6379		mg/Kg		66	10 - 150
Bromoform	ND		0.969	0.7657		mg/Kg		79	10 - 150
Bromomethane	ND	F2	0.969	0.9632		mg/Kg		99	10 - 150
2-Butanone (MEK)	ND		4.84	3.338		mg/Kg		69	10 - 150
Carbon disulfide	ND		0.969	0.9552		mg/Kg		99	10 - 150
Carbon tetrachloride	ND		0.969	0.9847		mg/Kg		102	10 - 150
Chlorobenzene	ND		0.969	0.9523		mg/Kg		98	10 - 150
Chlorodibromomethane	ND		0.969	0.9302		mg/Kg		96	10 - 150
Chloroethane	ND	*	0.969	0.9572		mg/Kg		99	10 - 150
Chloroform	ND		0.969	0.8494		mg/Kg		88	10 - 150
Chloromethane	ND		0.969	1.008		mg/Kg		104	10 - 150
2-Chlorotoluene	ND	F1	0.969	1.602	F1	mg/Kg		165	10 - 150
4-Chlorotoluene	ND		0.969	1.291		mg/Kg		133	10 - 150
cis-1,2-Dichloroethene	ND		0.969	0.9719		mg/Kg		100	10 - 150
cis-1,3-Dichloropropene	ND		0.969	0.9041		mg/Kg		93	10 - 150
1,2-Dibromo-3-Chloropropane	ND		0.969	0.5491		mg/Kg		57	10 - 150
1,2-Dibromoethane (EDB)	ND		0.969	0.8675		mg/Kg		90	10 - 150
Dibromomethane	ND		0.969	0.7984		mg/Kg		82	10 - 150
1,2-Dichlorobenzene	ND		0.969	0.8921		mg/Kg		92	10 - 150
1,3-Dichlorobenzene	ND		0.969	1.077		mg/Kg		111	10 - 150
1,4-Dichlorobenzene	ND		0.969	0.9588		mg/Kg		99	10 - 150
Dichlorodifluoromethane	ND		0.969	0.8375		mg/Kg		86	10 - 150
1,1-Dichloroethane	ND		0.969	0.9474		mg/Kg		98	10 - 150
1,2-Dichloroethane	ND		0.969	0.8314		mg/Kg		86	24 - 138
1,1-Dichloroethene	ND		0.969	0.9431		mg/Kg		97	10 - 150
1,2-Dichloropropane	ND		0.969	1.147		mg/Kg		118	10 - 150
1,3-Dichloropropane	ND		0.969	0.7916		mg/Kg		82	10 - 150
2,2-Dichloropropane	ND		0.969	1.063		mg/Kg		110	10 - 150
1,1-Dichloropropene	ND		0.969	0.9493		mg/Kg		98	10 - 150
Diisopropyl ether	ND		0.969	0.9675		mg/Kg		100	27 - 144
Ethylbenzene	0.806	F1	0.969	2.490	F1	mg/Kg		174	10 - 150
Ethyl tert-butyl ether	ND		0.969	0.9569		mg/Kg		99	10 - 150
Hexachlorobutadiene	ND		0.969	0.4115		mg/Kg		42	10 - 150
2-Hexanone	ND		4.84	4.444		mg/Kg		92	10 - 150
Isopropylbenzene	0.192		0.969	1.263		mg/Kg		111	10 - 150
Methylene Chloride	ND		0.969	0.9243		mg/Kg		95	24 - 150
4-Methyl-2-pentanone (MIBK)	ND		4.84	3.824		mg/Kg		79	10 - 150
Methyl tert-butyl ether	ND		0.969	0.8634		mg/Kg		89	10 - 150
Naphthalene	0.391	F1 F2	0.969	0.4662	F1	mg/Kg		8	10 - 150
n-Butylbenzene	0.253		0.969	1.571		mg/Kg		136	10 - 150
N-Propylbenzene	0.339	F1	0.969	1.860	F1	mg/Kg		157	10 - 150
p-Isopropyltoluene	0.187		0.969	1.345		mg/Kg		120	10 - 150
sec-Butylbenzene	0.150		0.969	1.376		mg/Kg		127	10 - 150
Styrene	ND		0.969	0.9782		mg/Kg		101	10 - 150

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-111596-A-2-A MS
Matrix: Solid
Analysis Batch: 369935

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 369964

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
t-Amyl alcohol	ND	F2	9.69	2.336		mg/Kg		24	10 - 150
Tert-amyl methyl ether	ND		0.969	0.9475		mg/Kg		98	10 - 150
tert-Butyl alcohol (TBA)	ND		9.69	ND		mg/Kg		20	10 - 150
tert-Butylbenzene	ND		0.969	1.160		mg/Kg		120	10 - 150
1,1,1,2-Tetrachloroethane	ND		0.969	0.9632		mg/Kg		99	10 - 150
1,1,2,2-Tetrachloroethane	ND	F1	0.969	1.787	F1	mg/Kg		184	10 - 150
Tetrachloroethene	ND		0.969	0.8456		mg/Kg		87	10 - 150
Toluene	1.46	F1	0.969	3.325	F1	mg/Kg		192	17 - 150
trans-1,2-Dichloroethene	ND		0.969	0.9877		mg/Kg		102	10 - 150
trans-1,3-Dichloropropene	ND		0.969	0.8713		mg/Kg		90	10 - 150
1,2,3-Trichlorobenzene	ND	F2	0.969	0.1693		mg/Kg		17	10 - 150
1,2,4-Trichlorobenzene	ND	F2	0.969	0.2384		mg/Kg		25	10 - 150
1,1,1-Trichloroethane	ND		0.969	0.9348		mg/Kg		96	10 - 150
1,1,2-Trichloroethane	ND		0.969	0.8861		mg/Kg		91	10 - 150
Trichloroethene	ND		0.969	1.014		mg/Kg		105	10 - 150
Trichlorofluoromethane	ND		0.969	0.8293		mg/Kg		86	10 - 150
1,2,3-Trichloropropane	ND		0.969	0.8835		mg/Kg		91	10 - 150
1,2,4-Trimethylbenzene	0.813	F1	0.969	2.465	F1	mg/Kg		170	10 - 150
1,3,5-Trimethylbenzene	0.323		0.969	1.729		mg/Kg		145	10 - 150
Vinyl chloride	ND		0.969	1.064		mg/Kg		110	10 - 150
Xylenes, Total	2.09	F1	1.94	5.284	F1	mg/Kg		165	10 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*140*	*X*	*70 - 130*
Dibromofluoromethane (Surr)	*91*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*85*		*70 - 130*
Toluene-d8 (Surr)	*90*		*70 - 130*

Lab Sample ID: 490-111596-A-2-A MSD
Matrix: Solid
Analysis Batch: 369935

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 369964

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		4.84	3.225		mg/Kg		67	10 - 150	6	50
Benzene	0.306		0.969	1.441		mg/Kg		117	21 - 150	2	50
Bromobenzene	ND		0.969	1.192		mg/Kg		123	10 - 150	0	50
Bromochloromethane	ND		0.969	0.8600		mg/Kg		89	10 - 150	1	50
Bromodichloromethane	ND		0.969	0.7272		mg/Kg		75	10 - 150	13	50
Bromoform	ND		0.969	0.7745		mg/Kg		80	10 - 150	1	50
Bromomethane	ND	F2	0.969	0.5594	F2	mg/Kg		58	10 - 150	53	50
2-Butanone (MEK)	ND		4.84	3.471		mg/Kg		72	10 - 150	4	50
Carbon disulfide	ND		0.969	0.9481		mg/Kg		98	10 - 150	1	50
Carbon tetrachloride	ND		0.969	0.9738		mg/Kg		100	10 - 150	1	50
Chlorobenzene	ND		0.969	0.9666		mg/Kg		100	10 - 150	1	50
Chlorodibromomethane	ND		0.969	0.9138		mg/Kg		94	10 - 150	2	50
Chloroethane	ND	*	0.969	0.8006		mg/Kg		83	10 - 150	18	50
Chloroform	ND		0.969	0.8282		mg/Kg		85	10 - 150	3	50
Chloromethane	ND		0.969	1.279		mg/Kg		132	10 - 150	24	50

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-111596-A-2-A MSD
Matrix: Solid
Analysis Batch: 369935

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 369964

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Chlorotoluene	ND	F1	0.969	1.620	F1	mg/Kg		167	10 - 150	1	50
4-Chlorotoluene	ND		0.969	1.297		mg/Kg		134	10 - 150	0	50
cis-1,2-Dichloroethene	ND		0.969	0.9527		mg/Kg		98	10 - 150	2	50
cis-1,3-Dichloropropene	ND		0.969	0.8869		mg/Kg		92	10 - 150	2	50
1,2-Dibromo-3-Chloropropane	ND		0.969	0.6282		mg/Kg		65	10 - 150	13	50
1,2-Dibromoethane (EDB)	ND		0.969	0.9060		mg/Kg		93	10 - 150	4	50
Dibromomethane	ND		0.969	0.8003		mg/Kg		83	10 - 150	0	50
1,2-Dichlorobenzene	ND		0.969	0.9190		mg/Kg		95	10 - 150	3	50
1,3-Dichlorobenzene	ND		0.969	1.103		mg/Kg		114	10 - 150	2	50
1,4-Dichlorobenzene	ND		0.969	1.001		mg/Kg		103	10 - 150	4	50
Dichlorodifluoromethane	ND		0.969	0.7913		mg/Kg		82	10 - 150	6	50
1,1-Dichloroethane	ND		0.969	0.9172		mg/Kg		95	10 - 150	3	50
1,2-Dichloroethane	ND		0.969	0.8296		mg/Kg		86	24 - 138	0	50
1,1-Dichloroethene	ND		0.969	0.9405		mg/Kg		97	10 - 150	0	50
1,2-Dichloropropane	ND		0.969	0.9418		mg/Kg		97	10 - 150	20	50
1,3-Dichloropropane	ND		0.969	0.8009		mg/Kg		83	10 - 150	1	50
2,2-Dichloropropane	ND		0.969	1.033		mg/Kg		107	10 - 150	3	50
1,1-Dichloropropene	ND		0.969	0.9396		mg/Kg		97	10 - 150	1	50
Diisopropyl ether	ND		0.969	0.9613		mg/Kg		99	27 - 144	1	50
Ethylbenzene	0.806	F1	0.969	2.535	F1	mg/Kg		178	10 - 150	2	50
Ethyl tert-butyl ether	ND		0.969	0.9469		mg/Kg		98	10 - 150	1	50
Hexachlorobutadiene	ND		0.969	0.6539		mg/Kg		67	10 - 150	45	50
2-Hexanone	ND		4.84	4.627		mg/Kg		96	10 - 150	4	50
Isopropylbenzene	0.192		0.969	1.280		mg/Kg		112	10 - 150	1	50
Methylene Chloride	ND		0.969	0.9180		mg/Kg		95	24 - 150	1	50
4-Methyl-2-pentanone (MIBK)	ND		4.84	3.810		mg/Kg		79	10 - 150	0	50
Methyl tert-butyl ether	ND		0.969	0.8599		mg/Kg		89	10 - 150	0	50
Naphthalene	0.391	F1 F2	0.969	0.7886	F2	mg/Kg		41	10 - 150	51	50
n-Butylbenzene	0.253		0.969	1.624		mg/Kg		141	10 - 150	3	50
N-Propylbenzene	0.339	F1	0.969	1.906	F1	mg/Kg		162	10 - 150	2	50
p-Isopropyltoluene	0.187		0.969	1.378		mg/Kg		123	10 - 150	2	50
sec-Butylbenzene	0.150		0.969	1.422		mg/Kg		131	10 - 150	3	50
Styrene	ND		0.969	0.9887		mg/Kg		102	10 - 150	1	50
t-Amyl alcohol	ND	F2	9.69	3.930	F2	mg/Kg		41	10 - 150	51	50
Tert-amyl methyl ether	ND		0.969	0.9462		mg/Kg		98	10 - 150	0	50
tert-Butyl alcohol (TBA)	ND		9.69	ND		mg/Kg		22	10 - 150	9	50
tert-Butylbenzene	ND		0.969	1.187		mg/Kg		122	10 - 150	2	50
1,1,1,2-Tetrachloroethane	ND		0.969	0.9679		mg/Kg		100	10 - 150	0	50
1,1,2,2-Tetrachloroethane	ND	F1	0.969	1.807	F1	mg/Kg		186	10 - 150	1	50
Tetrachloroethene	ND		0.969	0.8377		mg/Kg		86	10 - 150	1	50
Toluene	1.46	F1	0.969	3.351	F1	mg/Kg		195	17 - 150	1	50
trans-1,2-Dichloroethene	ND		0.969	0.9651		mg/Kg		100	10 - 150	2	50
trans-1,3-Dichloropropene	ND		0.969	0.8961		mg/Kg		92	10 - 150	3	50
1,2,3-Trichlorobenzene	ND	F2	0.969	0.5733	F2	mg/Kg		59	10 - 150	109	50
1,2,4-Trichlorobenzene	ND	F2	0.969	0.5013	F2	mg/Kg		52	10 - 150	71	50
1,1,1-Trichloroethane	ND		0.969	0.9172		mg/Kg		95	10 - 150	2	50
1,1,2-Trichloroethane	ND		0.969	0.8816		mg/Kg		91	10 - 150	1	50
Trichloroethene	ND		0.969	0.9936		mg/Kg		103	10 - 150	2	50

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-111596-A-2-A MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 369935 — **Prep Batch: 369964**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Trichlorofluoromethane	ND		0.969	0.8080		mg/Kg		83	10 - 150	3	50
1,2,3-Trichloropropane	ND		0.969	0.9236		mg/Kg		95	10 - 150	4	50
1,2,4-Trimethylbenzene	0.813	F1	0.969	2.490	F1	mg/Kg		173	10 - 150	1	50
1,3,5-Trimethylbenzene	0.323		0.969	1.749		mg/Kg		147	10 - 150	1	50
Vinyl chloride	ND		0.969	1.041		mg/Kg		107	10 - 150	2	50
Xylenes, Total	2.09	F1	1.94	5.271	F1	mg/Kg		164	10 - 150	0	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*142*	*X*	*70 - 130*
Dibromofluoromethane (Surr)	*90*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*83*		*70 - 130*
Toluene-d8 (Surr)	*88*		*70 - 130*

Lab Sample ID: 490-111600-F-10-J MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 370030 — **Prep Batch: 370122**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		0.249	0.2488		mg/Kg		95	10 - 150
Benzene	ND		0.0498	0.04862		mg/Kg		94	21 - 150
Bromobenzene	ND		0.0498	0.04976		mg/Kg		100	10 - 150
Bromochloromethane	ND		0.0498	0.04704		mg/Kg		94	10 - 150
Bromodichloromethane	ND		0.0498	0.04573		mg/Kg		92	10 - 150
Bromoform	ND		0.0498	0.04873		mg/Kg		98	10 - 150
Bromomethane	ND		0.0498	0.05250		mg/Kg		105	10 - 150
2-Butanone (MEK)	ND		0.249	0.2363		mg/Kg		95	10 - 150
Carbon disulfide	ND		0.0498	0.04066		mg/Kg		82	10 - 150
Carbon tetrachloride	ND		0.0498	0.04757		mg/Kg		96	10 - 150
Chlorobenzene	ND		0.0498	0.04896		mg/Kg		98	10 - 150
Chlorodibromomethane	ND		0.0498	0.04894		mg/Kg		98	10 - 150
Chloroethane	ND		0.0498	0.04539		mg/Kg		91	10 - 150
Chloroform	ND		0.0498	0.04471		mg/Kg		90	10 - 150
Chloromethane	ND		0.0498	0.04710		mg/Kg		93	10 - 150
2-Chlorotoluene	ND		0.0498	0.05366		mg/Kg		108	10 - 150
4-Chlorotoluene	ND		0.0498	0.05169		mg/Kg		104	10 - 150
cis-1,2-Dichloroethene	ND		0.0498	0.04642		mg/Kg		93	10 - 150
cis-1,3-Dichloropropene	ND		0.0498	0.04805		mg/Kg		96	10 - 150
1,2-Dibromo-3-Chloropropane	ND		0.0498	0.04979		mg/Kg		100	10 - 150
1,2-Dibromoethane (EDB)	ND		0.0498	0.04855		mg/Kg		97	10 - 150
Dibromomethane	ND		0.0498	0.04559		mg/Kg		92	10 - 150
1,2-Dichlorobenzene	ND		0.0498	0.04788		mg/Kg		96	10 - 150
1,3-Dichlorobenzene	ND		0.0498	0.04937		mg/Kg		99	10 - 150
1,4-Dichlorobenzene	ND		0.0498	0.05007		mg/Kg		101	10 - 150
Dichlorodifluoromethane	ND		0.0498	0.04794		mg/Kg		96	10 - 150
1,1-Dichloroethane	ND		0.0498	0.04650		mg/Kg		93	10 - 150
1,2-Dichloroethane	ND		0.0498	0.04553		mg/Kg		91	24 - 138
1,1-Dichloroethene	ND		0.0498	0.04703		mg/Kg		94	10 - 150
1,2-Dichloropropane	ND		0.0498	0.04609		mg/Kg		93	10 - 150

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-111600-F-10-J MS
Matrix: Solid
Analysis Batch: 370030

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 370122

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3-Dichloropropane	ND		0.0498	0.04796		mg/Kg		96	10 - 150
2,2-Dichloropropane	ND		0.0498	0.04730		mg/Kg		95	10 - 150
1,1-Dichloropropene	ND		0.0498	0.04621		mg/Kg		93	10 - 150
Diisopropyl ether	ND		0.0498	0.04620		mg/Kg		93	27 - 144
Ethylbenzene	ND		0.0498	0.04920		mg/Kg		97	10 - 150
Ethyl tert-butyl ether	ND		0.0498	0.04183		mg/Kg		84	10 - 150
Hexachlorobutadiene	ND		0.0498	0.03571		mg/Kg		72	10 - 150
2-Hexanone	ND		0.249	0.2481		mg/Kg		100	10 - 150
Isopropylbenzene	ND		0.0498	0.04860		mg/Kg		98	10 - 150
Methylene Chloride	ND		0.0498	0.05170		mg/Kg		94	24 - 150
4-Methyl-2-pentanone (MIBK)	ND		0.249	0.2480		mg/Kg		100	10 - 150
Methyl tert-butyl ether	ND		0.0498	0.04414		mg/Kg		89	10 - 150
Naphthalene	ND		0.0498	0.02317		mg/Kg		47	10 - 150
n-Butylbenzene	ND		0.0498	0.04718		mg/Kg		95	10 - 150
N-Propylbenzene	ND		0.0498	0.05366		mg/Kg		108	10 - 150
p-Isopropyltoluene	ND		0.0498	0.05035		mg/Kg		101	10 - 150
sec-Butylbenzene	ND		0.0498	0.05255		mg/Kg		106	10 - 150
Styrene	ND		0.0498	0.03045		mg/Kg		61	10 - 150
t-Amyl alcohol	ND		0.498	0.4114		mg/Kg		83	10 - 150
Tert-amyl methyl ether	ND		0.0498	0.03959		mg/Kg		79	10 - 150
tert-Butyl alcohol (TBA)	ND		0.498	0.4718		mg/Kg		95	10 - 150
tert-Butylbenzene	ND		0.0498	0.05073		mg/Kg		102	10 - 150
1,1,1,2-Tetrachloroethane	ND		0.0498	0.05093		mg/Kg		102	10 - 150
1,1,2,2-Tetrachloroethane	ND		0.0498	0.04970		mg/Kg		100	10 - 150
Tetrachloroethene	ND		0.0498	0.05068		mg/Kg		102	10 - 150
Toluene	0.00222		0.0498	0.04880		mg/Kg		94	17 - 150
trans-1,2-Dichloroethene	ND		0.0498	0.04659		mg/Kg		94	10 - 150
trans-1,3-Dichloropropene	ND		0.0498	0.04773		mg/Kg		96	10 - 150
1,2,3-Trichlorobenzene	ND		0.0498	0.02911		mg/Kg		58	10 - 150
1,2,4-Trichlorobenzene	ND		0.0498	0.03268		mg/Kg		66	10 - 150
1,1,1-Trichloroethane	ND		0.0498	0.04618		mg/Kg		93	10 - 150
1,1,2-Trichloroethane	ND		0.0498	0.04593		mg/Kg		92	10 - 150
Trichloroethene	ND		0.0498	0.04610		mg/Kg		93	10 - 150
Trichlorofluoromethane	ND		0.0498	0.04968		mg/Kg		100	10 - 150
1,2,3-Trichloropropane	ND		0.0498	0.05167		mg/Kg		104	10 - 150
1,2,4-Trimethylbenzene	ND		0.0498	0.05163		mg/Kg		104	10 - 150
1,3,5-Trimethylbenzene	ND		0.0498	0.05151		mg/Kg		103	10 - 150
Vinyl chloride	ND		0.0498	0.04670		mg/Kg		94	10 - 150
Xylenes, Total	ND		0.0996	0.09713		mg/Kg		98	10 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
Dibromofluoromethane (Surr)	*97*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-111600-F-10-L MSD
Matrix: Solid
Analysis Batch: 370343

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 370122

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		0.231	0.1820		mg/Kg		73	10 - 150	31	50
Benzene	ND		0.0462	0.04213		mg/Kg		88	21 - 150	14	50
Bromobenzene	ND		0.0462	0.04289		mg/Kg		93	10 - 150	15	50
Bromochloromethane	ND		0.0462	0.04107		mg/Kg		89	10 - 150	14	50
Bromodichloromethane	ND		0.0462	0.04051		mg/Kg		88	10 - 150	12	50
Bromoform	ND		0.0462	0.04037		mg/Kg		87	10 - 150	19	50
Bromomethane	ND		0.0462	0.04628		mg/Kg		100	10 - 150	13	50
2-Butanone (MEK)	ND		0.231	0.1859		mg/Kg		80	10 - 150	24	50
Carbon disulfide	ND		0.0462	0.03896		mg/Kg		84	10 - 150	4	50
Carbon tetrachloride	ND		0.0462	0.04305		mg/Kg		93	10 - 150	10	50
Chlorobenzene	ND		0.0462	0.04330		mg/Kg		94	10 - 150	12	50
Chlorodibromomethane	ND		0.0462	0.04100		mg/Kg		89	10 - 150	18	50
Chloroethane	ND		0.0462	0.03962		mg/Kg		86	10 - 150	14	50
Chloroform	ND		0.0462	0.03977		mg/Kg		86	10 - 150	12	50
Chloromethane	ND		0.0462	0.04031		mg/Kg		86	10 - 150	16	50
2-Chlorotoluene	ND		0.0462	0.04829		mg/Kg		105	10 - 150	11	50
4-Chlorotoluene	ND		0.0462	0.04704		mg/Kg		102	10 - 150	9	50
cis-1,2-Dichloroethene	ND		0.0462	0.04107		mg/Kg		89	10 - 150	12	50
cis-1,3-Dichloropropene	ND		0.0462	0.04159		mg/Kg		90	10 - 150	14	50
1,2-Dibromo-3-Chloropropane	ND		0.0462	0.04149		mg/Kg		90	10 - 150	18	50
1,2-Dibromoethane (EDB)	ND		0.0462	0.03943		mg/Kg		85	10 - 150	21	50
Dibromomethane	ND		0.0462	0.03832		mg/Kg		83	10 - 150	17	50
1,2-Dichlorobenzene	ND		0.0462	0.04200		mg/Kg		91	10 - 150	13	50
1,3-Dichlorobenzene	ND		0.0462	0.04620		mg/Kg		100	10 - 150	7	50
1,4-Dichlorobenzene	ND		0.0462	0.04604		mg/Kg		100	10 - 150	8	50
Dichlorodifluoromethane	ND		0.0462	0.04376		mg/Kg		95	10 - 150	9	50
1,1-Dichloroethane	ND		0.0462	0.04113		mg/Kg		89	10 - 150	12	50
1,2-Dichloroethane	ND		0.0462	0.03915		mg/Kg		85	24 - 138	15	50
1,1-Dichloroethene	ND		0.0462	0.04121		mg/Kg		89	10 - 150	13	50
1,2-Dichloropropane	ND		0.0462	0.03983		mg/Kg		86	10 - 150	15	50
1,3-Dichloropropane	ND		0.0462	0.03988		mg/Kg		86	10 - 150	18	50
2,2-Dichloropropane	ND		0.0462	0.04423		mg/Kg		96	10 - 150	7	50
1,1-Dichloropropene	ND		0.0462	0.04123		mg/Kg		89	10 - 150	11	50
Diisopropyl ether	ND		0.0462	0.04044		mg/Kg		88	27 - 144	13	50
Ethylbenzene	ND		0.0462	0.04411		mg/Kg		93	10 - 150	11	50
Ethyl tert-butyl ether	ND		0.0462	0.03614		mg/Kg		78	10 - 150	15	50
Hexachlorobutadiene	ND		0.0462	0.03954		mg/Kg		86	10 - 150	10	50
2-Hexanone	ND		0.231	0.1905		mg/Kg		82	10 - 150	26	50
Isopropylbenzene	ND		0.0462	0.04351		mg/Kg		94	10 - 150	11	50
Methylene Chloride	ND		0.0462	0.04328		mg/Kg		84	24 - 150	18	50
4-Methyl-2-pentanone (MIBK)	ND		0.231	0.1923		mg/Kg		83	10 - 150	25	50
Methyl tert-butyl ether	ND		0.0462	0.03742		mg/Kg		81	10 - 150	16	50
Naphthalene	ND		0.0462	0.02495		mg/Kg		54	10 - 150	7	50
n-Butylbenzene	ND		0.0462	0.04607		mg/Kg		100	10 - 150	2	50
N-Propylbenzene	ND		0.0462	0.04825		mg/Kg		104	10 - 150	11	50
p-Isopropyltoluene	ND		0.0462	0.04699		mg/Kg		102	10 - 150	7	50
sec-Butylbenzene	ND		0.0462	0.04689		mg/Kg		101	10 - 150	11	50
Styrene	ND		0.0462	0.04144		mg/Kg		90	10 - 150	31	50

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-111600-F-10-L MSD
Matrix: Solid
Analysis Batch: 370343

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 370122

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
t-Amyl alcohol	ND		0.462	0.3417		mg/Kg		74	10 - 150	19	50
Tert-amyl methyl ether	ND		0.0462	0.03530		mg/Kg		76	10 - 150	11	50
tert-Butyl alcohol (TBA)	ND		0.462	0.3786		mg/Kg		82	10 - 150	22	50
tert-Butylbenzene	ND		0.0462	0.04404		mg/Kg		95	10 - 150	14	50
1,1,1,2-Tetrachloroethane	ND		0.0462	0.04435		mg/Kg		96	10 - 150	14	50
1,1,2,2-Tetrachloroethane	ND		0.0462	0.03907		mg/Kg		85	10 - 150	24	50
Tetrachloroethene	ND		0.0462	0.04634		mg/Kg		100	10 - 150	9	50
Toluene	0.00222		0.0462	0.04294		mg/Kg		88	17 - 150	13	50
trans-1,2-Dichloroethene	ND		0.0462	0.04121		mg/Kg		89	10 - 150	12	50
trans-1,3-Dichloropropene	ND		0.0462	0.04115		mg/Kg		89	10 - 150	15	50
1,2,3-Trichlorobenzene	ND		0.0462	0.02958		mg/Kg		64	10 - 150	2	50
1,2,4-Trichlorobenzene	ND		0.0462	0.03358		mg/Kg		73	10 - 150	3	50
1,1,1-Trichloroethane	ND		0.0462	0.04182		mg/Kg		90	10 - 150	10	50
1,1,2-Trichloroethane	ND		0.0462	0.03784		mg/Kg		82	10 - 150	19	50
Trichloroethene	ND		0.0462	0.04236		mg/Kg		92	10 - 150	8	50
Trichlorofluoromethane	ND		0.0462	0.04353		mg/Kg		94	10 - 150	13	50
1,2,3-Trichloropropane	ND		0.0462	0.04048		mg/Kg		88	10 - 150	24	50
1,2,4-Trimethylbenzene	ND		0.0462	0.04499		mg/Kg		97	10 - 150	14	50
1,3,5-Trimethylbenzene	ND		0.0462	0.04879		mg/Kg		106	10 - 150	5	50
Vinyl chloride	ND		0.0462	0.04111		mg/Kg		89	10 - 150	13	50
Xylenes, Total	ND		0.0924	0.08579		mg/Kg		93	10 - 150	12	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
Dibromofluoromethane (Surr)	*98*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*

Lab Sample ID: MB 490-370343/6
Matrix: Solid
Analysis Batch: 370343

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.0500	0.00840	mg/Kg			09/15/16 13:38	1
Benzene	ND		0.00200	0.000670	mg/Kg			09/15/16 13:38	1
Bromobenzene	ND		0.00200	0.000720	mg/Kg			09/15/16 13:38	1
Bromochloromethane	ND		0.00200	0.000550	mg/Kg			09/15/16 13:38	1
Bromodichloromethane	ND		0.00200	0.000550	mg/Kg			09/15/16 13:38	1
Bromoform	ND		0.00200	0.000550	mg/Kg			09/15/16 13:38	1
Bromomethane	ND		0.00200	0.00120	mg/Kg			09/15/16 13:38	1
2-Butanone (MEK)	ND		0.0500	0.00510	mg/Kg			09/15/16 13:38	1
Carbon disulfide	ND		0.00500	0.00360	mg/Kg			09/15/16 13:38	1
Carbon tetrachloride	ND		0.00200	0.000670	mg/Kg			09/15/16 13:38	1
Chlorobenzene	ND		0.00200	0.000670	mg/Kg			09/15/16 13:38	1
Chlorodibromomethane	ND		0.00200	0.000340	mg/Kg			09/15/16 13:38	1
Chloroethane	ND		0.00500	0.00190	mg/Kg			09/15/16 13:38	1
Chloroform	ND		0.00200	0.000670	mg/Kg			09/15/16 13:38	1
Chloromethane	ND		0.00200	0.000670	mg/Kg			09/15/16 13:38	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-370343/6
Matrix: Solid
Analysis Batch: 370343

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorotoluene	ND		0.00200	0.000890	mg/Kg			09/15/16 13:38	1
4-Chlorotoluene	ND		0.00200	0.000840	mg/Kg			09/15/16 13:38	1
cis-1,2-Dichloroethene	ND		0.00200	0.000670	mg/Kg			09/15/16 13:38	1
cis-1,3-Dichloropropene	ND		0.00200	0.000670	mg/Kg			09/15/16 13:38	1
1,2-Dibromo-3-Chloropropane	ND		0.00500	0.000700	mg/Kg			09/15/16 13:38	1
1,2-Dibromoethane (EDB)	ND		0.00200	0.00100	mg/Kg			09/15/16 13:38	1
Dibromomethane	ND		0.00200	0.000560	mg/Kg			09/15/16 13:38	1
1,2-Dichlorobenzene	ND		0.00200	0.000340	mg/Kg			09/15/16 13:38	1
1,3-Dichlorobenzene	ND		0.00200	0.000670	mg/Kg			09/15/16 13:38	1
1,4-Dichlorobenzene	ND		0.00200	0.000670	mg/Kg			09/15/16 13:38	1
Dichlorodifluoromethane	ND		0.00200	0.00100	mg/Kg			09/15/16 13:38	1
1,1-Dichloroethane	ND		0.00200	0.000670	mg/Kg			09/15/16 13:38	1
1,2-Dichloroethane	ND		0.00200	0.000670	mg/Kg			09/15/16 13:38	1
1,1-Dichloroethene	ND		0.00200	0.000570	mg/Kg			09/15/16 13:38	1
1,2-Dichloropropane	ND		0.00200	0.000940	mg/Kg			09/15/16 13:38	1
1,3-Dichloropropane	ND		0.00200	0.000940	mg/Kg			09/15/16 13:38	1
2,2-Dichloropropane	ND		0.00200	0.000670	mg/Kg			09/15/16 13:38	1
1,1-Dichloropropene	ND		0.00200	0.000510	mg/Kg			09/15/16 13:38	1
Diisopropyl ether	ND		0.00200	0.000670	mg/Kg			09/15/16 13:38	1
Ethylbenzene	ND		0.00200	0.000670	mg/Kg			09/15/16 13:38	1
Ethyl tert-butyl ether	ND		0.00500	0.00100	mg/Kg			09/15/16 13:38	1
Hexachlorobutadiene	ND		0.00500	0.00114	mg/Kg			09/15/16 13:38	1
2-Hexanone	ND		0.0500	0.0167	mg/Kg			09/15/16 13:38	1
Isopropylbenzene	ND		0.00200	0.000410	mg/Kg			09/15/16 13:38	1
Methylene Chloride	ND		0.0100	0.000860	mg/Kg			09/15/16 13:38	1
4-Methyl-2-pentanone (MIBK)	ND		0.0500	0.00190	mg/Kg			09/15/16 13:38	1
Methyl tert-butyl ether	ND		0.00200	0.000960	mg/Kg			09/15/16 13:38	1
Naphthalene	ND		0.00500	0.00170	mg/Kg			09/15/16 13:38	1
n-Butylbenzene	ND		0.00200	0.000980	mg/Kg			09/15/16 13:38	1
N-Propylbenzene	ND		0.00200	0.000670	mg/Kg			09/15/16 13:38	1
p-Isopropyltoluene	ND		0.00200	0.000670	mg/Kg			09/15/16 13:38	1
sec-Butylbenzene	ND		0.00200	0.000670	mg/Kg			09/15/16 13:38	1
Styrene	ND		0.00200	0.00110	mg/Kg			09/15/16 13:38	1
t-Amyl alcohol	ND		0.0200	0.00930	mg/Kg			09/15/16 13:38	1
Tert-amyl methyl ether	ND		0.00200	0.000310	mg/Kg			09/15/16 13:38	1
tert-Butyl alcohol (TBA)	ND		0.0500	0.0112	mg/Kg			09/15/16 13:38	1
tert-Butylbenzene	ND		0.00200	0.000900	mg/Kg			09/15/16 13:38	1
1,1,1,2-Tetrachloroethane	ND		0.00200	0.000670	mg/Kg			09/15/16 13:38	1
1,1,2,2-Tetrachloroethane	ND		0.00200	0.00100	mg/Kg			09/15/16 13:38	1
Tetrachloroethene	ND		0.00200	0.000730	mg/Kg			09/15/16 13:38	1
Toluene	ND		0.00200	0.000740	mg/Kg			09/15/16 13:38	1
trans-1,2-Dichloroethene	ND		0.00200	0.000670	mg/Kg			09/15/16 13:38	1
trans-1,3-Dichloropropene	ND		0.00200	0.000670	mg/Kg			09/15/16 13:38	1
1,2,3-Trichlorobenzene	ND		0.00200	0.000380	mg/Kg			09/15/16 13:38	1
1,2,4-Trichlorobenzene	ND		0.00200	0.000670	mg/Kg			09/15/16 13:38	1
1,1,1-Trichloroethane	ND		0.00200	0.000920	mg/Kg			09/15/16 13:38	1
1,1,2-Trichloroethane	ND		0.00500	0.00140	mg/Kg			09/15/16 13:38	1
Trichloroethene	ND		0.00200	0.000960	mg/Kg			09/15/16 13:38	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-370343/6
Matrix: Solid
Analysis Batch: 370343

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	ND		0.00200	0.00100	mg/Kg			09/15/16 13:38	1
1,2,3-Trichloropropane	ND		0.00200	0.000550	mg/Kg			09/15/16 13:38	1
1,2,4-Trimethylbenzene	ND		0.00200	0.00100	mg/Kg			09/15/16 13:38	1
1,3,5-Trimethylbenzene	ND		0.00200	0.000750	mg/Kg			09/15/16 13:38	1
Vinyl chloride	ND		0.00200	0.00110	mg/Kg			09/15/16 13:38	1
Xylenes, Total	ND		0.00600	0.00123	mg/Kg			09/15/16 13:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*09/15/16 13:38*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*09/15/16 13:38*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*		*09/15/16 13:38*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*09/15/16 13:38*	*1*

Lab Sample ID: LCS 490-370343/3
Matrix: Solid
Analysis Batch: 370343

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.250	0.2143		mg/Kg		86	45 - 145
Benzene	0.0500	0.04723		mg/Kg		94	70 - 130
Bromobenzene	0.0500	0.04913		mg/Kg		98	67 - 130
Bromochloromethane	0.0500	0.04810		mg/Kg		96	70 - 133
Bromodichloromethane	0.0500	0.04705		mg/Kg		94	70 - 130
Bromoform	0.0500	0.05192		mg/Kg		104	59 - 137
Bromomethane	0.0500	0.05378		mg/Kg		108	32 - 150
2-Butanone (MEK)	0.250	0.2314		mg/Kg		93	50 - 149
Carbon disulfide	0.0500	0.04447		mg/Kg		89	66 - 138
Carbon tetrachloride	0.0500	0.04848		mg/Kg		97	70 - 131
Chlorobenzene	0.0500	0.05077		mg/Kg		102	70 - 130
Chlorodibromomethane	0.0500	0.05005		mg/Kg		100	70 - 130
Chloroethane	0.0500	0.04498		mg/Kg		90	37 - 150
Chloroform	0.0500	0.04543		mg/Kg		91	70 - 130
Chloromethane	0.0500	0.04588		mg/Kg		92	53 - 150
2-Chlorotoluene	0.0500	0.05340		mg/Kg		107	70 - 132
4-Chlorotoluene	0.0500	0.05153		mg/Kg		103	67 - 135
cis-1,2-Dichloroethene	0.0500	0.04787		mg/Kg		96	70 - 132
cis-1,3-Dichloropropene	0.0500	0.04974		mg/Kg		99	70 - 130
1,2-Dibromo-3-Chloropropane	0.0500	0.05497		mg/Kg		110	47 - 144
1,2-Dibromoethane (EDB)	0.0500	0.05030		mg/Kg		101	69 - 130
Dibromomethane	0.0500	0.04636		mg/Kg		93	70 - 130
1,2-Dichlorobenzene	0.0500	0.05218		mg/Kg		104	70 - 134
1,3-Dichlorobenzene	0.0500	0.05397		mg/Kg		108	69 - 137
1,4-Dichlorobenzene	0.0500	0.05390		mg/Kg		108	66 - 134
Dichlorodifluoromethane	0.0500	0.04783		mg/Kg		96	32 - 150
1,1-Dichloroethane	0.0500	0.04668		mg/Kg		93	70 - 130
1,2-Dichloroethane	0.0500	0.04744		mg/Kg		95	65 - 134
1,1-Dichloroethene	0.0500	0.04750		mg/Kg		95	70 - 131
1,2-Dichloropropane	0.0500	0.04646		mg/Kg		93	70 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-370343/3
Matrix: Solid
Analysis Batch: 370343

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3-Dichloropropane	0.0500	0.04934		mg/Kg		99	70 - 130
2,2-Dichloropropane	0.0500	0.04879		mg/Kg		98	57 - 150
1,1-Dichloropropene	0.0500	0.04599		mg/Kg		92	70 - 130
Diisopropyl ether	0.0500	0.04747		mg/Kg		95	68 - 134
Ethylbenzene	0.0500	0.04939		mg/Kg		99	70 - 130
Ethyl tert-butyl ether	0.0500	0.03976		mg/Kg		80	19 - 150
Hexachlorobutadiene	0.0500	0.05375		mg/Kg		108	64 - 137
2-Hexanone	0.250	0.2474		mg/Kg		99	47 - 148
Isopropylbenzene	0.0500	0.05073		mg/Kg		101	70 - 130
Methylene Chloride	0.0500	0.04696		mg/Kg		94	69 - 130
4-Methyl-2-pentanone (MIBK)	0.250	0.2465		mg/Kg		99	48 - 150
Methyl tert-butyl ether	0.0500	0.04485		mg/Kg		90	54 - 145
Naphthalene	0.0500	0.05275		mg/Kg		106	55 - 149
n-Butylbenzene	0.0500	0.05295		mg/Kg		106	57 - 150
N-Propylbenzene	0.0500	0.05130		mg/Kg		103	62 - 150
p-Isopropyltoluene	0.0500	0.05159		mg/Kg		103	66 - 147
sec-Butylbenzene	0.0500	0.05207		mg/Kg		104	68 - 147
Styrene	0.0500	0.05158		mg/Kg		103	70 - 131
t-Amyl alcohol	0.500	0.3851		mg/Kg		77	10 - 150
Tert-amyl methyl ether	0.0500	0.03839		mg/Kg		77	10 - 150
tert-Butyl alcohol (TBA)	0.500	0.4140		mg/Kg		83	10 - 150
tert-Butylbenzene	0.0500	0.04898		mg/Kg		98	70 - 138
1,1,1,2-Tetrachloroethane	0.0500	0.05175		mg/Kg		104	70 - 130
1,1,2,2-Tetrachloroethane	0.0500	0.04757		mg/Kg		95	61 - 134
Tetrachloroethene	0.0500	0.05125		mg/Kg		102	70 - 130
Toluene	0.0500	0.04785		mg/Kg		96	70 - 130
trans-1,2-Dichloroethene	0.0500	0.04654		mg/Kg		93	70 - 130
trans-1,3-Dichloropropene	0.0500	0.05000		mg/Kg		100	67 - 130
1,2,3-Trichlorobenzene	0.0500	0.05784		mg/Kg		116	57 - 146
1,2,4-Trichlorobenzene	0.0500	0.05502		mg/Kg		110	47 - 150
1,1,1-Trichloroethane	0.0500	0.04760		mg/Kg		95	70 - 130
1,1,2-Trichloroethane	0.0500	0.04603		mg/Kg		92	70 - 130
Trichloroethene	0.0500	0.04825		mg/Kg		97	70 - 130
Trichlorofluoromethane	0.0500	0.04777		mg/Kg		96	53 - 150
1,2,3-Trichloropropane	0.0500	0.04954		mg/Kg		99	60 - 139
1,2,4-Trimethylbenzene	0.0500	0.05104		mg/Kg		102	70 - 140
1,3,5-Trimethylbenzene	0.0500	0.05113		mg/Kg		102	69 - 141
Vinyl chloride	0.0500	0.04628		mg/Kg		93	63 - 150
Xylenes, Total	0.100	0.09967		mg/Kg		100	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
Dibromofluoromethane (Surr)	*97*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-370343/4
Matrix: Solid
Analysis Batch: 370343

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	0.250	0.2243		mg/Kg		90	45 - 145	5	38
Benzene	0.0500	0.04674		mg/Kg		93	70 - 130	1	37
Bromobenzene	0.0500	0.04768		mg/Kg		95	67 - 130	3	40
Bromochloromethane	0.0500	0.04735		mg/Kg		95	70 - 133	2	15
Bromodichloromethane	0.0500	0.04692		mg/Kg		94	70 - 130	0	20
Bromoform	0.0500	0.05131		mg/Kg		103	59 - 137	1	17
Bromomethane	0.0500	0.05189		mg/Kg		104	32 - 150	4	45
2-Butanone (MEK)	0.250	0.2454		mg/Kg		98	50 - 149	6	39
Carbon disulfide	0.0500	0.04201		mg/Kg		84	66 - 138	6	41
Carbon tetrachloride	0.0500	0.04815		mg/Kg		96	70 - 131	1	41
Chlorobenzene	0.0500	0.04824		mg/Kg		96	70 - 130	5	40
Chlorodibromomethane	0.0500	0.04956		mg/Kg		99	70 - 130	1	14
Chloroethane	0.0500	0.04404		mg/Kg		88	37 - 150	2	50
Chloroform	0.0500	0.04474		mg/Kg		89	70 - 130	2	15
Chloromethane	0.0500	0.04373		mg/Kg		87	53 - 150	5	47
2-Chlorotoluene	0.0500	0.04917		mg/Kg		98	70 - 132	8	41
4-Chlorotoluene	0.0500	0.04786		mg/Kg		96	67 - 135	7	41
cis-1,2-Dichloroethene	0.0500	0.04652		mg/Kg		93	70 - 132	3	18
cis-1,3-Dichloropropene	0.0500	0.04851		mg/Kg		97	70 - 130	2	42
1,2-Dibromo-3-Chloropropane	0.0500	0.05564		mg/Kg		111	47 - 144	1	38
1,2-Dibromoethane (EDB)	0.0500	0.04876		mg/Kg		98	69 - 130	3	17
Dibromomethane	0.0500	0.04651		mg/Kg		93	70 - 130	0	19
1,2-Dichlorobenzene	0.0500	0.05199		mg/Kg		104	70 - 134	0	40
1,3-Dichlorobenzene	0.0500	0.04991		mg/Kg		100	69 - 137	8	41
1,4-Dichlorobenzene	0.0500	0.04997		mg/Kg		100	66 - 134	8	41
Dichlorodifluoromethane	0.0500	0.04661		mg/Kg		93	32 - 150	3	50
1,1-Dichloroethane	0.0500	0.04585		mg/Kg		92	70 - 130	2	42
1,2-Dichloroethane	0.0500	0.04641		mg/Kg		93	65 - 134	2	16
1,1-Dichloroethene	0.0500	0.04714		mg/Kg		94	70 - 131	1	43
1,2-Dichloropropane	0.0500	0.04586		mg/Kg		92	70 - 130	1	15
1,3-Dichloropropane	0.0500	0.04793		mg/Kg		96	70 - 130	3	15
2,2-Dichloropropane	0.0500	0.04824		mg/Kg		96	57 - 150	1	42
1,1-Dichloropropene	0.0500	0.04595		mg/Kg		92	70 - 130	0	41
Diisopropyl ether	0.0500	0.04633		mg/Kg		93	68 - 134	2	36
Ethylbenzene	0.0500	0.04725		mg/Kg		94	70 - 130	4	38
Ethyl tert-butyl ether	0.0500	0.04018		mg/Kg		80	19 - 150	1	37
Hexachlorobutadiene	0.0500	0.05005		mg/Kg		100	64 - 137	7	44
2-Hexanone	0.250	0.2586		mg/Kg		103	47 - 148	4	38
Isopropylbenzene	0.0500	0.04817		mg/Kg		96	70 - 130	5	39
Methylene Chloride	0.0500	0.04652		mg/Kg		93	69 - 130	1	19
4-Methyl-2-pentanone (MIBK)	0.250	0.2527		mg/Kg		101	48 - 150	2	41
Methyl tert-butyl ether	0.0500	0.04481		mg/Kg		90	54 - 145	0	36
Naphthalene	0.0500	0.05303		mg/Kg		106	55 - 149	1	37
n-Butylbenzene	0.0500	0.04790		mg/Kg		96	57 - 150	10	39
N-Propylbenzene	0.0500	0.04809		mg/Kg		96	62 - 150	6	38
p-Isopropyltoluene	0.0500	0.04847		mg/Kg		97	66 - 147	6	38
sec-Butylbenzene	0.0500	0.04964		mg/Kg		99	68 - 147	5	38
Styrene	0.0500	0.04908		mg/Kg		98	70 - 131	5	40

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-370343/4
Matrix: Solid
Analysis Batch: 370343

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
t-Amyl alcohol	0.500	0.4131		mg/Kg		83	10 - 150	7	50
Tert-amyl methyl ether	0.0500	0.03888		mg/Kg		78	10 - 150	1	50
tert-Butyl alcohol (TBA)	0.500	0.4528		mg/Kg		91	10 - 150	9	50
tert-Butylbenzene	0.0500	0.04543		mg/Kg		91	70 - 138	8	38
1,1,1,2-Tetrachloroethane	0.0500	0.04887		mg/Kg		98	70 - 130	6	41
1,1,2,2-Tetrachloroethane	0.0500	0.04741		mg/Kg		95	61 - 134	0	16
Tetrachloroethene	0.0500	0.04874		mg/Kg		97	70 - 130	5	41
Toluene	0.0500	0.04610		mg/Kg		92	70 - 130	4	40
trans-1,2-Dichloroethene	0.0500	0.04570		mg/Kg		91	70 - 130	2	41
trans-1,3-Dichloropropene	0.0500	0.04839		mg/Kg		97	67 - 130	3	41
1,2,3-Trichlorobenzene	0.0500	0.05630		mg/Kg		113	57 - 146	3	42
1,2,4-Trichlorobenzene	0.0500	0.05275		mg/Kg		105	47 - 150	4	43
1,1,1-Trichloroethane	0.0500	0.04717		mg/Kg		94	70 - 130	1	41
1,1,2-Trichloroethane	0.0500	0.04475		mg/Kg		89	70 - 130	3	17
Trichloroethene	0.0500	0.04728		mg/Kg		95	70 - 130	2	41
Trichlorofluoromethane	0.0500	0.04863		mg/Kg		97	53 - 150	2	49
1,2,3-Trichloropropane	0.0500	0.05033		mg/Kg		101	60 - 139	2	16
1,2,4-Trimethylbenzene	0.0500	0.04895		mg/Kg		98	70 - 140	4	38
1,3,5-Trimethylbenzene	0.0500	0.05042		mg/Kg		101	69 - 141	1	38
Vinyl chloride	0.0500	0.04592		mg/Kg		92	63 - 150	1	46
Xylenes, Total	0.100	0.09480		mg/Kg		95	70 - 130	5	38

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
Dibromofluoromethane (Surr)	*98*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-367779/1-A
Matrix: Solid
Analysis Batch: 368004

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 367779

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0670	0.0320	mg/Kg		09/03/16 18:23	09/06/16 12:33	1
Acenaphthylene	ND		0.0670	0.0290	mg/Kg		09/03/16 18:23	09/06/16 12:33	1
Anthracene	ND		0.0670	0.0290	mg/Kg		09/03/16 18:23	09/06/16 12:33	1
Benzo[a]anthracene	ND		0.0670	0.0300	mg/Kg		09/03/16 18:23	09/06/16 12:33	1
Benzo[a]pyrene	ND		0.0670	0.0270	mg/Kg		09/03/16 18:23	09/06/16 12:33	1
Benzo[b]fluoranthene	ND		0.0670	0.0280	mg/Kg		09/03/16 18:23	09/06/16 12:33	1
Benzo[g,h,i]perylene	ND		0.0670	0.0330	mg/Kg		09/03/16 18:23	09/06/16 12:33	1
Benzo[k]fluoranthene	ND		0.0670	0.0270	mg/Kg		09/03/16 18:23	09/06/16 12:33	1
Chrysene	ND		0.0670	0.0370	mg/Kg		09/03/16 18:23	09/06/16 12:33	1
Dibenz(a,h)anthracene	ND		0.0670	0.0320	mg/Kg		09/03/16 18:23	09/06/16 12:33	1
Fluoranthene	ND		0.0670	0.0340	mg/Kg		09/03/16 18:23	09/06/16 12:33	1
Fluorene	ND		0.0670	0.0290	mg/Kg		09/03/16 18:23	09/06/16 12:33	1
Indeno[1,2,3-cd]pyrene	ND		0.0670	0.0290	mg/Kg		09/03/16 18:23	09/06/16 12:33	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-367779/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 368004 — **Prep Batch: 367779**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		0.0670	0.0280	mg/Kg		09/03/16 18:23	09/06/16 12:33	1
2-Methylnaphthalene	ND		0.0670	0.0260	mg/Kg		09/03/16 18:23	09/06/16 12:33	1
Naphthalene	ND		0.0670	0.0290	mg/Kg		09/03/16 18:23	09/06/16 12:33	1
Phenanthrene	ND		0.0670	0.0340	mg/Kg		09/03/16 18:23	09/06/16 12:33	1
Pyrene	ND		0.0670	0.0340	mg/Kg		09/03/16 18:23	09/06/16 12:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*66*		*29 - 120*	*09/03/16 18:23*	*09/06/16 12:33*	*1*
Nitrobenzene-d5 (Surr)	*69*		*27 - 120*	*09/03/16 18:23*	*09/06/16 12:33*	*1*
Terphenyl-d14 (Surr)	*70*		*13 - 120*	*09/03/16 18:23*	*09/06/16 12:33*	*1*

Lab Sample ID: LCS 490-367779/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 368004 — **Prep Batch: 367779**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	1.67	0.9788		mg/Kg		59	36 - 120
Acenaphthylene	1.67	0.9648		mg/Kg		58	38 - 120
Anthracene	1.67	0.9616		mg/Kg		58	46 - 124
Benzo[a]anthracene	1.67	0.9523		mg/Kg		57	45 - 120
Benzo[a]pyrene	1.67	0.9265		mg/Kg		56	45 - 120
Benzo[b]fluoranthene	1.67	0.8688		mg/Kg		52	42 - 120
Benzo[g,h,i]perylene	1.67	1.042		mg/Kg		63	38 - 120
Benzo[k]fluoranthene	1.67	1.057		mg/Kg		63	42 - 120
Chrysene	1.67	0.9710		mg/Kg		58	43 - 120
Dibenz(a,h)anthracene	1.67	0.9982		mg/Kg		60	32 - 128
Fluoranthene	1.67	0.9644		mg/Kg		58	46 - 120
Fluorene	1.67	0.9415		mg/Kg		56	42 - 120
Indeno[1,2,3-cd]pyrene	1.67	0.9741		mg/Kg		58	41 - 121
1-Methylnaphthalene	1.67	0.9296		mg/Kg		56	32 - 120
2-Methylnaphthalene	1.67	0.9413		mg/Kg		56	28 - 120
Naphthalene	1.67	0.9692		mg/Kg		58	32 - 120
Phenanthrene	1.67	0.9589		mg/Kg		58	45 - 120
Pyrene	1.67	0.9635		mg/Kg		58	43 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*55*		*29 - 120*
Nitrobenzene-d5 (Surr)	*57*		*27 - 120*
Terphenyl-d14 (Surr)	*57*		*13 - 120*

Lab Sample ID: 490-111143-31 MS — **Client Sample ID: DUP-3**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 368004 — **Prep Batch: 367779**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	ND		1.65	0.8797		mg/Kg		53	19 - 120
Acenaphthylene	ND		1.65	0.8665		mg/Kg		53	25 - 120
Anthracene	ND		1.65	0.8769		mg/Kg		53	28 - 125

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-111143-31 MS
Matrix: Solid
Analysis Batch: 368004

Client Sample ID: DUP-3
Prep Type: Total/NA
Prep Batch: 367779

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene	ND		1.65	0.8911		mg/Kg		54	23 - 120
Benzo[a]pyrene	ND		1.65	0.8448		mg/Kg		51	15 - 128
Benzo[b]fluoranthene	ND		1.65	0.9018		mg/Kg		55	12 - 133
Benzo[g,h,i]perylene	ND		1.65	0.9280		mg/Kg		56	22 - 120
Benzo[k]fluoranthene	ND		1.65	0.8650		mg/Kg		53	28 - 120
Chrysene	ND		1.65	0.9056		mg/Kg		55	20 - 120
Dibenz(a,h)anthracene	ND		1.65	0.8743		mg/Kg		53	12 - 128
Fluoranthene	ND		1.65	0.8695		mg/Kg		53	10 - 143
Fluorene	ND		1.65	0.8484		mg/Kg		52	20 - 120
Indeno[1,2,3-cd]pyrene	ND		1.65	0.8657		mg/Kg		53	22 - 121
1-Methylnaphthalene	ND		1.65	0.8332		mg/Kg		51	10 - 120
2-Methylnaphthalene	ND		1.65	0.8337		mg/Kg		51	13 - 120
Naphthalene	ND		1.65	0.8556		mg/Kg		52	10 - 120
Phenanthrene	ND		1.65	0.8800		mg/Kg		53	21 - 122
Pyrene	ND		1.65	0.8917		mg/Kg		54	20 - 123

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*52*		*29 - 120*
Nitrobenzene-d5 (Surr)	*52*		*27 - 120*
Terphenyl-d14 (Surr)	*54*		*13 - 120*

Lab Sample ID: 490-111143-31 MSD
Matrix: Solid
Analysis Batch: 368004

Client Sample ID: DUP-3
Prep Type: Total/NA
Prep Batch: 367779

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	ND		1.63	0.8567		mg/Kg		53	19 - 120	3	50
Acenaphthylene	ND		1.63	0.8382		mg/Kg		52	25 - 120	3	50
Anthracene	ND		1.63	0.8356		mg/Kg		51	28 - 125	5	49
Benzo[a]anthracene	ND		1.63	0.8278		mg/Kg		51	23 - 120	7	50
Benzo[a]pyrene	ND		1.63	0.8087		mg/Kg		50	15 - 128	4	50
Benzo[b]fluoranthene	ND		1.63	0.8027		mg/Kg		49	12 - 133	12	50
Benzo[g,h,i]perylene	ND		1.63	0.9087		mg/Kg		56	22 - 120	2	50
Benzo[k]fluoranthene	ND		1.63	0.8221		mg/Kg		51	28 - 120	5	45
Chrysene	ND		1.63	0.8699		mg/Kg		53	20 - 120	4	49
Dibenz(a,h)anthracene	ND		1.63	0.8468		mg/Kg		52	12 - 128	3	50
Fluoranthene	ND		1.63	0.8446		mg/Kg		52	10 - 143	3	50
Fluorene	ND		1.63	0.8051		mg/Kg		50	20 - 120	5	50
Indeno[1,2,3-cd]pyrene	ND		1.63	0.8374		mg/Kg		51	22 - 121	3	50
1-Methylnaphthalene	ND		1.63	0.8081		mg/Kg		50	10 - 120	3	50
2-Methylnaphthalene	ND		1.63	0.8047		mg/Kg		49	13 - 120	4	50
Naphthalene	ND		1.63	0.8353		mg/Kg		51	10 - 120	2	50
Phenanthrene	ND		1.63	0.8413		mg/Kg		52	21 - 122	4	50
Pyrene	ND		1.63	0.8475		mg/Kg		52	20 - 123	5	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*49*		*29 - 120*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-111143-31 MSD
Matrix: Solid
Analysis Batch: 368004

Client Sample ID: DUP-3
Prep Type: Total/NA
Prep Batch: 367779

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*51*		*27 - 120*
Terphenyl-d14 (Surr)	*51*		*13 - 120*

Lab Sample ID: MB 490-368071/1-A
Matrix: Water
Analysis Batch: 368363

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 368071

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		2.00	0.320	ug/L		09/06/16 14:40	09/07/16 16:11	1
Acenaphthylene	ND		2.00	0.350	ug/L		09/06/16 14:40	09/07/16 16:11	1
Anthracene	ND		2.00	0.380	ug/L		09/06/16 14:40	09/07/16 16:11	1
Benzo[a]anthracene	ND		2.00	0.320	ug/L		09/06/16 14:40	09/07/16 16:11	1
Benzo[a]pyrene	ND		2.00	0.380	ug/L		09/06/16 14:40	09/07/16 16:11	1
Benzo[b]fluoranthene	ND		2.00	0.360	ug/L		09/06/16 14:40	09/07/16 16:11	1
Benzo[g,h,i]perylene	ND		2.00	0.620	ug/L		09/06/16 14:40	09/07/16 16:11	1
Benzo[k]fluoranthene	ND		2.00	0.370	ug/L		09/06/16 14:40	09/07/16 16:11	1
Chrysene	ND		2.00	0.330	ug/L		09/06/16 14:40	09/07/16 16:11	1
Dibenz(a,h)anthracene	ND		2.00	0.450	ug/L		09/06/16 14:40	09/07/16 16:11	1
Fluoranthene	ND		2.00	0.320	ug/L		09/06/16 14:40	09/07/16 16:11	1
Fluorene	ND		2.00	0.320	ug/L		09/06/16 14:40	09/07/16 16:11	1
Indeno[1,2,3-cd]pyrene	ND		2.00	0.410	ug/L		09/06/16 14:40	09/07/16 16:11	1
1-Methylnaphthalene	ND		2.00	0.360	ug/L		09/06/16 14:40	09/07/16 16:11	1
2-Methylnaphthalene	ND		2.00	0.400	ug/L		09/06/16 14:40	09/07/16 16:11	1
Naphthalene	ND		2.00	0.370	ug/L		09/06/16 14:40	09/07/16 16:11	1
Phenanthrene	ND		2.00	0.420	ug/L		09/06/16 14:40	09/07/16 16:11	1
Pyrene	ND		2.00	0.350	ug/L		09/06/16 14:40	09/07/16 16:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*89*		*29 - 120*	*09/06/16 14:40*	*09/07/16 16:11*	*1*
Nitrobenzene-d5 (Surr)	*89*		*27 - 120*	*09/06/16 14:40*	*09/07/16 16:11*	*1*
Terphenyl-d14 (Surr)	*105*		*13 - 120*	*09/06/16 14:40*	*09/07/16 16:11*	*1*

Lab Sample ID: LCS 490-368071/2-A
Matrix: Water
Analysis Batch: 368363

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 368071

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	40.0	38.03		ug/L		95	36 - 129
Acenaphthylene	40.0	38.51		ug/L		96	36 - 120
Anthracene	40.0	37.23		ug/L		93	42 - 130
Benzo[a]anthracene	40.0	40.16		ug/L		100	41 - 131
Benzo[a]pyrene	40.0	38.58		ug/L		96	45 - 131
Benzo[b]fluoranthene	40.0	39.70		ug/L		99	43 - 132
Benzo[g,h,i]perylene	40.0	42.89		ug/L		107	38 - 138
Benzo[k]fluoranthene	40.0	41.04		ug/L		103	44 - 129
Chrysene	40.0	39.93		ug/L		100	39 - 130
Dibenz(a,h)anthracene	40.0	40.70		ug/L		102	43 - 140
Fluoranthene	40.0	38.91		ug/L		97	31 - 132

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-368071/2-A
Matrix: Water
Analysis Batch: 368363

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 368071

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluorene	40.0	36.24		ug/L		91	37 - 130
Indeno[1,2,3-cd]pyrene	40.0	40.55		ug/L		101	40 - 136
1-Methylnaphthalene	40.0	33.79		ug/L		84	36 - 131
2-Methylnaphthalene	40.0	34.45		ug/L		86	31 - 120
Naphthalene	40.0	34.76		ug/L		87	32 - 120
Phenanthrene	40.0	37.34		ug/L		93	39 - 126
Pyrene	40.0	39.31		ug/L		98	37 - 129

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*90*		*29 - 120*
Nitrobenzene-d5 (Surr)	*86*		*27 - 120*
Terphenyl-d14 (Surr)	*89*		*13 - 120*

Lab Sample ID: MB 490-368562/1-A
Matrix: Solid
Analysis Batch: 368877

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 368562

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0670	0.0320	mg/Kg		09/08/16 10:22	09/09/16 13:42	1
Acenaphthylene	ND		0.0670	0.0290	mg/Kg		09/08/16 10:22	09/09/16 13:42	1
Anthracene	ND		0.0670	0.0290	mg/Kg		09/08/16 10:22	09/09/16 13:42	1
Benzo[a]anthracene	ND		0.0670	0.0300	mg/Kg		09/08/16 10:22	09/09/16 13:42	1
Benzo[a]pyrene	ND		0.0670	0.0270	mg/Kg		09/08/16 10:22	09/09/16 13:42	1
Benzo[b]fluoranthene	ND		0.0670	0.0280	mg/Kg		09/08/16 10:22	09/09/16 13:42	1
Benzo[g,h,i]perylene	ND		0.0670	0.0330	mg/Kg		09/08/16 10:22	09/09/16 13:42	1
Benzo[k]fluoranthene	ND		0.0670	0.0270	mg/Kg		09/08/16 10:22	09/09/16 13:42	1
Chrysene	ND		0.0670	0.0370	mg/Kg		09/08/16 10:22	09/09/16 13:42	1
Dibenz(a,h)anthracene	ND		0.0670	0.0320	mg/Kg		09/08/16 10:22	09/09/16 13:42	1
Fluoranthene	ND		0.0670	0.0340	mg/Kg		09/08/16 10:22	09/09/16 13:42	1
Fluorene	ND		0.0670	0.0290	mg/Kg		09/08/16 10:22	09/09/16 13:42	1
Indeno[1,2,3-cd]pyrene	ND		0.0670	0.0290	mg/Kg		09/08/16 10:22	09/09/16 13:42	1
1-Methylnaphthalene	ND		0.0670	0.0280	mg/Kg		09/08/16 10:22	09/09/16 13:42	1
2-Methylnaphthalene	ND		0.0670	0.0260	mg/Kg		09/08/16 10:22	09/09/16 13:42	1
Naphthalene	ND		0.0670	0.0290	mg/Kg		09/08/16 10:22	09/09/16 13:42	1
Phenanthrene	ND		0.0670	0.0340	mg/Kg		09/08/16 10:22	09/09/16 13:42	1
Pyrene	ND		0.0670	0.0340	mg/Kg		09/08/16 10:22	09/09/16 13:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*68*		*29 - 120*	*09/08/16 10:22*	*09/09/16 13:42*	*1*
Nitrobenzene-d5 (Surr)	*68*		*27 - 120*	*09/08/16 10:22*	*09/09/16 13:42*	*1*
Terphenyl-d14 (Surr)	*83*		*13 - 120*	*09/08/16 10:22*	*09/09/16 13:42*	*1*

Lab Sample ID: LCS 490-368562/2-A
Matrix: Solid
Analysis Batch: 368877

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 368562

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	1.67	1.282		mg/Kg		77	36 - 120

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-368562/2-A
Matrix: Solid
Analysis Batch: 368877

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 368562

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthylene	1.67	1.321		mg/Kg		79	38 - 120
Anthracene	1.67	1.355		mg/Kg		81	46 - 124
Benzo[a]anthracene	1.67	1.382		mg/Kg		83	45 - 120
Benzo[a]pyrene	1.67	1.276		mg/Kg		77	45 - 120
Benzo[b]fluoranthene	1.67	1.303		mg/Kg		78	42 - 120
Benzo[g,h,i]perylene	1.67	1.370		mg/Kg		82	38 - 120
Benzo[k]fluoranthene	1.67	1.476		mg/Kg		89	42 - 120
Chrysene	1.67	1.341		mg/Kg		80	43 - 120
Dibenz(a,h)anthracene	1.67	1.257		mg/Kg		75	32 - 128
Fluoranthene	1.67	1.347		mg/Kg		81	46 - 120
Fluorene	1.67	1.259		mg/Kg		76	42 - 120
Indeno[1,2,3-cd]pyrene	1.67	1.314		mg/Kg		79	41 - 121
1-Methylnaphthalene	1.67	1.195		mg/Kg		72	32 - 120
2-Methylnaphthalene	1.67	1.198		mg/Kg		72	28 - 120
Naphthalene	1.67	1.204		mg/Kg		72	32 - 120
Phenanthrene	1.67	1.322		mg/Kg		79	45 - 120
Pyrene	1.67	1.384		mg/Kg		83	43 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*66*		*29 - 120*
Nitrobenzene-d5 (Surr)	*69*		*27 - 120*
Terphenyl-d14 (Surr)	*75*		*13 - 120*

Lab Sample ID: 490-111143-1 MS
Matrix: Solid
Analysis Batch: 368877

Client Sample ID: SB-1
Prep Type: Total/NA
Prep Batch: 368562

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	ND		1.65	1.346		mg/Kg		81	19 - 120
Acenaphthylene	ND		1.65	1.394		mg/Kg		84	25 - 120
Anthracene	ND		1.65	1.422		mg/Kg		86	28 - 125
Benzo[a]anthracene	ND		1.65	1.430		mg/Kg		86	23 - 120
Benzo[a]pyrene	ND		1.65	1.319		mg/Kg		80	15 - 128
Benzo[b]fluoranthene	ND		1.65	1.354		mg/Kg		82	12 - 133
Benzo[g,h,i]perylene	ND		1.65	1.425		mg/Kg		86	22 - 120
Benzo[k]fluoranthene	ND		1.65	1.492		mg/Kg		90	28 - 120
Chrysene	ND		1.65	1.376		mg/Kg		83	20 - 120
Dibenz(a,h)anthracene	ND		1.65	1.312		mg/Kg		79	12 - 128
Fluoranthene	ND		1.65	1.419		mg/Kg		86	10 - 143
Fluorene	ND		1.65	1.326		mg/Kg		80	20 - 120
Indeno[1,2,3-cd]pyrene	ND		1.65	1.349		mg/Kg		82	22 - 121
1-Methylnaphthalene	ND		1.65	1.240		mg/Kg		75	10 - 120
2-Methylnaphthalene	ND		1.65	1.227		mg/Kg		74	13 - 120
Naphthalene	ND		1.65	1.230		mg/Kg		74	10 - 120
Phenanthrene	ND		1.65	1.370		mg/Kg		83	21 - 122
Pyrene	ND		1.65	1.426		mg/Kg		86	20 - 123

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-111143-1 MS
Matrix: Solid
Analysis Batch: 368877

Client Sample ID: SB-1
Prep Type: Total/NA
Prep Batch: 368562

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*72*		*29 - 120*
Nitrobenzene-d5 (Surr)	*76*		*27 - 120*
Terphenyl-d14 (Surr)	*79*		*13 - 120*

Lab Sample ID: 490-111143-1 MSD
Matrix: Solid
Analysis Batch: 368877

Client Sample ID: SB-1
Prep Type: Total/NA
Prep Batch: 368562

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	ND		1.63	1.132		mg/Kg		69	19 - 120	17	50
Acenaphthylene	ND		1.63	1.198		mg/Kg		74	25 - 120	15	50
Anthracene	ND		1.63	1.194		mg/Kg		73	28 - 125	17	49
Benzo[a]anthracene	ND		1.63	1.224		mg/Kg		75	23 - 120	16	50
Benzo[a]pyrene	ND		1.63	1.097		mg/Kg		67	15 - 128	18	50
Benzo[b]fluoranthene	ND		1.63	1.143		mg/Kg		70	12 - 133	17	50
Benzo[g,h,i]perylene	ND		1.63	1.201		mg/Kg		74	22 - 120	17	50
Benzo[k]fluoranthene	ND		1.63	1.234		mg/Kg		76	28 - 120	19	45
Chrysene	ND		1.63	1.179		mg/Kg		72	20 - 120	15	49
Dibenz(a,h)anthracene	ND		1.63	1.118		mg/Kg		69	12 - 128	16	50
Fluoranthene	ND		1.63	1.191		mg/Kg		73	10 - 143	17	50
Fluorene	ND		1.63	1.139		mg/Kg		70	20 - 120	15	50
Indeno[1,2,3-cd]pyrene	ND		1.63	1.162		mg/Kg		71	22 - 121	15	50
1-Methylnaphthalene	ND		1.63	1.066		mg/Kg		65	10 - 120	15	50
2-Methylnaphthalene	ND		1.63	1.088		mg/Kg		67	13 - 120	12	50
Naphthalene	ND		1.63	1.058		mg/Kg		65	10 - 120	15	50
Phenanthrene	ND		1.63	1.167		mg/Kg		72	21 - 122	16	50
Pyrene	ND		1.63	1.230		mg/Kg		76	20 - 123	15	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*63*		*29 - 120*
Nitrobenzene-d5 (Surr)	*66*		*27 - 120*
Terphenyl-d14 (Surr)	*70*		*13 - 120*

Lab Sample ID: MB 490-369043/1-A
Matrix: Solid
Analysis Batch: 369149

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 369043

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0670	0.0320	mg/Kg		09/09/16 16:02	09/10/16 14:59	1
Acenaphthylene	ND		0.0670	0.0290	mg/Kg		09/09/16 16:02	09/10/16 14:59	1
Anthracene	ND		0.0670	0.0290	mg/Kg		09/09/16 16:02	09/10/16 14:59	1
Benzo[a]anthracene	ND		0.0670	0.0300	mg/Kg		09/09/16 16:02	09/10/16 14:59	1
Benzo[a]pyrene	ND		0.0670	0.0270	mg/Kg		09/09/16 16:02	09/10/16 14:59	1
Benzo[b]fluoranthene	ND		0.0670	0.0280	mg/Kg		09/09/16 16:02	09/10/16 14:59	1
Benzo[g,h,i]perylene	ND		0.0670	0.0330	mg/Kg		09/09/16 16:02	09/10/16 14:59	1
Benzo[k]fluoranthene	ND		0.0670	0.0270	mg/Kg		09/09/16 16:02	09/10/16 14:59	1
Chrysene	ND		0.0670	0.0370	mg/Kg		09/09/16 16:02	09/10/16 14:59	1
Dibenz(a,h)anthracene	ND		0.0670	0.0320	mg/Kg		09/09/16 16:02	09/10/16 14:59	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-369043/1-A
Matrix: Solid
Analysis Batch: 369149

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 369043

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	ND		0.0670	0.0340	mg/Kg		09/09/16 16:02	09/10/16 14:59	1
Fluorene	ND		0.0670	0.0290	mg/Kg		09/09/16 16:02	09/10/16 14:59	1
Indeno[1,2,3-cd]pyrene	ND		0.0670	0.0290	mg/Kg		09/09/16 16:02	09/10/16 14:59	1
1-Methylnaphthalene	ND		0.0670	0.0280	mg/Kg		09/09/16 16:02	09/10/16 14:59	1
2-Methylnaphthalene	ND		0.0670	0.0260	mg/Kg		09/09/16 16:02	09/10/16 14:59	1
Naphthalene	ND		0.0670	0.0290	mg/Kg		09/09/16 16:02	09/10/16 14:59	1
Phenanthrene	ND		0.0670	0.0340	mg/Kg		09/09/16 16:02	09/10/16 14:59	1
Pyrene	ND		0.0670	0.0340	mg/Kg		09/09/16 16:02	09/10/16 14:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*80*		*29 - 120*	*09/09/16 16:02*	*09/10/16 14:59*	*1*
Nitrobenzene-d5 (Surr)	*87*		*27 - 120*	*09/09/16 16:02*	*09/10/16 14:59*	*1*
Terphenyl-d14 (Surr)	*84*		*13 - 120*	*09/09/16 16:02*	*09/10/16 14:59*	*1*

Lab Sample ID: LCS 490-369043/2-A
Matrix: Solid
Analysis Batch: 369149

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 369043

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	1.67	1.221		mg/Kg		73	36 - 120
Acenaphthylene	1.67	1.254		mg/Kg		75	38 - 120
Anthracene	1.67	1.246		mg/Kg		75	46 - 124
Benzo[a]anthracene	1.67	1.292		mg/Kg		78	45 - 120
Benzo[a]pyrene	1.67	1.126		mg/Kg		68	45 - 120
Benzo[b]fluoranthene	1.67	1.212		mg/Kg		73	42 - 120
Benzo[g,h,i]perylene	1.67	1.281		mg/Kg		77	38 - 120
Benzo[k]fluoranthene	1.67	1.180		mg/Kg		71	42 - 120
Chrysene	1.67	1.219		mg/Kg		73	43 - 120
Dibenz(a,h)anthracene	1.67	1.163		mg/Kg		70	32 - 128
Fluoranthene	1.67	1.226		mg/Kg		74	46 - 120
Fluorene	1.67	1.190		mg/Kg		71	42 - 120
Indeno[1,2,3-cd]pyrene	1.67	1.197		mg/Kg		72	41 - 121
1-Methylnaphthalene	1.67	1.120		mg/Kg		67	32 - 120
2-Methylnaphthalene	1.67	1.094		mg/Kg		66	28 - 120
Naphthalene	1.67	1.107		mg/Kg		66	32 - 120
Phenanthrene	1.67	1.216		mg/Kg		73	45 - 120
Pyrene	1.67	1.212		mg/Kg		73	43 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*68*		*29 - 120*
Nitrobenzene-d5 (Surr)	*68*		*27 - 120*
Terphenyl-d14 (Surr)	*70*		*13 - 120*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-111311-G-1-B MS
Matrix: Solid
Analysis Batch: 369149

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 369043

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	ND		1.66	1.148		mg/Kg		69	19 - 120
Acenaphthylene	ND		1.66	1.207		mg/Kg		73	25 - 120
Anthracene	ND		1.66	1.161		mg/Kg		70	28 - 125
Benzo[a]anthracene	ND		1.66	1.168		mg/Kg		70	23 - 120
Benzo[a]pyrene	ND		1.66	1.086		mg/Kg		66	15 - 128
Benzo[b]fluoranthene	ND		1.66	1.284		mg/Kg		78	12 - 133
Benzo[g,h,i]perylene	ND		1.66	1.217		mg/Kg		73	22 - 120
Benzo[k]fluoranthene	ND		1.66	1.116		mg/Kg		67	28 - 120
Chrysene	ND		1.66	0.8573		mg/Kg		52	20 - 120
Dibenz(a,h)anthracene	ND		1.66	1.111		mg/Kg		67	12 - 128
Fluoranthene	ND		1.66	1.166		mg/Kg		70	10 - 143
Fluorene	ND		1.66	1.126		mg/Kg		68	20 - 120
Indeno[1,2,3-cd]pyrene	ND		1.66	1.143		mg/Kg		69	22 - 121
1-Methylnaphthalene	ND		1.66	0.6636		mg/Kg		40	10 - 120
2-Methylnaphthalene	ND		1.66	0.6710		mg/Kg		40	13 - 120
Naphthalene	ND		1.66	0.6198		mg/Kg		37	10 - 120
Phenanthrene	ND		1.66	1.134		mg/Kg		68	21 - 122
Pyrene	ND		1.66	0.9892		mg/Kg		60	20 - 123

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*63*		*29 - 120*
Nitrobenzene-d5 (Surr)	*43*		*27 - 120*
Terphenyl-d14 (Surr)	*58*		*13 - 120*

Lab Sample ID: 490-111311-G-1-C MSD
Matrix: Solid
Analysis Batch: 369149

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 369043

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	ND		1.65	1.338		mg/Kg		81	19 - 120	15	50
Acenaphthylene	ND		1.65	1.406		mg/Kg		85	25 - 120	15	50
Anthracene	ND		1.65	1.359		mg/Kg		82	28 - 125	16	49
Benzo[a]anthracene	ND		1.65	1.308		mg/Kg		79	23 - 120	11	50
Benzo[a]pyrene	ND		1.65	1.248		mg/Kg		76	15 - 128	14	50
Benzo[b]fluoranthene	ND		1.65	1.353		mg/Kg		82	12 - 133	5	50
Benzo[g,h,i]perylene	ND		1.65	1.405		mg/Kg		85	22 - 120	14	50
Benzo[k]fluoranthene	ND		1.65	1.320		mg/Kg		80	28 - 120	17	45
Chrysene	ND		1.65	1.259		mg/Kg		76	20 - 120	38	49
Dibenz(a,h)anthracene	ND		1.65	1.306		mg/Kg		79	12 - 128	16	50
Fluoranthene	ND		1.65	1.357		mg/Kg		82	10 - 143	15	50
Fluorene	ND		1.65	1.316		mg/Kg		80	20 - 120	16	50
Indeno[1,2,3-cd]pyrene	ND		1.65	1.338		mg/Kg		81	22 - 121	16	50
1-Methylnaphthalene	ND		1.65	0.8440		mg/Kg		51	10 - 120	24	50
2-Methylnaphthalene	ND		1.65	0.8377		mg/Kg		51	13 - 120	22	50
Naphthalene	ND		1.65	0.8061		mg/Kg		49	10 - 120	26	50
Phenanthrene	ND		1.65	1.280		mg/Kg		78	21 - 122	12	50
Pyrene	ND		1.65	1.162		mg/Kg		70	20 - 123	16	50

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-111311-G-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 369149 — **Prep Batch: 369043**

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2-Fluorobiphenyl (Surr)	75		29 - 120
Nitrobenzene-d5 (Surr)	56		27 - 120
Terphenyl-d14 (Surr)	67		13 - 120

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Lab Sample ID: 490-111143-20 MS — **Client Sample ID: SB-20**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 367978 — **Prep Batch: 367875**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics [C6 - C10]	ND	F1 F2	446	743.1	F1	mg/Kg		167	56 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
a,a,a-Trifluorotoluene	161	X	50 - 150

Lab Sample ID: 490-111143-20 MSD — **Client Sample ID: SB-20**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 367978 — **Prep Batch: 367875**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics [C6 - C10]	ND	F1 F2	446	349.1	F2	mg/Kg		78	56 - 130	72	21

Surrogate	MSD %Recovery	MSD Qualifier	Limits
a,a,a-Trifluorotoluene	133		50 - 150

Lab Sample ID: 490-111143-21 MS — **Client Sample ID: SB-21**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 368333 — **Prep Batch: 367875**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics [C6 - C10]	ND		419	378.2		mg/Kg		90	56 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
a,a,a-Trifluorotoluene	140		50 - 150

Lab Sample ID: 490-111143-21 MSD — **Client Sample ID: SB-21**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 368333 — **Prep Batch: 367875**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics [C6 - C10]	ND		419	379.8		mg/Kg		91	56 - 130	0	21

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics) (Continued)

Lab Sample ID: 490-111143-21 MSD
Matrix: Solid
Analysis Batch: 368333

Client Sample ID: SB-21
Prep Type: Total/NA
Prep Batch: 367875

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*142*		*50 - 150*

Lab Sample ID: MB 490-367978/8
Matrix: Solid
Analysis Batch: 367978

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.00	2.50	mg/Kg			09/06/16 15:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*104*		*50 - 150*		*09/06/16 15:31*	*1*

Lab Sample ID: LCS 490-367978/5
Matrix: Solid
Analysis Batch: 367978

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics [C6 - C10]			500	484.9		mg/Kg		97	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*134*		*50 - 150*

Lab Sample ID: LCSD 490-367978/6
Matrix: Solid
Analysis Batch: 367978

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics [C6 - C10]			500	494.2		mg/Kg		99	70 - 130	2	21

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*130*		*50 - 150*

Lab Sample ID: MB 490-368333/8
Matrix: Solid
Analysis Batch: 368333

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.00	2.50	mg/Kg			09/07/16 15:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*105*		*50 - 150*		*09/07/16 15:10*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics) (Continued)

Lab Sample ID: LCS 490-368333/5 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 368333

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics [C6 - C10]			500	535.5		mg/Kg		107	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*137*		*50 - 150*

Lab Sample ID: LCSD 490-368333/6 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 368333

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics [C6 - C10]			500	521.2		mg/Kg		104	70 - 130	3	21

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*133*		*50 - 150*

Lab Sample ID: MB 490-368519/8 — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 368519

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.00	2.50	mg/Kg			09/08/16 12:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*78*		*50 - 150*		*09/08/16 12:26*	*1*

Lab Sample ID: LCS 490-368519/5 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 368519

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics [C6 - C10]			500	517.0		mg/Kg		103	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*86*		*50 - 150*

Lab Sample ID: LCSD 490-368519/6 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 368519

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics [C6 - C10]			500	508.2		mg/Kg		102	70 - 130	2	21

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics) (Continued)

Lab Sample ID: LCSD 490-368519/6 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 368519

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
a,a,a-Trifluorotoluene	88		50 - 150

Lab Sample ID: MB 490-369280/25 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 369280

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		100	50.0	ug/L			09/12/16 21:21	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	93		50 - 150		09/12/16 21:21	1

Lab Sample ID: LCS 490-369280/23 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 369280

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics [C6 - C10]			1000	936.5		ug/L		94	66 - 140		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene	94		50 - 150

Lab Sample ID: LCSD 490-369280/24 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 369280

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics [C6 - C10]			1000	929.1		ug/L		93	66 - 140	1	42

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
a,a,a-Trifluorotoluene	93		50 - 150

Lab Sample ID: 490-111143-50 MS — **Client Sample ID: MW-W**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 369280

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics [C6 - C10]	ND		1000	838.1		ug/L		84	33 - 175		

Surrogate	MS %Recovery	MS Qualifier	Limits
a,a,a-Trifluorotoluene	90		50 - 150

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics) (Continued)

Lab Sample ID: 490-111143-50 MSD — **Client Sample ID: MW-W**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 369280

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics [C6 - C10]	ND		1000	977.9		ug/L		98	33 - 175	15	42

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*92*		*50 - 150*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Lab Sample ID: MB 490-367710/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 367676 — **Prep Batch: 367710**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		5.00	2.50	mg/Kg		09/03/16 11:42	09/04/16 09:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*101*		*50 - 150*	*09/03/16 11:42*	*09/04/16 09:01*	*1*

Lab Sample ID: LCS 490-367710/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 367676 — **Prep Batch: 367710**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	40.0	30.73		mg/Kg		77	54 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl (Surr)	*90*		*50 - 150*

Lab Sample ID: 490-111029-A-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 367676 — **Prep Batch: 367710**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	ND		39.4	29.95		mg/Kg		70	10 - 142

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
o-Terphenyl (Surr)	*83*		*50 - 150*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics) (Continued)

Lab Sample ID: 490-111029-A-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 367676 — **Prep Batch: 367710**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	ND		39.9	28.68		mg/Kg		66	10 - 142	4	47

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
o-Terphenyl (Surr)	*69*		*50 - 150*

Lab Sample ID: MB 490-368125/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 368212 — **Prep Batch: 368125**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		100	91.0	ug/L		09/06/16 17:09	09/07/16 11:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*74*		*50 - 150*	*09/06/16 17:09*	*09/07/16 11:12*	*1*

Lab Sample ID: LCS 490-368125/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 368212 — **Prep Batch: 368125**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]			800	1235	*	ug/L		154	46 - 132		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl (Surr)	*69*		*50 - 150*

Lab Sample ID: MB 490-368606/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 368926 — **Prep Batch: 368606**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		5.00	2.50	mg/Kg		09/08/16 11:38	09/09/16 12:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*107*		*50 - 150*	*09/08/16 11:38*	*09/09/16 12:11*	*1*

Lab Sample ID: LCS 490-368606/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 368926 — **Prep Batch: 368606**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]			40.0	32.35		mg/Kg		81	54 - 130		

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics) (Continued)

Lab Sample ID: LCS 490-368606/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 368926 — **Prep Batch: 368606**

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-Terphenyl (Surr)	99		50 - 150

Lab Sample ID: 490-111143-20 MS — **Client Sample ID: SB-20**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 368926 — **Prep Batch: 368606**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	ND		39.7	29.87		mg/Kg		68	10 - 142

Surrogate	MS %Recovery	MS Qualifier	Limits
o-Terphenyl (Surr)	82		50 - 150

Lab Sample ID: 490-111143-20 MSD — **Client Sample ID: SB-20**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 368926 — **Prep Batch: 368606**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	ND		39.2	30.56		mg/Kg		71	10 - 142	2	47

Surrogate	MSD %Recovery	MSD Qualifier	Limits
o-Terphenyl (Surr)	86		50 - 150

Lab Sample ID: MB 490-368623/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 368488 — **Prep Batch: 368623**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		100	91.0	ug/L		09/08/16 12:01	09/08/16 15:18	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	68		50 - 150	09/08/16 12:01	09/08/16 15:18	1

Lab Sample ID: LCS 490-368623/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 368488 — **Prep Batch: 368623**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	800	571.4		ug/L		71	46 - 132

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-Terphenyl (Surr)	77		50 - 150

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics) (Continued)

Lab Sample ID: LCSD 490-368623/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 368488 — **Prep Batch: 368623**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	800	620.5		ug/L		78	46 - 132	8	31

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
o-Terphenyl (Surr)	*85*		*50 - 150*

Lab Sample ID: MB 490-368868/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 368830 — **Prep Batch: 368868**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		5.00	2.50	mg/Kg		09/09/16 10:00	09/09/16 15:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*114*		*50 - 150*	*09/09/16 10:00*	*09/09/16 15:08*	*1*

Lab Sample ID: LCS 490-368868/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 368830 — **Prep Batch: 368868**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	40.0	37.28		mg/Kg		93	54 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl (Surr)	*115*		*50 - 150*

Lab Sample ID: LCSD 490-368868/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 368830 — **Prep Batch: 368868**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	40.0	25.75		mg/Kg		64	54 - 130	37	47

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
o-Terphenyl (Surr)	*85*		*50 - 150*

Lab Sample ID: 490-111160-A-7-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 369160 — **Prep Batch: 368868**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	13.8		39.0	34.38		mg/Kg		53	10 - 142

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics) (Continued)

Lab Sample ID: 490-111160-A-7-B MS
Matrix: Solid
Analysis Batch: 369160

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 368868

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
o-Terphenyl (Surr)	*71*		*50 - 150*

Lab Sample ID: 490-111160-A-7-C MSD
Matrix: Solid
Analysis Batch: 369160

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 368868

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	13.8		39.9	44.30		mg/Kg		77	10 - 142	25	47

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
o-Terphenyl (Surr)	*89*		*50 - 150*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 490-369216/1-A
Matrix: Solid
Analysis Batch: 369773

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 369216

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.0333	0.0100	mg/Kg		09/11/16 10:56	09/13/16 15:52	1
PCB-1221	ND		0.0333	0.0100	mg/Kg		09/11/16 10:56	09/13/16 15:52	1
PCB-1232	ND		0.0333	0.0200	mg/Kg		09/11/16 10:56	09/13/16 15:52	1
PCB-1242	ND		0.0333	0.0100	mg/Kg		09/11/16 10:56	09/13/16 15:52	1
PCB-1248	ND		0.0333	0.0100	mg/Kg		09/11/16 10:56	09/13/16 15:52	1
PCB-1254	ND		0.0333	0.0100	mg/Kg		09/11/16 10:56	09/13/16 15:52	1
PCB-1260	ND		0.0333	0.0100	mg/Kg		09/11/16 10:56	09/13/16 15:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*102*		*20 - 150*	*09/11/16 10:56*	*09/13/16 15:52*	*1*
Tetrachloro-m-xylene	*87*		*19 - 147*	*09/11/16 10:56*	*09/13/16 15:52*	*1*

Lab Sample ID: LCS 490-369216/2-A
Matrix: Solid
Analysis Batch: 369773

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 369216

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	0.167	0.1536		mg/Kg		92	60 - 137
PCB-1260	0.167	0.1538		mg/Kg		92	56 - 141

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*102*		*20 - 150*
Tetrachloro-m-xylene	*89*		*19 - 147*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 490-111280-A-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 369773 — **Prep Batch: 369216**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	ND		0.166	0.1474		mg/Kg		89	10 - 150
PCB-1260	ND		0.166	0.1489		mg/Kg		90	10 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*94*		*20 - 150*
Tetrachloro-m-xylene	*79*		*19 - 147*

Lab Sample ID: 490-111280-A-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 369773 — **Prep Batch: 369216**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	ND		0.162	0.1570		mg/Kg		97	10 - 150	6	50
PCB-1260	ND		0.162	0.1603		mg/Kg		99	10 - 150	7	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*106*		*20 - 150*
Tetrachloro-m-xylene	*92*		*19 - 147*

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 490-368008/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 368191 — **Prep Batch: 368008**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00860	mg/L		09/06/16 11:22	09/07/16 03:52	1
Barium	ND		0.0100	0.00500	mg/L		09/06/16 11:22	09/07/16 03:52	1
Cadmium	ND		0.00100	0.000500	mg/L		09/06/16 11:22	09/07/16 03:52	1
Chromium	ND		0.00500	0.00300	mg/L		09/06/16 11:22	09/07/16 03:52	1
Lead	ND		0.00500	0.00200	mg/L		09/06/16 11:22	09/07/16 03:52	1
Selenium	ND		0.0100	0.00500	mg/L		09/06/16 11:22	09/07/16 03:52	1
Silver	ND		0.00500	0.00300	mg/L		09/06/16 11:22	09/07/16 03:52	1

Lab Sample ID: LCS 490-368008/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 368191 — **Prep Batch: 368008**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0500	0.04320		mg/L		86	80 - 120
Barium	2.00	1.856		mg/L		93	80 - 120
Cadmium	0.0500	0.04520		mg/L		90	80 - 120
Chromium	0.200	0.1833		mg/L		92	80 - 120
Lead	0.0500	0.04840		mg/L		97	80 - 120
Selenium	0.0500	0.04360		mg/L		87	80 - 120
Silver	0.0500	0.04620		mg/L		92	80 - 120

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCSD 490-368008/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 368191 — **Prep Batch: 368008**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	0.0500	0.04180		mg/L		84	80 - 120	3	20
Barium	2.00	1.820		mg/L		91	80 - 120	2	20
Cadmium	0.0500	0.04420		mg/L		88	80 - 120	2	20
Chromium	0.200	0.1780		mg/L		89	80 - 120	3	20
Lead	0.0500	0.04790		mg/L		96	80 - 120	1	20
Selenium	0.0500	0.04210		mg/L		84	80 - 120	4	20
Silver	0.0500	0.04730		mg/L		95	80 - 120	2	20

Lab Sample ID: 490-111040-A-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 368191 — **Prep Batch: 368008**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0635		0.0500	0.1126		mg/L		98	75 - 125
Barium	ND		2.00	1.792		mg/L		90	75 - 125
Cadmium	ND		0.0500	0.04370		mg/L		87	75 - 125
Chromium	ND		0.200	0.1757		mg/L		88	75 - 125
Lead	0.00590		0.0500	0.04850		mg/L		85	75 - 125
Selenium	ND		0.0500	0.04910		mg/L		98	75 - 125
Silver	ND		0.0500	0.04720		mg/L		94	75 - 125

Lab Sample ID: 490-111040-A-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 368191 — **Prep Batch: 368008**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	0.0635		0.0500	0.1134		mg/L		100	75 - 125	1	20
Barium	ND		2.00	1.803		mg/L		90	75 - 125	1	20
Cadmium	ND		0.0500	0.04390		mg/L		88	75 - 125	0	20
Chromium	ND		0.200	0.1761		mg/L		88	75 - 125	0	20
Lead	0.00590		0.0500	0.04980		mg/L		88	75 - 125	3	20
Selenium	ND		0.0500	0.04950		mg/L		99	75 - 125	1	20
Silver	ND		0.0500	0.04700		mg/L		94	75 - 125	0	20

Lab Sample ID: MB 490-368175/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 368726 — **Prep Batch: 368175**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00860	mg/L		09/07/16 08:20	09/08/16 13:16	1
Barium	ND		0.0100	0.00500	mg/L		09/07/16 08:20	09/08/16 13:16	1
Cadmium	ND		0.00100	0.000500	mg/L		09/07/16 08:20	09/08/16 13:16	1
Chromium	ND		0.00500	0.00300	mg/L		09/07/16 08:20	09/08/16 13:16	1
Lead	ND		0.00500	0.00200	mg/L		09/07/16 08:20	09/08/16 13:16	1
Selenium	ND		0.0100	0.00500	mg/L		09/07/16 08:20	09/08/16 13:16	1
Silver	ND		0.00500	0.00300	mg/L		09/07/16 08:20	09/08/16 13:16	1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: MB 490-368175/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 369072 — **Prep Batch: 368175**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00860	mg/L		09/07/16 08:20	09/09/16 10:15	1
Barium	ND		0.0100	0.00500	mg/L		09/07/16 08:20	09/09/16 10:15	1
Cadmium	ND		0.00100	0.000500	mg/L		09/07/16 08:20	09/09/16 10:15	1
Chromium	ND		0.00500	0.00300	mg/L		09/07/16 08:20	09/09/16 10:15	1
Lead	ND		0.00500	0.00200	mg/L		09/07/16 08:20	09/09/16 10:15	1
Selenium	ND		0.0100	0.00500	mg/L		09/07/16 08:20	09/09/16 10:15	1

Lab Sample ID: MB 490-368175/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 369412 — **Prep Batch: 368175**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.00500	0.00300	mg/L		09/07/16 08:20	09/11/16 18:41	1

Lab Sample ID: LCS 490-368175/18-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 368726 — **Prep Batch: 368175**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.0500	0.05050		mg/L		101	80 - 120

Lab Sample ID: LCS 490-368175/18-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 369412 — **Prep Batch: 368175**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.0500	0.04830		mg/L		97	80 - 120

Lab Sample ID: LCS 490-368175/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 369072 — **Prep Batch: 368175**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0500	0.04920		mg/L		98	80 - 120
Barium	2.00	2.107		mg/L		105	80 - 120
Cadmium	0.0500	0.05230		mg/L		105	80 - 120
Chromium	0.200	0.2059		mg/L		103	80 - 120
Lead	0.0500	0.05380		mg/L		108	80 - 120
Selenium	0.0500	0.05100		mg/L		102	80 - 120

Lab Sample ID: LCSD 490-368175/19-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 368726 — **Prep Batch: 368175**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	0.0500	0.05000		mg/L		100	80 - 120	1	20

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCSD 490-368175/19-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 369412 — **Prep Batch: 368175**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	0.0500	0.04840		mg/L		97	80 - 120	0	20

Lab Sample ID: LCSD 490-368175/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 369072 — **Prep Batch: 368175**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	0.0500	0.04660		mg/L		93	80 - 120	5	20
Barium	2.00	2.092		mg/L		105	80 - 120	1	20
Cadmium	0.0500	0.05170		mg/L		103	80 - 120	1	20
Chromium	0.200	0.2024		mg/L		101	80 - 120	2	20
Lead	0.0500	0.05230		mg/L		105	80 - 120	3	20
Selenium	0.0500	0.04980		mg/L		100	80 - 120	2	20

Lab Sample ID: 490-111161-A-36-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 368726 — **Prep Batch: 368175**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	ND		0.0500	0.04880		mg/L		98	75 - 125
Barium	ND		2.00	2.027		mg/L		101	75 - 125
Cadmium	ND		0.0500	0.05030		mg/L		101	75 - 125
Chromium	ND		0.200	0.2099		mg/L		105	75 - 125
Lead	ND		0.0500	0.05240		mg/L		105	75 - 125
Selenium	ND		0.0500	0.04760		mg/L		95	75 - 125
Silver	ND	F1	0.0500	0.02060	F1	mg/L		41	75 - 125

Lab Sample ID: 490-111161-A-36-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 369072 — **Prep Batch: 368175**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	ND		0.0500	0.04770		mg/L		95	75 - 125
Barium	ND		2.00	2.060		mg/L		103	75 - 125
Cadmium	ND		0.0500	0.05100		mg/L		102	75 - 125
Chromium	ND		0.200	0.1991		mg/L		100	75 - 125
Lead	ND		0.0500	0.05280		mg/L		106	75 - 125
Selenium	ND		0.0500	0.04990		mg/L		100	75 - 125

Lab Sample ID: 490-111161-A-36-B MS ^5 — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 369412 — **Prep Batch: 368175**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	ND	F1	0.0500	0.02700	F1	mg/L		54	75 - 125

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 490-111161-A-36-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 368726 — **Prep Batch: 368175**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	ND		0.0500	0.04720		mg/L		94	75 - 125	3	20
Barium	ND		2.00	2.016		mg/L		101	75 - 125	1	20
Cadmium	ND		0.0500	0.05000		mg/L		100	75 - 125	1	20
Chromium	ND		0.200	0.2093		mg/L		105	75 - 125	0	20
Lead	ND		0.0500	0.05230		mg/L		105	75 - 125	0	20
Selenium	ND		0.0500	0.04800		mg/L		96	75 - 125	1	20
Silver	ND	F1	0.0500	0.02100	F1	mg/L		42	75 - 125	2	20

Lab Sample ID: 490-111161-A-36-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 369072 — **Prep Batch: 368175**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	ND		0.0500	0.04710		mg/L		94	75 - 125	1	20
Barium	ND		2.00	2.045		mg/L		102	75 - 125	1	20
Cadmium	ND		0.0500	0.05050		mg/L		101	75 - 125	1	20
Chromium	ND		0.200	0.1958		mg/L		98	75 - 125	2	20
Lead	ND		0.0500	0.05200		mg/L		104	75 - 125	2	20
Selenium	ND		0.0500	0.04990		mg/L		100	75 - 125	0	20

Lab Sample ID: 490-111161-A-36-C MSD ^5 — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 369412 — **Prep Batch: 368175**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	ND	F1	0.0500	0.02650	F1	mg/L		53	75 - 125	2	20

Lab Sample ID: MB 490-369761/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 369942 — **Prep Batch: 369761**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.00	1.20	mg/Kg		09/13/16 13:22	09/13/16 20:12	1
Barium	ND		2.00	1.00	mg/Kg		09/13/16 13:22	09/13/16 20:12	1
Cadmium	ND		1.00	0.100	mg/Kg		09/13/16 13:22	09/13/16 20:12	1
Chromium	ND		1.00	0.902	mg/Kg		09/13/16 13:22	09/13/16 20:12	1
Lead	ND		1.00	0.501	mg/Kg		09/13/16 13:22	09/13/16 20:12	1
Selenium	ND		2.00	1.10	mg/Kg		09/13/16 13:22	09/13/16 20:12	1
Silver	ND		1.00	0.401	mg/Kg		09/13/16 13:22	09/13/16 20:12	1

Lab Sample ID: LCS 490-369761/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 369942 — **Prep Batch: 369761**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	19.8	17.41		mg/Kg		88	80 - 120
Barium	791	746.6		mg/Kg		94	80 - 120
Cadmium	19.8	18.75		mg/Kg		95	80 - 120
Chromium	79.1	77.71		mg/Kg		98	80 - 120

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 490-369761/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 369942 — **Prep Batch: 369761**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	19.8	19.82		mg/Kg		100	80 - 120
Selenium	19.8	17.73		mg/Kg		90	80 - 120
Silver	19.8	19.09		mg/Kg		97	80 - 120

Lab Sample ID: LCSD 490-369761/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 369942 — **Prep Batch: 369761**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	19.0	16.32		mg/Kg		86	80 - 120	6	20
Barium	762	711.6		mg/Kg		93	80 - 120	5	20
Cadmium	19.0	17.87		mg/Kg		94	80 - 120	5	20
Chromium	76.2	73.85		mg/Kg		97	80 - 120	5	20
Lead	19.0	18.72		mg/Kg		98	80 - 120	6	20
Selenium	19.0	16.44		mg/Kg		86	80 - 120	8	20
Silver	19.0	18.25		mg/Kg		96	80 - 120	5	20

Lab Sample ID: 460-119837-C-1-E MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 369942 — **Prep Batch: 369761**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	1040	F2	20.1	3370	E 4	mg/Kg		11567	75 - 125
Barium	55.1		805	770.8		mg/Kg		89	75 - 125
Cadmium	2.82		20.1	22.72		mg/Kg		99	75 - 125
Chromium	14.8		80.5	97.61		mg/Kg		103	75 - 125
Lead	601	F2	20.1	905.0	4	mg/Kg		1510	75 - 125
Selenium	4.61		20.1	26.12		mg/Kg		107	75 - 125
Silver	14.8	F1	20.1	35.27		mg/Kg		102	75 - 125

Lab Sample ID: 460-119837-C-1-F MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 369942 — **Prep Batch: 369761**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	1040	F2	20.0	828.5	4 F2	mg/Kg		-1070	75 - 125	121	20
Barium	55.1		802	782.6		mg/Kg		91	75 - 125	2	20
Cadmium	2.82		20.0	20.60		mg/Kg		89	75 - 125	10	20
Chromium	14.8		80.2	87.98		mg/Kg		91	75 - 125	10	20
Lead	601	F2	20.0	598.2	4 F2	mg/Kg		-15	75 - 125	41	20
Selenium	4.61		20.0	21.80		mg/Kg		86	75 - 125	18	20
Silver	14.8	F1	20.0	28.74	F1	mg/Kg		69	75 - 125	20	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 490-367870/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 368105 — **Prep Batch: 367870**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.000200	0.000100	mg/L		09/06/16 08:01	09/06/16 14:03	1

Lab Sample ID: LCS 490-367870/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 368105 — **Prep Batch: 367870**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00100	0.0007974		mg/L		80	80 - 120

Lab Sample ID: 490-111126-F-5-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 368105 — **Prep Batch: 367870**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND	F1	0.00100	0.0007422	F1	mg/L		74	75 - 125

Lab Sample ID: 490-111126-F-5-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 368105 — **Prep Batch: 367870**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND	F1	0.00100	0.0007959		mg/L		80	75 - 125	7	20

Lab Sample ID: MB 490-368295/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 368690 — **Prep Batch: 368295**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.000200	0.000100	mg/L		09/07/16 11:16	09/08/16 12:17	1

Lab Sample ID: LCS 490-368295/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 368690 — **Prep Batch: 368295**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00100	0.0009219		mg/L		92	80 - 120

Lab Sample ID: 490-111061-B-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 368690 — **Prep Batch: 368295**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		0.00100	0.001003		mg/L		100	75 - 125

Lab Sample ID: 490-111061-B-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 368690 — **Prep Batch: 368295**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		0.00100	0.001046		mg/L		105	75 - 125	4	20

QC Sample Results

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 490-368080/1-A
Matrix: Solid
Analysis Batch: 368378

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 368080

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0977	0.0293	mg/Kg		09/06/16 14:59	09/07/16 13:50	1

Lab Sample ID: LCS 490-368080/2-A
Matrix: Solid
Analysis Batch: 368378

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 368080

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.167	0.1554		mg/Kg		93	80 - 120		

Lab Sample ID: 490-111143-7 MS
Matrix: Solid
Analysis Batch: 368378

Client Sample ID: SB-7
Prep Type: Total/NA
Prep Batch: 368080

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	ND	F1	0.163	0.1565	F1	mg/Kg		69	80 - 120		

Lab Sample ID: 490-111143-7 MSD
Matrix: Solid
Analysis Batch: 368378

Client Sample ID: SB-7
Prep Type: Total/NA
Prep Batch: 368080

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND	F1	0.167	0.1491	F1	mg/Kg		63	80 - 120	5	20

QC Association Summary

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

GC/MS VOA

Prep Batch: 367875

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111143-5	SB-5	Total/NA	Solid	5035	
490-111143-8	SB-8	Total/NA	Solid	5035	
490-111143-17	SB-17	Total/NA	Solid	5035	

Prep Batch: 367883

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111143-1	SB-1	Total/NA	Solid	5035	
490-111143-2	SB-2	Total/NA	Solid	5035	
490-111143-3	SB-3	Total/NA	Solid	5035	
490-111143-4	SB-4	Total/NA	Solid	5035	
490-111143-5	SB-5	Total/NA	Solid	5035	
490-111143-6	SB-6	Total/NA	Solid	5035	
490-111143-7	SB-7	Total/NA	Solid	5035	
490-111143-8	SB-8	Total/NA	Solid	5035	
490-111143-9	SB-9	Total/NA	Solid	5035	
490-111143-10	SB-10	Total/NA	Solid	5035	
490-111143-11	SB-11	Total/NA	Solid	5035	
490-111143-12	SB-12	Total/NA	Solid	5035	
490-111143-13	SB-13	Total/NA	Solid	5035	
490-111143-14	SB-14	Total/NA	Solid	5035	
490-111143-15	SB-15	Total/NA	Solid	5035	
490-111143-16	SB-16	Total/NA	Solid	5035	
490-111143-17	SB-17	Total/NA	Solid	5035	
490-111143-18	SB-18	Total/NA	Solid	5035	
490-111143-19	SB-19	Total/NA	Solid	5035	
490-111143-20	SB-20	Total/NA	Solid	5035	
490-111143-21	SB-21	Total/NA	Solid	5035	
490-111143-22	SB-22	Total/NA	Solid	5035	
490-111143-23	SB-23	Total/NA	Solid	5035	
490-111143-24	SB-24	Total/NA	Solid	5035	
490-111143-25	SB-25	Total/NA	Solid	5035	
490-111143-26	SB-26	Total/NA	Solid	5035	
490-111143-27	SB-27	Total/NA	Solid	5035	
490-111143-28	SB-28	Total/NA	Solid	5035	
490-111143-29	DUP-1	Total/NA	Solid	5035	
490-111143-30	DUP-2	Total/NA	Solid	5035	
490-111143-31	DUP-3	Total/NA	Solid	5035	
490-111143-32	TB	Total/NA	Solid	5035	

Analysis Batch: 369449

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111143-1	SB-1	Total/NA	Solid	8260B	367883
490-111143-2	SB-2	Total/NA	Solid	8260B	367883
490-111143-3	SB-3	Total/NA	Solid	8260B	367883
490-111143-4	SB-4	Total/NA	Solid	8260B	367883
490-111143-5	SB-5	Total/NA	Solid	8260B	367883
490-111143-6	SB-6	Total/NA	Solid	8260B	367883
490-111143-7	SB-7	Total/NA	Solid	8260B	367883
490-111143-8	SB-8	Total/NA	Solid	8260B	367883
490-111143-9	SB-9	Total/NA	Solid	8260B	367883
490-111143-10	SB-10	Total/NA	Solid	8260B	367883

GC/MS VOA (Continued)

Analysis Batch: 369449 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111143-11	SB-11	Total/NA	Solid	8260B	367883
490-111143-12	SB-12	Total/NA	Solid	8260B	367883
490-111143-13	SB-13	Total/NA	Solid	8260B	367883
MB 490-369449/6	Method Blank	Total/NA	Solid	8260B	
LCS 490-369449/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-369449/4	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 369526

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111143-34	SB-7	Total/NA	Water	8260B	
490-111143-35	SB-8	Total/NA	Water	8260B	
490-111143-36	SB-9	Total/NA	Water	8260B	
490-111143-37	SB-10	Total/NA	Water	8260B	
490-111143-38	SB-11	Total/NA	Water	8260B	
490-111143-39	SB-12	Total/NA	Water	8260B	
MB 490-369526/7	Method Blank	Total/NA	Water	8260B	
LCS 490-369526/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 490-369526/4	Lab Control Sample Dup	Total/NA	Water	8260B	
490-111143-34 MS	SB-7	Total/NA	Water	8260B	
490-111143-34 MSD	SB-7	Total/NA	Water	8260B	

Analysis Batch: 369547

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111143-33	FB	Total/NA	Water	8260B	
490-111143-40	SB-13	Total/NA	Water	8260B	
490-111143-41	SB-15	Total/NA	Water	8260B	
490-111143-42	SB-19	Total/NA	Water	8260B	
490-111143-43	SB-20	Total/NA	Water	8260B	
490-111143-44	SB-22	Total/NA	Water	8260B	
490-111143-45	SB-23	Total/NA	Water	8260B	
490-111143-46	SB-25	Total/NA	Water	8260B	
490-111143-47	DUP1	Total/NA	Water	8260B	
490-111143-48	DUP2	Total/NA	Water	8260B	
490-111143-49	MW-N	Total/NA	Water	8260B	
490-111143-50	MW-W	Total/NA	Water	8260B	
490-111143-51	Trip Blank	Total/NA	Water	8260B	
MB 490-369547/7	Method Blank	Total/NA	Water	8260B	
LCS 490-369547/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 490-369547/4	Lab Control Sample Dup	Total/NA	Water	8260B	
490-111143-49 MS	MW-N	Total/NA	Water	8260B	
490-111143-49 MSD	MW-N	Total/NA	Water	8260B	

Analysis Batch: 369613

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111143-14	SB-14	Total/NA	Solid	8260B	367883
490-111143-15	SB-15	Total/NA	Solid	8260B	367883
490-111143-16	SB-16	Total/NA	Solid	8260B	367883
490-111143-17	SB-17	Total/NA	Solid	8260B	367883
490-111143-18	SB-18	Total/NA	Solid	8260B	367883
490-111143-19	SB-19	Total/NA	Solid	8260B	367883
490-111143-20	SB-20	Total/NA	Solid	8260B	367883

GC/MS VOA (Continued)

Analysis Batch: 369613 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111143-21	SB-21	Total/NA	Solid	8260B	367883
490-111143-23	SB-23	Total/NA	Solid	8260B	367883
490-111143-24	SB-24	Total/NA	Solid	8260B	367883
490-111143-25	SB-25	Total/NA	Solid	8260B	367883
490-111143-26	SB-26	Total/NA	Solid	8260B	367883
490-111143-27	SB-27	Total/NA	Solid	8260B	367883
490-111143-28	SB-28	Total/NA	Solid	8260B	367883
490-111143-29	DUP-1	Total/NA	Solid	8260B	367883
490-111143-30	DUP-2	Total/NA	Solid	8260B	367883
490-111143-31	DUP-3	Total/NA	Solid	8260B	367883
490-111143-32	TB	Total/NA	Solid	8260B	367883
MB 490-369613/6	Method Blank	Total/NA	Solid	8260B	
LCS 490-369613/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-369613/4	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 369700

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111143-33	FB	Total/NA	Water	8260B	
490-111143-40	SB-13	Total/NA	Water	8260B	
490-111143-41	SB-15	Total/NA	Water	8260B	
490-111143-42	SB-19	Total/NA	Water	8260B	
490-111143-43	SB-20	Total/NA	Water	8260B	
MB 490-369700/7	Method Blank	Total/NA	Water	8260B	
LCS 490-369700/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 490-369700/4	Lab Control Sample Dup	Total/NA	Water	8260B	
490-111154-B-1 MS	Matrix Spike	Total/NA	Water	8260B	
490-111154-C-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

Analysis Batch: 369935

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111143-5	SB-5	Total/NA	Solid	8260B	367875
490-111143-8	SB-8	Total/NA	Solid	8260B	367875
490-111143-17	SB-17	Total/NA	Solid	8260B	367875
MB 490-369935/7	Method Blank	Total/NA	Solid	8260B	
LCS 490-369935/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-369935/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
490-111596-A-2-A MS	Matrix Spike	Total/NA	Solid	8260B	369964
490-111596-A-2-A MSD	Matrix Spike Duplicate	Total/NA	Solid	8260B	369964

Prep Batch: 369964

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111596-A-2-A MS	Matrix Spike	Total/NA	Solid	5030B	
490-111596-A-2-A MSD	Matrix Spike Duplicate	Total/NA	Solid	5030B	

Analysis Batch: 370030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111143-22	SB-22	Total/NA	Solid	8260B	367883
490-111600-F-10-J MS	Matrix Spike	Total/NA	Solid	8260B	370122

GC/MS VOA (Continued)

Prep Batch: 370122

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111600-F-10-J MS	Matrix Spike	Total/NA	Solid	5030B	
490-111600-F-10-L MSD	Matrix Spike Duplicate	Total/NA	Solid	5030B	

Analysis Batch: 370343

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 490-370343/6	Method Blank	Total/NA	Solid	8260B	
LCS 490-370343/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-370343/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
490-111600-F-10-L MSD	Matrix Spike Duplicate	Total/NA	Solid	8260B	370122

GC/MS Semi VOA

Prep Batch: 367779

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111143-31	DUP-3	Total/NA	Solid	3550C	
MB 490-367779/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 490-367779/2-A	Lab Control Sample	Total/NA	Solid	3550C	
490-111143-31 MS	DUP-3	Total/NA	Solid	3550C	
490-111143-31 MSD	DUP-3	Total/NA	Solid	3550C	

Analysis Batch: 368004

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111143-31	DUP-3	Total/NA	Solid	8270C	367779
MB 490-367779/1-A	Method Blank	Total/NA	Solid	8270C	367779
LCS 490-367779/2-A	Lab Control Sample	Total/NA	Solid	8270C	367779
490-111143-31 MS	DUP-3	Total/NA	Solid	8270C	367779
490-111143-31 MSD	DUP-3	Total/NA	Solid	8270C	367779

Prep Batch: 368071

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111143-33	FB	Total/NA	Water	3510C	
490-111143-34	SB-7	Total/NA	Water	3510C	
490-111143-35	SB-8	Total/NA	Water	3510C	
490-111143-36	SB-9	Total/NA	Water	3510C	
490-111143-37	SB-10	Total/NA	Water	3510C	
490-111143-38	SB-11	Total/NA	Water	3510C	
490-111143-39	SB-12	Total/NA	Water	3510C	
490-111143-40	SB-13	Total/NA	Water	3510C	
490-111143-41	SB-15	Total/NA	Water	3510C	
490-111143-42	SB-19	Total/NA	Water	3510C	
490-111143-43	SB-20	Total/NA	Water	3510C	
490-111143-44	SB-22	Total/NA	Water	3510C	
490-111143-45	SB-23	Total/NA	Water	3510C	
490-111143-46	SB-25	Total/NA	Water	3510C	
490-111143-47	DUP1	Total/NA	Water	3510C	
490-111143-48	DUP2	Total/NA	Water	3510C	
490-111143-49	MW-N	Total/NA	Water	3510C	
490-111143-50	MW-W	Total/NA	Water	3510C	
MB 490-368071/1-A	Method Blank	Total/NA	Water	3510C	
LCS 490-368071/2-A	Lab Control Sample	Total/NA	Water	3510C	

GC/MS Semi VOA (Continued)

Analysis Batch: 368363

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111143-33	FB	Total/NA	Water	8270C	368071
490-111143-34	SB-7	Total/NA	Water	8270C	368071
490-111143-35	SB-8	Total/NA	Water	8270C	368071
490-111143-36	SB-9	Total/NA	Water	8270C	368071
490-111143-37	SB-10	Total/NA	Water	8270C	368071
490-111143-38	SB-11	Total/NA	Water	8270C	368071
490-111143-39	SB-12	Total/NA	Water	8270C	368071
490-111143-40	SB-13	Total/NA	Water	8270C	368071
490-111143-41	SB-15	Total/NA	Water	8270C	368071
490-111143-42	SB-19	Total/NA	Water	8270C	368071
490-111143-43	SB-20	Total/NA	Water	8270C	368071
490-111143-44	SB-22	Total/NA	Water	8270C	368071
490-111143-45	SB-23	Total/NA	Water	8270C	368071
490-111143-46	SB-25	Total/NA	Water	8270C	368071
490-111143-47	DUP1	Total/NA	Water	8270C	368071
490-111143-48	DUP2	Total/NA	Water	8270C	368071
490-111143-49	MW-N	Total/NA	Water	8270C	368071
490-111143-50	MW-W	Total/NA	Water	8270C	368071
MB 490-368071/1-A	Method Blank	Total/NA	Water	8270C	368071
LCS 490-368071/2-A	Lab Control Sample	Total/NA	Water	8270C	368071

Prep Batch: 368562

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111143-1	SB-1	Total/NA	Solid	3550C	
490-111143-2	SB-2	Total/NA	Solid	3550C	
490-111143-3	SB-3	Total/NA	Solid	3550C	
490-111143-4	SB-4	Total/NA	Solid	3550C	
490-111143-5	SB-5	Total/NA	Solid	3550C	
490-111143-6	SB-6	Total/NA	Solid	3550C	
490-111143-7	SB-7	Total/NA	Solid	3550C	
490-111143-8	SB-8	Total/NA	Solid	3550C	
490-111143-9	SB-9	Total/NA	Solid	3550C	
490-111143-10	SB-10	Total/NA	Solid	3550C	
490-111143-11	SB-11	Total/NA	Solid	3550C	
490-111143-12	SB-12	Total/NA	Solid	3550C	
490-111143-13	SB-13	Total/NA	Solid	3550C	
490-111143-14	SB-14	Total/NA	Solid	3550C	
490-111143-15	SB-15	Total/NA	Solid	3550C	
490-111143-16	SB-16	Total/NA	Solid	3550C	
490-111143-17	SB-17	Total/NA	Solid	3550C	
490-111143-18	SB-18	Total/NA	Solid	3550C	
490-111143-19	SB-19	Total/NA	Solid	3550C	
490-111143-20	SB-20	Total/NA	Solid	3550C	
MB 490-368562/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 490-368562/2-A	Lab Control Sample	Total/NA	Solid	3550C	
490-111143-1 MS	SB-1	Total/NA	Solid	3550C	
490-111143-1 MSD	SB-1	Total/NA	Solid	3550C	

Analysis Batch: 368877

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111143-1	SB-1	Total/NA	Solid	8270C	368562

GC/MS Semi VOA (Continued)

Analysis Batch: 368877 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111143-2	SB-2	Total/NA	Solid	8270C	368562
490-111143-3	SB-3	Total/NA	Solid	8270C	368562
490-111143-4	SB-4	Total/NA	Solid	8270C	368562
490-111143-5	SB-5	Total/NA	Solid	8270C	368562
490-111143-6	SB-6	Total/NA	Solid	8270C	368562
490-111143-7	SB-7	Total/NA	Solid	8270C	368562
490-111143-8	SB-8	Total/NA	Solid	8270C	368562
490-111143-9	SB-9	Total/NA	Solid	8270C	368562
490-111143-10	SB-10	Total/NA	Solid	8270C	368562
490-111143-11	SB-11	Total/NA	Solid	8270C	368562
490-111143-12	SB-12	Total/NA	Solid	8270C	368562
490-111143-13	SB-13	Total/NA	Solid	8270C	368562
490-111143-14	SB-14	Total/NA	Solid	8270C	368562
490-111143-15	SB-15	Total/NA	Solid	8270C	368562
490-111143-16	SB-16	Total/NA	Solid	8270C	368562
490-111143-17	SB-17	Total/NA	Solid	8270C	368562
490-111143-18	SB-18	Total/NA	Solid	8270C	368562
490-111143-19	SB-19	Total/NA	Solid	8270C	368562
490-111143-20	SB-20	Total/NA	Solid	8270C	368562
MB 490-368562/1-A	Method Blank	Total/NA	Solid	8270C	368562
LCS 490-368562/2-A	Lab Control Sample	Total/NA	Solid	8270C	368562
490-111143-1 MS	SB-1	Total/NA	Solid	8270C	368562
490-111143-1 MSD	SB-1	Total/NA	Solid	8270C	368562

Prep Batch: 369043

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111143-21	SB-21	Total/NA	Solid	3550C	
490-111143-22	SB-22	Total/NA	Solid	3550C	
490-111143-23	SB-23	Total/NA	Solid	3550C	
490-111143-24	SB-24	Total/NA	Solid	3550C	
490-111143-25	SB-25	Total/NA	Solid	3550C	
490-111143-26	SB-26	Total/NA	Solid	3550C	
490-111143-27	SB-27	Total/NA	Solid	3550C	
490-111143-28	SB-28	Total/NA	Solid	3550C	
490-111143-29	DUP-1	Total/NA	Solid	3550C	
490-111143-30	DUP-2	Total/NA	Solid	3550C	
MB 490-369043/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 490-369043/2-A	Lab Control Sample	Total/NA	Solid	3550C	
490-111311-G-1-B MS	Matrix Spike	Total/NA	Solid	3550C	
490-111311-G-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	3550C	

Analysis Batch: 369149

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111143-21	SB-21	Total/NA	Solid	8270C	369043
490-111143-22	SB-22	Total/NA	Solid	8270C	369043
490-111143-23	SB-23	Total/NA	Solid	8270C	369043
490-111143-24	SB-24	Total/NA	Solid	8270C	369043
490-111143-25	SB-25	Total/NA	Solid	8270C	369043
490-111143-26	SB-26	Total/NA	Solid	8270C	369043
490-111143-27	SB-27	Total/NA	Solid	8270C	369043
490-111143-28	SB-28	Total/NA	Solid	8270C	369043

GC/MS Semi VOA (Continued)

Analysis Batch: 369149 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111143-29	DUP-1	Total/NA	Solid	8270C	369043
490-111143-30	DUP-2	Total/NA	Solid	8270C	369043
MB 490-369043/1-A	Method Blank	Total/NA	Solid	8270C	369043
LCS 490-369043/2-A	Lab Control Sample	Total/NA	Solid	8270C	369043
490-111311-G-1-B MS	Matrix Spike	Total/NA	Solid	8270C	369043
490-111311-G-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8270C	369043

GC VOA

Prep Batch: 367875

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111143-1	SB-1	Total/NA	Solid	5035	
490-111143-2	SB-2	Total/NA	Solid	5035	
490-111143-3	SB-3	Total/NA	Solid	5035	
490-111143-4	SB-4	Total/NA	Solid	5035	
490-111143-5	SB-5	Total/NA	Solid	5035	
490-111143-6	SB-6	Total/NA	Solid	5035	
490-111143-7	SB-7	Total/NA	Solid	5035	
490-111143-8	SB-8	Total/NA	Solid	5035	
490-111143-9	SB-9	Total/NA	Solid	5035	
490-111143-10	SB-10	Total/NA	Solid	5035	
490-111143-11	SB-11	Total/NA	Solid	5035	
490-111143-12	SB-12	Total/NA	Solid	5035	
490-111143-13	SB-13	Total/NA	Solid	5035	
490-111143-14	SB-14	Total/NA	Solid	5035	
490-111143-15	SB-15	Total/NA	Solid	5035	
490-111143-16	SB-16	Total/NA	Solid	5035	
490-111143-17	SB-17	Total/NA	Solid	5035	
490-111143-18	SB-18	Total/NA	Solid	5035	
490-111143-19	SB-19	Total/NA	Solid	5035	
490-111143-20	SB-20	Total/NA	Solid	5035	
490-111143-21	SB-21	Total/NA	Solid	5035	
490-111143-22	SB-22	Total/NA	Solid	5035	
490-111143-23	SB-23	Total/NA	Solid	5035	
490-111143-24	SB-24	Total/NA	Solid	5035	
490-111143-25	SB-25	Total/NA	Solid	5035	
490-111143-26	SB-26	Total/NA	Solid	5035	
490-111143-27	SB-27	Total/NA	Solid	5035	
490-111143-28	SB-28	Total/NA	Solid	5035	
490-111143-29	DUP-1	Total/NA	Solid	5035	
490-111143-30	DUP-2	Total/NA	Solid	5035	
490-111143-31	DUP-3	Total/NA	Solid	5035	
490-111143-20 MS	SB-20	Total/NA	Solid	5035	
490-111143-20 MSD	SB-20	Total/NA	Solid	5035	
490-111143-21 MS	SB-21	Total/NA	Solid	5035	
490-111143-21 MSD	SB-21	Total/NA	Solid	5035	

Analysis Batch: 367978

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111143-1	SB-1	Total/NA	Solid	8015C	367875

GC VOA (Continued)

Analysis Batch: 367978 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111143-2	SB-2	Total/NA	Solid	8015C	367875
490-111143-3	SB-3	Total/NA	Solid	8015C	367875
490-111143-4	SB-4	Total/NA	Solid	8015C	367875
490-111143-5	SB-5	Total/NA	Solid	8015C	367875
490-111143-6	SB-6	Total/NA	Solid	8015C	367875
490-111143-7	SB-7	Total/NA	Solid	8015C	367875
490-111143-8	SB-8	Total/NA	Solid	8015C	367875
490-111143-9	SB-9	Total/NA	Solid	8015C	367875
490-111143-10	SB-10	Total/NA	Solid	8015C	367875
490-111143-11	SB-11	Total/NA	Solid	8015C	367875
490-111143-12	SB-12	Total/NA	Solid	8015C	367875
490-111143-13	SB-13	Total/NA	Solid	8015C	367875
490-111143-14	SB-14	Total/NA	Solid	8015C	367875
490-111143-15	SB-15	Total/NA	Solid	8015C	367875
490-111143-16	SB-16	Total/NA	Solid	8015C	367875
490-111143-17	SB-17	Total/NA	Solid	8015C	367875
490-111143-18	SB-18	Total/NA	Solid	8015C	367875
490-111143-19	SB-19	Total/NA	Solid	8015C	367875
490-111143-20	SB-20	Total/NA	Solid	8015C	367875
MB 490-367978/8	Method Blank	Total/NA	Solid	8015C	
LCS 490-367978/5	Lab Control Sample	Total/NA	Solid	8015C	
LCSD 490-367978/6	Lab Control Sample Dup	Total/NA	Solid	8015C	
490-111143-20 MS	SB-20	Total/NA	Solid	8015C	367875
490-111143-20 MSD	SB-20	Total/NA	Solid	8015C	367875

Analysis Batch: 368333

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111143-21	SB-21	Total/NA	Solid	8015C	367875
490-111143-22	SB-22	Total/NA	Solid	8015C	367875
490-111143-24	SB-24	Total/NA	Solid	8015C	367875
490-111143-25	SB-25	Total/NA	Solid	8015C	367875
490-111143-26	SB-26	Total/NA	Solid	8015C	367875
490-111143-27	SB-27	Total/NA	Solid	8015C	367875
490-111143-28	SB-28	Total/NA	Solid	8015C	367875
490-111143-29	DUP-1	Total/NA	Solid	8015C	367875
490-111143-30	DUP-2	Total/NA	Solid	8015C	367875
490-111143-31	DUP-3	Total/NA	Solid	8015C	367875
MB 490-368333/8	Method Blank	Total/NA	Solid	8015C	
LCS 490-368333/5	Lab Control Sample	Total/NA	Solid	8015C	
LCSD 490-368333/6	Lab Control Sample Dup	Total/NA	Solid	8015C	
490-111143-21 MS	SB-21	Total/NA	Solid	8015C	367875
490-111143-21 MSD	SB-21	Total/NA	Solid	8015C	367875

Analysis Batch: 368519

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111143-23	SB-23	Total/NA	Solid	8015C	367875
MB 490-368519/8	Method Blank	Total/NA	Solid	8015C	
LCS 490-368519/5	Lab Control Sample	Total/NA	Solid	8015C	
LCSD 490-368519/6	Lab Control Sample Dup	Total/NA	Solid	8015C	

GC VOA (Continued)

Analysis Batch: 369280

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111143-33	FB	Total/NA	Water	8015C	
490-111143-34	SB-7	Total/NA	Water	8015C	
490-111143-35	SB-8	Total/NA	Water	8015C	
490-111143-36	SB-9	Total/NA	Water	8015C	
490-111143-37	SB-10	Total/NA	Water	8015C	
490-111143-38	SB-11	Total/NA	Water	8015C	
490-111143-39	SB-12	Total/NA	Water	8015C	
490-111143-40	SB-13	Total/NA	Water	8015C	
490-111143-41	SB-15	Total/NA	Water	8015C	
490-111143-42	SB-19	Total/NA	Water	8015C	
490-111143-43	SB-20	Total/NA	Water	8015C	
490-111143-44	SB-22	Total/NA	Water	8015C	
490-111143-45	SB-23	Total/NA	Water	8015C	
490-111143-46	SB-25	Total/NA	Water	8015C	
490-111143-47	DUP1	Total/NA	Water	8015C	
490-111143-48	DUP2	Total/NA	Water	8015C	
490-111143-49	MW-N	Total/NA	Water	8015C	
490-111143-50	MW-W	Total/NA	Water	8015C	
MB 490-369280/25	Method Blank	Total/NA	Water	8015C	
LCS 490-369280/23	Lab Control Sample	Total/NA	Water	8015C	
LCSD 490-369280/24	Lab Control Sample Dup	Total/NA	Water	8015C	
490-111143-50 MS	MW-W	Total/NA	Water	8015C	
490-111143-50 MSD	MW-W	Total/NA	Water	8015C	

GC Semi VOA

Analysis Batch: 367676

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111143-31	DUP-3	Total/NA	Solid	8015C	367710
MB 490-367710/1-A	Method Blank	Total/NA	Solid	8015C	367710
LCS 490-367710/2-A	Lab Control Sample	Total/NA	Solid	8015C	367710
490-111029-A-1-B MS	Matrix Spike	Total/NA	Solid	8015C	367710
490-111029-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015C	367710

Prep Batch: 367710

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111143-31	DUP-3	Total/NA	Solid	3550C	
MB 490-367710/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 490-367710/2-A	Lab Control Sample	Total/NA	Solid	3550C	
490-111029-A-1-B MS	Matrix Spike	Total/NA	Solid	3550C	
490-111029-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	3550C	

Prep Batch: 368125

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111143-33	FB	Total/NA	Water	3510C	
490-111143-34	SB-7	Total/NA	Water	3510C	
490-111143-35	SB-8	Total/NA	Water	3510C	
490-111143-36	SB-9	Total/NA	Water	3510C	
490-111143-37	SB-10	Total/NA	Water	3510C	
490-111143-38	SB-11	Total/NA	Water	3510C	

GC Semi VOA (Continued)

Prep Batch: 368125 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111143-39	SB-12	Total/NA	Water	3510C	
490-111143-40	SB-13	Total/NA	Water	3510C	
490-111143-42	SB-19	Total/NA	Water	3510C	
490-111143-43	SB-20	Total/NA	Water	3510C	
490-111143-44	SB-22	Total/NA	Water	3510C	
490-111143-45	SB-23	Total/NA	Water	3510C	
490-111143-46	SB-25	Total/NA	Water	3510C	
490-111143-47	DUP1	Total/NA	Water	3510C	
490-111143-48	DUP2	Total/NA	Water	3510C	
490-111143-49	MW-N	Total/NA	Water	3510C	
490-111143-50	MW-W	Total/NA	Water	3510C	
MB 490-368125/1-A	Method Blank	Total/NA	Water	3510C	
LCS 490-368125/2-A	Lab Control Sample	Total/NA	Water	3510C	

Analysis Batch: 368212

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111143-33	FB	Total/NA	Water	8015C	368125
490-111143-34	SB-7	Total/NA	Water	8015C	368125
490-111143-35	SB-8	Total/NA	Water	8015C	368125
490-111143-36	SB-9	Total/NA	Water	8015C	368125
490-111143-37	SB-10	Total/NA	Water	8015C	368125
490-111143-38	SB-11	Total/NA	Water	8015C	368125
490-111143-39	SB-12	Total/NA	Water	8015C	368125
490-111143-40	SB-13	Total/NA	Water	8015C	368125
490-111143-42	SB-19	Total/NA	Water	8015C	368125
490-111143-43	SB-20	Total/NA	Water	8015C	368125
490-111143-44	SB-22	Total/NA	Water	8015C	368125
490-111143-45	SB-23	Total/NA	Water	8015C	368125
490-111143-46	SB-25	Total/NA	Water	8015C	368125
490-111143-47	DUP1	Total/NA	Water	8015C	368125
490-111143-48	DUP2	Total/NA	Water	8015C	368125
490-111143-49	MW-N	Total/NA	Water	8015C	368125
490-111143-50	MW-W	Total/NA	Water	8015C	368125
MB 490-368125/1-A	Method Blank	Total/NA	Water	8015C	368125
LCS 490-368125/2-A	Lab Control Sample	Total/NA	Water	8015C	368125

Analysis Batch: 368488

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111143-41	SB-15	Total/NA	Water	8015C	368623
MB 490-368623/1-A	Method Blank	Total/NA	Water	8015C	368623
LCS 490-368623/2-A	Lab Control Sample	Total/NA	Water	8015C	368623
LCSD 490-368623/3-A	Lab Control Sample Dup	Total/NA	Water	8015C	368623

Prep Batch: 368606

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111143-1	SB-1	Total/NA	Solid	3550C	
490-111143-2	SB-2	Total/NA	Solid	3550C	
490-111143-3	SB-3	Total/NA	Solid	3550C	
490-111143-4	SB-4	Total/NA	Solid	3550C	
490-111143-5	SB-5	Total/NA	Solid	3550C	
490-111143-6	SB-6	Total/NA	Solid	3550C	

GC Semi VOA (Continued)

Prep Batch: 368606 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111143-7	SB-7	Total/NA	Solid	3550C	
490-111143-8	SB-8	Total/NA	Solid	3550C	
490-111143-9	SB-9	Total/NA	Solid	3550C	
490-111143-10	SB-10	Total/NA	Solid	3550C	
490-111143-11	SB-11	Total/NA	Solid	3550C	
490-111143-12	SB-12	Total/NA	Solid	3550C	
490-111143-13	SB-13	Total/NA	Solid	3550C	
490-111143-14	SB-14	Total/NA	Solid	3550C	
490-111143-15	SB-15	Total/NA	Solid	3550C	
490-111143-16	SB-16	Total/NA	Solid	3550C	
490-111143-17	SB-17	Total/NA	Solid	3550C	
490-111143-18	SB-18	Total/NA	Solid	3550C	
490-111143-19	SB-19	Total/NA	Solid	3550C	
490-111143-20	SB-20	Total/NA	Solid	3550C	
MB 490-368606/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 490-368606/2-A	Lab Control Sample	Total/NA	Solid	3550C	
490-111143-20 MS	SB-20	Total/NA	Solid	3550C	
490-111143-20 MSD	SB-20	Total/NA	Solid	3550C	

Prep Batch: 368623

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111143-41	SB-15	Total/NA	Water	3510C	
MB 490-368623/1-A	Method Blank	Total/NA	Water	3510C	
LCS 490-368623/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 490-368623/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 368830

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111143-21	SB-21	Total/NA	Solid	8015C	368868
490-111143-22	SB-22	Total/NA	Solid	8015C	368868
490-111143-23	SB-23	Total/NA	Solid	8015C	368868
490-111143-24	SB-24	Total/NA	Solid	8015C	368868
490-111143-25	SB-25	Total/NA	Solid	8015C	368868
490-111143-26	SB-26	Total/NA	Solid	8015C	368868
490-111143-27	SB-27	Total/NA	Solid	8015C	368868
490-111143-28	SB-28	Total/NA	Solid	8015C	368868
490-111143-29	DUP-1	Total/NA	Solid	8015C	368868
490-111143-30	DUP-2	Total/NA	Solid	8015C	368868
MB 490-368868/1-A	Method Blank	Total/NA	Solid	8015C	368868
LCS 490-368868/2-A	Lab Control Sample	Total/NA	Solid	8015C	368868
LCSD 490-368868/3-A	Lab Control Sample Dup	Total/NA	Solid	8015C	368868

Prep Batch: 368868

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111143-21	SB-21	Total/NA	Solid	3550C	
490-111143-22	SB-22	Total/NA	Solid	3550C	
490-111143-23	SB-23	Total/NA	Solid	3550C	
490-111143-24	SB-24	Total/NA	Solid	3550C	
490-111143-25	SB-25	Total/NA	Solid	3550C	
490-111143-26	SB-26	Total/NA	Solid	3550C	
490-111143-27	SB-27	Total/NA	Solid	3550C	

GC Semi VOA (Continued)

Prep Batch: 368868 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111143-28	SB-28	Total/NA	Solid	3550C	
490-111143-29	DUP-1	Total/NA	Solid	3550C	
490-111143-30	DUP-2	Total/NA	Solid	3550C	
MB 490-368868/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 490-368868/2-A	Lab Control Sample	Total/NA	Solid	3550C	
LCSD 490-368868/3-A	Lab Control Sample Dup	Total/NA	Solid	3550C	
490-111160-A-7-B MS	Matrix Spike	Total/NA	Solid	3550C	
490-111160-A-7-C MSD	Matrix Spike Duplicate	Total/NA	Solid	3550C	

Analysis Batch: 368926

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111143-1	SB-1	Total/NA	Solid	8015C	368606
490-111143-2	SB-2	Total/NA	Solid	8015C	368606
490-111143-3	SB-3	Total/NA	Solid	8015C	368606
490-111143-4	SB-4	Total/NA	Solid	8015C	368606
490-111143-5	SB-5	Total/NA	Solid	8015C	368606
490-111143-6	SB-6	Total/NA	Solid	8015C	368606
490-111143-7	SB-7	Total/NA	Solid	8015C	368606
490-111143-8	SB-8	Total/NA	Solid	8015C	368606
490-111143-9	SB-9	Total/NA	Solid	8015C	368606
490-111143-10	SB-10	Total/NA	Solid	8015C	368606
490-111143-11	SB-11	Total/NA	Solid	8015C	368606
490-111143-12	SB-12	Total/NA	Solid	8015C	368606
490-111143-13	SB-13	Total/NA	Solid	8015C	368606
490-111143-14	SB-14	Total/NA	Solid	8015C	368606
490-111143-15	SB-15	Total/NA	Solid	8015C	368606
490-111143-16	SB-16	Total/NA	Solid	8015C	368606
490-111143-17	SB-17	Total/NA	Solid	8015C	368606
490-111143-18	SB-18	Total/NA	Solid	8015C	368606
490-111143-19	SB-19	Total/NA	Solid	8015C	368606
490-111143-20	SB-20	Total/NA	Solid	8015C	368606
MB 490-368606/1-A	Method Blank	Total/NA	Solid	8015C	368606
LCS 490-368606/2-A	Lab Control Sample	Total/NA	Solid	8015C	368606
490-111143-20 MS	SB-20	Total/NA	Solid	8015C	368606
490-111143-20 MSD	SB-20	Total/NA	Solid	8015C	368606

Analysis Batch: 369160

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111160-A-7-B MS	Matrix Spike	Total/NA	Solid	8015C	368868
490-111160-A-7-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015C	368868

Prep Batch: 369216

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111143-7	SB-7	Total/NA	Solid	3550C	
490-111143-8	SB-8	Total/NA	Solid	3550C	
490-111143-9	SB-9	Total/NA	Solid	3550C	
490-111143-10	SB-10	Total/NA	Solid	3550C	
490-111143-11	SB-11	Total/NA	Solid	3550C	
490-111143-12	SB-12	Total/NA	Solid	3550C	
490-111143-13	SB-13	Total/NA	Solid	3550C	
490-111143-19	SB-19	Total/NA	Solid	3550C	

GC Semi VOA (Continued)

Prep Batch: 369216 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111143-22	SB-22	Total/NA	Solid	3550C	
490-111143-25	SB-25	Total/NA	Solid	3550C	
MB 490-369216/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 490-369216/2-A	Lab Control Sample	Total/NA	Solid	3550C	
490-111280-A-1-B MS	Matrix Spike	Total/NA	Solid	3550C	
490-111280-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	3550C	

Analysis Batch: 369773

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111143-7	SB-7	Total/NA	Solid	8082A	369216
490-111143-8	SB-8	Total/NA	Solid	8082A	369216
490-111143-9	SB-9	Total/NA	Solid	8082A	369216
490-111143-10	SB-10	Total/NA	Solid	8082A	369216
490-111143-11	SB-11	Total/NA	Solid	8082A	369216
490-111143-12	SB-12	Total/NA	Solid	8082A	369216
490-111143-13	SB-13	Total/NA	Solid	8082A	369216
490-111143-19	SB-19	Total/NA	Solid	8082A	369216
490-111143-22	SB-22	Total/NA	Solid	8082A	369216
490-111143-25	SB-25	Total/NA	Solid	8082A	369216
MB 490-369216/1-A	Method Blank	Total/NA	Solid	8082A	369216
LCS 490-369216/2-A	Lab Control Sample	Total/NA	Solid	8082A	369216
490-111280-A-1-B MS	Matrix Spike	Total/NA	Solid	8082A	369216
490-111280-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8082A	369216

Metals

Prep Batch: 367870

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111143-34	SB-7	Total/NA	Water	7470A	
490-111143-36	SB-9	Total/NA	Water	7470A	
490-111143-37	SB-10	Total/NA	Water	7470A	
490-111143-38	SB-11	Total/NA	Water	7470A	
490-111143-39	SB-12	Total/NA	Water	7470A	
490-111143-40	SB-13	Total/NA	Water	7470A	
490-111143-42	SB-19	Total/NA	Water	7470A	
490-111143-44	SB-22	Total/NA	Water	7470A	
490-111143-46	SB-25	Total/NA	Water	7470A	
MB 490-367870/1-A	Method Blank	Total/NA	Water	7470A	
LCS 490-367870/2-A	Lab Control Sample	Total/NA	Water	7470A	
490-111126-F-5-B MS	Matrix Spike	Total/NA	Water	7470A	
490-111126-F-5-C MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Prep Batch: 368008

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111143-34	SB-7	Total/NA	Water	3010A	
490-111143-35	SB-8	Total/NA	Water	3010A	
490-111143-36	SB-9	Total/NA	Water	3010A	
490-111143-37	SB-10	Total/NA	Water	3010A	
490-111143-38	SB-11	Total/NA	Water	3010A	
MB 490-368008/1-A	Method Blank	Total/NA	Water	3010A	

Metals (Continued)

Prep Batch: 368008 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 490-368008/2-A	Lab Control Sample	Total/NA	Water	3010A	
LCSD 490-368008/3-A	Lab Control Sample Dup	Total/NA	Water	3010A	
490-111040-A-1-B MS	Matrix Spike	Total/NA	Water	3010A	
490-111040-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	3010A	

Prep Batch: 368080

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111143-7	SB-7	Total/NA	Solid	7471B	
490-111143-8	SB-8	Total/NA	Solid	7471B	
490-111143-9	SB-9	Total/NA	Solid	7471B	
490-111143-10	SB-10	Total/NA	Solid	7471B	
490-111143-11	SB-11	Total/NA	Solid	7471B	
490-111143-12	SB-12	Total/NA	Solid	7471B	
490-111143-13	SB-13	Total/NA	Solid	7471B	
490-111143-19	SB-19	Total/NA	Solid	7471B	
490-111143-22	SB-22	Total/NA	Solid	7471B	
490-111143-25	SB-25	Total/NA	Solid	7471B	
MB 490-368080/1-A	Method Blank	Total/NA	Solid	7471B	
LCS 490-368080/2-A	Lab Control Sample	Total/NA	Solid	7471B	
490-111143-7 MS	SB-7	Total/NA	Solid	7471B	
490-111143-7 MSD	SB-7	Total/NA	Solid	7471B	

Analysis Batch: 368105

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111143-34	SB-7	Total/NA	Water	7470A	367870
490-111143-36	SB-9	Total/NA	Water	7470A	367870
490-111143-37	SB-10	Total/NA	Water	7470A	367870
490-111143-38	SB-11	Total/NA	Water	7470A	367870
490-111143-39	SB-12	Total/NA	Water	7470A	367870
490-111143-40	SB-13	Total/NA	Water	7470A	367870
490-111143-42	SB-19	Total/NA	Water	7470A	367870
490-111143-44	SB-22	Total/NA	Water	7470A	367870
490-111143-46	SB-25	Total/NA	Water	7470A	367870
MB 490-367870/1-A	Method Blank	Total/NA	Water	7470A	367870
LCS 490-367870/2-A	Lab Control Sample	Total/NA	Water	7470A	367870
490-111126-F-5-B MS	Matrix Spike	Total/NA	Water	7470A	367870
490-111126-F-5-C MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	367870

Prep Batch: 368175

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111143-39	SB-12	Total/NA	Water	3010A	
490-111143-40	SB-13	Total/NA	Water	3010A	
490-111143-42	SB-19	Total/NA	Water	3010A	
490-111143-44	SB-22	Total/NA	Water	3010A	
490-111143-46	SB-25	Total/NA	Water	3010A	
MB 490-368175/1-A	Method Blank	Total/NA	Water	3010A	
LCS 490-368175/18-A	Lab Control Sample	Total/NA	Water	3010A	
LCS 490-368175/2-A	Lab Control Sample	Total/NA	Water	3010A	
LCSD 490-368175/19-A	Lab Control Sample Dup	Total/NA	Water	3010A	
LCSD 490-368175/3-A	Lab Control Sample Dup	Total/NA	Water	3010A	
490-111161-A-36-B MS	Matrix Spike	Total/NA	Water	3010A	

Metals (Continued)

Prep Batch: 368175 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111161-A-36-B MS ^5	Matrix Spike	Total/NA	Water	3010A	
490-111161-A-36-C MSD	Matrix Spike Duplicate	Total/NA	Water	3010A	
490-111161-A-36-C MSD ^5	Matrix Spike Duplicate	Total/NA	Water	3010A	

Analysis Batch: 368191

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111143-34	SB-7	Total/NA	Water	6010C	368008
490-111143-35	SB-8	Total/NA	Water	6010C	368008
490-111143-36	SB-9	Total/NA	Water	6010C	368008
490-111143-37	SB-10	Total/NA	Water	6010C	368008
490-111143-38	SB-11	Total/NA	Water	6010C	368008
MB 490-368008/1-A	Method Blank	Total/NA	Water	6010C	368008
LCS 490-368008/2-A	Lab Control Sample	Total/NA	Water	6010C	368008
LCSD 490-368008/3-A	Lab Control Sample Dup	Total/NA	Water	6010C	368008
490-111040-A-1-B MS	Matrix Spike	Total/NA	Water	6010C	368008
490-111040-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	6010C	368008

Prep Batch: 368295

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111143-35	SB-8	Total/NA	Water	7470A	
MB 490-368295/1-A	Method Blank	Total/NA	Water	7470A	
LCS 490-368295/2-A	Lab Control Sample	Total/NA	Water	7470A	
490-111061-B-1-B MS	Matrix Spike	Total/NA	Water	7470A	
490-111061-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Analysis Batch: 368378

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111143-7	SB-7	Total/NA	Solid	7471B	368080
490-111143-8	SB-8	Total/NA	Solid	7471B	368080
490-111143-9	SB-9	Total/NA	Solid	7471B	368080
490-111143-10	SB-10	Total/NA	Solid	7471B	368080
490-111143-11	SB-11	Total/NA	Solid	7471B	368080
490-111143-12	SB-12	Total/NA	Solid	7471B	368080
490-111143-13	SB-13	Total/NA	Solid	7471B	368080
490-111143-19	SB-19	Total/NA	Solid	7471B	368080
490-111143-22	SB-22	Total/NA	Solid	7471B	368080
MB 490-368080/1-A	Method Blank	Total/NA	Solid	7471B	368080
LCS 490-368080/2-A	Lab Control Sample	Total/NA	Solid	7471B	368080
490-111143-7 MS	SB-7	Total/NA	Solid	7471B	368080
490-111143-7 MSD	SB-7	Total/NA	Solid	7471B	368080

Analysis Batch: 368598

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111143-25	SB-25	Total/NA	Solid	7471B	368080

Analysis Batch: 368690

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111143-35	SB-8	Total/NA	Water	7470A	368295
MB 490-368295/1-A	Method Blank	Total/NA	Water	7470A	368295
LCS 490-368295/2-A	Lab Control Sample	Total/NA	Water	7470A	368295
490-111061-B-1-B MS	Matrix Spike	Total/NA	Water	7470A	368295

Metals (Continued)

Analysis Batch: 368690 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111061-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	368295

Analysis Batch: 368726

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 490-368175/1-A	Method Blank	Total/NA	Water	6010C	368175
LCS 490-368175/18-A	Lab Control Sample	Total/NA	Water	6010C	368175
LCSD 490-368175/19-A	Lab Control Sample Dup	Total/NA	Water	6010C	368175
490-111161-A-36-B MS	Matrix Spike	Total/NA	Water	6010C	368175
490-111161-A-36-C MSD	Matrix Spike Duplicate	Total/NA	Water	6010C	368175

Analysis Batch: 369072

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111143-39	SB-12	Total/NA	Water	6010C	368175
490-111143-40	SB-13	Total/NA	Water	6010C	368175
490-111143-42	SB-19	Total/NA	Water	6010C	368175
490-111143-44	SB-22	Total/NA	Water	6010C	368175
490-111143-46	SB-25	Total/NA	Water	6010C	368175
MB 490-368175/1-A	Method Blank	Total/NA	Water	6010C	368175
LCS 490-368175/2-A	Lab Control Sample	Total/NA	Water	6010C	368175
LCSD 490-368175/3-A	Lab Control Sample Dup	Total/NA	Water	6010C	368175
490-111161-A-36-B MS	Matrix Spike	Total/NA	Water	6010C	368175
490-111161-A-36-C MSD	Matrix Spike Duplicate	Total/NA	Water	6010C	368175

Analysis Batch: 369412

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111143-39	SB-12	Total/NA	Water	6010C	368175
490-111143-40	SB-13	Total/NA	Water	6010C	368175
490-111143-42	SB-19	Total/NA	Water	6010C	368175
490-111143-44	SB-22	Total/NA	Water	6010C	368175
490-111143-46	SB-25	Total/NA	Water	6010C	368175
MB 490-368175/1-A	Method Blank	Total/NA	Water	6010C	368175
LCS 490-368175/18-A	Lab Control Sample	Total/NA	Water	6010C	368175
LCSD 490-368175/19-A	Lab Control Sample Dup	Total/NA	Water	6010C	368175
490-111161-A-36-B MS ^5	Matrix Spike	Total/NA	Water	6010C	368175
490-111161-A-36-C MSD ^5	Matrix Spike Duplicate	Total/NA	Water	6010C	368175

Prep Batch: 369761

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111143-7	SB-7	Total/NA	Solid	3051A	
490-111143-8	SB-8	Total/NA	Solid	3051A	
490-111143-9	SB-9	Total/NA	Solid	3051A	
490-111143-10	SB-10	Total/NA	Solid	3051A	
490-111143-11	SB-11	Total/NA	Solid	3051A	
490-111143-12	SB-12	Total/NA	Solid	3051A	
490-111143-13	SB-13	Total/NA	Solid	3051A	
490-111143-19	SB-19	Total/NA	Solid	3051A	
490-111143-22	SB-22	Total/NA	Solid	3051A	
490-111143-25	SB-25	Total/NA	Solid	3051A	
MB 490-369761/1-A	Method Blank	Total/NA	Solid	3051A	
LCS 490-369761/2-A	Lab Control Sample	Total/NA	Solid	3051A	
LCSD 490-369761/3-A	Lab Control Sample Dup	Total/NA	Solid	3051A	

Metals (Continued)

Prep Batch: 369761 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-119837-C-1-E MS	Matrix Spike	Total/NA	Solid	3051A	
460-119837-C-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	3051A	

Analysis Batch: 369942

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-111143-7	SB-7	Total/NA	Solid	6010C	369761
490-111143-8	SB-8	Total/NA	Solid	6010C	369761
490-111143-9	SB-9	Total/NA	Solid	6010C	369761
490-111143-10	SB-10	Total/NA	Solid	6010C	369761
490-111143-11	SB-11	Total/NA	Solid	6010C	369761
490-111143-12	SB-12	Total/NA	Solid	6010C	369761
490-111143-13	SB-13	Total/NA	Solid	6010C	369761
490-111143-19	SB-19	Total/NA	Solid	6010C	369761
490-111143-22	SB-22	Total/NA	Solid	6010C	369761
490-111143-25	SB-25	Total/NA	Solid	6010C	369761
MB 490-369761/1-A	Method Blank	Total/NA	Solid	6010C	369761
LCS 490-369761/2-A	Lab Control Sample	Total/NA	Solid	6010C	369761
LCSD 490-369761/3-A	Lab Control Sample Dup	Total/NA	Solid	6010C	369761
460-119837-C-1-E MS	Matrix Spike	Total/NA	Solid	6010C	369761
460-119837-C-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	6010C	369761

Lab Chronicle

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-1
Date Collected: 08/31/16 09:40
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.28 g	5.0 mL	367883	08/31/16 09:40	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	369449	09/12/16 19:41	IMA	TAL NSH
Total/NA	Prep	3550C			30.45 g	1.00 mL	368562	09/08/16 10:22	LOJ	TAL NSH
Total/NA	Analysis	8270C		1			368877	09/09/16 14:22	T1C	TAL NSH
Total/NA	Prep	5035			5.91 g	5.0 mL	367875	08/31/16 09:40	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	367978	09/06/16 17:41	A1B	TAL NSH
Total/NA	Prep	3550C			25.25 g	1.00 mL	368606	09/08/16 11:38	LOJ	TAL NSH
Total/NA	Analysis	8015C		1			368926	09/09/16 12:48	MDW	TAL NSH

Client Sample ID: SB-2
Date Collected: 08/31/16 09:50
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.606 g	5.0 mL	367883	08/31/16 09:50	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	369449	09/12/16 20:09	IMA	TAL NSH
Total/NA	Prep	3550C			30.71 g	1.00 mL	368562	09/08/16 10:22	LOJ	TAL NSH
Total/NA	Analysis	8270C		1			368877	09/09/16 15:21	T1C	TAL NSH
Total/NA	Prep	5035			5.75 g	5.0 mL	367875	08/31/16 09:50	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	367978	09/06/16 18:15	A1B	TAL NSH
Total/NA	Prep	3550C			25.98 g	1.00 mL	368606	09/08/16 11:38	LOJ	TAL NSH
Total/NA	Analysis	8015C		1			368926	09/09/16 13:06	MDW	TAL NSH

Client Sample ID: SB-3
Date Collected: 08/31/16 10:20
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.52 g	5.0 mL	367883	08/31/16 10:20	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	369449	09/12/16 20:36	IMA	TAL NSH
Total/NA	Prep	3550C			30.58 g	1.00 mL	368562	09/08/16 10:22	LOJ	TAL NSH
Total/NA	Analysis	8270C		1			368877	09/09/16 15:41	T1C	TAL NSH
Total/NA	Prep	5035			5.28 g	5.0 mL	367875	08/31/16 10:20	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	367978	09/06/16 18:48	A1B	TAL NSH
Total/NA	Prep	3550C			25.07 g	1.00 mL	368606	09/08/16 11:38	LOJ	TAL NSH
Total/NA	Analysis	8015C		1			368926	09/09/16 13:25	MDW	TAL NSH

Client Sample ID: SB-4
Date Collected: 08/31/16 10:40
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.592 g	5.0 mL	367883	08/31/16 10:40	JLP	TAL NSH

Lab Chronicle

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-4
Date Collected: 08/31/16 10:40
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 g	5 mL	369449	09/12/16 21:03	IMA	TAL NSH
Total/NA	Prep	3550C			30.33 g	1.00 mL	368562	09/08/16 10:22	LOJ	TAL NSH
Total/NA	Analysis	8270C		1			368877	09/09/16 16:01	T1C	TAL NSH
Total/NA	Prep	5035			6.81 g	5.0 mL	367875	08/31/16 10:40	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	367978	09/06/16 19:22	A1B	TAL NSH
Total/NA	Prep	3550C			25.10 g	1.00 mL	368606	09/08/16 11:38	LOJ	TAL NSH
Total/NA	Analysis	8015C		1			368926	09/09/16 13:44	MDW	TAL NSH

Client Sample ID: SB-5
Date Collected: 08/31/16 11:00
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.67 g	5.0 mL	367875	08/31/16 11:00	JLP	TAL NSH
Total/NA	Analysis	8260B		1	0.2 mL	10 mL	369935	09/14/16 12:59	EML	TAL NSH
Total/NA	Prep	5035			5.257 g	5.0 mL	367883	08/31/16 11:00	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	369449	09/12/16 21:31	IMA	TAL NSH
Total/NA	Prep	3550C			30.27 g	1.00 mL	368562	09/08/16 10:22	LOJ	TAL NSH
Total/NA	Analysis	8270C		1			368877	09/09/16 16:20	T1C	TAL NSH
Total/NA	Prep	5035			4.09 g	5.0 mL	367875	08/31/16 11:00	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	367978	09/06/16 19:55	A1B	TAL NSH
Total/NA	Prep	3550C			25.28 g	1.00 mL	368606	09/08/16 11:38	LOJ	TAL NSH
Total/NA	Analysis	8015C		1			368926	09/09/16 14:02	MDW	TAL NSH

Client Sample ID: SB-6
Date Collected: 08/31/16 11:20
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.421 g	5.0 mL	367883	08/31/16 11:20	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	369449	09/12/16 21:58	IMA	TAL NSH
Total/NA	Prep	3550C			30.18 g	1.00 mL	368562	09/08/16 10:22	LOJ	TAL NSH
Total/NA	Analysis	8270C		1			368877	09/09/16 16:40	T1C	TAL NSH
Total/NA	Prep	5035			5.45 g	5.0 mL	367875	08/31/16 11:20	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	367978	09/06/16 20:28	A1B	TAL NSH
Total/NA	Prep	3550C			25.39 g	1.00 mL	368606	09/08/16 11:38	LOJ	TAL NSH
Total/NA	Analysis	8015C		1			368926	09/09/16 14:21	MDW	TAL NSH

Client Sample ID: SB-7

Lab Sample ID: 490-111143-7
Date Collected: 08/31/16 12:45
Matrix: Solid
Date Received: 09/03/16 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.419 g	5.0 mL	367883	08/31/16 12:45	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	369449	09/12/16 22:26	IMA	TAL NSH
Total/NA	Prep	3550C			30.09 g	1.00 mL	368562	09/08/16 10:22	LOJ	TAL NSH
Total/NA	Analysis	8270C		1			368877	09/09/16 17:00	T1C	TAL NSH
Total/NA	Prep	5035			6.25 g	5.0 mL	367875	08/31/16 12:45	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	367978	09/06/16 21:02	A1B	TAL NSH
Total/NA	Prep	3550C			25.41 g	1.00 mL	368606	09/08/16 11:38	LOJ	TAL NSH
Total/NA	Analysis	8015C		1			368926	09/09/16 14:40	MDW	TAL NSH
Total/NA	Prep	3550C			30.34 g	10 mL	369216	09/11/16 10:57	MNM	TAL NSH
Total/NA	Analysis	8082A		1			369773	09/13/16 17:41	MGH	TAL NSH
Total/NA	Prep	3051A			0.516 g	100 mL	369761	09/13/16 13:22	PG1	TAL NSH
Total/NA	Analysis	6010C		1			369942	09/13/16 22:10	BLG	TAL NSH
Total/NA	Prep	7471B			0.623 g	100 mL	368080	09/06/16 14:59	BLG	TAL NSH
Total/NA	Analysis	7471B		1			368378	09/07/16 13:56	BLG	TAL NSH

Client Sample ID: SB-8

Lab Sample ID: 490-111143-8
Date Collected: 08/31/16 13:20
Matrix: Solid
Date Received: 09/03/16 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7.29 g	5.0 mL	367875	08/31/16 13:20	JLP	TAL NSH
Total/NA	Analysis	8260B		1	0.2 mL	10 mL	369935	09/14/16 13:26	EML	TAL NSH
Total/NA	Prep	5035			6.084 g	5.0 mL	367883	08/31/16 13:20	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	369449	09/12/16 22:53	IMA	TAL NSH
Total/NA	Prep	3550C			30.76 g	1.00 mL	368562	09/08/16 10:22	LOJ	TAL NSH
Total/NA	Analysis	8270C		1			368877	09/09/16 17:20	T1C	TAL NSH
Total/NA	Prep	5035			7.51 g	5.0 mL	367875	08/31/16 13:20	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	367978	09/06/16 21:35	A1B	TAL NSH
Total/NA	Prep	3550C			25.06 g	1.00 mL	368606	09/08/16 11:38	LOJ	TAL NSH
Total/NA	Analysis	8015C		10			368926	09/09/16 21:15	MDW	TAL NSH
Total/NA	Prep	3550C			30.16 g	10 mL	369216	09/11/16 10:57	MNM	TAL NSH
Total/NA	Analysis	8082A		1			369773	09/13/16 17:56	MGH	TAL NSH
Total/NA	Prep	3051A			0.524 g	100 mL	369761	09/13/16 13:22	PG1	TAL NSH
Total/NA	Analysis	6010C		1			369942	09/13/16 22:15	BLG	TAL NSH
Total/NA	Prep	7471B			0.620 g	100 mL	368080	09/06/16 14:59	BLG	TAL NSH
Total/NA	Analysis	7471B		1			368378	09/07/16 14:04	BLG	TAL NSH

Client Sample ID: SB-9

Lab Sample ID: 490-111143-9
Date Collected: 08/31/16 14:10
Matrix: Solid
Date Received: 09/03/16 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7.083 g	5.0 mL	367883	08/31/16 14:10	JLP	TAL NSH

Lab Chronicle

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-9

Lab Sample ID: 490-111143-9
Date Collected: 08/31/16 14:10
Matrix: Solid
Date Received: 09/03/16 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 g	5 mL	369449	09/12/16 23:20	IMA	TAL NSH
Total/NA	Prep	3550C			30.88 g	1.00 mL	368562	09/08/16 10:22	LOJ	TAL NSH
Total/NA	Analysis	8270C		1			368877	09/09/16 17:40	T1C	TAL NSH
Total/NA	Prep	5035			7.17 g	5.0 mL	367875	08/31/16 14:10	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	367978	09/06/16 22:08	A1B	TAL NSH
Total/NA	Prep	3550C			25.83 g	1.00 mL	368606	09/08/16 11:38	LOJ	TAL NSH
Total/NA	Analysis	8015C		1			368926	09/09/16 15:17	MDW	TAL NSH
Total/NA	Prep	3550C			30.43 g	10 mL	369216	09/11/16 10:57	MNM	TAL NSH
Total/NA	Analysis	8082A		1			369773	09/13/16 18:12	MGH	TAL NSH
Total/NA	Prep	3051A			0.503 g	100 mL	369761	09/13/16 13:22	PG1	TAL NSH
Total/NA	Analysis	6010C		1			369942	09/13/16 22:20	BLG	TAL NSH
Total/NA	Prep	7471B			0.625 g	100 mL	368080	09/06/16 14:59	BLG	TAL NSH
Total/NA	Analysis	7471B		1			368378	09/07/16 14:07	BLG	TAL NSH

Client Sample ID: SB-10

Lab Sample ID: 490-111143-10
Date Collected: 08/31/16 15:10
Matrix: Solid
Date Received: 09/03/16 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7 g	5.0 mL	367883	08/31/16 15:10	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	369449	09/12/16 23:48	IMA	TAL NSH
Total/NA	Prep	3550C			30.93 g	1.00 mL	368562	09/08/16 10:22	LOJ	TAL NSH
Total/NA	Analysis	8270C		1			368877	09/09/16 18:00	T1C	TAL NSH
Total/NA	Prep	5035			6.22 g	5.0 mL	367875	08/31/16 15:10	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	367978	09/06/16 22:41	A1B	TAL NSH
Total/NA	Prep	3550C			25.70 g	1.00 mL	368606	09/08/16 11:38	LOJ	TAL NSH
Total/NA	Analysis	8015C		1			368926	09/09/16 15:36	MDW	TAL NSH
Total/NA	Prep	3550C			30.29 g	10 mL	369216	09/11/16 10:57	MNM	TAL NSH
Total/NA	Analysis	8082A		1			369773	09/13/16 18:38	MGH	TAL NSH
Total/NA	Prep	3051A			0.510 g	100 mL	369761	09/13/16 13:22	PG1	TAL NSH
Total/NA	Analysis	6010C		1			369942	09/13/16 22:26	BLG	TAL NSH
Total/NA	Prep	7471B			0.595 g	100 mL	368080	09/06/16 14:59	BLG	TAL NSH
Total/NA	Analysis	7471B		1			368378	09/07/16 14:09	BLG	TAL NSH

Client Sample ID: SB-11

Lab Sample ID: 490-111143-11
Date Collected: 08/31/16 16:00
Matrix: Solid
Date Received: 09/03/16 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.846 g	5.0 mL	367883	08/31/16 16:00	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	369449	09/13/16 00:15	IMA	TAL NSH
Total/NA	Prep	3550C			30.16 g	1.00 mL	368562	09/08/16 10:22	LOJ	TAL NSH
Total/NA	Analysis	8270C		1			368877	09/09/16 18:20	T1C	TAL NSH

Lab Chronicle

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-11

Lab Sample ID: 490-111143-11
Date Collected: 08/31/16 16:00
Matrix: Solid
Date Received: 09/03/16 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.06 g	5.0 mL	367875	08/31/16 16:00	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	367978	09/06/16 23:14	A1B	TAL NSH
Total/NA	Prep	3550C			25.19 g	1.00 mL	368606	09/08/16 11:38	LOJ	TAL NSH
Total/NA	Analysis	8015C		1			368926	09/09/16 15:55	MDW	TAL NSH
Total/NA	Prep	3550C			30.36 g	10 mL	369216	09/11/16 10:57	MNM	TAL NSH
Total/NA	Analysis	8082A		1			369773	09/13/16 18:53	MGH	TAL NSH
Total/NA	Prep	3051A			0.517 g	100 mL	369761	09/13/16 13:22	PG1	TAL NSH
Total/NA	Analysis	6010C		1			369942	09/13/16 22:42	BLG	TAL NSH
Total/NA	Prep	7471B			0.618 g	100 mL	368080	09/06/16 14:59	BLG	TAL NSH
Total/NA	Analysis	7471B		1			368378	09/07/16 14:12	BLG	TAL NSH

Client Sample ID: SB-12

Lab Sample ID: 490-111143-12
Date Collected: 08/31/16 16:40
Matrix: Solid
Date Received: 09/03/16 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7.082 g	5.0 mL	367883	08/31/16 16:40	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	369449	09/13/16 00:43	IMA	TAL NSH
Total/NA	Prep	3550C			30.50 g	1.00 mL	368562	09/08/16 10:22	LOJ	TAL NSH
Total/NA	Analysis	8270C		1			368877	09/09/16 18:40	T1C	TAL NSH
Total/NA	Prep	5035			6.9 g	5.0 mL	367875	08/31/16 16:40	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	367978	09/06/16 23:48	A1B	TAL NSH
Total/NA	Prep	3550C			25.68 g	1.00 mL	368606	09/08/16 11:38	LOJ	TAL NSH
Total/NA	Analysis	8015C		1			368926	09/09/16 17:48	MDW	TAL NSH
Total/NA	Prep	3550C			30.82 g	10 mL	369216	09/11/16 10:57	MNM	TAL NSH
Total/NA	Analysis	8082A		1			369773	09/13/16 19:09	MGH	TAL NSH
Total/NA	Prep	3051A			0.516 g	100 mL	369761	09/13/16 13:22	PG1	TAL NSH
Total/NA	Analysis	6010C		1			369942	09/13/16 22:47	BLG	TAL NSH
Total/NA	Prep	7471B			0.613 g	100 mL	368080	09/06/16 14:59	BLG	TAL NSH
Total/NA	Analysis	7471B		1			368378	09/07/16 14:15	BLG	TAL NSH

Client Sample ID: SB-13

Lab Sample ID: 490-111143-13
Date Collected: 09/01/16 09:30
Matrix: Solid
Date Received: 09/03/16 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.668 g	5.0 mL	367883	09/01/16 09:30	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	369449	09/13/16 01:10	IMA	TAL NSH
Total/NA	Prep	3550C			30.29 g	1.00 mL	368562	09/08/16 10:22	LOJ	TAL NSH
Total/NA	Analysis	8270C		1			368877	09/09/16 19:00	T1C	TAL NSH
Total/NA	Prep	5035			6.83 g	5.0 mL	367875	09/01/16 09:30	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	367978	09/07/16 00:21	A1B	TAL NSH
Total/NA	Prep	3550C			25.08 g	1.00 mL	368606	09/08/16 11:38	LOJ	TAL NSH

Client Sample ID: SB-13
Date Collected: 09/01/16 09:30
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-13
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015C		1			368926	09/09/16 18:07	MDW	TAL NSH
Total/NA	Prep	3550C			30.98 g	10 mL	369216	09/11/16 10:57	MNM	TAL NSH
Total/NA	Analysis	8082A		1			369773	09/13/16 19:24	MGH	TAL NSH
Total/NA	Prep	3051A			0.507 g	100 mL	369761	09/13/16 13:22	PG1	TAL NSH
Total/NA	Analysis	6010C		1			369942	09/13/16 22:52	BLG	TAL NSH
Total/NA	Prep	7471B			0.604 g	100 mL	368080	09/06/16 14:59	BLG	TAL NSH
Total/NA	Analysis	7471B		1			368378	09/07/16 14:23	BLG	TAL NSH

Client Sample ID: SB-14
Date Collected: 09/01/16 08:50
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-14
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.452 g	5.0 mL	367883	09/01/16 08:50	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	369613	09/13/16 15:10	EML	TAL NSH
Total/NA	Prep	3550C			30.46 g	1.00 mL	368562	09/08/16 10:22	LOJ	TAL NSH
Total/NA	Analysis	8270C		1			368877	09/09/16 19:20	T1C	TAL NSH
Total/NA	Prep	5035			6.83 g	5.0 mL	367875	09/01/16 08:50	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	367978	09/07/16 00:54	A1B	TAL NSH
Total/NA	Prep	3550C			25.51 g	1.00 mL	368606	09/08/16 11:38	LOJ	TAL NSH
Total/NA	Analysis	8015C		1			368926	09/09/16 18:26	MDW	TAL NSH

Client Sample ID: SB-15
Date Collected: 09/01/16 10:00
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-15
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7.166 g	5.0 mL	367883	09/01/16 10:00	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	369613	09/13/16 15:38	EML	TAL NSH
Total/NA	Prep	3550C			30.73 g	1.00 mL	368562	09/08/16 10:22	LOJ	TAL NSH
Total/NA	Analysis	8270C		1			368877	09/09/16 19:39	T1C	TAL NSH
Total/NA	Prep	5035			6.98 g	5.0 mL	367875	09/01/16 10:00	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	367978	09/07/16 01:27	A1B	TAL NSH
Total/NA	Prep	3550C			25.44 g	1.00 mL	368606	09/08/16 11:38	LOJ	TAL NSH
Total/NA	Analysis	8015C		1			368926	09/09/16 18:45	MDW	TAL NSH

Client Sample ID: SB-16
Date Collected: 09/01/16 10:35
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-16
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7.268 g	5.0 mL	367883	09/01/16 10:35	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	369613	09/13/16 16:05	EML	TAL NSH

Lab Chronicle

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-16
Lab Sample ID: 490-111143-16
Date Collected: 09/01/16 10:35
Matrix: Solid
Date Received: 09/03/16 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			30.09 g	1.00 mL	368562	09/08/16 10:22	LOJ	TAL NSH
Total/NA	Analysis	8270C		1			368877	09/09/16 19:59	T1C	TAL NSH
Total/NA	Prep	5035			7.09 g	5.0 mL	367875	09/01/16 10:35	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	367978	09/07/16 02:00	A1B	TAL NSH
Total/NA	Prep	3550C			25.27 g	1.00 mL	368606	09/08/16 11:38	LOJ	TAL NSH
Total/NA	Analysis	8015C		1			368926	09/09/16 19:04	MDW	TAL NSH

Client Sample ID: SB-17
Lab Sample ID: 490-111143-17
Date Collected: 09/01/16 11:00
Matrix: Solid
Date Received: 09/03/16 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.06 g	5.0 mL	367875	09/01/16 11:00	JLP	TAL NSH
Total/NA	Analysis	8260B		1	0.2 mL	10 mL	369935	09/14/16 13:53	EML	TAL NSH
Total/NA	Prep	5035			6.11 g	5.0 mL	367883	09/01/16 11:00	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	369613	09/13/16 16:33	EML	TAL NSH
Total/NA	Prep	3550C			30.14 g	1.00 mL	368562	09/08/16 10:22	LOJ	TAL NSH
Total/NA	Analysis	8270C		1			368877	09/09/16 20:19	T1C	TAL NSH
Total/NA	Prep	5035			4.39 g	5.0 mL	367875	09/01/16 11:00	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	367978	09/07/16 02:33	A1B	TAL NSH
Total/NA	Prep	3550C			25.30 g	1.00 mL	368606	09/08/16 11:38	LOJ	TAL NSH
Total/NA	Analysis	8015C		1			368926	09/09/16 19:23	MDW	TAL NSH

Client Sample ID: SB-18
Lab Sample ID: 490-111143-18
Date Collected: 09/01/16 11:20
Matrix: Solid
Date Received: 09/03/16 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.615 g	5.0 mL	367883	09/01/16 11:20	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	369613	09/13/16 17:00	EML	TAL NSH
Total/NA	Prep	3550C			30.38 g	1.00 mL	368562	09/08/16 10:22	LOJ	TAL NSH
Total/NA	Analysis	8270C		1			368877	09/09/16 20:39	T1C	TAL NSH
Total/NA	Prep	5035			6 g	5.0 mL	367875	09/01/16 11:20	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	367978	09/07/16 03:06	A1B	TAL NSH
Total/NA	Prep	3550C			25.19 g	1.00 mL	368606	09/08/16 11:38	LOJ	TAL NSH
Total/NA	Analysis	8015C		1			368926	09/09/16 19:41	MDW	TAL NSH

Client Sample ID: SB-19
Lab Sample ID: 490-111143-19
Date Collected: 09/01/16 11:45
Matrix: Solid
Date Received: 09/03/16 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.07 g	5.0 mL	367883	09/01/16 11:45	JLP	TAL NSH

Lab Chronicle

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-19

Lab Sample ID: 490-111143-19
Date Collected: 09/01/16 11:45
Matrix: Solid
Date Received: 09/03/16 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 g	5 mL	369613	09/13/16 17:28	EML	TAL NSH
Total/NA	Prep	3550C			30.59 g	1.00 mL	368562	09/08/16 10:22	LOJ	TAL NSH
Total/NA	Analysis	8270C		1			368877	09/09/16 20:58	T1C	TAL NSH
Total/NA	Prep	5035			4.91 g	5.0 mL	367875	09/01/16 11:45	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	367978	09/07/16 03:39	A1B	TAL NSH
Total/NA	Prep	3550C			25.83 g	1.00 mL	368606	09/08/16 11:38	LOJ	TAL NSH
Total/NA	Analysis	8015C		1			368926	09/09/16 20:00	MDW	TAL NSH
Total/NA	Prep	3550C			30.07 g	10 mL	369216	09/11/16 10:57	MNM	TAL NSH
Total/NA	Analysis	8082A		1			369773	09/13/16 19:40	MGH	TAL NSH
Total/NA	Prep	3051A			0.500 g	100 mL	369761	09/13/16 13:22	PG1	TAL NSH
Total/NA	Analysis	6010C		1			369942	09/13/16 22:57	BLG	TAL NSH
Total/NA	Prep	7471B			0.605 g	100 mL	368080	09/06/16 14:59	BLG	TAL NSH
Total/NA	Analysis	7471B		1			368378	09/07/16 14:26	BLG	TAL NSH

Client Sample ID: SB-20

Lab Sample ID: 490-111143-20
Date Collected: 09/01/16 12:50
Matrix: Solid
Date Received: 09/03/16 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.407 g	5.0 mL	367883	09/01/16 12:50	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	369613	09/13/16 17:55	EML	TAL NSH
Total/NA	Prep	3550C			30.22 g	1.00 mL	368562	09/08/16 10:22	LOJ	TAL NSH
Total/NA	Analysis	8270C		1			368877	09/09/16 21:18	T1C	TAL NSH
Total/NA	Prep	5035			5.61 g	5.0 mL	367875	09/01/16 12:50	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	367978	09/07/16 04:12	A1B	TAL NSH
Total/NA	Prep	3550C			25.45 g	1.00 mL	368606	09/08/16 11:38	LOJ	TAL NSH
Total/NA	Analysis	8015C		1			368926	09/09/16 20:19	MDW	TAL NSH

Client Sample ID: SB-21

Lab Sample ID: 490-111143-21
Date Collected: 09/01/16 13:10
Matrix: Solid
Date Received: 09/03/16 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.5 g	5.0 mL	367883	09/01/16 13:10	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	369613	09/13/16 18:23	EML	TAL NSH
Total/NA	Prep	3550C			30.75 g	1.00 mL	369043	09/09/16 16:02	LOJ	TAL NSH
Total/NA	Analysis	8270C		1			369149	09/10/16 15:39	T1C	TAL NSH
Total/NA	Prep	5035			5.97 g	5.0 mL	367875	09/01/16 13:10	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	368333	09/07/16 19:07	A1B	TAL NSH
Total/NA	Prep	3550C			25.66 g	1.00 mL	368868	09/09/16 10:00	LOJ	TAL NSH
Total/NA	Analysis	8015C		1			368830	09/09/16 16:02	MDW	TAL NSH

Lab Chronicle

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-22
Date Collected: 09/01/16 13:30
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-22
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.879 g	5.0 mL	367883	09/01/16 13:30	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	370030	09/14/16 19:26	EML	TAL NSH
Total/NA	Prep	3550C			30.12 g	1.00 mL	369043	09/09/16 16:02	LOJ	TAL NSH
Total/NA	Analysis	8270C		1			369149	09/10/16 15:58	T1C	TAL NSH
Total/NA	Prep	5035			6.3 g	5.0 mL	367875	09/01/16 13:30	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	368333	09/07/16 19:41	A1B	TAL NSH
Total/NA	Prep	3550C			25.50 g	1.00 mL	368868	09/09/16 10:00	LOJ	TAL NSH
Total/NA	Analysis	8015C		1			368830	09/09/16 16:20	MDW	TAL NSH
Total/NA	Prep	3550C			30.11 g	10 mL	369216	09/11/16 10:57	MNM	TAL NSH
Total/NA	Analysis	8082A		1			369773	09/13/16 19:55	MGH	TAL NSH
Total/NA	Prep	3051A			0.518 g	100 mL	369761	09/13/16 13:22	PG1	TAL NSH
Total/NA	Analysis	6010C		1			369942	09/13/16 23:02	BLG	TAL NSH
Total/NA	Prep	7471B			0.604 g	100 mL	368080	09/06/16 14:59	BLG	TAL NSH
Total/NA	Analysis	7471B		1			368378	09/07/16 14:28	BLG	TAL NSH

Client Sample ID: SB-23
Date Collected: 09/01/16 15:30
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-23
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7.112 g	5.0 mL	367883	09/01/16 15:30	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	369613	09/13/16 19:17	EML	TAL NSH
Total/NA	Prep	3550C			30.17 g	1.00 mL	369043	09/09/16 16:02	LOJ	TAL NSH
Total/NA	Analysis	8270C		1			369149	09/10/16 16:18	T1C	TAL NSH
Total/NA	Prep	5035			6.62 g	5.0 mL	367875	09/01/16 15:30	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	368519	09/08/16 14:28	AK1	TAL NSH
Total/NA	Prep	3550C			25.75 g	1.00 mL	368868	09/09/16 10:00	LOJ	TAL NSH
Total/NA	Analysis	8015C		1			368830	09/09/16 16:37	MDW	TAL NSH

Client Sample ID: SB-24
Date Collected: 09/01/16 15:15
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-24
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.905 g	5.0 mL	367883	09/01/16 15:15	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	369613	09/13/16 19:45	EML	TAL NSH
Total/NA	Prep	3550C			30.11 g	1.00 mL	369043	09/09/16 16:02	LOJ	TAL NSH
Total/NA	Analysis	8270C		1			369149	09/10/16 16:38	T1C	TAL NSH
Total/NA	Prep	5035			5.97 g	5.0 mL	367875	09/01/16 15:15	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	368333	09/07/16 20:47	A1B	TAL NSH
Total/NA	Prep	3550C			25.14 g	1.00 mL	368868	09/09/16 10:00	LOJ	TAL NSH
Total/NA	Analysis	8015C		1			368830	09/09/16 16:55	MDW	TAL NSH

Lab Chronicle

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-25

Lab Sample ID: 490-111143-25
Date Collected: 09/01/16 16:30
Matrix: Solid
Date Received: 09/03/16 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.573 g	5.0 mL	367883	09/01/16 16:30	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	369613	09/13/16 20:12	EML	TAL NSH
Total/NA	Prep	3550C			30.72 g	1.00 mL	369043	09/09/16 16:02	LOJ	TAL NSH
Total/NA	Analysis	8270C		1			369149	09/10/16 16:58	T1C	TAL NSH
Total/NA	Prep	5035			6.36 g	5.0 mL	367875	09/01/16 16:30	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	368333	09/07/16 21:21	A1B	TAL NSH
Total/NA	Prep	3550C			25.77 g	1.00 mL	368868	09/09/16 10:00	LOJ	TAL NSH
Total/NA	Analysis	8015C		1			368830	09/09/16 17:13	MDW	TAL NSH
Total/NA	Prep	3550C			30.61 g	10 mL	369216	09/11/16 10:57	MNM	TAL NSH
Total/NA	Analysis	8082A		1			369773	09/13/16 20:11	MGH	TAL NSH
Total/NA	Prep	3051A			0.503 g	100 mL	369761	09/13/16 13:22	PG1	TAL NSH
Total/NA	Analysis	6010C		1			369942	09/13/16 23:07	BLG	TAL NSH
Total/NA	Prep	7471B			0.604 g	100 mL	368080	09/06/16 14:59	BLG	TAL NSH
Total/NA	Analysis	7471B		1			368598	09/08/16 10:11	BLG	TAL NSH

Client Sample ID: SB-26

Lab Sample ID: 490-111143-26
Date Collected: 09/01/16 17:00
Matrix: Solid
Date Received: 09/03/16 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.285 g	5.0 mL	367883	09/01/16 17:00	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	369613	09/13/16 20:40	EML	TAL NSH
Total/NA	Prep	3550C			30.73 g	1.00 mL	369043	09/09/16 16:02	LOJ	TAL NSH
Total/NA	Analysis	8270C		1			369149	09/10/16 17:17	T1C	TAL NSH
Total/NA	Prep	5035			6.05 g	5.0 mL	367875	09/01/16 17:00	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	368333	09/07/16 21:54	A1B	TAL NSH
Total/NA	Prep	3550C			25.28 g	1.00 mL	368868	09/09/16 10:00	LOJ	TAL NSH
Total/NA	Analysis	8015C		1			368830	09/09/16 17:31	MDW	TAL NSH

Client Sample ID: SB-27

Lab Sample ID: 490-111143-27
Date Collected: 09/02/16 08:45
Matrix: Solid
Date Received: 09/03/16 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.813 g	5.0 mL	367883	09/02/16 08:45	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	369613	09/13/16 21:07	EML	TAL NSH
Total/NA	Prep	3550C			30.35 g	1.00 mL	369043	09/09/16 16:02	LOJ	TAL NSH
Total/NA	Analysis	8270C		1			369149	09/10/16 17:37	T1C	TAL NSH
Total/NA	Prep	5035			6.73 g	5.0 mL	367875	09/02/16 08:45	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	368333	09/07/16 22:27	A1B	TAL NSH
Total/NA	Prep	3550C			25.26 g	1.00 mL	368868	09/09/16 10:00	LOJ	TAL NSH
Total/NA	Analysis	8015C		1			368830	09/09/16 17:49	MDW	TAL NSH

Lab Chronicle

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-28
Date Collected: 09/02/16 09:10
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-28
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.511 g	5.0 mL	367883	09/02/16 09:10	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	369613	09/13/16 21:35	EML	TAL NSH
Total/NA	Prep	3550C			30.90 g	1.00 mL	369043	09/09/16 16:02	LOJ	TAL NSH
Total/NA	Analysis	8270C		1			369149	09/10/16 17:56	T1C	TAL NSH
Total/NA	Prep	5035			6.17 g	5.0 mL	367875	09/02/16 09:10	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	368333	09/07/16 23:00	A1B	TAL NSH
Total/NA	Prep	3550C			25.19 g	1.00 mL	368868	09/09/16 10:00	LOJ	TAL NSH
Total/NA	Analysis	8015C		1			368830	09/09/16 18:07	MDW	TAL NSH

Client Sample ID: DUP-1
Date Collected: 08/31/16 15:15
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-29
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.401 g	5.0 mL	367883	08/31/16 15:15	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	369613	09/13/16 14:43	EML	TAL NSH
Total/NA	Prep	3550C			30.79 g	1.00 mL	369043	09/09/16 16:02	LOJ	TAL NSH
Total/NA	Analysis	8270C		1			369149	09/10/16 18:16	T1C	TAL NSH
Total/NA	Prep	5035			5.87 g	5.0 mL	367875	08/31/16 15:15	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	368333	09/07/16 23:33	A1B	TAL NSH
Total/NA	Prep	3550C			25.36 g	1.00 mL	368868	09/09/16 10:00	LOJ	TAL NSH
Total/NA	Analysis	8015C		1			368830	09/09/16 18:25	MDW	TAL NSH

Client Sample ID: DUP-2
Date Collected: 09/01/16 10:10
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-30
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.851 g	5.0 mL	367883	09/01/16 10:10	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	369613	09/13/16 22:02	EML	TAL NSH
Total/NA	Prep	3550C			30.04 g	1.00 mL	369043	09/09/16 16:02	LOJ	TAL NSH
Total/NA	Analysis	8270C		1			369149	09/10/16 18:36	T1C	TAL NSH
Total/NA	Prep	5035			6.63 g	5.0 mL	367875	09/01/16 10:10	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	368333	09/08/16 00:07	A1B	TAL NSH
Total/NA	Prep	3550C			25.99 g	1.00 mL	368868	09/09/16 10:00	LOJ	TAL NSH
Total/NA	Analysis	8015C		1			368830	09/09/16 18:43	MDW	TAL NSH

Client Sample ID: DUP-3
Date Collected: 09/02/16 09:20
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-31
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.84 g	5.0 mL	367883	09/02/16 09:20	JLP	TAL NSH

Lab Chronicle

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: DUP-3
Date Collected: 09/02/16 09:20
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-31
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 g	5 mL	369613	09/13/16 22:29	EML	TAL NSH
Total/NA	Prep	3550C			30.57 g	1.00 mL	367779	09/03/16 18:23	LOJ	TAL NSH
Total/NA	Analysis	8270C		1			368004	09/06/16 13:11	WDS	TAL NSH
Total/NA	Prep	5035			6.59 g	5.0 mL	367875	09/02/16 09:20	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	368333	09/08/16 00:40	A1B	TAL NSH
Total/NA	Prep	3550C			25.73 g	1.00 mL	367710	09/03/16 18:18	LOJ	TAL NSH
Total/NA	Analysis	8015C		1			367676	09/04/16 10:45	GMH	TAL NSH

Client Sample ID: TB
Date Collected: 08/31/16 01:01
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-32
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5.0 mL	367883	08/31/16 01:01	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	369613	09/13/16 14:16	EML	TAL NSH

Client Sample ID: FB
Date Collected: 09/01/16 16:15
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-33
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	369547	09/13/16 03:10	AK1	TAL NSH
Total/NA	Analysis	8260B		1	10 mL	10 mL	369700	09/13/16 15:17	RP	TAL NSH
Total/NA	Prep	3510C			260 mL	1.0 mL	368071	09/06/16 14:40	DHC	TAL NSH
Total/NA	Analysis	8270C		1			368363	09/07/16 16:50	T1C	TAL NSH
Total/NA	Analysis	8015C		1	5 mL	5 mL	369280	09/12/16 21:53	GWM	TAL NSH
Total/NA	Prep	3510C			260 mL	1.0 mL	368125	09/06/16 17:09	DHC	TAL NSH
Total/NA	Analysis	8015C		1			368212	09/07/16 11:43	MDW	TAL NSH

Client Sample ID: SB-7
Date Collected: 08/31/16 17:11
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-34
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	369526	09/12/16 17:14	RP	TAL NSH
Total/NA	Prep	3510C			270 mL	1.0 mL	368071	09/06/16 14:40	DHC	TAL NSH
Total/NA	Analysis	8270C		1			368363	09/07/16 17:10	T1C	TAL NSH
Total/NA	Analysis	8015C		1	5 mL	5 mL	369280	09/12/16 22:25	GWM	TAL NSH
Total/NA	Prep	3510C			270 mL	1.0 mL	368125	09/06/16 17:09	DHC	TAL NSH
Total/NA	Analysis	8015C		1			368212	09/07/16 11:59	MDW	TAL NSH
Total/NA	Prep	3010A			50.0 mL	50.0 mL	368008	09/06/16 11:22	BLG	TAL NSH
Total/NA	Analysis	6010C		1			368191	09/07/16 06:21	RDF	TAL NSH

Lab Chronicle

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-7
Lab Sample ID: 490-111143-34
Date Collected: 08/31/16 17:11
Matrix: Water
Date Received: 09/03/16 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7470A			30.0 mL	30.0 mL	367870	09/06/16 08:01	BLG	TAL NSH
Total/NA	Analysis	7470A		1			368105	09/06/16 14:49	BLG	TAL NSH

Client Sample ID: SB-8
Lab Sample ID: 490-111143-35
Date Collected: 08/31/16 17:25
Matrix: Water
Date Received: 09/03/16 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	369526	09/12/16 17:44	RP	TAL NSH
Total/NA	Prep	3510C			270 mL	1.0 mL	368071	09/06/16 14:40	DHC	TAL NSH
Total/NA	Analysis	8270C		1			368363	09/07/16 17:30	T1C	TAL NSH
Total/NA	Analysis	8015C		1	5 mL	5 mL	369280	09/12/16 22:57	GWM	TAL NSH
Total/NA	Prep	3510C			270 mL	1.0 mL	368125	09/06/16 17:09	DHC	TAL NSH
Total/NA	Analysis	8015C		1			368212	09/07/16 12:15	MDW	TAL NSH
Total/NA	Prep	3010A			50.0 mL	50.0 mL	368008	09/06/16 11:22	BLG	TAL NSH
Total/NA	Analysis	6010C		1			368191	09/07/16 06:26	RDF	TAL NSH
Total/NA	Prep	7470A			30.0 mL	30.0 mL	368295	09/07/16 11:16	BLG	TAL NSH
Total/NA	Analysis	7470A		1			368690	09/08/16 12:53	BLG	TAL NSH

Client Sample ID: SB-9
Lab Sample ID: 490-111143-36
Date Collected: 08/31/16 17:40
Matrix: Water
Date Received: 09/03/16 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	369526	09/12/16 18:14	RP	TAL NSH
Total/NA	Prep	3510C			270 mL	1.0 mL	368071	09/06/16 14:40	DHC	TAL NSH
Total/NA	Analysis	8270C		1			368363	09/07/16 17:49	T1C	TAL NSH
Total/NA	Analysis	8015C		1	5 mL	5 mL	369280	09/12/16 23:29	GWM	TAL NSH
Total/NA	Prep	3510C			270 mL	1.0 mL	368125	09/06/16 17:09	DHC	TAL NSH
Total/NA	Analysis	8015C		1			368212	09/07/16 12:31	MDW	TAL NSH
Total/NA	Prep	3010A			50.0 mL	50.0 mL	368008	09/06/16 11:22	BLG	TAL NSH
Total/NA	Analysis	6010C		1			368191	09/07/16 06:31	RDF	TAL NSH
Total/NA	Prep	7470A			30.0 mL	30.0 mL	367870	09/06/16 08:01	BLG	TAL NSH
Total/NA	Analysis	7470A		1			368105	09/06/16 14:52	BLG	TAL NSH

Client Sample ID: SB-10
Lab Sample ID: 490-111143-37
Date Collected: 08/31/16 18:00
Matrix: Water
Date Received: 09/03/16 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	369526	09/12/16 18:44	RP	TAL NSH
Total/NA	Prep	3510C			270 mL	1.0 mL	368071	09/06/16 14:40	DHC	TAL NSH
Total/NA	Analysis	8270C		1			368363	09/07/16 18:09	T1C	TAL NSH

Lab Chronicle

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015C		1	5 mL	5 mL	369280	09/13/16 00:01	GWM	TAL NSH
Total/NA	Prep	3510C			270 mL	1.0 mL	368125	09/06/16 17:09	DHC	TAL NSH
Total/NA	Analysis	8015C		1			368212	09/07/16 12:46	MDW	TAL NSH
Total/NA	Prep	3010A			50.0 mL	50.0 mL	368008	09/06/16 11:22	BLG	TAL NSH
Total/NA	Analysis	6010C		1			368191	09/07/16 06:36	RDF	TAL NSH
Total/NA	Prep	7470A			30.0 mL	30.0 mL	367870	09/06/16 08:01	BLG	TAL NSH
Total/NA	Analysis	7470A		1			368105	09/06/16 14:55	BLG	TAL NSH

Client Sample ID: SB-11

Lab Sample ID: 490-111143-38

Date Collected: 08/31/16 18:15
Matrix: Water
Date Received: 09/03/16 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	369526	09/12/16 19:13	RP	TAL NSH
Total/NA	Prep	3510C			250 mL	1.0 mL	368071	09/06/16 14:40	DHC	TAL NSH
Total/NA	Analysis	8270C		1			368363	09/07/16 18:29	T1C	TAL NSH
Total/NA	Analysis	8015C		1	5 mL	5 mL	369280	09/13/16 00:34	GWM	TAL NSH
Total/NA	Prep	3510C			270 mL	1.0 mL	368125	09/06/16 17:09	DHC	TAL NSH
Total/NA	Analysis	8015C		1			368212	09/07/16 13:02	MDW	TAL NSH
Total/NA	Prep	3010A			50.0 mL	50.0 mL	368008	09/06/16 11:22	BLG	TAL NSH
Total/NA	Analysis	6010C		1			368191	09/07/16 06:41	RDF	TAL NSH
Total/NA	Prep	7470A			30.0 mL	30.0 mL	367870	09/06/16 08:01	BLG	TAL NSH
Total/NA	Analysis	7470A		1			368105	09/06/16 14:57	BLG	TAL NSH

Client Sample ID: SB-12

Lab Sample ID: 490-111143-39

Date Collected: 08/31/16 18:35
Matrix: Water
Date Received: 09/03/16 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	369526	09/12/16 19:43	RP	TAL NSH
Total/NA	Prep	3510C			260 mL	1.0 mL	368071	09/06/16 14:40	DHC	TAL NSH
Total/NA	Analysis	8270C		1			368363	09/07/16 18:48	T1C	TAL NSH
Total/NA	Analysis	8015C		1	5 mL	5 mL	369280	09/13/16 01:06	GWM	TAL NSH
Total/NA	Prep	3510C			270 mL	1.0 mL	368125	09/06/16 17:09	DHC	TAL NSH
Total/NA	Analysis	8015C		1			368212	09/07/16 13:18	MDW	TAL NSH
Total/NA	Prep	3010A			50.0 mL	50.0 mL	368175	09/07/16 08:20	CAH	TAL NSH
Total/NA	Analysis	6010C		1			369072	09/09/16 10:56	RDF	TAL NSH
Total/NA	Prep	3010A			50.0 mL	50.0 mL	368175	09/07/16 08:20	CAH	TAL NSH
Total/NA	Analysis	6010C		5			369412	09/11/16 19:22	RDF	TAL NSH
Total/NA	Prep	7470A			30.0 mL	30.0 mL	367870	09/06/16 08:01	BLG	TAL NSH
Total/NA	Analysis	7470A		1			368105	09/06/16 15:05	BLG	TAL NSH

Lab Chronicle

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-13

Lab Sample ID: 490-111143-40
Date Collected: 09/02/16 10:05
Matrix: Water
Date Received: 09/03/16 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	369547	09/13/16 03:39	AK1	TAL NSH
Total/NA	Analysis	8260B		1	10 mL	10 mL	369700	09/13/16 17:16	RP	TAL NSH
Total/NA	Prep	3510C			270 mL	1.0 mL	368071	09/06/16 14:40	DHC	TAL NSH
Total/NA	Analysis	8270C		1			368363	09/07/16 19:08	T1C	TAL NSH
Total/NA	Analysis	8015C		1	5 mL	5 mL	369280	09/13/16 01:38	GWM	TAL NSH
Total/NA	Prep	3510C			270 mL	1.0 mL	368125	09/06/16 17:09	DHC	TAL NSH
Total/NA	Analysis	8015C		1			368212	09/07/16 13:34	MDW	TAL NSH
Total/NA	Prep	3010A			50.0 mL	50.0 mL	368175	09/07/16 08:20	CAH	TAL NSH
Total/NA	Analysis	6010C		1			369072	09/09/16 11:22	RDF	TAL NSH
Total/NA	Prep	3010A			50.0 mL	50.0 mL	368175	09/07/16 08:20	CAH	TAL NSH
Total/NA	Analysis	6010C		5			369412	09/11/16 19:37	RDF	TAL NSH
Total/NA	Prep	7470A			30.0 mL	30.0 mL	367870	09/06/16 08:01	BLG	TAL NSH
Total/NA	Analysis	7470A		1			368105	09/06/16 15:08	BLG	TAL NSH

Client Sample ID: SB-15

Lab Sample ID: 490-111143-41
Date Collected: 09/02/16 09:15
Matrix: Water
Date Received: 09/03/16 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	369547	09/13/16 04:09	AK1	TAL NSH
Total/NA	Analysis	8260B		1	10 mL	10 mL	369700	09/13/16 18:16	RP	TAL NSH
Total/NA	Prep	3510C			270 mL	1.0 mL	368071	09/06/16 14:40	DHC	TAL NSH
Total/NA	Analysis	8270C		1			368363	09/07/16 19:27	T1C	TAL NSH
Total/NA	Analysis	8015C		1	5 mL	5 mL	369280	09/13/16 02:09	GWM	TAL NSH
Total/NA	Prep	3510C			260 mL	1 mL	368623	09/08/16 12:01	KB	TAL NSH
Total/NA	Analysis	8015C		1			368488	09/08/16 16:37	MDW	TAL NSH

Client Sample ID: SB-19

Lab Sample ID: 490-111143-42
Date Collected: 09/02/16 09:50
Matrix: Water
Date Received: 09/03/16 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	369547	09/13/16 04:39	AK1	TAL NSH
Total/NA	Analysis	8260B		1	10 mL	10 mL	369700	09/13/16 18:45	RP	TAL NSH
Total/NA	Prep	3510C			270 mL	1.0 mL	368071	09/06/16 14:40	DHC	TAL NSH
Total/NA	Analysis	8270C		1			368363	09/07/16 19:47	T1C	TAL NSH
Total/NA	Analysis	8015C		1	5 mL	5 mL	369280	09/13/16 02:41	GWM	TAL NSH
Total/NA	Prep	3510C			270 mL	1.0 mL	368125	09/06/16 17:09	DHC	TAL NSH
Total/NA	Analysis	8015C		1			368212	09/07/16 14:06	MDW	TAL NSH
Total/NA	Prep	3010A			50.0 mL	50.0 mL	368175	09/07/16 08:20	CAH	TAL NSH
Total/NA	Analysis	6010C		1			369072	09/09/16 11:27	RDF	TAL NSH
Total/NA	Prep	3010A			50.0 mL	50.0 mL	368175	09/07/16 08:20	CAH	TAL NSH

Lab Chronicle

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: SB-19
Date Collected: 09/02/16 09:50
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-42
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6010C		1			369412	09/11/16 19:53	RDF	TAL NSH
Total/NA	Prep	7470A			30.0 mL	30.0 mL	367870	09/06/16 08:01	BLG	TAL NSH
Total/NA	Analysis	7470A		1			368105	09/06/16 15:11	BLG	TAL NSH

Client Sample ID: SB-20
Date Collected: 09/02/16 10:45
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-43
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	369547	09/13/16 05:09	AK1	TAL NSH
Total/NA	Analysis	8260B		1	10 mL	10 mL	369700	09/13/16 19:15	RP	TAL NSH
Total/NA	Prep	3510C			250 mL	1.0 mL	368071	09/06/16 14:40	DHC	TAL NSH
Total/NA	Analysis	8270C		1			368363	09/07/16 20:06	T1C	TAL NSH
Total/NA	Analysis	8015C		1	5 mL	5 mL	369280	09/13/16 03:13	GWM	TAL NSH
Total/NA	Prep	3510C			270 mL	1.0 mL	368125	09/06/16 17:09	DHC	TAL NSH
Total/NA	Analysis	8015C		1			368212	09/07/16 14:21	MDW	TAL NSH

Client Sample ID: SB-22
Date Collected: 09/02/16 11:00
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-44
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	369547	09/13/16 05:39	AK1	TAL NSH
Total/NA	Prep	3510C			250 mL	1.0 mL	368071	09/06/16 14:40	DHC	TAL NSH
Total/NA	Analysis	8270C		1			368363	09/07/16 20:26	T1C	TAL NSH
Total/NA	Analysis	8015C		1	5 mL	5 mL	369280	09/13/16 03:44	GWM	TAL NSH
Total/NA	Prep	3510C			270 mL	1.0 mL	368125	09/06/16 17:09	DHC	TAL NSH
Total/NA	Analysis	8015C		1			368212	09/07/16 14:37	MDW	TAL NSH
Total/NA	Prep	3010A			50.0 mL	50.0 mL	368175	09/07/16 08:20	CAH	TAL NSH
Total/NA	Analysis	6010C		1			369072	09/09/16 11:32	RDF	TAL NSH
Total/NA	Prep	3010A			50.0 mL	50.0 mL	368175	09/07/16 08:20	CAH	TAL NSH
Total/NA	Analysis	6010C		2			369412	09/11/16 19:58	RDF	TAL NSH
Total/NA	Prep	7470A			30.0 mL	30.0 mL	367870	09/06/16 08:01	BLG	TAL NSH
Total/NA	Analysis	7470A		1			368105	09/06/16 15:14	BLG	TAL NSH

Client Sample ID: SB-23
Date Collected: 09/02/16 11:20
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-45
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	369547	09/13/16 06:09	AK1	TAL NSH
Total/NA	Prep	3510C			270 mL	1.0 mL	368071	09/06/16 14:40	DHC	TAL NSH

Client Sample ID: SB-23 — Lab Sample ID: 490-111143-45

Date Collected: 09/02/16 11:20 — **Matrix: Water**
Date Received: 09/03/16 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270C		1			368363	09/07/16 20:45	T1C	TAL NSH
Total/NA	Analysis	8015C		1	5 mL	5 mL	369280	09/13/16 04:16	GWM	TAL NSH
Total/NA	Prep	3510C			270 mL	1.0 mL	368125	09/06/16 17:09	DHC	TAL NSH
Total/NA	Analysis	8015C		1			368212	09/07/16 14:53	MDW	TAL NSH

Client Sample ID: SB-25 — Lab Sample ID: 490-111143-46

Date Collected: 09/02/16 11:30 — **Matrix: Water**
Date Received: 09/03/16 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	369547	09/13/16 06:38	AK1	TAL NSH
Total/NA	Prep	3510C			270 mL	1.0 mL	368071	09/06/16 14:40	DHC	TAL NSH
Total/NA	Analysis	8270C		1			368363	09/07/16 21:05	T1C	TAL NSH
Total/NA	Analysis	8015C		1	5 mL	5 mL	369280	09/13/16 04:48	GWM	TAL NSH
Total/NA	Prep	3510C			270 mL	1.0 mL	368125	09/06/16 17:09	DHC	TAL NSH
Total/NA	Analysis	8015C		1			368212	09/07/16 15:09	MDW	TAL NSH
Total/NA	Prep	3010A			50.0 mL	50.0 mL	368175	09/07/16 08:20	CAH	TAL NSH
Total/NA	Analysis	6010C		1			369072	09/09/16 11:42	RDF	TAL NSH
Total/NA	Prep	3010A			50.0 mL	50.0 mL	368175	09/07/16 08:20	CAH	TAL NSH
Total/NA	Analysis	6010C		2			369412	09/11/16 20:03	RDF	TAL NSH
Total/NA	Prep	7470A			30.0 mL	30.0 mL	367870	09/06/16 08:01	BLG	TAL NSH
Total/NA	Analysis	7470A		1			368105	09/06/16 15:16	BLG	TAL NSH

Client Sample ID: DUP1 — Lab Sample ID: 490-111143-47

Date Collected: 08/31/16 18:00 — **Matrix: Water**
Date Received: 09/03/16 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	369547	09/13/16 07:08	AK1	TAL NSH
Total/NA	Prep	3510C			270 mL	1.0 mL	368071	09/06/16 14:40	DHC	TAL NSH
Total/NA	Analysis	8270C		1			368363	09/07/16 21:24	T1C	TAL NSH
Total/NA	Analysis	8015C		1	5 mL	5 mL	369280	09/13/16 05:20	GWM	TAL NSH
Total/NA	Prep	3510C			270 mL	1.0 mL	368125	09/06/16 17:09	DHC	TAL NSH
Total/NA	Analysis	8015C		1			368212	09/07/16 15:25	MDW	TAL NSH

Client Sample ID: DUP2 — Lab Sample ID: 490-111143-48

Date Collected: 09/02/16 09:20 — **Matrix: Water**
Date Received: 09/03/16 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	369547	09/13/16 07:38	AK1	TAL NSH
Total/NA	Prep	3510C			260 mL	1.0 mL	368071	09/06/16 14:40	DHC	TAL NSH

Lab Chronicle

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Client Sample ID: DUP2
Date Collected: 09/02/16 09:20
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-48
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270C		1			368363	09/07/16 21:44	T1C	TAL NSH
Total/NA	Analysis	8015C		1	5 mL	5 mL	369280	09/13/16 05:52	GWM	TAL NSH
Total/NA	Prep	3510C			260 mL	1.0 mL	368125	09/06/16 17:09	DHC	TAL NSH
Total/NA	Analysis	8015C		1			368212	09/07/16 15:41	MDW	TAL NSH

Client Sample ID: MW-N
Date Collected: 09/02/16 10:30
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-49
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	369547	09/13/16 08:08	AK1	TAL NSH
Total/NA	Prep	3510C			270 mL	1.0 mL	368071	09/06/16 14:40	DHC	TAL NSH
Total/NA	Analysis	8270C		1			368363	09/07/16 22:03	T1C	TAL NSH
Total/NA	Analysis	8015C		1	5 mL	5 mL	369280	09/13/16 06:24	GWM	TAL NSH
Total/NA	Prep	3510C			270 mL	1.0 mL	368125	09/06/16 17:09	DHC	TAL NSH
Total/NA	Analysis	8015C		1			368212	09/07/16 15:57	MDW	TAL NSH

Client Sample ID: MW-W
Date Collected: 09/02/16 08:30
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-50
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	369547	09/13/16 08:38	AK1	TAL NSH
Total/NA	Prep	3510C			260 mL	1.0 mL	368071	09/06/16 14:40	DHC	TAL NSH
Total/NA	Analysis	8270C		1			368363	09/07/16 22:23	T1C	TAL NSH
Total/NA	Analysis	8015C		1	5 mL	5 mL	369280	09/13/16 06:55	GWM	TAL NSH
Total/NA	Prep	3510C			270 mL	1.0 mL	368125	09/06/16 17:09	DHC	TAL NSH
Total/NA	Analysis	8015C		1			368212	09/07/16 16:13	MDW	TAL NSH

Client Sample ID: Trip Blank
Date Collected: 08/31/16 01:01
Date Received: 09/03/16 10:10

Lab Sample ID: 490-111143-51
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	369547	09/13/16 02:40	AK1	TAL NSH

Laboratory References:
TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Method Summary

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL NSH
8015C	Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)	SW846	TAL NSH
8015C	Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)	SW846	TAL NSH
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL NSH
6010C	Metals (ICP)	SW846	TAL NSH
7470A	Mercury (CVAA)	SW846	TAL NSH
7471B	Mercury (CVAA)	SW846	TAL NSH

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Certification Summary

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Laboratory: TestAmerica Nashville

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
Maryland	State Program	3	316	03-31-17

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6010C	3010A	Water	Arsenic
6010C	3010A	Water	Barium
6010C	3010A	Water	Cadmium
6010C	3010A	Water	Chromium
6010C	3010A	Water	Lead
6010C	3010A	Water	Selenium
6010C	3010A	Water	Silver
6010C	3051A	Solid	Arsenic
6010C	3051A	Solid	Barium
6010C	3051A	Solid	Cadmium
6010C	3051A	Solid	Chromium
6010C	3051A	Solid	Lead
6010C	3051A	Solid	Selenium
6010C	3051A	Solid	Silver
7470A	7470A	Water	Mercury
7471B	7471B	Solid	Mercury
8015C		Water	Gasoline Range Organics [C6 - C10]
8015C	3510C	Water	Diesel Range Organics [C10-C28]
8015C	3550C	Solid	Diesel Range Organics [C10-C28]
8015C	5035	Solid	Gasoline Range Organics [C6 - C10]
8082A	3550C	Solid	PCB-1016
8082A	3550C	Solid	PCB-1221
8082A	3550C	Solid	PCB-1232
8082A	3550C	Solid	PCB-1242
8082A	3550C	Solid	PCB-1248
8082A	3550C	Solid	PCB-1254
8082A	3550C	Solid	PCB-1260
8260B		Water	1,1,1,2-Tetrachloroethane
8260B		Water	1,1,1-Trichloroethane
8260B		Water	1,1,2,2-Tetrachloroethane
8260B		Water	1,1,2-Trichloroethane
8260B		Water	1,1-Dichloroethane
8260B		Water	1,1-Dichloroethene
8260B		Water	1,1-Dichloropropene
8260B		Water	1,2,3-Trichlorobenzene
8260B		Water	1,2,3-Trichloropropane
8260B		Water	1,2,4-Trichlorobenzene
8260B		Water	1,2,4-Trimethylbenzene
8260B		Water	1,2-Dibromo-3-Chloropropane
8260B		Water	1,2-Dibromoethane (EDB)
8260B		Water	1,2-Dichlorobenzene
8260B		Water	1,2-Dichloroethane
8260B		Water	1,2-Dichloropropane
8260B		Water	1,3,5-Trimethylbenzene
8260B		Water	1,3-Dichlorobenzene
8260B		Water	1,3-Dichloropropane

Laboratory: TestAmerica Nashville (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
Maryland	State Program	3	316	03-31-17

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8260B		Water	1,4-Dichlorobenzene
8260B		Water	2,2-Dichloropropane
8260B		Water	2-Butanone (MEK)
8260B		Water	2-Chlorotoluene
8260B		Water	2-Hexanone
8260B		Water	4-Chlorotoluene
8260B		Water	4-Methyl-2-pentanone (MIBK)
8260B		Water	Acetone
8260B		Water	Benzene
8260B		Water	Bromobenzene
8260B		Water	Bromochloromethane
8260B		Water	Bromodichloromethane
8260B		Water	Bromoform
8260B		Water	Bromomethane
8260B		Water	Carbon disulfide
8260B		Water	Carbon tetrachloride
8260B		Water	Chlorobenzene
8260B		Water	Chlorodibromomethane
8260B		Water	Chloroethane
8260B		Water	Chloroform
8260B		Water	Chloromethane
8260B		Water	cis-1,2-Dichloroethene
8260B		Water	cis-1,3-Dichloropropene
8260B		Water	Dibromomethane
8260B		Water	Dichlorodifluoromethane
8260B		Water	Diisopropyl ether
8260B		Water	Ethyl tert-butyl ether
8260B		Water	Ethylbenzene
8260B		Water	Hexachlorobutadiene
8260B		Water	Isopropylbenzene
8260B		Water	Methyl tert-butyl ether
8260B		Water	Methylene Chloride
8260B		Water	Naphthalene
8260B		Water	n-Butylbenzene
8260B		Water	N-Propylbenzene
8260B		Water	p-Isopropyltoluene
8260B		Water	sec-Butylbenzene
8260B		Water	Styrene
8260B		Water	t-Amyl alcohol
8260B		Water	Tert-amyl methyl ether
8260B		Water	tert-Butyl alcohol (TBA)
8260B		Water	tert-Butylbenzene
8260B		Water	Tetrachloroethene
8260B		Water	Toluene
8260B		Water	trans-1,2-Dichloroethene
8260B		Water	trans-1,3-Dichloropropene

Laboratory: TestAmerica Nashville (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
Maryland	State Program	3	316	03-31-17

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8260B		Water	Trichloroethene
8260B		Water	Trichlorofluoromethane
8260B		Water	Vinyl chloride
8260B		Water	Xylenes, Total
8260B	5035	Solid	1,1,1,2-Tetrachloroethane
8260B	5035	Solid	1,1,1-Trichloroethane
8260B	5035	Solid	1,1,2,2-Tetrachloroethane
8260B	5035	Solid	1,1,2-Trichloroethane
8260B	5035	Solid	1,1-Dichloroethane
8260B	5035	Solid	1,1-Dichloroethene
8260B	5035	Solid	1,1-Dichloropropene
8260B	5035	Solid	1,2,3-Trichlorobenzene
8260B	5035	Solid	1,2,3-Trichloropropane
8260B	5035	Solid	1,2,4-Trichlorobenzene
8260B	5035	Solid	1,2,4-Trimethylbenzene
8260B	5035	Solid	1,2-Dibromo-3-Chloropropane
8260B	5035	Solid	1,2-Dibromoethane (EDB)
8260B	5035	Solid	1,2-Dichlorobenzene
8260B	5035	Solid	1,2-Dichloroethane
8260B	5035	Solid	1,2-Dichloropropane
8260B	5035	Solid	1,3,5-Trimethylbenzene
8260B	5035	Solid	1,3-Dichlorobenzene
8260B	5035	Solid	1,3-Dichloropropane
8260B	5035	Solid	1,4-Dichlorobenzene
8260B	5035	Solid	2,2-Dichloropropane
8260B	5035	Solid	2-Butanone (MEK)
8260B	5035	Solid	2-Chlorotoluene
8260B	5035	Solid	2-Hexanone
8260B	5035	Solid	4-Chlorotoluene
8260B	5035	Solid	4-Methyl-2-pentanone (MIBK)
8260B	5035	Solid	Acetone
8260B	5035	Solid	Benzene
8260B	5035	Solid	Bromobenzene
8260B	5035	Solid	Bromochloromethane
8260B	5035	Solid	Bromodichloromethane
8260B	5035	Solid	Bromoform
8260B	5035	Solid	Bromomethane
8260B	5035	Solid	Carbon disulfide
8260B	5035	Solid	Carbon tetrachloride
8260B	5035	Solid	Chlorobenzene
8260B	5035	Solid	Chlorodibromomethane
8260B	5035	Solid	Chloroethane
8260B	5035	Solid	Chloroform
8260B	5035	Solid	Chloromethane
8260B	5035	Solid	cis-1,2-Dichloroethene
8260B	5035	Solid	cis-1,3-Dichloropropene

Laboratory: TestAmerica Nashville (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
Maryland	State Program	3	316	03-31-17

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8260B	5035	Solid	Dibromomethane
8260B	5035	Solid	Dichlorodifluoromethane
8260B	5035	Solid	Diisopropyl ether
8260B	5035	Solid	Ethyl tert-butyl ether
8260B	5035	Solid	Ethylbenzene
8260B	5035	Solid	Hexachlorobutadiene
8260B	5035	Solid	Isopropylbenzene
8260B	5035	Solid	Methyl tert-butyl ether
8260B	5035	Solid	Methylene Chloride
8260B	5035	Solid	Naphthalene
8260B	5035	Solid	n-Butylbenzene
8260B	5035	Solid	N-Propylbenzene
8260B	5035	Solid	p-Isopropyltoluene
8260B	5035	Solid	sec-Butylbenzene
8260B	5035	Solid	Styrene
8260B	5035	Solid	t-Amyl alcohol
8260B	5035	Solid	Tert-amyl methyl ether
8260B	5035	Solid	tert-Butyl alcohol (TBA)
8260B	5035	Solid	tert-Butylbenzene
8260B	5035	Solid	Tetrachloroethene
8260B	5035	Solid	Toluene
8260B	5035	Solid	trans-1,2-Dichloroethene
8260B	5035	Solid	trans-1,3-Dichloropropene
8260B	5035	Solid	Trichloroethene
8260B	5035	Solid	Trichlorofluoromethane
8260B	5035	Solid	Vinyl chloride
8260B	5035	Solid	Xylenes, Total
8270C	3510C	Water	1-Methylnaphthalene
8270C	3510C	Water	2-Methylnaphthalene
8270C	3510C	Water	Acenaphthene
8270C	3510C	Water	Acenaphthylene
8270C	3510C	Water	Anthracene
8270C	3510C	Water	Benzo[a]anthracene
8270C	3510C	Water	Benzo[a]pyrene
8270C	3510C	Water	Benzo[b]fluoranthene
8270C	3510C	Water	Benzo[g,h,i]perylene
8270C	3510C	Water	Benzo[k]fluoranthene
8270C	3510C	Water	Chrysene
8270C	3510C	Water	Dibenz(a,h)anthracene
8270C	3510C	Water	Fluoranthene
8270C	3510C	Water	Fluorene
8270C	3510C	Water	Indeno[1,2,3-cd]pyrene
8270C	3510C	Water	Naphthalene
8270C	3510C	Water	Phenanthrene
8270C	3510C	Water	Pyrene
8270C	3550C	Solid	1-Methylnaphthalene

Certification Summary

Client: AECOM
Project/Site: Black and Decker – Talbot County, MD

TestAmerica Job ID: 490-111143-1
SDG: 28712 Glebe Road, Easton, MD

Laboratory: TestAmerica Nashville (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
Maryland	State Program	3	316	03-31-17

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8270C	3550C	Solid	2-Methylnaphthalene
8270C	3550C	Solid	Acenaphthene
8270C	3550C	Solid	Acenaphthylene
8270C	3550C	Solid	Anthracene
8270C	3550C	Solid	Benzo[a]anthracene
8270C	3550C	Solid	Benzo[a]pyrene
8270C	3550C	Solid	Benzo[b]fluoranthene
8270C	3550C	Solid	Benzo[g,h,i]perylene
8270C	3550C	Solid	Benzo[k]fluoranthene
8270C	3550C	Solid	Chrysene
8270C	3550C	Solid	Dibenz(a,h)anthracene
8270C	3550C	Solid	Fluoranthene
8270C	3550C	Solid	Fluorene
8270C	3550C	Solid	Indeno[1,2,3-cd]pyrene
8270C	3550C	Solid	Naphthalene
8270C	3550C	Solid	Phenanthrene
8270C	3550C	Solid	Pyrene

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

490-111143 Chain of Custody

Cooler Received/Opened On 9/3/2016 @ 1010

Time Samples Removed From Cooler 1530 Time Samples Placed In Storage 1631 (2 Hour Window)

1. Tracking # 0322 (last 4 digits, FedEx) Courier: FedEx Sat.Del.

IR Gun ID Raynger pH Strip Lot HC58117 Chlorine Strip Lot 71130

2. Temperature of rep. sample or temp blank when opened: 6.4 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 2 front

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) HKG

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None → wet Bel.

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None MDM

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) MDM

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) MDM

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) MDM

I certify that I attached a label with the unique LIMS number to each container (intial) MDM

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#_____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 12/15/15

9/15/2016

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

Loc: 490
111143
#2
E

Cooler Received/Opened On 9/3/2016 @ 1010

Time Samples Removed From Cooler 1530 Time Samples Placed In Storage 1638 (2 Hour Window)

1. Tracking # 0149 (last 4 digits, FedEx) Courier: FedEx Sat.Del.

   IR Gun ID 17960358 pH Strip Lot HC58117 Chlorine Strip Lot 71130

2. Temperature of rep. sample or temp blank when opened: 1.6 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

   If yes, how many and where: 2, front

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) AEO

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

   Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

   b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) MDM

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

   b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) MDM

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) MDM

I certify that I attached a label with the unique LIMS number to each container (intial) MDM

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#_____

BIS = Broken in shipment

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

Loc: 490
111143
#2
D

Cooler Received/Opened On 9/3/2016 @ 1010

Time Samples Removed From Cooler 1530 Time Samples Placed In Storage 1634 (2 Hour Window)

1. Tracking # 9690 (last 4 digits, FedEx) Courier: FedEx Sat.Del.

IR Gun ID Raynger pH Strip Lot HC58117 Chlorine Strip Lot 71130

2. Temperature of rep. sample or temp blank when opened: 3.9 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 2 front

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) HG

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) MDM

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) MDM

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) MDM

I certify that I attached a label with the unique LIMS number to each container (intial) MDM

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#_____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 12/15/15

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

Loc: 490
111143
#2
C

COOLER RECEIPT FORM

Cooler Received/Opened On 9/3/2016 @ 1010

Time Samples Removed From Cooler_____ Time Samples Placed In Storage 1634 (2 Hour Window)

1. Tracking # 8873 (last 4 digits, FedEx) Courier: _FedEx Sat.Del._

   IR Gun ID 17960357 pH Strip Lot HC58117 Chlorine Strip Lot 71130

2. Temperature of rep. sample or temp blank when opened: 2.7 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

   If yes, how many and where: 2 Front

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) SEV

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

   Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

   b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) MDM

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

   b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) MDM

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) MDM

I certify that I attached a label with the unique LIMS number to each container (intial) MDM

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#_____

BIS = Broken in shipment

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

Loc: 490
111143
#2
B

Cooler Received/Opened On 9/3/2016 @ 1010

Time Samples Removed From Cooler 1530 Time Samples Placed In Storage 1634 (2 Hour Window)

1. Tracking # 9701 (last 4 digits, FedEx) Courier: FedEx Sat.Del.

   IR Gun ID 17960353 pH Strip Lot HC58117 Chlorine Strip Lot 71130

2. Temperature of rep. sample or temp blank when opened: 2.2 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

   If yes, how many and where: (1) Front

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) msm

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

   Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

   b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) msm

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

   b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) msm

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) msm

I certify that I attached a label with the unique LIMS number to each container (intial) msm

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#_____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 12/15/15

Loc: 490
111143
#2
A

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

Cooler Received/Opened On 9/3/2016 @ 1010

Time Samples Removed From Cooler 1530 Time Samples Placed In Storage 1634 (2 Hour Window)

1. Tracking # 9965 (last 4 digits, FedEx) Courier: FedEx Sat.Del.

IR Gun ID 17960353 pH Strip Lot HC58117 Chlorine Strip Lot 71130

2. Temperature of rep. sample or temp blank when opened: 0.5 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: _____

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) MDM

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # 1/2

I certify that I unloaded the cooler and answered questions 7-14 (intial) MDM

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) MDM

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) MDM

I certify that I attached a label with the unique LIMS number to each container (intial) MDM

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#_____

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THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

Loc: 490
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Cooler Received/Opened On 9/3/2016 @ 1010

Time Samples Removed From Cooler 1530 Time Samples Placed In Storage 1634 (2 Hour Window)

1. Tracking # 0230 (last 4 digits, FedEx) Courier: FedEx Sat.Del.

   IR Gun ID 17960353 pH Strip Lot HC58117 Chlorine Strip Lot 71130

2. Temperature of rep. sample or temp blank when opened: 0.7 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

   If yes, how many and where: (1) Front

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) mom

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

   Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

   b. Was there any observable headspace present in any VOA vial? YES...NO...NA mom 9/3/16

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) mom

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

   b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) mom

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) mom

I certify that I attached a label with the unique LIMS number to each container (intial) mom

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#_____

BIS = Broken in shipment

Loc: 490
111143
#1
D

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

Cooler Received/Opened On 9/3/2016 @ 1010

Time Samples Removed From Cooler 1530 Time Samples Placed In Storage 1634 (2 Hour Window)

1. Tracking # 0057 (last 4 digits, FedEx) Courier: _FedEx Sat.Del._

   IR Gun ID 17960358 pH Strip Lot HC58117 Chlorine Strip Lot 71130

2. Temperature of rep. sample or temp blank when opened: 5.6 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

   If yes, how many and where: 2 front

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) AEQ

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

   Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA mm 9-3-16

13a. Were VOA vials received? YES...NO...NA

   b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) mm

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

   b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) mm

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) mm

I certify that I attached a label with the unique LIMS number to each container (intial) mm

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#_____

BIS = Broken in shipment

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-3404

Chain of Custody Record

Loc: 490
111143

TestA.

9/15/2016

Client Information	Sampler: J. Porter	Lab PM: Salomon, Sherry	Carrier	COC No: 490-56398-18234.1
Client Contact: Ms. Marie Treiber	Phone	E-Mail: sherry.salomon@testamericainc.com		Page: Page 1 of 5
Company: AECOM				Job #
Address: 8000 Virginia Manor Road Suite 110	Due Date Requested:			
City: Beltsville	TAT Requested (days): standard			
State, Zip: MD, 20705				
Phone: 301-289-3819(Tel)	PO #: PENDING			
Email: Marie Treiber@aecom com	WO #			
Project Name: Black and Decker – Talbot County, MD	Project #: 49011049			
Site: 28712 Glebe Road, Easton, MD	SSOW#			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Standard 8260 List + Oxygenates	8270C - Polyaromatic Hydrocarbons	8082A - Standard PCBs (1016-1260)	8015C_GRO - Standard GRO Range (C6-C10)	8015C_DRO - Diesel Range Organics (C10-C28)	6010C/7471B - RCRA Metals	Total Number of containers	Special Instructions/Note:
			Preservation Code:											
SB-1	8/31/16	940	G	S			X	X		X	X			-1
SB-2		950					X	X		X	X			2
SB-3		1020					X	X		X	X			3
SB-4		1040					X	X		X	X			4
SB-5		1100					X	X		X	X			5
SB-6		1120					X	X		X	X			6
SB-7		1245					X	X	X	X	X	X		7
SB-8		1320					X	X	X	X	X	X		8
SB-9		1410					X	X	X	X	X	X		9
SB-10		1510					X	X	X	X	X	X		10
SB-11		1600					X	X	X	X	X	X		11

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
[signature]	9.2.16 1230	AECOM	[signature]	9.3.16 @1010	TAN
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: ☐ Yes ☐ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-3404

Chain of Custody Record

Loc: 490
111143

TestAmeric

9/15/2016

Client Information	Sampler: J. Porter	Lab PM: Salomon, Sherry	COC No: 490-56398-18234 1
Client Contact: Ms Marie Treiber	Phone:	E-Mail: sherry.salomon@testamericainc.com	Page: Page 2 of 5
Company: AECOM			Job #
Address: 8000 Virginia Manor Road Suite 110	Due Date Requested:		
City: Beltsville	TAT Requested (days): Standard		
State, Zip: MD, 20705			
Phone: 301-289-3819(Tel)	PO #: PENDING		
Email: Marie Treiber@aecom com	WO #		
Project Name: Black and Decker – Talbot County, MD	Project #: 49011049		
Site: 28712 Glebe Road, Easton, MD	SSOW#		

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Standard 8260 List + Oxygenates	8270C - Polyaromatic Hydrocarbons	8082A - Standard PCBs (1016-1260)	8015C_GRO - Standard GRO Range (C6-C10)	8015C_DRO - Diesel Range Organics (C10-C28)	6010C/7471B - RCRA Metals	Total Number of containers	Special Instructions/Note:
			Preservation Code:											
SB-12	8/31/16	1640	G	S			X	X	X	X	X	X		-12
SB-13	9/1/16	930					X	X	X	X	X	X		13
SB-14		850					X	X		X	X	X		14
SB-15		1000					X	X		X	X			15
SB-16		1035					X	X		X	X			16
SB-17		1100					X	X		X	X			17
SB-18		1120					X	X		X	X			18
SB-19		1145					X	X	X	X	X	X		19
SB-20		1250					X	X		X	X			20
SB-21		1310					X	X		X	X			21
SB-22		1330					X	X	X	X	X	X		22

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date	Time	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Jaelin Pacto	9.2.16 1230	AECOM	[illegible]	9.3.16 @ 1010	TMW
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: \ Yes \ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-3404

Chain of Custody Record

Loc: 490
111143
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A

TestAmeri

9/15/2016

Client Information

Client Contact: Ms. Marie Treiber
Company: AECOM
Address: 8000 Virginia Manor Road Suite 110
City: Beltsville
State, Zip: MD, 20705
Phone: 301-289-3819(Tel)
Email: Marie Treiber@aecom.com
Project Name: Black and Decker – Talbot County, MD
Site: 28712 Glebe Road, Easton, MD

Sampler: J. Porter
Phone:
Due Date Requested:
TAT Requested (days): standard
PO #: PENDING
WO #:
Project #: 49011049
SSOW#:

Lab PM: Salomon, Sherry
E-Mail: sherry salomon@testamericainc.com
Cari:

COC No: 490-56398-18234 1
Page: Page 3 of 5
Job #:

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Standard 8260 List + Oxygenates	8270C - Polyaromatic Hydrocarbons	8082A - Standard PCBs (1016-1260)	8015C_GRO - Standard GRO Range (C6-C10)	8015C_DRO - Diesel Range Organics (C10-C28)	6010C/7471B - RCRA Metals	Total Number of containers	Special Instructions/Note:
			Preservation Code:											
SB-23	9/1/16	1530	G	S			X	X		X	X			23
SB-24	↓	1515	↓	↓			X	X		X	X			24
SB-25		1630					X	X	X	X	X	X		25
SB-26		1700					X	X		X	X			26
SB-27	9/2/16	0845					X	X		X	X			27
SB-28	↓	0910					X	X		X	X			28
DUP-1	8/31/16	1515					X	X		X	X			29
DUP-2	9/1/16	1010					X	X		X	X			30
~~TB~~ DUP-3	9/2/16	0920					X	X		X	X			31
TB							X							32
FB	9/1/16	1615	↓	↓			X	X		X	X			33

Possible Hazard Identification
☐ Non Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements.

Empty Kit Relinquished by: | Date: | Time: | Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Jallin Porter	9.2.16 1230	AECOM	[illegible]	9.3.16 @ 1010	TAN

Custody Seals Intact: ☐ Yes ☐ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-3404

Chain of Custody Record

Loc: 490
111143
#1
B

TestAmerica

9/15/2016

Client Information	Sampler: J. Porter	Lab PM: Salomon, Sherry	Carr	COC No: 490-56398-18234 1
Client Contact: Ms. Marie Treiber	Phone:	E-Mail: sherry salomon@testamericainc.com		Page: Page 4 of 5
Company: AECOM				Job #
Address: 8000 Virginia Manor Road Suite 110	Due Date Requested:			
City: Beltsville	TAT Requested (days): Standard			
State, Zip: MD, 20705				
Phone: 301-289-3819(Tel)	PO #: PENDING			
Email: Marie Treiber@aecom com	WO #			
Project Name: Black and Decker – Talbot County, MD	Project #: 49011049			
Site: 28712 Glebe Road, Easton, MD	SSOW#			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Standard 8260 List + Oxygenates	8270C - Polyaromatic Hydrocarbons,	~~8082A - Standard PCBs (4040-4060)~~	8015C_GRO - Standard GRO Range (C6-C10)	8015C_DRO - Diesel Range Organics (C10-C28)	6010C/7471B - RCRA Metals	Total Number of containers	Special Instructions/Note:
			Preservation Code:											
SB-7	8/31/16	1711	G	W	N		X	X		X	X	X		31
SB-8		1725			N		X	X		X	X	X		35
SB-9		1740			N		X	X		X	X	X		36
SB-10		1800			N		X	X		X	X	X		37
SB-11		1815			N		X	X		X	X	X		38
SB-12		1835			N		X	X		X	X	X		39
SB-13	9/2/16	1005			N		X	X		X	X	X		40
SB-15		0915					X	X		X	X			41
SB-19		0950			N		X	X		X	X	X		42
SB-20		1045					X	X		X	X			43
SB-22		1100			N		X	X		X	X	X		44

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements.

Empty Kit Relinquished by.	Date.	Time:	Method of Shipment

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
J. Porter	9-2-16 1230	AECOM	[illegible]	9-3-16 @1010	TAN
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: ☐ Yes ☐ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-3404

Chain of Custody Record

Loc: 490
111143
#1
C

TestAmerica

9/15/2016

Client Information	Sampler: J. Porter	Lab PM: Salomon, Sherry	Carrier:	COC No: 490-56398-18234 1
Client Contact: Ms Marie Treiber	Phone:	E-Mail: sherry salomon@testamericainc com		Page: Page 5 of 5
Company: AECOM				Job #
Address: 8000 Virginia Manor Road Suite 110	Due Date Requested:			
City: Beltsville	TAT Requested (days): Standard			
State, Zip: MD, 20705				
Phone: 301-289-3819(Tel)	PO #: PENDING			
Email: Marie Treiber@aecom com	WO #			
Project Name: Black and Decker – Talbot County, MD	Project #: 49011049			
Site: 28712 Glebe Road, Easton, MD	SSOW#			

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Standard 8260 List + Oxygenates	8270C - Polyaromatic Hydrocarbons	~~8082A - Standard PCBs (1016,1260)~~	8015C_GRO - Standard GRO Range (C6-C10)	8015C_DRO - Diesel Range Organics (C10-C28)	6010C/7471B - RCRA Metals	Total Number of containers	Special Instructions/Note:
			Preservation Code:											
SB-23	9/2/16	1120	G	W			X	X		X	X			45
SB-25	↓	1130	↓	↑	N		X	X		X	X	X		46
DUP1	8/31/16	1800					X	X		X	X			47
DUP2	9/2/16	920					X	X		X	X			48
MW-N	9/2/16	1030					X	X		X	X			49
MW-W	9/2/16	0830	↓	↓			X	X		X	X			50

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Possible Hazard Identification
☐ Non Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested. I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Jackie Porter	9.2.16 1230	AECOM	[illegible]	9.3.16 @ 1010	TAN
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks

Huckaba, Jimmy

From: Pecora, Peter [Peter.Pecora@aecom.com]
Sent: Tuesday, September 06, 2016 2:20 PM
To: Huckaba, Jimmy
Cc: Treiber, Marie
Subject: FW: Emailing - TA Quote49010935 7-26-16.pdf
Importance: High
Attachments: TA Quote49010935 7-26-16.pdf

Jimmy,

Please disregard my previous email adding SVOCs. Attached is the correct proposal to follow for the analyses, so we are fine with just the PAHs.

Thanks

Peter

From: Treiber, Marie
Sent: Tuesday, September 06, 2016 3:17 PM
To: Pecora, Peter
Subject: Emailing - TA Quote49010935 7-26-16.pdf

Salomon, Sherry

From: Huckaba, Jimmy [jimmy.huckaba@testamericainc.com]
Sent: Tuesday, September 06, 2016 12:55 PM
To: Marie Treiber; Peter Pecora; Salomon, Sherry
Subject: TestAmerica Sample Login Confirmation files from 490-111143 Black and Decker – Talbot County, MD (Please see note.)
Attachments: Std_Tal_Login_Ack for 490-111143-1.pdf; Std_Tal_Login_Limits for 490-111143-1.pdf; COC 490-111143 (201609031648).pdf

Hello,

Attached, please find the Sample Confirmation files for job 490-111143; Black and Decker – Talbot County, MD

Note: One cooler arrived above temp at 6.4. Soil samples SB-10, SB-11, SB-12, SB-13, SB-14, SB-15, SB-16, SB-17, SB-18, SB-19, SB-27, SB-28, DUP-2, and DUP-3 were om the hot cooler. These samples have been released to the lab to run. If you prefer to cancel any of the test on these sample, please let us know as soon as possible.

Please feel free to contact me or your PM, Sherry Salomon, if you have any questions.

Thank you.

Please let us know if we met your expectations by rating the service you received from TestAmerica on this project by visiting our website at: Project Feedback

JIMMY HUCKABA
Project Management Assistant I

TestAmerica Nashville
THE LEADER IN ENVIRONMENTAL TESTING

Tel: 615.726,0177

Reference: [316027]
Attachments: 3

Login Sample Receipt Checklist

Client: AECOM

Job Number: 490-111143-1
SDG Number: 28712 Glebe Road, Easton, MD

Login Number: 111143
List Number: 1
Creator: McBride, Mike

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	False	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	IDs on containers do not match the COC. Logged in per COC.
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

AECOM
8000 Virginia Manor Drive, Ste. 110
Beltsville, MD 20705

301.289.3900 tel
301.289.3901 fax

October 24, 2016

Mr. Mike Henry, Airport Manager
Easton/Newnam Field Airport
29137 Newnam Road, Unit 1
Easton, Maryland 21601

Subject: Supplemental Sampling Results – Addendum to the Phase II Environmental Site Investigation
Former Black and Decker Manufacturing Facility, Easton, Maryland

Dear Mr. Henry,

AECOM Technical Services, Inc. (AECOM) is pleased to present the results of the supplemental sampling conducted at the former Black and Decker Manufacturing Facility located at 28712 Glebe Road in Easton, Maryland (Subject Property). This work is being conducted pursuant to Easton/Newnam Field Airport's request, following review of the submitted September 2016 Draft Phase II Environmental Site Investigation Report.

BACKGROUND

AECOM was retained by the Easton/Newnam Field Airport to conduct a Phase I Environmental Due Diligence Audit (EDDA) of the Subject Property. Based on the results of the July 2016 Phase I, a Phase II sampling program was implemented. The Phase II sampling program included 28 soil borings, soil sampling, and groundwater sampling. Based on the analytical results, select metals, chlorinated solvents, and petroleum hydrocarbons exceeded a regulator cleanup standard in either the soil or groundwater. Of particular interest were the detections of chlorinated solvents (cis-1,2-dichloroethene, trichloroethene, and vinyl chloride) in the groundwater. The exceedances appeared mostly in an isolated area and at levels suggesting residual impacts, not indicative of a significant spill or release to the environment.

Based on these results, AECOM recommended supplemental sampling to further define and characterize the areas of elevated concentrations. A proposal was submitted to you on September 21, 2016, outlining the proposed work and was approved.

SCOPE OF WORK

On September 28 and 29, 2016, AECOM supervised the advancement of seven supplemental soil borings to collect samples. The boring locations were proposed in the vicinity and downgradient of previous soil borings SB-13 and SB-19, the two borings that exhibited the highest chlorinated solvents detected. Figure 1, attached, depicts the locations of the supplemental soil borings. To evaluate the vertical extent of the impacts observed during the initial Phase II sampling, AECOM proposed to advance each boring down to 40 feet below ground surface (or to the extent possible using direct push technology). AECOM proposed to collect one soil sample from each boring, and one groundwater sample per 10 vertical feet using a dual-tube sampling device. Each sample collected would be submitted for laboratory analysis for volatile organic compounds (VOCs) using EPA Method 8260.

Soils above the saturation zone (above the groundwater table) were continuously screened during the investigation using a photo-ionization detector (PID). Based on PID responses, one soil sample per boring was collected for analysis. If there was no PID response, a soil sample was collected from just above the observed zone of saturation.

As described below, additional out-of-scope sampling was conducted based on new information collected regarding the site's storm water management. The new sampling included two storm water outfall samples and a surface water sample. In addition to the sampling, AECOM conducted a sensitive receptor survey.

RESULTS

Soil Borings

The soil borings were advanced between a total depth of 21 and 38 feet below ground surface, until refusal was encountered. No positive responses on the PID were detected during this phase of investigation. The soils encountered were generally similar to those observed during the initial investigation (intermittent sands and clays). The attached boring logs provide a detailed description of the lithology observed. A total of seven soil and 17 groundwater samples were collected from the soil borings and submitted for analysis to Maryland Spectral Services, Inc. The analytical results did not detect any constituents exceeding their associated MDE cleanup standard.

Trace detections of cis-1,2-dichlorethene was detected in the groundwater from four borings (SB-29, 31, 32, and 34), however, well below the regulatory standard. The highest concentration of cis-1,2-dichlorethene detected was 23.3 micrograms per liter (µg/l) compared to the standard of 70 µg/l). In each of those borings, a higher detection was found at the more shallow depth of sampling interval, suggesting residual shallow impacts only.

Other trace constituents detected below applicable regulatory standards in the soil samples include acetone, toluene, ethylbenzene, xylenes, 1,2,4-trimethylbenzene, and carbon disulfide. Other trace constituents detected below applicable regulatory standards in the groundwater samples include acetone, 2-butanone, carbon disulfide,

A complete summary of the analytical data is provided in Table 1 (soil) and Table 2 (groundwater). The complete analytical laboratory report is enclosed.

Surface Water Sampling

Prior to the supplemental sampling, AECOM re-interviewed Mr. George Tarr (site contact) and obtained additional information regarding the site's storm water drainage system. Evidently, the site's storm water is managed through various collection points (storm drains, grates) across the facility which is directed through subgrade pipes and connecting vaults. The storm water ultimately discharges to Glebe Creek located approximately 1,500 feet to the northwest. Glebe Creek is a tributary to Miles River, and eventually the Chesapeake Bay. Additionally, two overflow drainage pipes are in place for use during significant storm water events. The overflow drainage pipes discharge to surface swales and ultimately the onsite storm water pond. AECOM adjusted our soil boring locations to capture potential leak points from the storm water vaults and also collected surface water samples to evaluate the surface water runoff quality.

Due to heavy rainfall during our investigation, we were able to collect grab water samples from both the overflow drainage pipes and the on-site storm water pond. Results of the grab sampling showed only cis-1,2-dichlorethene at 3.4 µg/l (estimated value) from "Overflow A", which is below the groundwater standard of 70 µg/l. All other samples and constituents were non-detect.

Sensitive Receptor Survey

In addition to the sampling, AECOM conducted a sensitive receptor survey to identify any nearby receptors that may be considered for environmental risk in the event of a complete pathway for any contaminants identified onsite. The survey included a review of available databases and a "dashboard" survey within approximately one-half mile from the site. The results of the survey identified several groundwater wells in the vicinity of the subject site.

According to the site contact, Mr. Tarr, municipal water was provided to the surrounding community approximately 15 years ago; however, most property owners kept their private well(s) for irrigation or other non-potable purposes.

A deep municipal well was further identified directly across Glebe Road, approximately 800 feet from SB-13. This well is reportedly 1,210 feet deep. Other wells identified were to the north of the site along Mistletoe Drive.

Additional potential sensitive receptors identified include Glebe Creek, located approximately 1,500 feet to the northwest which received storm water from the site.

Conclusions

Based on our limited investigation, there doesn't appear to be a significant, widespread environmental concern at the subject site. Residual impacts, including trace chlorinated solvents, were detected in collected groundwater samples and from an outfall surface water sample. This may be indicative of the long history of solvent use at the site with minor drips, spills or releases.

A sensitive receptor survey was conducted which identified several wells in the vicinity (including a deep municipal well adjacent to the site) and surface waters which receive storm water runoff from the site.

We appreciate the opportunity to work with you on this project. If you have any questions, please feel free to contact the undersigned at (301) 289-3901.

Sincerely,

AECOM

Scott Beatson
Project Manager

Marie Treiber
Senior Project Manager

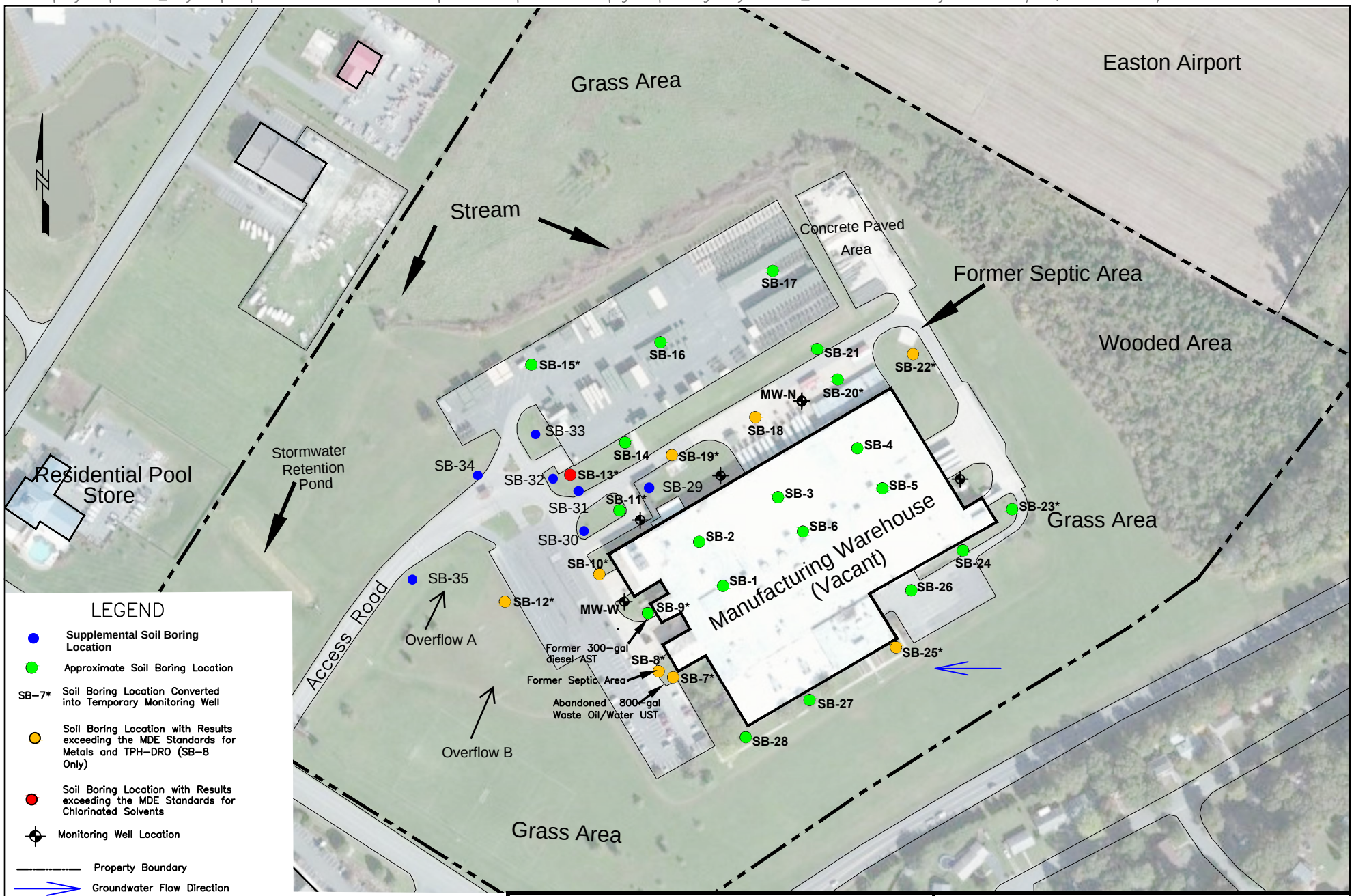
Gary Grinstead
Associate Vice President

Enclosures:

Figure 1 – Supplemental Sample Locations
Table 1 – Soil Analytical Results
Table 2 – Groundwater Analytical Results
Supplemental Soil Boring Logs
Laboratory Analytical Report

Cc: Ms. Jennifer Lutz – AECOM
Project File

File: W:\Projects\USCLM1_Projects\PST\Black and Decker Easton MD\AECOM files\Phase I EDDA\Figures\SLU.dwg Layout: ANSI_A1-LJ User: colfleshj Plotted: Sep 16, 2016 - 12:51pm Xref's:



AECOM

Black and Decker (U.S.) Inc. – Subject Property
28712 Glebe Road, Easton, MD 21601
Project No. 60514611

Site Map with Soil Boring Locations

DATE: 06/23/16 | DRWN: JP | REV: PP

FIGURE 1

Table 1: Soil Analytical Results
Former Black & Decker Facility
28721 Glebe Road
Easton, Maryland

Sample ID	SB-29	SB-30	SB-31	SB-32	SB-33	SB-34	SB-35	MDE Non-Residential Clean-up Standards
Sample Date	9/28/2016	9/39/2016	9/28/2016	9/28/2016	9/29/2016	9/29/2016	9/29/2016	
Sample Depth	11'	12'	10'	11'	10'	11'	14'	
PID Reading (ppm)	0	0	0	0	0	0	0	
Volatile Organic Compounds (mg/Kg)								
Acetone	0.0266	0.0251	0.0191	0.0114	0.0175	0.0148	0.0253	92,000
Benzene	ND	ND	ND	ND	ND	ND	ND	52
Toluene	ND	0.0045 J	ND	ND	ND	ND	ND	8,200
Ethylbenzene	ND	0.0031 J	ND	ND	ND	ND	ND	10,000
Xylenes	0.0044 J	0.0153 J	0.0051 J	ND	ND	ND	0.0034 J	20,000
MTBE	ND	ND	ND	ND	ND	ND	ND	720
cis-1,2-Dichlorethene	0.0025 J	ND	ND	0.0025 J	ND	ND	ND	1,000
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	7
1,2,4-Trimethylbenzene	0.0028 J	0.0044 J	0.0034 J	ND	ND	ND	0.0027 J	--
Carbon Disulfide	0.0054 J	ND	0.0064 J	ND	ND	ND	0.0024 J	10,000

ND: Not detected at the laboratory reporting limit
mg/Kg: milligrams-per-kilogram
J: Laboratory estimated concentration (detected below the reporting limit)
PID: Photoionization Detector

Table 2: Groundwater Analytical Results
Former Black & Decker Facility
28712 Glebe Road
Easton, Maryland

Sample ID	SB-29	SB-29	SB-30	SB-30	SB-30	SB-30	SB-31	SB-31	SB-32	SB-32	SB-33	SB-33	SB-33	MDE Groundwater Clean-up Standards
Sample Date	9/29/2016	9/29/2016	9/29/2016	9/29/2016	9/29/2016	9/29/2016	9/28/2016	9/28/2016	9/29/2016	9/29/2016	9/29/2016	9/29/2016	9/29/2016	
Sample Depth	11'-12'	19'-20'	12'-13'	19'-20'	29'-30'	37'-38'	11'-12'	18'-19'	11'-12'	19'-20'	11'-12'	19'-20'	28'-29'	
Volatile Organic Compounds (µg/L)														
Acetone	ND	ND	ND	ND	ND	ND	ND	ND	27.5	ND	ND	ND	ND	550
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,000
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	700
Xylenes	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10,000
MTBE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20
2-Butanone (MEK)	ND	ND	ND	ND	12.1	17.9	ND	ND	14	ND	ND	ND	ND	700
Carbon Disulfide	ND	ND	ND	ND	ND	3.1 J	ND	ND	ND	ND	ND	ND	ND	100
cis-1,2-Dichlorethene	2.4 J	ND	ND	ND	ND	ND	3.0 J	ND	23.3	ND	ND	ND	ND	70
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	90
Trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	100
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
Vinyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2

ND: Not detected at the laboratory reporting limit
J: Laboratory estimated concentration (detected below the reporting limit)
ug/L: micrograms-per-liter
Highlighted Bold: results exceed the MDE Groundwater Clean-up Standard

Table 2 Continued: Groundwater Analytical Results
Former Black & Decker Facility
28712 Glebe Road
Easton, Maryland

Sample ID	SB-34	SB-34	SB-35	SB-35	Overflow A	Overflow B	SW Pond	Duplicate	EB	Trip Blank	MDE Groundwater Clean-up Standards
Sample Date	9/29/2016	9/29/2016	9/29/2016	9/29/2016	9/29/2016	9/29/2016	9/29/2016	9/29/2016	9/29/2016	9/29/2016	
Sample Depth	12'-13'	19'-20'	13'-14'	19'-20'	--	--	--	--	--	--	
Volatile Organic Compounds (µg/L)											
Acetone	ND	ND	ND	ND	ND	ND	ND	ND	17.8	15.1	550
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,000
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	700
Xylenes	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10,000
MTBE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20
2-Butanone (MEK)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	700
Carbon Disulfide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	100
cis-1,2-Dichlorethene	23	5.0 J	ND	ND	3.4 J	ND	ND	ND	ND	ND	70
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	90
Trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	100
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
Vinyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2

ND: Not detected at the laboratory reporting limit
J: Laboratory estimated concentration (detected below the reporting limit)
ug/L: micrograms-per-liter
Highlighted Bold: results exceed the MDE Groundwater Clean-up Standard

AECOM	*Client:* Talbot County, MD			***BORING ID: SB-29***
	Project Number: 60520027			
	Site Location: Former Black and Decker Facility, Easton, MD			
	Coordinates:	*Elevation:*		*Sheet:* 1 of 1
	Drilling Method: Dual Tube Geoprobe			*Monitoring Well Installed:* No
	Sample Type(s): Acetate Sleeve, Peristaltic Pump	*Boring Diameter:* 3 1/4"		*Screened Interval:*
Weather: Rain, windy, 60's	*Logged By: Jeremy Joiner*	*Date Started: 09/29/2016*		*Depth of Boring: 24'*
Drilling Contractor: Odyssey Environmental	*Ground Elevation:*	*Date Finished: 09/29/2016*		*Water Level: 10.0'*

Depth (ft)	Geologic sample ID	Sample Depth (ft)	Recovery (inches)	Headspace (ppm)	U.S.C.S	**MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)**	Lab Sample ID	Lab Sample Depth (Ft.)
						0'-5' hand augered.		
1				0.0		Brown clayey SILT, little clay, no plasticity, moist, no odor.		
2				0.0		Gray sandy CLAY, medium stiff, no plasticity, fine-medium grain, . trace small gravels, moist, no odor.		
3				0.0				
4				0.0		Gray CLAY, stiff, no plasticity, moist, no odor.		
5				0.0				
6				0.0				
7				0.0				
8				0.0		Black/Brown SAND, well graded, very moist, trace small gravels, organic odor.		
9				0.0				
10				0.0		Gray SAND, fine to medium grain, trace small gravels, very moist, no odor.		
11				0.0		Water sample collected at 11'-12'	SB-29 11'	
12				0.0				
13				0.0				
14				0.0				
15				0.0		Soil collection terminated at 15 ft. bgs		
16				0.0				
17				0.0				
18				0.0				
19				0.0		Water sample collected at 19'-20 ' interval.		
20				0.0				
21				0.0				
22				0.0				
23				0.0				
24				0.0				
						Geoprobe Refusal at 24 ft. bgs		

NOTES: Hand augered to 5'bgs for utility clearance.
Soil sample collected at 11 ft. bgs
Water smaples collected at 11'-12' and 19'-20'

Date	Time	Depth to groundwater while drilling

Checked by _____ Date:_____

AECOM	*Client:* Talbot County, MD									**BORING ID: SB-30**
	Project Number: 60520027									
	Site Location: Former Black and Decker Facility, Easton, MD									
	Coordinates:					*Elevation:*				*Sheet:* 1 of 1
	Drilling Method: Dual Tube Geoprobe									*Monitoring Well Installed:* No
	Sample Type(s): Acetate Sleeve, Peristaltic Pump					*Boring Diameter:* 3 1/4"				*Screened Interval:*
Weather: Rain, windy, 60's					*Logged By: Jeremy Joiner*		*Date Started: 09/29/2016*			*Depth of Boring: 38'*
Drilling Contractor: Odyssey Environmental					*Ground Elevation:*		*Date Finished: 09/29/2016*			*Water Level: 12'*

Depth (ft)	Geologic sample ID	Sample Depth (ft)	Recovery (inches)	Headspace (ppm)	U.S.C.S	**MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)**	Lab Sample ID	Lab Sample Depth (Ft.)
						0'-5' hand augered		
1				0.0		Mottled brown, gray clayey SILT, little fine to medium grain sand, moist, no odor.		
2				0.0		Orange SAND, well graded, trace clay and small gravels, moist, no odor.		
3				0.0				
						Gray sandy CLAY, no plasticity, medium stiff, fine to medium grain,		
4				0.0		moist to wet, no odor.		
						Gray CLAY, stiff, no plasticity, trace small gravels and fine sand, moist, no odor.		
5				0.0				
6				0.0				
7				0.0				
8				0.0				
9				0.0				
10				0.0				
11				0.0				
12				0.0		Black silty SAND, fine to medium grain, trace lean clay, trace organic matter,	SB-30 12'	
						wet, organic odor. Water sample collected 12'-13'		
13				0.0		- 6-inch well sorted clean gravel lense, wet, no odor.		
						Brown and Gray clayey SAND, fine to medium grain, trace small gravels,		
14				0.0		no plasticity, wet, no odor.		
15				0.0		Soil collection terminated at 15 ft. bgs		
16				0.0				
17				0.0				
18				0.0				
19				0.0				
20				0.0				
21				0.0				

22				0.0					
23				0.0					
24				0.0					
25				0.0					
26				0.0					
27				0.0					
28				0.0					
29				0.0		Water sample collected 29'-30'			
30				0.0					
31				0.0					
32				0.0					
33				0.0					
34				0.0					
35				0.0					
36				0.0					
37				0.0		Water sample collected 37'-38'			
38				0.0					

NOTES: Hand augered to 5'bgs for utility clearance.
Soil sample collected at 12 ft bgs
Water samples collected at 12'-13', 29'-30', and 37'-38'

Checked by _____ Date:_____

Date	Time	Depth to groundwater while drilling

AECOM	*Client:* Talbot County, MD		**BORING ID: SB-31**
	Project Number: 60520027		
	Site Location: Former Black and Decker Facility, Easton, MD		
	Coordinates:	*Elevation:*	*Sheet:* 1 of 1
	Drilling Method: Dual Tube Geoprobe		*Monitoring Well Installed:* No
	Sample Type(s): Acetate Sleeve, Peristaltic Pump	*Boring Diameter:* 3 1/4"	*Screened Interval:*
Weather: Rain, windy, 60's	*Logged By: Jeremy Joiner*	*Date Started: 09/28/2016*	*Depth of Boring: 21'*
Drilling Contractor: Odyssey Environmental	*Ground Elevation:*	*Date Finished: 09/28/2016*	*Water Level: 11'*

Depth (ft)	Geologic sample ID	Sample Depth (ft)	Recovery (inches)	Headspace (ppm)	U.S.C.S	**MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)**	Lab Sample ID	Lab Sample Depth (Ft.)
						0'-5' hand augered		
1				0.0		Light brown sandy SILT, few small gravels, slightly moist, no odor.		
2				0.0				
						Mottled brown/gray CLAY, little fine grain sand, trace silt, moist, no odor.		
3				0.0				
4				0.0				
						Reddish-brown CLAY, no plasticity, medium stiffness, little fine to medium		
5				0.0		grain sand,moist, no odor.		
6				0.0				
7				0.0				
8				0.0		Black clayey SAND, fine to medium grain, no plasticity, some organic matter,		
						wet, no odor		
9				0.0				
						Dark gray clayey SAND, fine to medium grain, trace silt and small gravels,		
10				0.0		no plasticity, wet, no odor.	SB-31 10'	
11				0.0				
12				0.0				
13				0.0				
14				0.0				
15				0.0				
16				0.0				
17				0.0				
18				0.0				
19				0.0		Gray CLAY, medium stiff, moist, no odor.		
20				0.0		SAA, very stiff, slightly moist, no odor.		
21				0.0		Geoprobe Refusal at 21' bgs		

NOTES:
Hand augered to 5'bgs for utility clearance.
Collected soil sample at 10 ft. bgs
Colected water samples at 11'-12' and 18'-19'

Date	Time	Depth to groundwater while drilling

Checked by _____ Date:_____

AECOM	*Client:* Talbot County, MD									**BORING ID: SB-32**
	Project Number: 60520027									
	Site Location: Former Black and Decker Facility, Easton, MD									
	Coordinates:					*Elevation:*				*Sheet:* 1 of 1
	Drilling Method: Dual Tube Geoprobe									*Monitoring Well Installed:* No
	Sample Type(s): Acetate Sleeve, Peristaltic Pump					*Boring Diameter:* 3 1/4"				*Screened Interval:*
Weather: Rain, windy, 60's						*Logged By: Jeremy Joiner*	*Date Started: 09/28/2016*			*Depth of Boring: 30'*
Drilling Contractor: Odyssey Environmental						*Ground Elevation:*	*Date Finished: 09/28/2016*			*Water Level: 11'*

Depth (ft)	Geologic sample ID	Sample Depth (ft)	Recovery (inches)	Headspace (ppm)	U.S.C.S	**MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)**	Lab Sample ID	Lab Sample Depth (Ft.)
						0'-5' hand augered		
1				0.0		Brown sandy CLAY, fine to medium grain, no plasticity, moist, no odor.		
2				0.0				
3				0.0				
						Gray clayey SAND, fine to medium grain, no plasticity, very moist to wet, no odor.		
4				0.0		Gray CLAY, little fine to medium grain sand, stiff, no plasticity, slightly moist to moist, no odor.		
5				0.0				
6				0.0				
7				0.0		7'-7.2' Gray SAND lense, fine to medium grain , moist, no odor.		
8				0.0				
						8.3'-8.5' Gray SAND lense, fine to medium grain , moist, no odor.		
9				0.0		Black clayey SAND, trace silt, trace organic matter, very moist, no odor.		
10				0.0		Black SAND, fine to medium grain, some organic matter, saturated at 11', organic odor		
11				0.0		Water sample collected at 11'-12'	SB-32 11'	
						SAA, Gray		
12				0.0				
13				0.0				
14				0.0				
15				0.0		Dark gray clayey SAND, fine to medium grain, medium loose, very moist, no odor.		
16				0.0				
17				0.0				
18				0.0				
19				0.0		Water sample collected at 19'-20'		
20				0.0		Gray CLAY, stiff low to no plasticity, moist, no odor.		
21				0.0				

22				0.0				
23				0.0				
24				0.0				
25				0.0		Heaving sands, no competent sampling possible.		
26				0.0				
27				0.0				
28				0.0				
29				0.0				
30				0.0		Boring terminated at 30 ft. bgs due to heaving sands		

NOTES: Hand augered to 5'bgs for utility clearance.
Soil sample collected at 11 ft. bgs
Water samples collected at 11'-12' and 19'-20'

Checked by _____ Date:_____

Date	Time	Depth to groundwater while drilling

AECOM	*Client:* Talbot County, MD			**BORING ID: SB-33**
	Project Number: 60520027			
	Site Location: Former Black and Decker Facility, Easton, MD			
	Coordinates:	*Elevation:*		*Sheet:* 1 of 1
	Drilling Method: Dual Tube Geoprobe			*Monitoring Well Installed:* No
	Sample Type(s): Acetate Sleeve, Peristaltic Pump	*Boring Diameter:* 3 1/4"		*Screened Interval:*
Weather: Rain, windy, 60's	*Logged By: Jeremy Joiner*	*Date Started: 09/28/2016*		*Depth of Boring: 29'*
Drilling Contractor: Odyssey Environmental	*Ground Elevation:*	*Date Finished: 09/28/2016*		*Water Level: 11'*

Depth (ft)	Geologic sample ID	Sample Depth (ft)	Recovery (inches)	Headspace (ppm)	U.S.C.S	**MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)**	Lab Sample ID	Lab Sample Depth (Ft.)
						0'-5' hand augered		
1				0.0		Brown sandy SILT, fine grain, moist, no odor.		
2				0.0				
3				0.0				
						Reddish brown clayey SAND, fien to medium grain, no plasticity, moist, no odor.		
4				0.0				
						Gray CLAY, little fine grain sand, firm, no plasticity, moist, no odor.		
5				0.0				
						Gray sandy CLAY, medium stiff, fine to medium grain, moist, no odor.		
6				0.0				
7				0.0				
8				0.0				
9				0.0		Black silty SAND, trace clay, no plasticity, fine to medium grain, very moist to wet, no odor.		
10				0.0				
11				0.0		Water sample collected 11'-12'	SB-33 11'	
12				0.0				
13				0.0				
14				0.0				
15				0.0		Terminated soil boring at 15 ft. bgs.		
16				0.0				
17				0.0				
18				0.0				
19				0.0		Water sample collected 19'-20'		
20				0.0				
21				0.0				

22				0.0				
23				0.0				
24				0.0				
25				0.0				
26				0.0				
27				0.0				
28				0.0		Water sample collected 28'-29'		
29				0.0		Geoprobe refusal at 29 ft. bgs.		

NOTES:

Hand augered to 5'bgs for utility clearance.
Collected soil sample at 10 ft. bgs
Collected water samples at 11'-12', 19'-20' and 28'-29'
Duplicate water sample collected at the 19'-20' interval

Checked by _____ Date:_____

Date	Time	Depth to groundwater while drilling

AECOM	*Client:* Talbot County, MD		**BORING ID: SB-34**
	Project Number: 60520027		
	Site Location: Former Black and Decker Facility, Easton, MD		
	Coordinates:	*Elevation:*	*Sheet:* 1 of 1
	Drilling Method: Dual Tube Geoprobe		*Monitoring Well Installed:* No
	Sample Type(s): Acetate Sleeve, Peristaltic Pump	*Boring Diameter:* 3 1/4"	*Screened Interval:*
Weather: Rain, windy, 60's	*Logged By: Jeremy Joiner*	*Date Started: 09/29/2016*	*Depth of Boring: 21'*
Drilling Contractor: Odyssey Environmental	*Ground Elevation:*	*Date Finished: 09/29/2016*	*Water Level: 11'*

Depth (ft)	Geologic sample ID	Sample Depth (ft)	Recovery (inches)	Headspace (ppm)	U.S.C.S	**MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)**	Lab Sample ID	Lab Sample Depth (Ft.)
						0'-5' hand augered		
1				0.0		Brown clayey SILT, little fine to medium grain sand, moist, no odor.		
						Mottled Brown/Gray CLAY, stiff, no plasticity, trace fine sand, moist, no odor.		
2				0.0				
3				0.0				
4				0.0				
5				0.0		Gray CLAY, trace fine sand, medium stiff, no plasticity, moist, no odor.		
6				0.0				
7				0.0		Black clayey SAND, fine to medium grain, very moist, no odor.		
8				0.0				
9				0.0				
10				0.0				
11				0.0			SB-34 11'	
12				0.0		Water sample collected 12'-13'		
13				0.0				
14				0.0				
15				0.0		Terminated soil boring at 15 ft. bgs.		
16				0.0				
17				0.0				
18				0.0				
19				0.0		Water sample collected 19'-20'		
20				0.0				
21				0.0		Geoprobe Refusal at 21' bgs		

NOTES: Hand augered to 5'bgs for utility clearance.
Soil sample collected at 11 ft bgs
Water samples collected at 12'-13' and 19'-20'

Date	Time	Depth to groundwater while drilling

Checked by _____ Date:_____

AECOM	*Client:* Talbot County, MD								**BORING ID: SB-35**
	Project Number: 60520027								
	Site Location: Former Black and Decker Facility, Easton, MD								
	Coordinates:					*Elevation:*			*Sheet:* 1 of 1
	Drilling Method: Dual Tube Geoprobe								*Monitoring Well Installed:* No
	Sample Type(s): Acetate Sleeve, Peristaltic Pump					*Boring Diameter:* 3 1/4"			*Screened Interval:*
Weather: Rain, windy, 60's				*Logged By: Jeremy Joiner*		*Date Started: 09/29/2016*			*Depth of Boring: 23'*
Drilling Contractor: Odyssey Environmental				*Ground Elevation:*		*Date Finished: 09/29/2016*			*Water Level: 11'*

Depth (ft)	Geologic sample ID	Sample Depth (ft)	Recovery (inches)	Headspace (ppm)	U.S.C.S	**MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)**	Lab Sample ID	Lab Sample Depth (Ft.)
						0'-5' hand augered		
1				0.0		Brown clayey SILT, little fine sand, moist, no odor.		
2				0.0		Black organic SAND, fine to medium grain, some organic matter present, organic odor present, wet,		
3				0.0		Gray clayey SAND, fine to medium grain, no plasticity, trace organic matter, very moist, no odor.		
4				0.0				
5				0.0				
6				0.0				
7				0.0				
8				0.0				
9				0.0				
10				0.0				
11				0.0		Gray SAND, well graded, trace small gravels, wet, no odor.		
12				0.0				
13				0.0		Water sample collected 13'-14'		
14				0.0		Gray CLAY, medium stiff, no plasticity, little fine grain sand, very moist, no odor.	SB-35 14'	
15				0.0		Terminated soil boring at 15 ft. bgs.		
16								
17								
18								
19						Water sample collected 19'-20'		
20								
21								
22								
23						Geoprobe refusal at 23 ft. bgs.		

NOTES: Hand augered to 5'bgs for utility clearance.
Soil sample collected at 14 ft. bgs.
Water samples collected at 13'-14' and 19'-20'

Date	Time	Depth to groundwater while drilling

Checked by _____ Date:_____

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
VELAP ID 460040

05 October 2016

Scott Beatson
AECOM Environment
8000 VIRGINIA MANOR RD, STE 110
BELTSVILLE, MD 20705
RE: Former Black & Decker

Enclosed are the results of analyses for samples received by the laboratory on 09/29/16 17:56.

A more detailed report format is available upon request, which lists the accreditation status for all analytical methods performed.

Please visit our website at www.mdspectral.com for a complete listing of our accreditations.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Will Brewington
Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501

Project Manager: Scott Beatson

Reported:
10/05/16 11:17

Client Sample ID	Alternate Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SB-32 11'		6092909-01	Soil	09/28/16 15:30	09/29/16 17:56
SB-31 10'		6092909-02	Soil	09/28/16 13:00	09/29/16 17:56
SB-35 14'		6092909-03	Soil	09/29/16 12:25	09/29/16 17:56
SB-34 11'		6092909-04	Soil	09/29/16 12:55	09/29/16 17:56
SB-30 12'		6092909-05	Soil	09/29/16 10:30	09/29/16 17:56
SB-33 10'		6092909-06	Soil	09/29/16 08:15	09/29/16 17:56
SB-29 11'		6092909-07	Soil	09/29/16 13:55	09/29/16 17:56
SB-31 11'-12'		6092909-08	Nonpotable Water	09/28/16 13:45	09/29/16 17:56
SB-31 18' 19'		6092909-09	Nonpotable Water	09/28/16 14:00	09/29/16 17:56
SB-33 11'-12'		6092909-10	Nonpotable Water	09/29/16 08:30	09/29/16 17:56
SB-33 19'-20'		6092909-11	Nonpotable Water	09/29/16 08:40	09/29/16 17:56
SB-33 28'-29'		6092909-12	Nonpotable Water	09/29/16 09:00	09/29/16 17:56
Duplicate		6092909-13	Nonpotable Water	09/29/16 13:45	09/29/16 17:56
SB-32 19'-20'		6092909-14	Nonpotable Water	09/29/16 09:30	09/29/16 17:56
SB-30 12'-13'		6092909-15	Nonpotable Water	09/29/16 09:40	09/29/16 17:56
SB-30 19'-20'		6092909-16	Nonpotable Water	09/29/16 10:50	09/29/16 17:56
SB-30 29'-30'		6092909-17	Nonpotable Water	09/29/16 11:10	09/29/16 17:56
SB-30 37'-38'		6092909-18	Nonpotable Water	09/29/16 11:45	09/29/16 17:56
SB-35 13'-14'		6092909-19	Nonpotable Water	09/29/16 12:30	09/29/16 17:56
SB-35 19-'20'		6092909-20	Nonpotable Water	09/29/16 12:40	09/29/16 17:56
SB-34 12'-13'		6092909-21	Nonpotable Water	09/29/16 13:05	09/29/16 17:56
SB-34 19'-20'		6092909-22	Nonpotable Water	09/29/16 13:20	09/29/16 17:56
SB-29 11'-12'		6092909-23	Nonpotable Water	09/29/16 14:10	09/29/16 17:56
SB-29 19'-20'		6092909-24	Nonpotable Water	09/29/16 14:20	09/29/16 17:56
SB-32 11'-12'		6092909-25	Nonpotable Water	09/29/16 08:20	09/29/16 17:56
Trip Blank		6092909-26	Nonpotable Water	09/29/16 00:00	09/29/16 17:56

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501

Project Manager: Scott Beatson

Reported:
10/05/16 11:17

Client Sample ID	Alternate Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Equipment Blank		6092909-27	Nonpotable Water	09/29/16 00:00	09/29/16 17:56
Overflow A		6092909-28	Nonpotable Water	09/29/16 14:40	09/29/16 17:56
Overflow B		6092909-29	Nonpotable Water	09/29/16 15:00	09/29/16 17:56
Stormwater Pond		6092909-30	Nonpotable Water	09/29/16 14:50	09/29/16 17:56

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-32 11'

6092909-01 (Soil)
Sample Date: 09/28/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS)									
Acetone	**11.4**		ug/kg dry	11.4	11.4	1	10/03/16	10/03/16 17:08	GM
tert-Amyl alcohol (TAA)	ND		ug/kg dry	56.8	56.8	1	10/03/16	10/03/16 17:08	GM
tert-Amyl methyl ether (TAME)	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM
Benzene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM
Bromobenzene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM
Bromochloromethane	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM
Bromodichloromethane	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM
Bromoform	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM
Bromomethane	ND		ug/kg dry	5.7	5.7	1	10/03/16	10/03/16 17:08	GM
tert-Butanol (TBA)	ND		ug/kg dry	56.8	56.8	1	10/03/16	10/03/16 17:08	GM
2-Butanone (MEK)	ND		ug/kg dry	11.4	11.4	1	10/03/16	10/03/16 17:08	GM
n-Butylbenzene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM
sec-Butylbenzene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM
tert-Butylbenzene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM
Carbon disulfide	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM
Carbon tetrachloride	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM
Chlorobenzene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM
Chloroethane	ND		ug/kg dry	5.7	5.7	1	10/03/16	10/03/16 17:08	GM
Chloroform	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM
Chloromethane	ND		ug/kg dry	5.7	5.7	1	10/03/16	10/03/16 17:08	GM
2-Chlorotoluene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM
4-Chlorotoluene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM
1,2-Dibromo-3-chloropropane	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM
Dibromochloromethane	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM
1,2-Dibromoethane (EDB)	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM
Dibromomethane	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM
1,2-Dichlorobenzene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM
1,3-Dichlorobenzene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM
1,4-Dichlorobenzene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM
Dichlorodifluoromethane	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM
1,1-Dichloroethane	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM
1,2-Dichloroethane	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM
1,1-Dichloroethene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM
cis-1,2-Dichloroethene	**2.5**	J	ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-32 11'

6092909-01 (Soil)
Sample Date: 09/28/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
trans-1,2-Dichloroethene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM
Dichlorofluoromethane	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM
1,2-Dichloropropane	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM
1,3-Dichloropropane	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM
2,2-Dichloropropane	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM
1,1-Dichloropropene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM
cis-1,3-Dichloropropene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM
trans-1,3-Dichloropropene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM
Diisopropyl ether (DIPE)	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM
Ethyl tert-butyl ether (ETBE)	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM
Ethylbenzene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM
Hexachlorobutadiene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM
2-Hexanone	ND		ug/kg dry	11.4	11.4	1	10/03/16	10/03/16 17:08	GM
Isopropylbenzene (Cumene)	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM
4-Isopropyltoluene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM
Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM
4-Methyl-2-pentanone	ND		ug/kg dry	11.4	11.4	1	10/03/16	10/03/16 17:08	GM
Methylene chloride	ND		ug/kg dry	22.7	22.7	1	10/03/16	10/03/16 17:08	GM
Naphthalene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM
n-Propylbenzene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM
Styrene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM
1,1,1,2-Tetrachloroethane	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM
1,1,2,2-Tetrachloroethane	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM
Tetrachloroethene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM
Toluene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM
1,2,3-Trichlorobenzene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM
1,2,4-Trichlorobenzene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM
1,1,1-Trichloroethane	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM
1,1,2-Trichloroethane	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM
Trichloroethene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM
Trichlorofluoromethane (Freon 11)	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM
1,2,3-Trichloropropane	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM
1,2,4-Trimethylbenzene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM
1,3,5-Trimethylbenzene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-32 11'

6092909-01 (Soil)
Sample Date: 09/28/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
Vinyl chloride	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM
o-Xylene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM
m- & p-Xylenes	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 17:08	GM
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*97 %*	*10/03/16*		*10/03/16 17:08*		
Surrogate: Toluene-d8			*75-120*	*101 %*	*10/03/16*		*10/03/16 17:08*		
Surrogate: 4-Bromofluorobenzene			*65-120*	*96 %*	*10/03/16*		*10/03/16 17:08*		
PERCENT SOLIDS BY ASTM D2216-05									
Percent Solids	**88**		%			1	10/04/16	10/05/16 11:14	WB

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As a NELAP accredited laboratory, MSS can provide a certification list upon request.

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-31 10'

6092909-02 (Soil)
Sample Date: 09/28/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS)									
Acetone	**19.1**		ug/kg dry	13.0	13.0	1	10/03/16	10/03/16 17:39	GM
tert-Amyl alcohol (TAA)	ND		ug/kg dry	64.9	64.9	1	10/03/16	10/03/16 17:39	GM
tert-Amyl methyl ether (TAME)	ND		ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM
Benzene	ND		ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM
Bromobenzene	ND		ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM
Bromochloromethane	ND		ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM
Bromodichloromethane	ND		ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM
Bromoform	ND		ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM
Bromomethane	ND		ug/kg dry	6.5	6.5	1	10/03/16	10/03/16 17:39	GM
tert-Butanol (TBA)	ND		ug/kg dry	64.9	64.9	1	10/03/16	10/03/16 17:39	GM
2-Butanone (MEK)	ND		ug/kg dry	13.0	13.0	1	10/03/16	10/03/16 17:39	GM
n-Butylbenzene	ND		ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM
sec-Butylbenzene	ND		ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM
tert-Butylbenzene	ND		ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM
Carbon disulfide	**6.4**	J	ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM
Carbon tetrachloride	ND		ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM
Chlorobenzene	ND		ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM
Chloroethane	ND		ug/kg dry	6.5	6.5	1	10/03/16	10/03/16 17:39	GM
Chloroform	ND		ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM
Chloromethane	ND		ug/kg dry	6.5	6.5	1	10/03/16	10/03/16 17:39	GM
2-Chlorotoluene	ND		ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM
4-Chlorotoluene	ND		ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM
1,2-Dibromo-3-chloropropane	ND		ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM
Dibromochloromethane	ND		ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM
1,2-Dibromoethane (EDB)	ND		ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM
Dibromomethane	ND		ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM
1,2-Dichlorobenzene	ND		ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM
1,3-Dichlorobenzene	ND		ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM
1,4-Dichlorobenzene	ND		ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM
Dichlorodifluoromethane	ND		ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM
1,1-Dichloroethane	ND		ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM
1,2-Dichloroethane	ND		ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM
1,1-Dichloroethene	ND		ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM
cis-1,2-Dichloroethene	ND		ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-31 10'

6092909-02 (Soil)
Sample Date: 09/28/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
trans-1,2-Dichloroethene	ND		ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM
Dichlorofluoromethane	ND		ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM
1,2-Dichloropropane	ND		ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM
1,3-Dichloropropane	ND		ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM
2,2-Dichloropropane	ND		ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM
1,1-Dichloropropene	ND		ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM
cis-1,3-Dichloropropene	ND		ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM
trans-1,3-Dichloropropene	ND		ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM
Diisopropyl ether (DIPE)	ND		ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM
Ethyl tert-butyl ether (ETBE)	ND		ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM
Ethylbenzene	ND		ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM
Hexachlorobutadiene	ND		ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM
2-Hexanone	ND		ug/kg dry	13.0	13.0	1	10/03/16	10/03/16 17:39	GM
Isopropylbenzene (Cumene)	ND		ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM
4-Isopropyltoluene	ND		ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM
Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM
4-Methyl-2-pentanone	ND		ug/kg dry	13.0	13.0	1	10/03/16	10/03/16 17:39	GM
Methylene chloride	ND		ug/kg dry	26.0	26.0	1	10/03/16	10/03/16 17:39	GM
Naphthalene	ND		ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM
n-Propylbenzene	ND		ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM
Styrene	ND		ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM
1,1,1,2-Tetrachloroethane	ND		ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM
1,1,2,2-Tetrachloroethane	ND		ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM
Tetrachloroethene	ND		ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM
Toluene	ND		ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM
1,2,3-Trichlorobenzene	ND		ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM
1,2,4-Trichlorobenzene	ND		ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM
1,1,1-Trichloroethane	ND		ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM
1,1,2-Trichloroethane	ND		ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM
Trichloroethene	ND		ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM
Trichlorofluoromethane (Freon 11)	ND		ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM
1,2,3-Trichloropropane	ND		ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM
1,2,4-Trimethylbenzene	**3.4**	J	ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM
1,3,5-Trimethylbenzene	ND		ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-31 10'

6092909-02 (Soil)
Sample Date: 09/28/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
Vinyl chloride	ND		ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM
o-Xylene	ND		ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM
m- & p-Xylenes	**5.1**	J	ug/kg dry	6.5	2.6	1	10/03/16	10/03/16 17:39	GM
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*97 %*	*10/03/16*		*10/03/16 17:39*		
Surrogate: Toluene-d8			*75-120*	*101 %*	*10/03/16*		*10/03/16 17:39*		
Surrogate: 4-Bromofluorobenzene			*65-120*	*94 %*	*10/03/16*		*10/03/16 17:39*		
PERCENT SOLIDS BY ASTM D2216-05									
Percent Solids	**77**		%			1	10/04/16	10/05/16 11:14	WB

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-35 14'

6092909-03 (Soil)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS)									
Acetone	**25.3**		ug/kg dry	11.9	11.9	1	10/03/16	10/03/16 18:11	GM
tert-Amyl alcohol (TAA)	ND		ug/kg dry	59.5	59.5	1	10/03/16	10/03/16 18:11	GM
tert-Amyl methyl ether (TAME)	ND		ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM
Benzene	ND		ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM
Bromobenzene	ND		ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM
Bromochloromethane	ND		ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM
Bromodichloromethane	ND		ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM
Bromoform	ND		ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM
Bromomethane	ND		ug/kg dry	6.0	6.0	1	10/03/16	10/03/16 18:11	GM
tert-Butanol (TBA)	ND		ug/kg dry	59.5	59.5	1	10/03/16	10/03/16 18:11	GM
2-Butanone (MEK)	ND		ug/kg dry	11.9	11.9	1	10/03/16	10/03/16 18:11	GM
n-Butylbenzene	ND		ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM
sec-Butylbenzene	ND		ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM
tert-Butylbenzene	ND		ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM
Carbon disulfide	**2.4**	J	ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM
Carbon tetrachloride	ND		ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM
Chlorobenzene	ND		ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM
Chloroethane	ND		ug/kg dry	6.0	6.0	1	10/03/16	10/03/16 18:11	GM
Chloroform	ND		ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM
Chloromethane	ND		ug/kg dry	6.0	6.0	1	10/03/16	10/03/16 18:11	GM
2-Chlorotoluene	ND		ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM
4-Chlorotoluene	ND		ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM
1,2-Dibromo-3-chloropropane	ND		ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM
Dibromochloromethane	ND		ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM
1,2-Dibromoethane (EDB)	ND		ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM
Dibromomethane	ND		ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM
1,2-Dichlorobenzene	ND		ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM
1,3-Dichlorobenzene	ND		ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM
1,4-Dichlorobenzene	ND		ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM
Dichlorodifluoromethane	ND		ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM
1,1-Dichloroethane	ND		ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM
1,2-Dichloroethane	ND		ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM
1,1-Dichloroethene	ND		ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM
cis-1,2-Dichloroethene	ND		ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-35 14'

6092909-03 (Soil)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
trans-1,2-Dichloroethene	ND		ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM
Dichlorofluoromethane	ND		ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM
1,2-Dichloropropane	ND		ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM
1,3-Dichloropropane	ND		ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM
2,2-Dichloropropane	ND		ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM
1,1-Dichloropropene	ND		ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM
cis-1,3-Dichloropropene	ND		ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM
trans-1,3-Dichloropropene	ND		ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM
Diisopropyl ether (DIPE)	ND		ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM
Ethyl tert-butyl ether (ETBE)	ND		ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM
Ethylbenzene	ND		ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM
Hexachlorobutadiene	ND		ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM
2-Hexanone	ND		ug/kg dry	11.9	11.9	1	10/03/16	10/03/16 18:11	GM
Isopropylbenzene (Cumene)	ND		ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM
4-Isopropyltoluene	ND		ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM
Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM
4-Methyl-2-pentanone	ND		ug/kg dry	11.9	11.9	1	10/03/16	10/03/16 18:11	GM
Methylene chloride	ND		ug/kg dry	23.8	23.8	1	10/03/16	10/03/16 18:11	GM
Naphthalene	ND		ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM
n-Propylbenzene	ND		ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM
Styrene	ND		ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM
1,1,1,2-Tetrachloroethane	ND		ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM
1,1,2,2-Tetrachloroethane	ND		ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM
Tetrachloroethene	ND		ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM
Toluene	ND		ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM
1,2,3-Trichlorobenzene	ND		ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM
1,2,4-Trichlorobenzene	ND		ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM
1,1,1-Trichloroethane	ND		ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM
1,1,2-Trichloroethane	ND		ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM
Trichloroethene	ND		ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM
Trichlorofluoromethane (Freon 11)	ND		ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM
1,2,3-Trichloropropane	ND		ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM
1,2,4-Trimethylbenzene	**2.7**	J	ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM
1,3,5-Trimethylbenzene	ND		ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-35 14'

6092909-03 (Soil)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
Vinyl chloride	ND		ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM
o-Xylene	ND		ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM
m- & p-Xylenes	**3.4**	J	ug/kg dry	6.0	2.4	1	10/03/16	10/03/16 18:11	GM
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*100 %*	*10/03/16*		*10/03/16 18:11*		
Surrogate: Toluene-d8			*75-120*	*100 %*	*10/03/16*		*10/03/16 18:11*		
Surrogate: 4-Bromofluorobenzene			*65-120*	*97 %*	*10/03/16*		*10/03/16 18:11*		
PERCENT SOLIDS BY ASTM D2216-05									
Percent Solids	**84**		%			1	10/04/16	10/05/16 11:14	WB

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-34 11'

6092909-04 (Soil)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS)									
Acetone	**14.8**		ug/kg dry	13.2	13.2	1	10/03/16	10/03/16 18:42	GM
tert-Amyl alcohol (TAA)	ND		ug/kg dry	65.8	65.8	1	10/03/16	10/03/16 18:42	GM
tert-Amyl methyl ether (TAME)	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM
Benzene	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM
Bromobenzene	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM
Bromochloromethane	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM
Bromodichloromethane	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM
Bromoform	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM
Bromomethane	ND		ug/kg dry	6.6	6.6	1	10/03/16	10/03/16 18:42	GM
tert-Butanol (TBA)	ND		ug/kg dry	65.8	65.8	1	10/03/16	10/03/16 18:42	GM
2-Butanone (MEK)	ND		ug/kg dry	13.2	13.2	1	10/03/16	10/03/16 18:42	GM
n-Butylbenzene	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM
sec-Butylbenzene	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM
tert-Butylbenzene	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM
Carbon disulfide	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM
Carbon tetrachloride	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM
Chlorobenzene	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM
Chloroethane	ND		ug/kg dry	6.6	6.6	1	10/03/16	10/03/16 18:42	GM
Chloroform	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM
Chloromethane	ND		ug/kg dry	6.6	6.6	1	10/03/16	10/03/16 18:42	GM
2-Chlorotoluene	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM
4-Chlorotoluene	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM
1,2-Dibromo-3-chloropropane	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM
Dibromochloromethane	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM
1,2-Dibromoethane (EDB)	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM
Dibromomethane	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM
1,2-Dichlorobenzene	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM
1,3-Dichlorobenzene	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM
1,4-Dichlorobenzene	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM
Dichlorodifluoromethane	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM
1,1-Dichloroethane	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM
1,2-Dichloroethane	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM
1,1-Dichloroethene	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM
cis-1,2-Dichloroethene	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-34 11'

6092909-04 (Soil)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
trans-1,2-Dichloroethene	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM
Dichlorofluoromethane	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM
1,2-Dichloropropane	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM
1,3-Dichloropropane	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM
2,2-Dichloropropane	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM
1,1-Dichloropropene	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM
cis-1,3-Dichloropropene	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM
trans-1,3-Dichloropropene	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM
Diisopropyl ether (DIPE)	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM
Ethyl tert-butyl ether (ETBE)	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM
Ethylbenzene	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM
Hexachlorobutadiene	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM
2-Hexanone	ND		ug/kg dry	13.2	13.2	1	10/03/16	10/03/16 18:42	GM
Isopropylbenzene (Cumene)	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM
4-Isopropyltoluene	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM
Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM
4-Methyl-2-pentanone	ND		ug/kg dry	13.2	13.2	1	10/03/16	10/03/16 18:42	GM
Methylene chloride	ND		ug/kg dry	26.3	26.3	1	10/03/16	10/03/16 18:42	GM
Naphthalene	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM
n-Propylbenzene	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM
Styrene	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM
1,1,1,2-Tetrachloroethane	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM
1,1,2,2-Tetrachloroethane	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM
Tetrachloroethene	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM
Toluene	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM
1,2,3-Trichlorobenzene	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM
1,2,4-Trichlorobenzene	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM
1,1,1-Trichloroethane	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM
1,1,2-Trichloroethane	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM
Trichloroethene	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM
Trichlorofluoromethane (Freon 11)	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM
1,2,3-Trichloropropane	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM
1,2,4-Trimethylbenzene	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM
1,3,5-Trimethylbenzene	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-34 11'

6092909-04 (Soil)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
Vinyl chloride	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM
o-Xylene	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM
m- & p-Xylenes	ND		ug/kg dry	6.6	2.6	1	10/03/16	10/03/16 18:42	GM
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*101 %*	*10/03/16*		*10/03/16 18:42*		
Surrogate: Toluene-d8			*75-120*	*100 %*	*10/03/16*		*10/03/16 18:42*		
Surrogate: 4-Bromofluorobenzene			*65-120*	*96 %*	*10/03/16*		*10/03/16 18:42*		
PERCENT SOLIDS BY ASTM D2216-05									
Percent Solids	**76**		%			1	10/04/16	10/05/16 11:14	WB

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-30 12'

6092909-05 (Soil)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS)									**IS-07**
Acetone	**25.1**		ug/kg dry	12.5	12.5	1	10/03/16	10/03/16 19:13	GM
tert-Amyl alcohol (TAA)	ND		ug/kg dry	62.5	62.5	1	10/03/16	10/03/16 19:13	GM
tert-Amyl methyl ether (TAME)	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM
Benzene	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM
Bromobenzene	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM
Bromochloromethane	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM
Bromodichloromethane	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM
Bromoform	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM
Bromomethane	ND		ug/kg dry	6.3	6.3	1	10/03/16	10/03/16 19:13	GM
tert-Butanol (TBA)	ND		ug/kg dry	62.5	62.5	1	10/03/16	10/03/16 19:13	GM
2-Butanone (MEK)	ND		ug/kg dry	12.5	12.5	1	10/03/16	10/03/16 19:13	GM
n-Butylbenzene	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM
sec-Butylbenzene	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM
tert-Butylbenzene	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM
Carbon disulfide	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM
Carbon tetrachloride	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM
Chlorobenzene	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM
Chloroethane	ND		ug/kg dry	6.3	6.3	1	10/03/16	10/03/16 19:13	GM
Chloroform	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM
Chloromethane	ND		ug/kg dry	6.3	6.3	1	10/03/16	10/03/16 19:13	GM
2-Chlorotoluene	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM
4-Chlorotoluene	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM
1,2-Dibromo-3-chloropropane	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM
Dibromochloromethane	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM
1,2-Dibromoethane (EDB)	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM
Dibromomethane	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM
1,2-Dichlorobenzene	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM
1,3-Dichlorobenzene	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM
1,4-Dichlorobenzene	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM
Dichlorodifluoromethane	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM
1,1-Dichloroethane	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM
1,2-Dichloroethane	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM
1,1-Dichloroethene	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM
cis-1,2-Dichloroethene	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-30 12'

6092909-05 (Soil)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									**IS-07**
trans-1,2-Dichloroethene	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM
Dichlorofluoromethane	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM
1,2-Dichloropropane	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM
1,3-Dichloropropane	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM
2,2-Dichloropropane	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM
1,1-Dichloropropene	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM
cis-1,3-Dichloropropene	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM
trans-1,3-Dichloropropene	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM
Diisopropyl ether (DIPE)	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM
Ethyl tert-butyl ether (ETBE)	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM
Ethylbenzene	**3.1**	J	ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM
Hexachlorobutadiene	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM
2-Hexanone	ND		ug/kg dry	12.5	12.5	1	10/03/16	10/03/16 19:13	GM
Isopropylbenzene (Cumene)	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM
4-Isopropyltoluene	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM
Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM
4-Methyl-2-pentanone	ND		ug/kg dry	12.5	12.5	1	10/03/16	10/03/16 19:13	GM
Methylene chloride	ND		ug/kg dry	25.0	25.0	1	10/03/16	10/03/16 19:13	GM
Naphthalene	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM
n-Propylbenzene	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM
Styrene	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM
1,1,1,2-Tetrachloroethane	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM
1,1,2,2-Tetrachloroethane	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM
Tetrachloroethene	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM
Toluene	**4.5**	J	ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM
1,2,3-Trichlorobenzene	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM
1,2,4-Trichlorobenzene	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM
1,1,1-Trichloroethane	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM
1,1,2-Trichloroethane	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM
Trichloroethene	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM
Trichlorofluoromethane (Freon 11)	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM
1,2,3-Trichloropropane	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM
1,2,4-Trimethylbenzene	**4.4**	J	ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM
1,3,5-Trimethylbenzene	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-30 12'

6092909-05 (Soil)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									**IS-07**
Vinyl chloride	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM
o-Xylene	**4.5**	J	ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM
m- & p-Xylenes	**10.8**		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 19:13	GM
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*99 %*	*10/03/16*		*10/03/16 19:13*		
Surrogate: Toluene-d8			*75-120*	*108 %*	*10/03/16*		*10/03/16 19:13*		
Surrogate: 4-Bromofluorobenzene			*65-120*	*86 %*	*10/03/16*		*10/03/16 19:13*		
PERCENT SOLIDS BY ASTM D2216-05									
Percent Solids	**80**		%			1	10/04/16	10/05/16 11:14	WB

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As a NELAP accredited laboratory, MSS can provide a certification list upon request.

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-33 10'

6092909-06 (Soil)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS)									
Acetone	**17.5**		ug/kg dry	11.4	11.4	1	10/03/16	10/03/16 19:44	GM
tert-Amyl alcohol (TAA)	ND		ug/kg dry	56.8	56.8	1	10/03/16	10/03/16 19:44	GM
tert-Amyl methyl ether (TAME)	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM
Benzene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM
Bromobenzene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM
Bromochloromethane	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM
Bromodichloromethane	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM
Bromoform	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM
Bromomethane	ND		ug/kg dry	5.7	5.7	1	10/03/16	10/03/16 19:44	GM
tert-Butanol (TBA)	ND		ug/kg dry	56.8	56.8	1	10/03/16	10/03/16 19:44	GM
2-Butanone (MEK)	ND		ug/kg dry	11.4	11.4	1	10/03/16	10/03/16 19:44	GM
n-Butylbenzene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM
sec-Butylbenzene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM
tert-Butylbenzene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM
Carbon disulfide	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM
Carbon tetrachloride	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM
Chlorobenzene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM
Chloroethane	ND		ug/kg dry	5.7	5.7	1	10/03/16	10/03/16 19:44	GM
Chloroform	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM
Chloromethane	ND		ug/kg dry	5.7	5.7	1	10/03/16	10/03/16 19:44	GM
2-Chlorotoluene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM
4-Chlorotoluene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM
1,2-Dibromo-3-chloropropane	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM
Dibromochloromethane	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM
1,2-Dibromoethane (EDB)	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM
Dibromomethane	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM
1,2-Dichlorobenzene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM
1,3-Dichlorobenzene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM
1,4-Dichlorobenzene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM
Dichlorodifluoromethane	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM
1,1-Dichloroethane	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM
1,2-Dichloroethane	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM
1,1-Dichloroethene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM
cis-1,2-Dichloroethene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-33 10'

6092909-06 (Soil)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
trans-1,2-Dichloroethene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM
Dichlorofluoromethane	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM
1,2-Dichloropropane	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM
1,3-Dichloropropane	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM
2,2-Dichloropropane	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM
1,1-Dichloropropene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM
cis-1,3-Dichloropropene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM
trans-1,3-Dichloropropene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM
Diisopropyl ether (DIPE)	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM
Ethyl tert-butyl ether (ETBE)	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM
Ethylbenzene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM
Hexachlorobutadiene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM
2-Hexanone	ND		ug/kg dry	11.4	11.4	1	10/03/16	10/03/16 19:44	GM
Isopropylbenzene (Cumene)	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM
4-Isopropyltoluene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM
Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM
4-Methyl-2-pentanone	ND		ug/kg dry	11.4	11.4	1	10/03/16	10/03/16 19:44	GM
Methylene chloride	ND		ug/kg dry	22.7	22.7	1	10/03/16	10/03/16 19:44	GM
Naphthalene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM
n-Propylbenzene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM
Styrene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM
1,1,1,2-Tetrachloroethane	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM
1,1,2,2-Tetrachloroethane	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM
Tetrachloroethene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM
Toluene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM
1,2,3-Trichlorobenzene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM
1,2,4-Trichlorobenzene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM
1,1,1-Trichloroethane	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM
1,1,2-Trichloroethane	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM
Trichloroethene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM
Trichlorofluoromethane (Freon 11)	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM
1,2,3-Trichloropropane	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM
1,2,4-Trimethylbenzene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM
1,3,5-Trimethylbenzene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-33 10'

6092909-06 (Soil)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
Vinyl chloride	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM
o-Xylene	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM
m- & p-Xylenes	ND		ug/kg dry	5.7	2.3	1	10/03/16	10/03/16 19:44	GM
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*104 %*	*10/03/16*		*10/03/16 19:44*		
Surrogate: Toluene-d8			*75-120*	*100 %*	*10/03/16*		*10/03/16 19:44*		
Surrogate: 4-Bromofluorobenzene			*65-120*	*97 %*	*10/03/16*		*10/03/16 19:44*		
PERCENT SOLIDS BY ASTM D2216-05									
Percent Solids	**88**		%			1	10/04/16	10/05/16 11:14	WB

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-29 11'

6092909-07 (Soil)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS)									
Acetone	**26.6**		ug/kg dry	12.5	12.5	1	10/03/16	10/03/16 20:15	GM
tert-Amyl alcohol (TAA)	ND		ug/kg dry	62.5	62.5	1	10/03/16	10/03/16 20:15	GM
tert-Amyl methyl ether (TAME)	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM
Benzene	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM
Bromobenzene	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM
Bromochloromethane	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM
Bromodichloromethane	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM
Bromoform	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM
Bromomethane	ND		ug/kg dry	6.3	6.3	1	10/03/16	10/03/16 20:15	GM
tert-Butanol (TBA)	ND		ug/kg dry	62.5	62.5	1	10/03/16	10/03/16 20:15	GM
2-Butanone (MEK)	ND		ug/kg dry	12.5	12.5	1	10/03/16	10/03/16 20:15	GM
n-Butylbenzene	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM
sec-Butylbenzene	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM
tert-Butylbenzene	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM
Carbon disulfide	**5.4**	J	ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM
Carbon tetrachloride	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM
Chlorobenzene	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM
Chloroethane	ND		ug/kg dry	6.3	6.3	1	10/03/16	10/03/16 20:15	GM
Chloroform	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM
Chloromethane	ND		ug/kg dry	6.3	6.3	1	10/03/16	10/03/16 20:15	GM
2-Chlorotoluene	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM
4-Chlorotoluene	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM
1,2-Dibromo-3-chloropropane	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM
Dibromochloromethane	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM
1,2-Dibromoethane (EDB)	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM
Dibromomethane	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM
1,2-Dichlorobenzene	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM
1,3-Dichlorobenzene	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM
1,4-Dichlorobenzene	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM
Dichlorodifluoromethane	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM
1,1-Dichloroethane	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM
1,2-Dichloroethane	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM
1,1-Dichloroethene	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM
cis-1,2-Dichloroethene	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-29 11'

6092909-07 (Soil)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
trans-1,2-Dichloroethene	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM
Dichlorofluoromethane	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM
1,2-Dichloropropane	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM
1,3-Dichloropropane	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM
2,2-Dichloropropane	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM
1,1-Dichloropropene	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM
cis-1,3-Dichloropropene	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM
trans-1,3-Dichloropropene	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM
Diisopropyl ether (DIPE)	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM
Ethyl tert-butyl ether (ETBE)	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM
Ethylbenzene	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM
Hexachlorobutadiene	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM
2-Hexanone	ND		ug/kg dry	12.5	12.5	1	10/03/16	10/03/16 20:15	GM
Isopropylbenzene (Cumene)	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM
4-Isopropyltoluene	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM
Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM
4-Methyl-2-pentanone	ND		ug/kg dry	12.5	12.5	1	10/03/16	10/03/16 20:15	GM
Methylene chloride	ND		ug/kg dry	25.0	25.0	1	10/03/16	10/03/16 20:15	GM
Naphthalene	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM
n-Propylbenzene	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM
Styrene	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM
1,1,1,2-Tetrachloroethane	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM
1,1,2,2-Tetrachloroethane	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM
Tetrachloroethene	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM
Toluene	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM
1,2,3-Trichlorobenzene	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM
1,2,4-Trichlorobenzene	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM
1,1,1-Trichloroethane	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM
1,1,2-Trichloroethane	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM
Trichloroethene	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM
Trichlorofluoromethane (Freon 11)	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM
1,2,3-Trichloropropane	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM
1,2,4-Trimethylbenzene	**2.8**	J	ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM
1,3,5-Trimethylbenzene	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-29 11'

6092909-07 (Soil)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
Vinyl chloride	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM
o-Xylene	ND		ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM
m- & p-Xylenes	**4.4**	J	ug/kg dry	6.3	2.5	1	10/03/16	10/03/16 20:15	GM
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*102 %*	*10/03/16*		*10/03/16 20:15*		
Surrogate: Toluene-d8			*75-120*	*101 %*	*10/03/16*		*10/03/16 20:15*		
Surrogate: 4-Bromofluorobenzene			*65-120*	*95 %*	*10/03/16*		*10/03/16 20:15*		
PERCENT SOLIDS BY ASTM D2216-05									
Percent Solids	**80**		%			1	10/04/16	10/05/16 11:14	WB

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-31 11'-12'

6092909-08 (Nonpotable Water)
Sample Date: 09/28/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS)									
Acetone	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 12:48	WB
tert-Amyl alcohol (TAA)	ND		ug/L	20.0	20.0	1	10/03/16	10/03/16 12:48	WB
tert-Amyl methyl ether (TAME)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB
Benzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB
Bromobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB
Bromochloromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB
Bromodichloromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB
Bromoform	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB
Bromomethane	ND		ug/L	5.0	5.0	1	10/03/16	10/03/16 12:48	WB
tert-Butanol (TBA)	ND		ug/L	15.0	15.0	1	10/03/16	10/03/16 12:48	WB
2-Butanone (MEK)	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 12:48	WB
n-Butylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB
sec-Butylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB
tert-Butylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB
Carbon disulfide	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB
Carbon tetrachloride	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB
Chlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB
Chloroethane	ND		ug/L	5.0	5.0	1	10/03/16	10/03/16 12:48	WB
Chloroform	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB
Chloromethane	ND		ug/L	5.0	5.0	1	10/03/16	10/03/16 12:48	WB
2-Chlorotoluene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB
4-Chlorotoluene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB
Dibromochloromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB
1,2-Dibromo-3-chloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB
1,2-Dibromoethane (EDB)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB
Dibromomethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB
1,2-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB
1,3-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB
1,4-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB
Dichlorodifluoromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB
1,1-Dichloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB
1,2-Dichloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB
1,1-Dichloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB
cis-1,2-Dichloroethene	**3.0**	J	ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-31 11'-12'

6092909-08 (Nonpotable Water)
Sample Date: 09/28/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
trans-1,2-Dichloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB
Dichlorofluoromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB
1,2-Dichloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB
1,3-Dichloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB
2,2-Dichloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB
1,1-Dichloropropene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB
cis-1,3-Dichloropropene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB
trans-1,3-Dichloropropene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB
Diisopropyl ether (DIPE)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB
Ethyl tert-butyl ether (ETBE)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB
Ethylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB
Hexachlorobutadiene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB
2-Hexanone	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 12:48	WB
Isopropylbenzene (Cumene)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB
4-Isopropyltoluene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB
Methyl tert-butyl ether (MTBE)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB
4-Methyl-2-pentanone	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 12:48	WB
Methylene chloride	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 12:48	WB
Naphthalene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB
n-Propylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB
Styrene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB
1,1,1,2-Tetrachloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB
1,1,2,2-Tetrachloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB
Tetrachloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB
Toluene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB
1,2,3-Trichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB
1,2,4-Trichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB
1,1,1-Trichloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB
1,1,2-Trichloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB
Trichloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB
Trichlorofluoromethane (Freon 11)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB
1,2,3-Trichloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB
1,2,4-Trimethylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB
1,3,5-Trimethylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501

Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-31 11'-12'

6092909-08 (Nonpotable Water)
Sample Date: 09/28/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
Vinyl chloride	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB
o-Xylene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB
m- & p-Xylenes	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 12:48	WB
Surrogate: 1,2-Dichloroethane-d4			*75-120*	*107 %*			*10/03/16*	*10/03/16 12:48*	
Surrogate: Toluene-d8			*84-110*	*99 %*			*10/03/16*	*10/03/16 12:48*	
Surrogate: 4-Bromofluorobenzene			*78-110*	*89 %*			*10/03/16*	*10/03/16 12:48*	

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-31 18' 19'

6092909-09 (Nonpotable Water)
Sample Date: 09/28/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS)									
Acetone	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 13:19	WB
tert-Amyl alcohol (TAA)	ND		ug/L	20.0	20.0	1	10/03/16	10/03/16 13:19	WB
tert-Amyl methyl ether (TAME)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB
Benzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB
Bromobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB
Bromochloromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB
Bromodichloromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB
Bromoform	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB
Bromomethane	ND		ug/L	5.0	5.0	1	10/03/16	10/03/16 13:19	WB
tert-Butanol (TBA)	ND		ug/L	15.0	15.0	1	10/03/16	10/03/16 13:19	WB
2-Butanone (MEK)	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 13:19	WB
n-Butylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB
sec-Butylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB
tert-Butylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB
Carbon disulfide	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB
Carbon tetrachloride	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB
Chlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB
Chloroethane	ND		ug/L	5.0	5.0	1	10/03/16	10/03/16 13:19	WB
Chloroform	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB
Chloromethane	ND		ug/L	5.0	5.0	1	10/03/16	10/03/16 13:19	WB
2-Chlorotoluene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB
4-Chlorotoluene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB
Dibromochloromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB
1,2-Dibromo-3-chloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB
1,2-Dibromoethane (EDB)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB
Dibromomethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB
1,2-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB
1,3-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB
1,4-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB
Dichlorodifluoromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB
1,1-Dichloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB
1,2-Dichloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB
1,1-Dichloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB
cis-1,2-Dichloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-31 18' 19'

6092909-09 (Nonpotable Water)
Sample Date: 09/28/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
trans-1,2-Dichloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB
Dichlorofluoromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB
1,2-Dichloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB
1,3-Dichloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB
2,2-Dichloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB
1,1-Dichloropropene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB
cis-1,3-Dichloropropene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB
trans-1,3-Dichloropropene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB
Diisopropyl ether (DIPE)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB
Ethyl tert-butyl ether (ETBE)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB
Ethylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB
Hexachlorobutadiene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB
2-Hexanone	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 13:19	WB
Isopropylbenzene (Cumene)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB
4-Isopropyltoluene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB
Methyl tert-butyl ether (MTBE)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB
4-Methyl-2-pentanone	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 13:19	WB
Methylene chloride	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 13:19	WB
Naphthalene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB
n-Propylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB
Styrene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB
1,1,1,2-Tetrachloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB
1,1,2,2-Tetrachloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB
Tetrachloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB
Toluene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB
1,2,3-Trichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB
1,2,4-Trichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB
1,1,1-Trichloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB
1,1,2-Trichloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB
Trichloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB
Trichlorofluoromethane (Freon 11)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB
1,2,3-Trichloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB
1,2,4-Trimethylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB
1,3,5-Trimethylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501

Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-31 18' 19'

6092909-09 (Nonpotable Water)
Sample Date: 09/28/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
Vinyl chloride	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB
o-Xylene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB
m- & p-Xylenes	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:19	WB
Surrogate: 1,2-Dichloroethane-d4			*75-120*	*106 %*			*10/03/16*	*10/03/16 13:19*	
Surrogate: Toluene-d8			*84-110*	*98 %*			*10/03/16*	*10/03/16 13:19*	
Surrogate: 4-Bromofluorobenzene			*78-110*	*90 %*			*10/03/16*	*10/03/16 13:19*	

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-33 11'-12'

6092909-10 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS)									
Acetone	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 13:50	WB
tert-Amyl alcohol (TAA)	ND		ug/L	20.0	20.0	1	10/03/16	10/03/16 13:50	WB
tert-Amyl methyl ether (TAME)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB
Benzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB
Bromobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB
Bromochloromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB
Bromodichloromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB
Bromoform	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB
Bromomethane	ND		ug/L	5.0	5.0	1	10/03/16	10/03/16 13:50	WB
tert-Butanol (TBA)	ND		ug/L	15.0	15.0	1	10/03/16	10/03/16 13:50	WB
2-Butanone (MEK)	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 13:50	WB
n-Butylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB
sec-Butylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB
tert-Butylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB
Carbon disulfide	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB
Carbon tetrachloride	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB
Chlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB
Chloroethane	ND		ug/L	5.0	5.0	1	10/03/16	10/03/16 13:50	WB
Chloroform	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB
Chloromethane	ND		ug/L	5.0	5.0	1	10/03/16	10/03/16 13:50	WB
2-Chlorotoluene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB
4-Chlorotoluene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB
Dibromochloromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB
1,2-Dibromo-3-chloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB
1,2-Dibromoethane (EDB)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB
Dibromomethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB
1,2-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB
1,3-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB
1,4-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB
Dichlorodifluoromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB
1,1-Dichloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB
1,2-Dichloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB
1,1-Dichloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB
cis-1,2-Dichloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-33 11'-12'

6092909-10 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
trans-1,2-Dichloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB
Dichlorofluoromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB
1,2-Dichloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB
1,3-Dichloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB
2,2-Dichloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB
1,1-Dichloropropene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB
cis-1,3-Dichloropropene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB
trans-1,3-Dichloropropene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB
Diisopropyl ether (DIPE)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB
Ethyl tert-butyl ether (ETBE)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB
Ethylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB
Hexachlorobutadiene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB
2-Hexanone	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 13:50	WB
Isopropylbenzene (Cumene)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB
4-Isopropyltoluene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB
Methyl tert-butyl ether (MTBE)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB
4-Methyl-2-pentanone	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 13:50	WB
Methylene chloride	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 13:50	WB
Naphthalene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB
n-Propylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB
Styrene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB
1,1,1,2-Tetrachloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB
1,1,2,2-Tetrachloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB
Tetrachloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB
Toluene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB
1,2,3-Trichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB
1,2,4-Trichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB
1,1,1-Trichloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB
1,1,2-Trichloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB
Trichloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB
Trichlorofluoromethane (Freon 11)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB
1,2,3-Trichloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB
1,2,4-Trimethylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB
1,3,5-Trimethylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501

Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-33 11'-12'

6092909-10 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
Vinyl chloride	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB
o-Xylene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB
m- & p-Xylenes	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 13:50	WB
Surrogate: 1,2-Dichloroethane-d4			*75-120*	*92 %*		*10/03/16*		*10/03/16 13:50*	
Surrogate: Toluene-d8			*84-110*	*100 %*		*10/03/16*		*10/03/16 13:50*	
Surrogate: 4-Bromofluorobenzene			*78-110*	*88 %*		*10/03/16*		*10/03/16 13:50*	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-33 19'-20'

6092909-11 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS)									
Acetone	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 14:22	WB
tert-Amyl alcohol (TAA)	ND		ug/L	20.0	20.0	1	10/03/16	10/03/16 14:22	WB
tert-Amyl methyl ether (TAME)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB
Benzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB
Bromobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB
Bromochloromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB
Bromodichloromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB
Bromoform	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB
Bromomethane	ND		ug/L	5.0	5.0	1	10/03/16	10/03/16 14:22	WB
tert-Butanol (TBA)	ND		ug/L	15.0	15.0	1	10/03/16	10/03/16 14:22	WB
2-Butanone (MEK)	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 14:22	WB
n-Butylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB
sec-Butylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB
tert-Butylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB
Carbon disulfide	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB
Carbon tetrachloride	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB
Chlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB
Chloroethane	ND		ug/L	5.0	5.0	1	10/03/16	10/03/16 14:22	WB
Chloroform	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB
Chloromethane	ND		ug/L	5.0	5.0	1	10/03/16	10/03/16 14:22	WB
2-Chlorotoluene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB
4-Chlorotoluene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB
Dibromochloromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB
1,2-Dibromo-3-chloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB
1,2-Dibromoethane (EDB)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB
Dibromomethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB
1,2-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB
1,3-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB
1,4-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB
Dichlorodifluoromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB
1,1-Dichloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB
1,2-Dichloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB
1,1-Dichloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB
cis-1,2-Dichloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-33 19'-20'

6092909-11 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
trans-1,2-Dichloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB
Dichlorofluoromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB
1,2-Dichloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB
1,3-Dichloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB
2,2-Dichloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB
1,1-Dichloropropene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB
cis-1,3-Dichloropropene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB
trans-1,3-Dichloropropene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB
Diisopropyl ether (DIPE)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB
Ethyl tert-butyl ether (ETBE)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB
Ethylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB
Hexachlorobutadiene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB
2-Hexanone	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 14:22	WB
Isopropylbenzene (Cumene)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB
4-Isopropyltoluene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB
Methyl tert-butyl ether (MTBE)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB
4-Methyl-2-pentanone	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 14:22	WB
Methylene chloride	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 14:22	WB
Naphthalene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB
n-Propylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB
Styrene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB
1,1,1,2-Tetrachloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB
1,1,2,2-Tetrachloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB
Tetrachloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB
Toluene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB
1,2,3-Trichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB
1,2,4-Trichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB
1,1,1-Trichloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB
1,1,2-Trichloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB
Trichloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB
Trichlorofluoromethane (Freon 11)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB
1,2,3-Trichloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB
1,2,4-Trimethylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB
1,3,5-Trimethylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-33 19'-20'

6092909-11 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
Vinyl chloride	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB
o-Xylene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB
m- & p-Xylenes	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:22	WB

Surrogate: 1,2-Dichloroethane-d4	*75-120*	*105 %*	*10/03/16*	*10/03/16 14:22*
Surrogate: Toluene-d8	*84-110*	*100 %*	*10/03/16*	*10/03/16 14:22*
Surrogate: 4-Bromofluorobenzene	*78-110*	*89 %*	*10/03/16*	*10/03/16 14:22*

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-33 28'-29'

6092909-12 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS)									
Acetone	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 14:53	WB
tert-Amyl alcohol (TAA)	ND		ug/L	20.0	20.0	1	10/03/16	10/03/16 14:53	WB
tert-Amyl methyl ether (TAME)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB
Benzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB
Bromobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB
Bromochloromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB
Bromodichloromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB
Bromoform	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB
Bromomethane	ND		ug/L	5.0	5.0	1	10/03/16	10/03/16 14:53	WB
tert-Butanol (TBA)	ND		ug/L	15.0	15.0	1	10/03/16	10/03/16 14:53	WB
2-Butanone (MEK)	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 14:53	WB
n-Butylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB
sec-Butylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB
tert-Butylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB
Carbon disulfide	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB
Carbon tetrachloride	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB
Chlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB
Chloroethane	ND		ug/L	5.0	5.0	1	10/03/16	10/03/16 14:53	WB
Chloroform	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB
Chloromethane	ND		ug/L	5.0	5.0	1	10/03/16	10/03/16 14:53	WB
2-Chlorotoluene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB
4-Chlorotoluene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB
Dibromochloromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB
1,2-Dibromo-3-chloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB
1,2-Dibromoethane (EDB)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB
Dibromomethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB
1,2-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB
1,3-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB
1,4-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB
Dichlorodifluoromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB
1,1-Dichloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB
1,2-Dichloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB
1,1-Dichloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB
cis-1,2-Dichloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-33 28'-29'

6092909-12 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
trans-1,2-Dichloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB
Dichlorofluoromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB
1,2-Dichloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB
1,3-Dichloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB
2,2-Dichloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB
1,1-Dichloropropene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB
cis-1,3-Dichloropropene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB
trans-1,3-Dichloropropene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB
Diisopropyl ether (DIPE)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB
Ethyl tert-butyl ether (ETBE)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB
Ethylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB
Hexachlorobutadiene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB
2-Hexanone	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 14:53	WB
Isopropylbenzene (Cumene)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB
4-Isopropyltoluene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB
Methyl tert-butyl ether (MTBE)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB
4-Methyl-2-pentanone	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 14:53	WB
Methylene chloride	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 14:53	WB
Naphthalene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB
n-Propylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB
Styrene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB
1,1,1,2-Tetrachloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB
1,1,2,2-Tetrachloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB
Tetrachloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB
Toluene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB
1,2,3-Trichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB
1,2,4-Trichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB
1,1,1-Trichloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB
1,1,2-Trichloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB
Trichloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB
Trichlorofluoromethane (Freon 11)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB
1,2,3-Trichloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB
1,2,4-Trimethylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB
1,3,5-Trimethylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-33 28'-29'

6092909-12 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
Vinyl chloride	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB
o-Xylene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB
m- & p-Xylenes	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 14:53	WB
Surrogate: 1,2-Dichloroethane-d4			*75-120*	*90 %*		*10/03/16*	*10/03/16 14:53*		
Surrogate: Toluene-d8			*84-110*	*99 %*		*10/03/16*	*10/03/16 14:53*		
Surrogate: 4-Bromofluorobenzene			*78-110*	*87 %*		*10/03/16*	*10/03/16 14:53*		

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

Duplicate

6092909-13 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS)									
Acetone	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 15:24	WB
tert-Amyl alcohol (TAA)	ND		ug/L	20.0	20.0	1	10/03/16	10/03/16 15:24	WB
tert-Amyl methyl ether (TAME)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB
Benzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB
Bromobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB
Bromochloromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB
Bromodichloromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB
Bromoform	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB
Bromomethane	ND		ug/L	5.0	5.0	1	10/03/16	10/03/16 15:24	WB
tert-Butanol (TBA)	ND		ug/L	15.0	15.0	1	10/03/16	10/03/16 15:24	WB
2-Butanone (MEK)	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 15:24	WB
n-Butylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB
sec-Butylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB
tert-Butylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB
Carbon disulfide	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB
Carbon tetrachloride	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB
Chlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB
Chloroethane	ND		ug/L	5.0	5.0	1	10/03/16	10/03/16 15:24	WB
Chloroform	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB
Chloromethane	ND		ug/L	5.0	5.0	1	10/03/16	10/03/16 15:24	WB
2-Chlorotoluene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB
4-Chlorotoluene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB
Dibromochloromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB
1,2-Dibromo-3-chloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB
1,2-Dibromoethane (EDB)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB
Dibromomethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB
1,2-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB
1,3-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB
1,4-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB
Dichlorodifluoromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB
1,1-Dichloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB
1,2-Dichloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB
1,1-Dichloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB
cis-1,2-Dichloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

Duplicate

6092909-13 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
trans-1,2-Dichloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB
Dichlorofluoromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB
1,2-Dichloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB
1,3-Dichloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB
2,2-Dichloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB
1,1-Dichloropropene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB
cis-1,3-Dichloropropene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB
trans-1,3-Dichloropropene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB
Diisopropyl ether (DIPE)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB
Ethyl tert-butyl ether (ETBE)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB
Ethylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB
Hexachlorobutadiene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB
2-Hexanone	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 15:24	WB
Isopropylbenzene (Cumene)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB
4-Isopropyltoluene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB
Methyl tert-butyl ether (MTBE)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB
4-Methyl-2-pentanone	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 15:24	WB
Methylene chloride	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 15:24	WB
Naphthalene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB
n-Propylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB
Styrene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB
1,1,1,2-Tetrachloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB
1,1,2,2-Tetrachloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB
Tetrachloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB
Toluene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB
1,2,3-Trichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB
1,2,4-Trichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB
1,1,1-Trichloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB
1,1,2-Trichloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB
Trichloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB
Trichlorofluoromethane (Freon 11)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB
1,2,3-Trichloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB
1,2,4-Trimethylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB
1,3,5-Trimethylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501

Project Manager: Scott Beatson

Reported:
10/05/16 11:17

Duplicate

6092909-13 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
Vinyl chloride	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB
o-Xylene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB
m- & p-Xylenes	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:24	WB
Surrogate: 1,2-Dichloroethane-d4			*75-120*	*108 %*			*10/03/16*	*10/03/16 15:24*	
Surrogate: Toluene-d8			*84-110*	*100 %*			*10/03/16*	*10/03/16 15:24*	
Surrogate: 4-Bromofluorobenzene			*78-110*	*91 %*			*10/03/16*	*10/03/16 15:24*	

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-32 19'-20'

6092909-14 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS)									
Acetone	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 15:55	WB
tert-Amyl alcohol (TAA)	ND		ug/L	20.0	20.0	1	10/03/16	10/03/16 15:55	WB
tert-Amyl methyl ether (TAME)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB
Benzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB
Bromobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB
Bromochloromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB
Bromodichloromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB
Bromoform	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB
Bromomethane	ND		ug/L	5.0	5.0	1	10/03/16	10/03/16 15:55	WB
tert-Butanol (TBA)	ND		ug/L	15.0	15.0	1	10/03/16	10/03/16 15:55	WB
2-Butanone (MEK)	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 15:55	WB
n-Butylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB
sec-Butylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB
tert-Butylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB
Carbon disulfide	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB
Carbon tetrachloride	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB
Chlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB
Chloroethane	ND		ug/L	5.0	5.0	1	10/03/16	10/03/16 15:55	WB
Chloroform	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB
Chloromethane	ND		ug/L	5.0	5.0	1	10/03/16	10/03/16 15:55	WB
2-Chlorotoluene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB
4-Chlorotoluene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB
Dibromochloromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB
1,2-Dibromo-3-chloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB
1,2-Dibromoethane (EDB)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB
Dibromomethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB
1,2-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB
1,3-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB
1,4-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB
Dichlorodifluoromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB
1,1-Dichloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB
1,2-Dichloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB
1,1-Dichloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB
cis-1,2-Dichloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-32 19'-20'

6092909-14 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
trans-1,2-Dichloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB
Dichlorofluoromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB
1,2-Dichloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB
1,3-Dichloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB
2,2-Dichloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB
1,1-Dichloropropene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB
cis-1,3-Dichloropropene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB
trans-1,3-Dichloropropene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB
Diisopropyl ether (DIPE)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB
Ethyl tert-butyl ether (ETBE)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB
Ethylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB
Hexachlorobutadiene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB
2-Hexanone	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 15:55	WB
Isopropylbenzene (Cumene)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB
4-Isopropyltoluene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB
Methyl tert-butyl ether (MTBE)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB
4-Methyl-2-pentanone	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 15:55	WB
Methylene chloride	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 15:55	WB
Naphthalene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB
n-Propylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB
Styrene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB
1,1,1,2-Tetrachloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB
1,1,2,2-Tetrachloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB
Tetrachloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB
Toluene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB
1,2,3-Trichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB
1,2,4-Trichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB
1,1,1-Trichloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB
1,1,2-Trichloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB
Trichloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB
Trichlorofluoromethane (Freon 11)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB
1,2,3-Trichloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB
1,2,4-Trimethylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB
1,3,5-Trimethylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501

Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-32 19'-20'

6092909-14 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
Vinyl chloride	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB
o-Xylene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB
m- & p-Xylenes	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 15:55	WB
Surrogate: 1,2-Dichloroethane-d4			*75-120*	*106 %*			*10/03/16*	*10/03/16 15:55*	
Surrogate: Toluene-d8			*84-110*	*98 %*			*10/03/16*	*10/03/16 15:55*	
Surrogate: 4-Bromofluorobenzene			*78-110*	*88 %*			*10/03/16*	*10/03/16 15:55*	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-30 12'-13'

6092909-15 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS)									
Acetone	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 16:26	WB
tert-Amyl alcohol (TAA)	ND		ug/L	20.0	20.0	1	10/03/16	10/03/16 16:26	WB
tert-Amyl methyl ether (TAME)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB
Benzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB
Bromobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB
Bromochloromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB
Bromodichloromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB
Bromoform	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB
Bromomethane	ND		ug/L	5.0	5.0	1	10/03/16	10/03/16 16:26	WB
tert-Butanol (TBA)	ND		ug/L	15.0	15.0	1	10/03/16	10/03/16 16:26	WB
2-Butanone (MEK)	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 16:26	WB
n-Butylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB
sec-Butylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB
tert-Butylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB
Carbon disulfide	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB
Carbon tetrachloride	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB
Chlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB
Chloroethane	ND		ug/L	5.0	5.0	1	10/03/16	10/03/16 16:26	WB
Chloroform	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB
Chloromethane	ND		ug/L	5.0	5.0	1	10/03/16	10/03/16 16:26	WB
2-Chlorotoluene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB
4-Chlorotoluene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB
Dibromochloromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB
1,2-Dibromo-3-chloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB
1,2-Dibromoethane (EDB)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB
Dibromomethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB
1,2-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB
1,3-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB
1,4-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB
Dichlorodifluoromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB
1,1-Dichloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB
1,2-Dichloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB
1,1-Dichloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB
cis-1,2-Dichloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-30 12'-13'

6092909-15 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
trans-1,2-Dichloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB
Dichlorofluoromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB
1,2-Dichloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB
1,3-Dichloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB
2,2-Dichloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB
1,1-Dichloropropene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB
cis-1,3-Dichloropropene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB
trans-1,3-Dichloropropene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB
Diisopropyl ether (DIPE)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB
Ethyl tert-butyl ether (ETBE)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB
Ethylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB
Hexachlorobutadiene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB
2-Hexanone	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 16:26	WB
Isopropylbenzene (Cumene)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB
4-Isopropyltoluene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB
Methyl tert-butyl ether (MTBE)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB
4-Methyl-2-pentanone	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 16:26	WB
Methylene chloride	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 16:26	WB
Naphthalene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB
n-Propylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB
Styrene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB
1,1,1,2-Tetrachloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB
1,1,2,2-Tetrachloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB
Tetrachloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB
Toluene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB
1,2,3-Trichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB
1,2,4-Trichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB
1,1,1-Trichloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB
1,1,2-Trichloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB
Trichloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB
Trichlorofluoromethane (Freon 11)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB
1,2,3-Trichloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB
1,2,4-Trimethylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB
1,3,5-Trimethylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501

Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-30 12'-13'

6092909-15 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
Vinyl chloride	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB
o-Xylene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB
m- & p-Xylenes	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:26	WB
Surrogate: 1,2-Dichloroethane-d4			*75-120*	*93 %*		*10/03/16*	*10/03/16 16:26*		
Surrogate: Toluene-d8			*84-110*	*100 %*		*10/03/16*	*10/03/16 16:26*		
Surrogate: 4-Bromofluorobenzene			*78-110*	*85 %*		*10/03/16*	*10/03/16 16:26*		

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-30 19'-20'

6092909-16 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS)									
Acetone	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 16:58	WB
tert-Amyl alcohol (TAA)	ND		ug/L	20.0	20.0	1	10/03/16	10/03/16 16:58	WB
tert-Amyl methyl ether (TAME)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB
Benzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB
Bromobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB
Bromochloromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB
Bromodichloromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB
Bromoform	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB
Bromomethane	ND		ug/L	5.0	5.0	1	10/03/16	10/03/16 16:58	WB
tert-Butanol (TBA)	ND		ug/L	15.0	15.0	1	10/03/16	10/03/16 16:58	WB
2-Butanone (MEK)	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 16:58	WB
n-Butylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB
sec-Butylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB
tert-Butylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB
Carbon disulfide	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB
Carbon tetrachloride	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB
Chlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB
Chloroethane	ND		ug/L	5.0	5.0	1	10/03/16	10/03/16 16:58	WB
Chloroform	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB
Chloromethane	ND		ug/L	5.0	5.0	1	10/03/16	10/03/16 16:58	WB
2-Chlorotoluene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB
4-Chlorotoluene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB
Dibromochloromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB
1,2-Dibromo-3-chloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB
1,2-Dibromoethane (EDB)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB
Dibromomethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB
1,2-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB
1,3-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB
1,4-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB
Dichlorodifluoromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB
1,1-Dichloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB
1,2-Dichloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB
1,1-Dichloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB
cis-1,2-Dichloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-30 19'-20'

6092909-16 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
trans-1,2-Dichloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB
Dichlorofluoromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB
1,2-Dichloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB
1,3-Dichloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB
2,2-Dichloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB
1,1-Dichloropropene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB
cis-1,3-Dichloropropene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB
trans-1,3-Dichloropropene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB
Diisopropyl ether (DIPE)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB
Ethyl tert-butyl ether (ETBE)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB
Ethylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB
Hexachlorobutadiene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB
2-Hexanone	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 16:58	WB
Isopropylbenzene (Cumene)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB
4-Isopropyltoluene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB
Methyl tert-butyl ether (MTBE)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB
4-Methyl-2-pentanone	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 16:58	WB
Methylene chloride	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 16:58	WB
Naphthalene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB
n-Propylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB
Styrene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB
1,1,1,2-Tetrachloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB
1,1,2,2-Tetrachloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB
Tetrachloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB
Toluene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB
1,2,3-Trichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB
1,2,4-Trichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB
1,1,1-Trichloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB
1,1,2-Trichloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB
Trichloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB
Trichlorofluoromethane (Freon 11)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB
1,2,3-Trichloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB
1,2,4-Trimethylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB
1,3,5-Trimethylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501

Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-30 19'-20'

6092909-16 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
Vinyl chloride	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB
o-Xylene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB
m- & p-Xylenes	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 16:58	WB
Surrogate: 1,2-Dichloroethane-d4			*75-120*	*94 %*		*10/03/16*	*10/03/16 16:58*		
Surrogate: Toluene-d8			*84-110*	*102 %*		*10/03/16*	*10/03/16 16:58*		
Surrogate: 4-Bromofluorobenzene			*78-110*	*86 %*		*10/03/16*	*10/03/16 16:58*		

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-30 29'-30'

6092909-17 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS)									
Acetone	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 17:29	WB
tert-Amyl alcohol (TAA)	ND		ug/L	20.0	20.0	1	10/03/16	10/03/16 17:29	WB
tert-Amyl methyl ether (TAME)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB
Benzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB
Bromobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB
Bromochloromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB
Bromodichloromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB
Bromoform	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB
Bromomethane	ND		ug/L	5.0	5.0	1	10/03/16	10/03/16 17:29	WB
tert-Butanol (TBA)	ND		ug/L	15.0	15.0	1	10/03/16	10/03/16 17:29	WB
2-Butanone (MEK)	**12.1**		ug/L	10.0	10.0	1	10/03/16	10/03/16 17:29	WB
n-Butylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB
sec-Butylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB
tert-Butylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB
Carbon disulfide	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB
Carbon tetrachloride	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB
Chlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB
Chloroethane	ND		ug/L	5.0	5.0	1	10/03/16	10/03/16 17:29	WB
Chloroform	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB
Chloromethane	ND		ug/L	5.0	5.0	1	10/03/16	10/03/16 17:29	WB
2-Chlorotoluene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB
4-Chlorotoluene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB
Dibromochloromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB
1,2-Dibromo-3-chloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB
1,2-Dibromoethane (EDB)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB
Dibromomethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB
1,2-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB
1,3-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB
1,4-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB
Dichlorodifluoromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB
1,1-Dichloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB
1,2-Dichloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB
1,1-Dichloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB
cis-1,2-Dichloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-30 29'-30'

6092909-17 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
trans-1,2-Dichloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB
Dichlorofluoromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB
1,2-Dichloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB
1,3-Dichloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB
2,2-Dichloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB
1,1-Dichloropropene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB
cis-1,3-Dichloropropene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB
trans-1,3-Dichloropropene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB
Diisopropyl ether (DIPE)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB
Ethyl tert-butyl ether (ETBE)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB
Ethylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB
Hexachlorobutadiene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB
2-Hexanone	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 17:29	WB
Isopropylbenzene (Cumene)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB
4-Isopropyltoluene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB
Methyl tert-butyl ether (MTBE)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB
4-Methyl-2-pentanone	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 17:29	WB
Methylene chloride	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 17:29	WB
Naphthalene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB
n-Propylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB
Styrene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB
1,1,1,2-Tetrachloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB
1,1,2,2-Tetrachloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB
Tetrachloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB
Toluene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB
1,2,3-Trichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB
1,2,4-Trichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB
1,1,1-Trichloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB
1,1,2-Trichloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB
Trichloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB
Trichlorofluoromethane (Freon 11)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB
1,2,3-Trichloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB
1,2,4-Trimethylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB
1,3,5-Trimethylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501

Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-30 29'-30'

6092909-17 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
Vinyl chloride	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB
o-Xylene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB
m- & p-Xylenes	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 17:29	WB

Surrogate: 1,2-Dichloroethane-d4	*75-120*	*90 %*	*10/03/16*	*10/03/16 17:29*
Surrogate: Toluene-d8	*84-110*	*101 %*	*10/03/16*	*10/03/16 17:29*
Surrogate: 4-Bromofluorobenzene	*78-110*	*87 %*	*10/03/16*	*10/03/16 17:29*

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-30 37'-38'

6092909-18 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS)									
Acetone	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 18:00	WB
tert-Amyl alcohol (TAA)	ND		ug/L	20.0	20.0	1	10/03/16	10/03/16 18:00	WB
tert-Amyl methyl ether (TAME)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB
Benzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB
Bromobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB
Bromochloromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB
Bromodichloromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB
Bromoform	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB
Bromomethane	ND		ug/L	5.0	5.0	1	10/03/16	10/03/16 18:00	WB
tert-Butanol (TBA)	ND		ug/L	15.0	15.0	1	10/03/16	10/03/16 18:00	WB
2-Butanone (MEK)	**17.9**		ug/L	10.0	10.0	1	10/03/16	10/03/16 18:00	WB
n-Butylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB
sec-Butylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB
tert-Butylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB
Carbon disulfide	**3.1**	J	ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB
Carbon tetrachloride	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB
Chlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB
Chloroethane	ND		ug/L	5.0	5.0	1	10/03/16	10/03/16 18:00	WB
Chloroform	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB
Chloromethane	ND		ug/L	5.0	5.0	1	10/03/16	10/03/16 18:00	WB
2-Chlorotoluene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB
4-Chlorotoluene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB
Dibromochloromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB
1,2-Dibromo-3-chloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB
1,2-Dibromoethane (EDB)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB
Dibromomethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB
1,2-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB
1,3-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB
1,4-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB
Dichlorodifluoromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB
1,1-Dichloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB
1,2-Dichloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB
1,1-Dichloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB
cis-1,2-Dichloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB

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Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-30 37'-38'

6092909-18 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
trans-1,2-Dichloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB
Dichlorofluoromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB
1,2-Dichloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB
1,3-Dichloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB
2,2-Dichloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB
1,1-Dichloropropene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB
cis-1,3-Dichloropropene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB
trans-1,3-Dichloropropene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB
Diisopropyl ether (DIPE)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB
Ethyl tert-butyl ether (ETBE)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB
Ethylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB
Hexachlorobutadiene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB
2-Hexanone	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 18:00	WB
Isopropylbenzene (Cumene)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB
4-Isopropyltoluene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB
Methyl tert-butyl ether (MTBE)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB
4-Methyl-2-pentanone	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 18:00	WB
Methylene chloride	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 18:00	WB
Naphthalene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB
n-Propylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB
Styrene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB
1,1,1,2-Tetrachloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB
1,1,2,2-Tetrachloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB
Tetrachloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB
Toluene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB
1,2,3-Trichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB
1,2,4-Trichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB
1,1,1-Trichloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB
1,1,2-Trichloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB
Trichloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB
Trichlorofluoromethane (Freon 11)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB
1,2,3-Trichloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB
1,2,4-Trimethylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB
1,3,5-Trimethylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-30 37'-38'

6092909-18 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
Vinyl chloride	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB
o-Xylene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB
m- & p-Xylenes	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:00	WB
Surrogate: 1,2-Dichloroethane-d4			*75-120*	*109 %*			*10/03/16*	*10/03/16 18:00*	
Surrogate: Toluene-d8			*84-110*	*99 %*			*10/03/16*	*10/03/16 18:00*	
Surrogate: 4-Bromofluorobenzene			*78-110*	*87 %*			*10/03/16*	*10/03/16 18:00*	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-35 13'-14'

6092909-19 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS)									
Acetone	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 18:31	WB
tert-Amyl alcohol (TAA)	ND		ug/L	20.0	20.0	1	10/03/16	10/03/16 18:31	WB
tert-Amyl methyl ether (TAME)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB
Benzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB
Bromobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB
Bromochloromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB
Bromodichloromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB
Bromoform	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB
Bromomethane	ND		ug/L	5.0	5.0	1	10/03/16	10/03/16 18:31	WB
tert-Butanol (TBA)	ND		ug/L	15.0	15.0	1	10/03/16	10/03/16 18:31	WB
2-Butanone (MEK)	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 18:31	WB
n-Butylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB
sec-Butylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB
tert-Butylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB
Carbon disulfide	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB
Carbon tetrachloride	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB
Chlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB
Chloroethane	ND		ug/L	5.0	5.0	1	10/03/16	10/03/16 18:31	WB
Chloroform	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB
Chloromethane	ND		ug/L	5.0	5.0	1	10/03/16	10/03/16 18:31	WB
2-Chlorotoluene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB
4-Chlorotoluene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB
Dibromochloromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB
1,2-Dibromo-3-chloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB
1,2-Dibromoethane (EDB)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB
Dibromomethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB
1,2-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB
1,3-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB
1,4-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB
Dichlorodifluoromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB
1,1-Dichloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB
1,2-Dichloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB
1,1-Dichloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB
cis-1,2-Dichloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-35 13'-14'

6092909-19 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
trans-1,2-Dichloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB
Dichlorofluoromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB
1,2-Dichloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB
1,3-Dichloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB
2,2-Dichloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB
1,1-Dichloropropene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB
cis-1,3-Dichloropropene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB
trans-1,3-Dichloropropene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB
Diisopropyl ether (DIPE)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB
Ethyl tert-butyl ether (ETBE)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB
Ethylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB
Hexachlorobutadiene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB
2-Hexanone	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 18:31	WB
Isopropylbenzene (Cumene)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB
4-Isopropyltoluene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB
Methyl tert-butyl ether (MTBE)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB
4-Methyl-2-pentanone	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 18:31	WB
Methylene chloride	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 18:31	WB
Naphthalene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB
n-Propylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB
Styrene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB
1,1,1,2-Tetrachloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB
1,1,2,2-Tetrachloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB
Tetrachloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB
Toluene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB
1,2,3-Trichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB
1,2,4-Trichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB
1,1,1-Trichloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB
1,1,2-Trichloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB
Trichloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB
Trichlorofluoromethane (Freon 11)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB
1,2,3-Trichloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB
1,2,4-Trimethylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB
1,3,5-Trimethylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501

Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-35 13'-14'

6092909-19 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
Vinyl chloride	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB
o-Xylene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB
m- & p-Xylenes	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 18:31	WB
Surrogate: 1,2-Dichloroethane-d4			*75-120*	*107 %*			*10/03/16*	*10/03/16 18:31*	
Surrogate: Toluene-d8			*84-110*	*100 %*			*10/03/16*	*10/03/16 18:31*	
Surrogate: 4-Bromofluorobenzene			*78-110*	*89 %*			*10/03/16*	*10/03/16 18:31*	

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-35 19-'20'

6092909-20 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS)									
Acetone	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 19:02	WB
tert-Amyl alcohol (TAA)	ND		ug/L	20.0	20.0	1	10/03/16	10/03/16 19:02	WB
tert-Amyl methyl ether (TAME)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB
Benzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB
Bromobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB
Bromochloromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB
Bromodichloromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB
Bromoform	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB
Bromomethane	ND		ug/L	5.0	5.0	1	10/03/16	10/03/16 19:02	WB
tert-Butanol (TBA)	ND		ug/L	15.0	15.0	1	10/03/16	10/03/16 19:02	WB
2-Butanone (MEK)	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 19:02	WB
n-Butylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB
sec-Butylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB
tert-Butylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB
Carbon disulfide	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB
Carbon tetrachloride	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB
Chlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB
Chloroethane	ND		ug/L	5.0	5.0	1	10/03/16	10/03/16 19:02	WB
Chloroform	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB
Chloromethane	ND		ug/L	5.0	5.0	1	10/03/16	10/03/16 19:02	WB
2-Chlorotoluene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB
4-Chlorotoluene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB
Dibromochloromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB
1,2-Dibromo-3-chloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB
1,2-Dibromoethane (EDB)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB
Dibromomethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB
1,2-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB
1,3-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB
1,4-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB
Dichlorodifluoromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB
1,1-Dichloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB
1,2-Dichloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB
1,1-Dichloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB
cis-1,2-Dichloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-35 19-'20'

6092909-20 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
trans-1,2-Dichloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB
Dichlorofluoromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB
1,2-Dichloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB
1,3-Dichloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB
2,2-Dichloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB
1,1-Dichloropropene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB
cis-1,3-Dichloropropene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB
trans-1,3-Dichloropropene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB
Diisopropyl ether (DIPE)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB
Ethyl tert-butyl ether (ETBE)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB
Ethylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB
Hexachlorobutadiene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB
2-Hexanone	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 19:02	WB
Isopropylbenzene (Cumene)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB
4-Isopropyltoluene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB
Methyl tert-butyl ether (MTBE)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB
4-Methyl-2-pentanone	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 19:02	WB
Methylene chloride	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 19:02	WB
Naphthalene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB
n-Propylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB
Styrene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB
1,1,1,2-Tetrachloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB
1,1,2,2-Tetrachloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB
Tetrachloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB
Toluene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB
1,2,3-Trichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB
1,2,4-Trichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB
1,1,1-Trichloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB
1,1,2-Trichloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB
Trichloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB
Trichlorofluoromethane (Freon 11)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB
1,2,3-Trichloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB
1,2,4-Trimethylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB
1,3,5-Trimethylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501

Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-35 19-'20'

6092909-20 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
Vinyl chloride	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB
o-Xylene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB
m- & p-Xylenes	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:02	WB
Surrogate: 1,2-Dichloroethane-d4			*75-120*	*105 %*			*10/03/16*	*10/03/16 19:02*	
Surrogate: Toluene-d8			*84-110*	*98 %*			*10/03/16*	*10/03/16 19:02*	
Surrogate: 4-Bromofluorobenzene			*78-110*	*89 %*			*10/03/16*	*10/03/16 19:02*	

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-34 12'-13'

6092909-21 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS)									
Acetone	ND		ug/L	10.0	10.0	1	10/04/16	10/04/16 11:18	WB
tert-Amyl alcohol (TAA)	ND		ug/L	20.0	20.0	1	10/04/16	10/04/16 11:18	WB
tert-Amyl methyl ether (TAME)	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB
Benzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB
Bromobenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB
Bromochloromethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB
Bromodichloromethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB
Bromoform	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB
Bromomethane	ND		ug/L	5.0	5.0	1	10/04/16	10/04/16 11:18	WB
tert-Butanol (TBA)	ND		ug/L	15.0	15.0	1	10/04/16	10/04/16 11:18	WB
2-Butanone (MEK)	ND		ug/L	10.0	10.0	1	10/04/16	10/04/16 11:18	WB
n-Butylbenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB
sec-Butylbenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB
tert-Butylbenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB
Carbon disulfide	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB
Carbon tetrachloride	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB
Chlorobenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB
Chloroethane	ND		ug/L	5.0	5.0	1	10/04/16	10/04/16 11:18	WB
Chloroform	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB
Chloromethane	ND		ug/L	5.0	5.0	1	10/04/16	10/04/16 11:18	WB
2-Chlorotoluene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB
4-Chlorotoluene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB
Dibromochloromethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB
1,2-Dibromo-3-chloropropane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB
1,2-Dibromoethane (EDB)	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB
Dibromomethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB
1,2-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB
1,3-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB
1,4-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB
Dichlorodifluoromethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB
1,1-Dichloroethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB
1,2-Dichloroethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB
1,1-Dichloroethene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB
cis-1,2-Dichloroethene	**23.0**		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-34 12'-13'

6092909-21 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
trans-1,2-Dichloroethene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB
Dichlorofluoromethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB
1,2-Dichloropropane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB
1,3-Dichloropropane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB
2,2-Dichloropropane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB
1,1-Dichloropropene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB
cis-1,3-Dichloropropene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB
trans-1,3-Dichloropropene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB
Diisopropyl ether (DIPE)	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB
Ethyl tert-butyl ether (ETBE)	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB
Ethylbenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB
Hexachlorobutadiene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB
2-Hexanone	ND		ug/L	10.0	10.0	1	10/04/16	10/04/16 11:18	WB
Isopropylbenzene (Cumene)	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB
4-Isopropyltoluene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB
Methyl tert-butyl ether (MTBE)	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB
4-Methyl-2-pentanone	ND		ug/L	10.0	10.0	1	10/04/16	10/04/16 11:18	WB
Methylene chloride	ND		ug/L	10.0	10.0	1	10/04/16	10/04/16 11:18	WB
Naphthalene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB
n-Propylbenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB
Styrene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB
1,1,1,2-Tetrachloroethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB
1,1,2,2-Tetrachloroethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB
Tetrachloroethene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB
Toluene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB
1,2,3-Trichlorobenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB
1,2,4-Trichlorobenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB
1,1,1-Trichloroethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB
1,1,2-Trichloroethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB
Trichloroethene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB
Trichlorofluoromethane (Freon 11)	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB
1,2,3-Trichloropropane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB
1,2,4-Trimethylbenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB
1,3,5-Trimethylbenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501

Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-34 12'-13'

6092909-21 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
Vinyl chloride	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB
o-Xylene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB
m- & p-Xylenes	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:18	WB

Surrogate: 1,2-Dichloroethane-d4	*75-120*	*92 %*	*10/04/16*	*10/04/16 11:18*
Surrogate: Toluene-d8	*84-110*	*102 %*	*10/04/16*	*10/04/16 11:18*
Surrogate: 4-Bromofluorobenzene	*78-110*	*85 %*	*10/04/16*	*10/04/16 11:18*

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
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www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-34 19'-20'

6092909-22 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS)									
Acetone	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 19:33	WB
tert-Amyl alcohol (TAA)	ND		ug/L	20.0	20.0	1	10/03/16	10/03/16 19:33	WB
tert-Amyl methyl ether (TAME)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB
Benzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB
Bromobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB
Bromochloromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB
Bromodichloromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB
Bromoform	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB
Bromomethane	ND		ug/L	5.0	5.0	1	10/03/16	10/03/16 19:33	WB
tert-Butanol (TBA)	ND		ug/L	15.0	15.0	1	10/03/16	10/03/16 19:33	WB
2-Butanone (MEK)	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 19:33	WB
n-Butylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB
sec-Butylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB
tert-Butylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB
Carbon disulfide	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB
Carbon tetrachloride	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB
Chlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB
Chloroethane	ND		ug/L	5.0	5.0	1	10/03/16	10/03/16 19:33	WB
Chloroform	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB
Chloromethane	ND		ug/L	5.0	5.0	1	10/03/16	10/03/16 19:33	WB
2-Chlorotoluene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB
4-Chlorotoluene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB
Dibromochloromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB
1,2-Dibromo-3-chloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB
1,2-Dibromoethane (EDB)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB
Dibromomethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB
1,2-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB
1,3-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB
1,4-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB
Dichlorodifluoromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB
1,1-Dichloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB
1,2-Dichloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB
1,1-Dichloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB
cis-1,2-Dichloroethene	**5.0**	J	ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-34 19'-20'

6092909-22 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
trans-1,2-Dichloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB
Dichlorofluoromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB
1,2-Dichloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB
1,3-Dichloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB
2,2-Dichloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB
1,1-Dichloropropene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB
cis-1,3-Dichloropropene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB
trans-1,3-Dichloropropene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB
Diisopropyl ether (DIPE)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB
Ethyl tert-butyl ether (ETBE)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB
Ethylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB
Hexachlorobutadiene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB
2-Hexanone	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 19:33	WB
Isopropylbenzene (Cumene)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB
4-Isopropyltoluene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB
Methyl tert-butyl ether (MTBE)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB
4-Methyl-2-pentanone	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 19:33	WB
Methylene chloride	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 19:33	WB
Naphthalene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB
n-Propylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB
Styrene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB
1,1,1,2-Tetrachloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB
1,1,2,2-Tetrachloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB
Tetrachloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB
Toluene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB
1,2,3-Trichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB
1,2,4-Trichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB
1,1,1-Trichloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB
1,1,2-Trichloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB
Trichloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB
Trichlorofluoromethane (Freon 11)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB
1,2,3-Trichloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB
1,2,4-Trimethylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB
1,3,5-Trimethylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB

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Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501

Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-34 19'-20'

6092909-22 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
Vinyl chloride	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB
o-Xylene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB
m- & p-Xylenes	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 19:33	WB
Surrogate: 1,2-Dichloroethane-d4			*75-120*	*110 %*			*10/03/16*	*10/03/16 19:33*	
Surrogate: Toluene-d8			*84-110*	*99 %*			*10/03/16*	*10/03/16 19:33*	
Surrogate: 4-Bromofluorobenzene			*78-110*	*88 %*			*10/03/16*	*10/03/16 19:33*	

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Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
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Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-29 11'-12'

6092909-23 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS)									
Acetone	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 20:04	WB
tert-Amyl alcohol (TAA)	ND		ug/L	20.0	20.0	1	10/03/16	10/03/16 20:04	WB
tert-Amyl methyl ether (TAME)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB
Benzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB
Bromobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB
Bromochloromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB
Bromodichloromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB
Bromoform	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB
Bromomethane	ND		ug/L	5.0	5.0	1	10/03/16	10/03/16 20:04	WB
tert-Butanol (TBA)	ND		ug/L	15.0	15.0	1	10/03/16	10/03/16 20:04	WB
2-Butanone (MEK)	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 20:04	WB
n-Butylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB
sec-Butylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB
tert-Butylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB
Carbon disulfide	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB
Carbon tetrachloride	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB
Chlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB
Chloroethane	ND		ug/L	5.0	5.0	1	10/03/16	10/03/16 20:04	WB
Chloroform	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB
Chloromethane	ND		ug/L	5.0	5.0	1	10/03/16	10/03/16 20:04	WB
2-Chlorotoluene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB
4-Chlorotoluene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB
Dibromochloromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB
1,2-Dibromo-3-chloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB
1,2-Dibromoethane (EDB)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB
Dibromomethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB
1,2-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB
1,3-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB
1,4-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB
Dichlorodifluoromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB
1,1-Dichloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB
1,2-Dichloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB
1,1-Dichloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB
cis-1,2-Dichloroethene	**2.4**	J	ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB

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Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-29 11'-12'

6092909-23 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
trans-1,2-Dichloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB
Dichlorofluoromethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB
1,2-Dichloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB
1,3-Dichloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB
2,2-Dichloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB
1,1-Dichloropropene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB
cis-1,3-Dichloropropene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB
trans-1,3-Dichloropropene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB
Diisopropyl ether (DIPE)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB
Ethyl tert-butyl ether (ETBE)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB
Ethylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB
Hexachlorobutadiene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB
2-Hexanone	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 20:04	WB
Isopropylbenzene (Cumene)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB
4-Isopropyltoluene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB
Methyl tert-butyl ether (MTBE)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB
4-Methyl-2-pentanone	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 20:04	WB
Methylene chloride	ND		ug/L	10.0	10.0	1	10/03/16	10/03/16 20:04	WB
Naphthalene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB
n-Propylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB
Styrene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB
1,1,1,2-Tetrachloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB
1,1,2,2-Tetrachloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB
Tetrachloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB
Toluene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB
1,2,3-Trichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB
1,2,4-Trichlorobenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB
1,1,1-Trichloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB
1,1,2-Trichloroethane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB
Trichloroethene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB
Trichlorofluoromethane (Freon 11)	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB
1,2,3-Trichloropropane	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB
1,2,4-Trimethylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB
1,3,5-Trimethylbenzene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB

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Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
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Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-29 11'-12'

6092909-23 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
Vinyl chloride	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB
o-Xylene	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB
m- & p-Xylenes	ND		ug/L	5.0	2.0	1	10/03/16	10/03/16 20:04	WB
Surrogate: 1,2-Dichloroethane-d4			*75-120*	*108 %*			*10/03/16*	*10/03/16 20:04*	
Surrogate: Toluene-d8			*84-110*	*99 %*			*10/03/16*	*10/03/16 20:04*	
Surrogate: 4-Bromofluorobenzene			*78-110*	*88 %*			*10/03/16*	*10/03/16 20:04*	

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-29 19'-20'

6092909-24 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS)									
Acetone	ND		ug/L	10.0	10.0	1	10/04/16	10/04/16 11:49	WB
tert-Amyl alcohol (TAA)	ND		ug/L	20.0	20.0	1	10/04/16	10/04/16 11:49	WB
tert-Amyl methyl ether (TAME)	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB
Benzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB
Bromobenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB
Bromochloromethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB
Bromodichloromethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB
Bromoform	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB
Bromomethane	ND		ug/L	5.0	5.0	1	10/04/16	10/04/16 11:49	WB
tert-Butanol (TBA)	ND		ug/L	15.0	15.0	1	10/04/16	10/04/16 11:49	WB
2-Butanone (MEK)	ND		ug/L	10.0	10.0	1	10/04/16	10/04/16 11:49	WB
n-Butylbenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB
sec-Butylbenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB
tert-Butylbenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB
Carbon disulfide	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB
Carbon tetrachloride	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB
Chlorobenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB
Chloroethane	ND		ug/L	5.0	5.0	1	10/04/16	10/04/16 11:49	WB
Chloroform	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB
Chloromethane	ND		ug/L	5.0	5.0	1	10/04/16	10/04/16 11:49	WB
2-Chlorotoluene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB
4-Chlorotoluene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB
Dibromochloromethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB
1,2-Dibromo-3-chloropropane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB
1,2-Dibromoethane (EDB)	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB
Dibromomethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB
1,2-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB
1,3-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB
1,4-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB
Dichlorodifluoromethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB
1,1-Dichloroethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB
1,2-Dichloroethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB
1,1-Dichloroethene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB
cis-1,2-Dichloroethene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-29 19'-20'

6092909-24 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
trans-1,2-Dichloroethene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB
Dichlorofluoromethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB
1,2-Dichloropropane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB
1,3-Dichloropropane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB
2,2-Dichloropropane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB
1,1-Dichloropropene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB
cis-1,3-Dichloropropene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB
trans-1,3-Dichloropropene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB
Diisopropyl ether (DIPE)	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB
Ethyl tert-butyl ether (ETBE)	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB
Ethylbenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB
Hexachlorobutadiene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB
2-Hexanone	ND		ug/L	10.0	10.0	1	10/04/16	10/04/16 11:49	WB
Isopropylbenzene (Cumene)	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB
4-Isopropyltoluene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB
Methyl tert-butyl ether (MTBE)	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB
4-Methyl-2-pentanone	ND		ug/L	10.0	10.0	1	10/04/16	10/04/16 11:49	WB
Methylene chloride	ND		ug/L	10.0	10.0	1	10/04/16	10/04/16 11:49	WB
Naphthalene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB
n-Propylbenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB
Styrene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB
1,1,1,2-Tetrachloroethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB
1,1,2,2-Tetrachloroethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB
Tetrachloroethene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB
Toluene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB
1,2,3-Trichlorobenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB
1,2,4-Trichlorobenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB
1,1,1-Trichloroethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB
1,1,2-Trichloroethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB
Trichloroethene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB
Trichlorofluoromethane (Freon 11)	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB
1,2,3-Trichloropropane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB
1,2,4-Trimethylbenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB
1,3,5-Trimethylbenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501

Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-29 19'-20'

6092909-24 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
Vinyl chloride	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB
o-Xylene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB
m- & p-Xylenes	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 11:49	WB
Surrogate: 1,2-Dichloroethane-d4			*75-120*	*111 %*			*10/04/16*	*10/04/16 11:49*	
Surrogate: Toluene-d8			*84-110*	*98 %*			*10/04/16*	*10/04/16 11:49*	
Surrogate: 4-Bromofluorobenzene			*78-110*	*86 %*			*10/04/16*	*10/04/16 11:49*	

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Analytical Results

1500 Caton Center Dr Suite G
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www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-32 11'-12'

6092909-25 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS)									
Acetone	**27.5**		ug/L	10.0	10.0	1	10/04/16	10/04/16 12:20	WB
tert-Amyl alcohol (TAA)	ND		ug/L	20.0	20.0	1	10/04/16	10/04/16 12:20	WB
tert-Amyl methyl ether (TAME)	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB
Benzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB
Bromobenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB
Bromochloromethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB
Bromodichloromethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB
Bromoform	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB
Bromomethane	ND		ug/L	5.0	5.0	1	10/04/16	10/04/16 12:20	WB
tert-Butanol (TBA)	ND		ug/L	15.0	15.0	1	10/04/16	10/04/16 12:20	WB
2-Butanone (MEK)	**14.0**		ug/L	10.0	10.0	1	10/04/16	10/04/16 12:20	WB
n-Butylbenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB
sec-Butylbenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB
tert-Butylbenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB
Carbon disulfide	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB
Carbon tetrachloride	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB
Chlorobenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB
Chloroethane	ND		ug/L	5.0	5.0	1	10/04/16	10/04/16 12:20	WB
Chloroform	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB
Chloromethane	ND		ug/L	5.0	5.0	1	10/04/16	10/04/16 12:20	WB
2-Chlorotoluene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB
4-Chlorotoluene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB
Dibromochloromethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB
1,2-Dibromo-3-chloropropane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB
1,2-Dibromoethane (EDB)	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB
Dibromomethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB
1,2-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB
1,3-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB
1,4-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB
Dichlorodifluoromethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB
1,1-Dichloroethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB
1,2-Dichloroethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB
1,1-Dichloroethene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB
cis-1,2-Dichloroethene	**23.3**		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB

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Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-32 11'-12'

6092909-25 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
trans-1,2-Dichloroethene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB
Dichlorofluoromethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB
1,2-Dichloropropane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB
1,3-Dichloropropane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB
2,2-Dichloropropane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB
1,1-Dichloropropene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB
cis-1,3-Dichloropropene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB
trans-1,3-Dichloropropene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB
Diisopropyl ether (DIPE)	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB
Ethyl tert-butyl ether (ETBE)	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB
Ethylbenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB
Hexachlorobutadiene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB
2-Hexanone	ND		ug/L	10.0	10.0	1	10/04/16	10/04/16 12:20	WB
Isopropylbenzene (Cumene)	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB
4-Isopropyltoluene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB
Methyl tert-butyl ether (MTBE)	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB
4-Methyl-2-pentanone	ND		ug/L	10.0	10.0	1	10/04/16	10/04/16 12:20	WB
Methylene chloride	ND		ug/L	10.0	10.0	1	10/04/16	10/04/16 12:20	WB
Naphthalene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB
n-Propylbenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB
Styrene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB
1,1,1,2-Tetrachloroethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB
1,1,2,2-Tetrachloroethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB
Tetrachloroethene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB
Toluene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB
1,2,3-Trichlorobenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB
1,2,4-Trichlorobenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB
1,1,1-Trichloroethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB
1,1,2-Trichloroethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB
Trichloroethene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB
Trichlorofluoromethane (Freon 11)	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB
1,2,3-Trichloropropane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB
1,2,4-Trimethylbenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB
1,3,5-Trimethylbenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

SB-32 11'-12'

6092909-25 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
Vinyl chloride	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB
o-Xylene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB
m- & p-Xylenes	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:20	WB

Surrogate: 1,2-Dichloroethane-d4	*75-120*	*109 %*	*10/04/16*	*10/04/16 12:20*
Surrogate: Toluene-d8	*84-110*	*100 %*	*10/04/16*	*10/04/16 12:20*
Surrogate: 4-Bromofluorobenzene	*78-110*	*86 %*	*10/04/16*	*10/04/16 12:20*

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

Trip Blank

6092909-26 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS)									
Acetone	**15.1**		ug/L	10.0	10.0	1	10/04/16	10/04/16 12:51	WB
tert-Amyl alcohol (TAA)	ND		ug/L	20.0	20.0	1	10/04/16	10/04/16 12:51	WB
tert-Amyl methyl ether (TAME)	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB
Benzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB
Bromobenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB
Bromochloromethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB
Bromodichloromethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB
Bromoform	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB
Bromomethane	ND		ug/L	5.0	5.0	1	10/04/16	10/04/16 12:51	WB
tert-Butanol (TBA)	ND		ug/L	15.0	15.0	1	10/04/16	10/04/16 12:51	WB
2-Butanone (MEK)	ND		ug/L	10.0	10.0	1	10/04/16	10/04/16 12:51	WB
n-Butylbenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB
sec-Butylbenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB
tert-Butylbenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB
Carbon disulfide	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB
Carbon tetrachloride	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB
Chlorobenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB
Chloroethane	ND		ug/L	5.0	5.0	1	10/04/16	10/04/16 12:51	WB
Chloroform	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB
Chloromethane	ND		ug/L	5.0	5.0	1	10/04/16	10/04/16 12:51	WB
2-Chlorotoluene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB
4-Chlorotoluene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB
Dibromochloromethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB
1,2-Dibromo-3-chloropropane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB
1,2-Dibromoethane (EDB)	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB
Dibromomethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB
1,2-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB
1,3-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB
1,4-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB
Dichlorodifluoromethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB
1,1-Dichloroethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB
1,2-Dichloroethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB
1,1-Dichloroethene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB
cis-1,2-Dichloroethene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

Trip Blank

6092909-26 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
trans-1,2-Dichloroethene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB
Dichlorofluoromethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB
1,2-Dichloropropane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB
1,3-Dichloropropane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB
2,2-Dichloropropane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB
1,1-Dichloropropene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB
cis-1,3-Dichloropropene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB
trans-1,3-Dichloropropene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB
Diisopropyl ether (DIPE)	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB
Ethyl tert-butyl ether (ETBE)	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB
Ethylbenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB
Hexachlorobutadiene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB
2-Hexanone	ND		ug/L	10.0	10.0	1	10/04/16	10/04/16 12:51	WB
Isopropylbenzene (Cumene)	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB
4-Isopropyltoluene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB
Methyl tert-butyl ether (MTBE)	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB
4-Methyl-2-pentanone	ND		ug/L	10.0	10.0	1	10/04/16	10/04/16 12:51	WB
Methylene chloride	ND		ug/L	10.0	10.0	1	10/04/16	10/04/16 12:51	WB
Naphthalene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB
n-Propylbenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB
Styrene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB
1,1,1,2-Tetrachloroethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB
1,1,2,2-Tetrachloroethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB
Tetrachloroethene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB
Toluene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB
1,2,3-Trichlorobenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB
1,2,4-Trichlorobenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB
1,1,1-Trichloroethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB
1,1,2-Trichloroethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB
Trichloroethene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB
Trichlorofluoromethane (Freon 11)	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB
1,2,3-Trichloropropane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB
1,2,4-Trimethylbenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB
1,3,5-Trimethylbenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

Trip Blank

6092909-26 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
Vinyl chloride	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB
o-Xylene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB
m- & p-Xylenes	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 12:51	WB
Surrogate: 1,2-Dichloroethane-d4			*75-120*	*111 %*			*10/04/16*	*10/04/16 12:51*	
Surrogate: Toluene-d8			*84-110*	*98 %*			*10/04/16*	*10/04/16 12:51*	
Surrogate: 4-Bromofluorobenzene			*78-110*	*85 %*			*10/04/16*	*10/04/16 12:51*	

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

Equipment Blank

6092909-27 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS)									
Acetone	**17.8**		ug/L	10.0	10.0	1	10/04/16	10/04/16 13:22	WB
tert-Amyl alcohol (TAA)	ND		ug/L	20.0	20.0	1	10/04/16	10/04/16 13:22	WB
tert-Amyl methyl ether (TAME)	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB
Benzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB
Bromobenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB
Bromochloromethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB
Bromodichloromethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB
Bromoform	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB
Bromomethane	ND		ug/L	5.0	5.0	1	10/04/16	10/04/16 13:22	WB
tert-Butanol (TBA)	ND		ug/L	15.0	15.0	1	10/04/16	10/04/16 13:22	WB
2-Butanone (MEK)	ND		ug/L	10.0	10.0	1	10/04/16	10/04/16 13:22	WB
n-Butylbenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB
sec-Butylbenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB
tert-Butylbenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB
Carbon disulfide	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB
Carbon tetrachloride	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB
Chlorobenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB
Chloroethane	ND		ug/L	5.0	5.0	1	10/04/16	10/04/16 13:22	WB
Chloroform	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB
Chloromethane	ND		ug/L	5.0	5.0	1	10/04/16	10/04/16 13:22	WB
2-Chlorotoluene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB
4-Chlorotoluene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB
Dibromochloromethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB
1,2-Dibromo-3-chloropropane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB
1,2-Dibromoethane (EDB)	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB
Dibromomethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB
1,2-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB
1,3-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB
1,4-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB
Dichlorodifluoromethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB
1,1-Dichloroethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB
1,2-Dichloroethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB
1,1-Dichloroethene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB
cis-1,2-Dichloroethene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

Equipment Blank

6092909-27 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
trans-1,2-Dichloroethene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB
Dichlorofluoromethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB
1,2-Dichloropropane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB
1,3-Dichloropropane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB
2,2-Dichloropropane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB
1,1-Dichloropropene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB
cis-1,3-Dichloropropene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB
trans-1,3-Dichloropropene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB
Diisopropyl ether (DIPE)	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB
Ethyl tert-butyl ether (ETBE)	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB
Ethylbenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB
Hexachlorobutadiene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB
2-Hexanone	ND		ug/L	10.0	10.0	1	10/04/16	10/04/16 13:22	WB
Isopropylbenzene (Cumene)	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB
4-Isopropyltoluene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB
Methyl tert-butyl ether (MTBE)	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB
4-Methyl-2-pentanone	ND		ug/L	10.0	10.0	1	10/04/16	10/04/16 13:22	WB
Methylene chloride	ND		ug/L	10.0	10.0	1	10/04/16	10/04/16 13:22	WB
Naphthalene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB
n-Propylbenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB
Styrene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB
1,1,1,2-Tetrachloroethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB
1,1,2,2-Tetrachloroethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB
Tetrachloroethene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB
Toluene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB
1,2,3-Trichlorobenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB
1,2,4-Trichlorobenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB
1,1,1-Trichloroethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB
1,1,2-Trichloroethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB
Trichloroethene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB
Trichlorofluoromethane (Freon 11)	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB
1,2,3-Trichloropropane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB
1,2,4-Trimethylbenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB
1,3,5-Trimethylbenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

Equipment Blank

6092909-27 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
Vinyl chloride	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB
o-Xylene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB
m- & p-Xylenes	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:22	WB

Surrogate: 1,2-Dichloroethane-d4	*75-120*	*108 %*	*10/04/16*	*10/04/16 13:22*
Surrogate: Toluene-d8	*84-110*	*99 %*	*10/04/16*	*10/04/16 13:22*
Surrogate: 4-Bromofluorobenzene	*78-110*	*85 %*	*10/04/16*	*10/04/16 13:22*

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

Overflow A

6092909-28 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS)									
Acetone	ND		ug/L	10.0	10.0	1	10/04/16	10/04/16 13:54	WB
tert-Amyl alcohol (TAA)	ND		ug/L	20.0	20.0	1	10/04/16	10/04/16 13:54	WB
tert-Amyl methyl ether (TAME)	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB
Benzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB
Bromobenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB
Bromochloromethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB
Bromodichloromethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB
Bromoform	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB
Bromomethane	ND		ug/L	5.0	5.0	1	10/04/16	10/04/16 13:54	WB
tert-Butanol (TBA)	ND		ug/L	15.0	15.0	1	10/04/16	10/04/16 13:54	WB
2-Butanone (MEK)	ND		ug/L	10.0	10.0	1	10/04/16	10/04/16 13:54	WB
n-Butylbenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB
sec-Butylbenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB
tert-Butylbenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB
Carbon disulfide	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB
Carbon tetrachloride	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB
Chlorobenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB
Chloroethane	ND		ug/L	5.0	5.0	1	10/04/16	10/04/16 13:54	WB
Chloroform	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB
Chloromethane	ND		ug/L	5.0	5.0	1	10/04/16	10/04/16 13:54	WB
2-Chlorotoluene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB
4-Chlorotoluene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB
Dibromochloromethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB
1,2-Dibromo-3-chloropropane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB
1,2-Dibromoethane (EDB)	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB
Dibromomethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB
1,2-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB
1,3-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB
1,4-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB
Dichlorodifluoromethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB
1,1-Dichloroethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB
1,2-Dichloroethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB
1,1-Dichloroethene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB
cis-1,2-Dichloroethene	**3.4**	J	ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB

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As a NELAP accredited laboratory, MSS can provide a certification list upon request.

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

Overflow A

6092909-28 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
trans-1,2-Dichloroethene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB
Dichlorofluoromethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB
1,2-Dichloropropane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB
1,3-Dichloropropane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB
2,2-Dichloropropane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB
1,1-Dichloropropene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB
cis-1,3-Dichloropropene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB
trans-1,3-Dichloropropene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB
Diisopropyl ether (DIPE)	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB
Ethyl tert-butyl ether (ETBE)	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB
Ethylbenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB
Hexachlorobutadiene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB
2-Hexanone	ND		ug/L	10.0	10.0	1	10/04/16	10/04/16 13:54	WB
Isopropylbenzene (Cumene)	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB
4-Isopropyltoluene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB
Methyl tert-butyl ether (MTBE)	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB
4-Methyl-2-pentanone	ND		ug/L	10.0	10.0	1	10/04/16	10/04/16 13:54	WB
Methylene chloride	ND		ug/L	10.0	10.0	1	10/04/16	10/04/16 13:54	WB
Naphthalene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB
n-Propylbenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB
Styrene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB
1,1,1,2-Tetrachloroethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB
1,1,2,2-Tetrachloroethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB
Tetrachloroethene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB
Toluene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB
1,2,3-Trichlorobenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB
1,2,4-Trichlorobenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB
1,1,1-Trichloroethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB
1,1,2-Trichloroethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB
Trichloroethene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB
Trichlorofluoromethane (Freon 11)	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB
1,2,3-Trichloropropane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB
1,2,4-Trimethylbenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB
1,3,5-Trimethylbenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB

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Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

Overflow A

6092909-28 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
Vinyl chloride	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB
o-Xylene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB
m- & p-Xylenes	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 13:54	WB
Surrogate: 1,2-Dichloroethane-d4			*75-120*	*109 %*	*10/04/16*		*10/04/16 13:54*		
Surrogate: Toluene-d8			*84-110*	*100 %*	*10/04/16*		*10/04/16 13:54*		
Surrogate: 4-Bromofluorobenzene			*78-110*	*87 %*	*10/04/16*		*10/04/16 13:54*		

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Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

Overflow B

6092909-29 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS)									
Acetone	ND		ug/L	10.0	10.0	1	10/04/16	10/04/16 14:25	WB
tert-Amyl alcohol (TAA)	ND		ug/L	20.0	20.0	1	10/04/16	10/04/16 14:25	WB
tert-Amyl methyl ether (TAME)	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB
Benzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB
Bromobenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB
Bromochloromethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB
Bromodichloromethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB
Bromoform	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB
Bromomethane	ND		ug/L	5.0	5.0	1	10/04/16	10/04/16 14:25	WB
tert-Butanol (TBA)	ND		ug/L	15.0	15.0	1	10/04/16	10/04/16 14:25	WB
2-Butanone (MEK)	ND		ug/L	10.0	10.0	1	10/04/16	10/04/16 14:25	WB
n-Butylbenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB
sec-Butylbenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB
tert-Butylbenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB
Carbon disulfide	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB
Carbon tetrachloride	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB
Chlorobenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB
Chloroethane	ND		ug/L	5.0	5.0	1	10/04/16	10/04/16 14:25	WB
Chloroform	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB
Chloromethane	ND		ug/L	5.0	5.0	1	10/04/16	10/04/16 14:25	WB
2-Chlorotoluene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB
4-Chlorotoluene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB
Dibromochloromethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB
1,2-Dibromo-3-chloropropane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB
1,2-Dibromoethane (EDB)	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB
Dibromomethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB
1,2-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB
1,3-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB
1,4-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB
Dichlorodifluoromethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB
1,1-Dichloroethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB
1,2-Dichloroethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB
1,1-Dichloroethene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB
cis-1,2-Dichloroethene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB

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Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

Overflow B

6092909-29 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
trans-1,2-Dichloroethene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB
Dichlorofluoromethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB
1,2-Dichloropropane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB
1,3-Dichloropropane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB
2,2-Dichloropropane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB
1,1-Dichloropropene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB
cis-1,3-Dichloropropene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB
trans-1,3-Dichloropropene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB
Diisopropyl ether (DIPE)	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB
Ethyl tert-butyl ether (ETBE)	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB
Ethylbenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB
Hexachlorobutadiene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB
2-Hexanone	ND		ug/L	10.0	10.0	1	10/04/16	10/04/16 14:25	WB
Isopropylbenzene (Cumene)	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB
4-Isopropyltoluene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB
Methyl tert-butyl ether (MTBE)	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB
4-Methyl-2-pentanone	ND		ug/L	10.0	10.0	1	10/04/16	10/04/16 14:25	WB
Methylene chloride	ND		ug/L	10.0	10.0	1	10/04/16	10/04/16 14:25	WB
Naphthalene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB
n-Propylbenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB
Styrene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB
1,1,1,2-Tetrachloroethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB
1,1,2,2-Tetrachloroethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB
Tetrachloroethene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB
Toluene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB
1,2,3-Trichlorobenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB
1,2,4-Trichlorobenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB
1,1,1-Trichloroethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB
1,1,2-Trichloroethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB
Trichloroethene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB
Trichlorofluoromethane (Freon 11)	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB
1,2,3-Trichloropropane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB
1,2,4-Trimethylbenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB
1,3,5-Trimethylbenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB

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Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
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Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

Overflow B

6092909-29 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
Vinyl chloride	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB
o-Xylene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB
m- & p-Xylenes	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:25	WB
Surrogate: 1,2-Dichloroethane-d4			*75-120*	*110 %*			*10/04/16*	*10/04/16 14:25*	
Surrogate: Toluene-d8			*84-110*	*99 %*			*10/04/16*	*10/04/16 14:25*	
Surrogate: 4-Bromofluorobenzene			*78-110*	*86 %*			*10/04/16*	*10/04/16 14:25*	

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Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

Stormwater Pond

6092909-30 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS)									
Acetone	ND		ug/L	10.0	10.0	1	10/04/16	10/04/16 14:56	WB
tert-Amyl alcohol (TAA)	ND		ug/L	20.0	20.0	1	10/04/16	10/04/16 14:56	WB
tert-Amyl methyl ether (TAME)	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB
Benzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB
Bromobenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB
Bromochloromethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB
Bromodichloromethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB
Bromoform	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB
Bromomethane	ND		ug/L	5.0	5.0	1	10/04/16	10/04/16 14:56	WB
tert-Butanol (TBA)	ND		ug/L	15.0	15.0	1	10/04/16	10/04/16 14:56	WB
2-Butanone (MEK)	ND		ug/L	10.0	10.0	1	10/04/16	10/04/16 14:56	WB
n-Butylbenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB
sec-Butylbenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB
tert-Butylbenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB
Carbon disulfide	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB
Carbon tetrachloride	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB
Chlorobenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB
Chloroethane	ND		ug/L	5.0	5.0	1	10/04/16	10/04/16 14:56	WB
Chloroform	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB
Chloromethane	ND		ug/L	5.0	5.0	1	10/04/16	10/04/16 14:56	WB
2-Chlorotoluene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB
4-Chlorotoluene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB
Dibromochloromethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB
1,2-Dibromo-3-chloropropane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB
1,2-Dibromoethane (EDB)	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB
Dibromomethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB
1,2-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB
1,3-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB
1,4-Dichlorobenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB
Dichlorodifluoromethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB
1,1-Dichloroethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB
1,2-Dichloroethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB
1,1-Dichloroethene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB
cis-1,2-Dichloroethene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

Stormwater Pond

6092909-30 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
trans-1,2-Dichloroethene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB
Dichlorofluoromethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB
1,2-Dichloropropane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB
1,3-Dichloropropane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB
2,2-Dichloropropane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB
1,1-Dichloropropene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB
cis-1,3-Dichloropropene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB
trans-1,3-Dichloropropene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB
Diisopropyl ether (DIPE)	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB
Ethyl tert-butyl ether (ETBE)	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB
Ethylbenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB
Hexachlorobutadiene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB
2-Hexanone	ND		ug/L	10.0	10.0	1	10/04/16	10/04/16 14:56	WB
Isopropylbenzene (Cumene)	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB
4-Isopropyltoluene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB
Methyl tert-butyl ether (MTBE)	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB
4-Methyl-2-pentanone	ND		ug/L	10.0	10.0	1	10/04/16	10/04/16 14:56	WB
Methylene chloride	ND		ug/L	10.0	10.0	1	10/04/16	10/04/16 14:56	WB
Naphthalene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB
n-Propylbenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB
Styrene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB
1,1,1,2-Tetrachloroethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB
1,1,2,2-Tetrachloroethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB
Tetrachloroethene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB
Toluene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB
1,2,3-Trichlorobenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB
1,2,4-Trichlorobenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB
1,1,1-Trichloroethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB
1,1,2-Trichloroethane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB
Trichloroethene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB
Trichlorofluoromethane (Freon 11)	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB
1,2,3-Trichloropropane	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB
1,2,4-Trimethylbenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB
1,3,5-Trimethylbenzene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB

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Will Brewington, Staff Chemist

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501
Project Manager: Scott Beatson

Reported:
10/05/16 11:17

Stormwater Pond

6092909-30 (Nonpotable Water)
Sample Date: 09/29/16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
Vinyl chloride	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB
o-Xylene	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB
m- & p-Xylenes	ND		ug/L	5.0	2.0	1	10/04/16	10/04/16 14:56	WB
Surrogate: 1,2-Dichloroethane-d4			*75-120*	*107 %*			*10/04/16*	*10/04/16 14:56*	
Surrogate: Toluene-d8			*84-110*	*98 %*			*10/04/16*	*10/04/16 14:56*	
Surrogate: 4-Bromofluorobenzene			*78-110*	*85 %*			*10/04/16*	*10/04/16 14:56*	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Former Black & Decker

Project Number: 60520027.00501

Project Manager: Scott Beatson

Reported:
10/05/16 11:17

Notes and Definitions

J	Detected but below the reporting limit; therefore, result is an estimated concentration (CLP J-Flag).
IS-07	Internal standard area outside control limits due to sample matrix effect.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

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Will Brewington, Staff Chemist

CHAIN-OF-CUSTODY RECORD

Maryland Spectral Services, Inc.
1500 Caton Center Drive, Suite G
Baltimore, MD 21227
410-247-7600 • Fax 410-247-7602
labman@mdspectral.com

Matrix Codes: NW (non-potable water) PW (potable water)

Company Name: AECOM

Project Manager: Scott Beatson

Project Name: Black and Decker

Project ID:

Sampler(s): Jeremy Jaime

P.O. Number:

Analysis Requested: VOCs (8260)

Field Sample ID	Date	Time	Water	Soil	Other	No. of Containers	VOCs (8260)	Preservative: 1+1 HCl, H_2SO_4, Methanol, $Na_2S_2O_3$, $NaHCO_3$	Field pH, Residual Chlorine, QC Request, Trip Blank, Field Blank	MSS Lab ID
SB-32 11'	9/28/16	1530		X		1	X	None		6092909-01
SB-31 10'	9/28	1300		X		1	X			
SB-35 14'	9/29	1225		X		1	X			
SB-34 11'	9/29	1255		X		1	X			
SB-30 12'	9/29	1030		X		1	X			
SB-33 10'	9/29	0815		X		1	X			
SB-29 11'	9/29	1355		X		1	X			07

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
(Printed) Jeremy Jaime	9/29/16 5:30p	(Printed) Cory Koons	(Printed)		(Printed)
Relinquished by: (Signature)	Date/Time	Received by Lab: (Signature)			
(Printed)		(Printed)			

Turn Around Time:
- ☐ Normal (7 day)
- ☐ 5 day
- ☑ 4 day
- ☐ 3 day
- ☐ Rush (2 day)
- ☐ Next Day
- ☐ Other: _____
- ☐ Specific Due Date: _____

Lab Use:
Temp: 2.4 °C
- ☐ Received on Ice
- ☐ Received same day
- ☐ Preservation Appropriate

Delivery Method:
- Courier
- Client
- UPS
- FedEx
- USPS
- Other: _____

Special Instructions/QC Requirements & Comments:

Sample Disposal:
- ☐ Return to Client
- ☐ Disposal by lab
- ☐ Archive for _____ days

MSS-F001-002

CHAIN-OF-CUSTODY RECORD

Maryland Spectral Services, Inc.
1500 Caton Center Drive, Suite G
Baltimore, MD 21227
410-247-7600 • Fax 410-247-7602
labman@mdspectral.com

Matrix Codes: NW (non-potable water) PW (potable water)

Company Name: AECOM

Project Manager: Scott Beatson

Project Name: Black and Decker

Project ID:

Sampler(s): Jeremy Joiner

P.O. Number:

Analysis Requested: VOCs (8260)

Field Sample ID	Date	Time	Water	Soil	Other	No. of Containers	VOCs (8260)	Preservative: 1+1 HCl, H_2SO_4, Methanol, $Na_2S_2O_3$, $NaHCO_3$	Field pH, Residual Chlorine, QC Request, Trip Blank, Field Blank	MSS Lab ID
SB-31 11'-12'	9/28	1345	X			2	X	HCl		6092909-08
SB-31 18'-19'	9/28	1400	X			2	X			
SB-33 11'-12'	9/29	0830	X			2	X			
SB-33 19'-20'	9/29	0840	X			2	X			
SB-33 28'-29'	9/29	0900	X			2	X			
Duplicate	9/29		X			2	X			
SB-32 19'-20'	9/29	0930	X			2	X			
SB-30 12'-13'	9/29	040	X			2	X			
SB-30 19'-20'	9/29	1050	X			2	X			
SB-30 29'-30'	9/29	1110	X			2	X			17

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
(Printed) Jeremy Joiner	9/29/16 0530p	(Printed) Cory Koons	(Printed)		(Printed)
Relinquished by: (Signature)	Date/Time	Received by Lab: (Signature)			
(Printed)		(Printed)			

Turn Around Time:
- ☐ Normal (7 day)
- ☐ 5 day
- ☑ 4 day
- ☐ 3 day
- ☐ Rush (2 day)
- ☐ Next Day
- ☐ Other: _____
- ☐ Specific Due Date: _____

Lab Use:
Temp: 2-4 °C
- ☐ Received on Ice
- ☐ Received same day
- ☐ Preservation Appropriate

Delivery Method:
- Courier
- Client
- UPS
- FedEx
- USPS
- Other: _____

Special Instructions/QC Requirements & Comments:

Sample Disposal:
- ☐ Return to Client
- ☐ Disposal by lab
- ☐ Archive for _____ days

MSS-F001-002

CHAIN-OF-CUSTODY RECORD

Company Name: AECOM

Project Manager: Scott Beatson

Project Name: Black and Decker

Project ID:

Sampler(s): Jeremy Joiner

P.O. Number:

Maryland Spectral Services, Inc.
1500 Caton Center Drive, Suite G
Baltimore, MD 21227
410-247-7600 • Fax 410-247-7602
labman@mdspectral.com

Matrix Codes: NW (non-potable water) PW (potable water)

Field Sample ID	Date	Time	Water	Soil	Other	No. of Containers	VOCs (8260)	Preservative: 1+1 HCl, H_2SO_4, Methanol, $Na_2S_2O_3$, $NaHCO_3$	Field pH, Residual Chlorine, QC Request, Trip Blank, Field Blank	MSS Lab ID
SB-30 37'-38'	9/29	1145	X			2	X	HCl		6092909-18
SB-35 13'-14'	9/29	1230	X			2	X			
SB-35 19'-20'	9/29	1240	X			2	X			
SB-34 12'-13'	9/29	1305	X			2	X			
SB-34 19'-20'	9/29	1320	X			2	X			
SB-29 11'-12'	9/29	1410	X			2	X			
SB-29 19'-20'	9/29	1420	X			2	X			
SB-32 11'-12'	9/29	0820	X			2	X			
Trip Blank			X			2	X			
Equipment Blank			X			2	X			27

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
(Printed) Jeremy Joiner	9/29/16 5:30p	(Printed) Cory Koons	(Printed)		(Printed)
Relinquished by: (Signature)	Date/Time	Received by Lab: (Signature)			
(Printed)		(Printed)			

Turn Around Time:
- ☐ Normal (7 day)
- ☐ 5 day
- ☑ 4 day
- ☐ 3 day
- ☐ Rush (2 day)
- ☐ Next Day
- ☐ Other: _____
- ☐ Specific Due Date: _____

Lab Use:
Temp: _____ °C
- ☐ Received on Ice
- ☐ Received same day
- ☐ Preservation Appropriate

Delivery Method:
- Courier
- Client
- UPS
- FedEx
- USPS
- Other: _____

Special Instructions/QC Requirements & Comments:

Sample Disposal:
- ☐ Return to Client
- ☐ Disposal by lab
- ☐ Archive for _____ days

MSS-F001-002

CHAIN-OF-CUSTODY RECORD

Maryland Spectral Services, Inc.
1500 Caton Center Drive, Suite G
Baltimore, MD 21227
410-247-7600 • Fax 410-247-7602
labman@mdspectral.com

Matrix Codes: NW (non-potable water) PW (potable water)

Company Name: AECOM

Project Manager: Scott Beatson

Project Name: Black and Decker

Project ID:

Sampler(s): Jenny Jones

P.O. Number:

Analysis Requested: VOCs (8260)

Field Sample ID	Date	Time	Water	Soil	Other	No. of Containers	VOCs (8260)	Preservative: 1+1 HCl, H_2SO_4, Methanol, $Na_2S_2O_3$, $NaHCO_3$	Field pH, Residual Chlorine, QC Request, Trip Blank, Field Blank	MSS Lab ID
Overflow A	9/29	1440	X			2	X	HCl		6092989-28
Overflow B	9/29	1500	X			2	X	HCl		29
Stormwater Pond	9/29	1450	X			2	X	HCl		30

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
(Printed) Jenny Jones	9-29-16 5:30p	(Printed) Cory Koons	(Printed)		(Printed)

Relinquished by: (Signature)	Date/Time	Received by Lab: (Signature)
(Printed)		(Printed)

Turn Around Time:
- ☐ Normal (7 day)
- ☐ 5 day
- ☑ 4 day
- ☐ 3 day
- ☐ Rush (2 day)
- ☐ Next Day
- ☐ Other: _____
- ☐ Specific Due Date: _____

Lab Use:
Temp: _____ °C
- ☐ Received on Ice
- ☐ Received same day
- ☐ Preservation Appropriate

Delivery Method:
- Courier
- Client
- UPS
- FedEx
- USPS
- Other: _____

Special Instructions/QC Requirements & Comments:

Sample Disposal:
- ☐ Return to Client
- ☐ Disposal by lab
- ☐ Archive for _____ days

MSS-F001-002

HAZARDOUS MATERIALS

EASTON/NEWNAM FIELD AIRPORT

Prepared by:
KB Environmental Sciences, Inc.

Prepared for:
AECOM

November 2016

Hazardous Materials, Solid Waste, and Pollution Prevention

This section identifies those sites and facilities on, or in the vicinity of the airport that are known, or have the potential, to involve hazardous materials, hazardous waste, environmental contamination and/or other regulated substances (collectively referred to as ñHaz. Mat.ò)[1,2], which could have an effect on the proposed improvement projects at ESN.

Hazardous Materials and Solid Waste Regulations

Federal legislation[3], enforced by the EPA, jointly regulates the release, handling and remediation of hazardous materials. At the state level, the MDE is primarily responsible for ensuring Federal hazardous materials regulations are enforced and upheld. State-level regulations[4], meant to both ensure proper enforcement of Federal regulations as well as to account for regionally specific problems, have been incorporated into the Administrative Code of Maryland.

The main Federal regulations by which solid waste is controlled are the Resource Conservation and Recovery Act (RCRA) Hazardous and Solid Waste Amendments (HSWA) of 1984 and the Solid Waste Disposal Act (SWDA) of 1965. As defined under the SWDA, solid waste includes any garbage, refuse or sludge from a waste treatment plant, water supply treatment plant or air pollution control facility, including that generated from industrial, commercial, agricultural and other land uses. Additionally, MDE enforces additional regulations[5] included in the Administrative Code of Maryland that assist with maintaining Federal requirements at the State level.

Assessment Methodology

The identification of sites or facilities that utilize or store hazardous and other regulated materials, as well as sites that are known or have the potential to contain environmental contamination on and near ESN was mostly derived from an electronic database search of agency records[6] pertaining to facilities and sites located within the vicinity of the proposed projects. This search area identifying the approximate airport center as well as a quarter mile, half mile, and full mile search radius buffer from the airportôs center are shown in **Figure 1**.

Information assessed during the environmental screening, including the environmental records search, included:

- Electronic Search of Regulatory Agency Records ï Sources of agency information comprised federal, state, tribal and local regulatory agency files, including those (i.) listed on the EPA National Priority List (NPL) (a.k.a. Superfund Sites), (ii.) registered users and generators of hazardous materials and wastes, (iii.) above- and underground-storage tanks (AST/UST), (iv.) and/or use and discharges of other regulated substances (EDR, 2016).
- Historical Aerial Photos ï A visual evaluation of current and historic aerial photography at the airport and its immediate vicinity was performed to help identify other facilities and sites with the potential to contain these materials and substances[7].
- Topographic Gradient ï The topographic gradient of the airport was examined using GeoCheck® to identify potential contamination dispersion through groundwater flow from any historic spills located at higher elevations than the proposed projects.
- General Knowledge ï Information known about hazardous wastes associated with general aviation (GA) airports in general, and ESN in particular, was also utilized to help characterize the types and locations of hazardous materials at general aviation (GA) airports.

---

[1] If a site or facility is identified in this assessment it does not necessarily mean that it involves hazardous materials hazardous waste, environmental contamination and/or other regulated substances. Rather it only means that the potential exists for these materials or substances to occur presently or historically. In some cases, individual and more detailed investigations may be needed to fully ascertain the actual, and extent of, involvement with hazardous materials or environmental contamination, should it exist.

[2] Deicing chemicals are not classifiable as hazardous materials under federal or state regulations.

[3] Such as the Resource Conservation and Recovery Act (RCRA), Comprehensive Environmental Response Compensation and Liability Act (CERCLA, or "Superfund"), the Clean Water Act (CWA) and other Federal regulations.

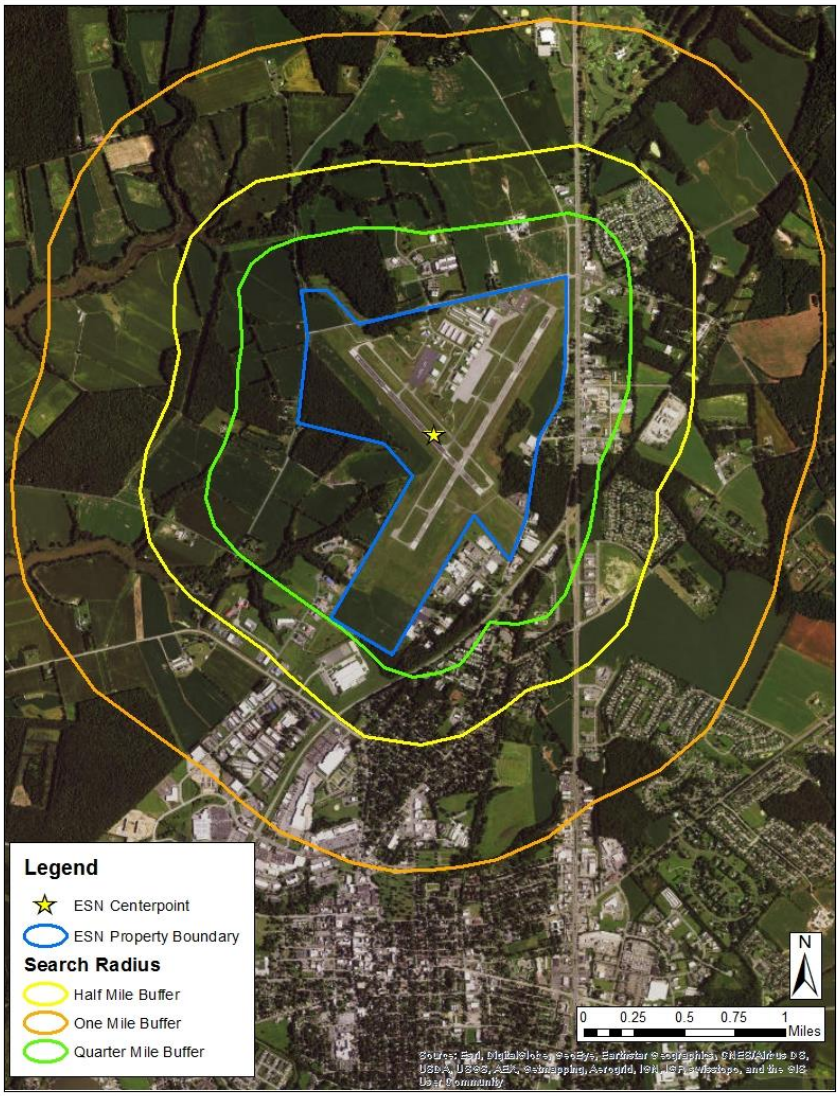
[4] Such as §26.10.01 - §26.10.15, §26.13.01 - §26.13.13, §26.14.01 - §26.14.02, and other State regulations.

[5] Such as §26.03.01 - §26.03.13 and §26.04.01 - §26.04.11.

[6] EDR, 2016. Records searched included, but were not limited to, the Federal National Priority List (NPL), Federal Superfund Liens and Delisted NPL, CERCLIS, CORRACTS, TSDF, RCRA, and Federal/State/Tribal leaking UST/AST.

[7] Historic aerial photographs of the airport and its general vicinity were obtained for the years 1960, 1970, 1981, 1989, 1990, 1995, 1998, 2005, 2007, 2009, and 2011.

Figure 1: Haz. Mat. Site Search Area



Assessment Results

Based upon the findings of this assessment, the utilization and storage of hazardous materials and other regulated substances at ESN are typical of most GA airports. These activities and facilities at ESN largely comprise the storage and transfer of aircraft fuels and other petroleum-based fuels. The materials and substances used at ESN that are classifiable as hazardous, regulated, or have the potential to cause environmental contamination are aircraft and other petroleum-based fuels. These fuels are contained in ASTs ranging in size from 500 to 30,000 gallons and are located on the north side of the airport. The fuel types stored include aviation jet fuel, aviation gasoline (AvGas), gasoline, diesel, and used oil.

On-airport sites include the six currently active ASTs containing the previously listed fuel types ranging from 500 to 30,000 gallons (Site No. 1); nine historic USTs containing gasoline and heating oil ranging from 550 gallons to 1,000 gallons (Site No. 2 and 3); and one active small quantity generator (RCRA-SQG[8]) with no violations (Site No. 4).

Adjoining (non-airport) land uses and types include residential, farm lands, commercial and industrial land uses. These non-airport sites included five active RCRA-SQGs, two active large quantity generators (RCRA-LQG[14]), three conditionally exempt small quantity generators (RCRA-CESQG[14]), five active USTs, 23 historic USTs, four active ASTs, two historic ASTs, eight cases involving a release and a cleanup, five cases involving a release but no cleanup, one case of soil contamination, two cases of groundwater (well) contamination, one case of hand bailing, one case of dumping, two sites with emergency releases to the soil (ERNS[9]), eight historic auto stations, two sites on the Leaking Underground Storage Tank (LUST[10]) List, one site which had several shipments of hazardous waste transported to a treatment, storage and disposal (TSD) facility, and two sites which are found in the UIC Database[11].

Importantly, the research did not identify any sites or facilities at ESN, or in its vicinity, which are on EPA's NPL. NPL sites are considered by EPA to have the most significant public health and environmental risks to neighboring areas. Moreover, there are no reported or currently-operated landfills; large-scale industrial/chemical facilities; or RCRA-permitted hazardous waste treatment, storage, and disposal facilities at the airport or nearby.

[8] Federal RCRA (Resource Conservation and Recovery Act) Generators List.

[9] Emergency Response Notification System. This is a database that is used to store information on notifications of oil discharges and hazardous substances releases.

[10] Recovered Government Archive Leaking Underground Storage Tank. The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists.

[11] Underground Injection Wells Database is a listing of underground injection well locations. The UIC Program is responsible for regulating the construction, operation, permitting, and closure of injection wells that place fluids underground for storage or disposal.

An evaluation of current and historic aerial photography of the airport and its general vicinity was also conducted to help identify other facilities and sites with the potential to contain these materials and substances. A review of these historical aerial photographs did not reveal any additional areas or facilities in the vicinity of the airport.

Figure 2: Potential Haz. Mat. Sites in the Vicinity of ESN

A review of the topographic gradient was performed using GeoCheck® to identify potential contamination dispersion through groundwater flow[12] from any historic spills located at higher elevations than the proposed project areas. The general topographic gradient of the area is generally west southwest. The elevation at ESN and in its vicinity ranges from the lowest to the west (reported at 14 feet) to the highest to the east (reported at 58 feet).

In addition to the sites identified in this report, an Environmental Due Diligence Audit (EDDA) was performed to the south of the airport property in connection with the former Black and Decker facility.[13] This report identified the Chesapeake Publishing Company (Site No. 12), as being listed on the Brownfield Master Inventory Report Archived Sites; and Easton utilities (Site No. 8) as having an NPL status of ñdeferred to RCRAò An evaluation conducted by the EPA determined that additional investigation and/or cleanup measures were not necessary. Additionally, a site visit completed for the EDDA at Black and Decker (Site No. 33) identified a 400-gallon concrete pit to collect excess oil as well as heat-treat ovens in a motor area with concrete catch pits for quench oil.

These sites and facilities reported upon in this assessment are shown in **Figure 2**. For ease of review, **Table 2-3** also contains a summary listing of these sites. This information includes the site number (Site No.), site name, and the distance and direction from ESNôs property boundary.

[12] A particular site's groundwater flow direction is best determined by a qualified environmental professional using site-specific well data.

[13] [13] AECOM, Draft Phase I Environmental Due Diligence Audit at Former Black And Decker Manufacturing Facility, Talbot County, Maryland, July 2016.

Table 2-3: Sites and Facilities Reported or with the Potential to Contain Hazardous Materials, Environmental Contamination, and/or Other Regulated Substances on or in the Vicinity of ESN[1,2]

Site No.	Name	Distance from Airport Boundary	Description of Findings
1	Easton Airport	On Airport Property	(6) Currently operated 500-30,000 gallon ASTs containing aviation gasoline, aviation jet fuel, gasoline, diesel, and used oil.
2	Easton Municipal Airport	On Airport Property	(4) Historic 500-550 gallon USTs containing heating oil or other substances (now removed or permanently out of use).
3	Easton Airport	On Airport Property	(5) Historic 550-1,000 gallon USTs containing gasoline, heating oil, and other substances (now removed/permanently out of use).
4	Maryland Natural Resources	On Airport Property	(1) RCRA-SQG (active) with no violations reported.
5	B/R Instrument Corp	160 ft. Southeast	(1) RCRA-CESQG (active) with no violations reported.
6	Christopher Lloyd	120 ft. East	(1) Case from 2003 - 2011 involving a release of residential heating oil from an AST with cleanup reported.
7	West & Callahan, Inc.	90 ft. East	(1) 550 gallon UST of gasoline (permanently out of use as of 2000).
8	Easton Utilities	320 ft. South	(1) Case from 2010 - 2011 involving well groundwater contamination from motor/lube oil with a cleanup reported. (1) Case from 2013 - 2015 involving a tank closure of motor/lube oil with both a release and a cleanup reported. (4) Currently active 275-1,000,000 gallon ASTs containing diesel, heating oil, and used oil. (2) Historic 6,000 gallon USTs containing lube oil (now removed/permanently out of use). This site is also found in the Emergency Release Notification System for two emergency releases to the soil. One incident occurred on July 22, 2010 from a 6,000 gallon UST/AST. A second emergency release to the soil/water of 1 gallon of oil/fuel occurred on August 11, 2000 due to equipment failure. Absorbents were applied, a shutdown was completed, and cleanup occurred. In addition, the EDDA report identified this site as having an NPL status of ñdeferred to RCRAò An evaluation conducted by the EPA determined that additional investigation and/or cleanup measures were not necessary.
9	Salisbury Pewter Inc.	750 ft. South	(1) RCRA-CESQG (active) with no violations reported.
10	Wolfes Mobile Repair Service	480 ft. Northeast	Historic Auto Station (2005).
11	Elliott Equipment Co.	480 ft. East	(1) Case from 1994 - 1997 involving a tank closure of motor/lube oil with a release documented, but cleanup is not reported. (3) Historic 500-10,000 gallon USTs containing heating oil, gasoline and diesel. (1) Currently active 1,000 gallon UST.
12	Chesapeake Publishing Corp. (Easton Printing Div.)	420 ft. South	This site is found in the Recovered Government Archive Leaking Underground Storage Tank (LUST) Database from 1996-1999, which indicated a case of hand bailing the monitoring wells for free product. This site is also in the Land Restoration Program Database for Groundwater Chlorination (archived 2008).

Site No.	Name	Distance from Airport Boundary	Description of Findings
			(1) Historic 10,000 gallon UST containing heating oil (removed). (1) RCRA-SQG (active) with no violations reported. (1) Case from 1995 - 2006 involving well groundwater contamination from commercial heating oil with both a release and cleanup reported. In addition, the EDDA identified this site as being listed on the Brownfield Master Inventory Report, Archived Sites, by County.
13	Robins Nest at Hilly	630 ft. East	(1) 1,000 gallon UST containing heating oil (permanently out of use).
14	Wilson, Elliot Trucks	350 ft. West	(1) RCRA-SQG (active) with no violations reported.
15	Whalen Co Inc., The	420 ft. South	(1) RCRA-CESQG (active) with no violations reported.
16	Tri County Gas Co	1,140 ft. East	Historic Auto Station (2001).
17	Faye Hughes Property	390 ft. East	(1) Case involving an AST from April 3, 2003 - December 8, 2010 with both a release and a cleanup reported.
18	Bates Trash Facility	350 ft. Northeast	(1) Case involving soil contamination from motor/lube oil on March 3, 2016 with no release and no cleanup reported.
19	Ceylon Auto Trader	480 ft. Northeast	Historic Auto Station (2003).
20	Norris Ford of Easton, LLC	420 ft. Northeast	This site is found in the UIC Database. However, the permit is expired. (1) RCRA-SQG (active) with no violations reported. (1) Case from 1998 - 2010 involving a tank closure of motor/lube oil with both a release and a cleanup reported. (2) 550-2,000 gallon USTs containing gasoline and heating oil (now permanently out of use/removed).
21	Easton Transmission	630 ft. North	Historic Auto Station (2009).
22	Fast Stop Food Store	400 ft. Northeast	(1) Case in 2012 with both a release and a cleanup reported. (2) Cases in 1993 involving well groundwater contamination from motor/lube oil with both a release and a cleanup reported. (1) Case that was cancelled in 2002 with a release reported but no cleanup reported. (1) Case involving hand bailing the monitoring wells for free product. (1) Leaking Underground Storage Tank - ARRA (1996-1999). (8) Historic 2,000-12,000 gallon USTs containing gasoline and kerosene (now permanently out of use/removed). (4) 6,000 gallon USTs containing gasohol and diesel (currently in use).
23	Sea Watch International	350 ft. South	(1) Historic 550 gallon UST containing gasoline (removed).
24	L-3 Unmanned Systems/BAI Aerosystems Inc./L-3 BAI Aero Systems	230 ft. South	(1) Case involving dumping from September 29, 2007 - October 18, 2007 with no release and no cleanup reported. In addition, several shipments of hazardous waste were transported to a TSD facility in 2008-2012.
25	Filter Networks	230 ft. South	(1) RCRA-LQG (active) with no violations reported.

Site No.	Name	Distance from Airport Boundary	Description of Findings
26	Easton Transmissions	630 ft. North	Historic Auto Station (2012).
27	Landry Cars & Automotives	620 ft. Northeast	Historic Auto Station (2010).
28	Beefeaters Bar-B-Que	530 ft. Northeast	(2) Cases from 1993 - 1997 involving a tank closure of motor/lube oil with a release reported, but a cleanup is not reported. (1) Historic 550 gallon UST containing gasoline (permanently out of use).
29	Harrison's Transmission & Auto	470 ft. Southwest	Historic Auto Station (2012)
30	Shirley Walker	720 ft. Northeast	(1) Cancelled case in 2003 involving well groundwater contamination with a release reported, but no cleanup reported.
31	Mullikins Auto Body	740 ft. East	(1) RCRA-CESQG (active) with no violations at a currently operating auto body shop. This site is found in the Historic Auto Station database, but is currently in use. (1) Case in 1998 with both a release and a cleanup reported. This site is also found in the UIC Database, but the permit is expired as of 2015.
32	Behrens Automotive	690 ft. Northeast	Historic Auto Station (2012).
33	Black & Decker	1,050 ft. Southwest	(1) Case from 1994 -1997 involving a tank closure of motor/lube oil with a release reported but no cleanup reported. (1) Case from 2003 - 2004 involving a well groundwater contamination from motor/lube oil with both a release and a cleanup reported. (3) Historic 800-1,000 gallon USTs containing heating oil, diesel and used oil (now permanently out of use). (1) RCRA-LQG (active) with no violations reported. In addition, a site visit completed for the EDDA identified a 400-gallon concrete pit to collect excess oil as well as heat-treat ovens in a motor area with concrete catch pits for quench oil.
34	Coca-Cola Distribution Facility	4,010 ft. Southwest	(2) Historic 10,000 gallon USTS containing gasoline and diesel (now permanently out of use).
35	Sotera Engineered Solutions	1,050 ft. Southwest	(1) RCRA-CESQG (active) with no violations reported.

Notes: ft. = feet; RCRA = Resource Conservation and Recovery Act; SQG = Small Quantity Generator; LQG = Large Quantity Generator; CESQG = Conditionally Exempt Small Quantity Generator; UST = Underground storage tank; AST = Above ground storage tank; and LUST = Leaking Underground Storage Tank.

(1) The listing of a site or facility in this table does not necessarily mean that a discharge of hazardous materials or other regulated substances has occurred and caused environmental contamination. Rather, these sites and facilities are identified here because they are either known, or have the potential, to contain these materials and substances. In some cases, individual and more detailed investigations may be needed to fully ascertain the actual, and extent of, involvement with hazardous materials or environmental contamination, should it exist.

(2) Fuels used at ESN are not classifiable as hazardous materials under Federal or state regulations. They are listed here because of their potential to cause environmental contamination.

Impacts
Several sites on, or in the vicinity of the airport were identified that are known, or have the potential, to involve hazardous materials, hazardous waste, environmental contamination and/or other regulated substances which could have an effect on the proposed improvements at ESN. **Figure 3** illustrates each of the potential Haz. Mat. sites in relation to the proposed improvement projects at ESN.

According to this assessment, Site No. 33 and 35 are within the vicinity of several proposed improvement projects, including the construction of a proposed airport service road, property acquisition for avigation easements, and obstruction removal. Site No 12 includes a case involving groundwater contamination, a case found in the historic leaking UST database for hand bailing a monitor well, a historic UST which has been removed, and is found in the Brownfield Master Inventory Report. This site is located on property acquirements for avigation easements and obstruction removal is proposed to occur. Additional sites that are within the vicinity of proposed improvement projects include Site Nos. 5, 22, 27, and 34. Based on these findings, appropriate precautions should be undertaken prior to and during the construction of the proposed improvements. These may include (but are not necessarily limited to) the testing of soils and/or groundwater and the notification of appropriate agencies should hazardous materials or environmental contamination be encountered.

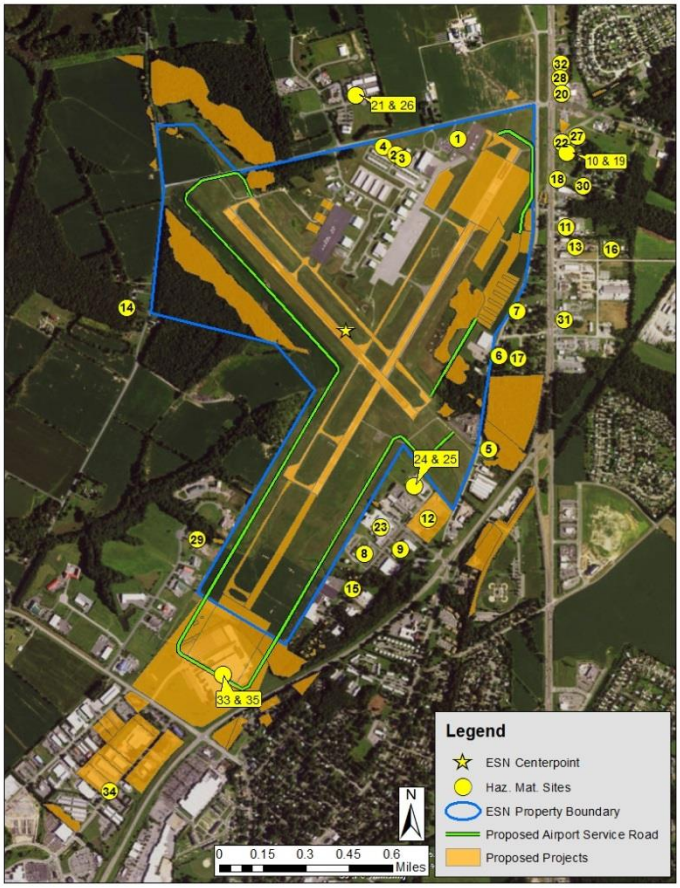


Figure 3: Potential Haz. Mat. Sites in Relation to Proposed Improvement Projects at ESN.

Use and Generation of Hazardous Materials
The proposed improvement projects are typical of GA airports of the approximate size and function of ESN. Therefore, the generation of hazardous materials is likely limited to solvents and their waste products. The facilities may also involve the storage of fuel and other petroleum products (e.g., oil, grease, lubricants) in relatively small quantities. During demolition activities asbestos-containing materials may also be encountered and will require proper handling and disposal.

Solid wastes will likely be confined to building demolition debris such as concrete, asphalt, wood, etc. These materials may be transported and disposed of in nearby landfills, repurposed or recycled to the extent feasible.

Pollution Prevention
The design and use of the proposed improvement projects will adhere to federal and state regulations as well as best practices pertaining to the use of hazardous materials, petroleum storage and waste disposal. This includes precautionary measures aimed at preventing and minimizing impacts to surface and ground waters, soil and air.

Solid Waste
The proposed improvements to ESN are not expected to change or increase solid wastes. These wastes include (but are not limited to) paper and cardboard, plastic and steel containers, wood, concrete and various white goods.

REVISED SUPPLEMENTAL SITE INVESTIGATION WORK PLAN
FOR THE FORMER BLACK AND DECKER FACILITY

EASTON / NEWNAM FIELD AIRPORT

EASTON, MARYLAND

PREPARED FOR: TALBOT COUNTY

PREPARED BY: AECOM
8000 VIRGINIA MANOR ROAD
SUITE 110
BELTSVILLE, MD 20705

MARCH 2018

REVISED SUPPLEMENTAL SITE INVESTIGATION WORK PLAN

FORMER BLACK AND DECKER FACILITY

28712 GLEBE ROAD

EASTON, MARYLAND

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Table 2: Groundwater and Surface Water Samples

Attachment

Attachment A: MDE Correspondence

1 Introduction

AECOM Technical Services, Inc. (AECOM) has prepared this Revised Supplemental Site Investigation Work Plan in accordance with the letter from the Maryland Department of the Environment (MDE) Voluntary Cleanup Program (VCP) dated July 14, 2017 and the MDE email correspondence received on October 13, 2017 (**Attachment A**). This scope of work will address the additional sampling requirements specified including:

- Incremental composite soil sampling from 11 decisional units,
- Stormwater ditch soil sampling,
- Sub-slab soil sampling near the trash compactor hydraulic lift,
- Polychlorinated biphenyl (PCB) soil sampling in the vicinity of the former transformers,
- Installation of monitoring wells cross and downgradient of the Site,
- Groundwater sampling,
- Surface water and sediment sampling from the stream that bisects the Site, and
- Sub-slab soil gas sampling.

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2 Site Background and Historical Use

The Site is located at 28712 Glebe Road, Easton, Talbot County, Maryland. The 58-acre parcel is located on the north side of Easton in the northwest quadrant of Glebe Road and Easton Parkway (MD 322), south of the Easton / Newnam Field Airport. The Maryland State Department of Assessments & Taxation (SDAT) website lists the Account Number for the Subject Property as District 01 - No. 002090; the property type is light manufacturing and the land use is light industrial. The primary structure includes a warehouse and finished office space. The warehouse is primarily used for vehicle (police and EMS), boat, and miscellaneous storage. The east portion of the warehouse has been fenced off and will be used by Whalen Company for light manufacturing beginning in April 2018. The main office building, located south of the warehouse, is currently utilized by Maverick Transport (trucking company), the Talbot County Sherriff's Office and several other County offices. The site layout is depicted in **Figure 1** and the new interior layout is provided as **Figure 2**.

According to the Phase I Environmental Due Diligence Audit (EDDA) prepared by AECOM in July 2016, the Site was undeveloped prior to 1975. The primary structure was constructed in 1975, and was utilized by Black and Decker for power-tool assembly and manufacturing from 1975 to 2003. Black and Decker's outdoor products (i.e. lawn mowers and lawn edgers), motors, nickel-cadmium battery powered household products, battery operated kitchen appliances, and electric and battery-powered tools were produced at this Facility (ERM, 2003). Injection molding, dip and power coating, and vapor degreasing with 1,1,1-trichloroethane (TCA) were all performed at the Site. In 1993, vapor-degreasing was replaced by aqueous parts washers. Black and Decker sold the Site to Easton Exchange LLC in June 2003. Sotera Engineered Solutions (Sotera) occupied the Site from approximately August 1, 2013 until August 2015. During that time, Sotera occupied the office and used the warehouse space for the fabrication of plastics and appliances/furniture. Upon exiting the Site, Sotera removed all components of their operation. The site is currently owned by Talbot County.

In July 2016, AECOM completed a Phase I EDDA for the Subject Property which revealed evidence that supports the potential for recognized environmental conditions (RECs) in connection with the Subject Property. In order to further investigate the RECs, AECOM completed a Phase II Site Investigation at the Subject Property between August 31, 2016 and September 2, 2016. The results and a summary of the identified RECs were presented in the *Phase II Environmental Site Investigation of the Former Black and Decker Facility* which was prepared by AECOM in October 2016. Based on the results, a supplemental investigation was completed during September 2016; the results were presented in the letter entitled *Supplemental Sampling Results – Addendum to the Phase II Environmental Site Investigation* dated October 24, 2016.

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3 Scope of Work

The purpose of this Revised Supplemental Phase II Investigation is to obtain adequate data to complete the VCP Application. The proposed scope of work is discussed in the sections below.

3.1 Incremental Soil Sampling

3.1.1 Composite Samples from the 11 Decisional Units

In response to the MDE correspondence and discussions with MDE, the Site has been divided into 11 decision-based units (DBUs). Each DBU will consist of up to ten soil sampling locations as shown on **Figure 3**. In three of the DBUs (6, 10 and 11) only six sample locations have been identified. Fewer samples will be collected from DBUs 6 and 10 due to the smaller size of the units. Composite samples will not be collected from the paved areas due to the use of polycyclic aromatic hydrocarbons (PAHs) in asphalt and parking lot sealcoat. The sampling area within DBU 11 will be limited to the warehouse portion of the on-site structure; samples will not be collected from the office space portion of the structure to avoid interior destruction and disruption to the current tenants.

Two incremental soil samples will be collected from each soil sampling location. The increments include a surface sample collected from 0 to 1 feet and a shallow subsurface sample collected from 4 to 5 feet. Several of the shallow subsurface samples, particularly those towards the eastern portion of the Site may be collected from 3 to 4 feet to avoid collecting samples from the highly organic rich peat-like layer observed in the previously collected borings at depths of 4 feet (eastern portion of Site) to 9 feet (western portion of Site). Within each DBU, an equal portion of each surface sample (measured by volume using a 4-ounce jar) will be composited (i.e. mixed together) and a sample representing the surface soil within that DBU will be collected. Samples representing the shallow subsurface soil within each DBU will be collected using the same procedure. A total of 22 composite samples will be collected which includes a composite surface sample and a composite subsurface sample collected from each of the 11 DBUs. The composited samples will be submitted to a Maryland-certified laboratory and analyzed for the parameters shown on **Table 1**.

The individual soil samples collected from each proposed location (i.e. non composited samples) will be submitted to the analytical laboratory and placed on hold pending the results of the composite samples. In the event that a DBU composite sample exceeds the MDE cleanup level, the individual soil samples collected from that DBU at that increment will be analyzed for further investigation. The individual soil samples will only be analyzed for the constituent that exceeded -the cleanup level.

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The analytical results will be compared to the MDE non-residential cleanup standards with the exception of arsenic which will be compared to the Anticipated Typical Concentration (ATC) for Eastern Maryland of 3.6 milligrams-per-kilogram (mg/kg) as specified in the MDE *Interim Final Guidance* dated June 2008.

3.1.2 Additional Soil Sampling

Soil samples will be collected at two locations along the observed open drainage ditch (SO-1 and SO-2) and two locations adjacent to the previously emptied transformers (SO-3 and SO-4) which were observed during the Phase I EDDA. Additionally, sub-slab soil samples (SS-1 and SS-2) will be collected from below the slab-grade in the vicinity of the trash compactor in the loading dock area on the north side of the warehouse structure. The samples collected from the loading dock will be used to check for potential release(s) from the trash compactor hydraulic lift.

At each location (**Figure 4**), a surface sample will be collected from 0 to 1 feet and a shallow subsurface sample will be collected from 4 to 5 feet. As previously noted, sample collection from the organic rich peat-like layer will be avoided. All samples will be stored on ice (at 4°C), packed in coolers, and shipped under chain of custody for laboratory analysis. Samples will be shipped to a Maryland-certified laboratory and analyzed for the parameters specified in **Table 1**.

3.2 Groundwater Investigation

3.2.1 Previously Installed Monitoring Wells

There are six existing monitoring wells at the site; however, only two of the previously installed wells (MW-2 and MW-6) could be located during the recently completed Phase I EDDA and Phase II Assessment. The existing wells were installed during April 2003 as part of a previous Phase II investigation completed by Weston Solutions, Inc. The wells were surveyed for top of casing (TOC) and gauged prior to the sampling event conducted on April 25, 2003. The depth to water (DTW) and groundwater elevation data provided in the Phase II assessment dated May 15, 2003 is provided in the table below along with well completion information obtained from MDE records. A groundwater contour map using the data collected on April 25, 2003, provided as **Figure 5**, indicates that the general groundwater flow direction is towards the west.

Well ID	Date Installed	Well Permit Number	Total Depth (ft bgs)	Screen Length (ft bgs)	Elevation (ft msl)	DTW (feet below TOC)	Groundwater Elevation (ft msl)
MW-1	4/23/2003	TA942218	20	15 to 20	23.92	5.05	18.87
MW-2	4/23/2003	TA942219	20	15 to 20	--	6.85	--
MW-3	4/23/2003	TA942220	20	15 to 20	25.92	9.35	16.57
MW-4	4/23/2003	TA942222	20	15 to 20	25.73	11.06	14.67
MW-5	4/23/2003	TA942222	20	15 to 20	24.14	7.96	16.18

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Well ID	Date Installed	Well Permit Number	Total Depth (ft bgs)	Screen Length (ft bgs)	Elevation (ft msl)	DTW (feet below TOC)	Groundwater Elevation (ft msl)
MW-6	4/23/2003	TA942223	20	15 to 20	21.50	4.65	16.85

Note: Groundwater elevation data was collected by Weston Solutions, Inc. prior to sample collection on April 25, 2003.
ft bgs = feet below ground surface
ft msl = feet above mean sea level
DTW = Depth to water
TOC = Top of Casing
-- = Not Surveyed

3.2.2 Proposed Monitoring Wells

The installation of eight monitoring wells is proposed in order to further evaluate the water quality concerns identified in the Phase II investigation submitted during October 2016. The proposed well locations are identified on **Figure 6**. Prior to monitoring well installation, soil cores will be collected at 5-foot intervals from each proposed location. The soil cores will be logged for lithology and field screened for volatile organic compounds (VOCs) using a photo-ionization detector (PID) using a 10.7 eV lamp and with a second PID using an 11.7 eV lamp. The monitoring wells will be installed using a drill rig equipped with hollow-stem augers (HSA). The monitoring wells will be constructed using two-inch diameter Schedule 40 polyvinyl chloride (PVC) well casing and slotted PVC well screen. Clean sand filter pack (morie #2) will be installed in the annular space between the borehole and the well screen/casing from the bottom of the boring to approximately one foot above the screened interval. Following installation, the wells will be developed using a surge block and submersible pump. In order to better define the groundwater contour gradient at the Site, the new and pre-existing monitoring wells will be surveyed to an accuracy of 0.01 feet by a Maryland licensed surveyor.

Proposed wells MW-7, MW-8A, MW-8B, MW-9, MW-10, MW-11, MW-12 and MW-13 are located either downgradient or cross-gradient of the manufacturing warehouse. With the exception of monitoring well MW-8B, all proposed wells will be installed to an approximate depth of 18-20 feet below ground surface (bgs), and will be screened approximately 5 feet above and 10 feet below the groundwater table in order to evaluate groundwater quality. Groundwater was observed at approximately 8-10 ft bgs in the majority of borings installed during the 2016 Phase II investigation. Proposed wells MW-7, MW-8A and MW-9 to MW-13 will be used to evaluate VOCs, total petroleum hydrocarbons – gasoline range organics/diesel range organics (TPH-GRO/DRO) and dissolved metals in the groundwater.

Proposed well MW-8B (co-located with well MW-8A) will be installed directly downgradient of soil boring SB-13. As presented in the Phase II investigation report dated October 2016, the groundwater sample collected from SB-13 exhibited concentrations of chlorinated solvents exceeding MDE standards; therefore, the proposed well MW-8B will be screened to target chlorinated solvents. The majority of the borings installed during the 2016 Phase II

investigation indicated refusal using direct push technology (DPT) at approximately 21 ft bgs to 24 ft bgs. The suspected cause of refusal is the presence of a clay unit observed at approximately 20 ft bgs in several of the soil borings installed on the Site. In order to target the shallow groundwater present above this clay unit, 5-foot cores will be collected from proposed well location MW-8B prior to well installation in order to determine the depth to the top of the clay unit. The monitoring well will then be installed to the top of the clay unit and the bottom five feet of the well will be screened. The remainder of the well will be cased to the ground surface.

3.2.3 Groundwater Sampling Procedures

Groundwater samples will be collected from the eight new and two pre-existing wells a minimum of seven days following installation and development of the new monitoring wells. The samples will be collected using low-flow methodologies which are intended to minimize disturbance of the groundwater system during sampling to obtain a more representative sample, as required by the VCP. Field parameter data, in addition to establishing the completion of purging, are important as they provide direct data that helps understand the geochemical conditions and potential mobility of the metals. Therefore, it is important that appropriate sampling procedures be used for groundwater sampling to obtain high-quality, useable data.

Site-specific procedures are provided below:

- Each well will be gauged prior to sample collection.
- The pump intake will be set in the middle of the water column or center of the screened interval if water extends above the top of the screen. The depth of the intake will be recorded on the field sampling sheets.
- The pumping rate during purging will be approximately 100 to 400 milliliters-per-minute (ml/min), with the goal of maintaining a stabilized drawdown of less than 0.2 feet. If this small stabilized drawdown cannot be maintained at low pumping rates, the following are alternate targets, in order of preference:
    - Stabilized drawdown less than 0.2 feet (ideally),
    - Stabilized drawdown that doesn't drop the water level below the top of the screen,
    - Stabilized drawdown within the screened interval, and
    - If the well is pumping dry even at very low pumping rates, allow the well to go dry and collect the sample once sufficient water has recharged the well, a minimum of one hour later.
- The discharge from the pump will be directed to a flow-through cell where field parameters will be measured. All field instruments will be calibrated following manufacturer's instructions on a daily basis prior to sampling.

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- Purging will be considered complete when pH, specific conductance, oxidation-reduction potential (ORP), and dissolved oxygen (DO) stabilize to the ranges specified in the United States Environmental Protection Agency (USEPA) Standard Procedures, and when turbidity drops below 5 nephlometric turbidity unit (NTU). If the water is silty, it may not be possible to achieve this turbidity level. In this case, purging will continue until turbidity is stabilized.
- Appropriate sample containers will be filled directly from the pump discharge. The pumping rate used during purging will not be changed, but the flow-through cell will be disconnected.

The samples collected for metals will be field filtered with a 0.45 micron inline filter and will be submitted for the analysis of dissolved metals. All samples will be stored on ice (at 4°C), packed in coolers, and shipped under chain of custody for laboratory analysis. Samples will be shipped or couriered overnight to a licensed Maryland-certified laboratory and analyzed for the parameters specified in **Table 2**. Decontamination of sampling equipment will follow project procedures. Tubing used for sampling will be dedicated to a particular well and discarded after use.

3.3 Surface Water and Sediment Investigation

3.3.1 Surface Water Sampling

Surface water samples will be collected at up to seven locations (SW-1, SW-2, SW-3, SW-4, SW-5, SW-6 and SW-7) within the on-site stream that bisects the property; proposed locations are displayed on **Figure 7**. Samples are to be collected first from the most downstream location and working upstream towards the property boundary to minimize the potential for cross-contamination via downstream transport of disturbed sediment. Prior to sample collection, a water quality meter (YSI or similar) will be deployed to collect field parameters including pH, specific conductance, temperature, dissolved oxygen (DO) and turbidity. The total water depth will also be recorded on the field sampling sheet. Unpreserved sample containers can be filled directly with the flowing or standing water. The container is lowered to the sampling depth and opened below the water surface. To fill sample containers already containing preservatives provided by the laboratory, surface water is collected in clean 250-mL sample bottles and transferred into the sample container. Samples should be collected from the middle of the water column at the mid-depth section or deepest flow channel of the stream. Debris and other objects (sticks, leaves) that may be flowing with the water should not be included in the samples. Surface water samples will not be collected if there is a lack of flow or clear drainage pattern.

The samples collected for metals will be field filtered and submitted for the analysis of dissolved metals. All samples will be stored on ice (at 4°C), packed in coolers, and shipped under chain of custody for laboratory analysis. Samples will be shipped to a Maryland-certified laboratory and analyzed for the analytes listed in **Table 2**.

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3.3.2 Sediment Sampling

The investigation will also include sediment sampling in the on-site stream from four of the seven proposed surface water sample locations (SD-1, SD-3, SD-5 and SD-7) which are displayed on **Figure 7**. Sediment samples will be collected following surface water sample collection. Surface sediment samples will be collected using a grab sampler such as a petite ponar, Ekman, or Ted Young dredge, at a depth of 0 to 6 in. Grab samples will be evaluated for acceptability according to USEPA's *Methods for Collection, Storage and Manipulation of Sediments for Chemical and Toxicological Analyses Technical Manual*. The water depth and the depth of sampler descent will also be recorded for each sample collected. In the event that the stream channel is dry, samples will be collected using a hand auger or trowel from the top 0 to 6 inches; the samples will be identified as 'soil' on the chain of custody. Samples will be collected from depositional areas, when possible. The sediment will be characterized by color, texture (field-determined grain size), composition, stratigraphy, and odor. Sediment will then be transferred to a non-metal container and homogenized. The homogenized sample will be representative of the full 0 to 6 inch horizon at each sampling location. Any large stones or other debris (e.g., sticks) should be removed from the sample. Standing water will be removed from the sampling device via siphoning, not decanting, to reduce the loss of fine material. Homogenized sediment will be transferred to the appropriate sample containers for each suite of analyses. Sediment sampling equipment such as bowls, spoons, and dredges will be decontaminated prior to and following sample collection. If the stream bed is dry during the sampling event, soil samples will be collected from 0 to 1 foot with at each of the proposed sediment sample locations. All samples will be stored on ice (at 4°C), packed in coolers, and shipped under chain of custody for laboratory analysis. Samples will be shipped to a Maryland-certified laboratory and analyzed for the list of parameters in **Table 1**.

3.3.1 Sub-Slab Soil Gas Sampling

Sub-slab soil gas sample collection is proposed at four locations inside the on-site structure as displayed on **Figure 8**. The primary goal of sub-slab soil gas sampling is to assess the threat of vapor intrusion into the ambient air space of the on-site structure through the foundation slab.

The sub-slab gas sample will be collected from a vapor point using a 6-Liter Summa™ canister fitted with a flow orifice pre-calibrated to collect a 6-Liter sample over an 8-hour period. Once the 8-hour sampling period has been completed, the canister will be boxed and shipped to a Maryland-certified laboratory for analysis of VOCs via Method TO-15. A brief summary of the sampling protocol is provided below.

The sub-slab vapor points will be installed by first advancing a small diameter hole (approximately 3/8-inches in diameter) through the floor slab to determine thickness followed by a 1-inch hole several inches deep. The holes will be drilled via hammer drill or concrete core and will extend through the slab. The bottom of the sub-slab vapor point will extend approximately 1 foot below the bottom of the slab.

A sample point consisting of a stainless length of tubing fitted with compression fittings and will be placed into the boring. The cored slab annulus will be filled with bentonite or quick-setting cement placed around the stainless steel sub-slab vapor point.

Prior to sub-slab soil gas sample collection, the monitoring point and above grade tubing will be purged three volumes of air in the open space of tubing and the sample point prior to sample. Helium will be used as a field tracer during sampling. At the start of the sampling event, a pressure gauge reading will be performed and values will be recorded. Sampling will continue until a complete 8-hour sample has been collected. At the end of the sampling event, a pressure gauge reading will be recorded.

The 6-Liter canister with a calibrated 8-hour orifice will be connected to the stainless steel vapor point via nylon tubing (collecting with a calibrated orifice will ensure the flow rate is not greater than 200 mL/min, which is the flow threshold above which VOC stripping from soil may occur). The holes in the slab will be plugged immediately following sample collection with non-VOC pliable caulk or equivalent.

3.4 Quality Control Sampling

The field Quality Assurance/Quality Control (QA/QC) program will be accomplished through the collection of blind field duplicates, equipment blanks, trip blanks and matrix spiked sample analyses. The analytical QA/QC program will be assessed through the internal laboratory QC performed, including method blanks, calibrations, laboratory control sample (LCS) recoveries, surrogate and internal standard recoveries, laboratory duplicates, and MS/MSD recoveries as applicable to the analytical method.

Blind field duplicates, equipment blanks and matrix spikes will be collected at a frequency of 1 per 20 field samples for soil, surface water and groundwater. Equipment blanks will not be collected when dedicated sampling equipment is used (e.g., peristaltic pump with dedicated tubing). One trip blank will be provided per cooler containing VOC samples, which will be analyzed for VOCs only.

The primary data quality indicators (DQIs) are precision, accuracy, representativeness, completeness, comparability, and sensitivity (sometimes referred to as PARCCS criteria). Evaluation of DQIs provides the mechanism for on-going control and evaluation of data quality throughout the project and ultimately will be used to define the data quality achieved for the various measurement parameters. Data validation will be completed by assessing the project data sets with regard to the PARCCS parameters described above. The Data Quality Assessment Report will be used to describe and document observed data limitations based on the qualitative and quantitative performance criteria. Based on the data quality assessment results, data that do not meet performance criteria will be flagged with qualifiers and potentially be rejected or be limited in use for Site decision making.

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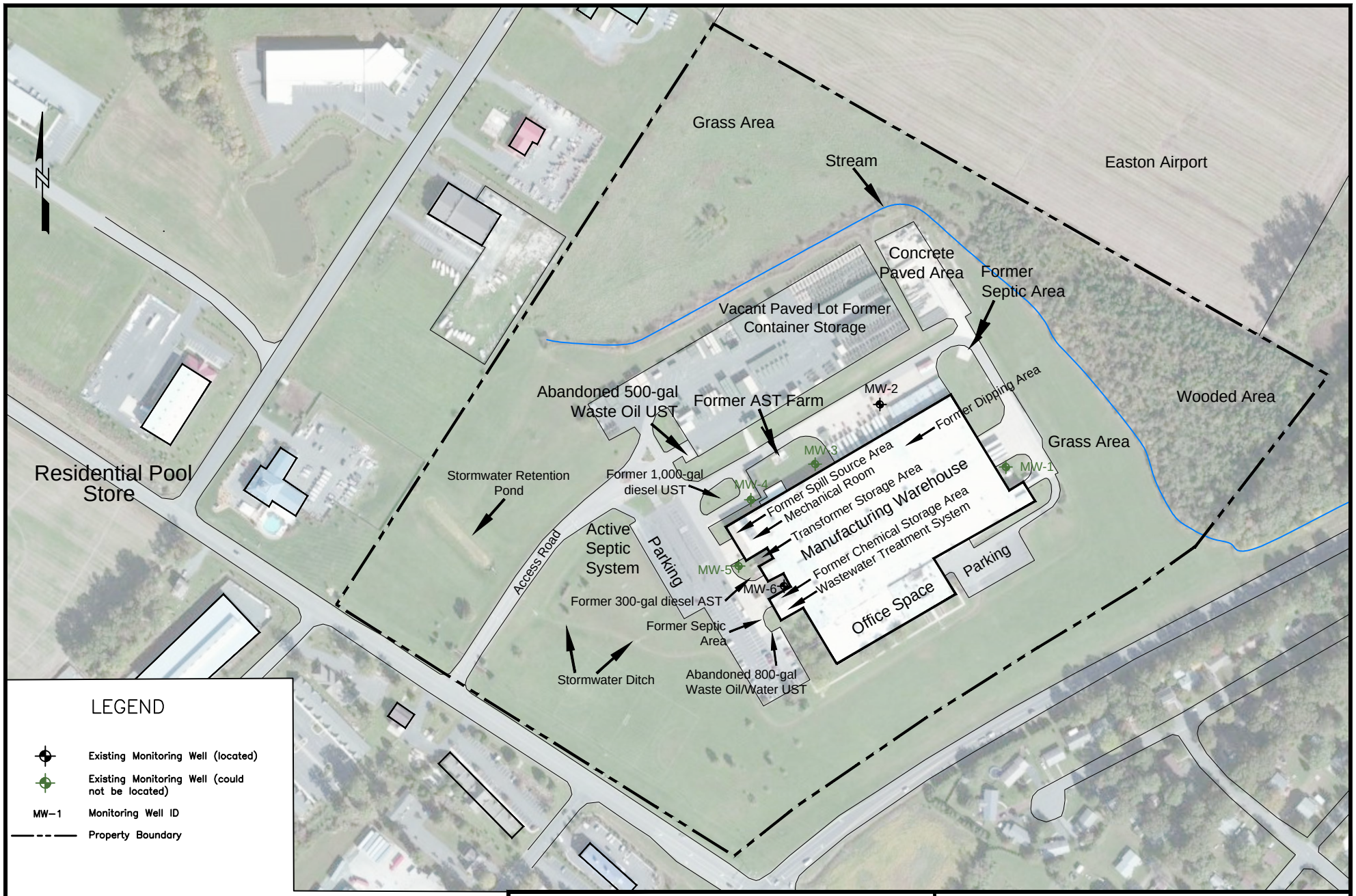
3.5 Investigation derived waste

Investigation derived waste (IDW) will be generated by hand auguring, drilling and sampling activities. Soil generated during the incremental soil sampling will be returned to the boring hole. Solid IDW generated from drilling (i.e., cuttings, left over grout mixtures, etc.) and aqueous IDW generated from monitoring well development and sampling will be stored in properly labeled, Department of Transportation (DOT) approved 55-gallon drums. The IDW will be properly disposed of at an off-site certified disposal facility following completion of the supplemental investigation.

4 Reporting

The Supplemental Site Investigation Report will be prepared following completion of field activities and receipt of the analytical data. The report will include a current groundwater contour map, figures displaying sample locations, analytical results presented in tabular format compared to applicable standards, the laboratory analytical reports and a discussion of the nature and extent of contamination.

Figures



LEGEND

- Existing Monitoring Well (located)
- Existing Monitoring Well (could not be located)
- MW-1 Monitoring Well ID
- Property Boundary

AECOM

125 0 250

1"=250'

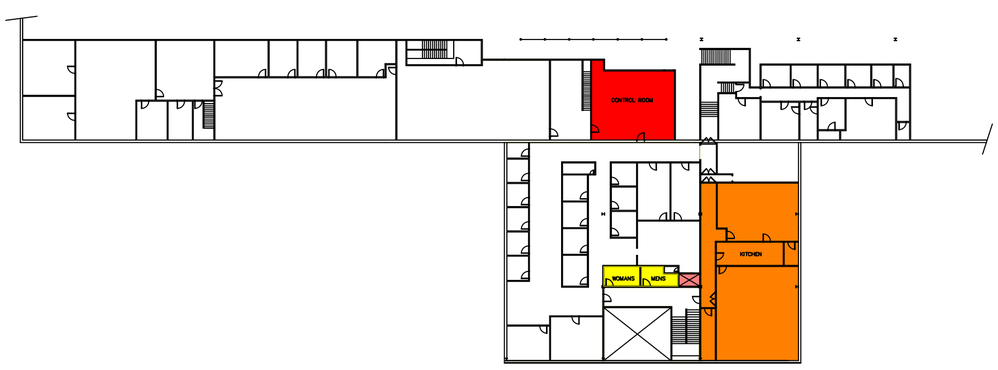
Black and Decker (U.S.) Inc. – Subject Property
28712 Glebe Road, Easton, MD 21601

Project No. 60514611

Site Plan

DATE: 2/21/2018	DRWN: SD	REV: JC	**FIGURE 1**

FIRST FLOOR



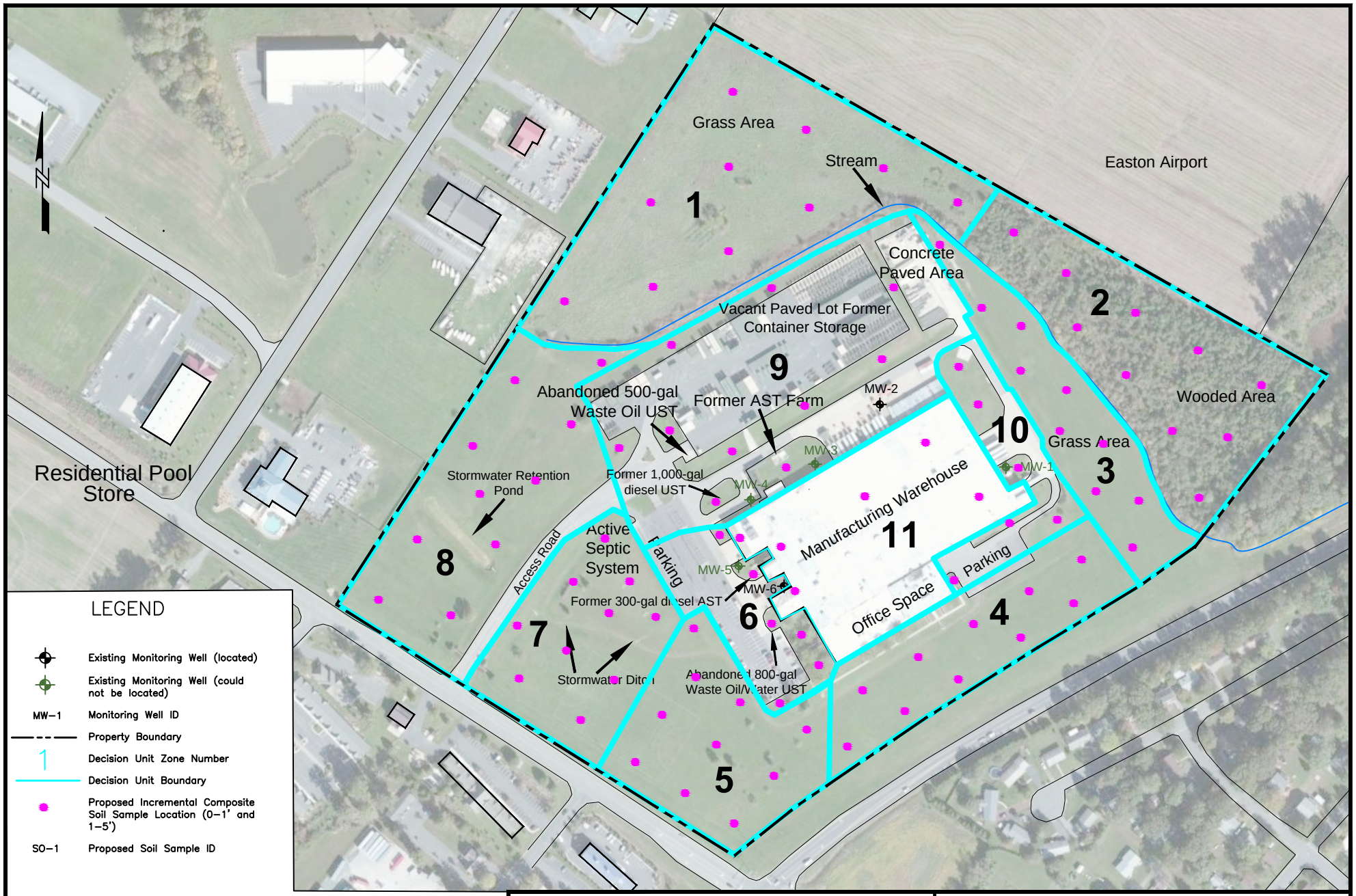
SECOND FLOOR

0 20 40 80

- Avalon Foundation
- Boat Builder Storage
- Common
- Easton Utilities
- Election Board
- Elevator
- EMS
- Facilities
- Global Vision 2020
- George Tarr
- Health Department
- Maverick Transportation
- Mechanical / Computer
- Real Estate Staging Co.
- Rest Rooms
- Sheriff's Office
- Mid-Shore Community Foundation
- Tourism
- Whalen

Figure 2
Talbot County Business Center Space Allocation

Revised December 20, 2017



AECOM

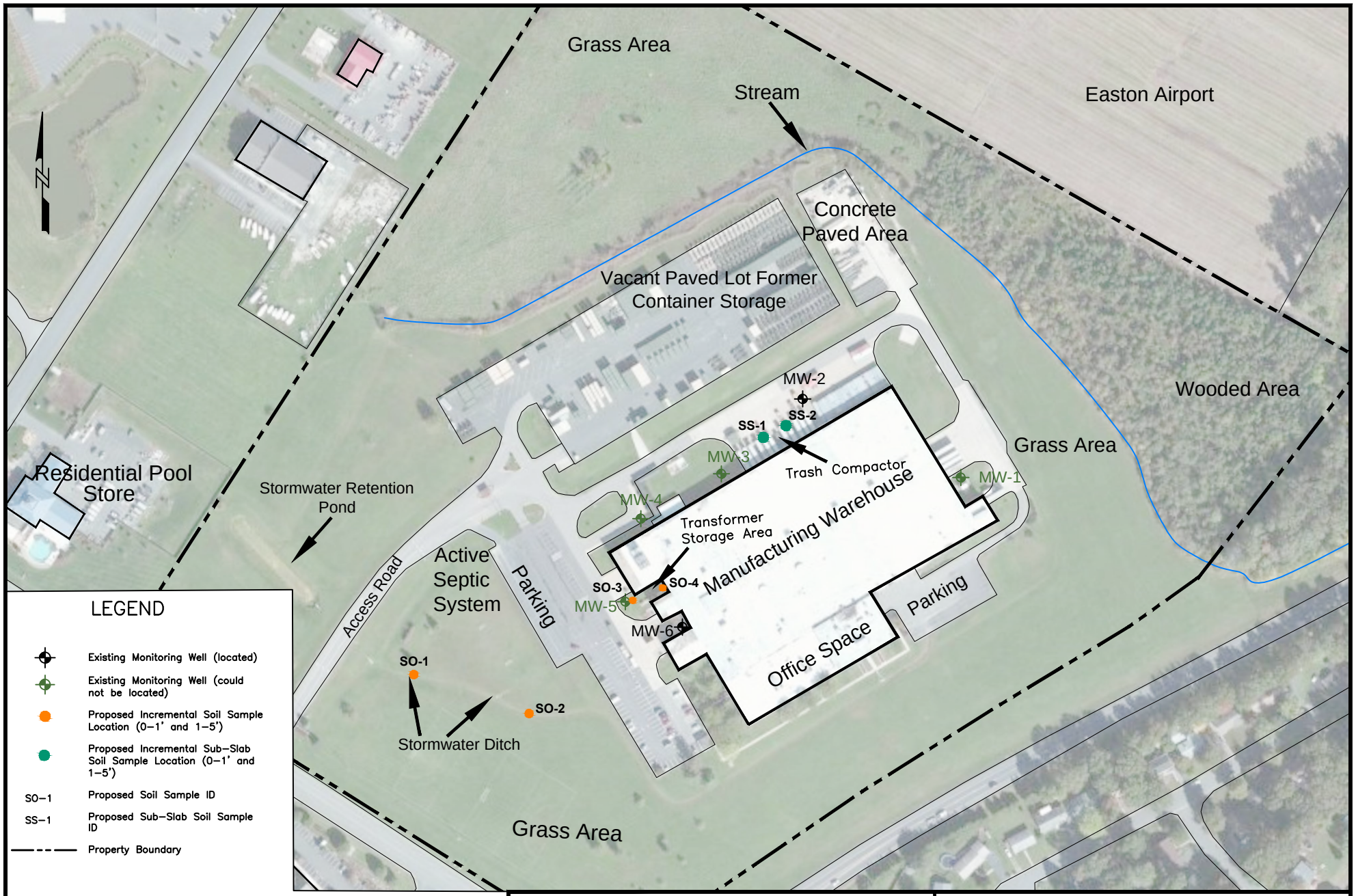
Black and Decker (U.S.) Inc. – Subject Property
28712 Glebe Road, Easton, MD 21601

Project No. 60563642

DATE: 2/21/2018 | DRWN: SD | REV: JC

Proposed Incremental Composite Soil Sample Locations

FIGURE 3



AECOM

125 0 250

1"=250'

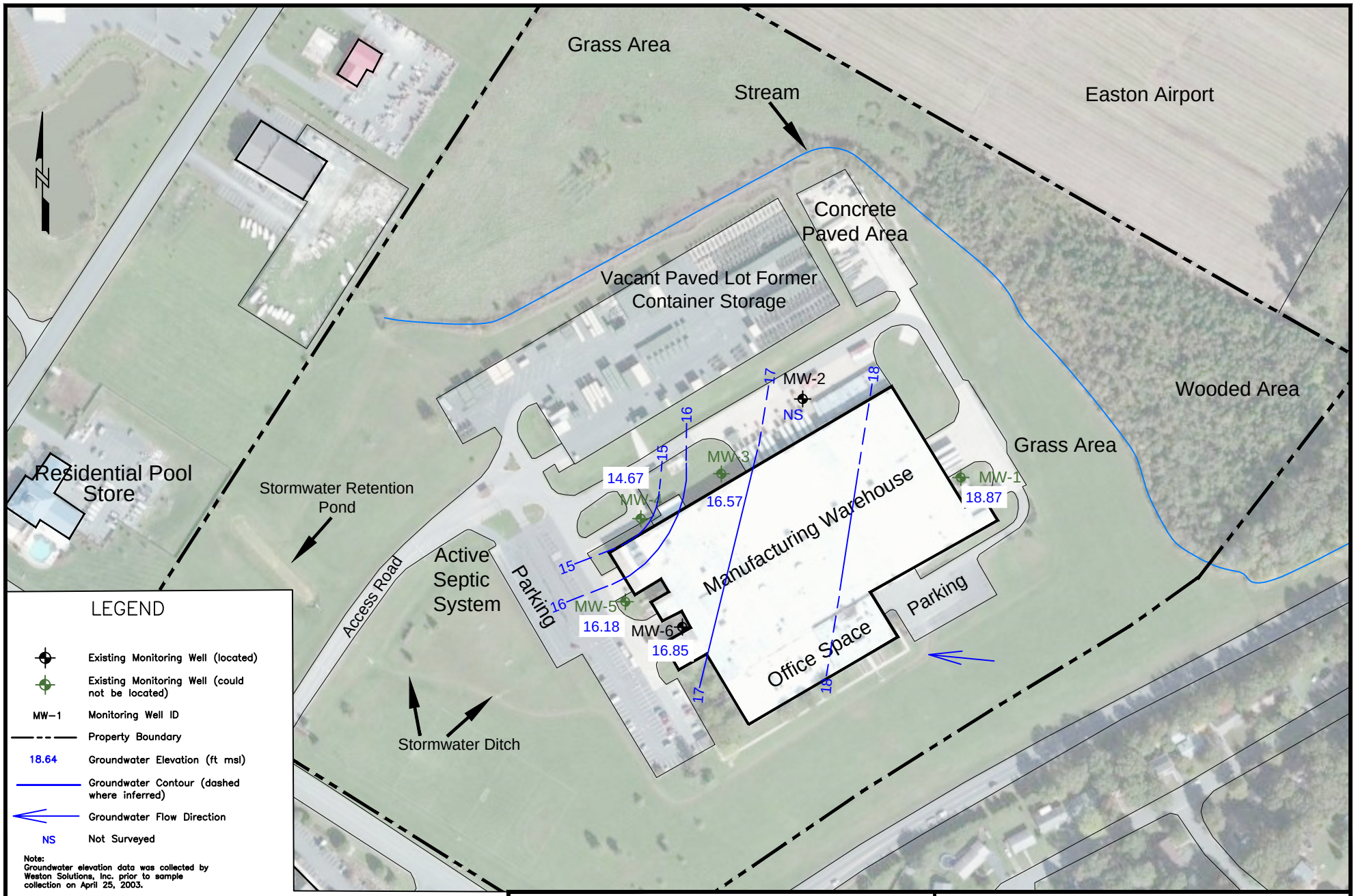
Black and Decker (U.S.) Inc. – Subject Property
28712 Glebe Road, Easton, MD 21601

Project No. 60563642

DATE: 2/21/2018 | DRWN: SD | REV: JC

Proposed Additional Soil Sample Locations

FIGURE 4



LEGEND

- Existing Monitoring Well (located)
- Existing Monitoring Well (could not be located)
- MW–1 Monitoring Well ID
- Property Boundary
- 18.64 Groundwater Elevation (ft msl)
- Groundwater Contour (dashed where inferred)
- Groundwater Flow Direction
- NS Not Surveyed

Note:
Groundwater elevation data was collected by Weston Solutions, Inc. prior to sample collection on April 25, 2003.

AECOM

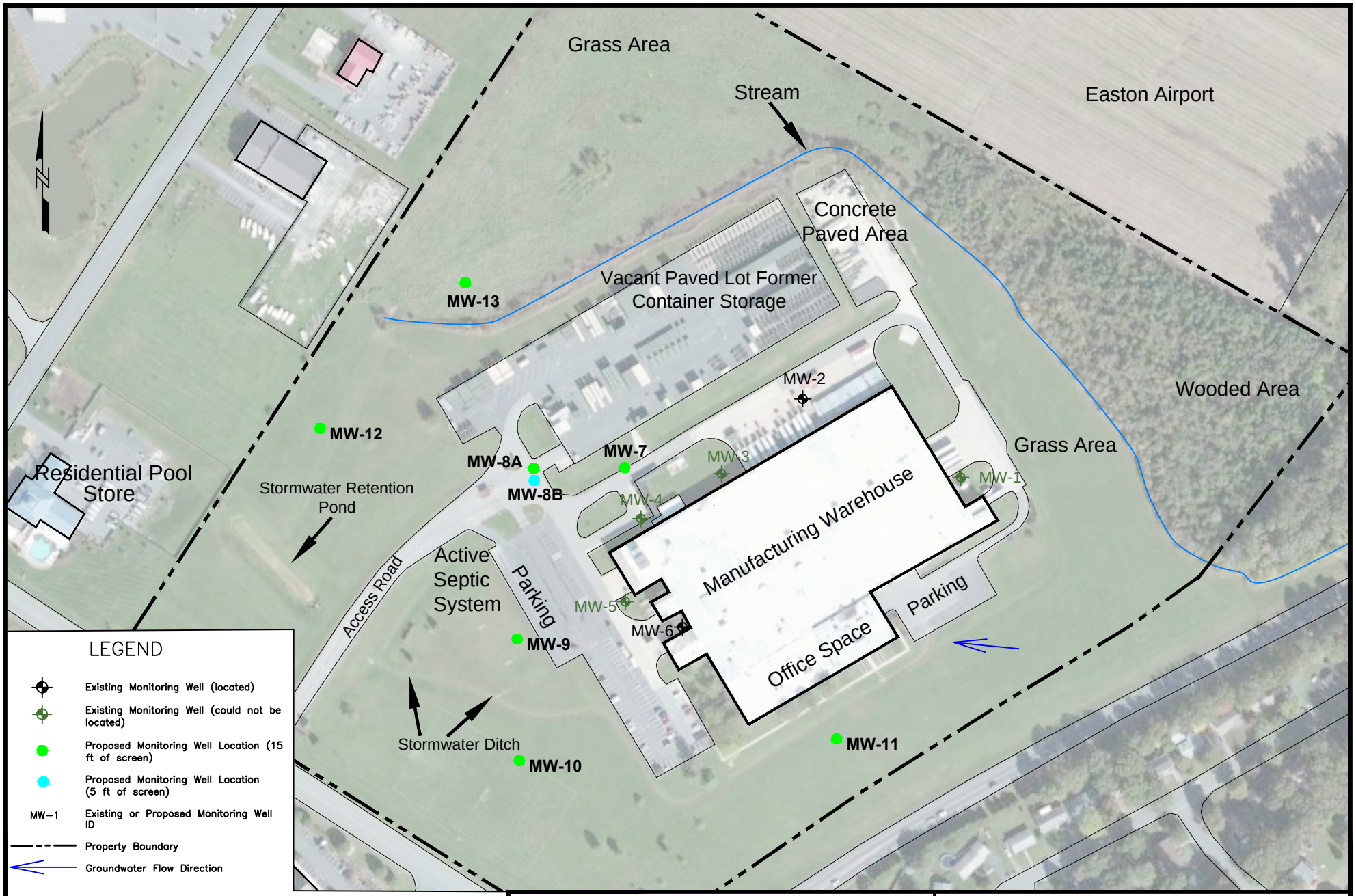
125 0 250
1"=250'

Black and Decker (U.S.) Inc. – Subject Property
28712 Glebe Road, Easton, MD 21601
Project No. 60563642

Groundwater Contour Map
April 25, 2003

DATE: 2/21/2018 | DRWN: SD | REV: JC

FIGURE 5



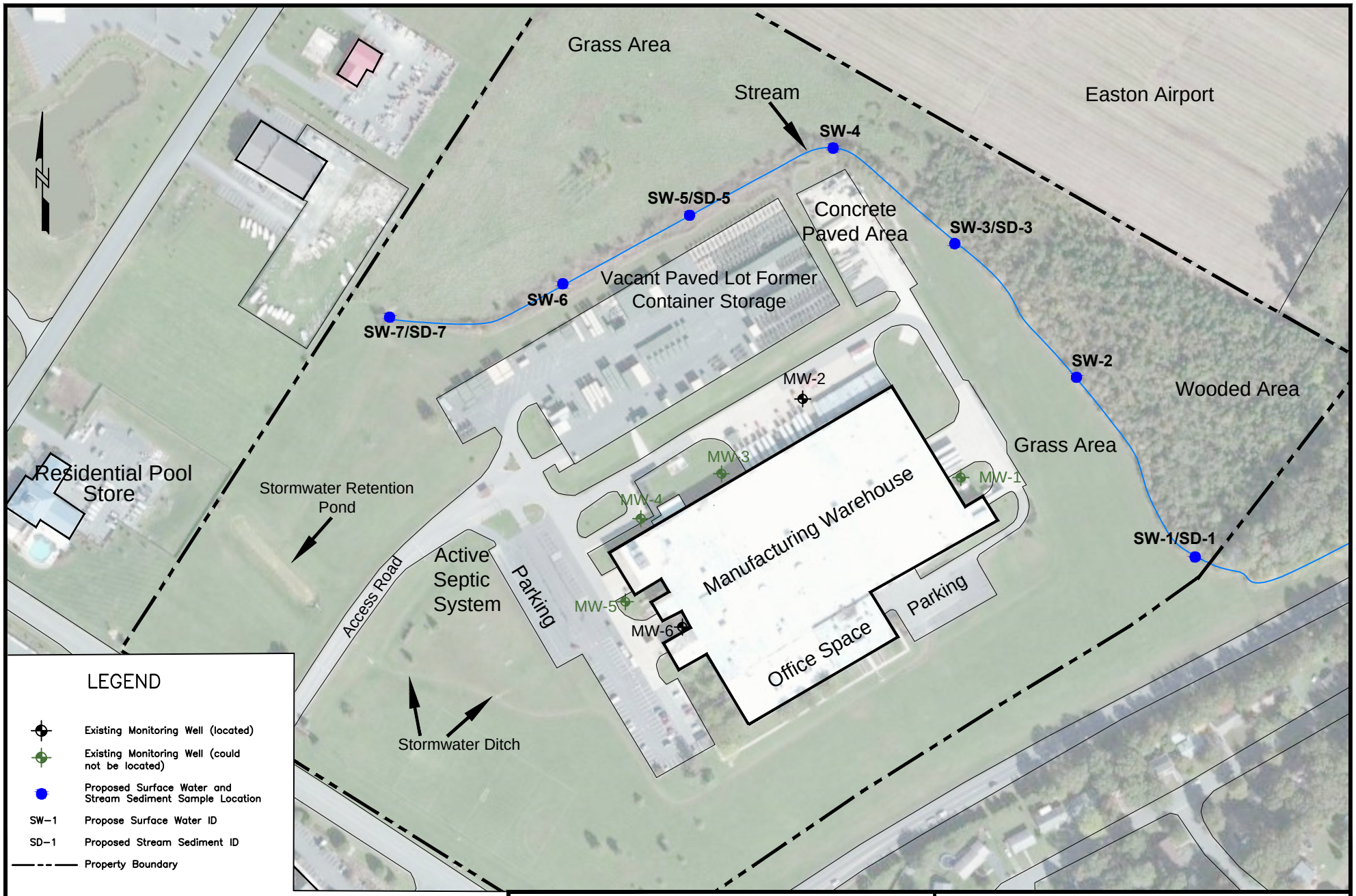
AECOM

Black and Decker (U.S.) Inc. – Subject Property
28712 Glebe Road, Easton, MD 21601

Project No. 60563642

Proposed Monitoring Well Locations

DATE: 2/21/2018	DRWN: SD	REV: JC	**FIGURE 6**



AECOM

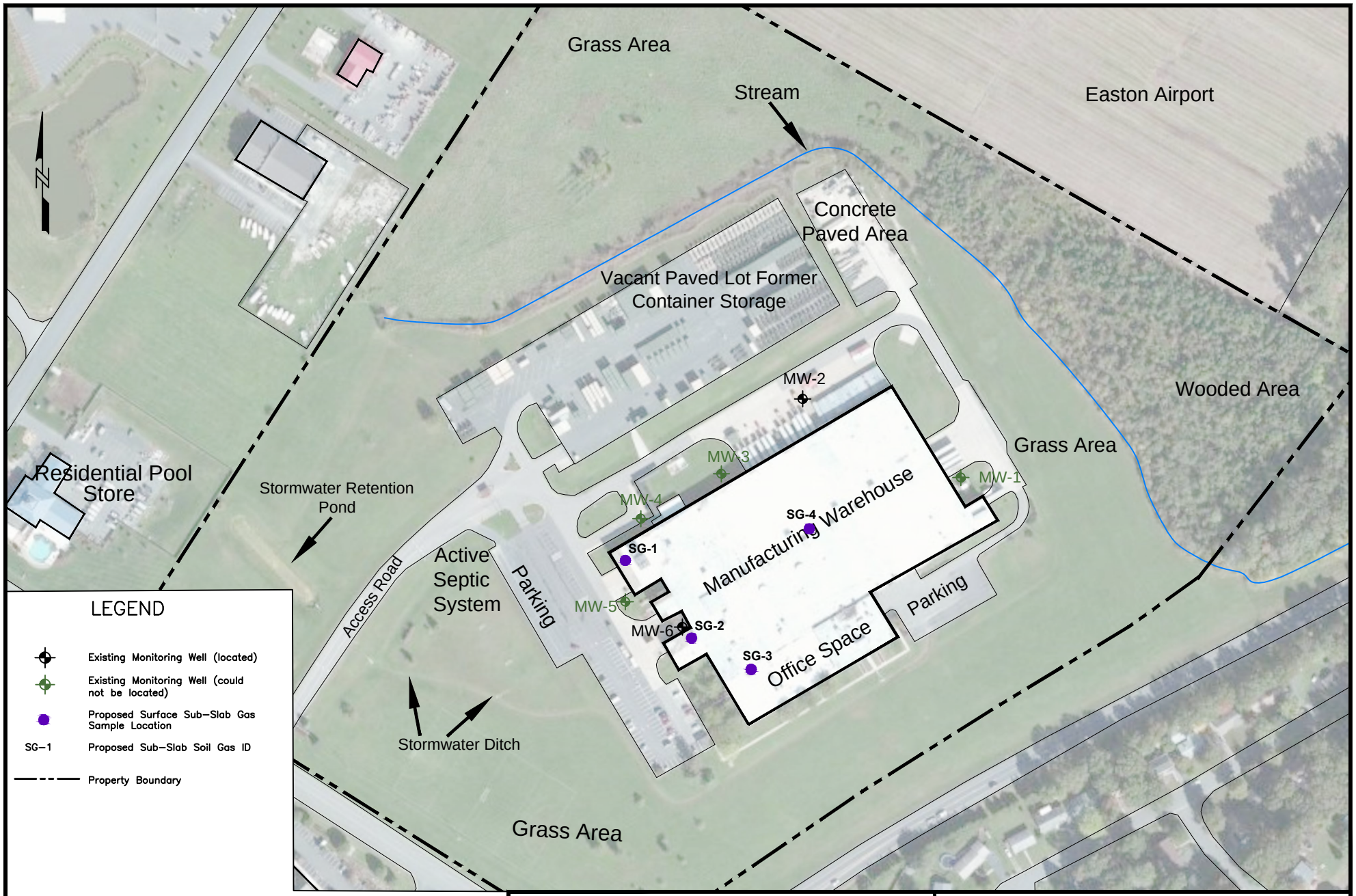
Black and Decker (U.S.) Inc. – Subject Property
28712 Glebe Road, Easton, MD 21601

Project No. 60563642

DATE: 2/22/2018 | DRWN: SD | REV: JC

Proposed Surface Water and Sediment Sample Locations

FIGURE 7



AECOM

125 0 250

1"=250'

Black and Decker (U.S.) Inc. – Subject Property
28712 Glebe Road, Easton, MD 21601

Project No. 60563642

DATE: 2/22/2018 | DRWN: SD | REV: JC

Proposed Sub-Slab Soil Gas Sample Locations

FIGURE 8

Tables

Table 1
Soil and Sediment Samples
Former Black & Decker Facility
28712 Glebe Road
Easton, Maryland

Sediment/ Soil Sample ID	Sample Interval(s)	Total Metals[1] EPA 6010/ 7471	Full-Suite VOCs EPA 8260	TPH-GRO/DRO EPA 8015	PAHs EPA 8270	PCBs EPA 8082
Decision Unit Composite Samples						
DBU-1	0-1 ft, 4-5 ft	X			X	
DBU-2	0-1 ft, 4-5 ft	X			X	
DBU-3	0-1 ft, 4-5 ft	X			X	
DBU-4	0-1 ft, 4-5 ft	X			X	
DBU-5	0-1 ft, 4-5 ft	X			X	
DBU-6	0-1 ft, 4-5 ft	X			X	
DBU-7	0-1 ft, 4-5 ft	X			X	
DBU-8	0-1 ft, 4-5 ft	X			X	
DBU-9	0-1 ft, 4-5 ft	X			X	
DBU-10	0-1 ft, 4-5 ft	X			X	
DBU-11	0-1 ft, 4-5 ft	X			X	
Stormwater Ditch						
SO-1	0-1 ft, 4-5 ft	X	X	X	X	
SO-2	0-1 ft, 4-5 ft	X	X	X	X	
Transformer Area						
SO-3	0-1 ft, 4-5 ft					X
SO-4	0-1 ft, 4-5 ft					X
Loading Docks						
SS-1	0-1 ft, 4-5 ft		X	X		X
SS-2	0-1 ft, 4-5 ft		X	X		X
On-Site Stream						
SD-1	0-6 in	X	X	X	X	
SD-3	0-6 in	X	X	X	X	
SD-5	0-6 in	X	X	X	X	
SD-7	0-6 in	X	X	X	X	

[1] Resource Recovery and Conservation Act (RCRA) list metals: As, Ba, Cd, Cr, Pb, Hg, Se and Ag.
DBU = decision based unit composite sample
VOC = volatile organic compound
PAH = polycyclic aromatic hydrocarbons
PCB = polychlorinated biphenyls
TPH-GRO/DRO = total petroleum hydrocarbons - gasoline/diesel range organics

Table 2
Groundwater and Surface Water Samples
Former Black & Decker Facility
28712 Glebe Road
Easton, Maryland

Monitoring Well/ Surface Water Sample ID	Field Parameters[1]	pH (laboratory analyzed) EPA 150.1	Dissolved Metals (RCRA[2]) EPA 6010/7471	Full-Suite VOCs EPA 8260	TPH-GRO/DRO EPA 8015
MW-2	X	X	X	X	X
MW-6	X	X	X	X	X
MW-7	X	X	X	X	X
MW-8A	X	X	X	X	X
MW-8B	X	X	X	X	X
MW-9	X	X	X	X	X
MW-10	X	X	X	X	X
MW-11	X	X	X	X	X
SW-1	X	X	X	X	X
SW-2	X	X	X	X	X
SW-3	X	X	X	X	X
SW-4	X	X	X	X	X
SW-5	X	X	X	X	X
SW-6	X	X	X	X	X
SW-7	X	X	X	X	X

[1] Field parameters include pH, specific conductance, temperature, dissolved oxygen, and turbidity
[2] Resource Recovery and Conservation Act (RCRA) list meatals includes As, Ba, Cd, Cr, Pb, Hg, Se and
VOC = volatile organic compound
PAH = polycyclic aromatic hydrocarbons
TPH-GRO/DRO = total petroleum hydrocarbons - gasoline/diesel range organics

AECOM

ATTACHMENT A

MDE Correspondence

Maryland
Department of
the Environment

Larry Hogan
Governor

Boyd Rutherford
Lieutenant Governor

Ben Grumbles
Secretary

July 14, 2017

CERTIFIED MAIL

Mr. R. Andrew Hollis
Talbot County
11 N. Washington Street
Easton, Maryland 21601

Re: Former Black & Decker Property
28712 Glebe Road
Easton, Maryland

Dear Mr. Hollis:

The Voluntary Cleanup Program ("VCP") of the Maryland Department of the Environment ("Department") has reviewed the application submitted by Talbot County for the Former Black & Decker Property located at the above address in the City of Easton, Talbot County, Maryland and determined the applications are incomplete pursuant to Title 7, Subtitle 5 of the Environment Article, Annotated Code of Maryland. Please provide written responses to the enclosed comments within sixty (60) days of receipt of this letter. The requested information must be accompanied by another statement of certification as found in Section XIV of the VCP application form. If the requested information is not received within 60 days the application will be denied. Please note that the statement of certification submitted to the VCP may not be a fax, scan or photocopy.

After receiving and evaluating the additional information and all requested analytical results, we will notify you in writing within 30 days of receipt whether the VCP application is complete. If complete, we will notify you in writing whether the application has been approved and the property has been accepted for participation in the VCP. If denied, the reasons for denial will be provided. In the meantime, if you have any questions regarding the application process or any other aspect of the VCP, please contact me via telephone at 410-537-3493 or electronic mail at joel.knauff@maryland.gov.

Sincerely,

Joel Knauff

Joel Knauff
Project Manager
Land Restoration Program

Enclosure

cc: Ms. Patricia Finneyfrock, Talbot County Office of Law
Ms. Marie Treiber, AECOM, LLC
Ms. Hilary Miller
Mr. James R. Carroll

MARYLAND DEPARTMENT OF THE ENVIRONMENT
VOLUNTARY CLEANUP PROGRAM (VCP)

VCP Application Review Comments
Former Black & Decker Property
28712 Glebe Road
Easton, Maryland

Selected VCP Application Designations

1. The VCP application submitted for the Former Black & Decker Property (the Site) indicated that the applicant has selected an unrestricted industrial land use designation for the Site. Please note that the unrestricted land use designation requires that the supporting environmental assessment data provided with the VCP application indicate the following:

    a. Engineering or institutional controls are not required to address soil or soil vapor contaminants on the entire site.

    b. Potable groundwater supply aquifers underlying the Site are in compliance with applicable drinking water standards without secondary treatment.

    Based on the preliminary Site investigation documentation that accompanied the VCP application, additional Site characterization and remediation actions would be necessary to allow the Site to qualify for the unrestricted designation. Alternately, the applicant may revise the VCP application to seek a restricted designation instead.

2. During the site visit the VCP project manager observed that portions of the property were currently being utilized for youth athletic fields. Recreational usage is not permitted under the industrial (Tier 3A) land use selected on the VCP application. If this property use is to continue, the Site must meet suitable risk criteria for mid-frequency recreational use and the VCP application must be revised to reflect this land use. In order to evaluate the requested supplemental Phase II work plan (Plan) the applicant should contact the VCP project manager as soon as possible to indicate whether the original VCP application will be revised otherwise the review will be based on land use requested in the original application.

Documentation Missing from the VCP Application Package

3. The documentation supplied with the initial VCP application for the Site was missing the following items to be submitted:

a. The VCP requires that the applicant provide a general groundwater elevation contour map. The general flow direction indicated on several figures in the supplied subsurface investigation reports is not sufficient to properly convey the potentiometric shallow groundwater conditions beneath the Site. This will require proper development and surveying of on-Site monitoring wells rather than temporary piezometers. VCP recommends incorporating the new wells requested in the comments below into this document.

b. VCP requires that the applicant provide linear contoured plume maps for the groundwater contaminants of concern at the Site (e.g., volatile organic compounds, petroleum constituents, dissolved metals, etc.).

c. If available, VCP requests that the applicant provide a legible map for the May 2003 Phase II Assessment Report by Weston Solutions, as the map included with the submitted copy of the report is illegible. The map should include legibly labeled locations of the monitoring wells sampled as part of that investigation.

4. VCP requires documented information to address the following concerns related to the supplied documentation:

   a. Were the groundwater samples submitted for metals analyzed as total metals or filtered samples? VCP requires that samples collected to analyze for metals in groundwater be filtered for purposes of risk assessment.

   b. Are groundwater pH values available for any of the metals in groundwater analysis conducted thus far? This is contextual information necessary to address the elevated concentrations of metals detected in groundwater at several sampling locations.

Supplemental Phase II Sampling Requirements:

5. While the groundwater sampling documentation provided to VCP thus far is sufficient to identify broader concerns regarding the presence of contaminants in groundwater from beneath the Site, it is insufficient to properly characterize the contamination and whether it represents a significant plume originating from the Site or more modest localized groundwater impact. VCP requests development of a supplemental Phase II investigative work plan that addresses the following:

   a. VCP requests the installation of monitoring wells in the identified problem areas. The quantity and placement of the new wells should be advanced and screened as to provide comprehensive definition and characterization of the plume. Wells

should be installed to properly address the particular contaminants in question. Be sure that well construction consideration is given to the nature of the contaminants being investigated (i.e., checking well depth and well screening depth and interval when investigating chlorinated solvent contamination versus petroleum contamination).

b. The VCP recommends installing wells in down-gradient areas in sufficient numbers to ensure that the groundwater contamination is fully defined and that plume migration had been accounted for. This is of particular concern for the areas with detected concentrations of VOCs and/or metals in groundwater above applicable cleanup standards.

c. VCP requests that the wells used in the Site investigation be gauged and surveyed to better define the groundwater contour gradient at the Site.

d. VCP requires a more comprehensive investigation of the areas of metals contamination in groundwater identified by the subsurface investigations at the Site. As aforementioned, samples collected to characterize this problem need to be representative and should be filtered for risk assessment purposes. Also, please be sure to include pH values to accompany your metals samples. All wells should be fully developed and purged prior to collecting samples, taking special care when doing so for preexisting monitoring wells.

6. VCP also identified several data gaps regarding soil sampling at the Site. The Phase II supplemental work plan should also address the following concerns regarding the on-Site soils:

   a. VCP requires additional sub-slab soil characterization in the former interior utility and chemical/petroleum storage areas of the Site, particularly in the vicinity of the waste oil storage area on the southwestern portion of the on-Site structure, close to the historical petroleum release area and in the areas of past industrial processes within the structure (i.e. - former paint/coating application areas, parts washing areas, chemical baths, etc.). The applicant should concentrate on the soils directly beneath the slab that will be exposed as new surface and shallow soils by building demolition as your priority for this portion of the soil sampling.

   b. Based on the past industrial use of the Site, the VCP believes that polycyclic aromatic hydrocarbon (PAH) analysis of representative surface and shallow soil in and around the former operation areas is necessary. VCP recommends

including representative sub-slab samples from appropriate areas as well.

c. VCP requests additional surficial and shallow soil sampling is recommended along the northeastern loading docks to check for potential PCB releases from hydraulic dock levelers.

d. VCP noted a general lack of surficial and shallow soil sample analysis in the Site characterization sampling and analyses completed thus far. VCP requests that additional sampling be performed at the Site to address this discrepancy.

7. VCP requires sub-slab groundwater characterization in the former interior utility and chemical/petroleum storage areas of the Site, particularly in the vicinity of the waste oil storage area on the southwestern portion of the on-Site structure, close to the historical petroleum release area. Soil gas samples should be collected using the TO-15 method for a minimum of 8 hours.

8. VCP requires the collection and analytical characterization of representative surface water and sediment samples from the stream that bisects the Site. At a minimum, these samples should include representation from areas where the stream enters and exits the property, as well as representative samples from along its on-Site flow path. Additionally, collection and analysis of surface and shallow soil samples from the observed open drainage areas at the Site is also recommended.

9. Sampling has not been conducted previously in the grassy areas currently being used for youth athletic fields by Talbot County. If this property use is to continue, the Site must meet suitable risk criteria for the mid-frequency recreational land use. If the VCP application is revised to request a mid-frequency recreational land use, the Phase II supplemental work plan must include sufficient soil and groundwater sampling in the areas currently or proposed to be used for recreational purposes.

Canzeri, John

From: Joel Knauff -MDE- <joel.knauff@maryland.gov>
Sent: Friday, October 13, 2017 3:12 PM
To: Canzeri, John
Cc: Treiber, Marie; Patricia Finneyfrock
Subject: Review comments on Revised VCP App. & Supplemental Investigation Assessment Work Plan - Former Black & Decker Property

Hi John,

As per our recent discussions and the completion of the VCP's review of the *Revised VCP Application and Supplemental Investigation Assessment Work Plan*, prepared by AECOM on behalf of Talbot County and dated September 11, 2017, I am providing the VCP's comments for your review. The comments are as follows:

1. Based on recent conversations, the VCP understands that the applicant intends to make changes to the originally submitted application. The VCP understands that the portion of the Site used as youth athletic fields is to be subdivided into a separate parcel or parcels, which will then be submitted to the VCP under a separate application, seeking restricted recreational usage. The remainder of the Site shall be designated for restricted industrial or commercial use under the existing application. The appropriate application documentation must be submitted to formalize these changes and additions.

2. The VCP feels that the proposed soil sampling plan is in need of alteration to provide sufficient Site characterization. The proposed grab samples are very limited in scope and may not provide an adequate picture of actual conditions at the Site. The VCP requests the following changes:

   a. The VCP recommends using an incremental/composite method for soil sampling. I have included a marked up map with these comments, suggesting a potential decision unit approach towards the surface and shallow subsurface sampling. This approach can be altered to better account for the subdivision of the athletic fields if need be. In zones 1 through 10, the VCP would recommend that two 10-point incremental composite samples should be collected from each zone: one to represent a depth of 0 to 1 foot below ground surface (bgs) and another for a depth of 1 to 5 feet bgs. Sample locations used for this exercise should be representatively distributed, but may be biased to include sampling areas of suspected impact where applicable. Zone 11, as defined on the map, includes the building interior. Representative grab soil samples from below the slab may be sufficient in this zone rather than full composite/incremental sampling.

   b. The VCP recommends retaining the point samples as separate soil samples for each of the 20 composite points in each zone (10 for the surficial zone and 10 for the shallow zone) so that they may be sampled individually should the results of the composite sampling warrant additional characterization.

   c. The incremental/composite samples should be analyzed for metals and polycyclic aromatic hydrocarbons (PAHs) in soil. Please note that grab samples should be collected for polychlorinated biphenyl (PCB) analysis in suspect areas, as composite/incremental sampling may compromise the representative integrity of PCB concentrations in soil. As with any analysis, but of particular concern for PCBs, please be sure the laboratory detection limit of the analysis is below the applicable screening level.

d. The VCP noted a lack of PCB soil samples proposed by the rear loading dock area on the northeast side of the building near MW-1. Representative samples should be collected from this area.

3. The VCP notes that the sediment and surface water sampling locations presented in this work plan do not encompass the entire length of the stream as it traverses the Site. The VCP requests that one sample be placed at the upstream point-of-entry at the Site to characterize the surface water and sediment conditions of the stream where it enters the property. Additionally, the remaining samples should be redistributed to provide more comprehensive characterization of the full length of the stream as it crosses the Site.

4. The VCP has noted a lack of down-gradient sampling points for groundwater characterization. Please note that the extent of groundwater impact at the Site must be sufficiently characterized. Some representative monitoring well locations should be added on the western portion of the Site.

5. Please address the comments provided in this correspondence in the form of a revised work plan (or work plans if the parcels are to be subdivided as has been suggested). Additionally, please provide the requested revised pages of the VCP application document.

Please don't hesitate to contact me with any questions or concerns regarding this project.

Best regards,

Joel

--

Joel B. Knauff
Geologist III
Maryland Department of the Environment
Land and Materials Administration - Land Restoration Program
1800 Washington Boulevard
Baltimore, Maryland 21230
Phone: 410-537-3440

Click here to complete a three question customer experience survey.

Appendix E: Wetland Resources

DEPARTMENT OF THE ARMY
BALTIMORE DISTRICT, U.S. ARMY CORPS OF ENGINEERS
218 North Washington St.
Easton, MD 21601

August 30, 2016

Easton Airport
c/o AECOM
Ms. Joanna Hiebler
4 North Park Drive
Hunt Valley, Maryland 21104

Gentlemen:

This is in response to your letter of July 26, 2016 for an approved jurisdictional determination (JD) and verification of the limits of jurisdictional non-tidal wetlands, at and adjacent to the Easton Airport, Easton, Talbot County, Maryland. Your project has been assigned the file name, **CENABOP-RMS (Easton Airport/pre app JD) 2016-01242-M13.**

Field inspections were conducted during April and July, 2016. These site inspection indicated that the determination of the limits of the wetlands and waters of the United States, including jurisdictional wetlands within the "Area of Review" depicted on the revised plans dated August 30, 2016 is accurate. Enclosed is a document that outlines the basis of our determination of no jurisdiction over these areas.

This letter contains an approved jurisdictional determination for your subject site. This approved jurisdictional determination is valid for five years from the date of this letter unless new information warrants revision of the determination before the expiration date, or a District Engineer has identified, after public notice and comment, that specific geographic areas with rapidly changing environmental conditions merit re-verification on a more frequent basis. If you object to this determination, you may request an administrative appeal under Corps regulations at 33 CFR Part 331. Enclosed you will find a Notification of Appeal Process (NAP) fact sheet and request for Appeal (RFA) form. If you request to appeal this determination you must submit a completed RFA form to the North Atlantic Division Office at the following address:

Regulatory Appeals Review Officer
North Atlantic Division, US Army Corps of Engineers
Fort Hamilton Military Community
General Lee Avenue, Bldg 301
Brooklyn, NY 11252-6700

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete; that it meets the criteria for appeal under 33 CFR part 331.5, and that it has been received by the Division Office within 60 days of the date of the NAP. Should you decide to submit a RFA form, it must be received at the above address by October 26, 2016. It is not necessary to submit an RFA form to the Division office if you do not object to the determination in this letter.

You are reminded that any grading or filling of waters of the United States, including jurisdictional wetlands, is subject to Department of the Army authorization. State and local authorizations may also be required to conduct activities in these locations. In addition, the Interstate Land Sales Full Disclosure Act may require that prospective buyers be made aware, by the seller, of the Federal authority over any waters of the United States, including wetlands, being purchased.

A copy of this letter is being provided to the Maryland Department of the Environment for informational purposes. In future correspondence and permit applications regarding this parcel please include the file number located in the first paragraph of this letter. If you have any questions concerning this matter, please call Rod Schwarm of the Easton Field Office at 410-820-8550.

Sincerely,

Rod Schwarm, PWS
Maryland Section Southern

Enclosures

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL (NAO/NAP fact sheet & RFA form)

Applicant: Easton Airport/pre-app-JD		File Number: 2016-01186	Date: 230 August 2016
Attached is:			See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)		A
	PROFFERED PERMIT (Standard Permit or Letter of permission)		B
	PERMIT DENIAL		C
X	APPROVED JURISDICTIONAL DETERMINATION		D
	PRELIMINARY JURISDICTIONAL DETERMINATION		E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at http://usace.army.mil/inet/functions/cw/cecwo/reg or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the Baltimore District Engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations (JD) associated with the permit.

- OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the Baltimore District Engineer. Your objections must be received by the Baltimore District Engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the Baltimore District Engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the Baltimore District Engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the Baltimore District Engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.

- APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the North Atlantic Division Engineer, ATTN: CENAD-PD-PSD-O, Fort Hamilton Military Community, Building 301, General Lee Avenue, Brooklyn, NY 11252-6700. This form must be received by the North Atlantic Division Engineer within 60 days of the date of this notice with a copy furnished to the Baltimore District Engineer.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the North Atlantic Division Engineer, ATTN: CENAD-PD-PSD-O, Fort Hamilton Military Community, Building 301, General Lee Avenue, Brooklyn, NY 11252-6700. This form must be received by the North Atlantic Division Engineer within 60 days of the date of this notice with a copy furnished to the Baltimore District Engineer.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.

- APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the North Atlantic Division Engineer, ATTN: CENAD-PD-PSD-O, Fort Hamilton Military Community, Building 301, General Lee Avenue, Brooklyn, NY 11252-6700. This form must be received by the North Atlantic Division Engineer within 60 days of the date of this notice with a copy furnished to the Baltimore District Engineer.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact: Mr. Frank Plewa U.S. Army Corps of Engineers, Baltimore District 10 S. Howard St. Regulatory Branch, Baltimore District Baltimore, MD 21203-1715 717-249-2522 or (410) 962- 3670	If you only have questions regarding the appeal process you may also contact: Administrative Appeals Review Officer North Atlantic Division, Corps of Engineers Fort Hamilton General Lee Avenue , Military Community Bldg. 301 Brooklyn, NY 11252-6700 Telephone: 347-370-4650 Email: James.W.Haggerty@usace.army.mil

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

_____ Signature of appellant or agent.	Date:	Telephone number:

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: CENABOP-RMS (Easton Airport/pre-app) 2016-01242-M13

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: Maryland County: Talbot City: Easton
Center coordinates of site (lat/long in degree decimal format):
Latitude Longitude
38.809379° -76.072274°

Name of nearest waterbody: Glebe Creek & Goldsborough Creek
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Glebe Creek & Goldsborough Creek flow into the Miles River which flows into the Chesapeake Bay is a TNW.
Name of watershed or Hydrologic Unit Code (HUC): Miles River
☒ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
☐ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc…) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):
☐ Office (Desk) Determination. Date:
☒ Field Determination. Date(s) April & July 2016

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There are "*navigable waters of the U.S.*" within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [*Required*]
☒ Waters subject to the ebb and flow of the tide.
☒ Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain: Glebe Creek & Goldsborough Creek flow into the Miles River which flows into the Chesapeake Bay is a TNW traditionally navigable waterways with commercial and recreational boat use.

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There are "*waters of the U.S.*" within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [*Required*]

1. **Waters of the U.S.**
   a. **Indicate presence of waters of U.S. in review area (check all that apply):**

   ☒ TNWs, including territorial seas
   ☒ Wetlands adjacent to TNWs
   ☒ Relatively permanent waters[1] (RPWs) that flow directly or indirectly into TNWs
   ☐ Non-RPWs that flow directly or indirectly into TNWs
   ☐ Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
   ☐ Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
   ☐ Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
   ☐ Impoundments of jurisdictional waters
   ☐ Isolated (interstate or intrastate) waters, including isolated wetlands

   b. Identify (estimate) size of waters of the U.S. in the review area:
   Non-wetland waters: linear feet: width (ft) and/or
   Wetlands: acres.

   c. **Limits (boundaries) of jurisdiction** based on: Approximate MHW shoreline/high tide line
   Elevation of established OHWM (if known):

2. **Non-regulated waters/wetlands (check if applicable):**[2]

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[1] For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).
[2] Supporting documentation is presented in Section III.F.

Project waters are **Pick List** aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain: .

Identify flow route to TNW[4]: .
Tributary stream order, if known: .

(b) General Tributary Characteristics (check all that apply):
Tributary is: ☐ Natural;
☐ Artificial (man-made). Explain:
☐ Manipulated (man-altered). Explain: .

Tributary properties with respect to top of bank (estimate):
Average width: feet
Average depth: feet
Average side slopes: **Pick List.**

Primary tributary substrate composition (check all that apply):
☐ Silts ☒ Sands ☐ Concrete
☐ Cobbles ☐ Gravel ☐ Muck
☐ Bedrock ☐ Vegetation. Type/% cover:
☐ Other. Explain: .

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain:
Presence of run/riffle/pool complexes. Explain: .
Tributary geometry: **Pick List**
Tributary gradient (approximate average slope): %

(c) Flow:
Tributary provides for: **Pick List**
Estimate average number of flow events in review area/year: **Pick List**
Describe flow regime: .
Other information on duration and volume: .

Surface flow is: **Pick List.** Characteristics: .

Subsurface flow: **Pick List**. Explain findings: .
☐ Dye (or other) test performed: .

Tributary has (check all that apply):
☐ Bed and banks
☐ OHWM[5] (check all indicators that apply):
☐ clear, natural line impressed on the bank
☐ changes in the character of soil
☐ shelving
☐ vegetation matted down, bent, or absent
☐ leaf litter disturbed or washed away
☐ sediment deposition
☐ water staining
☐ other (list):
☐ the presence of litter and debris
☐ destruction of terrestrial vegetation
☐ the presence of wrack line
☐ sediment sorting
☐ scour
☐ multiple observed or predicted flow events
☐ abrupt change in plant community
☐ Discontinuous OHWM.[6] Explain: .

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):
☐ High Tide Line indicated by:
☐ oil or scum line along shore objects
☐ fine shell or debris deposits (foreshore)
☐ physical markings/characteristics
☐ tidal gauges
☐ other (list):
☐ Mean High Water Mark indicated by:
☐ survey to available datum;
☐ physical markings;
☐ vegetation lines/changes in vegetation types.

(iii) Chemical Characteristics:

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[4] Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.
[5] A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.
[6] Ibid.

Summarize overall biological, chemical and physical functions being performed: .

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D: .

2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .

3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

TNWs and Adjacent Wetlands. Check all that apply and provide size estimates in review area:

1.
   - ☐ TNWs: linear feet width (ft), Or,
   - ☐ Wetlands adjacent to TNWs: acres.

2. **RPWs that flow directly or indirectly into TNWs.**
   - ☐ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
   - ☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: .

   Provide estimates for jurisdictional waters in the review area (check all that apply):
   - ☐ Tributary waters: linear feet width (ft).
   - ☐ Other non-wetland waters: acres.
     Identify type(s) of waters:

Provide estimates for jurisdictional waters in the review area (check all that apply):
☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .
☐ Wetlands: acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):
☐ If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
☐ Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
☐ Prior to the Jan 2001 Supreme Court decision in "*SWANCC*," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
☐ Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: .
☐ Other: (explain, if not covered above): .

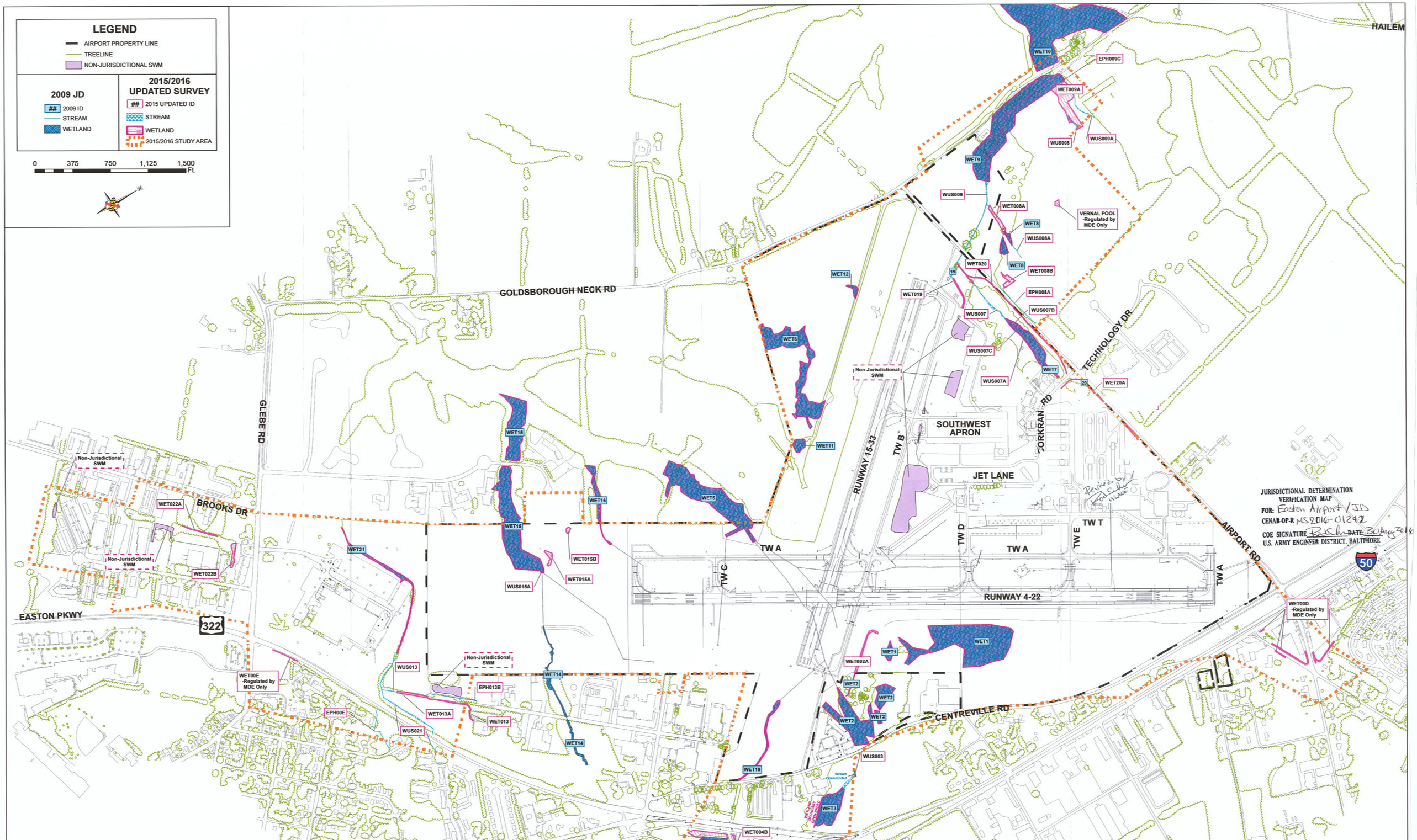
Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):
☐ Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource: .
☐ Wetlands: acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):
☐ Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource: .
☐ Wetlands: acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):
☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Plans submitted by the application revised August 30, 20162016.
☐ Data sheets prepared/submitted by or on behalf of the applicant/consultant.
☐ Office concurs with data sheets/delineation report.
☐ Office does not concur with data sheets/delineation report.
☐ Data sheets prepared by the Corps: .
☐ Corps navigable waters' study: .
☐ U.S. Geological Survey Hydrologic Atlas: .
☐ USGS NHD data.
☐ USGS 8 and 12 digit HUC maps.
☐ U.S. Geological Survey map(s). Cite scale & quad name:
☐ USDA Natural Resources Conservation Service Soil Survey. Citation: .
☐ National wetlands inventory map(s). Cite name:
☐ State/Local wetland inventory map(s): .
☐ FEMA/FIRM maps: Panel number
☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
☒ Photographs: ☒ Aerial (Name & Date): Google Earth Pro
or ☒ Other (Name & Date):
☐ Previous determination(s). File no. and date of response letter: .
☐ Applicable/supporting case law: .
☐ Applicable/supporting scientific literature: .
☐ Other information (please specify):

B. ADDITIONAL COMMENTS TO SUPPORT JD:



THE GREAT SEAL OF TALBOT COUNTY MARYLAND

EASTON/NEWNAM FIELD AIRPORT

EASTON, MARYLAND

AECOM

EASTON AIRPORT JD UPDATE
WETLAND DELINEATION REPORT

EXHIBIT

AECOM
4 North Park Drive, Suite 300
Hunt Valley, MD 21030
www.aecom.com

410-785-7220 tel
410-785-6818 fax

MEMORANDUM

December 23, 2015

To: Meeting Attendees
- Rod Schwarm, USACE
- Al Kampmeyer, MDE
- Jennifer Lutz, AECOM
- Greg VanderMolen, AECOM
- Joanna Hiebler, AECOM

cc: Mike Henry, Easton / Newnam Field Airport

From: Joanna Hiebler

Reference: Pre-Application Meeting
Wetland Delineation Summary / Jurisdictional Determination
Environmental Assessment for Five-Year Capital Improvement Program
AIP 3-24-0014-042
MAA Gr. No. 16-006
Easton / Newnam Field Airport
Easton, Maryland

A meeting was on Tuesday, November 10, 2015 at the Easton / Newnam Field Airport (ESN) with the Maryland Department of the Environment (MDE) and the US Army Corps of Engineers (USACE). The purpose of the meeting was to review the delineation of jurisdictional Waters of the US (WUS) (including wetlands) completed in October 2015 by AECOM. Delineation of WUS was conducted within the entire Airport property boundary, as well as any areas outside Airport property where proposed project limits would encroach.

This memo provides a brief description to the updates/additions that were made to the 2009 Jurisdictional Determination (JD) and contains the following attachments:

- Attachment A: Updated 2015 Delineation of Waters of the U.S., including Wetlands – JD Map (full size and 11x17)
- Attachment B: Approved 2009 JD Map
- Attachment C: Wetland Location Mapping (2015 Added Wetlands)
- Attachment D: Wetland Determination Data forms (2015 Added Wetlands)

PROJECT BACKGROUND

ESN is preparing an Environment Assessment for the County's next five year Capital Improvement Program, which includes an extension to Runway 4-22 and associated improvements; construction of aircraft storage facilities and aprons; acquisition of property within runway protection zones; construction of an Airport Service Road; relocation of Runway 22 end threshold; relocation of navigational aids; and finally, removal of tree obstructions to the existing 14 Code of Federal Regulations Part 77 surfaces for Runway 15-33 and Runway 4-22. In support of this Environmental Assessment, a wetland delineation was completed.

FINDINGS

The following table provides a summary of the wetland and WUS located within and surrounding the Airport property. The resources updated in 2015 utilized the naming convention of the areas previously approved in the

2009 JD, to the extent possible. The status indicates whether or not the system has not changed, been modified since the original 2009 JD, or if it is a system that was not identified in the 2009 JD.

Resource	Included within 2009 JD	Included within Study Area for 2015 JD	Wetland/Waters Classification	Wetland Data Sheet	Status
WET1	Yes	Yes	Wetland - PFO	No	Unchanged
WET2	Yes	Yes	Wetland - PEM	No	Unchanged
WET002A	No	Yes	Wetland - PEM	No	New – an extension of WET2
WET3	Yes	Yes	Wetland - PFO	No	Modified – decreased total wetland area
WUS003	No	Yes	Stream - Intermittent	No	Modified – previously identified as WET3 but revised to indicate WUS
WET4	Yes	Yes	Wetland - PFO	No	Modified – increased total wetland area
WET004A	No	Yes	Wetland – PEM	Yes	New
WET004B	No	Yes	Wetland - PFO	Yes	New
WET5	Yes	Yes	Wetland – PFO	No	Unchanged
WET6	Yes	Yes	Wetland – PFO	No	Unchanged
WET7	Yes	Yes	Wetland - PFO	No	Modified – decreased total wetland area
WUS007	No	Yes	Stream - Intermittent	No	Modified – previously identified as WET7 but revised to indicate WUS
WUS007A, WUS007B & WUS007C	No	Yes	Stream – Intermittent	No	New
WET8	Yes	Yes	Wetland - PFO	No	Unchanged
WET008A	No	Yes	Wetland - PEM	Yes	New
WET008B	No	Yes	Wetland - PFO	Yes	New
WUS008	No	Yes	Stream - Intermittent	No	New
WUS008A	No	Yes	Stream - Intermittent	No	New
EPH008A	No	Yes	Stream - Ephemeral	No	New
WET9	Yes	Yes	Wetland - PEM	No	Modified – decreased total

Resource	Included within 2009 JD	Included within Study Area for 2015 JD	Wetland/Waters Classification	Wetland Data Sheet	Status
					wetland area
WET009A	No	Yes	Wetland - PFO	Yes	New – added to existing WET9
WUS009	No	Yes	Stream - Perennial	No	Modified – previously identified as WET9 but revised to indicate WUS
WUS009A	No	Yes	Stream - Intermittent	No	New
EPH009C	No	Yes	Stream - Ephemeral	No	New
WET10	Yes	Yes	Wetland - PFO	No	Unchanged
WET11	Yes	Yes	Wetland – PFO	No	Unchanged
WET12	Yes	Yes	Wetland – PFO	No	Unchanged
WET13	Yes	Yes	Wetland - PFO	No	Modified – decreased total wetland area
WET013A	Yes	Yes	Wetland - PEM	Yes	Modified – previously identified as WUS but revised to indicate PEM
WUS013	Yes	Yes	Stream - Intermittent	No	Unchanged
EPH013B	No	Yes	Stream - Ephemeral	No	New
WET14	Yes	Yes	Wetland – PEM	No	Unchanged
WET15	Yes	Yes	Wetland - PEM	No	Unchanged
WET015A	No	Yes	Wetland - PEM	Yes	New
WET015B	No	Yes	Wetland - PEM	Yes	New
WUS015A	No	Yes	Stream – Perennial	No	New
WET18	Yes	Yes	Wetland – PEM	No	Unchanged
WET019	No	Yes	Wetland - PEM	Yes	New
WET020 & WET020A	Yes	Yes	Wetland - PEM	Yes	Modified – previously identified as WUS but revised to indicate PEM
WET21	Yes	Yes	Wetland - PEM	No	Modified – decreased total wetland area

Resource	Included within 2009 JD	Included within Study Area for 2015 JD	Wetland/Waters Classification	Wetland Data Sheet	Status
WUS021	No	Yes	Stream - Intermittent	No	New
WET022A	No	Yes	Wetland – PFO	Yes	New
WET022B	No	Yes	Wetland - PFO	Yes	New
WET00A	No	No	Wetland – PEM	Yes	New

The following describes those modifications that were made to resources present on the 2009 JD, as well as those new wetland and WUS resources identified in 2015.

WET002A – This linear wetland located at the east end of Runway 15-33 is an extension of WET2 included in the 2009 JD. The 2009 delineation ended at the fence-line for the Airport. As this was just an extension of an existing linear wetland located within a topographic swale, a new wetland data sheet has not included.

WET3 – WET3 is located east of Centreville Road, west of Route 322. The boundary of WET3 was decreased on the northern end and revised to indicate this northern portion as WUS only (**WUS003**). WUS003 is an intermittent stream feeding into another tributary to Glebe Creek.

WET4 - The MDE and USACE noted during the field visit that a wetland mitigation project was completed along the south side of Village Street, adjacent to existing WET4. AECOM has since revised the WET4 boundary to include this wetland area with WET4, therefore increasing its total size.

WET004A – WET004A is located within a linear drainage feature on the west side of the park entrance, just east of WET4 and west of the Rails-to-Trails line. This wetland is a palustrine emergent (PEM) fringe along the edge of the existing forest. Data sheets indicating hydrology indicators, hydrophytic vegetation, and hydric soils present at the wetland sampling point is located in Attachment D.

WET004B – WET004B is located across the street from WET004A, again within a linear drainage feature along the forest and park entrance. It is a palustrine forested (PFO) wetland. Data sheets indicating hydrology indicators, hydrophytic vegetation, and hydric soils present at the wetland sampling point is located in Attachment D.

WET7 – Just south of Airport Road, this PFO wetland was modified to decrease the extent of its western boundary. The western end was revised to indicate the presence of an intermittent stream only, **WUS007**. Additionally, several WUS were identified within WET7 (**WUS007A, WUS007B,** and **WUS007C**), and have been shown on the project mapping.

WET008A – WET008A is a PEM wetland located within a linear drainage feature connecting previously delineated WET8 and WET9. To the east of WET8, an additional stream was identified (**WUS008A**) as feeding into WET8, WET008A, and on to the newly identified WUS009. Data sheets indicating hydrology indicators, hydrophytic vegetation, and hydric soils present at the wetland sampling point is located in Attachment D.

WET008B – WET008B is a PFO wetland located just north of Airport Road, and just east of existing airport property boundaries. Drainage into the wetland is received by **EPH008A**. During the field review, the MDE indicated that this area was potentially man-made, as it is a concave circular feature likely excavated by a farmer using it as fill for another location. Data sheets indicating hydrology indicators, hydrophytic vegetation, and hydric soils present at the wetland sampling point is located in Attachment D.

WET9 – WET9 is a PEM wetland previously delineated in 2009 but modified in 2015. It is located just north of Airport Road, and within the Airport property boundary. The southern boundary of WET9 was shortened so that it does not extend completely to Airport Road. This southern area was revised to indicate WUS only, **WUS009**, where it extends south under Airport Road in into the fenced in airfield.

WET009A – The northern most portion of WET9 was extended to the east, increasing the total wetland area present in this location. The wetland was identified separately as WET009A since its classification is a PFO and not PEM. Stream features **EPH009C**, **WUS009A**, and **WUS008** have all been identified within systems WET9 and WET009A. Data sheets indicating hydrology indicators, hydrophytic vegetation, and hydric soils present at the wetland sampling point for WET009A is located in Attachment D.

WET13 - Existing WET13 has been revised on the mapping to illustrate the smaller, more linear wetland feature that currently exists. This area feeds into newly identified **WET013A**, which was previously shown as a stream on the 2009 JD. **EPH013B** was also included in the 2015 investigation, and contributes flow to WET013A. Data sheets indicating hydrology indicators, hydrophytic vegetation, and hydric soils present at WET013A are located in Attachment D.

WUS013 and **WUS021** – Intermittent WUS013 connects with perennial WUS021 just outside the southern end of the airport property boundary. The agencies concurred that these are stream systems and not wetland, and connect into existing WET21 to the west, north of the Black and Decker building.

WET21 – The eastern boundary of WET21was shortened to identify the wetland limits farther to the west then previously shown in 2009.

WET015A and **WET015B** – These systems are both PEM wetlands located within airport property boundaries, just south of the Runway 4-22 southern end. They are mowed regularly by airport maintenance. Data sheets indicating hydrology indicators, hydrophytic vegetation, and hydric soils present at the wetland sampling points are located in Attachment D.

WUS015A – This is a perennial stream located within the existing WET15 PEM wetland. The stream is approximately three to four feet wide, with one to two foot vegetated banks.

WET019 – This PEM wetland is located within Airport property boundaries at the western end of Runway 15-33. It receives flow directly culverted from stormwater management ponds located to the east and provides drainage into existing WUS009, just south of Airport Road. Data sheets indicating hydrology indicators, hydrophytic vegetation, and hydric soils present at the wetland sampling point is located in Attachment D.

WET020 and **WET020A** – Previously delineated waters along Airport Road in Area 20 have been revised to identify a PEM linear wetland (WET020 and WET020A). Vegetation has grown in this area since the 2009 delineation, and no mean high water mark is evident. MDE and USACE would prefer to call this entire system

wetland. Hydrophytic vegetation was present along the swale, with several crayfish burrows and aquatic species observed during the meeting. Data sheets indicating hydrology indicators, hydrophytic vegetation, and hydric soils present at the wetland sampling point is located in Attachment D.

WET022A and **WET022B** - South of Glebe Road, surrounding the Coca Cola building, these two PFO linear wetland systems have been delineated and added to the wetland mapping. The source of hydrology for WET022A comes from a stream piped from the south during business development phases extending through this area. The pipe outfalls behind the buildings within the forested strip proposed for potential tree removals. Data sheets indicating hydrology indicators, hydrophytic vegetation, and hydric soils present at the wetland sampling points are located in Attachment D.

WET00A – This linear PEM drainage feature is located just west of the existing airport terminal. It was added to the delineation on December 9, 2015. Data sheets indicating hydrology indicators, hydrophytic vegetation, and hydric soils present at the wetland sampling point is located in Attachment D.

The boundaries of WET1, 2, 3, 5, 6, 8, 11, 12, 14, 15, 16, and 18 were not changed.

Stormwater management systems were also analyzed and deemed not jurisdictional by the MDE and USACE. Mapping has been revised to include the note “Non-Jurisdictional SWM” to clarify these facilities and locations.

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MEMORANDUM

April 14, 2016

To: Rod Schwarm, USACE
Al Kampmeyer, MDE
Jennifer Lutz, AECOM

cc: Mike Henry, Easton / Newnam Field Airport

From: Joanna Hiebler, AECOM

Reference: 2015 Wetland Delineation Summary / Jurisdictional Determination
2016 Addendum #2
Easton / Newnam Field Airport
Easton, Maryland

An additional field visit was conducted on Wednesday April 13, 2016 at the Easton/Newnam Field Airport (ESN) to delineate two areas not captured during the 2015 updated airport wetland delineation. This addendum contains the following revised materials:

- Updated 2015/2016 Delineation of Waters of the U.S., including Wetlands – JD Map
- Revised Set Wetland Location Maps
- Wetland Determination Data forms (WET00D, WET00E and WUS00E added 4/13/2016)

The following table was previously provided to the agencies, summarizing all of the wetland and WUS located within and surrounding the Airport property. The resources updated in 2015/2016 utilized the naming convention of the areas previously approved in the 2009 JD, to the extent possible. The status indicates whether or not the system has not changed, been modified since the original 2009 JD, or if it is a system that was not identified in the 2009 JD. This chart is again being provided to illustrate the comprehensive view of what has been identified within the study area.

Resource	Included within 2009 JD	Included within Study Area for 2015 JD	Wetland/Waters Classification	Wetland Data Sheet	Status
WET1	Yes	Yes	Wetland – PFO/PEM	No	Unchanged
WET2	Yes	Yes	Wetland – PFO/PEM	No	Unchanged
WET002A	No	Yes	Wetland - PEM	No	New – an extension of WET2
WET3	Yes	Yes	Wetland - PFO	No	Modified – decreased total wetland area
WUS003	No	Yes	Stream - Intermittent	No	Modified – previously identified as WET3 but revised to indicate WUS
WET4	Yes	Yes	Wetland - PFO	No	Modified – increased total wetland area

Resource	Included within 2009 JD	Included within Study Area for 2015 JD	Wetland/Waters Classification	Wetland Data Sheet	Status
WET004A	No	Yes	Wetland – PEM	Yes	New
WET004B	No	Yes	Wetland - PFO	Yes	New
WET5	Yes	Yes	Wetland – PFO/PEM	No	Unchanged
WET6	Yes	Yes	Wetland – PFO	No	Unchanged
WET7	Yes	Yes	Wetland - PFO	No	Modified – decreased total wetland area
WUS007	No	Yes	Stream - Intermittent	No	Modified – previously identified as WET7 but revised to indicate WUS
WUS007A, WUS007B & WUS007C	No	Yes	Stream – Intermittent	No	New
WET8	Yes	Yes	Wetland - PEM	No	Unchanged
WET008A	No	Yes	Wetland - PEM	Yes	New
WET008B	No	Yes	Wetland - PFO	Yes	New
WUS008	No	Yes	Stream - Intermittent	No	New
WUS008A	No	Yes	Stream - Intermittent	No	New
EPH008A	No	Yes	Stream - Ephemeral	No	New
WET9	Yes	Yes	Wetland - PEM	No	Modified – decreased total wetland area
WET009A	No	Yes	Wetland - PFO	Yes	New – added to existing WET9
WUS009	No	Yes	Stream - Perennial	No	Modified – previously identified as WET9 but revised to indicate WUS
WUS009A	No	Yes	Stream - Intermittent	No	New
EPH009C	No	Yes	Stream - Ephemeral	No	New
WET10	Yes	Yes	Wetland - PFO	No	Unchanged
WET11	Yes	Yes	Wetland – PFO	No	Unchanged
WET12	Yes	Yes	Wetland – PFO	No	Unchanged

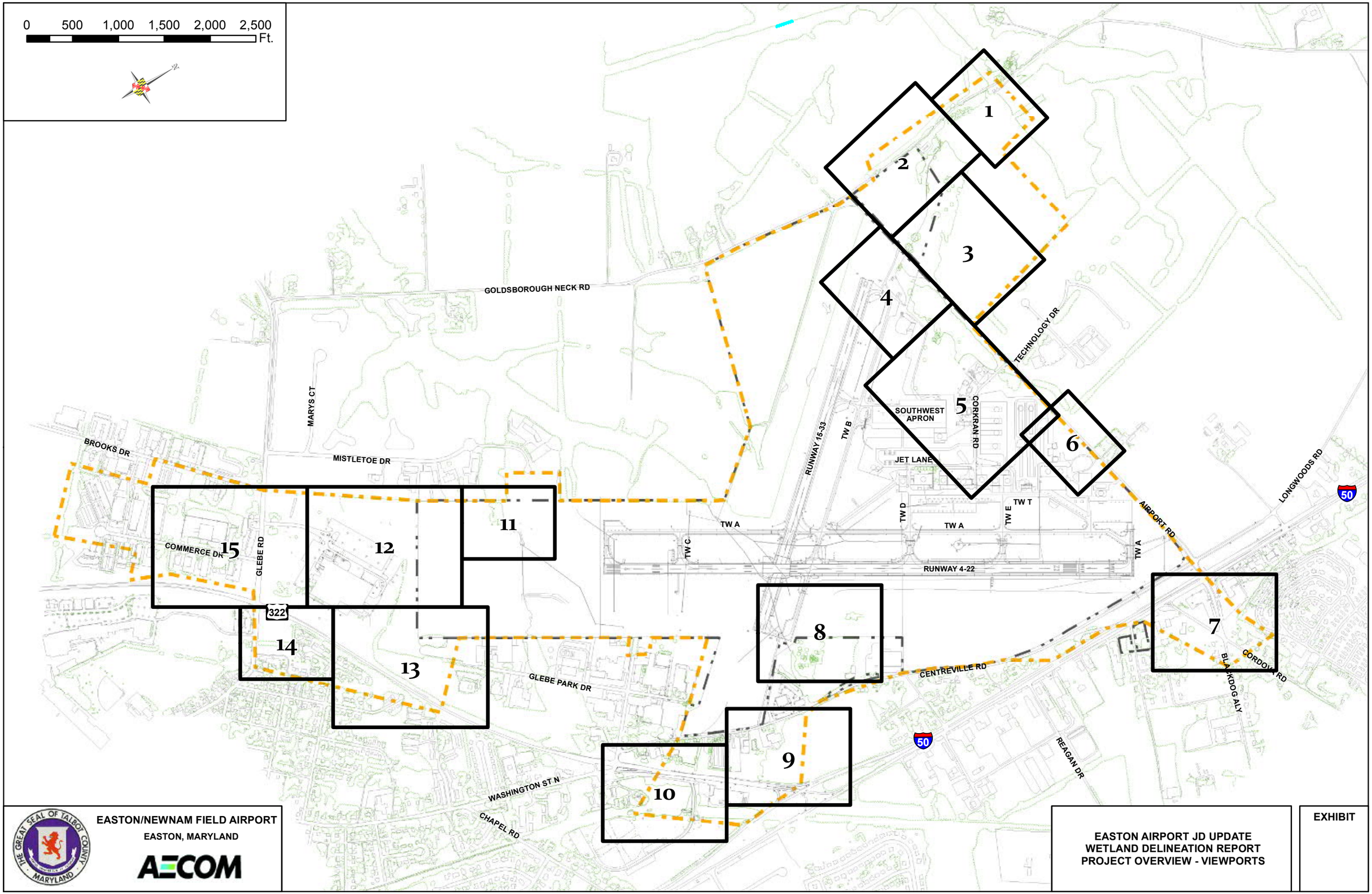
Resource	Included within 2009 JD	Included within Study Area for 2015 JD	Wetland/Waters Classification	Wetland Data Sheet	Status
WET13	Yes	Yes	Wetland - PFO	No	Modified – decreased total wetland area
WET013A	Yes	Yes	Wetland - PEM	Yes	Modified – previously identified as WUS but revised to indicate PEM
WUS013	Yes	Yes	Stream - Intermittent	No	Unchanged
EPH013B	No	Yes	Stream - Ephemeral	No	New
WET14	Yes	Yes	Wetland – PEM	No	Unchanged
WET15	Yes	Yes	Wetland – PFO/PEM	No	Unchanged
WET015A	No	Yes	Wetland - PEM	Yes	New
WET015B	No	Yes	Wetland - PEM	Yes	New
WUS015A	No	Yes	Stream – Perennial	No	New
WET016	Yes	Yes	Wetland - PEM	No	Unchanged
WET18	Yes	Yes	Wetland – PEM	No	Unchanged
WET019	No	Yes	Wetland - PEM	Yes	New
WET020 & WET020A	Yes	Yes	Wetland - PEM	Yes	Modified – previously identified as WUS but revised to indicate PEM
WET21	Yes	Yes	Wetland - PEM	No	Modified – decreased total wetland area
WUS021	No	Yes	Stream - Intermittent	No	New
WET022A	No	Yes	Wetland – PFO	Yes	New
WET022B	No	Yes	Wetland - PFO	Yes	New
WET00A	No	No	Wetland – PEM	Yes	New
WET00B	No	Yes	Wetland – PEM	Yes	New
WET00C	No	Yes	Wetland – PEM	Yes	New
POW	No	Yes	Vernal Pool	No	New
WET00D	No	Yes	Wetland – PEM	Yes	New
WET00E	No	Yes	Wetland – PEM	Yes	New

Resource	Included within 2009 JD	Included within Study Area for 2015 JD	Wetland/Waters Classification	Wetland Data Sheet	Status
EPH00E	No	Yes	Stream – Ephemeral	No	New

WET00D and WET00E – These are both linear PEM drainage features associated with roadway runoff. WET00D is located along Black Dog Alley and Cordova Road, east of U.S. Highway 50. WET00E is located along MD 322, on the southern side of the road. These areas have been added to the overall revised Airport Wetland Determination and Jurisdictional Determination, with additional Wetland Location Maps included.

EPH00E – An ephemeral stream was identified in the southeastern portion of the study area. The stream receives drainage from a forested wetland area outside of the study limit, southeast of Hollyday Street. The stream begins at a double RCP culvert under Hollyday Street, continues through a forested area between houses, before entering a swale through a backyard and connecting to a roadside swale along MD-322/Easton Parkway. The ephemeral stream is approximately 4-8 feet in width through the forested section, with a depth of 6-12 inches.

Enclosed please find a wetland data sheet for each of the PEM systems added, as well as a revised set of Wetland Location Maps. The map index has been updated, and the additional systems are located on Sheets. Please replace the copy provided in March 2016 with this set of maps. Please add these new wetland data sheets to the current set.



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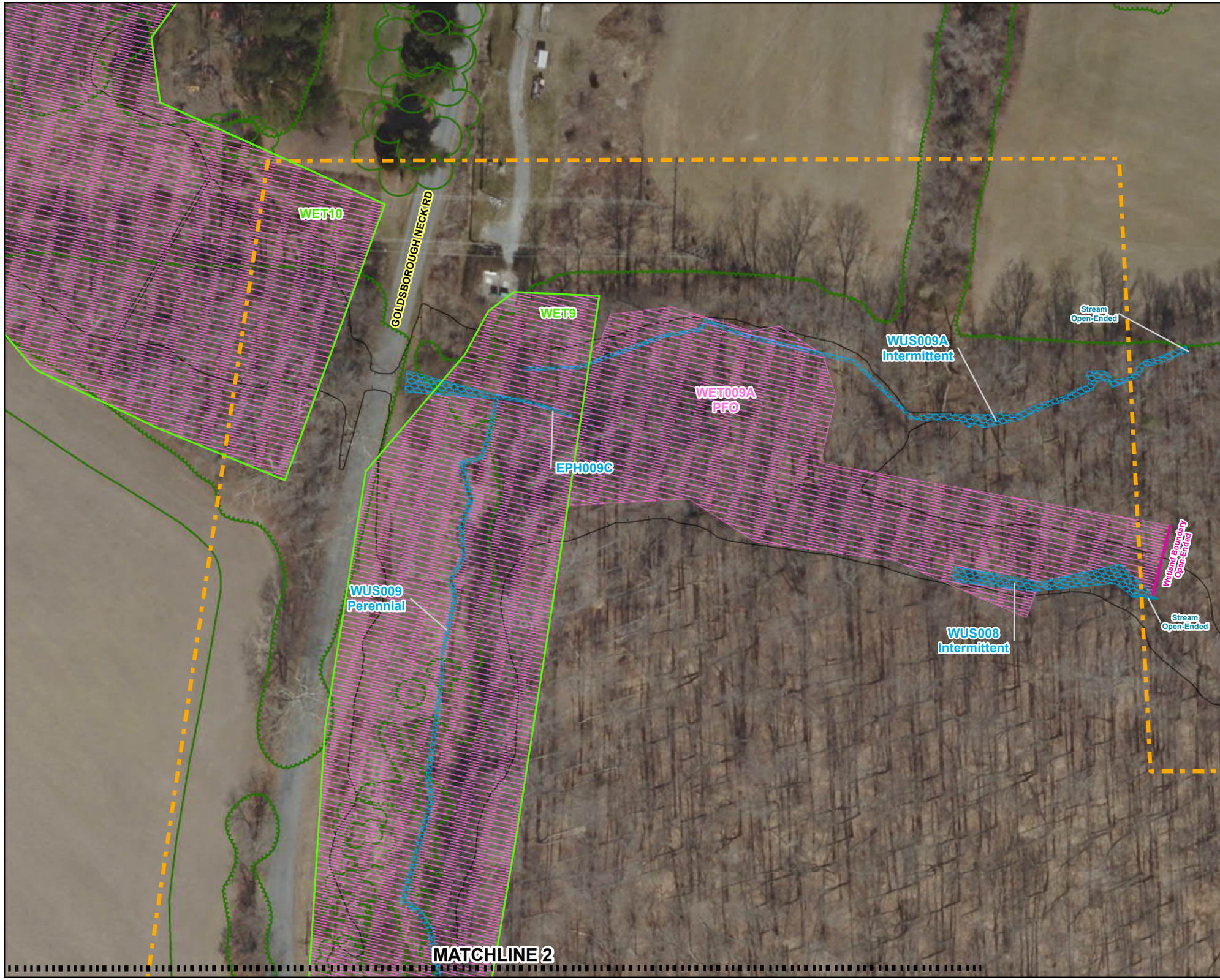


LEGEND

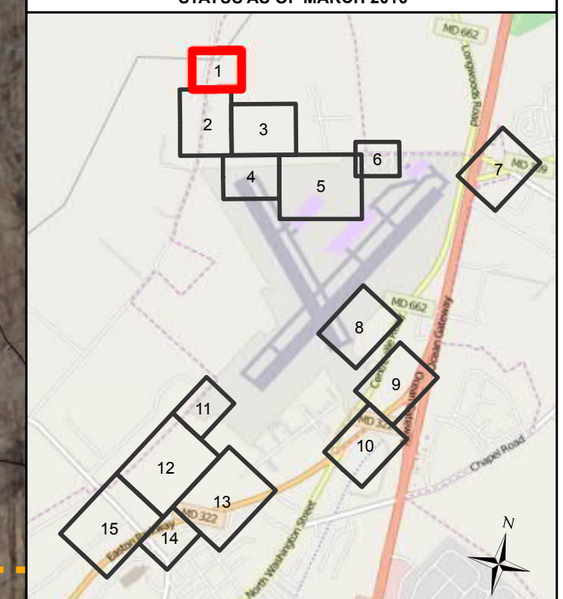
- STUDY AREA
- AIRPORT PROPERTY LINE
- TREELINE
- NON-JURISDICTIONAL SWM
- 100 YEAR FLOODPLAIN

2009 JD	2015 / 2016 SURVEY
STREAM SURVEY	STREAM SURVEY
WETLAND SURVEY	WETLAND SURVEY

N

NOTES:

STATUS AS OF MARCH 2016



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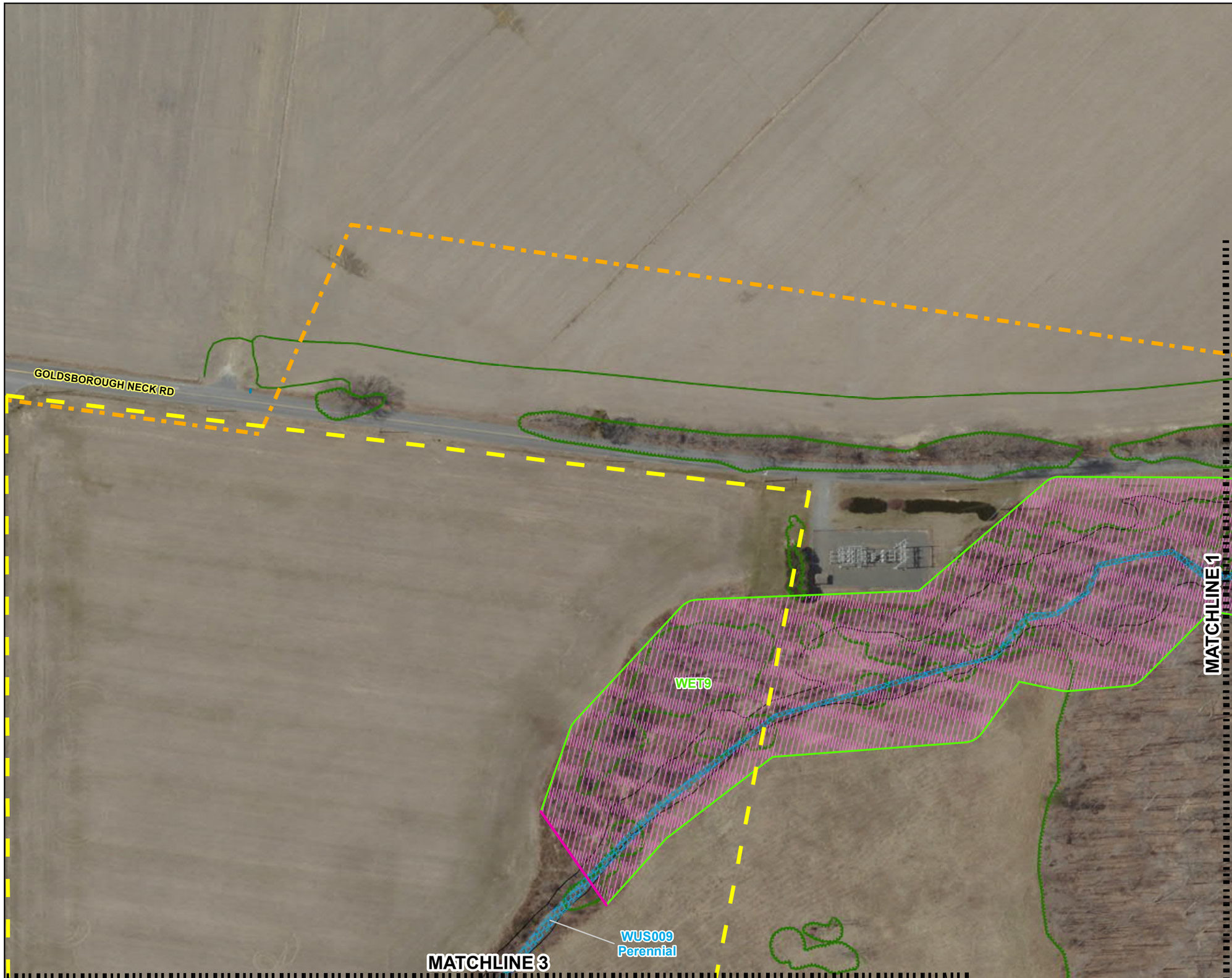


LEGEND

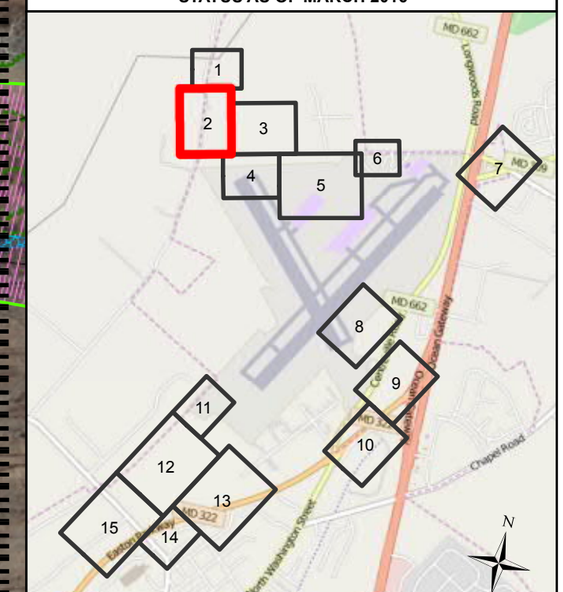
- STUDY AREA
- AIRPORT PROPERTY LINE
- TREELINE
- NON-JURISDICTIONAL SWM
- 100 YEAR FLOODPLAIN

2009 JD	2015 / 2016 SURVEY
STREAM SURVEY	STREAM SURVEY
WETLAND SURVEY	WETLAND SURVEY

N

NOTES:

STATUS AS OF MARCH 2016



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- 100 YEAR FLOODPLAIN

2009 JD	2015 / 2016 SURVEY
STREAM SURVEY	STREAM SURVEY
WETLAND SURVEY	WETLAND SURVEY

N

NOTES:

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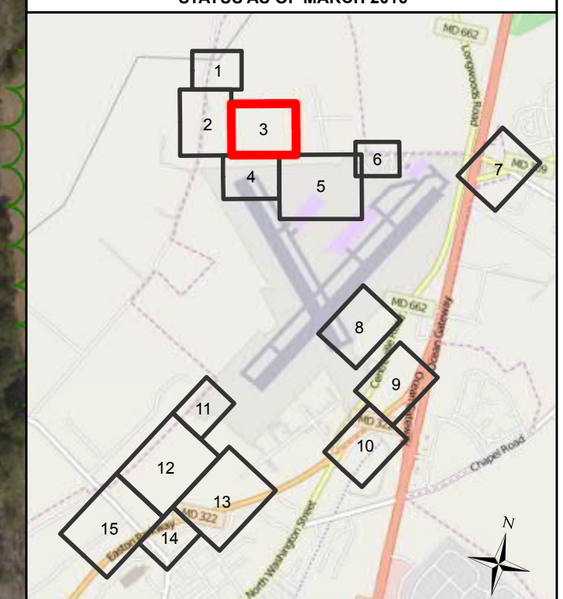

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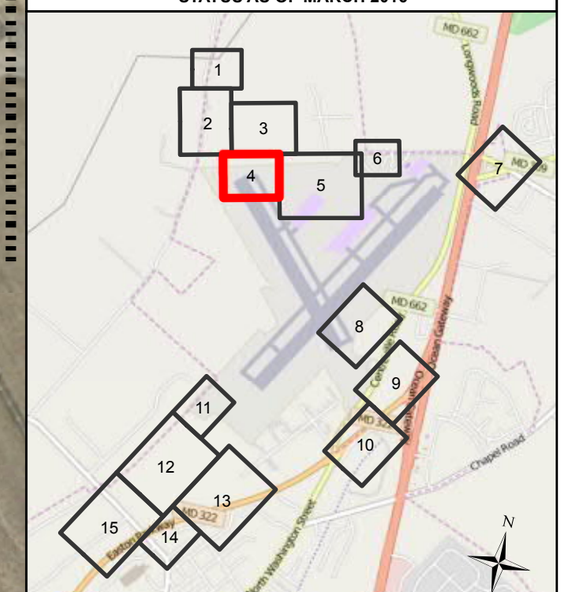
2009 JD	2015 / 2016 SURVEY
STREAM SURVEY	STREAM SURVEY
WETLAND SURVEY	WETLAND SURVEY

N

NOTES:

STATUS AS OF MARCH 2016



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2009 JD	2015 / 2016 SURVEY
STREAM SURVEY	STREAM SURVEY
WETLAND SURVEY	WETLAND SURVEY

N

NOTES:

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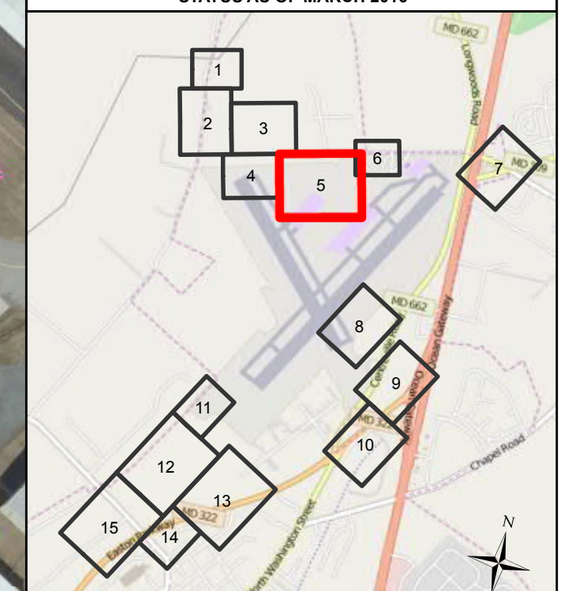

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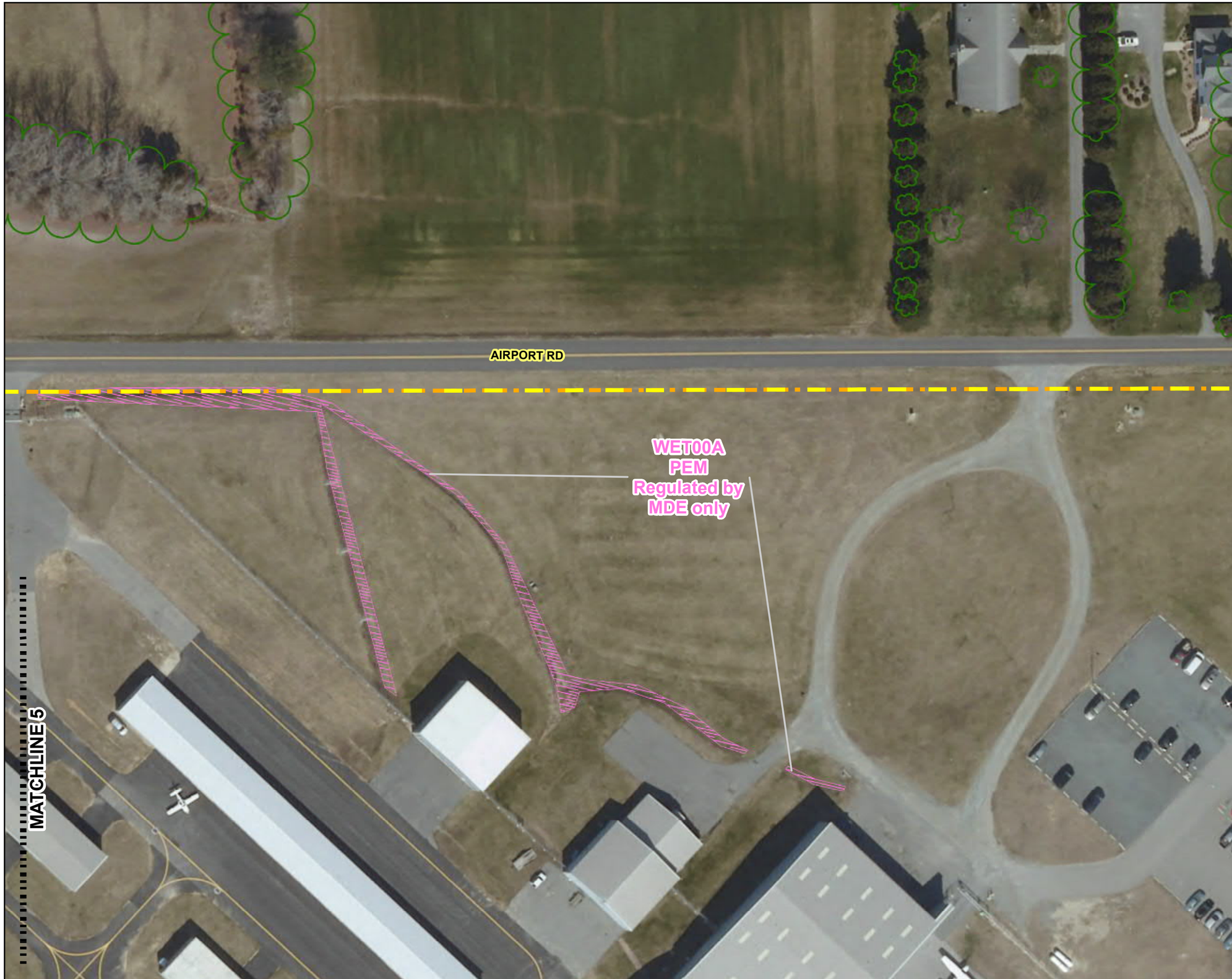

LEGEND

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- 100 YEAR FLOODPLAIN

2009 JD	2015 / 2016 SURVEY
STREAM SURVEY	STREAM SURVEY
WETLAND SURVEY	WETLAND SURVEY

N

NOTES:

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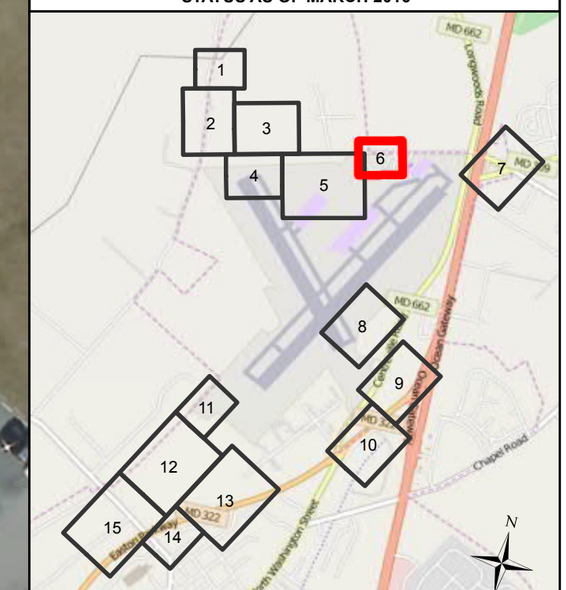

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- AIRPORT PROPERTY LINE
- TREELINE
- NON-JURISDICTIONAL SWM
- 100 YEAR FLOODPLAIN

2009 JD	2015 / 2016 SURVEY
STREAM SURVEY	STREAM SURVEY
WETLAND SURVEY	WETLAND SURVEY

N

NOTES:

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2009 JD	2015 / 2016 SURVEY
STREAM SURVEY	STREAM SURVEY
WETLAND SURVEY	WETLAND SURVEY

N

NOTES:

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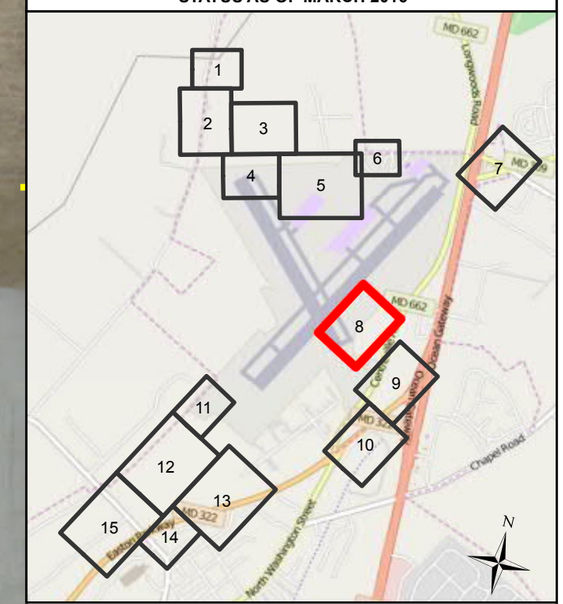

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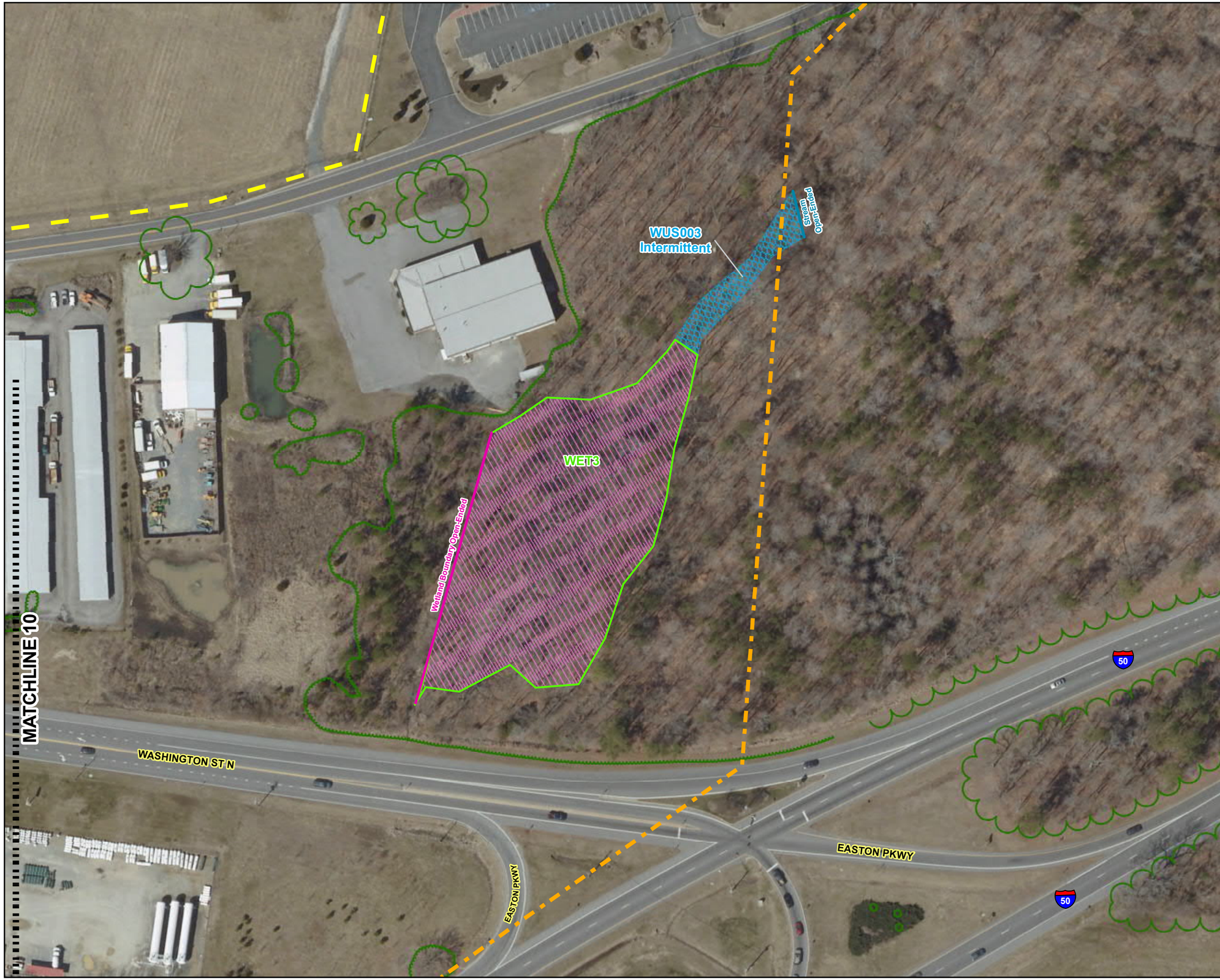

LEGEND

- STUDY AREA
- AIRPORT PROPERTY LINE
- TREELINE
- NON-JURISDICTIONAL SWM
- 100 YEAR FLOODPLAIN

2009 JD	2015 / 2016 SURVEY
STREAM SURVEY	STREAM SURVEY
WETLAND SURVEY	WETLAND SURVEY

N

NOTES:

STATUS AS OF MARCH 2016

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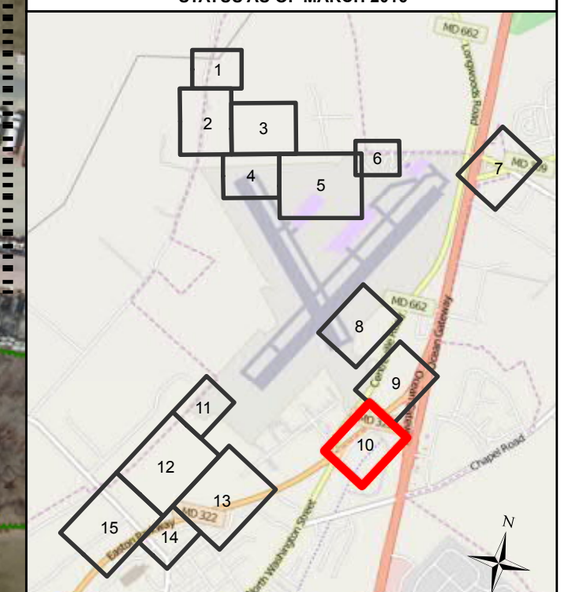
- 100 YEAR FLOODPLAIN

2009 JD	2015 / 2016 SURVEY
STREAM SURVEY	STREAM SURVEY
WETLAND SURVEY	WETLAND SURVEY

N

NOTES:

STATUS AS OF MARCH 2016



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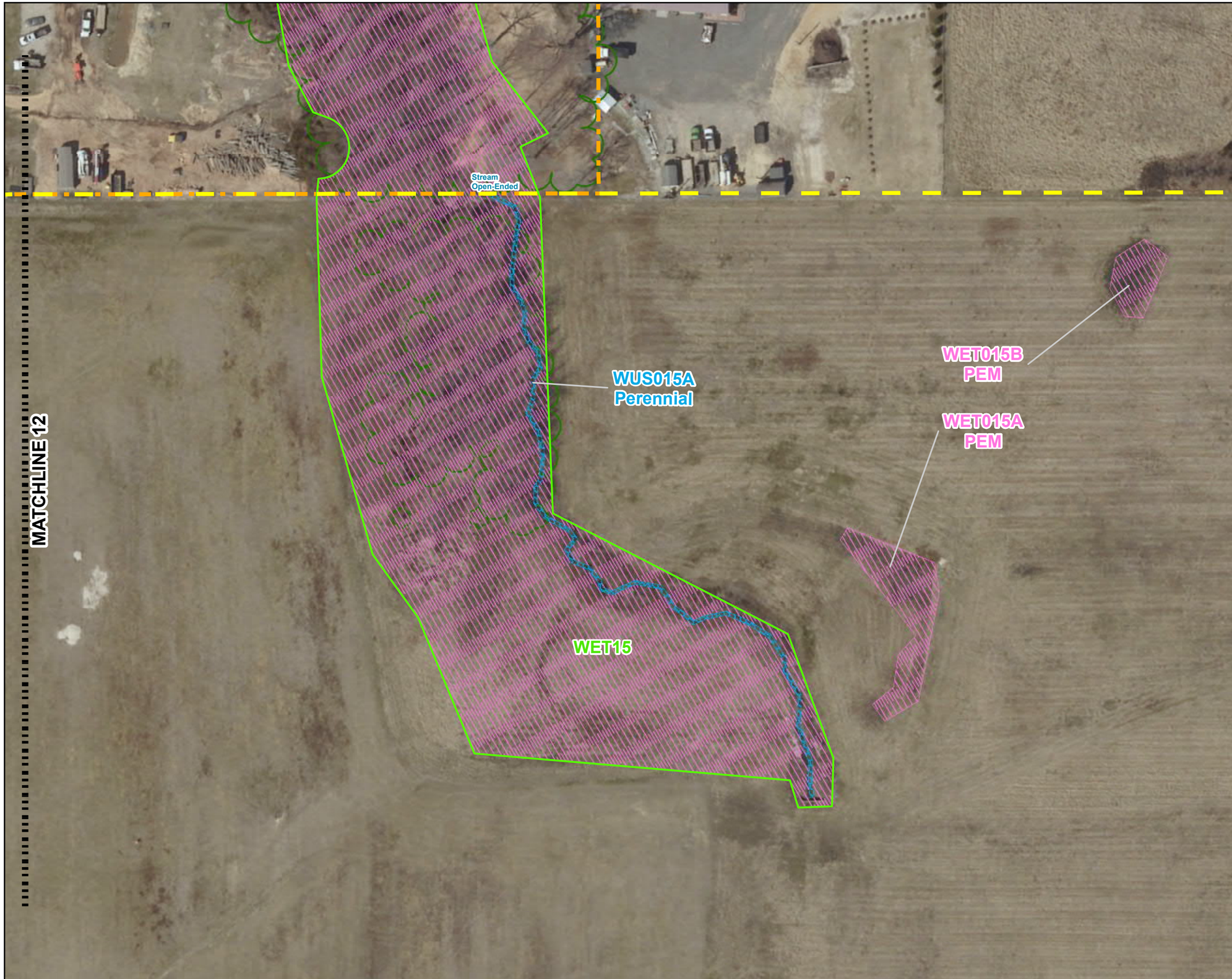
EASTON AIRPORT JD UPDATE
WETLAND DELINEATION REPORT



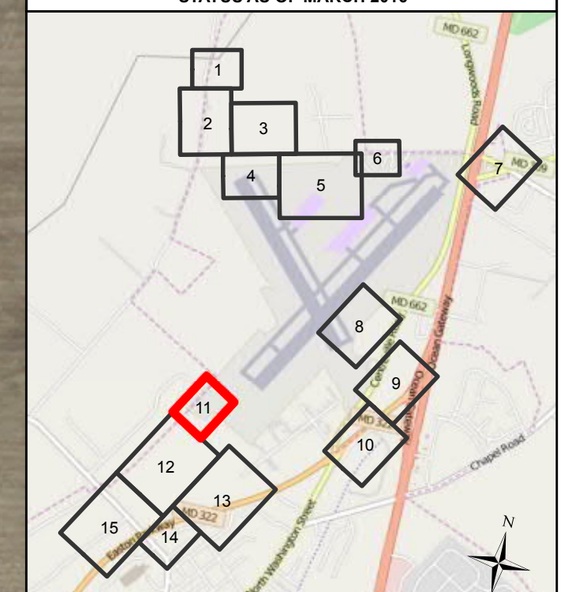
LEGEND

- STUDY AREA
- AIRPORT PROPERTY LINE
- TREELINE
- NON-JURISDICTIONAL SWM
- 100 YEAR FLOODPLAIN

2009 JD	2015 / 2016 SURVEY
STREAM SURVEY	STREAM SURVEY
WETLAND SURVEY	WETLAND SURVEY

NOTES:

STATUS AS OF MARCH 2016



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THE GREAT SEAL OF TALBOT COUNTY MARYLAND

EASTON/NEWNAM FIELD AIRPORT

EASTON, MARYLAND

AECOM

TALBOT COUNTY, MARYLAND
EASTON AIRPORT JD UPDATE
WETLAND DELINEATION REPORT

LEGEND

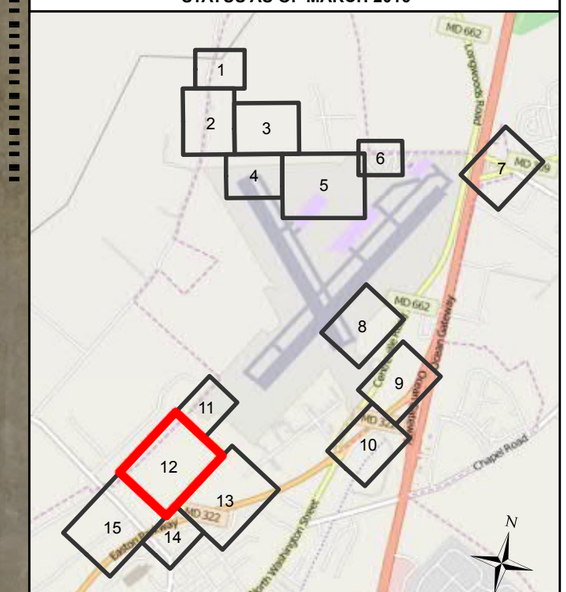
- STUDY AREA
- AIRPORT PROPERTY LINE
- TREELINE
- NON-JURISDICTIONAL SWM
- 100 YEAR FLOODPLAIN

2009 JD	2015 / 2016 SURVEY
STREAM SURVEY	STREAM SURVEY
WETLAND SURVEY	WETLAND SURVEY

N

NOTES:

STATUS AS OF MARCH 2016



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THE GREAT SEAL OF TALBOT COUNTY MARYLAND

EASTON/NEWNAM FIELD AIRPORT

EASTON, MARYLAND

AECOM

TALBOT COUNTY, MARYLAND
EASTON AIRPORT JD UPDATE
WETLAND DELINEATION REPORT

MATCHLINE 12

MATCHLINE 14

WET21

WUS021
Intermittent

WUS013
Intermittent

EPH013B
Ephemeral

WET013A
PEM

ROUTE 322

WET013
PFO

WUS021
Intermittent

EPH00E
Ephemeral

LEGEND

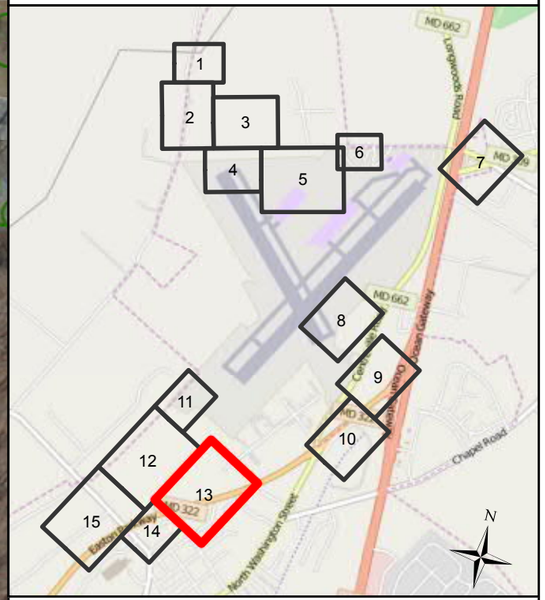
- STUDY AREA
- AIRPORT PROPERTY LINE
- TREELINE
- NON-JURISDICTIONAL SWM
- 100 YEAR FLOODPLAIN

2009 JD	2015 / 2016 SURVEY
STREAM SURVEY	STREAM SURVEY
WETLAND SURVEY	WETLAND SURVEY

N

NOTES:

STATUS AS OF MARCH 2016



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THE GREAT SEAL OF TALBOT COUNTY MARYLAND

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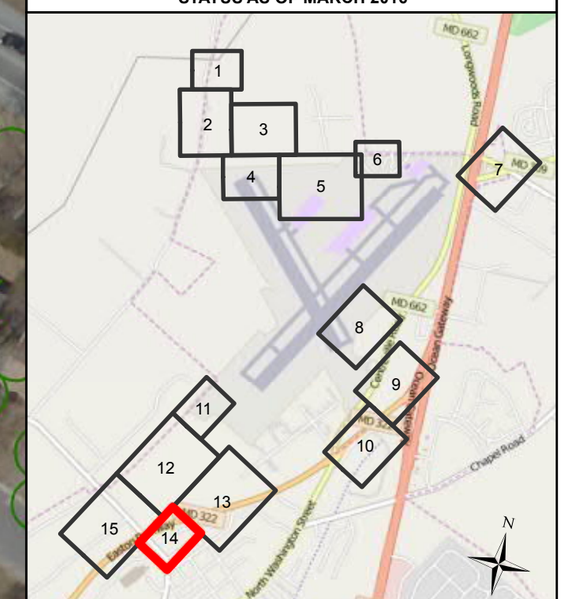
2009 JD	2015 / 2016 SURVEY
STREAM SURVEY	STREAM SURVEY
WETLAND SURVEY	WETLAND SURVEY

N

NOTES:

STATUS AS OF MARCH 2016



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THE GREAT SEAL OF TALBOT COUNTY MARYLAND

EASTON/NEWNAM FIELD AIRPORT

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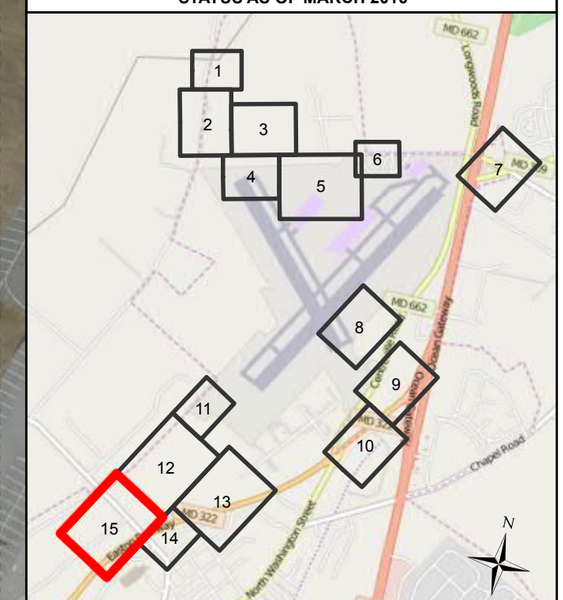
2009 JD	2015 / 2016 SURVEY
STREAM SURVEY	STREAM SURVEY
WETLAND SURVEY	WETLAND SURVEY

N

NOTES:

STATUS AS OF MARCH 2016



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EASTON/NEWNAM FIELD AIRPORT

EASTON, MARYLAND

AECOM

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Easton Airport City/County: Easton, MD Talbot Co. Sampling Date: 10/30/2015

Applicant/Owner: Easton Airport State: MD Sampling Point: Wet-4A

Investigator(s): KB + GT Section, Township, Range: Easton

Landform (hillslope, terrace, etc.): Basin Local relief (concave, convex, none): Concave Slope (%): <2%

Subregion (LRR or MLRA): MLRA 153C Lat: 38.796014 Long: -76.062540 Datum: WGS 84

Soil Map Unit Name: Lenni loams, 0-2% slopes LgA NWI classification: PEM

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes X No _____		**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present? Yes X No _____		
Wetland Hydrology Present? Yes X No _____		

Remarks:
wetland is located in linear drainage swale along small roadway. Upstream from drainage swale is a stormwater detention pond with an overflow pipe that drains to the wetland.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- [x] Surface Water (A1)
- [x] High Water Table (A2)
- [x] Saturation (A3)
- [ ] Water Marks (B1)
- [ ] Sediment Deposits (B2)
- [ ] Drift Deposits (B3)
- [ ] Algal Mat or Crust (B4)
- [ ] Iron Deposits (B5)
- [x] Inundation Visible on Aerial Imagery (B7)
- [x] Water-Stained Leaves (B9)
- [ ] Aquatic Fauna (B13)
- [ ] Marl Deposits (B15) **(LRR U)**
- [ ] Hydrogen Sulfide Odor (C1)
- [x] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Tilled Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- [ ] Surface Soil Cracks (B6)
- [ ] Sparsely Vegetated Concave Surface (B8)
- [x] Drainage Patterns (B10)
- [ ] Moss Trim Lines (B16)
- [ ] Dry-Season Water Table (C2)
- [x] Crayfish Burrows (C8)
- [ ] Saturation Visible on Aerial Imagery (C9)
- [x] Geomorphic Position (D2)
- [ ] Shallow Aquitard (D3)
- [ ] FAC-Neutral Test (D5)
- [ ] Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present? Yes X No _____ Depth (inches): 0"

Water Table Present? Yes X No _____ Depth (inches): 1"

Saturation Present? (includes capillary fringe) Yes X No _____ Depth (inches): 0"

Wetland Hydrology Present? Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Water filled the sample point after ~5 minutes.

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: WET-4A

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Liquidambar styraciflua	35	Y	FAC
2. Quercus rubra	10		FACU
3. Morus rubra	7		FACU
4. Acer rubrum	5		FAC
5. Catalpa speciosa	3		FACU
6.			
7.			
8.			
	60 = Total Cover		
50% of total cover: 30	20% of total cover: 12		

Sapling/Shrub Stratum (Plot size: 30')			
1. Quercus rubra	5	Y	FACU
2. Acer rubrum	5	Y	FAC
3.			
4.			
5.			
6.			
7.			
8.			
	10 = Total Cover		
50% of total cover: 5	20% of total cover: 2		

Herb Stratum (Plot size: 30')			
1. Leersia oryzoides	40	Y	OBL
2. Impatiens capensis	30	Y	FACW
3. Polygonum sp.	20		—
4. Boehmeria cylindrica	15		OBL
5. Lonicera japonica	2		FACU
6. Goldenrod sp.	2		—
7. Aster sp.	2		—
8.			
9.			
10.			
11.			
12.			
	111 = Total Cover		
50% of total cover: 55.5	20% of total cover: 22.2		

Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
50% of total cover:	20% of total cover:		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 80% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:
OBL species		x 1 =
FACW species		x 2 =
FAC species		x 3 =
FACU species		x 4 =
UPL species		x 5 =
Column Totals:	(A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes X No

Remarks: (If observed, list morphological adaptations below).

SOIL

Sampling Point: WET-4A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-8"	10 YR 5/1	97	7.5 YR 4/6	3	C	PL	Clay	
8-15"	10 YR 5/1	80	7.5 YR 4/6	20	C	M	Clay	
15-20"	10 YR 5/1	95	7.5 YR 6/6	5	C	M	Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) **(LRR P, T, U)**
- ☐ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ☐ Muck Presence (A8) **(LRR U)**
- ☐ 1 cm Muck (A9) **(LRR P, T)**
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) **(MLRA 150A)**
- ☐ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR P, S, T, U)**
- ☐ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ☐ Thin Dark Surface (S9) **(LRR S, T, U)**
- ☐ Loamy Mucky Mineral (F1) **(LRR O)**
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) **(LRR U)**
- ☐ Depleted Ochric (F11) **(MLRA 151)**
- ☐ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ☐ Umbric Surface (F13) **(LRR P, T, U)**
- ☐ Delta Ochric (F17) **(MLRA 151)**
- ☐ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) **(LRR O)**
- ☐ 2 cm Muck (A10) **(LRR S)**
- ☐ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ☐ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: None

Depth (inches): _____

Hydric Soil Present? Yes X No ____

Remarks:

Water filled sample point after ~5 minutes.

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Easton Airport City/County: Easton, MD Talbot Co. Sampling Date: 10/30/2015
Applicant/Owner: Easton Airport State: MD Sampling Point: WET-4B
Investigator(s): KB + GT Section, Township, Range: Easton
Landform (hillslope, terrace, etc.): Basin Local relief (concave, convex, none): Concave Slope (%): <2%
Subregion (LRR or MLRA): MLRA 153C Lat: 38.796161 Long: -76.062313 Datum: WGS 84
Soil Map Unit Name: Fallsington loams, 0-2% slopes FgcA NWI classification: PFO
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X	No _____	
Wetland Hydrology Present?	Yes X	No _____	

Remarks:
Wetland is located in low-lying area, along small roadway. Receives drainage from road runoff.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- [x] Surface Water (A1)
- [x] High Water Table (A2)
- [x] Saturation (A3)
- [ ] Water Marks (B1)
- [ ] Sediment Deposits (B2)
- [ ] Drift Deposits (B3)
- [ ] Algal Mat or Crust (B4)
- [ ] Iron Deposits (B5)
- [x] Inundation Visible on Aerial Imagery (B7)
- [x] Water-Stained Leaves (B9)
- [ ] Aquatic Fauna (B13)
- [ ] Marl Deposits (B15) **(LRR U)**
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Tilled Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- [ ] Surface Soil Cracks (B6)
- [ ] Sparsely Vegetated Concave Surface (B8)
- [x] Drainage Patterns (B10)
- [ ] Moss Trim Lines (B16)
- [ ] Dry-Season Water Table (C2)
- [ ] Crayfish Burrows (C8)
- [ ] Saturation Visible on Aerial Imagery (C9)
- [x] Geomorphic Position (D2)
- [ ] Shallow Aquitard (D3)
- [ ] FAC-Neutral Test (D5)
- [ ] Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes X	No _____	Depth (inches): 0"
Water Table Present?	Yes X	No _____	Depth (inches): 2"
Saturation Present? (includes capillary fringe)	Yes X	No _____	Depth (inches): 0"

Wetland Hydrology Present? Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Water filled the sample point after ~2 minutes

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: WET-4B

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Ulmus rubra	50	Y	FAC
2. Liquidamber styraciflua	20	Y	FAC
3. Acer rubrum	20	Y	FAC
4. Diospyros virginiana	5		FAC
5. Quercus coccinea	5		FACU
6.			
7.			
8.			
	100 = Total Cover		
50% of total cover: 50	20% of total cover: 20		

Sapling/Shrub Stratum (Plot size: 30')			
1. Ulmus rubra	50	Y	FAC
2. Diospyros virginiana	10		FAC
3. Quercus lyrata	3		OBL
4. Quercus alba	3		FACU
5.			
6.			
7.			
8.			
	66 = Total Cover		
50% of total cover: 33	20% of total cover: 13.2		

Herb Stratum (Plot size: 30')			
1. Viburnum dentatum	20	Y	FAC
2. Smilax rotundifolia	10	Y	FAC
3. Typha latifolia	5		OBL
4. Aster sp.	5		—
5. Lonicera japonica	2		FACU
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	42 = Total Cover		
50% of total cover: 21	20% of total cover: 8.4		

Woody Vine Stratum (Plot size: 30')			
1. Toxicodendron radicans	10	Y	FAC
2.			
3.			
4.			
5.			
	10 = Total Cover		
50% of total cover: 5	20% of total cover: 2		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 7 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 % (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:
OBL species		x 1 =
FACW species		x 2 =
FAC species		x 3 =
FACU species		x 4 =
UPL species		x 5 =
Column Totals:	(A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

X 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

__ 3 - Prevalence Index is ≤3.0[1]

__ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes X No ____

Remarks: (If observed, list morphological adaptations below).

Additional hydrophytic vegetation observed within wetland, outside of plot area. Observed species include, Phragmites australis + Typha latifolia.

SOIL

Sampling Point: WET-4B

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-3"	10 YR 3/2	100					Silty Clay	Organic matter present
3-20"	10 YR 6/1	70	10 YR 6/8	30	C	M	Silty Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) **(LRR P, T, U)**
- ☐ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ☐ Muck Presence (A8) **(LRR U)**
- ☐ 1 cm Muck (A9) **(LRR P, T)**
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) **(MLRA 150A)**
- ☐ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR P, S, T, U)**
- ☐ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ☐ Thin Dark Surface (S9) **(LRR S, T, U)**
- ☐ Loamy Mucky Mineral (F1) **(LRR O)**
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) **(LRR U)**
- ☐ Depleted Ochric (F11) **(MLRA 151)**
- ☐ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ☐ Umbric Surface (F13) **(LRR P, T, U)**
- ☐ Delta Ochric (F17) **(MLRA 151)**
- ☐ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) **(LRR O)**
- ☐ 2 cm Muck (A10) **(LRR S)**
- ☐ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ☐ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: None

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Easton Airport City/County: Easton, MD Talbot Co. Sampling Date: 10/23/2015
Applicant/Owner: Easton Airport State: MD Sampling Point: WET-8A
Investigator(s): KB + GT Section, Township, Range: Easton
Landform (hillslope, terrace, etc.): Basin Local relief (concave, convex, none): Concave Slope (%): 0-2%
Subregion (LRR or MLRA): MLRA 153C Lat: 38.811204 Long: -76.076929 Datum: WGS84
Soil Map Unit Name: Udorthents, borrow area, 0-5% slopes UbB NWI classification: PEM
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil X, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No _____
Hydric Soil Present?	Yes X	No _____
Wetland Hydrology Present?	Yes X	No _____

Is the Sampled Area within a Wetland? **Yes** X **No** _____

Remarks:
Wetland is located in low-lying swale within farmland. Soils potentially previously disturbed.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☒ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☒ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) **(LRR U)**
- ☐ Hydrogen Sulfide Odor (C1)
- ☒ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☒ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☒ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes _____	No X	Depth (inches): _____
Water Table Present?	Yes _____	No X	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes X	No _____	Depth (inches): 3"

Wetland Hydrology Present? **Yes** X **No** _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: WET-8A

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
		= Total Cover	

50% of total cover: _____ 20% of total cover: _____

Sapling/Shrub Stratum (Plot size: 30')			
1. Alnus serrulata	15	Y	OBL
2. Blackberry sp.	3		—
3.			
4.			
5.			
6.			
7.			
8.			
	18	= Total Cover	

50% of total cover: 9 20% of total cover: 3.6

Herb Stratum (Plot size: 30')			
1. Leersia oryoides	35	Y	OBL
2. Lonicera japonica	20	Y	FACU
3. Dichanthelium clandestinum	15	Y	FACW
4. Carex sp.	10		—
5. Goldenrod sp.	10		—
6. Juncus effusus	10		FACW
7. Securigera varia	10		—
8. Cyperus strigosus	5		FACW
9. Onoclea sensibilis	5		FACW
10.			
11.			
12.			
	120	= Total Cover	

50% of total cover: 60 20% of total cover: 24

Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

50% of total cover: _____ 20% of total cover: _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 75 % (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:
OBL species		x 1 =
FACW species		x 2 =
FAC species		x 3 =
FACU species		x 4 =
UPL species		x 5 =
Column Totals:	(A)	(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes X No _____

Remarks: (If observed, list morphological adaptations below).

SOIL

Sampling Point: WET-8A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-6"	10YR 4/3	100					Sandy loam	
6-12"	10YR 4/1	85	10YR 4/6	15	C	M	Sand	Common mottles
12-18"	10YR 3/1	75	10YR 4/6	25	C	M	Sandy loam	Frequent, well-defined mottles

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) **(LRR P, T, U)**
- ☐ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ☐ Muck Presence (A8) **(LRR U)**
- ☐ 1 cm Muck (A9) **(LRR P, T)**
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) **(MLRA 150A)**
- ☐ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR P, S, T, U)**
- ☐ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ☐ Thin Dark Surface (S9) **(LRR S, T, U)**
- ☐ Loamy Mucky Mineral (F1) **(LRR O)**
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) **(LRR U)**
- ☐ Depleted Ochric (F11) **(MLRA 151)**
- ☐ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ☐ Umbric Surface (F13) **(LRR P, T, U)**
- ☐ Delta Ochric (F17) **(MLRA 151)**
- ☐ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) **(LRR O)**
- ☐ 2 cm Muck (A10) **(LRR S)**
- ☐ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ☐ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: None

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Easton Airport City/County: Easton, MD Talbot Co. Sampling Date: 10/29/2015
Applicant/Owner: Easton Airport State: MD Sampling Point: WET-8B
Investigator(s): KB, GT+WG Section, Township, Range: Easton
Landform (hillslope, terrace, etc.): Basin Local relief (concave, convex, none): Concave Slope (%): 0-2%
Subregion (LRR or MLRA): MLRA 153C Lat: 38.810526 Long: -76.074490 Datum: WGS84
Soil Map Unit Name: Woodstown Sandy Loam, 0-2% slopes WdA NWI classification: PFO
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil X, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X	No _____	
Wetland Hydrology Present?	Yes X	No _____	

Remarks:
wetland is located in a disturbed area. Low area in forest has been created to intercept road runoff + protect farmland to the east from flooding.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☒ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☒ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) **(LRR U)**
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☒ Sparsely Vegetated Concave Surface (B8)
- ☒ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☒ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes _____	No X	Depth (inches): _____
Water Table Present?	Yes _____	No X	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes X	No _____	Depth (inches): 6"

Wetland Hydrology Present? Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Receives runoff from roadside ephemeral swale.

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: WET-8B

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Acer rubrum	30	Y	FAC
2. Liquidambar Styraciflua	10		FAC
3. Ulmus rubra	5		FAC
4.			
5.			
6.			
7.			
8.			
	____ = Total Cover		
50% of total cover: ____	20% of total cover: ____		

Sapling/Shrub Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	____ = Total Cover		
50% of total cover: ____	20% of total cover: ____		

Herb Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	____ = Total Cover		
50% of total cover: ____	20% of total cover: ____		

Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
5.			
	____ = Total Cover		
50% of total cover: ____	20% of total cover: ____		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: ____ (A)

Total Number of Dominant Species Across All Strata: ____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: ____ (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:
OBL species	____	x 1 = ____
FACW species	____	x 2 = ____
FAC species	____	x 3 = ____
FACU species	____	x 4 = ____
UPL species	____	x 5 = ____
Column Totals:	____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

__ 1 - Rapid Test for Hydrophytic Vegetation

__ 2 - Dominance Test is >50%

__ 3 - Prevalence Index is ≤3.0[1]

__ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ✓ No ____

Remarks: (If observed, list morphological adaptations below).

SOIL

Sampling Point: WET-8B

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-2"	10 YR 4/2	100					Silty Clay	Organic debris present
2-4"	10 YR 5/3	100					Sand	
4-6"	10 YR 7/8	100					Sand	Gravel present
6-9"	5 YR 4/6	50	10 YR 7/1	50	C	M	Sand	
9-10"	5 YR 4/6	100					Sand	
10-20"	10 YR 7/1	100					Sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) **(LRR P, T, U)**
- ☐ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ☐ Muck Presence (A8) **(LRR U)**
- ☐ 1 cm Muck (A9) **(LRR P, T)**
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) **(MLRA 150A)**
- ☐ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR P, S, T, U)**
- ☐ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ☐ Thin Dark Surface (S9) **(LRR S, T, U)**
- ☐ Loamy Mucky Mineral (F1) **(LRR O)**
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) **(LRR U)**
- ☐ Depleted Ochric (F11) **(MLRA 151)**
- ☐ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ☐ Umbric Surface (F13) **(LRR P, T, U)**
- ☐ Delta Ochric (F17) **(MLRA 151)**
- ☐ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) **(LRR O)**
- ☐ 2 cm Muck (A10) **(LRR S)**
- ☐ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ☐ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: None

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

Soils have been previously disturbed. Wetland is located in a man-made depression designed to intercept road runoff.

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Easton Airport City/County: Easton, MD Talbot Co. Sampling Date: 10/23/2015

Applicant/Owner: Easton Airport State: MD Sampling Point: WET-9A

Investigator(s): KB + GT Section, Township, Range: Easton

Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): Concave Slope (%): 0-2%

Subregion (LRR or MLRA): MLRA 153C Lat: 38.814449 Long: -76.079477 Datum: WGS84

Soil Map Unit Name: Zekiah silt loam, frequently flooded NWI classification: PFO

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X	No _____	
Wetland Hydrology Present?	Yes X	No _____	

Remarks:
wetland is located in low-lying floodplain area within forest, east of Goldsborough Neck Road.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- [x] Surface Water (A1)
- [x] High Water Table (A2)
- [x] Saturation (A3)
- [ ] Water Marks (B1)
- [ ] Sediment Deposits (B2)
- [ ] Drift Deposits (B3)
- [ ] Algal Mat or Crust (B4)
- [x] Iron Deposits (B5)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [x] Water-Stained Leaves (B9)
- [ ] Aquatic Fauna (B13)
- [ ] Marl Deposits (B15) **(LRR U)**
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Tilled Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- [ ] Surface Soil Cracks (B6)
- [ ] Sparsely Vegetated Concave Surface (B8)
- [x] Drainage Patterns (B10)
- [ ] Moss Trim Lines (B16)
- [ ] Dry-Season Water Table (C2)
- [x] Crayfish Burrows (C8)
- [ ] Saturation Visible on Aerial Imagery (C9)
- [x] Geomorphic Position (D2)
- [ ] Shallow Aquitard (D3)
- [ ] FAC-Neutral Test (D5)
- [ ] Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes X	No _____	Depth (inches): 0"
Water Table Present?	Yes X	No _____	Depth (inches): 2"
Saturation Present? (includes capillary fringe)	Yes X	No _____	Depth (inches): 0"

Wetland Hydrology Present? Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Water filled sample point after ~10 minutes

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: WET-9A

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Fraxinus pennsylvanica	30	Y	FACW
2. Carpinus caroliniana	10	Y	FAC
3. Acer rubrum	5		FAC
4.			
5.			
6.			
7.			
8.			
	45 = Total Cover		
50% of total cover: 22.5	20% of total cover: 9		

Sapling/Shrub Stratum (Plot size: 30')			
1. Viburnum prunifolium	2	Y	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	2 = Total Cover		
50% of total cover: 1	20% of total cover: 0.4		

Herb Stratum (Plot size: 30')			
1. Saururus cernuus	70	Y	OBL
2. Boehmeria cylindrica	30	Y	OBL
3. Pilea pumila	15		OBL
4. Aster sp.	2		—
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	117 = Total Cover		
50% of total cover: 58.5	20% of total cover: 23.4		

Woody Vine Stratum (Plot size: 30')			
1. Toxicodendron radicans	5	Y	FAC
2.			
3.			
4.			
5.			
	5 = Total Cover		
50% of total cover: 2.5	20% of total cover: 1		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 6 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:
OBL species		x 1 =
FACW species		x 2 =
FAC species		x 3 =
FACU species		x 4 =
UPL species		x 5 =
Column Totals:	(A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

X 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

__ 3 - Prevalence Index is ≤3.0[1]

__ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes X No ____

Remarks: (If observed, list morphological adaptations below).

SOIL

Sampling Point: WET-9A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-6"	10 YR 3/2	100					Clay loam	Organic matter present
6-12"	10 YR 4/1	95	10 YR 4/4	5	C	M	Sandy clay loam	Roots present
12-18"	10 YR 3/1	100					Sandy loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) **(LRR P, T, U)**
- ☐ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ☐ Muck Presence (A8) **(LRR U)**
- ☐ 1 cm Muck (A9) **(LRR P, T)**
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) **(MLRA 150A)**
- ☐ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR P, S, T, U)**
- ☐ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ☐ Thin Dark Surface (S9) **(LRR S, T, U)**
- ☐ Loamy Mucky Mineral (F1) **(LRR O)**
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) **(LRR U)**
- ☐ Depleted Ochric (F11) **(MLRA 151)**
- ☐ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ☐ Umbric Surface (F13) **(LRR P, T, U)**
- ☐ Delta Ochric (F17) **(MLRA 151)**
- ☐ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) **(LRR O)**
- ☐ 2 cm Muck (A10) **(LRR S)**
- ☐ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ☐ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed): None

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Easton Airport City/County: Easton, MD Talbot Co. Sampling Date: 11/4/2015
Applicant/Owner: Easton Airport State: MD Sampling Point: WET-13A
Investigator(s): KB + GT Section, Township, Range: Easton
Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 0-2%
Subregion (LRR or MLRA): MLRA 153C Lat: 38.791657 Long: -76.072020 Datum: WGS 84
Soil Map Unit Name: Lenni loam, 0-2% slopes LgA NWI classification: PEM
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X	No _____	
Wetland Hydrology Present?	Yes X	No _____	

Remarks:
wetland is located in a concave drainage swale along easement. wetland-13A is hydrologically connected to wetland 13, but has distinctly different characteristics.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- [x] Surface Water (A1)
- [x] High Water Table (A2)
- [x] Saturation (A3)
- [ ] Water Marks (B1)
- [ ] Sediment Deposits (B2)
- [ ] Drift Deposits (B3)
- [ ] Algal Mat or Crust (B4)
- [ ] Iron Deposits (B5)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Water-Stained Leaves (B9)
- [ ] Aquatic Fauna (B13)
- [ ] Marl Deposits (B15) **(LRR U)**
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Tilled Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- [ ] Surface Soil Cracks (B6)
- [ ] Sparsely Vegetated Concave Surface (B8)
- [x] Drainage Patterns (B10)
- [ ] Moss Trim Lines (B16)
- [ ] Dry-Season Water Table (C2)
- [ ] Crayfish Burrows (C8)
- [ ] Saturation Visible on Aerial Imagery (C9)
- [x] Geomorphic Position (D2)
- [ ] Shallow Aquitard (D3)
- [ ] FAC-Neutral Test (D5)
- [x] Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes X	No _____	Depth (inches): 0"
Water Table Present?	Yes X	No _____	Depth (inches): 12"
Saturation Present? (includes capillary fringe)	Yes X	No _____	Depth (inches): 0"

Wetland Hydrology Present? Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Water filled sample point to ~12" after 5 minutes.

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: WET-13A

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Liquidambar styraciflua	20	Y	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	20 = Total Cover		
50% of total cover: 10	20% of total cover: 4		

Sapling/Shrub Stratum (Plot size: 30')			
1. Rosa multiflora	10	Y	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	10 = Total Cover		
50% of total cover: 5	20% of total cover: 2		

Herb Stratum (Plot size: 30')			
1. Leersia oryzoides	80	Y	OBL
2. Carex folliculata	30	Y	OBL
3. Cyperus strigosus	10		FACW
4. Phragmites australis	10		FACW
5. Typha latifolia	10		OBL
6. Juncus effusus	2		FACW
7. Boehmeria cylindrica	2		OBL
8.			
9.			
10.			
11.			
12.			
	144 = Total Cover		
50% of total cover: 72	20% of total cover: 28.8		

Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
50% of total cover:	20% of total cover:		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 75% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:
OBL species		x 1 =
FACW species		x 2 =
FAC species		x 3 =
FACU species		x 4 =
UPL species		x 5 =
Column Totals:	(A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

X 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

__ 3 - Prevalence Index is ≤3.0[1]

__ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes X No ____

Remarks: (If observed, list morphological adaptations below).

SOIL

Sampling Point: WET-13A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-5"	10 YR 3/2	100					Sandy Clay loam	Roots/organic matter present
5-16"	7.5 YR 5/1	100					Sand	Minor gravel present

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) **(LRR P, T, U)**
- ☐ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ☐ Muck Presence (A8) **(LRR U)**
- ☐ 1 cm Muck (A9) **(LRR P, T)**
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) **(MLRA 150A)**
- ☐ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR P, S, T, U)**
- ☐ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ☐ Thin Dark Surface (S9) **(LRR S, T, U)**
- ☐ Loamy Mucky Mineral (F1) **(LRR O)**
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) **(LRR U)**
- ☐ Depleted Ochric (F11) **(MLRA 151)**
- ☐ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ☐ Umbric Surface (F13) **(LRR P, T, U)**
- ☐ Delta Ochric (F17) **(MLRA 151)**
- ☐ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) **(LRR O)**
- ☐ 2 cm Muck (A10) **(LRR S)**
- ☐ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ☐ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed): None

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ____

Remarks:

Very sandy soils in lower profile, saturated soils throughout.

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Easton Airport City/County: Easton, MD Talbot Co. Sampling Date: 10/22/2015

Applicant/Owner: Easton Airport State: MD Sampling Point: WET-15A

Investigator(s): KB + JH Section, Township, Range: Easton

Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): Concave Slope (%): 0-2%

Subregion (LRR or MLRA): MLRA 153C Lat: 38.796074 Long: -76.074764 Datum: WGS84

Soil Map Unit Name: Fallsington loams, 0-2% slopes FgcA NWI classification: PEM

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation X, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X	No _____	
Wetland Hydrology Present?	Yes X	No _____	

Remarks:
Wetland is located in a depression within the floodplain of the adjacent tributary to Glebe Creek. Vegetation is regularly mowed as part of maintenance activities at the airport.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☒ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☒ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) **(LRR U)**
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☒ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☒ Saturation Visible on Aerial Imagery (C9)
- ☒ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes _____	No X	Depth (inches): _____
Water Table Present?	Yes _____	No X	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes X	No _____	Depth (inches): 7"

Wetland Hydrology Present? Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Located in a depression; along toe of slight slope uphill.

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: WET-15A

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
		= Total Cover	

50% of total cover: _____ 20% of total cover: _____

Sapling/Shrub Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
		= Total Cover	

50% of total cover: _____ 20% of total cover: _____

Herb Stratum (Plot size: 30')			
1. Juncus effusus	50	Y	FACW
2. Carex sp.	30	Y	—
3. Onoclea sensibilis	5		FACW
4. Cyperus strigosus	3		FACW
5. Microstegium vimineum	5		FAC
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	93	= Total Cover	

50% of total cover: 46.5 20% of total cover: 18.6

Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

50% of total cover: _____ 20% of total cover: _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:
OBL species		x 1 =
FACW species		x 2 =
FAC species		x 3 =
FACU species		x 4 =
UPL species		x 5 =
Column Totals:	(A)	(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

X 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes X No _____

Remarks: (If observed, list morphological adaptations below).

Vegetation is regularly mowed as part of airport maintenance activities, difficult to identify species.

SOIL

Sampling Point: WET-15 A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-7"	10 YR 5/1	70	2.5 YR 3/6	30	C	PL	Silt	Oxidized roots, frequent mottles
7-12"	2.5 Y 7/1	50	10 YR 6/8	50	C	M	Sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) **(LRR P, T, U)**
- ☐ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ☐ Muck Presence (A8) **(LRR U)**
- ☐ 1 cm Muck (A9) **(LRR P, T)**
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) **(MLRA 150A)**
- ☐ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ☐ Sandy Gleyed Matrix (S4)
- ☒ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR P, S, T, U)**
- ☐ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ☐ Thin Dark Surface (S9) **(LRR S, T, U)**
- ☐ Loamy Mucky Mineral (F1) **(LRR O)**
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) **(LRR U)**
- ☐ Depleted Ochric (F11) **(MLRA 151)**
- ☐ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ☐ Umbric Surface (F13) **(LRR P, T, U)**
- ☐ Delta Ochric (F17) **(MLRA 151)**
- ☐ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) **(LRR O)**
- ☐ 2 cm Muck (A10) **(LRR S)**
- ☐ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ☐ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: None

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Easton Airport City/County: Easton, Talbot Co. Sampling Date: 11-10-2015

Applicant/Owner: Easton Airport State: MD Sampling Point: WETD15B

Investigator(s): JH Section, Township, Range: Easton

Landform (hillslope, terrace, etc.): slight depression Local relief (concave, convex, none): concave Slope (%): < 2%

Subregion (LRR or MLRA): MLRA 153C Lat: 38.7960 Long: -76.0747 Datum: _____

Soil Map Unit Name: Fallsington loam, 0-2% slopes NWI classification: PEM

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation ✓, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No _____	**Is the Sampled Area within a Wetland?** Yes ✓ No _____
Hydric Soil Present?	Yes ✓	No _____	
Wetland Hydrology Present?	Yes ✓	No _____	

Remarks:

The PEM has formed in a low spot on airport grounds and is regularly mowed

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- X Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- X Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- X FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes X	No _____	Depth (inches): 0"
Water Table Present?	Yes _____	No X	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes X	No _____	Depth (inches): 0"

Wetland Hydrology Present? Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Ponding in field

VEGETATION (Five Strata) – Use scientific names of plants.

Sampling Point: WET015B

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
	_____ = Total Cover		

50% of total cover: _____ 20% of total cover: _____

Sapling Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
6.			
	_____ = Total Cover		

50% of total cover: _____ 20% of total cover: _____

Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
6.			
	_____ = Total Cover		

50% of total cover: _____ 20% of total cover: _____

Herb Stratum (Plot size: 10x10)			
1. Juncus effusus	30	Y	FACW
2. Eleocharis sp.	40	Y	OBL
3. Ranunculus sp.	15		OBL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	85 = Total Cover		

50% of total cover: _____ 20% of total cover: _____

Woody Vine Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		

50% of total cover: _____ 20% of total cover: _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

✓ 1 - Rapid Test for Hydrophytic Vegetation

✓ 2 - Dominance Test is >50%

✓ 3 - Prevalence Index is ≤3.0[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine – All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes _____ No _____

Remarks: (If observed, list morphological adaptations below).

SOIL

Sampling Point: WET015B

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-10	2.5Y 7/1		10YR 7/8	15			silt clay loam	faint mottles

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Easton Airport City/County: Easton, MD Talbot Co. Sampling Date: 10/22/2015
Applicant/Owner: Easton Airport State: MD Sampling Point: WET-19
Investigator(s): GW, JH, GT + KD Section, Township, Range: Easton
Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): <5%
Subregion (LRR or MLRA): MLRA 153C Lat: 38.809344 Long: -76.075160 Datum: WGS 84
Soil Map Unit Name: Fallsington loams, 0-2% slopes FgcA NWI classification: PEM
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No _____
Hydric Soil Present?	Yes X	No _____
Wetland Hydrology Present?	Yes X	No _____

Is the Sampled Area within a Wetland? Yes X No _____

Remarks:
Wetland located in drainage swale
contributing sources include stormwater ponds

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- [x] Surface Water (A1)
- [x] High Water Table (A2)
- [x] Saturation (A3)
- [ ] Water Marks (B1)
- [ ] Sediment Deposits (B2)
- [ ] Drift Deposits (B3)
- [ ] Algal Mat or Crust (B4)
- [ ] Iron Deposits (B5)
- [x] Inundation Visible on Aerial Imagery (B7)
- [ ] Water-Stained Leaves (B9)
- [x] Aquatic Fauna (B13)
- [ ] Marl Deposits (B15) **(LRR U)**
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Tilled Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- [ ] Surface Soil Cracks (B6)
- [ ] Sparsely Vegetated Concave Surface (B8)
- [x] Drainage Patterns (B10)
- [ ] Moss Trim Lines (B16)
- [ ] Dry-Season Water Table (C2)
- [ ] Crayfish Burrows (C8)
- [x] Saturation Visible on Aerial Imagery (C9)
- [x] Geomorphic Position (D2)
- [ ] Shallow Aquitard (D3)
- [x] FAC-Neutral Test (D5)
- [ ] Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes X	No _____	Depth (inches): 1"
Water Table Present?	Yes X	No _____	Depth (inches): 4"
Saturation Present? (includes capillary fringe)	Yes X	No _____	Depth (inches): 0"

Wetland Hydrology Present? Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: WET-14

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	= Total Cover		

50% of total cover: _____ 20% of total cover: _____

Sapling/Shrub Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	= Total Cover		

50% of total cover: _____ 20% of total cover: _____

Herb Stratum (Plot size: 30')			
1. Microstegium vineminum	15	Y	FAC
2. Lonicera japonica	30	Y	FAC
3. Persicaria (Polygonum) punctatum	10	Y	OBL
4. Juncus effusus	10		FACW
5. Calystegia sp.	15		FAC
6. Carex sp.	5		—
7. Aster sp.	5		—
8.			
9.			
10.			
11.			
12.			
	= Total Cover		

50% of total cover: _____ 20% of total cover: _____

Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		

50% of total cover: _____ 20% of total cover: _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:
OBL species	_____	x 1 = _____
FACW species	_____	x 2 = _____
FAC species	_____	x 3 = _____
FACU species	_____	x 4 = _____
UPL species	_____	x 5 = _____
Column Totals:	_____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

X 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes X No _____

Remarks: (If observed, list morphological adaptations below).

SOIL

Sampling Point: WET-19

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-8"	10 YR 5/2	80	7.5 YR 4/6	20	C	M	Silt Loam	Many prominent mottles
8"-16"	GLEY 1 3/10GY	100						Gravel present

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) **(LRR P, T, U)**
- ☐ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ☐ Muck Presence (A8) **(LRR U)**
- ☐ 1 cm Muck (A9) **(LRR P, T)**
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) **(MLRA 150A)**
- ☐ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR P, S, T, U)**
- ☐ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ☐ Thin Dark Surface (S9) **(LRR S, T, U)**
- ☐ Loamy Mucky Mineral (F1) **(LRR O)**
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) **(LRR U)**
- ☐ Depleted Ochric (F11) **(MLRA 151)**
- ☐ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ☐ Umbric Surface (F13) **(LRR P, T, U)**
- ☐ Delta Ochric (F17) **(MLRA 151)**
- ☐ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) **(LRR O)**
- ☐ 2 cm Muck (A10) **(LRR S)**
- ☐ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ☐ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: None

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

Water present in sample point at ~4".

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Easton Airport City/County: Easton, MD Talbot Co. Sampling Date: 10/22/2015

Applicant/Owner: Easton Airport State: MD Sampling Point: WET-20

Investigator(s): KB, GT, JH + WG Section, Township, Range: Easton

Landform (hillslope, terrace, etc.): Basin / Swale Local relief (concave, convex, none): Concave Slope (%): <5%

Subregion (LRR or MLRA): MLRA 153C Lat: 38.810539 Long: -76.072984 Datum: WGS84

Soil Map Unit Name: Fallsington loams, 0-2% slopes FgcA NWI classification: PEM

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X	No _____	
Wetland Hydrology Present?	Yes X	No _____	

Remarks:

Linear wetland along roadside drainage swale.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☒ High Water Table (A2)
- ☒ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) **(LRR U)**
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☒ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☒ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes _____	No X	Depth (inches): _____
Water Table Present?	Yes X	No _____	Depth (inches): 3"
Saturation Present? (includes capillary fringe)	Yes X	No _____	Depth (inches): 0"

Wetland Hydrology Present? Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: WET-20

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	= Total Cover		
50% of total cover:	20% of total cover:		

Sapling/Shrub Stratum (Plot size: 30')			
1. Salix nigra	5	Y	OBL
2. Liquidambar styraciflua	5	Y	FAC
3.			
4.			
5.			
6.			
7.			
8.			
	10 = Total Cover		
50% of total cover: 5	20% of total cover: 2		

Herb Stratum (Plot size: 30')			
1. Lonicera japonica	25	Y	FAC
2. Persicaria sp.	15	Y	—
3. Juncus effusus	10		FACW
4. Onoclea sensibilis	10		FACW
5. Carex sp.	5		—
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	65 = Total Cover		
50% of total cover: 32.5	20% of total cover: 13		

Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
50% of total cover:	20% of total cover:		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 75% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:
OBL species		x 1 =
FACW species		x 2 =
FAC species		x 3 =
FACU species		x 4 =
UPL species		x 5 =
Column Totals:	(A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- [X] 1 - Rapid Test for Hydrophytic Vegetation
- [X] 2 - Dominance Test is >50%
- [ ] 3 - Prevalence Index is ≤3.0[1]
- [ ] Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes X No ____

Remarks: (If observed, list morphological adaptations below).

SOIL

Sampling Point: WET-20

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-15"	5Y 5/2	85	10YR 5/6	15	C	M	Clay loam	Mottles, common + distinct.

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) **(LRR P, T, U)**
- ☐ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ☐ Muck Presence (A8) **(LRR U)**
- ☐ 1 cm Muck (A9) **(LRR P, T)**
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) **(MLRA 150A)**
- ☐ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR P, S, T, U)**
- ☐ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ☐ Thin Dark Surface (S9) **(LRR S, T, U)**
- ☐ Loamy Mucky Mineral (F1) **(LRR O)**
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) **(LRR U)**
- ☐ Depleted Ochric (F11) **(MLRA 151)**
- ☐ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ☐ Umbric Surface (F13) **(LRR P, T, U)**
- ☐ Delta Ochric (F17) **(MLRA 151)**
- ☐ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) **(LRR O)**
- ☐ 2 cm Muck (A10) **(LRR S)**
- ☐ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ☐ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed): None

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ____

Remarks:

Solid, consistent soil profile. Saturated to surface

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Easton Airport City/County: Easton, MD Talbot Co. Sampling Date: 11/24/2015

Applicant/Owner: Easton Airport State: MD Sampling Point: WET-22A

Investigator(s): JH + KB Section, Township, Range: Easton

Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 0-2%

Subregion (LRR or MLRA): MLRA 153C Lat: 38.788106 Long: -76.081677 Datum: WGS84

Soil Map Unit Name: Urban land, Up NWI classification: PFO

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No _____
Hydric Soil Present?	Yes X	No _____
Wetland Hydrology Present?	Yes X	No _____

Is the Sampled Area within a Wetland? Yes X No _____

Remarks:
Wetland is located in a concave drainage swale along easement, wetland is downstream of a stormwater management facility that receives drainage from parking lots and roof runoff.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- [x] Surface Water (A1)
- [x] High Water Table (A2)
- [x] Saturation (A3)
- [ ] Water Marks (B1)
- [ ] Sediment Deposits (B2)
- [ ] Drift Deposits (B3)
- [ ] Algal Mat or Crust (B4)
- [ ] Iron Deposits (B5)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [x] Water-Stained Leaves (B9)
- [ ] Aquatic Fauna (B13)
- [ ] Marl Deposits (B15) **(LRR U)**
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Tilled Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- [ ] Surface Soil Cracks (B6)
- [ ] Sparsely Vegetated Concave Surface (B8)
- [x] Drainage Patterns (B10)
- [ ] Moss Trim Lines (B16)
- [ ] Dry-Season Water Table (C2)
- [ ] Crayfish Burrows (C8)
- [ ] Saturation Visible on Aerial Imagery (C9)
- [ ] Geomorphic Position (D2)
- [ ] Shallow Aquitard (D3)
- [ ] FAC-Neutral Test (D5)
- [ ] Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes X	No _____	Depth (inches): .5"
Water Table Present?	Yes X	No _____	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes X	No _____	Depth (inches): 0"

Wetland Hydrology Present? Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: WET-22 A

Tree Stratum (Plot size: 10')	Absolute % Cover	Dominant Species?	Indicator Status
1. Liquidambar styraciflua	25	Y	FAC
2. Acer rubrum	20	Y	FAC
3.			
4.			
5.			
6.			
7.			
8.			
	45 = Total Cover		
50% of total cover: ____	20% of total cover: ____		

Sapling/Shrub Stratum (Plot size: 10')			
1. Viburnum dentatum	5		FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	5 = Total Cover		
50% of total cover: ____	20% of total cover: ____		

Herb Stratum (Plot size: 10')			
1. Scirpus cyperinus	5		OBL
2. Typha latifolia	5		OBL
3. Microstegium vimineum	15	Y	FAC
4. Plantago aquatica	5		OBL
5. Lonicera japonica	5		FACU
6. Carex intumescens	5		FACW
7.			
8.			
9.			
10.			
11.			
12.			
	40 = Total Cover		
50% of total cover: ____	20% of total cover: ____		

Woody Vine Stratum (Plot size: 10')			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: ____	20% of total cover: ____		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:
OBL species	____	x 1 = ____
FACW species	____	x 2 = ____
FAC species	____	x 3 = ____
FACU species	____	x 4 = ____
UPL species	____	x 5 = ____
Column Totals:	____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- ✓ 2 - Dominance Test is >50%
- ✓ 3 - Prevalence Index is ≤3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes X No ____

Remarks: (If observed, list morphological adaptations below).

SOIL

Sampling Point: WET-22A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 4/1							silty clay
13-18	5Y 5/1							clay

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) **(LRR P, T, U)**
- ☐ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ☐ Muck Presence (A8) **(LRR U)**
- ☐ 1 cm Muck (A9) **(LRR P, T)**
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) **(MLRA 150A)**
- ☐ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR P, S, T, U)**
- ☐ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ☐ Thin Dark Surface (S9) **(LRR S, T, U)**
- ☐ Loamy Mucky Mineral (F1) **(LRR O)**
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) **(LRR U)**
- ☐ Depleted Ochric (F11) **(MLRA 151)**
- ☐ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ☐ Umbric Surface (F13) **(LRR P, T, U)**
- ☐ Delta Ochric (F17) **(MLRA 151)**
- ☐ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) **(LRR O)**
- ☐ 2 cm Muck (A10) **(LRR S)**
- ☐ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ☐ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ____

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Easton Airport City/County: Easton, MD Talbot Co. Sampling Date: 11/24/2015
Applicant/Owner: Easton Airport State: MD Sampling Point: WET-22B
Investigator(s): JH + KB Section, Township, Range: Easton
Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): 0-2%
Subregion (LRR or MLRA): MLRA 153C Lat: 38.788636 Long: -76.080440 Datum: WGS84
Soil Map Unit Name: Urban land, Up NWI classification: PFO
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes X No _____		**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present? Yes X No _____		
Wetland Hydrology Present? Yes X No _____		

Remarks:
Wetland is located in a flat, forested area, surrounded by urban industrial park

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☒ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☒ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) **(LRR U)**
- ☐ Hydrogen Sulfide Odor (C1)
- ☒ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☒ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____
Water Table Present? Yes _____ No X Depth (inches): _____
Saturation Present? (includes capillary fringe) Yes X No _____ Depth (inches): 0"

Wetland Hydrology Present? Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: WET-22B

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. Quercus phellos	25	Y	FACW
2. Quercus palustris	25	Y	FACW
3.			
4.			
5.			
6.			
7.			
8.			
	50 = Total Cover		

50% of total cover: _____ 20% of total cover: _____

Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	= Total Cover		

50% of total cover: _____ 20% of total cover: _____

Herb Stratum (Plot size: _____)			
1. Phragmites australis	55	Y	FACW
2. Campsis radicans	10		FAC
3. Lonicera japonica	5		FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	= Total Cover		

50% of total cover: _____ 20% of total cover: _____

Woody Vine Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		

50% of total cover: _____ 20% of total cover: _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

✓ 2 - Dominance Test is >50%

✓ 3 - Prevalence Index is ≤3.0[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes X No _____

Remarks: (If observed, list morphological adaptations below).

SOIL

Sampling Point: WET-22B

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 4/2						silt	organic material
8-12	10YR 4/2		7.5YR 6/8	20	RM	M	silty clay loam	small freq mottles
12-18	10YR 5/2		10YR 5/8	25	RM	M	"	lg freq mottles

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) **(LRR P, T, U)**
- ☐ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ☐ Muck Presence (A8) **(LRR U)**
- ☐ 1 cm Muck (A9) **(LRR P, T)**
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) **(MLRA 150A)**
- ☐ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR P, S, T, U)**
- ☐ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ☐ Thin Dark Surface (S9) **(LRR S, T, U)**
- ☐ Loamy Mucky Mineral (F1) **(LRR O)**
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) **(LRR U)**
- ☐ Depleted Ochric (F11) **(MLRA 151)**
- ☐ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ☐ Umbric Surface (F13) **(LRR P, T, U)**
- ☐ Delta Ochric (F17) **(MLRA 151)**
- ☐ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) **(LRR O)**
- ☐ 2 cm Muck (A10) **(LRR S)**
- ☐ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ☐ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Easton Airport City/County: Easton, MD Sampling Date: 12/9/2015

Applicant/Owner: Easton Airport State: MD Sampling Point: WET-[redacted]A

Investigator(s): JH + KB Section, Township, Range: Easton

Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 0-2%

Subregion (LRR or MLRA): MLRA 153C Lat: 38.811036 Long: -76.067075 Datum: WGS84

Soil Map Unit Name: Fallsington loams, 0-2% slopes FgcA NWI classification: PEM

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X	No _____	
Wetland Hydrology Present?	Yes X	No _____	

Remarks:
wetland is located in a system of concave drainage swales adjacent to the airport terminal + parking lot. One section of the wetland is geographically separate, but hydraulically connected via a culvert under a road.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- [x] Surface Water (A1)
- [x] High Water Table (A2)
- [x] Saturation (A3)
- [ ] Water Marks (B1)
- [ ] Sediment Deposits (B2)
- [ ] Drift Deposits (B3)
- [ ] Algal Mat or Crust (B4)
- [ ] Iron Deposits (B5)
- [x] Inundation Visible on Aerial Imagery (B7)
- [ ] Water-Stained Leaves (B9)
- [ ] Aquatic Fauna (B13)
- [ ] Marl Deposits (B15) **(LRR U)**
- [ ] Hydrogen Sulfide Odor (C1)
- [x] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Tilled Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- [ ] Surface Soil Cracks (B6)
- [ ] Sparsely Vegetated Concave Surface (B8)
- [x] Drainage Patterns (B10)
- [ ] Moss Trim Lines (B16)
- [ ] Dry-Season Water Table (C2)
- [ ] Crayfish Burrows (C8)
- [x] Saturation Visible on Aerial Imagery (C9)
- [x] Geomorphic Position (D2)
- [ ] Shallow Aquitard (D3)
- [ ] FAC-Neutral Test (D5)
- [x] Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes X	No _____	Depth (inches): 1"
Water Table Present?	Yes X	No _____	Depth (inches): 0"
Saturation Present? (includes capillary fringe)	Yes X	No _____	Depth (inches): 0"

Wetland Hydrology Present? Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: WGT-A

Tree Stratum (Plot size: 10')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	= Total Cover		

50% of total cover: _____ 20% of total cover: _____

Sapling/Shrub Stratum (Plot size: 10')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	= Total Cover		

50% of total cover: _____ 20% of total cover: _____

Herb Stratum (Plot size: 10')			
1. Carex tribuloides	10%		FACW
2. Juncus effusus	40%	Y	OBL
3. Cyperus strigosus	5%		FACW
4. Leersia oryzoides	10%		OBL
5. Scirpus cyperinus	5%		OBL
6. Ludwigia alternifolia	5%		OBL
7. Glyceria striata	5%		OBL
8. Kyllinga brevifolia	5%		FACW
9. Eleocharis sp.	40%	Y	—
10. Carex sp.	30%	Y	—
11. Polygonum sp.	5%		—
12.			
	160 = Total Cover		

50% of total cover: _____ 20% of total cover: _____

Woody Vine Stratum (Plot size: 10')			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		

50% of total cover: _____ 20% of total cover: _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:
OBL species		x 1 =
FACW species		x 2 =
FAC species		x 3 =
FACU species		x 4 =
UPL species		x 5 =
Column Totals:	(A)	(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

X 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

__ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes X No _____

Remarks: (If observed, list morphological adaptations below).

SOIL

Sampling Point: WET-A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-18"	2.5Y 4/1	100					Clay	Oxidized living roots present, standing water

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) **(LRR P, T, U)**
- ☐ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ☐ Muck Presence (A8) **(LRR U)**
- ☐ 1 cm Muck (A9) **(LRR P, T)**
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) **(MLRA 150A)**
- ☐ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR P, S, T, U)**
- ☐ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ☐ Thin Dark Surface (S9) **(LRR S, T, U)**
- ☐ Loamy Mucky Mineral (F1) **(LRR O)**
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) **(LRR U)**
- ☐ Depleted Ochric (F11) **(MLRA 151)**
- ☐ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ☐ Umbric Surface (F13) **(LRR P, T, U)**
- ☐ Delta Ochric (F17) **(MLRA 151)**
- ☐ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) **(LRR O)**
- ☐ 2 cm Muck (A10) **(LRR S)**
- ☐ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ☐ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: None

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

Further downstream within wetland, soils are silt sand with 2.5Y 4/1, 5/1 + 6/1 matrix + small, frequent mottles of 5YR 5/8 + 2.5Y 7/6, no standing water

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Easton Airport City/County: Easton, MD / Talbot Co Sampling Date: 3/16/2016

Applicant/Owner: Easton Airport State: MD Sampling Point: WETOOC

Investigator(s): JH, KB Section, Township, Range: Easton

Landform (hillslope, terrace, etc.): linear ditch Local relief (concave, convex, none): concave Slope (%): 0-2

Subregion (LRR or MLRA): MLRA 153C Lat: 38.809946 Long: -76.068643 Datum: WGS84

Soil Map Unit Name: Urban Land NWI classification: PEM

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No _____	**Is the Sampled Area within a Wetland?** **Yes** ✓ **No** _____
Hydric Soil Present?	Yes ✓	No _____	
Wetland Hydrology Present?	Yes ✓	No _____	

Remarks:
emergent wetland formed in linear drainage ditch surrounding airport buildings

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- [✓] Surface Water (A1)
- [✓] High Water Table (A2)
- [✓] Saturation (A3)
- [ ] Water Marks (B1)
- [ ] Sediment Deposits (B2)
- [ ] Drift Deposits (B3)
- [ ] Algal Mat or Crust (B4)
- [ ] Iron Deposits (B5)
- [✓] Inundation Visible on Aerial Imagery (B7)
- [ ] Water-Stained Leaves (B9)
- [✓] Aquatic Fauna (B13)
- [ ] Marl Deposits (B15) **(LRR U)**
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Tilled Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- [ ] Surface Soil Cracks (B6)
- [ ] Sparsely Vegetated Concave Surface (B8)
- [ ] Drainage Patterns (B10)
- [ ] Moss Trim Lines (B16)
- [ ] Dry-Season Water Table (C2)
- [✓] Crayfish Burrows (C8)
- [✓] Saturation Visible on Aerial Imagery (C9)
- [ ] Geomorphic Position (D2)
- [ ] Shallow Aquitard (D3)
- [✓] FAC-Neutral Test (D5)
- [ ] Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes ✓	No _____	Depth (inches): 1"
Water Table Present?	Yes ✓	No _____	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes ✓	No _____	Depth (inches): 0"

Wetland Hydrology Present? **Yes** ✓ **No** _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: WETDOC

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	0 = Total Cover		
50% of total cover: _____	20% of total cover: _____		

Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	0 = Total Cover		
50% of total cover: _____	20% of total cover: _____		

Herb Stratum (Plot size: _____)			
1. Juncus scirpoides	10		FACW
2. Juncus effusus	20	D	OBL
3. Carex sp.	15	D	UNK
4. Eleocharis sp.	40	D	UNK
5. Sphagnum moss	15		UNK
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	100 = Total Cover		
50% of total cover: _____	20% of total cover: _____		

Woody Vine Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: _____	20% of total cover: _____		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:
OBL species		x 1 =
FACW species		x 2 =
FAC species		x 3 =
FACU species		x 4 =
UPL species		x 5 =
Column Totals:	(A)	(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

- [x] 1 - Rapid Test for Hydrophytic Vegetation
- [x] 2 - Dominance Test is >50%
- [x] 3 - Prevalence Index is ≤3.0[1]
- [ ] Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ✓ No _____

Remarks: (If observed, list morphological adaptations below).

mosses observed throughout

SOIL

Sampling Point: WETOOC

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 3/3	60					silt loam	
	10YR 4/2	40						
5-8	10YR 4/2	100					silt loam	
8-12	10YR 5/1	100					silty sand	
12-18	7.5YR 7/1	80					silty sand	
	10YR 6/2	20						

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) **(LRR P, T, U)**
- ☐ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ☐ Muck Presence (A8) **(LRR U)**
- ☐ 1 cm Muck (A9) **(LRR P, T)**
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) **(MLRA 150A)**
- ☐ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR P, S, T, U)**
- ☐ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ☐ Thin Dark Surface (S9) **(LRR S, T, U)**
- ☐ Loamy Mucky Mineral (F1) **(LRR O)**
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) **(LRR U)**
- ☐ Depleted Ochric (F11) **(MLRA 151)**
- ☐ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ☐ Umbric Surface (F13) **(LRR P, T, U)**
- ☐ Delta Ochric (F17) **(MLRA 151)**
- ☐ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) **(LRR O)**
- ☐ 2 cm Muck (A10) **(LRR S)**
- ☐ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ☐ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ✓ **No** _____

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Easton Airport City/County: Easton/Talbot Co Sampling Date: 3/16/2016
Applicant/Owner: Airport State: MD Sampling Point: WETOOB
Investigator(s): JH, KB Section, Township, Range: Easton
Landform (hillslope, terrace, etc.): linear ditch Local relief (concave, convex, none): concave Slope (%): 0-2
Subregion (LRR or MLRA): MLRA 153C Lat: 38.809948 Long: -76.06864 Datum: WGS84
Soil Map Unit Name: Urban Land NWI classification: _____
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓ No _____	**Is the Sampled Area within a Wetland?** Yes ✓ No _____
Hydric Soil Present?	Yes ✓ No _____	
Wetland Hydrology Present?	Yes ✓ No _____	

Remarks: emergent wetland formed in linear drainage ditch surrounding airport bldgs

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☑ Surface Water (A1)
- ☑ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☑ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) **(LRR U)**
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☑ Crayfish Burrows (C8)
- ☑ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☑ FAC-Neutral Test (D5)
- ☐ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes ✓	No _____	Depth (inches): 1-3"
Water Table Present?	Yes ✓	No _____	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes ✓	No _____	Depth (inches): 0"

Wetland Hydrology Present? Yes ✓ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: WETOOB

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	_____ = Total Cover		
50% of total cover: _____	20% of total cover: _____		

Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	_____ = Total Cover		
50% of total cover: _____	20% of total cover: _____		

Herb Stratum (Plot size: _____)			
1. Juncus effuses	55	D	OBL
2. Juncus scirpoides	10		FACW
3. Carex sp.	15		UNK
4. Eleocharis sp.	10		UNK
5. Sphagnum moss	10		UNK
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	100 = Total Cover		
50% of total cover: _____	20% of total cover: _____		

Woody Vine Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
50% of total cover: _____	20% of total cover: _____		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	_____	x 1 =	_____
FACW species	_____	x 2 =	_____
FAC species	_____	x 3 =	_____
FACU species	_____	x 4 =	_____
UPL species	_____	x 5 =	_____
Column Totals:	_____ (A)		_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

- [x] 1 - Rapid Test for Hydrophytic Vegetation
- [x] 2 - Dominance Test is >50%
- [x] 3 - Prevalence Index is ≤3.0[1]
- [ ] Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ✓ **No** _____

Remarks: (If observed, list morphological adaptations below).

mosses observed scattered

SOIL

Sampling Point: WET 008

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 4/3	100					silt	very faint intreg mottles
4-8	10YR 7/2	85						
	10YR 7/8	15					silt sand	
8-18	10YR 7/2	10						
	10YR 7/8	90					silt sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) **(LRR P, T, U)**
- ☐ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ☐ Muck Presence (A8) **(LRR U)**
- ☐ 1 cm Muck (A9) **(LRR P, T)**
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) **(MLRA 150A)**
- ☐ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR P, S, T, U)**
- ☐ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ☐ Thin Dark Surface (S9) **(LRR S, T, U)**
- ☐ Loamy Mucky Mineral (F1) **(LRR O)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) **(LRR U)**
- ☐ Depleted Ochric (F11) **(MLRA 151)**
- ☐ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ☐ Umbric Surface (F13) **(LRR P, T, U)**
- ☐ Delta Ochric (F17) **(MLRA 151)**
- ☐ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) **(LRR O)**
- ☐ 2 cm Muck (A10) **(LRR S)**
- ☐ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ☐ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ✓ **No** ____

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Easton Airport City/County: Easton, MD / Talbot Co. Sampling Date: 4/13/2016

Applicant/Owner: Easton Airport State: MD Sampling Point: WET-00D

Investigator(s): KB + GT Section, Township, Range: Easton

Landform (hillslope, terrace, etc.): Linear Ditch Local relief (concave, convex, none): Concave Slope (%): 0-2

Subregion (LRR or MLRA): MLRA 153C Lat: 38.812290 Long: -76.058377 Datum: WGS84

Soil Map Unit Name: Elkton Silt Loam, EmA 0-2% NWI classification: PEM

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation X, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X	No _____	
Wetland Hydrology Present?	Yes X	No _____	

Remarks:
Emergent wetland formed in linear drainage ditches along Cordova Rd. + Black Dog Alley, east of U.S. 50. All hydrologically connected.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- [x] Surface Water (A1)
- [x] High Water Table (A2)
- [x] Saturation (A3)
- [ ] Water Marks (B1)
- [ ] Sediment Deposits (B2)
- [ ] Drift Deposits (B3)
- [ ] Algal Mat or Crust (B4)
- [ ] Iron Deposits (B5)
- [x] Inundation Visible on Aerial Imagery (B7)
- [ ] Water-Stained Leaves (B9)
- [ ] Aquatic Fauna (B13)
- [ ] Marl Deposits (B15) **(LRR U)**
- [ ] Hydrogen Sulfide Odor (C1)
- [x] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Tilled Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- [ ] Surface Soil Cracks (B6)
- [ ] Sparsely Vegetated Concave Surface (B8)
- [x] Drainage Patterns (B10)
- [ ] Moss Trim Lines (B16)
- [ ] Dry-Season Water Table (C2)
- [x] Crayfish Burrows (C8)
- [x] Saturation Visible on Aerial Imagery (C9)
- [x] Geomorphic Position (D2)
- [ ] Shallow Aquitard (D3)
- [ ] FAC-Neutral Test (D5)
- [ ] Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes X	No _____	Depth (inches): 2-3"
Water Table Present?	Yes X	No _____	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes X	No _____	Depth (inches): 0"

Wetland Hydrology Present? Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Standing water observed throughout linear wetland

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: WETOOD

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	0 = Total Cover		
50% of total cover: _____	20% of total cover: _____		

Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	0 = Total Cover		
50% of total cover: _____	20% of total cover: _____		

Herb Stratum (Plot size: _____)			
1. Juncus effuses	50	Y	OBL
2. Carex sp.	40	Y	UNK
3. Typha latifolia	35	Y	OBL
4. Phragmites australis	5		FACW
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	130% = Total Cover		
50% of total cover: 65%	20% of total cover: 26%		

Woody Vine Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: _____	20% of total cover: _____		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 67% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:
OBL species		x 1 =
FACW species		x 2 =
FAC species		x 3 =
FACU species		x 4 =
UPL species		x 5 =
Column Totals:	(A)	(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

X 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes X No _____

Remarks: (If observed, list morphological adaptations below).

Vegetation recently mowed at time of delineation.

SOIL

Sampling Point: WETOOD

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-6"	10 YR 2/1	100					Muck	High organic matter
6"-18"	10 YR 6/1	85	10 YR 5/6	15	C	M	Clay	oxidized roots

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) **(LRR P, T, U)**
- ☒ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ☐ Muck Presence (A8) **(LRR U)**
- ☐ 1 cm Muck (A9) **(LRR P, T)**
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) **(MLRA 150A)**
- ☐ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR P, S, T, U)**
- ☐ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ☐ Thin Dark Surface (S9) **(LRR S, T, U)**
- ☐ Loamy Mucky Mineral (F1) **(LRR O)**
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) **(LRR U)**
- ☐ Depleted Ochric (F11) **(MLRA 151)**
- ☐ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ☐ Umbric Surface (F13) **(LRR P, T, U)**
- ☐ Delta Ochric (F17) **(MLRA 151)**
- ☐ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) **(LRR O)**
- ☐ 2 cm Muck (A10) **(LRR S)**
- ☐ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ☐ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: None

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Easton Airport City/County: Easton, MD / Talbot Co. Sampling Date: 4/13/16

Applicant/Owner: Easton Airport State: MD Sampling Point: WET 00E

Investigator(s): KB + GT Section, Township, Range: Easton

Landform (hillslope, terrace, etc.): Linear ditch Local relief (concave, convex, none): Concave Slope (%): 0-2

Subregion (LRR or MLRA): MLRA 153C Lat: 38.788326 Long: -76.076646 Datum: WGS84

Soil Map Unit Name: Crosiadore silt loam, CsB 2-5% NWI classification: PEM

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation X, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No _____	**Is the Sampled Area within a Wetland?** **Yes** X **No** _____
Hydric Soil Present?	Yes X	No _____	
Wetland Hydrology Present?	Yes X	No _____	

Remarks:
Emergent wetland formed in linear drainage ditch along MD 322/Easton Pkwy.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- [x] Surface Water (A1)
- [x] High Water Table (A2)
- [x] Saturation (A3)
- [ ] Water Marks (B1)
- [ ] Sediment Deposits (B2)
- [ ] Drift Deposits (B3)
- [ ] Algal Mat or Crust (B4)
- [ ] Iron Deposits (B5)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Water-Stained Leaves (B9)
- [ ] Aquatic Fauna (B13)
- [ ] Marl Deposits (B15) **(LRR U)**
- [ ] Hydrogen Sulfide Odor (C1)
- [x] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Tilled Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- [ ] Surface Soil Cracks (B6)
- [ ] Sparsely Vegetated Concave Surface (B8)
- [x] Drainage Patterns (B10)
- [ ] Moss Trim Lines (B16)
- [ ] Dry-Season Water Table (C2)
- [ ] Crayfish Burrows (C8)
- [x] Saturation Visible on Aerial Imagery (C9)
- [x] Geomorphic Position (D2)
- [ ] Shallow Aquitard (D3)
- [ ] FAC-Neutral Test (D5)
- [ ] Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes X	No _____	Depth (inches): 3"
Water Table Present?	Yes X	No _____	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes X	No _____	Depth (inches): 0"

Wetland Hydrology Present? **Yes** X **No** _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Standing water observed throughout linear wetland

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: WETOOE

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	0 = Total Cover		
50% of total cover: _____	20% of total cover: _____		

Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	0 = Total Cover		
50% of total cover: _____	20% of total cover: _____		

Herb Stratum (Plot size: _____)			
1. Juncus effusus	60	Y	OBL
2. Carex sp.	25	Y	UNK
3. Typha latifolia	15		OBL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	100 = Total Cover		
50% of total cover: 50	20% of total cover: 20		

Woody Vine Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: _____	20% of total cover: _____		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)

Prevalence Index worksheet:

	Total % Cover of:	Multiply by:
OBL species	75	x 1 = 75
FACW species		x 2 =
FAC species		x 3 =
FACU species		x 4 =
UPL species		x 5 =
Column Totals:	75 (A)	75 (B)

Prevalence Index = B/A = 1

Hydrophytic Vegetation Indicators:

X 1 - Rapid Test for Hydrophytic Vegetation

__ 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

__ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes X No _____

Remarks: (If observed, list morphological adaptations below).

Vegetation recently mowed at time of delineation

SOIL

Sampling Point: WETOOE

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-6"	10 YR 2/2	100					Sandy Loam	Saturated, oxidized roots
6-12"	10 YR 5/1	75	10 YR 5/6	25	C	M	Sandy Clay	
12-18"	10 BG 5/1	96	10 YR 4/6	3	C	M	Clay	
			5 GY 4/2	1	C	M		

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) **(LRR P, T, U)**
- ☐ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ☐ Muck Presence (A8) **(LRR U)**
- ☐ 1 cm Muck (A9) **(LRR P, T)**
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) **(MLRA 150A)**
- ☐ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR P, S, T, U)**
- ☐ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ☐ Thin Dark Surface (S9) **(LRR S, T, U)**
- ☐ Loamy Mucky Mineral (F1) **(LRR O)**
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) **(LRR U)**
- ☐ Depleted Ochric (F11) **(MLRA 151)**
- ☐ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ☐ Umbric Surface (F13) **(LRR P, T, U)**
- ☐ Delta Ochric (F17) **(MLRA 151)**
- ☐ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) **(LRR O)**
- ☐ 2 cm Muck (A10) **(LRR S)**
- ☐ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ☐ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: None

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

Gleyed soils present in lower 6" of profile.

Appendix F: Air Quality

AIR QUALITY

EASTON/NEWNAM FIELD AIRPORT

Prepared by:
KB Environmental Sciences, Inc.

Prepared for:
AECOM

November 2016

AIR QUALITY

This section includes information on existing air quality conditions in the area surrounding ESN, including (i.) the regulatory agencies involved in the management of air quality, (ii.) relevant air quality regulations, (iii.) the attainment/nonattainment status and (iv.) recently recorded air monitoring data. The air quality impacts associated with the operational and construction activities of the proposed improvements at ESN are further discussed in **Section 3.1** of this report.

Regulatory Agencies

The Airport is located in the City of Easton, Talbot County, Maryland. The management of air quality conditions in Maryland, including the area around ESN, is the combined responsibility of federal, state, regional, and local governmental air quality regulatory agencies. Under the federal Clean Air Act (CAA), the U.S. Environmental Protection Agency (EPA) establishes the guiding principles and policies for protecting air quality conditions throughout the nation. EPAâs primary responsibilities in this area include promulgating the National Ambient Air Quality Standards (NAAQS) which define ambient concentrations for criteria air pollutants that are considered safe for public, health welfare and the environment as well as approving State Implementation Plans (SIPs).

The Federal Aviation Administration (FAA) is the primary agency involved in, and responsible for, ensuring that air quality impacts associated with proposed airport projects adhere to the reporting and disclosure requirements of the National Environmental Policy Act (NEPA) as well as the General Conformity rule of the CAA.

On the state level, The Maryland Department of the Environment (MDE) is responsible for enforcement of environmental laws and regulations, long-term planning and research. At the local level, the County of Talbot and the City of Easton also have a department of environmental programs, however they do not take part in air quality monitoring or management.

In addition to the various regulatory agencies, the state of Maryland is part of the Ozone Transport Commission (OTC). The OTC is a multi-state organization created under the CAA. They advise the EPA on transport issues and help to develop or implement regional solutions for ground level ozone (O_3) issues in the Northeast and Mid-Atlantic regions of the country.

National Ambient Air Quality Standards

Pursuant to the requirements of the CAA, the EPA establishes, enforces, and periodically reviews the NAAQS. The NAAQS are set to safeguard public health and environmental welfare against the detrimental effects of ambient air pollution and are defined as primary and/or secondary standards. Primary NAAQS are health-based standards geared toward protecting sensitive or at-risk portions of the population such as asthmatics, children, and the elderly. Secondary NAAQS are welfare oriented and are designed to prevent decreased visibility and damage to animals, vegetation, and physical structures. NAAQS have been established for six common air pollutants, referred to as criteria pollutants: carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO_2), ozone (O_3), particulate matter (PM) which includes particulate matter with a diameter of 10 microns or less (PM_{10}) and a diameter of 2.5 microns or less ($PM_{2.5}$), and sulfur dioxide (SO_2). Nitrogen oxides (NO_x) and volatile organic compound (VOC) emissions are precursors to ozone formation. The NAAQS are listed in **Table 1**.

Table 1: National Ambient Air Quality Standards (NAAQS)

Pollutant		Primary/ Secondary	Averaging Time	Level
Carbon Monoxide (CO)[a]		primary	8-hour	9 ppm
			1-hour	35 ppm
Lead (Pb)[b]		primary and secondary	Rolling 3 month average	0.15 εg/m^3
Nitrogen Dioxide (NO_2)[c]		primary	1-hour	100 ppb
		primary and secondary	Annual	53 ppb [d]
Ozone (O_3)[e]		primary and secondary	8-hour	0.070 ppm[f]
Particle Pollution (PM)	$PM_{2.5}$[g]	primary	Annual	12 εg/m^3
		secondary	Annual	15 εg/m^3
		primary and secondary	24-hour	35 εg/m^3
	PM_{10}[h]	primary and secondary	24-hour	150 εg/m^3
Sulfur Dioxide (SO_2)[i]		primary	1-hour	75 ppb[j]
		secondary	3-hour	0.5 ppm

Notes: ppb = parts per billion, ppm = parts per million, and µg/m^3 = micrograms per cubic meter of air.
[a] CO 1-hour and 8-hour standard not to be exceeded more than once per year.
[b] Lead rolling three month average standard not to be exceeded. In areas designated nonattainment for the Pb standards prior to the promulgation of the current (2008) standards, and for which implementation plans to attain or maintain the current (2008) standards have not been submitted and approved, the previous standards (1.5 µg/m^3 as a calendar quarter average) also remain in effect.
[c] NO2 1-hour standard represents the 98th percentile of 1-hour daily maximum concentrations, averaged over three years.
[d] The level of the annual NO_2 standard is 0.053 ppm, equal to 53 ppb, which is presented for the purpose of clearer comparison to the 1-hour standard.
[e] Ozone 8-hour standard represents the annual fourth-highest daily maximum 8-hr concentration, averaged over three years.
[f] Final rule signed October 1, 2015, and effective December 28, 2015. The previous (2008) O_3 standards additionally remain in effect in some areas. Revocation of the previous (2008) O_3 standards and transitioning to the current (2015) standards will be addressed in the implementation rule for the current standards.
[g] $PM_{2.5}$ annual standards represent annual mean, averaged over three years. $PM_{2.5}$ 24-hour standard represents 98th percentile, averaged over three years.
[h] PM_{10} 24-hour standard not to be exceeded more than once per year on average over three years.
[i] SO_2 1-hour standard represents 99th percentile of 1-hour daily maximum concentrations, averaged over three years. SO_2 3-hour standard not to be exceeded more than once per year.
[j] The previous SO_2 standards (0.14 ppm 24-hour and 0.03 ppm annual) will additionally remain in effect in certain areas: (1) any area for which it is not yet 1 year since the effective date of designation under the current (2010) standards, and (2)any area for which implementation plans providing for attainment of the current (2010) standard have not been submitted and approved and which is designated nonattainment under the previous SO_2 standards or is not meeting the requirements of a SIP call under the previous SO_2 standards (40 CFR 50.4(3)), A SIP call is an EPA action requiring a state to resubmit all or part of its State Implementation Plan to demonstrate attainment of the require NAAQS.
Source: EPA, National Ambient Air Quality Standards (NAAQS), September 2016, https://www.epa.gov/criteria-air-pollutants/naaqs-table.

Attainment/Nonattainment Status

The EPA designates areas as either meeting (attainment) or not meeting (nonattainment) the NAAQS. An area with measured pollutant concentrations that exceed the NAAQS is designated as a nonattainment area. Once a nonattainment area meets the NAAQS and the additional re-designation requirements in the CAA, the EPA will designate the area as a maintenance area. Ozone nonattainment areas are further classified as extreme, severe, moderate, or marginal. An area is designated as unclassifiable when there is a lack of sufficient data to form the basis of an attainment status determination.

The CAA requires states to develop a general plan to attain and/or maintain the primary and secondary NAAQS in all areas of the country and to develop a specific plan to attain the standards for each area designated nonattainment for a NAAQS. These plans, known as SIPs, are developed by state and local air quality management agencies and submitted to the EPA for approval. ESN is located in Talbot County which is currently designated as an ñattainmentò area of all NAAQs established by EPA.

CAA General Conformity Requirements

The General Conformity Rule of the federal CAA prohibits federal agencies (including the FAA) from permitting or funding projects that do not conform to an applicable SIP. The General Conformity Rule applies only to areas that are designated nonattainment or maintenance. Because ESN is located in Talbot County which is currently an area designated as ñattainmentò of all NAAQS established by EPA, General Conformity requirements outlined under the federal CAA do not apply to the proposed project and accordingly a General Conformity Applicability Analysis is not warranted.

CAA Transportation Conformity Requirements

The CAA also contains a Transportation Conformity Rule that functions similarly to the General Conformity Rule. The Transportation Conformity Rule restricts federal funding to highway or transportation projects that do not conform to an applicable SIP. The responsibility of transportation conformity determination is vested in the Federal Highway Administration (FHWA) and state Department of Transportation (DOT). The proposed improvements to ESN are not subject to the Transportation Conformity Rule because it is not a roadway/highway project.

National Environmental Policy Act (NEPA)

In addition to the General Conformity Rule requirements, the NEPA also requires environmental review of federally-funded projects that have the potential to affect the environment. Therefore, for disclosure purposes under the NEPA an operational and construction emissions inventory of the proposed improvements at ESN is presented in Section III of this report.

Air Quality Monitoring Data

The MDE maintains an air quality monitoring network composed of 19 monitoring stations throughout Maryland. These monitors record concentrations of pollutants in the ambient (i.e., outdoor) air to gauge compliance with the NAAQS. The closest monitoring station is located at Horn Point in Maryland, approximately 15 miles away from the Airport. The other two are a distance away in Seaford, Delaware; and Beltsville, Maryland. Available data from these stations is presented in **Table 2**. For ease of reference, the applicable NAAQS for each monitored pollutant is included on the table as well as the distance from the airport.

Table 2: Air Quality Monitoring Data

Station ID/Name	Approximate Distance from ESN	Pollutant	Averaging Period	NAAQS	2013	2014	2015
Horn Point, Maryland ID: 24-019-0004	15 Miles	CO (ppm)	8-Hour	9	0.3	0.4	0.3
			1-Hour	35	1	0.4	0.4
		O_3 (ppm)	8-Hour	0.07	0.08[a]	0.07	0.07
		SO_2 (ppb)	1 Hour	75	5[b]	6	6
Seaford, Delaware ID: 10-005-1002	26 Miles	$PM_{2.5}$ ($\mu g/m^3$)	24-hour	35	23	22	22
			Annual	12	9	8	8
Beltsville, Maryland ID: 24-033-0030	48 Miles	NO_2 (ppb)	1-hour	100	36	37	38
			Annual	53	8	8	8

Notes: ppb ï parts per billion, ppm ï parts per million, ε g/m^3 ï micrograms per cubic meter.
[a] O_3 requires three full years of data to compute the value for NAAQS standards. The station was not collecting data in 2011.
[b] SO_2 requires three full years of data to compute the value for NAAQS standards. The station was not collecting data in 2011.
Source: EPA, Air Data: Air Quality Data Collected at Outdoor Monitors across the U.S., https://www.epa.gov/outdoor-air-quality-data, 2016.

Impacts
As discussed in Section 2.0, the NEPA and CAA are the two primary regulations that apply to assessment of air quality impacts attributable to the proposed project. The NEPA requires the disclosure of the proposed projectôs impacts on the human environment- including air quality; and the CAA requires that the proposed project does not cause, or contribute to, a violation of the NAAQS.

With respect to the NAAQS ñattainmentò and ñnon-attainmentò designations ESN is located in Talbot County which is currently designated as an ñattainmentò area of all NAAQs established by EPA. Thus, General Conformity requirements outlined under the federal CAA do not apply to the proposed project and accordingly a General Conformity Applicability Analysis is not warranted. However, for disclosure purposes under the NEPA, both short-term construction and long-term operational-related emissions for the projectôs No-Build and Build future year of 2023 is presented.

Construction Emissions
Construction activities are temporary and variable depending on project location, duration and level of activity. These emissions occur predominantly in the engine exhaust from the operation of construction equipment and vehicles (e.g., scrapers, dozers, delivery trucks, etc.) at the site, the transportation of construction workers to and from the site, as well as attributed to fugitive dust produced from construction materials staging, soil handling, and un-stabilized land and wind erosion.

Construction equipment typically utilized in airport projects comprises both of on-road (i.e., on-road-licensed) and non-road equipment (i.e., off-road). The former category of vehicles are used for the transport and delivery of supplies, material and equipment to and from the site, and also include construction worker vehicles. The latter categories of equipment are operated on-site for activities such as soil/material handling, site clearing and grubbing.

The short-term construction emissions associated with the proposed improvements at ESN were computed using the Airport Construction Emissions Inventory Tool (ACEIT)[1]. Project-specific details and construction costs were used in the ACEIT to estimate construction activities and equipment/vehicles activity data (e.g., equipment mixes/times). Because the default emission factors used by ACEIT are outdated and do not reflect the latest EPAôs Motor Vehicle Emission Simulator (i.e., MOVES/NONROAD)[2] model, only activity data was extracted from ACEIT. Up-to-date emission factors were then developed using MOVES, which includes both on-road vehicles and off-road construction equipment. Consistent with the planning and development timeframes for the proposed project, **Table 3** presents the year(s) and the construction activities associated with the construction of each proposed improvement project.

Table 3: Construction Schedule and Activities

Year	Construction Activities
2021	Remove obstruction for existing Runways 15-33 and 4-22.
2023-2025	Extend Runway 4-22 to the south for a total length of 6,400 feet. Construct a partial parallel taxiway and connecting taxiways to the new Runway 4 threshold. Construct new taxiway connector to the new relocated Runway 22 end threshold and demolish Taxiway E connector. Rehabilitate Runway 4-22 and Taxiway A. Construct a standard Runway Object Free Area (ROFA) and Taxiway Object Free Area (TOFA). Construct a graded Runway Safety Area (RSA) and Taxiway Safety Area (TSA).
2025	Install and/or relocate Navigational Aids (NAVAIDs).
2027	Rehabilitate Runway 15-33 and Taxiway B.
2028	Construct an airport service road.
2029	Construct aircraft storage facilities: Central Apron.
2030	Construct aircraft storage facilities: East Apron and T-Hangars.
2031	Construct aircraft storage facilities: Hangar 53, 54, and 55.
Source: AECOM, 2016.	

[1] TRB, ACRP Report 102, *Guidance for Estimating Airport Construction Emissions*, http://www.trb.org/ACRP/Blurbs/170234.aspx.
[2] MOVES2014a is the latest version of MOVES/NONROAD. Additional information on MOVES2014a is available at https://www.epa.gov/moves/moves2014a-latest-version-motor-vehicle-emission-simulator-moves.

Additionally, fugitive emissions were calculated using emission factors within EPAõs Compilation of Air Pollutant Emission Factors (AP-42)[3]. Fugitive emissions result from site preparation, land clearing, material handling, equipment movement on unpaved areas; and evaporative fugitive emissions from application of asphalt paving. Construction emissions of on- and off-road vehicles/equipment are presented in **Table 4** - by pollutant and construction year. Again, for disclosure purposes, construction emissions of CO, NO_x, SO_2, PM_{10}, $PM_{2.5}$ and VOC are reported.

Table 4: Construction Emissions (tons per year)

Year	Source	CO	NO_x	SO_2	PM_{10}	$PM_{2.5}$	VOC
2021	On-Road Motor Vehicles	17.9	23.2	<0.1	2.1	2.0	5.1
	Off-Road Equipment	0.4	<0.1	<0.1	<0.1	<0.1	<0.1
	Fugitive Emissions	-	-	-	63.2	6.3	-
	Total	18.3	23.2	<0.1	65.3	8.4	5.1
2023	On-Road Motor Vehicles	3.2	5.7	<0.1	0.4	0.4	1.2
	Off-Road Equipment	5.2	0.6	<0.1	0.1	<0.1	0.5
	Fugitive Emissions	-	-	-	72.4	7.2	0.9
	Total	8.4	6.3	<0.1	72.9	7.6	2.6
2024	On-Road Motor Vehicles	2.9	5.0	<0.1	0.3	0.3	1.2
	Off-Road Equipment	4.8	0.5	<0.1	0.1	<0.1	0.5
	Fugitive Emissions	-	-	-	72.4	7.2	0.9
	Total	7.7	5.5	<0.1	72.8	7.6	2.5
2025	On-Road Motor Vehicles	2.7	4.6	<0.1	0.3	0.3	1.1
	Off-Road Equipment	4.8	1.1	<0.1	0.1	<0.1	0.5
	Fugitive Emissions	-	-	-	72.4	7.2	0.9
	Total	7.5	5.7	<0.1	72.8	7.6	2.5
2027	On-Road Motor Vehicles	1.3	4.0	<0.1	0.2	0.2	1.0
	Off-Road Equipment	0.3	0.4	<0.1	0.1	<0.1	0.1
	Fugitive Emissions	-	-	-	20.7	2.1	1.2
	Total	1.6	4.4	<0.1	20.9	2.2	2.2
2028	On-Road Motor Vehicles	0.5	1.4	<0.1	0.1	0.1	0.4
	Off-Road Equipment	2.0	0.2	<0.1	<0.1	<0.1	0.2
	Fugitive Emissions	<0.1	<0.1	<0.1	7.7	0.8	0.5
	Total	2.5	1.6	<0.1	7.8	0.8	1.0
2029	On-Road Motor Vehicles	0.3	0.8	<0.1	<0.1	<0.1	0.2
	Off-Road Equipment	1.8	0.1	<0.1	<0.1	<0.1	0.2
	Fugitive Emissions	<0.1	<0.1	<0.1	2.4	0.2	0.1
	Total	2.1	0.9	<0.1	2.5	0.3	0.5
2030	On-Road Motor Vehicles	1.6	3.6	<0.1	0.2	0.2	0.9
	Off-Road Equipment	0.9	0.2	<0.1	<0.1	<0.1	0.1
	Fugitive Emissions	<0.1	<0.1	<0.1	9.0	0.9	0.4
	Total	2.5	3.7	<0.1	9.2	1.1	1.4
2031	On-Road Motor Vehicles	0.7	1.7	<0.1	0.1	0.1	0.4
	Off-Road Equipment	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Fugitive Emissions	<0.1	<0.1	<0.1	7.2	0.7	0.3
	Total	0.9	1.7	<0.1	7.2	0.8	0.8

Notes: CO - carbon monoxide, NOx - nitrogen oxide, SO_2 - sulfur dioxide, PM10 - particulate matter with a diameter of 10 microns or less, PM2.5 ï particulate matter with a diameter of 2.5 microns or less, and VOC - volatile organic compound.

Operational Emissions

The aircraft operational-related emissions associated with the proposed improvements at ESN were computed using the latest version of FAAõs Aviation Environmental Design Tool (AEDT)[4]. Airport operational emissions

[3] EPA, Emissions Factors & AP-42, *Compilation of Air Pollutant Emission Factors*, http://www.epa.gov/ttn/chief/ap42/index.html#toc.

[4] AEDT 2c is the current release version of AEDT. Additional information on AEDT is available at https://aedt.faa.gov/.

sources other than aircraft (e.g., auxiliary power units a, ground service equipment, and motor vehicles) were not considered in the analysis as these source emissions would not change as a result of the proposed improvements. Aircraft fleet mix and operations remain the same between the No-Build and Build future year (2023); however, taxi times are affected due to the proposed extension of Runway 4-22. The proposed runway extension would create in the future build condition an additional aircraft taxi time of 1.44 minutes because of the increase in distance travelled during take-off.

Table below summarizes the AEDT aircraft fleet mix and level of operations by aircraft category (i.e., single-engine, multi-engine, turboprop, jet, rotor, and military), airframe and engine combination for 2023.

Table : Aircraft Fleet Mix and Operations (2023)

Aircraft Category	AEDT Aircraft Airframe	AEDT Engine	Operations
Single-Engine	Cessna 172 Skyhawk	IO-360-B	8,214
	Cessna 182	IO-360-B	2,456
	Cessna 206	TIO-540-J2B2	1,314
	Piper PA46-TP Meridian	PT6A-42	3,198
	Piper PA-32 Cherokee Six	TIO-540-J2B2	14,706
	Piper PA-28 Cherokee Series	IO-320-D1AD	4,036
	Beech Mentor (BE45)	PT6A-34	160
	Single-Engine Subtotal		34,084
Multi-Engine	Raytheon Beech 55 Baron	TIO-540-J2B2	1,362
	Piper PA-30 Twin Comanche	IO-320-D1AD	68
	Britten-Norman BN-2 Islander	250B17B	1,128
	Shorts 330	PT6A-45R	38
	Multi-Engine Subtotal		2,596
Turboprop	Cessna 208 Caravan	PT6A-114	1,978
	Cessna 441 Conquest II	TPE331-8	1,222
	Raytheon Super King Air 300	PT6A-60	1,248
	Piper PA-31T Cheyenne	PT6A-28	16
	Saab 340-A	CT7-5	6
	Turboprop Subtotal		4,470
Jet	Embraer ERJ145	AE3007A1/1	88
	Cessna 750 Citation X	PW308A	220
	Bombardier Challenger 600	CF34-3B	1,254
	Gulfstream G500	BR700-710A1-10	88
	Bombardier Challenger 601	CF34-3A	516
	Bombardier Learjet 35	TFE731-2-2B	3,102
	Raytheon Premier I	PW308C	1,190
	Cessna 500 Citation I	JT15D-1 series	1,414
	Cessna 650 Citation III	TFE731-3	88
	Eclipse 500 / PW610F	PW610F-A	902
	Cessna 550 Citation II	JT15D-4series	1,756
	Cessna 680 Citation Sovereign	PW308C	396
	Gulfstream G400	TAY 611-8C	248
	Israel IAI-1125 Astra	TFE731-3	916
	Fokker F100	TAY Mk620-15	474
	Jet Subtotal		12,652
Rotor	Agusta A-109	250B17B	22
	Bell 407 / Rolls-Royce 250-C47B	250B17B	30
	Bell 429	TPE331-1	38
	Bell 430	250B17B	52
	Boeing CH-46 Sea Knight	T58-GE-16	6
	Eurocopter EC-130	TPE331-3	60
	Robinson R22B	IO-320-D1AD	6
	Robinson R44 Raven	TIO-540-J2B2	16
	Sikorsky UH-60 Black Hawk	T700-GE-700	6

	Sikorsky S-76 Spirit	T700-GE-700	184
	Kaman SH-2 Seasprite	T58-GE-8F	30
	Rotor Subtotal		450
Military	Fairchild A-10A Thunderbolt II	TF34-GE-100-100A	16
	Bell 206 JetRanger	250B17B	124
	Bell UH-1 Iroquois	T400-CP-400	30
	Bell 429	TPE331-1	186
	Raytheon Beech Baron 58	TIO-540-J2B2	16
	Lockheed C-130 Hercules	T56-A-15	48
	Cessna 172 Skyhawk	IO-360-B	32
	Cessna 182	IO-360-B	124
	Cessna 206	TIO-540-J2B2	46
	Piper PA46-TP Meridian	PT6A-66	250
	Cessna 550 Citation II	JT15D-4series	62
	Convair CV-580	501 D13 alternative 1	78
	Raytheon Super King Air 300	PT6A-60A	30
	Boeing F/A-18 Hornet	F404-GE-400	78
	Piper PA-32 Cherokee Six	TIO-540-J2B2	124
	Gulfstream II-B	SPEY Mk511	12
	Rockwell Sabreliner 65	TFE731-3	12
	Piper PA-28 Cherokee Series	IO-320-D1AD	62
	Britten-Norman BN-2 Islander	250B17B	16
	Sikorsky CH-53 Sea Stallion	T64-GE-100	62
	Sikorsky UH-60 Black Hawk	T700-GE-700	140
	Sikorsky S-76 Spirit	T700-GE-700	46
	Eurocopter EC-155B1	T400-CP-400	234
	Military Subtotal		1,828
Grand Total			56,080
Source: AECOM, 2016.			

Table 3-3 presents the aircraft operational emissions inventories for the future 2023 no build and build conditions for ESN. For disclosure purposes under NEPA, operational emissions of CO, NOx, SO_2, PM_{10}, $PM_{2.5}$ and VOC are reported. As shown, overall total emissions increase from the 2023 future no build and build conditions. These emissions changes can be attributed to the slight increase in aircraft taxi times due to the proposed improvements to Runway 4-22.

Table : Aircraft Operational Emissions for Criteria Pollutants (tons per year)

2023 Project Scenario	CO	NO_x	SO_2	PM_{10}	$PM_{2.5}$	VOC
No Build	264.3	9.6	2.0	0.4	0.4	18.9
Build	271.2	9.7	2.1	0.4	0.4	19.9
Notes: CO - carbon monoxide, NO_x - nitrogen oxide, SO_2 - sulfur dioxide, PM_{10} - particulate matter with a diameter of 10 microns or less, PM2.5 ï particulate matter with a diameter of 2.5 microns or less, and VOC - volatile organic compound.						

Appendix G: Noise Analysis

APPENDIX G
NOISE

G-1 AIRCRAFT NOISE DESCRIPTORS

A variety of noise metrics are used to assess airport noise impacts in different ways. Noise metrics are used to describe individual noise events (such as a single operation of an aircraft taking off overhead) or groups of events (such as the cumulative effect of numerous aircraft operations, the collection of which creates a general noise environment or overall exposure level). Both types of descriptors are helpful in explaining how people tend to respond to a given noise condition. Descriptions of these metrics are provided below.

Decibel, dB – Sound is a complex physical phenomenon consisting of complex minute vibrations traveling through a medium, such as air. These vibrations are sensed by the human ear as sound pressure. Because of the vast range of sound pressure or intensity detectable by the human ear, sound pressure level (SPL) is represented on a logarithmic scale known as decibels (dB). A sound level of 0 dB is approximately the threshold of human hearing and is barely audible under extremely quiet (laboratory-type) listening conditions. A SPL of 120 dB begins to be felt inside the ear as discomfort and pain at approximately 140 dB. Most environmental sounds have SPLs ranging from 30 to 100 dB.

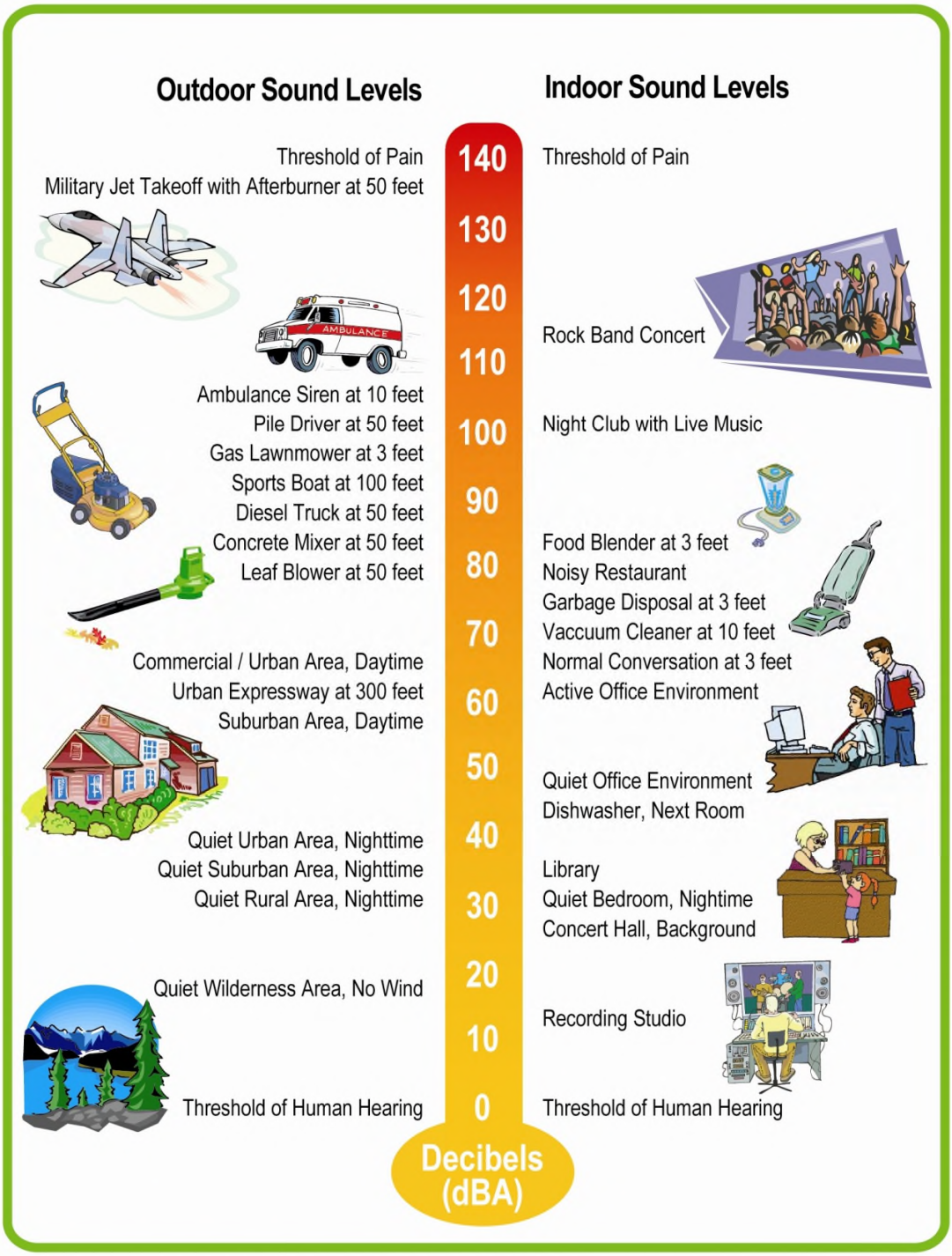
Because decibels are logarithmic, they cannot be added or subtracted directly like other (linear) numbers. For example, if two sound sources each produce 100 dB, when they are operated together they will produce 103 dB, not 200 dB. Four 100 dB sources operating together again double the sound energy, resulting in a total SPL of 106 dB, and so on. In addition, if one source is much louder than another, the two sources operating together will produce the same SPL as if the louder source were operating alone. For example, a 100 dB source plus an 80 dB source produce 100 dB when operating together. The louder source masks the quieter one.

Two useful rules to remember when comparing SPLs are: (1) most people perceive a 6 to 10 dB increase in SPL between two noise events to be about a doubling of loudness, and (2) changes in SPL of less than about 3 dB between two events are not easily detected outside of a laboratory.

A-Weighted Decibel, dBA – Frequency, or pitch, is a basic physical characteristic of sound and is expressed in units of cycles per second or hertz (Hz). The normal frequency range of hearing for most people extends from about 20 to 15,000 Hz. Because the human ear is more sensitive to middle and high frequencies (i.e., 1000 to 4000 Hz), a frequency weighting called “A” weighting is applied to the measurement of sound. The internationally standardized "A" filter approximates the sensitivity of the human ear and helps in assessing the perceived loudness of various sounds. In this document all sound levels are A-weighted sound levels and the adjective "A-weighted" has been omitted.

Figure G-1.1 charts common indoor and outdoor sound levels. A quiet rural area at nighttime may be 30 dBA or lower while the operator of a typical gas lawn mower may experience a level of 90 dBA. Similarly, the level in a library may be 30 dBA or lower while the listener at a rock band concert may experience levels near 110 dBA.

FIGURE G-1.1
COMMON OUTDOOR AND INDOOR SOUND LEVELS



Source: URS Corporation, 2008

Maximum A-Weighted Noise Level, L_{max} – Sound levels vary with time. For example, the sound increases as an aircraft approaches, then falls and blends into the ambient or background as the aircraft recedes into the distance. Because of this variation, it is often convenient to describe a particular noise "event" by its highest or maximum sound level (L_{max}). Note L_{max} describes only one dimension of an event; it provides no information on the cumulative noise exposure generated by a sound source. In fact, two events with identical L_{max} may produce very different total exposures. One may be of very short duration, while the other may be much longer.

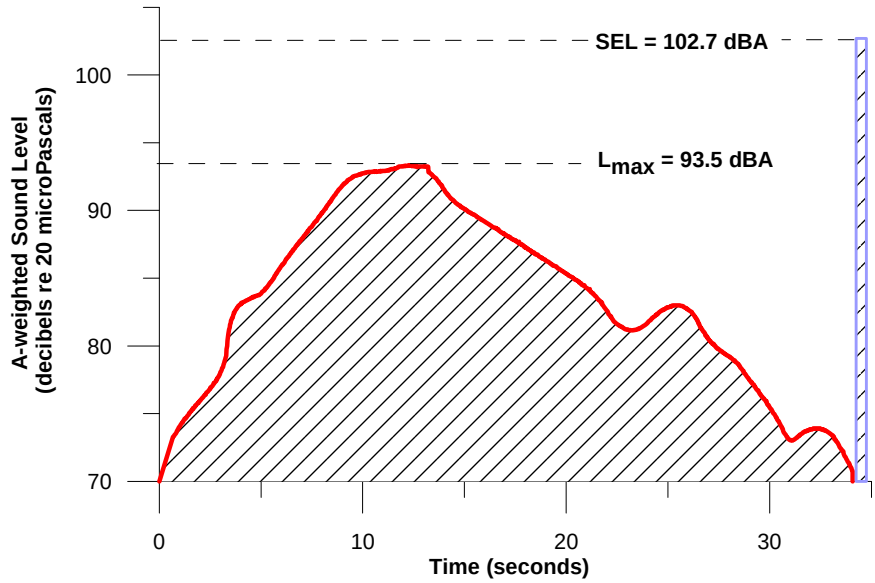
Sound Exposure Level, SEL – The most common measure of noise exposure for a single aircraft flyover is the SEL. SEL is a summation of the A-weighted sound energy at a particular location over the true duration of a noise event normalized to a fictional duration of one second. The true duration is defined as the amount of time the noise event exceeds background levels. For events lasting more than one second, SEL does not directly represent the sound level heard at any given time, but rather provides a measure of the net impact of the entire acoustic event.

The normalization to the fictional duration of one second enables the comparison of noise events with differing true duration and/or maximum level. Because the SEL is normalized to one second, it will almost always be larger in magnitude than the L_{max} for the event. In fact, for most aircraft events, the SEL is about 7 to 12 dB higher than the L_{max}. Additionally, since it is a cumulative measure, a higher SEL can result from either a louder or longer event, or some combination.

As SEL combines an event's overall sound level along with its duration, SEL provides a comprehensive way to describe noise events for use in modeling and comparing noise environments. Computer noise models, such as the one employed for this document, base their computations on these SELs.

Figure G-1.2 shows an event's "time history," the variation of sound level with time. For typical sound events experienced by a fixed listener, like a person experiencing an aircraft flying by, the sound level rises as the source (or aircraft) approaches the listener, peaks and then diminishes as the aircraft flies away from the listener. The area under the time history curve represents the overall sound energy of the noise event. The L_{max} for the event shown in the figure was 93.5 dBA. Compressing the event's total sound energy into one second to compute its SEL yields 102.7 dBA.

FIGURE G-1.2
COMPARISON OF MAXIMUM SOUND LEVEL (L_{MAX}) AND SOUND EXPOSURE LEVEL (SEL)



Source: URS Corporation, 2007.

Equivalent Sound Level, L_{eq} -- Equivalent sound level (abbreviated L_{eq}) is a measure of the exposure resulting from the accumulation of A-weighted sound levels over a particular period of interest (e.g., an hour, an 8-hour school day, nighttime, or a full 24-hour day). However, because the length of the period can be different depending on the time frame of interest, the applicable period should always be identified or clearly understood when discussing the metric. Such durations are often identified through a subscript, for example $L_{eq(8)}$ or $L_{eq(24)}$.

Conceptually, L_{eq} may be thought of as a constant sound level over the period of interest that contains as much sound energy as the actual time-varying sound level with its normal "peaks" and "dips." In the context of noise from typical aircraft flight events and as noted earlier for SEL, L_{eq} does not represent the sound level heard at any particular time, but rather represents the total sound exposure for the period of interest. Also, it should be noted that the "average" sound level suggested by L_{eq} is not an arithmetic value, but a logarithmic, or "energy-averaged," sound level. Thus, loud events tend to dominate the noise environment described by the L_{eq} metric.

Day-Night Average Sound Level, DNL - Time-averaged sound levels are measurements of sound levels averaged over a specified length of time. These levels provide a measure of the average sound energy during the measurement period. For the evaluation of community noise effects, and particularly aircraft noise effects, the Day-Night Average Sound Level (DNL). This metrics are similar to the Equivalent Sound Level (Leq) except that it compensates for the widely assumed increase in people's sensitivity to noise during nighttime hours. Each aircraft operation occurring between 10:00 p.m. and 7:00 a.m. is treated as if it were 10 operations. Logarithmically, this multiplier is the equivalent of adding 10 dB to the noise level of each nighttime operation. These noise level penalties are intended to correspond to the drop in background noise level which studies have found takes place from daytime to nighttime in a typical community. The nighttime decrease in ambient sound levels—from both

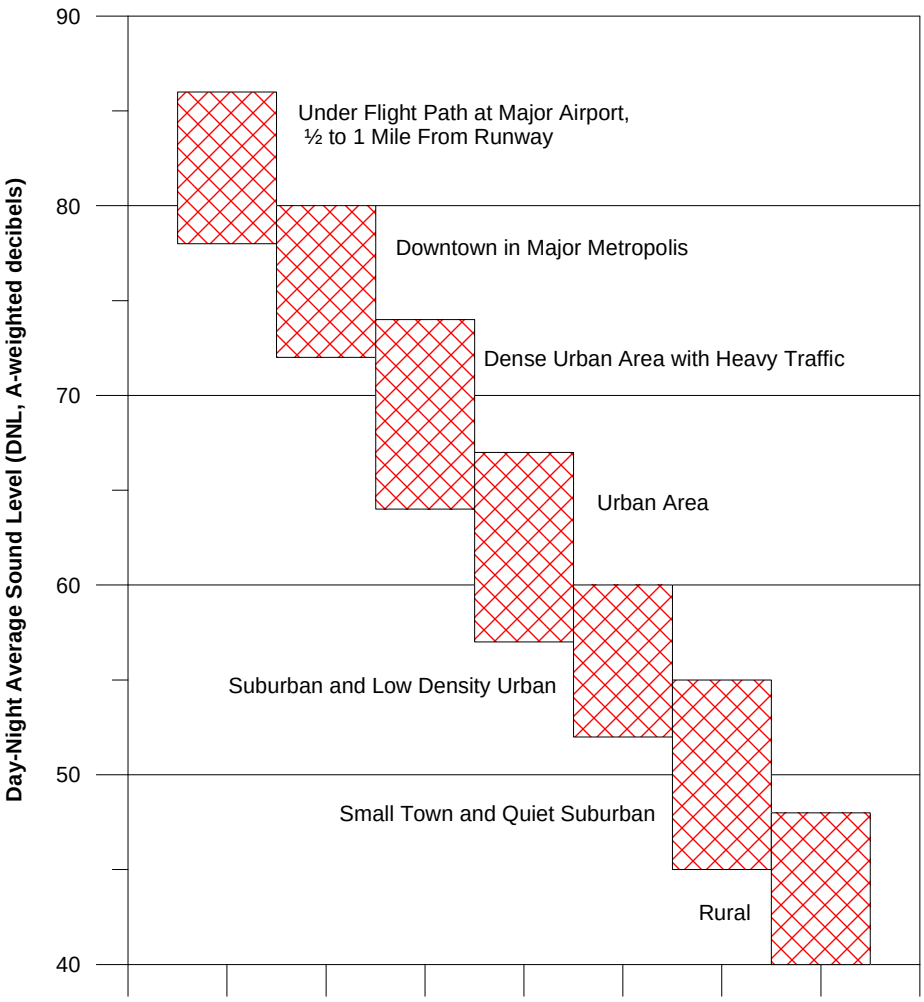
outdoor and indoor sources—is commonly considered to be the principal explanation for people's heightened sensitivity to noises during these periods.

DNL is the primary noise descriptor of this study. DNL is a 24-hour time-weighted-average noise metric expressed in A-weighted decibels (dBA) which accounts for the noise levels (in terms of SEL) of all individual aircraft events, the number of times those events occur, and the time of day at which they occur. Values of DNL can be measured with standard monitoring equipment or predicted with computer models. This document utilizes estimates of DNL with an FAA-approved computer-based noise model.

Typical DNL values for a variety of noise environments are shown in **Figure G-1.3**. DNL values can be approximately 85 dBA outdoors under a flight path within a mile of a major airport and 40 dBA or less outdoors in a rural residential area.

Due to the DNL descriptor's close correlation with the degree of community annoyance from aircraft noise, DNL have been formally adopted by most Federal agencies for measuring and evaluating aircraft noise for land use planning and noise impact assessment. Federal committees such as the Federal Interagency Committee on Urban Noise (FICUN) and the Federal Interagency Committee on Noise (FICON) which include the Environmental Protection Agency (EPA), Federal Aviation Administration (FAA), Department of Defense (DOD), Department of Housing and Urban Development (HUD), and Veterans Administration (VA), found DNL to be the best metric for land use planning. They also found no new cumulative sound descriptors or metrics of sufficient scientific standing to substitute for DNL. Other cumulative metrics could be used only to supplement, not replace DNL. Furthermore, FAA Order 1050.1F for environmental impact studies, requires DNL be used in describing cumulative noise exposure and in identifying aircraft noise/land use compatibility issues (EPA, 1974; FICUN, 1980; FICON, 1992; 14 CFR part 150, 2007; FAA, 2006).

FIGURE G-1.3
TYPICAL RANGE OF OUTDOOR COMMUNITY DAY-NIGHT AVERAGE SOUND LEVELS



Source: DOD, 1978

G-2 EFFECTS OF AIRCRAFT NOISE ON PEOPLE

This section addresses three ways humans can be affected by aircraft noise: annoyance, speech interference and sleep disturbance.

Annoyance – The primary potential effect of aircraft noise on exposed communities is one of annoyance. Noise annoyance is defined by the Environmental Protection Agency as any negative subjective reaction on the part of an individual or group (EPA, 1974). Scientific studies and a large number of social/attitudinal surveys have been conducted to appraise people's annoyance to all types of environmental noise, especially aircraft events. These studies and surveys have found the DNL to be the best measure of this annoyance (EPA, 1974; FICUN, 1980; FICON, 1992; ANSI, 2007; ANSI, 2003; Schultz, 1978; Fidell, et. al., 1991).

The relationship between annoyance and DNL determined by the scientific community and endorsed by many Federal agencies, including the FAA, is shown in **Figure G-2.1**. For a DNL of 65 dBA, approximately 13% of the exposed population would be highly-annoyed. The figure also shows at very low values of DNL, such as 45 dB or less, 1% or less of the exposed population would be highly annoyed. At very high values of DNL, such as 90 dBA, more than 80% of the exposed population would be highly annoyed.

It is often suggested a lower DNL, such as 60 or 55 dB, be adopted as the threshold of community noise annoyance for FAA environmental analysis documents. While there is no technical reason why a lower level cannot be measured or calculated for comparison purposes, a DNL of 65 dB:

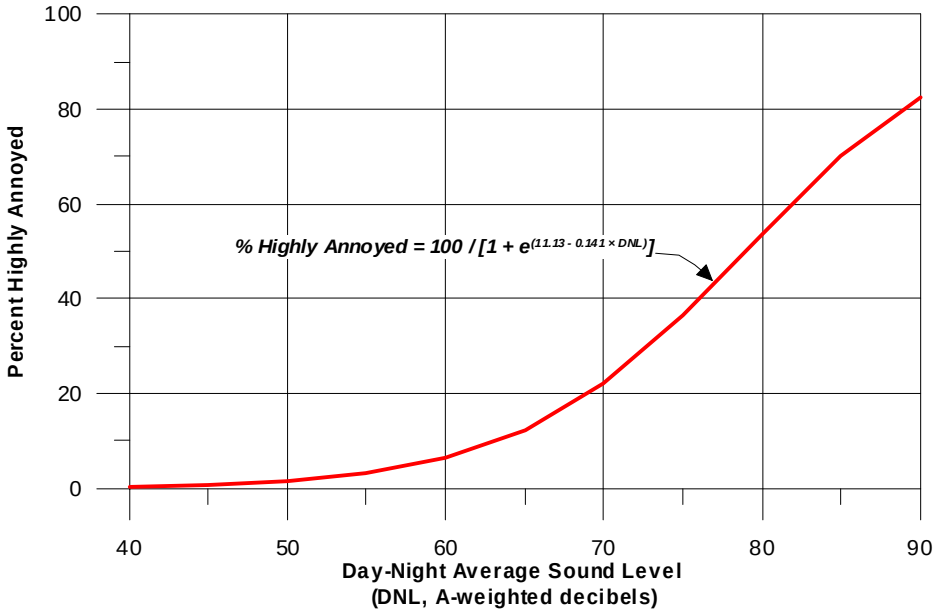
1) Provides a valid basis for comparing and assessing community noise effects.

2) Represents a noise exposure level normally dominated by aircraft noise and not other community or nearby highway noise sources.

3) Reflects the FAA's threshold for grant-in-aid funding of airport noise mitigation projects.

4) HUD also established a DNL standard of 65 dBA for eligibility for Federally-guaranteed home loans.

FIGURE G-2.1
RELATIONSHIP BETWEEN ANNOYANCE AND DAY-NIGHT AVERAGE SOUND LEVEL



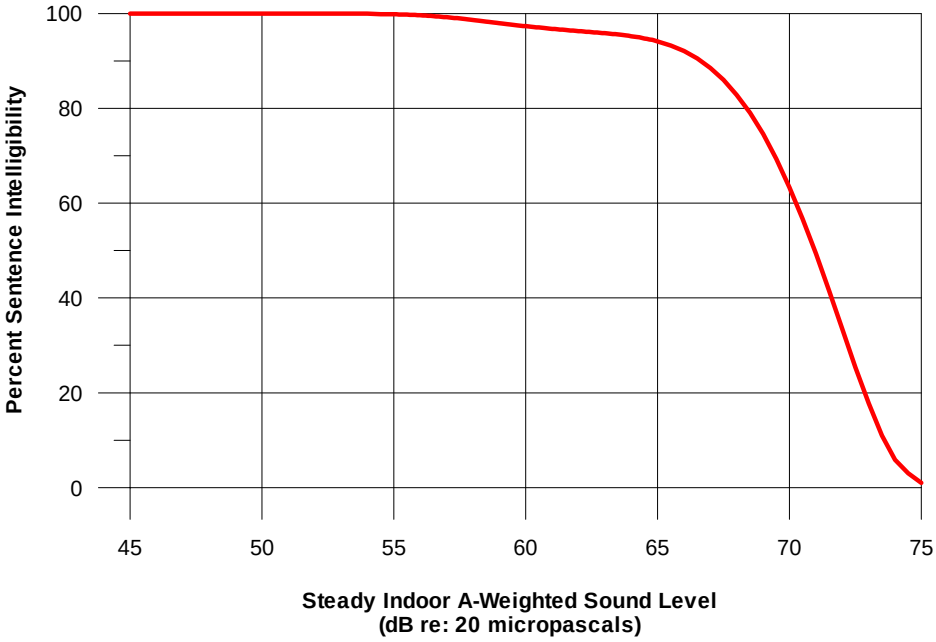
Source: FICON, 1992

Speech Interference – A primary effect of aircraft noise is its tendency to drown out or "mask" speech, making it difficult to carry on a normal conversation. As an aircraft approaches and its sound level increases, speech becomes harder to hear. As the ambient level increases, the talker must raise his/her voice, or the individuals must get closer together to continue talking.

For typical communication distances of 3 or 4 feet (1 to 1.5 meters), acceptable outdoor conversations can be carried on in a normal voice as long as the ambient noise outdoors is less than about 65 dBA (FICON, 1992). If the noise exceeds this level, intelligibility would be lost unless vocal effort was increased or communication distance was decreased.

Indoor speech interference can be expressed as a percentage of sentence intelligibility between two average adults with normal hearing speaking fluently in relaxed conversation approximately one meter apart in a typical living room or bedroom (EPA, 1974). As shown in **Figure G-2.2**, the percentage of sentence intelligibility is a non-linear function of the (steady) indoor ambient or background sound level (24-hour energy-average equivalent sound level ($L_{eq(24)}$). Steady ambient indoor sound levels of up to 45 dBA $L_{eq(24)}$ are expected to allow 100% intelligibility of sentences. The curve shows 99 percent sentence intelligibility for $L_{eq(24)}$ at or below 54 dBA and less than 10 percent intelligibility for $L_{eq(24)}$ greater than 73 dBA. In the same document from which **Figure G-2.2** was taken, the EPA established an indoor criterion of 45 dBA DNL as requisite to protect against speech interference indoors (EPA, 1974).

FIGURE G-2.2
PERCENT SENTENCE INTELLIGIBILITY FOR INDOOR SPEECH



Source: EPA, 1974.

G-3 NOISE ANALYSIS

G-3.1 EXISTING CONDITION NOISE MODELING ASSUMPTIONS

Airport Environmental Design Tool (AEDT)

The FAA has required the use of the Aviation Environmental Design Tool (AEDT) since May 29, 2015 for determining the predicted noise impact in the vicinity of airports. Statutory requirements for AEDT use are defined in FAA Order 1050.1F, Environmental Impacts: Policies and Procedures; Order 5050.4B, NEPA Implementing Instructions for Airport Actions; and title 14 CFR part 150, Airport Noise Compatibility Planning. AEDT Version 2C, released September 12, 2016, was the version used for this document (https:// aedt.faa.gov/2c_information.aspx).

The AEDT incorporates the number of annual average daily daytime and nighttime flight and run-up operations, flight paths, and flight profiles of the aircraft along with its extensive internal database of aircraft noise and performance information, to calculate the DNL at many points on the ground around an airport. From a grid of points, the AEDT contouring program draws contours of equal DNL to be superimposed onto land use maps. For this document, DNL contours of 65, 70, and 75 dBA were developed. DNL contours are a graphical representation of how the noise from the airport's average annual daily aircraft operations is distributed over the surrounding area. The AEDT can calculate sound levels at any specified point so that noise exposure at representative locations around an airport can be obtained.

The results of the AEDT analysis provide a relative measure of noise levels around airfield facilities. When the calculations are made in a consistent manner, the AEDT is most accurate for comparing before and after noise effects resulting from forecast changes or alternative noise control actions. It allows noise levels to be predicted for such Proposed Projects without the actual implementation and noise monitoring of those actions.

Title 14 CFR part 150, Appendix A, provides Federal compatible land use guidelines for several land uses as a function of DNL values. Compatible or non-compatible land use is determined by comparing the predicted or measured DNL values at a site to the established thresholds.

Examples of detailed local acoustical variables include:

- Temperature profiles;
- Wind gradients;
- Humidity effects;
- Ground absorption;
- Individual aircraft directivity patterns; and
- Sound diffraction caused by terrain, buildings, barriers, etc.

The results of the AEDT analysis provide a relative measure of noise levels around airfield facilities. When the calculations are made in a consistent manner, the AEDT is most accurate for comparing before and after noise effects resulting from forecast changes or alternative noise control actions. It allows noise levels to be predicted for such proposed projects without the actual implementation and noise monitoring of those actions.

Modeled Aircraft Operations

This section describes in detail the sources and derivation of the AEDT input data for the existing conditions including airport layout, weather, flight operations, runway use, flight tracks, track use, and flight profiles.

Airport Layout

ESN has two runways, designated as Runway 04/22 and 15/33. Runway 04/22 is 5,500 feet long by 100 feet wide. A full parallel taxiway system, 35 feet wide, supports this runway. Runway 15/33 is 4,003 feet long by 100 feet wide. A full parallel taxiway system, 35 feet wide, also supports this runway. The field elevation at ESN is approximately 72 feet. Apron and hangar facilities are available for both based and transient aircraft.

Weather and Climate

The weather conditions used in the AEDT was obtained from the National Climatic Data Center. The average temperature of the hottest month in Unionville, the closest monitoring station, is 74.7 degrees (NOAA Climatography of the U.S., 2010); The AEDT default airport pressure is 29.92 inches of mercury because atmospheric pressure is referred to sea level. The default average headwind is 8 knots. The AEDT default for pressure and headwind was not changed in the model.

Flight Operations

As shown in **Tables G-3.1 to G-3.3**, AEDT-modeled annual operations for the Existing Conditions totaled 42,543 operations, an average of approximately 116.6 daily operations. Jet operations accounted for approximately 18 percent of the total operations.

Nighttime operations accounted for approximately 3 percent of the total itinerant operations, with all local operations occurring between 7:00 a.m. and 10:00 p.m. Civilian and military helicopters operations accounted for approximately 2 percent of the total aircraft operations at ESN.

Table G-3.4 provides a comparison of the fleet mix percentages between the Existing Condition, 2023, and 2028 forecasted condition. It should be noted that except for the forecasted change in jet aircraft fleet mix resulting from the forecasts for the Hawker 800 / 900XP, the IAI Astra 1125, and the Challenger 300 / 350, the remaining general aviation and military aircraft fleet mix remains constant for each of the study years.

TABLE G-3.1
EXISTING CONDITION ANNUAL AND AVERAGE DAILY JET AIRCRAFT OPERATIONS

Jet Aircraft Fleet Mix								
AEDT AC	TFMSC Aircraft Type	Annual Operations	Arrivals			Departures		
			Day	Night	Total	Day	Night	Total
LEAR35	BAe HS 125/700-800/Hawker800	615	0.8172	0.0253	0.8425	0.8172	0.0253	0.8425
LEAR35	BAe-3100 Jetstream	58	0.0771	0.0024	0.0795	0.0771	0.0024	0.0795
CL601	Bombardier (Canadair) Challenger300	615	0.8172	0.0253	0.8425	0.8172	0.0253	0.8425
GV	Bombardier BD-700 GlobalExpress	6	0.0081	0.0003	0.0084	0.0081	0.0003	0.0084
CL600	Bombardier Challenger 600/601/604	153	0.2029	0.0063	0.2092	0.2029	0.0063	0.2092
LEAR35	Bombardier Learjet 31/A/B	37	0.0487	0.0015	0.0502	0.0487	0.0015	0.0502
LEAR35	Bombardier Learjet 35/36	318	0.4221	0.0131	0.4351	0.4221	0.0131	0.4351
LEAR35	Bombardier Learjet 45	217	0.2881	0.0089	0.2971	0.2881	0.0089	0.2971
LEAR35	Bombardier Learjet 55	6	0.0081	0.0003	0.0084	0.0081	0.0003	0.0084
CNA55B	Bombardier Learjet 60	95	0.1258	0.0039	0.1297	0.1258	0.0039	0.1297
CNA500	Cessna 500/Citation I	6	0.0081	0.0003	0.0084	0.0081	0.0003	0.0084
CNA500	Cessna Citation CJ2	86	0.1136	0.0035	0.1171	0.1136	0.0035	0.1171
CNA500	Cessna Citation CJ3	180	0.2394	0.0074	0.2468	0.2394	0.0074	0.2468
CIT3	Cessna Citation CJ4	12	0.0162	0.0005	0.0167	0.0162	0.0005	0.0167
CNA500	Cessna Citation II/Bravo	296	0.3937	0.0122	0.4058	0.3937	0.0122	0.4058
ECLIPSE500	Cessna Citation Mustang	43	0.0568	0.0018	0.0586	0.0568	0.0018	0.0586
CNA680	Cessna Citation Sovereign	220	0.2922	0.0090	0.3012	0.2922	0.0090	0.3012
CNA55B	Cessna Citation V/Ultra/Encore	202	0.2679	0.0083	0.2761	0.2679	0.0083	0.2761
CNA750	Cessna Citation X	122	0.1623	0.0050	0.1674	0.1623	0.0050	0.1674
CNA500	Cessna CitationJet/CJ1	211	0.2800	0.0087	0.2887	0.2800	0.0087	0.2887
CNA55B	Cessna Excel/XLS	678	0.9010	0.0279	0.9288	0.9010	0.0279	0.9288
CNA500	Cessna I/SP	6	0.0081	0.0003	0.0084	0.0081	0.0003	0.0084
CIT3	Cessna III/VI/VII	37	0.0487	0.0015	0.0502	0.0487	0.0015	0.0502
CL600	Dassault Falcon 2000	205	0.2719	0.0084	0.2803	0.2719	0.0084	0.2803
F10062	Dassault Falcon 900	43	0.0568	0.0018	0.0586	0.0568	0.0018	0.0586
LEAR35	Dassault Falcon/Mystère 10	611	0.8117	0.0251	0.8368	0.8117	0.0251	0.8368

CL600	Dassault Falcon/Mystère 20	24	0.0325	0.0010	0.0335	0.0325	0.0010	0.0335
F10062	Dassault Falcon/Mystère 50	220	0.2922	0.0090	0.3012	0.2922	0.0090	0.3012
ECLIPSE500	Eclipse 500	24	0.0325	0.0010	0.0335	0.0325	0.0010	0.0335
EMB145	Embraer 135 LR	27	0.0365	0.0011	0.0377	0.0365	0.0011	0.0377
EMB145	Embraer ERJ 135/140/Legacy	21	0.0284	0.0009	0.0293	0.0284	0.0009	0.0293
ECLIPSE500	Embraer Phenom 100	434	0.5763	0.0178	0.5941	0.5763	0.0178	0.5941
CL600	Embraer Phenom 300	229	0.3044	0.0094	0.3138	0.3044	0.0094	0.3138
IA1125	Gulfstream G150	24	0.0325	0.0010	0.0335	0.0325	0.0010	0.0335
CL600	Gulfstream G280	6	0.0081	0.0003	0.0084	0.0081	0.0003	0.0084
GIV	Gulfstream IV/G400	137	0.1826	0.0056	0.1883	0.1826	0.0056	0.1883
GV	Gulfstream V/G500	43	0.0568	0.0018	0.0586	0.0568	0.0018	0.0586
CL600	Hawker 4000	55	0.0731	0.0023	0.0753	0.0731	0.0023	0.0753
IA1125	IAI 1124 Westwind	6	0.0081	0.0003	0.0084	0.0081	0.0003	0.0084
CL600	IAI 1126 Galaxy/GulfstreamG200	24	0.0325	0.0010	0.0335	0.0325	0.0010	0.0335
IA1125	IAI Astra 1125	333	0.4425	0.0137	0.4562	0.4425	0.0137	0.4562
LEAR35	Learjet 40; GatesLearjet	18	0.0244	0.0008	0.0251	0.0244	0.0008	0.0251
LEAR35	Learjet 75	98	0.1299	0.0040	0.1339	0.1299	0.0040	0.1339
LEAR35	Lockheed L-1329 Jetstar731	12	0.0162	0.0005	0.0167	0.0162	0.0005	0.0167
MU3001	Mitsubishi MU300/ DiamondI	9	0.0122	0.0004	0.0126	0.0122	0.0004	0.0126
LEAR35	North American RockwellSabre 40/60	18	0.0244	0.0008	0.0251	0.0244	0.0008	0.0251
LEAR35	North American RockwellSabre 75	6	0.0081	0.0003	0.0084	0.0081	0.0003	0.0084
LEAR35	Raytheon Premier 1/390Premier 1	37	0.0487	0.0015	0.0502	0.0487	0.0015	0.0502
MU3001	Raytheon/Beech Beechjet 400/T-1	651	0.8644	0.0267	0.8912	0.8644	0.0267	0.8912
TOTAL		**7534**	**10.0109**	**0.3096**	**10.3205**	**10.0109**	**0.3096**	**10.3205**

Day = 7:00 a.m. to 9:59 p.m.; Night = 10:00 p.m. to 6:59 a.m.
Note: Numbers may not add, due to rounding.
Source: AECOM, 2016.

TABLE G-3.2
EXISTING CONDITION ANNUAL AND AVERAGE DAILY GENERAL AVIATION AIRCRAFT OPERATIONS

GENERAL AVIATION FLEET MIX												
ROTARY WING												
AEDT AC	TFMSC AIRCRAFT TYPE	ANNUAL OPERATIONS		ARRIVALS			DEPARTURES			LOCAL		
		ITINERANT	LOCAL	DAY	NIGHT	TOTAL	DAY	NIGHT	TOTAL	DAY	NIGHT	TOTAL
A109	AGUSTA SAAF-109	15	N/A	0.0201	0.0006	0.0207	0.0201	0.0006	0.0207	N/A	N/A	N/A
B407	BELL 407	20	N/A	0.0268	0.0008	0.0276	0.0268	0.0008	0.0276	N/A	N/A	N/A
B429	BELL 429	5	N/A	0.0067	0.0002	0.0069	0.0067	0.0002	0.0069	N/A	N/A	N/A
B429	EUROCOPTER EC-145	5	N/A	0.0067	0.0002	0.0069	0.0067	0.0002	0.0069	N/A	N/A	N/A
B430	BELL 430	35	N/A	0.0468	0.0014	0.0483	0.0468	0.0014	0.0483	N/A	N/A	N/A

CH47D	BOEING CH-47 CHINOOK	5	N/A	0.0067	0.0002	0.0069	0.0067	0.0002	0.0069	N/A	N/A	N/A
EC130	EUROCOPTER EC-135	40	N/A	0.0535	0.0017	0.0552	0.0535	0.0017	0.0552	N/A	N/A	N/A
R22	ROBINSON R-22 MARINER	5	N/A	0.0067	0.0002	0.0069	0.0067	0.0002	0.0069	N/A	N/A	N/A
R44	ROBINSON R-44 RAVEN	10	N/A	0.0134	0.0004	0.0138	0.0134	0.0004	0.0138	N/A	N/A	N/A
S70	SIKORSKY SH-60 SEAHAWK	5	N/A	0.0067	0.0002	0.0069	0.0067	0.0002	0.0069	N/A	N/A	N/A
S76	SIKORSKY S-76	126	N/A	0.1672	0.0052	0.1724	0.1672	0.0052	0.1724	N/A	N/A	N/A
SA330J	AGUSTA AB-139	20	N/A	0.0268	0.0008	0.0276	0.0268	0.0008	0.0276	N/A	N/A	N/A
TOTAL		**292**	**N/A**	**0.3880**	**0.012**	**0.4**	**0.388**	**0.012**	**0.4**	**N/A**	**N/A**	**N/A**
MULTI-ENGINE PISTON												
BEC58P	BEECH BARON 55	468	1319	0.6220	0.0192	0.6413	0.6220	0.0192	0.6413	3.614	0	3.614
PA30	PIPER PA-30	23	0	0.0311	0.0010	0.0321	0.0311	0.0010	0.0321	0	0	0
PA31	PIPER NAVAJO PA-31	388	0	0.5154	0.0159	0.5313	0.5154	0.0159	0.5313	0	0	0
SD330	PIAGGIO P-180 AVANTI	13	20	0.0178	0.0005	0.0183	0.0178	0.0005	0.0183	0.055	0	0.055
TOTAL		**893**	**1339**	**1.1863**	**0.0367**	**1.2230**	**1.1863**	**0.0367**	**1.2230**	**3.669**	**0.000**	**3.669**
SINGLE ENGINE PISTON												
CNA172	CESSNA SKYHAWK 172/CUTLASS	2690	6096	3.5750	0.1106	3.6855	3.5750	0.1106	3.6855	16.7010	0	16.7010
CNA182	CESSNA SKYLANE 182	804	1206	1.0684	0.0330	1.1015	1.0684	0.0330	1.1015	3.3045	0	3.3045
CNA206	CESSNA 210 CENTURION	430	645	0.5718	0.0177	0.5894	0.5718	0.0177	0.5894	1.7683	0	1.7683
GASEPF	AMERICAN AA-5 TRAVELER	1047	1571	1.3919	0.0430	1.4349	1.3919	0.0430	1.4349	4.3047	0	4.3047
GASEPV	BEECH BONANZA 35	4816	7224	6.3991	0.1979	6.5970	6.3991	0.1979	6.5970	19.7911	0	19.7911
PA28	PIPER CHEROKEE	1321	0	1.7557	0.0543	1.8100	1.7557	0.0543	1.8100	0	0	0
T34	BEECHCRAFT T-34 MENTOR	52	0	0.0693	0.0021	0.0714	0.0693	0.0021	0.0714	0	0	0
TOTAL		**11162**	**16742**	**14.8312**	**0.4587**	**15.2899**	**14.8312**	**0.4587**	**15.2899**	**45.8696**	**0.0000**	**45.8696**
TURBOPROP												
CNA208	CESSNA 208 CARAVAN	1429	N/A	1.8985	0.0587	1.9572	1.8985	0.0587	1.9572	N/A	N/A	N/A
CNA441	BEECH 200 SUPERKING	882	N/A	1.1716	0.0362	1.2079	1.1716	0.0362	1.2079	N/A	N/A	N/A
DHC6	BEECH SUPER KINGAIR 350	376	N/A	0.4990	0.0154	0.5145	0.4990	0.0154	0.5145	N/A	N/A	N/A
DO228	RAYTHEON 300 SUPERKING AIR	527	N/A	0.6997	0.0216	0.7214	0.6997	0.0216	0.7214	N/A	N/A	N/A
JPATS	NORTH AMERICAN T-6TEXAN	12	N/A	0.0163	0.0005	0.0168	0.0163	0.0005	0.0168	N/A	N/A	N/A
SF340	TRANSALL C-160	4	N/A	0.0054	0.0002	0.0056	0.0054	0.0002	0.0056	N/A	N/A	N/A
TOTAL		**3229**	**N/A**	**4.2906**	**0.1327**	**4.4233**	**4.2906**	**0.1327**	**4.4233**	**N/A**	**N/A**	**N/A**

Day = 7:00 a.m. to 9:59 p.m.; Night = 10:00 p.m. to 6:59 a.m.
Note: Numbers may not add, due to rounding.
Source: AECOM, 2016.

TABLE G-3.3
EXISTING CONDITION ANNUAL AND AVERAGE DAILY MILITARY AIRCRAFT OPERATIONS

Military Fleet Mix												
AEDT AC	TFMSC Aircraft Type	Annual Operations		Arrivals			Departures			Local		
		Itinerant	Local	Day	Night	Total	Day	Night	Total	Day	Night	Total
A10A	Fairchild A10	8		0.0101	0.0003	0.0105	0.0101	0.0003	0.0105	0	0	0
B206L	Agusta AB-206 LongRanger	98		0.1298	0.0040	0.1338	0.1298	0.0040	0.1338	0	0	0
B212	Bell 212	24		0.0324	0.0010	0.0334	0.0324	0.0010	0.0334	0	0	0
B429	Bell 429	146		0.1946	0.0060	0.2007	0.1946	0.0060	0.2007	0	0	0
BEC58P	Cessna 310	5	15	0.0061	0.0002	0.0063	0.0061	0.0002	0.0063	0.0418	0	0.0418
C130HP	Lockheed C-130 Hercules	37		0.0487	0.0015	0.0502	0.0487	0.0015	0.0502	0	0	0
CNA172	Cessna Skyhawk 172/Cutlass	9	46	0.0122	0.0004	0.0125	0.0122	0.0004	0.0125	0.1255	0	0.1255
CNA182	Cessna Skylane 182	37	61	0.0486	0.0015	0.0501	0.0486	0.0015	0.0501	0.1673	0	0.1673
CNA206	Cessna 210 Centurion	14	23	0.0182	0.0006	0.0188	0.0182	0.0006	0.0188	0.0627	0	0.0627
CNA441	Beech 200 SuperKing	73	122	0.0973	0.0030	0.1003	0.0973	0.0030	0.1003	0.3345	0	0.3345
CNA55B	Cessna Excel/XLS	18	0	0.0243	0.0008	0.0251	0.0243	0.0008	0.0251	0	0	0
CVR580	Grumman C-2 Greyhound	23	0	0.0304	0.0009	0.0313	0.0304	0.0009	0.0313	0	0	0
DHC6	Beech Super KingAir 350	9	15	0.0122	0.0004	0.0125	0.0122	0.0004	0.0125	0.0418	0	0.0418
F-18	Boeing FA-18 Hornet	61		0.0811	0.0025	0.0836	0.0811	0.0025	0.0836	0	0	0
GASEPV	Beech Bonanza 35	37	61	0.0486	0.0015	0.0501	0.0486	0.0015	0.0501	0.1673	0	0.1673
GIIB	Gulfstream III/G300	9	0	0.0122	0.0004	0.0125	0.0122	0.0004	0.0125	0	0	0
LEAR35	Bombardier Learjet 35/36	9	0	0.0122	0.0004	0.0125	0.0122	0.0004	0.0125	0	0	0
PA28	Piper Cherokee	18	0	0.0243	0.0008	0.0251	0.0243	0.0008	0.0251	0	0	0
PA31	Piper Navajo PA-31	5	0	0.0061	0.0002	0.0063	0.0061	0.0002	0.0063	0	0	0
S65	Sikorsky RH-53 SeaStallion	49		0.0649	0.0020	0.0669	0.0649	0.0020	0.0669	0	0	0
S70	Blackhawk Helicopter	110		0.1460	0.0045	0.1505	0.1460	0.0045	0.1505	0	0	0
S76	Sikorsky SK-76	37		0.0487	0.0015	0.0502	0.0487	0.0015	0.0502	0	0	0
SA365N	Aérospatiale SA 365 Dauphin 2	183		0.2433	0.0075	0.2508	0.2433	0.0075	0.2508	0	0	0.0000
TOTAL		**1018**	**343**	**1.3521**	**0.0418**	**1.3939**	**1.3521**	**0.0418**	**1.3939**	**0.9409**	**0**	**0.9409**

Day = 7:00 a.m. to 9:59 p.m.; Night = 10:00 p.m. to 6:59 a.m.
Note: Numbers may not add, due to rounding.
Source: AECOM, 2016.

TABLE G-3.4
EXISTING AND FUTURE CONDITION AIRCRAFT FLEET MIX

AEDT AC	TFMSC Aircraft Type	Existing Condition		2023		2028	
		Itinerant	Local	Itinerant	Local	Itinerant	Local
Jet / Turbine							
LEAR35	BAe HS 125/700-800/Hawker800	8.2%	N/A	4.1%	N/A	2.0%	N/A
LEAR35	BAe-3100 Jetstream	0.8%	N/A	0.8%	N/A	0.9%	N/A
CL601	Bombardier (Canadair) Challenger300	8.2%	N/A	4.1%	N/A	2.0%	N/A
GV	Bombardier BD-700 GlobalExpress	0.1%	N/A	0.1%	N/A	0.1%	N/A
CL600	Bombardier Challenger 600/601/604	2.0%	N/A	2.2%	N/A	2.3%	N/A
LEAR35	Bombardier Learjet 31/A/B	0.5%	N/A	0.5%	N/A	0.5%	N/A
LEAR35	Bombardier Learjet 35/36	4.2%	N/A	4.5%	N/A	4.7%	N/A
LEAR35	Bombardier Learjet 45	2.9%	N/A	3.1%	N/A	3.2%	N/A
LEAR35	Bombardier Learjet 55	0.1%	N/A	0.1%	N/A	0.1%	N/A
CNA55B	Bombardier Learjet 60	1.3%	N/A	1.3%	N/A	1.4%	N/A
CNA500	Cessna 500/Citation I	0.1%	N/A	0.1%	N/A	0.1%	N/A
CNA500	Cessna Citation CJ2	1.1%	N/A	1.2%	N/A	1.3%	N/A
CNA500	Cessna Citation CJ3	2.4%	N/A	2.6%	N/A	2.7%	N/A
CIT3	Cessna Citation CJ4	0.2%	N/A	0.2%	N/A	0.2%	N/A
CNA500	Cessna Citation II/Bravo	3.9%	N/A	4.2%	N/A	4.4%	N/A
ECLIPSE500	Cessna Citation Mustang	0.6%	N/A	0.6%	N/A	0.6%	N/A
CNA680	Cessna Citation Sovereign	2.9%	N/A	3.1%	N/A	3.2%	N/A
CNA55B	Cessna Citation V/Ultra/Encore	2.7%	N/A	2.9%	N/A	3.0%	N/A
CNA750	Cessna Citation X	1.6%	N/A	1.7%	N/A	1.8%	N/A
CNA500	Cessna CitationJet/CJ1	2.8%	N/A	3.0%	N/A	3.1%	N/A
CNA55B	Cessna Excel/XLS	9.0%	N/A	9.7%	N/A	10.0%	N/A
CNA500	Cessna I/SP	0.1%	N/A	0.1%	N/A	0.1%	N/A
CIT3	Cessna III/VI/VII	0.5%	N/A	0.5%	N/A	0.5%	N/A
CL600	Dassault Falcon 2000	2.7%	N/A	2.9%	N/A	3.0%	N/A
F10062	Dassault Falcon 900	0.6%	N/A	0.6%	N/A	0.6%	N/A
LEAR35	Dassault Falcon/Mystère 10	8.1%	N/A	8.7%	N/A	9.0%	N/A
CL600	Dassault Falcon/Mystère 20	0.3%	N/A	0.3%	N/A	0.4%	N/A
F10062	Dassault Falcon/Mystère 50	2.9%	N/A	3.1%	N/A	3.2%	N/A
ECLIPSE500	Eclipse 500	0.3%	N/A	0.3%	N/A	0.4%	N/A
EMB145	Embraer 135 LR	0.4%	N/A	0.4%	N/A	0.4%	N/A
EMB145	Embraer ERJ 135/140/Legacy	0.3%	N/A	0.3%	N/A	0.3%	N/A
ECLIPSE500	Embraer Phenom 100	5.8%	N/A	6.2%	N/A	6.4%	N/A
CL600	Embraer Phenom 300	3.0%	N/A	3.3%	N/A	3.4%	N/A
IA1125	Gulfstream G150	0.3%	N/A	0.3%	N/A	0.4%	N/A
CL600	Gulfstream G280	0.1%	N/A	0.1%	N/A	0.1%	N/A

GIV	Gulfstream IV/G400	1.8%	N/A	2.0%	N/A	2.0%	N/A
GV	Gulfstream V/G500	0.6%	N/A	0.6%	N/A	0.6%	N/A
CL600	Hawker 4000	0.7%	N/A	0.8%	N/A	0.8%	N/A
IA1125	IAI 1124 Westwind	0.1%	N/A	0.1%	N/A	0.1%	N/A
CL600	IAI 1126 Galaxy/GulfstreamG200	0.3%	N/A	0.3%	N/A	0.4%	N/A
IA1125	IAI Astra 1125	4.4%	N/A	6.8%	N/A	7.8%	N/A
LEAR35	Learjet 40; GatesLearjet	0.2%	N/A	0.3%	N/A	0.3%	N/A
LEAR35	Learjet 75	1.3%	N/A	1.4%	N/A	1.4%	N/A
LEAR35	Lockheed L-1329 Jetstar731	0.2%	N/A	0.2%	N/A	0.2%	N/A
MU3001	Mitsubishi MU300/ DiamondI	0.1%	N/A	0.1%	N/A	0.1%	N/A
LEAR35	North American RockwellSabre 40/60	0.2%	N/A	0.3%	N/A	0.3%	N/A
LEAR35	North American RockwellSabre 75	0.1%	N/A	0.1%	N/A	0.1%	N/A
LEAR35	Raytheon Premier 1/390Premier 1	0.5%	N/A	0.5%	N/A	0.5%	N/A
MU3001	Raytheon/Beech Beechjet 400/T-1	8.6%	N/A	9.3%	N/A	9.6%	N/A
TOTAL		**100.0%**	**N/A**	**100.0%**	**N/A**	**100.0%**	**N/A**
Rotary Wing							
A109	Agusta SAAF-109	5.2%	N/A	5.2%	N/A	5.2%	N/A
B407	Bell 407	6.9%	N/A	6.9%	N/A	6.9%	N/A
B429	Bell 429	1.7%	N/A	1.7%	N/A	1.7%	N/A
B429	Eurocopter EC-145	1.7%	N/A	1.7%	N/A	1.7%	N/A
B430	Bell 430	12.1%	N/A	12.1%	N/A	12.1%	N/A
CH47D	Boeing CH-47 Chinook	1.7%	N/A	1.7%	N/A	1.7%	N/A
EC130	Eurocopter EC-135	13.8%	N/A	13.8%	N/A	13.8%	N/A
R22	Robinson R-22 Mariner	1.7%	N/A	1.7%	N/A	1.7%	N/A
R44	Robinson R-44 Raven	3.4%	N/A	3.4%	N/A	3.4%	N/A
S70	Sikorsky SH-60 Seahawk	1.7%	N/A	1.7%	N/A	1.7%	N/A
S76	Sikorsky S-76	43.1%	N/A	43.1%	N/A	43.1%	N/A
SA330J	Agusta AB-139	6.9%	N/A	6.9%	N/A	6.9%	N/A
TOTAL		**100.0%**	**N/A**	**100.0%**	**N/A**	**100.0%**	**N/A**
Multi-Engine Piston							
BEC58P	Beech Baron 55	52.4%	98.5%	52.4%	98.5%	52.4%	98.5%
PA30	Piper PA-30	2.6%	---	2.6%	---	2.6%	---
PA31	Piper Navajo PA-31	43.4%	---	43.4%	---	43.4%	---
SD330	Piaggio P-180 Avanti	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
TOTAL		**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**
Single Engine Piston							
CNA172	Cessna Skyhawk 172/Cutlass	24.1%	36.4%	24.1%	36.4%	24.1%	36.4%
CNA182	Cessna Skylane 182	7.2%	7.2%	7.2%	7.2%	7.2%	7.2%
CNA206	Cessna 210 Centurion	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%
GASEPF	American AA-5 Traveler	9.4%	9.4%	9.4%	9.4%	9.4%	9.4%

GASEPV	Beech Bonanza 35	43.1%	43.1%	43.1%	43.1%	43.1%	43.1%
PA28	Piper Cherokee	11.8%	---	11.8%	---	11.8%	---
T34	Beechcraft T-34 Mentor	0.5%	---	0.5%	---	0.5%	---
TOTAL		**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**
Turboprop							
CNA208	Cessna 208 Caravan	44.2%	N/A	44.2%	N/A	44.2%	N/A
CNA441	Beech 200 SuperKing	27.3%	N/A	27.3%	N/A	27.3%	N/A
DHC6	Beech Super KingAir 350	11.6%	N/A	11.6%	N/A	11.6%	N/A
DO228	Raytheon 300 SuperKing Air	16.3%	N/A	16.3%	N/A	16.3%	N/A
JPATS	North American T-6Texan	0.4%	N/A	0.4%	N/A	0.4%	N/A
SF340	Transall C-160	0.1%	N/A	0.1%	N/A	0.1%	N/A
TOTAL		**100.0%**	**N/A**	**100.0%**	**N/A**	**100.0%**	**N/A**
Military Fleet Mix							
A10A	Fairchild A10	0.8%	---	0.8%	---	0.8%	---
B206L	Agusta AB-206 LongRanger	9.6%	---	9.6%	---	9.6%	---
B212	Bell 212	2.4%	---	2.4%	---	2.4%	---
B429	Bell 429	14.4%	---	14.4%	---	14.4%	---
BEC58P	Cessna 310	0.4%	4.4%	0.4%	4.4%	0.4%	4.4%
C130HP	Lockheed C-130 Hercules	3.6%	---	3.6%	---	3.6%	---
CNA172	Cessna Skyhawk 172/Cutlass	0.9%	13.3%	0.9%	13.3%	0.9%	13.3%
CNA182	Cessna Skylane 182	3.6%	17.8%	3.6%	17.8%	3.6%	17.8%
CNA206	Cessna 210 Centurion	1.3%	6.7%	1.3%	6.7%	1.3%	6.7%
CNA441	Beech 200 SuperKing	7.2%	35.6%	7.2%	35.6%	7.2%	35.6%
CNA55B	Cessna Excel/XLS	1.8%	---	1.8%	---	1.8%	---
CVR580	Grumman C-2 Greyhound	2.2%	---	2.2%	---	2.2%	---
DHC6	Beech Super KingAir 350	0.9%	4.4%	0.9%	4.4%	0.9%	4.4%
F-18	Boeing FA-18 Hornet	6.0%	---	6.0%	---	6.0%	---
GASEPV	Beech Bonanza 35	3.6%	17.8%	3.6%	17.8%	3.6%	17.8%
GIIB	Gulfstream III/G300	0.9%	---	0.9%	---	0.9%	---
LEAR35	Bombardier Learjet 35/36	0.9%	---	0.9%	---	0.9%	---
PA28	Piper Cherokee	1.8%	---	1.8%	---	1.8%	---
PA31	Piper Navajo PA-31	0.4%	---	0.4%	---	0.4%	---
S65	Sikorsky RH-53 SeaStallion	4.8%	---	4.8%	---	4.8%	---
S70	Blackhawk Helicopter	10.8%	---	10.8%	---	10.8%	---
S76	Sikorsky SK-76	3.6%	---	3.6%	---	3.6%	---
SA365N	Aérospatiale SA 365 Dauphin 2	18.0%	---	18.0%	---	18.0%	---
TOTAL		**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Note: Numbers may not add, due to rounding.
Source: AECOM, 2016.

Runway Use

A summary of the modeled annual average daily utilization of ESN's runways is presented in **Table G-3.5**. The airport Air Traffic Control Tower confirmed these percentages. The percentages provided in Table G-3.5 are applicable to both arrival and departure operations.

TABLE G-3.5
EXISTING CONDITION RUNWAY UTILIZATION

Runway	Jet	Turboprop	Single & Multi Engine Piston	Helicopters
04	65.0%	61.0%	60.4%	60.4%
22	30.0%	30.0%	29.6%	29.6%
15	2.0%	4.0%	4.8%	4.8%
33	3.0%	5.0%	5.2%	5.2%
TOTAL	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Source: ESN ATCT, 2016.

Flight Tracks

Flight tracks are the aircraft's actual path through the air projected vertically onto the ground. Modeled flight tracks reflect a reasonable representation of the actual flight track recognizing that pilot technique and weather conditions will affect the actual track of individual flights. **Exhibits G-3.1, G-3.2, and G-3.3** depict modeled arrival, departure, and touch and go tracks for the 2023 no-build and **Exhibits G-3.4, G-3.5, and G-3.6** depict modeled arrival, departure, and touch and go tracks for the 2028 build. Due to the number of aircraft operations at ESN, flight tracks were developed using published U.S. Terminal Procedures and applicable airport noise abatement procedures.

Track Use

Utilization percentages of the flight tracks are tabulated in **Table G-3.6** for arrivals and departures. It was assumed that helicopters would use the same flight tracks as fixed wing aircraft.

LEGEND

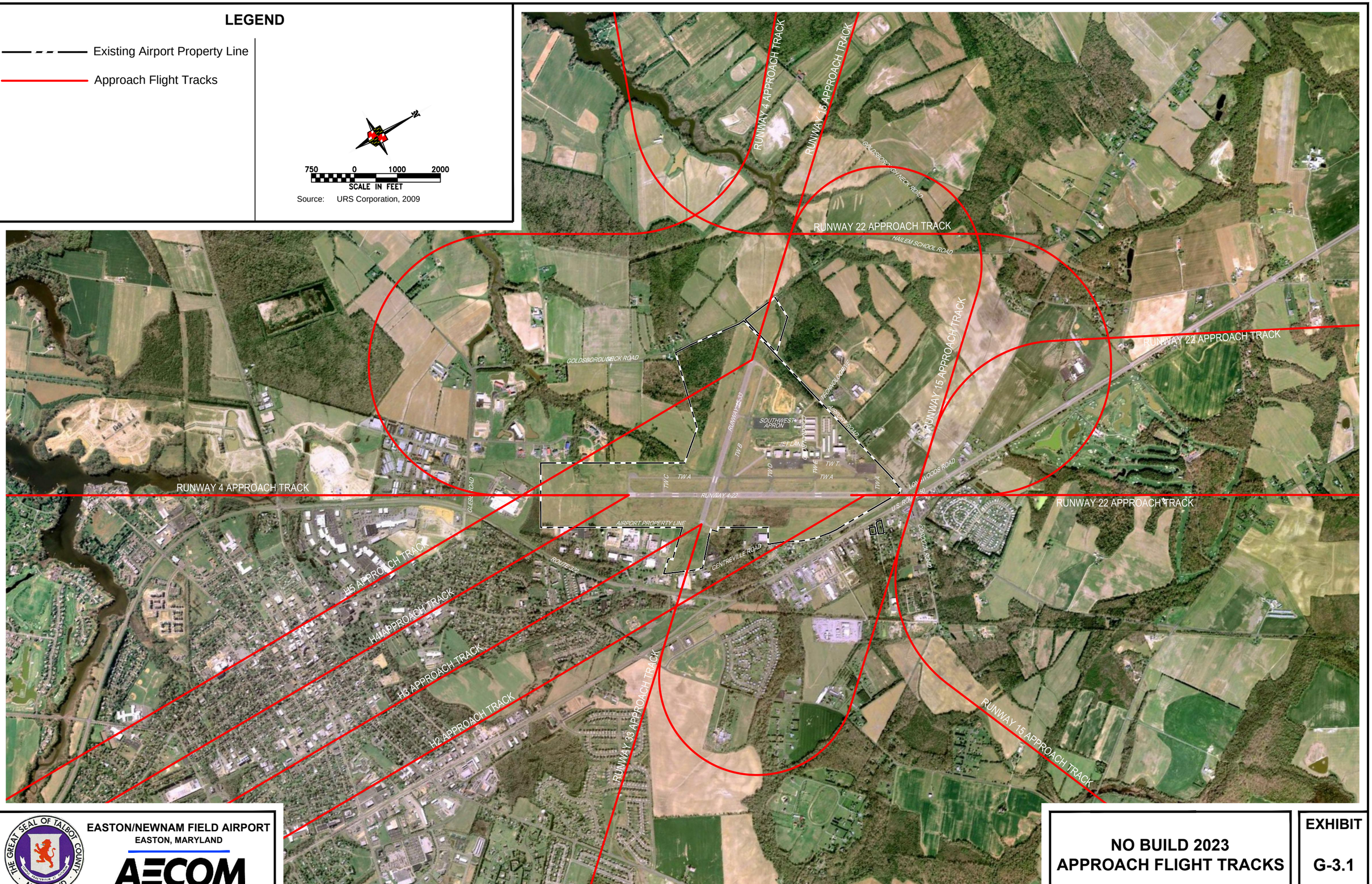
Existing Airport Property Line

Approach Flight Tracks

750 0 1000 2000

SCALE IN FEET

Source: URS Corporation, 2009



FILE NAME: U:\Projects\E\ESN\60423280\CAD\CIVIL\ESN_FLIGHT TRACKS\ESN_FLIGHT TRACKS – 2023–NO ACTION.dwg LAYOUT NAME: E–2 APP TRACKS PLOTTED: Thursday, March 02, 2017 – 5:23pm

THE GREAT SEAL OF TALBOT COUNTY MARYLAND

EASTON/NEWNAM FIELD AIRPORT
EASTON, MARYLAND

AECOM

NO BUILD 2023
APPROACH FLIGHT TRACKS

EXHIBIT
G-3.1

LEGEND

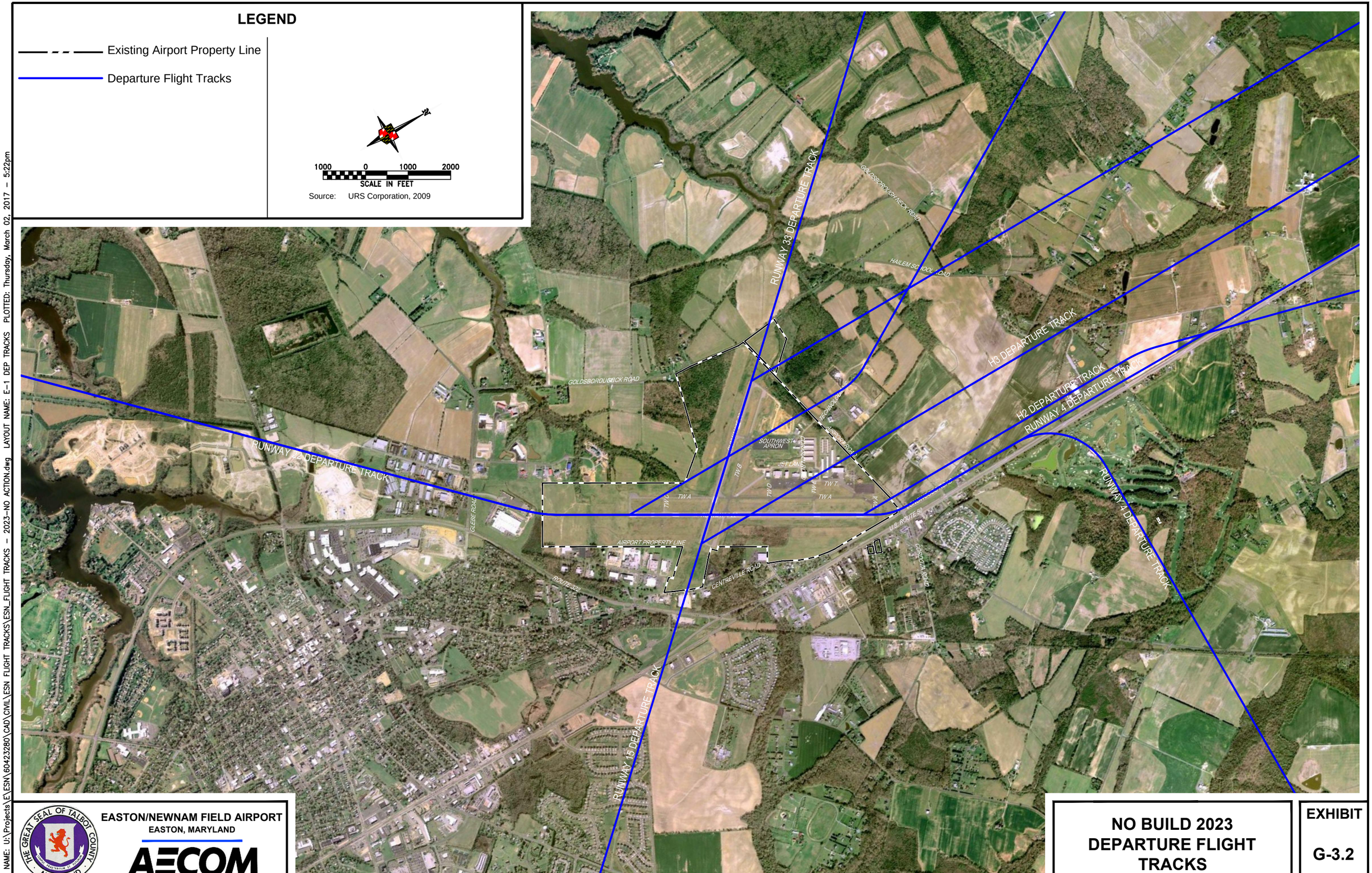
Existing Airport Property Line

Departure Flight Tracks

1000 0 1000 2000

SCALE IN FEET

Source: URS Corporation, 2009



EASTON/NEWNAM FIELD AIRPORT
EASTON, MARYLAND

AECOM

NO BUILD 2023 DEPARTURE FLIGHT TRACKS

EXHIBIT

G-3.2

FILE NAME: U:\Projects\E\ESN\60423280\CAD\CIVIL\ESN FLIGHT TRACKS\ESN_FLIGHT TRACKS – 2023–NO ACTION.dwg LAYOUT NAME: E-1 DEP TRACKS PLOTTED: Thursday, March 02, 2017 – 5:22pm

LEGEND

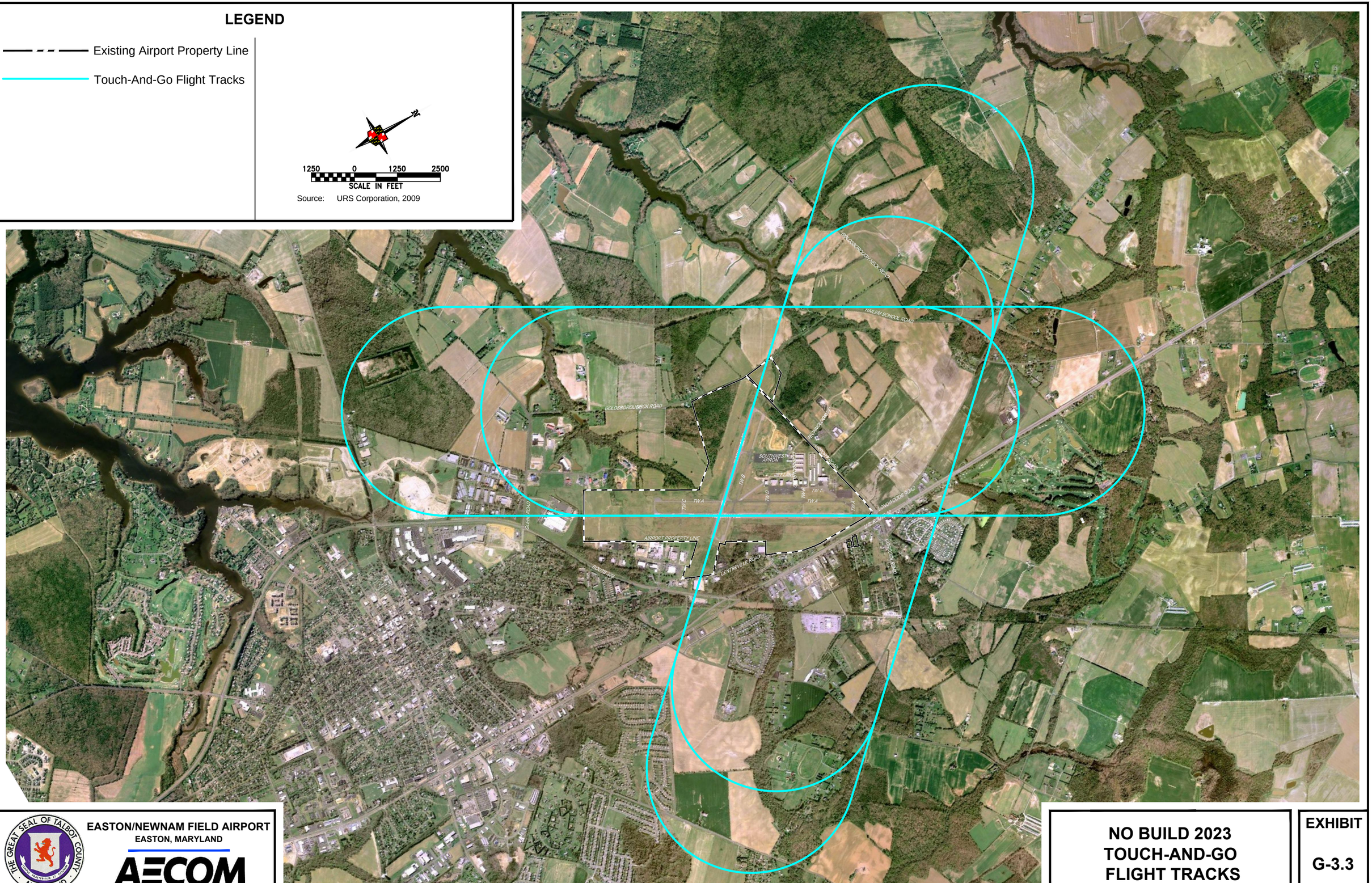
Existing Airport Property Line

Touch-And-Go Flight Tracks

1250 0 1250 2500

SCALE IN FEET

Source: URS Corporation, 2009



FILE NAME: U:\Projects\E\ESN\60423280\CAD\CIVIL\ESN FLIGHT TRACKS\ESN_FLIGHT TRACKS – 2023–NO ACTION.dwg LAYOUT NAME: E-3 TGO TRACKS PLOTTED: Thursday, March 02, 2017 – 5:24pm

EASTON/NEWNAM FIELD AIRPORT
EASTON, MARYLAND

AECOM

NO BUILD 2023
TOUCH-AND-GO
FLIGHT TRACKS

EXHIBIT

G-3.3

LEGEND

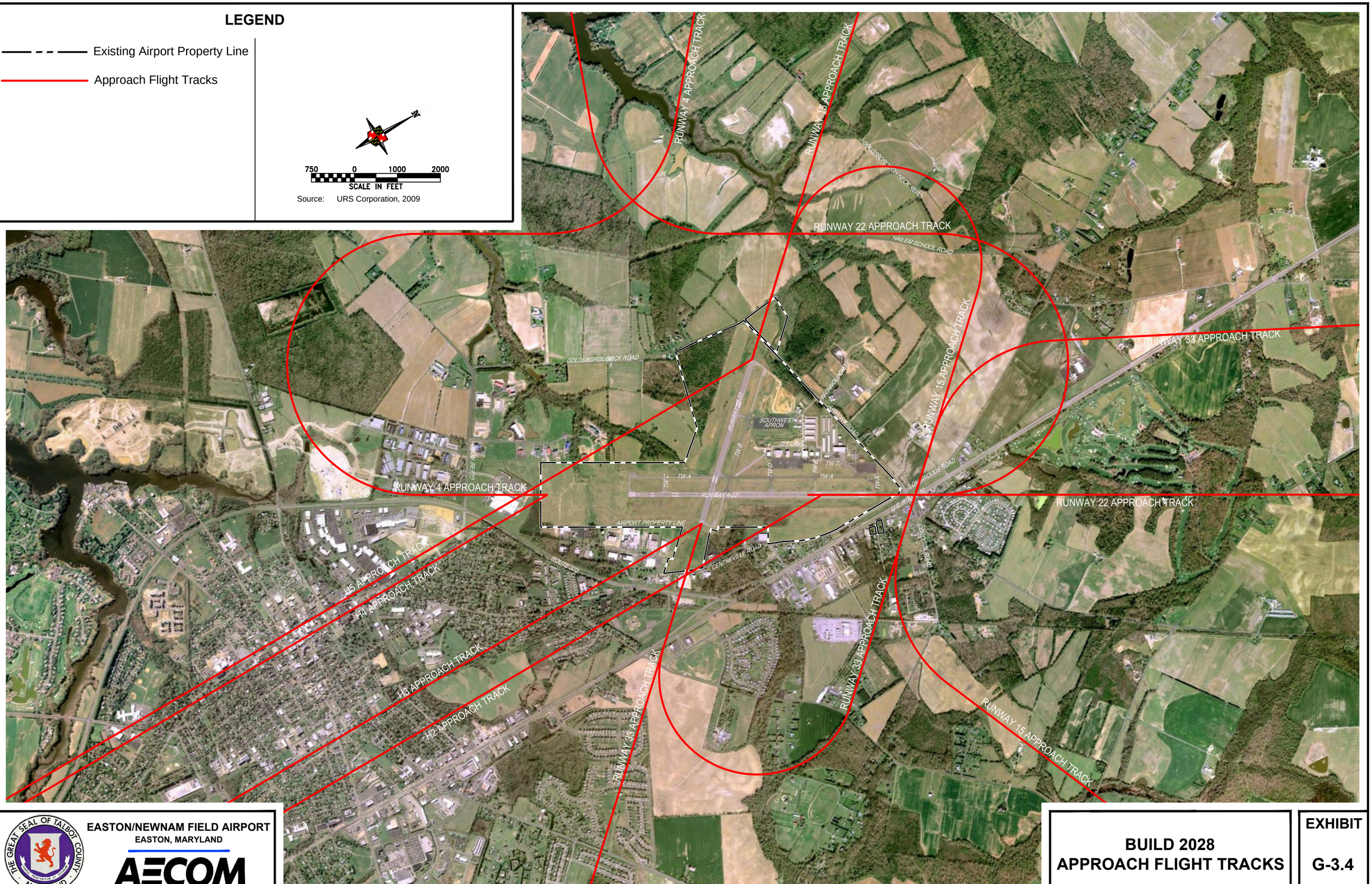
Existing Airport Property Line

Approach Flight Tracks

750 0 1000 2000

SCALE IN FEET

Source: URS Corporation, 2009



EASTON/NEWNAM FIELD AIRPORT
EASTON, MARYLAND

AECOM

BUILD 2028
APPROACH FLIGHT TRACKS

EXHIBIT
G-3.4

FILE NAME: U:\Projects\E\ESN\60423280\CAD\CIVIL\ESN_FLIGHT TRACKS\ESN_FLIGHT TRACKS – 2028-BUILD.dwg LAYOUT NAME: G3.4 APP TRACKS PLOTTED: Thursday, March 02, 2017 – 5:41pm

LEGEND

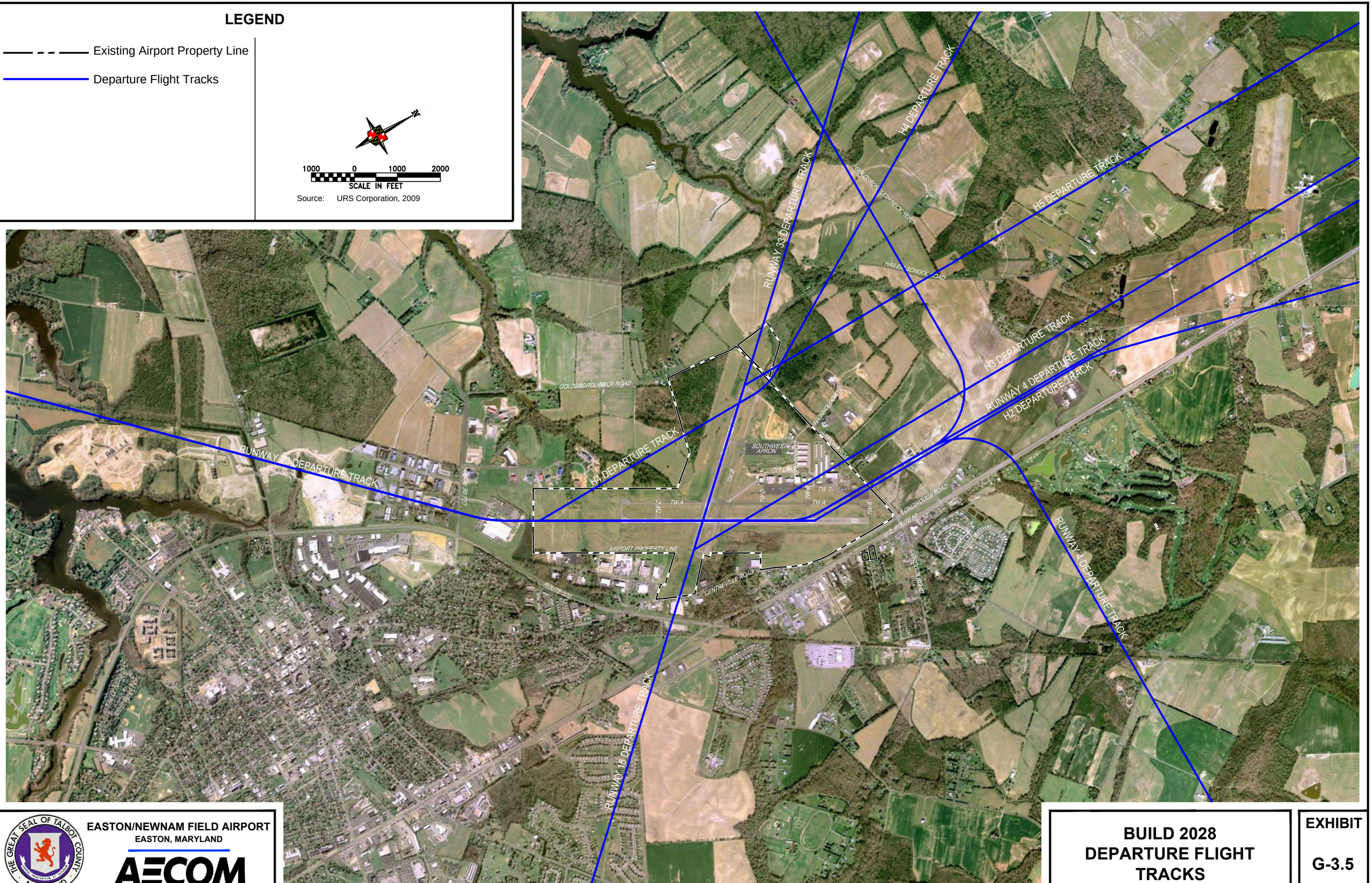
Existing Airport Property Line

Departure Flight Tracks

1000 0 1000 2000

SCALE IN FEET

Source: URS Corporation, 2009



EASTON/NEWNAM FIELD AIRPORT
EASTON, MARYLAND

AECOM

BUILD 2028 DEPARTURE FLIGHT TRACKS

EXHIBIT

G-3.5

FILE NAME: U:\Projects\E\ESN\60423280\CAD\CIVIL\ESN FLIGHT TRACKS\ESN_FLIGHT TRACKS – 2028–BUILD.dwg LAYOUT NAME: G3.5 DEP TRACKS PLOTTED: Thursday, March 02, 2017 – 5:42pm

LEGEND

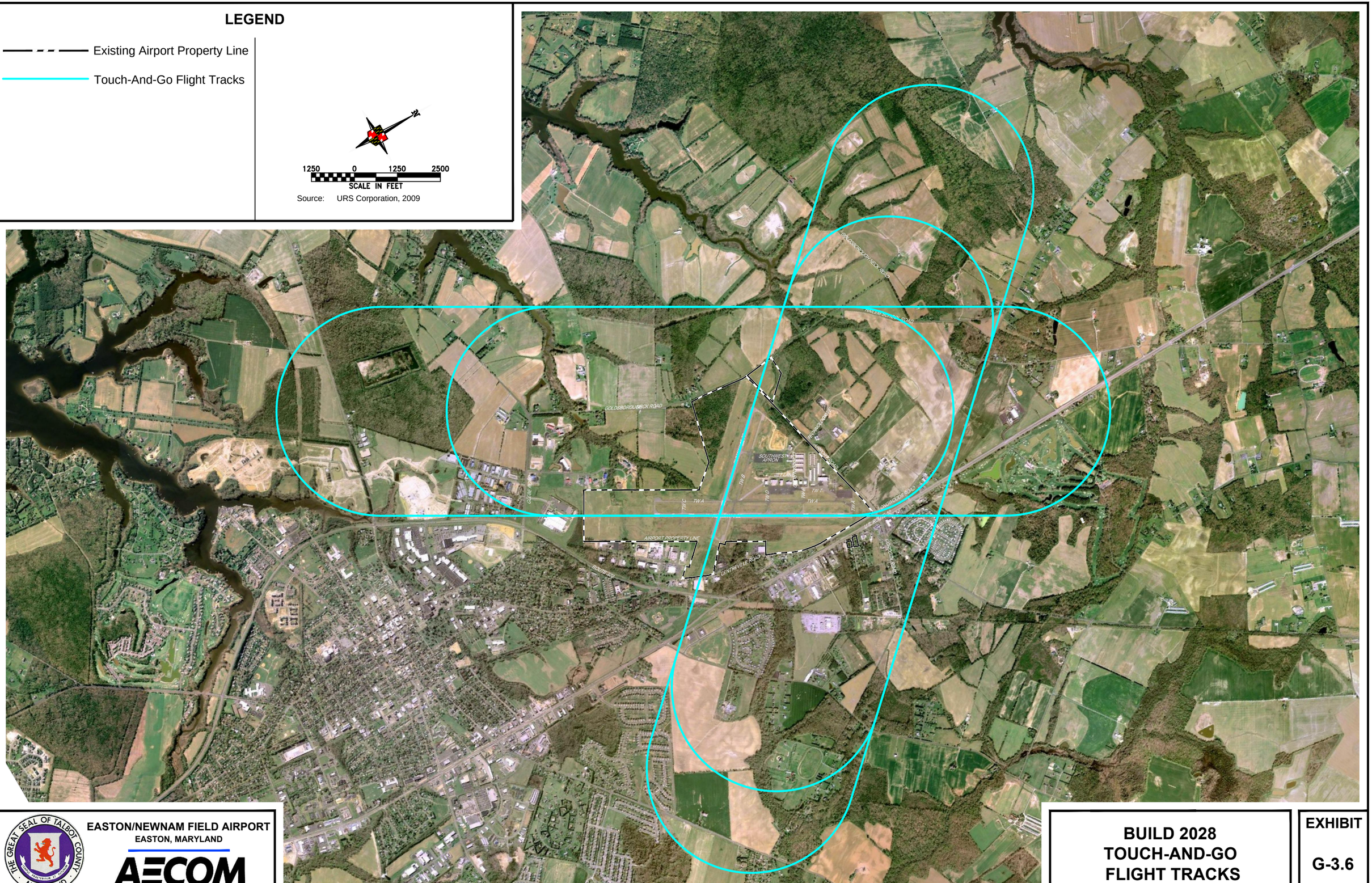
Existing Airport Property Line

Touch-And-Go Flight Tracks

1250 0 1250 2500

SCALE IN FEET

Source: URS Corporation, 2009



FILE NAME: U:\Projects\E\ESN\60423280\CAD\CIVIL\ESN FLIGHT TRACKS\ESN_FLIGHT TRACKS – 2028–BUILD.dwg LAYOUT NAME: G3.6 TGO TRACKS PLOTTED: Thursday, March 02, 2017 – 5:43pm

THE GREAT SEAL OF TALBOT COUNTY MARYLAND

EASTON/NEWNAM FIELD AIRPORT
EASTON, MARYLAND

AECOM

BUILD 2028
TOUCH-AND-GO
FLIGHT TRACKS

EXHIBIT

G-3.6

TABLE G-3.6
EXISTING CONDITION FLIGHT TRACK UTILIZATION PER RUNWAY

ARRIVAL				
Runway	**Track**	**Jets**	**TurboProp**	**Prop/Helo**
04	04A1	50.00%	50.00%	50.00%
	04A2	50.00%	50.00%	50.00%
22	22A1	50.00%	50.00%	50.00%
	22A2	50.00%	50.00%	50.00%
15	15A1	50.00%	50.00%	50.00%
	15A2	50.00%	50.00%	50.00%
33	33A1	50.00%	50.00%	50.00%
	33A2	50.00%	50.00%	50.00%
DEPARTURE				
Runway	**Track**	**Jets**	**TurboProp**	**Prop/Helo**
04	04D1	33.33%	33.33%	33.33%
	04D2	33.34%	33.34%	33.34%
22	04D3	33.33%	33.33%	33.33%
	22D1	33.33%	33.33%	33.33%
15	22D2	33.34%	33.34%	33.34%
	22D3	33.33%	33.33%	33.33%
33	15D1	100.00%	100.00%	100.00%
	33D1	100.00%	100.00%	100.00%

Sources: AECOM, 2016.

Flight Profiles

Flight profiles model the vertical paths of aircraft during departure and arrival to determine the altitude, speed, and engine thrust or power of an aircraft at any point along a flight track. AEDT uses this information to calculate noise exposure on the ground. Profiles are unique to each aircraft type and vary with temperature, barometric pressure, headwind, and aircraft weight. Standard AEDT default profiles were used for all aircraft operations.

FAA Part 150 Compatible Land Use Criteria

Title 14 CFR part 150, Appendix A, Table 1 (Title 14 CFR part 150, 2007), provides Federal compatible land use guidelines for several land uses as a function of DNL values. Compatible or non-compatible land use is determined by comparing the predicted or measured DNL or CNEL values at a site to the values listed in Table 1. This table is provided as **Table G-3.7**.

TABLE G-3.7
LAND USE COMPATIBILITY WITH YEARLY DAY-NIGHT AVERAGE SOUND LEVELS

	Yearly Day-Night Average Sound Level (DNL)					
	Below 65 Decibels	65-70 Decibels	70-75 Decibels	75-80 Decibels	80-85 Decibels	Over 85 Decibels
Residential						
Residential (Other than mobile homes & transient lodges)	Y	N[1]	N[1]	N	N	N
Mobile Home Parks	Y	N	N	N	N	N
Transient Lodging	Y	N[1]	N[1]	N[1]	N	N
Public Use						
Schools	Y	N[1]	N[1]	N	N	N
Hospitals, Nursing Homes	Y	25	30	N	N	N
Churches, Auditoriums, Concert Halls	Y	25	30	N	N	N
Governmental Services	Y	Y	25	30	N	N
Transportation	Y	Y	Y[2]	Y[3]	Y[4]	Y[4]
Parking	Y	Y	Y[2]	Y[3]	Y[4]	N
Commercial Use						
Offices, Business & Professional	Y	Y	25	30	N	N
Wholesale & Retail Building Materials, Hardware & Farm Equipment	Y	Y	Y[2]	Y[3]	Y[4]	N
Retail Trade - General	Y	Y	25	30	N	N
Utilities	Y	Y	Y[2]	Y[3]	Y[4]	N
Communications	Y	Y	25	30	N	N
Manufacturing & Production						
Manufacturing, General	Y	Y	Y[2]	Y[3]	Y[4]	N
Photographic and Optical	Y	Y	25	30	N	N
Agriculture (Except Livestock) & Forestry	Y	Y[6]	Y[7]	Y[8]	Y[8]	Y[8]
Livestock Farming & Breeding	Y	Y[6]	Y[7]	N	N	N
Mining & Fishing, Resource Production & Extraction	Y	Y	Y	Y	Y	Y
Recreational						
Outdoor Sports Arenas, Spectator Sports	Y	Y[5]	Y[5]	N	N	N
Outdoor Music Shells, Amphitheaters	Y	N	N	N	N	N
Nature Exhibits & Zoos	Y	Y	N	N	N	N
Amusement, Parks, Resorts, Camps	Y	Y	Y	N	N	N
Golf Courses, Riding Stables, Water Recreation	Y	Y	25	30	N	N

TABLE G-3.7 (CONTINUED)
LAND USE COMPATIBILITY WITH YEARLY DAY-NIGHT AVERAGE SOUND LEVELS

NOTE: The responsibility for determining the acceptable and permissible land uses and the relationship between specific properties remains with the local authorities. FAA determinations under Part 150 are not intended to substitute federally determined land use for those determined to be appropriate by local authorities in response to locally determined needs and values in achieving noise-compatible land uses.

KEY TO TABLE:

SLUCM Standard Land Use Coding Manual.

Y (Yes) Land Use and related structures are compatible without restrictions.

N (No) Land Use and related structures are not compatible and should be prohibited.

NLR Noise Level Reduction (outdoor to indoor) are to be achieved through incorporation of noise attenuation into the design and construction of structure.

25,30, or 35 Land use and related structures are generally compatible; measures to achieve NLR of 25, 30, or 35 dB must be incorporated in design and construction of structure.

[1] Where the community determines that residential or school uses must be allowed, measures to achieve outdoor to indoor NLR of at least 25 dB and 30 dB should be incorporated into building codes and be considered in individual approvals. Normal residential construction can be expected to provide a NLR of 20 dB, thus, the reduction requirements are often stated as 5, 10 or 15 dB over standard construction and normally assume mechanical ventilation and closed windows year round. However, the use of NLR criteria will not eliminate outdoor noise problems

[2] Measures to achieve NLR of 25 dB must be incorporated into the design and construction of portions of the buildings where the public is received, office areas, noise-sensitive areas, or where the normal noise level is low.

[3] Measures to achieve NLR of 30 dB must be incorporated into the design and construction of portions of the buildings where the public is received, office areas, noise-sensitive areas, or where the normal noise level is low.

[4] Measures to achieve NLR of 35 dB must be incorporated into the design and construction of portions of the buildings where the public is received, office areas, noise-sensitive areas, or where the normal noise level is low.

[5] Land use compatible provided special sound reinforcement systems are installed.

[6] Residential buildings require an NLR of 25 dB.

[7] Residential buildings require an NLR of 30 dB.

[8] Residential buildings not permitted.

Noncompatible land use.

Source: Title 14 CFR part 150, 2007.

G-3.2 FUTURE CONDITIONS NOISE MODELING ASSUMPTIONS

Flight Operations

As shown in **Tables G-3.8 through G-3.10**, AEDT-modeled annual operations for the 2023 study year totaled 56,079 operations, an average of approximately 153 daily operations. The fleet mix, except as noted in **Table G.3-4**, and day/night split did not change from the existing condition.

As shown in **Tables G-3.11 through G-3.13**, AEDT-modeled annual operations for the 2028 study year totaled 56,725 operations, an average of approximately 155 daily operations. As with the 2023 forecast, the fleet mix, except as noted in **Table G.3-4**, and day/night split did not change from the existing condition.

TABLE G-3.8
2023 ANNUAL AND AVERAGE DAILY JET AIRCRAFT OPERATIONS

Jet Aircraft Fleet Mix								
AEDT AC	TFMSC Aircraft Type	Annual Operations	Arrivals			Departures		
			Day	Night	Total	Day	Night	Total
LEAR35	BAe HS 125/700-800/Hawker800	516	0.6856	0.0212	0.7068	0.6856	0.0212	0.7068
LEAR35	BAe-3100 Jetstream	105	0.1390	0.0043	0.1433	0.1390	0.0043	0.1433
CL601	Bombardier (Canadair) Challenger300	516	0.6856	0.0212	0.7068	0.6856	0.0212	0.7068
GV	Bombardier BD-700 GlobalExpress	11	0.0146	0.0005	0.0151	0.0146	0.0005	0.0151
CL600	Bombardier Challenger 600/601/604	275	0.3657	0.0113	0.3770	0.3657	0.0113	0.3770
LEAR35	Bombardier Learjet 31/A/B	66	0.0878	0.0027	0.0905	0.0878	0.0027	0.0905
LEAR35	Bombardier Learjet 35/36	572	0.7606	0.0235	0.7841	0.7606	0.0235	0.7841
LEAR35	Bombardier Learjet 45	391	0.5192	0.0161	0.5353	0.5192	0.0161	0.5353
LEAR35	Bombardier Learjet 55	11	0.0146	0.0005	0.0151	0.0146	0.0005	0.0151
CNA55B	Bombardier Learjet 60	171	0.2267	0.0070	0.2337	0.2267	0.0070	0.2337
CNA500	Cessna 500/Citation I	11	0.0146	0.0005	0.0151	0.0146	0.0005	0.0151
CNA500	Cessna Citation CJ2	154	0.2048	0.0063	0.2111	0.2048	0.0063	0.2111
CNA500	Cessna Citation CJ3	325	0.4315	0.0133	0.4448	0.4315	0.0133	0.4448
CIT3	Cessna Citation CJ4	22	0.0293	0.0009	0.0302	0.0293	0.0009	0.0302
CNA500	Cessna Citation II/Bravo	534	0.7094	0.0219	0.7313	0.7094	0.0219	0.7313
ECLIPSE500	Cessna Citation Mustang	77	0.1024	0.0032	0.1056	0.1024	0.0032	0.1056
CNA680	Cessna Citation Sovereign	396	0.5266	0.0163	0.5428	0.5266	0.0163	0.5428
CNA55B	Cessna Citation V/Ultra/Encore	363	0.4827	0.0149	0.4976	0.4827	0.0149	0.4976
CNA750	Cessna Citation X	220	0.2925	0.0090	0.3016	0.2925	0.0090	0.3016
CNA500	Cessna CitationJet/CJ1	380	0.5046	0.0156	0.5202	0.5046	0.0156	0.5202
CNA55B	Cessna Excel/XLS	1222	1.6236	0.0502	1.6738	1.6236	0.0502	1.6738
CNA500	Cessna I/SP	11	0.0146	0.0005	0.0151	0.0146	0.0005	0.0151
CIT3	Cessna III/VI/VII	66	0.0878	0.0027	0.0905	0.0878	0.0027	0.0905
CL600	Dassault Falcon 2000	369	0.4900	0.0152	0.5051	0.4900	0.0152	0.5051
F10062	Dassault Falcon 900	77	0.1024	0.0032	0.1056	0.1024	0.0032	0.1056

LEAR35	Dassault Falcon/Mystère 10	1101	1.4627	0.0452	1.5079	1.4627	0.0452	1.5079
CL600	Dassault Falcon/Mystère 20	44	0.0585	0.0018	0.0603	0.0585	0.0018	0.0603
F10062	Dassault Falcon/Mystère 50	396	0.5266	0.0163	0.5428	0.5266	0.0163	0.5428
ECLIPSE500	Eclipse 500	44	0.0585	0.0018	0.0603	0.0585	0.0018	0.0603
EMB145	Embraer 135 LR	50	0.0658	0.0020	0.0679	0.0658	0.0020	0.0679
EMB145	Embraer ERJ 135/140/Legacy	39	0.0512	0.0016	0.0528	0.0512	0.0016	0.0528
ECLIPSE500	Embraer Phenom 100	782	1.0385	0.0321	1.0706	1.0385	0.0321	1.0706
CL600	Embraer Phenom 300	413	0.5485	0.0170	0.5655	0.5485	0.0170	0.5655
IA1125	Gulfstream G150	44	0.0585	0.0018	0.0603	0.0585	0.0018	0.0603
CL600	Gulfstream G280	11	0.0146	0.0005	0.0151	0.0146	0.0005	0.0151
GIV	Gulfstream IV/G400	248	0.3291	0.0102	0.3393	0.3291	0.0102	0.3393
GV	Gulfstream V/G500	77	0.1024	0.0032	0.1056	0.1024	0.0032	0.1056
CL600	Hawker 4000	99	0.1316	0.0041	0.1357	0.1316	0.0041	0.1357
IA1125	IAI 1124 Westwind	11	0.0146	0.0005	0.0151	0.0146	0.0005	0.0151
CL600	IAI 1126 Galaxy/GulfstreamG200	44	0.0585	0.0018	0.0603	0.0585	0.0018	0.0603
IA1125	IAI Astra 1125	860	1.1427	0.0353	1.1781	1.1427	0.0353	1.1781
LEAR35	Learjet 40; GatesLearjet	33	0.0439	0.0014	0.0452	0.0439	0.0014	0.0452
LEAR35	Learjet 75	176	0.2340	0.0072	0.2413	0.2340	0.0072	0.2413
LEAR35	Lockheed L-1329 Jetstar731	22	0.0293	0.0009	0.0302	0.0293	0.0009	0.0302
MU3001	Mitsubishi MU300/ DiamondI	17	0.0219	0.0007	0.0226	0.0219	0.0007	0.0226
LEAR35	North American RockwellSabre 40/60	33	0.0439	0.0014	0.0452	0.0439	0.0014	0.0452
LEAR35	North American RockwellSabre 75	11	0.0146	0.0005	0.0151	0.0146	0.0005	0.0151
LEAR35	Raytheon Premier 1/390Premier 1	66	0.0878	0.0027	0.0905	0.0878	0.0027	0.0905
MU3001	Raytheon/Beech Beechjet 400/T-1	1172	1.5577	0.0482	1.6059	1.5577	0.0482	1.6059
TOTAL		**12652**	**16.8116**	**0.5199**	**17.3315**	**16.8116**	**0.5199**	**17.3315**

Day = 7:00 a.m. to 9:59 p.m.; Night = 10:00 p.m. to 6:59 a.m.
Note: Numbers may not add, due to rounding.
Source: AECOM, 2016.

TABLE G-3.9
2023 ANNUAL AND AVERAGE DAILY GENERAL AVIATION AIRCRAFT OPERATIONS

GENERAL AVIATION FLEET MIX												
ROTARY WING												
AEDT AC	TFMSC AIRCRAFT TYPE	ANNUAL OPERATIONS		ARRIVALS			DEPARTURES			LOCAL		
		ITINERANT	LOCAL	DAY	NIGHT	TOTAL	DAY	NIGHT	TOTAL	DAY	NIGHT	TOTAL
A109	AGUSTA SAAF-109	23	N/A	0.0309	0.0010	0.0319	0.0309	0.0010	0.0319	N/A	N/A	N/A
B407	BELL 407	31	N/A	0.0412	0.0013	0.0425	0.0412	0.0013	0.0425	N/A	N/A	N/A
B429	BELL 429	8	N/A	0.0103	0.0003	0.0106	0.0103	0.0003	0.0106	N/A	N/A	N/A
B429	EUROCOPTE R EC-145	8	N/A	0.0103	0.0003	0.0106	0.0103	0.0003	0.0106	N/A	N/A	N/A
B430	BELL 430	54	N/A	0.0722	0.0022	0.0744	0.0722	0.0022	0.0744	N/A	N/A	N/A
CH47D	BOEING CH-47 CHINOOK	8	N/A	0.0103	0.0003	0.0106	0.0103	0.0003	0.0106	N/A	N/A	N/A
EC130	EUROCOPTE R EC-135	62	N/A	0.0825	0.0026	0.0850	0.0825	0.0026	0.0850	N/A	N/A	N/A
R22	ROBINSON R-22 MARINER	8	N/A	0.0103	0.0003	0.0106	0.0103	0.0003	0.0106	N/A	N/A	N/A
R44	ROBINSON R-44 RAVEN	16	N/A	0.0206	0.0006	0.0213	0.0206	0.0006	0.0213	N/A	N/A	N/A
S70	SIKORSKY SH-60 SEAHAWK	8	N/A	0.0103	0.0003	0.0106	0.0103	0.0003	0.0106	N/A	N/A	N/A
S76	SIKORSKY S-76	194	N/A	0.2577	0.0080	0.2657	0.2577	0.0080	0.2657	N/A	N/A	N/A
SA330J	AGUSTA AB-139	31	N/A	0.0412	0.0013	0.0425	0.0412	0.0013	0.0425	N/A	N/A	N/A
TOTAL		**450**	**N/A**	**0.5979**	**0.0185**	**0.6164**	**0.5979**	**0.0185**	**0.6164**	**N/A**	**N/A**	**N/A**
MULTI-ENGINE PISTON												
BEC58P	BEECH BARON 55	544	1534	0.7235	0.0224	0.7459	0.7235	0.0224	0.7459	4.203	0	4.203
PA30	PIPER PA-30	27	0	0.0362	0.0011	0.0373	0.0362	0.0011	0.0373	0	0	0
PA31	PIPER NAVAJO PA-31	451	0	0.5995	0.0185	0.6180	0.5995	0.0185	0.6180	0	0	0
SD330	PIAGGIO P-180 AVANTI	16	23	0.0207	0.0006	0.0213	0.0207	0.0006	0.0213	0.064	0	0.064
TOTAL		**1038**	**1558**	**1.3798**	**0.0427**	**1.4225**	**1.3798**	**0.0427**	**1.4225**	**4.267**	**0.000**	**4.267**
SINGLE ENGINE PISTON												
CNA172	CESSNA SKYHAWK 172/CUTLASS	3286	7446	4.3666	0.1350	4.5016	4.3666	0.1350	4.5016	20.3992	0	20.3992
CNA182	CESSNA SKYLANE 182	982	1473	1.3050	0.0404	1.3454	1.3050	0.0404	1.3454	4.0362	0	4.0362
CNA206	CESSNA 210 CENTURION	526	788	0.6984	0.0216	0.7200	0.6984	0.0216	0.7200	2.1599	0	2.1599
GASEPF	AMERICAN AA-5 TRAVELER	1279	1919	1.7001	0.0526	1.7527	1.7001	0.0526	1.7527	5.2580	0	5.2580
GASEPV	BEECH BONANZA 35	5882	8823	7.8161	0.2417	8.0579	7.8161	0.2417	8.0579	24.1736	0	24.1736
PA28	PIPER CHEROKEE	1614	0	2.1445	0.0663	2.2108	2.1445	0.0663	2.2108	0	0	0
T34	BEECHCRAF T T-34 MENTOR	64	0	0.0847	0.0026	0.0873	0.0847	0.0026	0.0873	0	0	0

TOTAL		**13633**	**20450**	**18.1153**	**0.5603**	**18.6756**	**18.1153**	**0.5603**	**18.6756**	**56.0268**	**0.0000**	**56.0268**
TURBOPROP												
CNA208	CESSNA 208 CARAVAN	1978	N/A	2.6287	0.0813	2.7100	2.6287	0.0813	2.7100	N/A	N/A	N/A
CNA441	BEECH 200 SUPERKING	1221	N/A	1.6223	0.0502	1.6725	1.6223	0.0502	1.6725	N/A	N/A	N/A
DHC6	BEECH SUPER KINGAIR 350	520	N/A	0.6910	0.0214	0.7123	0.6910	0.0214	0.7123	N/A	N/A	N/A
DO228	RAYTHEON 300 SUPERKING AIR	729	N/A	0.9689	0.0300	0.9988	0.9689	0.0300	0.9988	N/A	N/A	N/A
JPATS	NORTH AMERICAN T-6TEXAN	17	N/A	0.0225	0.0007	0.0232	0.0225	0.0007	0.0232	N/A	N/A	N/A
SF340	TRANSALL C-160	6	N/A	0.0075	0.0002	0.0077	0.0075	0.0002	0.0077	N/A	N/A	N/A
TOTAL		**4471**	**N/A**	**5.9409**	**0.1837**	**6.1247**	**5.9409**	**0.1837**	**6.1247**	**N/A**	**N/A**	**N/A**

Day = 7:00 a.m. to 9:59 p.m.; Night = 10:00 p.m. to 6:59 a.m.
Note: Numbers may not add, due to rounding.
Source: AECOM, 2016.

TABLE G-3.10
2023 ANNUAL AND AVERAGE DAILY MILITARY AIRCRAFT OPERATIONS

Military Fleet Mix												
AEDT AC	**TFMSC Aircraft Type**	**Annual Operations**		**Arrivals**			**Departures**			**Local**		
		Itinerant	**Local**	**Day**	**Night**	**Total**	**Day**	**Night**	**Total**	**Day**	**Night**	**Total**
A10A	Fairchild A10	10		0.0136	0.0004	0.0140	0.0136	0.0004	0.0140	0	0	0
B206L	Agusta AB-206 LongRanger	131		0.1742	0.0054	0.1796	0.1742	0.0054	0.1796	0	0	0
B212	Bell 212	33		0.0435	0.0013	0.0449	0.0435	0.0013	0.0449	0	0	0
B429	Bell 429	197		0.2613	0.0081	0.2694	0.2613	0.0081	0.2694	0	0	0
BEC58P	Cessna 310	6	20	0.0082	0.0003	0.0084	0.0082	0.0003	0.0084	0.0561	0	0.0561
C130HP	Lockheed C-130 Hercules	49		0.0653	0.0020	0.0673	0.0653	0.0020	0.0673	0	0	0
CNA172	Cessna Skyhawk 172/Cutlass	12	61	0.0163	0.0005	0.0168	0.0163	0.0005	0.0168	0.1684	0	0.1684
CNA182	Cessna Skylane 182	49	82	0.0653	0.0020	0.0673	0.0653	0.0020	0.0673	0.2245	0	0.2245
CNA206	Cessna 210 Centurion	18	31	0.0245	0.0008	0.0252	0.0245	0.0008	0.0252	0.0842	0	0.0842
CNA441	Beech 200 SuperKing	98	164	0.1306	0.0040	0.1346	0.1306	0.0040	0.1346	0.4491	0	0.4491
CNA55B	Cessna Excel/XLS	25		0.0326	0.0010	0.0337	0.0326	0.0010	0.0337	0	0	0
CVR580	Grumman C-2 Greyhound	31		0.0408	0.0013	0.0421	0.0408	0.0013	0.0421	0	0	0
DHC6	Beech Super KingAir 350	12	20	0.0163	0.0005	0.0168	0.0163	0.0005	0.0168	0.0561	0	0.0561
F-18	Boeing FA-18 Hornet	82		0.1089	0.0034	0.1122	0.1089	0.0034	0.1122	0	0	0
GASEPV	Beech Bonanza 35	49	82	0.0653	0.0020	0.0673	0.0653	0.0020	0.0673	0.2245	0	0.2245
GIIB	Gulfstream III/G300	12		0.0163	0.0005	0.0168	0.0163	0.0005	0.0168	0	0	0

LEAR35	Bombardier Learjet 35/36	12		0.0163	0.0005	0.0168	0.0163	0.0005	0.0168	0	0	0
PA28	Piper Cherokee	25		0.0326	0.0010	0.0337	0.0326	0.0010	0.0337	0	0	0
PA31	Piper Navajo PA-31	6		0.0082	0.0003	0.0084	0.0082	0.0003	0.0084	0	0	0
S65	Sikorsky RH-53 SeaStallion	66		0.0871	0.0027	0.0898	0.0871	0.0027	0.0898	0	0	0
S70	Blackhawk Helicopter	147		0.1960	0.0061	0.2020	0.1960	0.0061	0.2020	0	0	0
S76	Sikorsky SK-76	49		0.0653	0.0020	0.0673	0.0653	0.0020	0.0673	0	0	0
SA365N	Aérospatiale SA 365 Dauphin 2	246		0.3266	0.0101	0.3367	0.3266	0.0101	0.3367	0	0	0
TOTAL		**1366**	**461**	**1.8151**	**0.0561**	**1.8712**	**1.8151**	**0.0561**	**1.8712**	**1.2631**	**0**	**1.2631**

Day = 7:00 a.m. to 9:59 p.m.; Night = 10:00 p.m. to 6:59 a.m.
Note: Numbers may not add, due to rounding.
Source: AECOM, 2016.

TABLE G-3.11
2028 ANNUAL AND AVERAGE DAILY JET AIRCRAFT OPERATIONS

Jet Aircraft Fleet Mix								
AEDT AC	**TFMSC Aircraft Type**	**Annual Operations**	**Arrivals**			**Departures**		
			Day	**Night**	**Total**	**Day**	**Night**	**Total**
LEAR35	BAe HS 125/700-800/Hawker800	284	0.3774	0.0117	0.3890	0.3774	0.0117	0.3890
LEAR35	BAe-3100 Jetstream	119	0.1585	0.0049	0.1634	0.1585	0.0049	0.1634
CL601	Bombardier (Canadair) Challenger300	284	0.3774	0.0117	0.3890	0.3774	0.0117	0.3890
GV	Bombardier BD-700 GlobalExpress	13	0.0167	0.0005	0.0172	0.0167	0.0005	0.0172
CL600	Bombardier Challenger 600/601/604	314	0.4170	0.0129	0.4299	0.4170	0.0129	0.4299
LEAR35	Bombardier Learjet 31/A/B	75	0.1001	0.0031	0.1032	0.1001	0.0031	0.1032
LEAR35	Bombardier Learjet 35/36	653	0.8673	0.0268	0.8941	0.8673	0.0268	0.8941
LEAR35	Bombardier Learjet 45	446	0.5921	0.0183	0.6104	0.5921	0.0183	0.6104
LEAR35	Bombardier Learjet 55	13	0.0167	0.0005	0.0172	0.0167	0.0005	0.0172
CNA55B	Bombardier Learjet 60	195	0.2585	0.0080	0.2665	0.2585	0.0080	0.2665
CNA500	Cessna 500/Citation I	13	0.0167	0.0005	0.0172	0.0167	0.0005	0.0172
CNA500	Cessna Citation CJ2	176	0.2335	0.0072	0.2407	0.2335	0.0072	0.2407
CNA500	Cessna Citation CJ3	370	0.4920	0.0152	0.5073	0.4920	0.0152	0.5073
CIT3	Cessna Citation CJ4	25	0.0334	0.0010	0.0344	0.0334	0.0010	0.0344
CNA500	Cessna Citation II/Bravo	609	0.8089	0.0250	0.8340	0.8089	0.0250	0.8340
ECLIPSE500	Cessna Citation Mustang	88	0.1168	0.0036	0.1204	0.1168	0.0036	0.1204
CNA680	Cessna Citation Sovereign	452	0.6005	0.0186	0.6190	0.6005	0.0186	0.6190
CNA55B	Cessna Citation V/Ultra/Encore	414	0.5504	0.0170	0.5674	0.5504	0.0170	0.5674
CNA750	Cessna Citation X	251	0.3336	0.0103	0.3439	0.3336	0.0103	0.3439
CNA500	Cessna CitationJet/CJ1	433	0.5754	0.0178	0.5932	0.5754	0.0178	0.5932
CNA55B	Cessna Excel/XLS	1393	1.8514	0.0573	1.9087	1.8514	0.0573	1.9087
CNA500	Cessna I/SP	13	0.0167	0.0005	0.0172	0.0167	0.0005	0.0172

CIT3	Cessna III/VI/VII	75	0.1001	0.0031	0.1032	0.1001	0.0031	0.1032
CL600	Dassault Falcon 2000	421	0.5588	0.0173	0.5760	0.5588	0.0173	0.5760
F10062	Dassault Falcon 900	88	0.1168	0.0036	0.1204	0.1168	0.0036	0.1204
LEAR35	Dassault Falcon/Mystère 10	1255	1.6679	0.0516	1.7195	1.6679	0.0516	1.7195
CL600	Dassault Falcon/Mystère 20	50	0.0667	0.0021	0.0688	0.0667	0.0021	0.0688
F10062	Dassault Falcon/Mystère 50	452	0.6005	0.0186	0.6190	0.6005	0.0186	0.6190
ECLIPSE500	Eclipse 500	50	0.0667	0.0021	0.0688	0.0667	0.0021	0.0688
EMB145	Embraer 135 LR	56	0.0751	0.0023	0.0774	0.0751	0.0023	0.0774
EMB145	Embraer ERJ 135/140/Legacy	44	0.0584	0.0018	0.0602	0.0584	0.0018	0.0602
ECLIPSE500	Embraer Phenom 100	891	1.1842	0.0366	1.2209	1.1842	0.0366	1.2209
CL600	Embraer Phenom 300	471	0.6255	0.0193	0.6448	0.6255	0.0193	0.6448
IA1125	Gulfstream G150	50	0.0667	0.0021	0.0688	0.0667	0.0021	0.0688
CL600	Gulfstream G280	13	0.0167	0.0005	0.0172	0.0167	0.0005	0.0172
GIV	Gulfstream IV/G400	282	0.3753	0.0116	0.3869	0.3753	0.0116	0.3869
GV	Gulfstream V/G500	88	0.1168	0.0036	0.1204	0.1168	0.0036	0.1204
CL600	Hawker 4000	113	0.1501	0.0046	0.1548	0.1501	0.0046	0.1548
IA1125	IAI 1124 Westwind	13	0.0167	0.0005	0.0172	0.0167	0.0005	0.0172
CL600	IAI 1126 Galaxy/GulfstreamG200	50	0.0667	0.0021	0.0688	0.0667	0.0021	0.0688
IA1125	IAI Astra 1125	1089	1.4470	0.0448	1.4918	1.4470	0.0448	1.4918
LEAR35	Learjet 40; GatesLearjet	38	0.0500	0.0015	0.0516	0.0500	0.0015	0.0516
LEAR35	Learjet 75	201	0.2669	0.0083	0.2751	0.2669	0.0083	0.2751
LEAR35	Lockheed L-1329 Jetstar731	25	0.0334	0.0010	0.0344	0.0334	0.0010	0.0344
MU3001	Mitsubishi MU300/ Diamondl	19	0.0250	0.0008	0.0258	0.0250	0.0008	0.0258
LEAR35	North American RockwellSabre 40/60	38	0.0500	0.0015	0.0516	0.0500	0.0015	0.0516
LEAR35	North American RockwellSabre 75	13	0.0167	0.0005	0.0172	0.0167	0.0005	0.0172
LEAR35	Raytheon Premier 1/390Premier 1	75	0.1001	0.0031	0.1032	0.1001	0.0031	0.1032
MU3001	Raytheon/Beech Beechjet 400/T-1	1337	1.7763	0.0549	1.8313	1.7763	0.0549	1.8313
TOTAL		**13927**	**18.5057**	**0.5723**	**19.0780**	**18.5057**	**0.5723**	**19.0780**

Day = 7:00 a.m. to 9:59 p.m.; Night = 10:00 p.m. to 6:59 a.m.
Note: Numbers may not add, due to rounding.
Source: AECOM, 2016.

TABLE G-3.12
2028 ANNUAL AND AVERAGE DAILY GENERAL AVIATION AIRCRAFT OPERATIONS

GENERAL AVIATION FLEET MIX												
ROTARY WING												
AEDT AC	TFMSC AIRCRAFT TYPE	ANNUAL OPERATIONS		ARRIVALS			DEPARTURES			LOCAL		
		ITINERANT	LOCAL	DAY	NIGHT	TOTAL	DAY	NIGHT	TOTAL	DAY	NIGHT	TOTAL
A109	AGUSTA SAAF-109	25	N/A	0.0328	0.0010	0.0338	0.0328	0.0010	0.0338	N/A	N/A	N/A
B407	BELL 407	33	N/A	0.0437	0.0014	0.0451	0.0437	0.0014	0.0451	N/A	N/A	N/A
B429	BELL 429	8	N/A	0.0109	0.0003	0.0113	0.0109	0.0003	0.0113	N/A	N/A	N/A
B429	EUROCOPTER EC-145	8	N/A	0.0109	0.0003	0.0113	0.0109	0.0003	0.0113	N/A	N/A	N/A
B430	BELL 430	58	N/A	0.0765	0.0024	0.0789	0.0765	0.0024	0.0789	N/A	N/A	N/A
CH47D	BOEING CH-47 CHINOOK	8	N/A	0.0109	0.0003	0.0113	0.0109	0.0003	0.0113	N/A	N/A	N/A
EC130	EUROCOPTER EC-135	66	N/A	0.0874	0.0027	0.0901	0.0874	0.0027	0.0901	N/A	N/A	N/A
R22	ROBINSON R-22 MARINER	8	N/A	0.0109	0.0003	0.0113	0.0109	0.0003	0.0113	N/A	N/A	N/A
R44	ROBINSON R-44 RAVEN	16	N/A	0.0219	0.0007	0.0225	0.0219	0.0007	0.0225	N/A	N/A	N/A
S70	SIKORSKY SH-60 SEAHAWK	8	N/A	0.0109	0.0003	0.0113	0.0109	0.0003	0.0113	N/A	N/A	N/A
S76	SIKORSKY S-76	206	N/A	0.2732	0.0084	0.2816	0.2732	0.0084	0.2816	N/A	N/A	N/A
SA330J	AGUSTA AB-139	33	N/A	0.0437	0.0014	0.0451	0.0437	0.0014	0.0451	N/A	N/A	N/A
TOTAL		**477**	**N/A**	**0.6338**	**0.0196**	**0.6534**	**0.6338**	**0.0196**	**0.6534**	**N/A**	**N/A**	**N/A**
MULTI-ENGINE PISTON												
BEC58P	BEECH BARON 55	520	1464	0.6903	0.0214	0.7117	0.6903	0.0214	0.7117	4.011	0	4.011
PA30	PIPER PA-30	26		0.0345	0.0011	0.0356	0.0345	0.0011	0.0356	0	0	0
PA31	PIPER NAVAJO PA-31	430		0.5720	0.0177	0.5897	0.5720	0.0177	0.5897	0	0	0
SD330	PIAGGIO P-180 AVANTI	15	22	0.0197	0.0006	0.0203	0.0197	0.0006	0.0203	0.061	0	0.061
TOTAL		**991**	**1486**	**1.3165**	**0.0407**	**1.3573**	**1.3165**	**0.0407**	**1.3573**	**4.072**	**0**	**4.072**
SINGLE ENGINE PISTON												
CNA172	CESSNA SKYHAWK 172/CUTLASS	3231	7320	4.2931	0.1328	4.4258	4.2931	0.1328	4.4258	20.0556	0	20.0556
CNA182	CESSNA SKYLANE 182	966	1448	1.2831	0.0397	1.3227	1.2831	0.0397	1.3227	3.9682	0	3.9682
CNA206	CESSNA 210 CENTURION	517	775	0.6866	0.0212	0.7078	0.6866	0.0212	0.7078	2.1235	0	2.1235
GASEPF	AMERICAN AA-5 TRAVELER	1258	1887	1.6714	0.0517	1.7231	1.6714	0.0517	1.7231	5.1694	0	5.1694
GASEPV	BEECH BONANZA 35	5783	8675	7.6845	0.2377	7.9222	7.6845	0.2377	7.9222	23.7665	0	23.7665
PA28	PIPER CHEROKEE	1587		2.1084	0.0652	2.1736	2.1084	0.0652	2.1736	0	0	0
T34	BEECHCRAFT T-34 MENTOR	63		0.0832	0.0026	0.0858	0.0832	0.0026	0.0858	0	0	0
TOTAL		**13404**	**20105**	**17.8103**	**0.5508**	**18.3611**	**17.8103**	**0.5508**	**18.3611**	**55.0833**	**0**	**55.0833**
TURBOPROP												

CNA208	CESSNA 208 CARAVAN	1995	N/A	2.6505	0.0820	2.7325	2.6505	0.0820	2.7325	N/A	N/A	N/A
CNA441	BEECH 200 SUPERKING	1231	N/A	1.6357	0.0506	1.6863	1.6357	0.0506	1.6863	N/A	N/A	N/A
DHC6	BEECH SUPER KINGAIR 350	524	N/A	0.6967	0.0215	0.7182	0.6967	0.0215	0.7182	N/A	N/A	N/A
DO228	RAYTHEON 300 SUPERKING AIR	735	N/A	0.9769	0.0302	1.0071	0.9769	0.0302	1.0071	N/A	N/A	N/A
JPATS	NORTH AMERICAN T-6TEXAN	17	N/A	0.0227	0.0007	0.0234	0.0227	0.0007	0.0234	N/A	N/A	N/A
SF340	TRANSALL C-160	6	N/A	0.0076	0.0002	0.0078	0.0076	0.0002	0.0078	N/A	N/A	N/A
TOTAL		**4508**	**N/A**	**5.9901**	**0.1853**	**6.1753**	**5.9901**	**0.1853**	**6.1753**	**N/A**	**N/A**	**N/A**

Day = 7:00 a.m. to 9:59 p.m.; Night = 10:00 p.m. to 6:59 a.m.
Note: Numbers may not add, due to rounding.
Source: AECOM, 2016.

TABLE G-3.13
2028 ANNUAL AND AVERAGE DAILY MILITARY AIRCRAFT OPERATIONS

Military Fleet Mix												
AEDT AC	TFMSC Aircraft Type	Annual Operations		Arrivals			Departures			Local		
		Itinerant	Local	Day	Night	Total	Day	Night	Total	Day	Night	Total
A10A	Fairchild A10	10		0.0136	0.0004	0.0140	0.0136	0.0004	0.0140	0	0	0
B206L	Agusta AB-206 LongRanger	131		0.1742	0.0054	0.1796	0.1742	0.0054	0.1796	0	0	0
B212	Bell 212	33		0.0435	0.0013	0.0449	0.0435	0.0013	0.0449	0	0	0
B429	Bell 429	197		0.2613	0.0081	0.2694	0.2613	0.0081	0.2694	0	0	0
BEC58P	Cessna 310	6	20	0.0082	0.0003	0.0084	0.0082	0.0003	0.0084	0.0561	0	0.0561
C130HP	Lockheed C-130 Hercules	49		0.0653	0.0020	0.0673	0.0653	0.0020	0.0673	0	0	0
CNA172	Cessna Skyhawk 172/Cutlass	12	61	0.0163	0.0005	0.0168	0.0163	0.0005	0.0168	0.1684	0	0.1684
CNA182	Cessna Skylane 182	49	82	0.0653	0.0020	0.0673	0.0653	0.0020	0.0673	0.2245	0	0.2245
CNA206	Cessna 210 Centurion	18	31	0.0245	0.0008	0.0252	0.0245	0.0008	0.0252	0.0842	0	0.0842
CNA441	Beech 200 SuperKing	98	164	0.1306	0.0040	0.1346	0.1306	0.0040	0.1346	0.4491	0	0.4491
CNA55B	Cessna Excel/XLS	25		0.0326	0.0010	0.0337	0.0326	0.0010	0.0337	0	0	0
CVR580	Grumman C-2 Greyhound	31		0.0408	0.0013	0.0421	0.0408	0.0013	0.0421	0	0	0
DHC6	Beech Super KingAir 350	12	20	0.0163	0.0005	0.0168	0.0163	0.0005	0.0168	0.0561	0	0.0561
F-18	Boeing FA-18 Hornet	82		0.1089	0.0034	0.1122	0.1089	0.0034	0.1122	0	0	0
GASEPV	Beech Bonanza 35	49	82	0.0653	0.0020	0.0673	0.0653	0.0020	0.0673	0.2245	0	0.2245
GIIB	Gulfstream III/G300	12		0.0163	0.0005	0.0168	0.0163	0.0005	0.0168	0	0	0
LEAR35	Bombardier Learjet 35/36	12		0.0163	0.0005	0.0168	0.0163	0.0005	0.0168	0	0	0
PA28	Piper Cherokee	25		0.0326	0.0010	0.0337	0.0326	0.0010	0.0337	0	0	0
PA31	Piper Navajo PA-31	6		0.0082	0.0003	0.0084	0.0082	0.0003	0.0084	0	0	0
S65	Sikorsky RH-53 SeaStallion	66		0.0871	0.0027	0.0898	0.0871	0.0027	0.0898	0	0	0
S70	Blackhawk Helicopter	147		0.1960	0.0061	0.2020	0.1960	0.0061	0.2020	0	0	0
S76	Sikorsky SK-76	49		0.0653	0.0020	0.0673	0.0653	0.0020	0.0673	0	0	0
SA365N	Aérospatiale SA 365 Dauphin 2	246		0.3266	0.0101	0.3367	0.3266	0.0101	0.3367	0	0	0
TOTAL		**1366**	**461**	**1.8151**	**0.0561**	**1.8712**	**1.8151**	**0.0561**	**1.8712**	**1.2631**	**0**	**1.2631**

Day = 7:00 a.m. to 9:59 p.m.; Night = 10:00 p.m. to 6:59 a.m.
Note: Numbers may not add, due to rounding.
Source: AECOM, 2016.

Runway Use

Runway utilization remains unchanged from the Existing Condition.

Flight Tracks

Flight tracks remain unchanged from the Existing Condition.

Track Use

Flight track utilization remains unchanged from the Existing Condition

G-3.3 INTERIM CONDITION NOISE MODELING ASSUMPTIONS

Flight Operations

As shown in **Tables G-3.8 through G-3.10**, AEDT-modeled annual operations for the 2023 study year totaled 56,079 operations, an average of approximately 153 daily operations. The fleet mix and day/evening/night split did not change from the existing condition.

Runway Use

All operations will be shifted to Runway 15-33, and will operate on the same ratios, respectively, as the Existing Condition. While it should be noted that some of the existing aircraft types may not be able to operate on Runway 15-33 due to its length, all were included to provide a conservative estimate of any noise impacts resulting from the Interim Condition.

Flight Tracks

Flight tracks remain unchanged from the Existing Condition.

Track Use

Flight track utilization remains unchanged from the Existing Condition.

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Appendix H: List of Preparers

LIST OF PREPARERS

As required by FAA Order 5050.4B, the names and qualifications of the principal persons contributing information to this Environmental Assessment are identified. It should be noted, in accordance with Section 1502.6 of the CEQ regulations, the efforts of an interdisciplinary team, consisting of technicians and experts in various fields, were required to accomplish this study. Specialists involved in this Environmental Assessment included those in such fields as airport planning, biology, historic/archaeological, water resources, and other disciplines.

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Appendix J: Abbreviations, Acronyms, and Glossary of Terms

ABBREVIATIONS, ACRONYMS, AND GLOSSARY

A

AC	Advisory Circular
ACHP	Advisory Council on Historic Preservation
ALP	Airport Layout Plan
APE	Area of Potential Effect
ARC	Airport Reference Code
AST	Aboveground Storage Tank
ARP	Airport Reference Point

B

BMPs	Best Management Practices

C

CAA	Clean Air Act
CAC	Critical Area Commission
CBCA	Chesapeake Bay Critical Area
C&D	Construction/Demolition
CEQ	Council on Environmental Quality
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
CERCLIS	Comprehensive Environmental Response Compensation and Liability Information System
CESQGs	Conditionally Exempt Small Quantity Generators
CFR	Code of Federal Regulations
CO	Carbon Monoxide
COMAR	Annotated Code of Maryland Regulations
CWA	Clean Water Act
CZMA	Coastal Zone Management Act
CZMP	Coastal Zone Management Program

D

DNL	Day-Night Average Sound Level
DOI	US Department of the Interior
DOT	US Department of Transportation

E

EA	Environmental Assessment
EDDA	Environmental Due Diligence Audit
EIS	Environmental Impact Statement
EO	Executive Orders
EPA	US Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-Know Act
ERNS	Emergency Response Notification System

F

FAA	Federal Aviation Administration
FAR	Federal Aviation Regulation
FCP	Forest Conservation Plan
FEMA	Federal Emergency Management Agency
FIFRA	Federal Insecticide Fungicide and Rodenticide Act
FIRM	Flood Insurance Rate Map
FONSI	Finding of No Significant Impact
FPPA	Farmland Protection Policy Act
FR	Federal Register
FSD	Forest Stand Delineation
FUDS	Formerly Used Defense Sites
FWS	US Fish and Wildlife Service

G

GIS	Geographic Information System
GSE	Ground Support Equipment

H

HAPs	Hazardous Air Pollutants
HMIRS	Hazardous Material Incident Report System
HMTA	Hazardous Materials Transportation Act
HSWA	Hazardous and Solid Waste Amendments of 1984

I

IDA	Intensely Developed Area
INM	Integrated Noise Model

J

JD	Jurisdictional Determination

L

LCD	Land Clearing Debris
LDA	Limited Development Area
LOS	Level of Service
LQGs	Large Quantity Generators of Hazardous Waste
LUST	Leaking Underground Storage Tank
LWCF	Land and Water Conservation Fund

M

MDE	Maryland Department of the Environment
MDOT	Maryland Department of Transportation
MDNR	Maryland Department of Natural Resources
MES	Maryland Environmental Service
MHT	Maryland Historical Trust
MIHP	Maryland Inventory of Historic Properties
MPO	Metropolitan Planning Organization
MRSWF	Midshore Regional Solid Waste Facility
MRL	Midshore Regional Landfill
MSL	Mean Sea Level
MSW	Municipal Solid Waste

N

N/A	Not Applicable
NAAQS	National Ambient Air Quality Standards
NCSS	USDA's Natural Cooperative Soil Survey
NEPA	National Environmental Policy Act
NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act
NPIAS	National Plan of Integrated Airport Systems
NO_2	Nitrogen Dioxide
NO_x	Nitrogen Oxide
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
NRCS	National Resources Conservation Service
NRHP	National Register of Historic Places
NWI	National Wetlands Inventory
NWWRF	Natural Wood Waste Recycling Facilities

O

O_3	Ozone
OFA	Object Free Area

P

Pb	Lead
PCBs	Polychlorinated Biphenyls
PM	Particulate Matter
PM_{10}	Coarse Particular Matter
$PM_{2.5}$	Fine Particular Matter
ppm	Parts per Million

R

RCA	Resource Conservation Area
RCRA	Resource Conservation and Recovery Act
ROD	Record of Decision
RPZ	Runway Protection Zone

S

SDWA	Safe Drinking Water Act
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
SO_x	Sulfur Oxides
SPCC	Spill Prevention Control and Countermeasures
SSA	Socioeconomic Study Area
SQGs	Small Quantity Generators of Hazardous Waste
SWDA	Solid Waste Disposal Act

SWF	Solid Waste Facility
SWPPP	Stormwater Pollution Prevention Plan
T	
TAF	Terminal Area Forecast
TRI	Toxics Release Inventory (EPA)
TRIS	Toxic Chemical Release Inventory System
TSCA	Toxic Substances Control Act
TSP	Total Suspended Particles
U	
$\mu g/m^3$	Micrograms per cubic meter
USACE	US Army Corps of Engineers
USC	US Code
USDA	US Department of Agriculture
USGS	US Geological Survey
UST	Underground Storage Tank
V	
VCP	Voluntary Cleanup Program
VOCs	Volatile Organic Compounds

GLOSSARY OF TERMS

A partial glossary of terms used in this Environmental Assessment is provided below. The definitions are not to be taken as comprehensive, but solely to aid the non-technical reader.

Air Carrier - An airline that provides air transport services for passengers and/or freight. The airline generally operates with a recognized operating certificate or license.

Airport Layout Plan (ALP) - A scaled drawing of existing and proposed land and facilities necessary for the operation and development of the airport. The ALP shows boundaries and proposed additions to all areas owned or controlled by the airport operator for airport purposes, the location and nature of existing and proposed replacement airport facilities and structures, and the location on the airport of existing and proposed non-aviation areas and improvements thereon.

Aircraft Operation – An aircraft take-off (departure) or a landing (arrival) conducted at an airport.

Airport Reference Code (ARC) - A coding system used to relate airport design criteria to the operational and physical characteristics of a design aircraft (typically the most demanding) intended to operate at the airport.

Airspace - the portion of the atmosphere controlled by a particular country over its territory and territorial waters. Controlled airspace exists where air traffic control is exercised over aircraft flying in that airspace. Uncontrolled airspace is airspace in which air traffic control does not exert control, though it may act in an advisory manner. Sections of airspace may be designated restricted and/or prohibit certain aeronautical activities.

Approach Lighting Systems (ALS) - A series of lights that assists the pilot when aligning aircraft with the extended runway centerline on final approach at night or during periods of inclement weather.

Area of Potential Effect (APE) – The geographic area or areas within which a federal undertaking may directly or indirectly cause changes in the character or use of historic properties, if any such properties exist.

Avigation Easement - An easement for certain property rights related to aircraft overflights, including the right to generate noise. In addition, such an agreement usually restricts the property owner from obstructing airspace or an approach to a runway.

Base Floodplain - That area subject to a one percent or greater chance of flooding in any given year (i.e., the 100-year floodplain).

Best Management Practices (BMP) - Methods employed during construction and included in the development for ensuring environmental management to the greatest possible extent.

Biotic Communities - A group of interdependent organisms (i.e., plants, mammals, birds, reptiles, amphibians, fish, and invertebrates) inhabiting the same area or region and interacting with each other, usually comprising or inhabiting distinct habitat types.

Clean Air Act, as amended in 1990 (CAA) **-** An ambient air pollution control strategy based on the National Ambient Air Quality Standards (NAAQS) and a provision that individual states would develop implementation plans to meet and maintain the standards.

Coastal Zone Management - Under the *Federal Coastal Zone Management Act* (CZMA), the State of Maryland reviews Federal actions in light provides for preservation, protection, development, and restoration of the nation's coastal zones. The entire county of Queen Anne's is subject to the provisions of this Act.

Compatible Land Use - Compatibility of existing and planned land uses in the vicinity of an airport is usually related to the noise impacts associated with the operation of an airport. Evaluation consists of assuring that proper zoning or other land use controls are being undertaken, to ensure compatible development near the site.

Council on Environmental Quality (CEQ) Regulations **-** Regulations that implement the National Environmental Policy Act (NEPA).

Cultural Resources - Cultural resources include historic, historic architectural, and archaeological resources (including prehistoric or historic sites, districts, buildings, structures, or objects), which have been listed in, or determined eligible for listing in, the National Register of Historic Places (NRHP).

Cumulative Impacts - Cumulative impacts are considered the incremental effect of an action when added to other past, present, and reasonably foreseeable future actions.

Day-Night Average Sound Level (DNL) - DNL is the 24-hour average sound level in decibels using the A-weighted scale (dBA). This average is derived from all aircraft operations during a 24-hour period representing an average annual operational day.

Decibel (dB) - A unit of noise level representing a relative quantity. This reference value is a sound pressure of 20 micronewtons per square meter.

Department of Transportation (DOT) Section 4(f) and Section 6(f) Lands - Section 4(f) provides that the Secretary of Transportation will not approve any program or project that requires use of any publicly-owned land from a park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance, or land from a historic site of national, state, or local significance, unless there is no feasible and prudent alternative. The project must include all possible measures to minimize harm resulting from the use.

Design Aircraft - The most critical aircraft type currently using, or projected to use, an airport. It can either be one aircraft or a group of aircraft.

Detailed Study Area (DSA) – The geographic area which includes the areas of the Proposed Project and its reasonable alternatives that is established for environmental considerations that deal with specific and direct construction-related issues such as land clearing, wetlands, floodplains, archaeological resources, and/or hazardous materials and which has the potential for physical disturbance during clearing and construction activities.

Environmental Assessment (EA) - A concise document that assesses the environmental impacts of a proposed federal action. It discusses the need for, and environmental impacts of, the proposed federal actions and alternatives. An EA provides sufficient evidence and analysis for a Federal determination whether to prepare an Environmental Impact Statement (EIS) or issue a Finding of No Significant Impact (FONSI).

Environmental Impact Statement (EIS) - A detailed, concise document that provides a discussion of the significant environmental impacts which would occur as a result of a proposed Federal action, and informs decision-makers and the public of alternatives which would avoid or minimize adverse impacts.

Federal Aviation Administration (FAA) - FAA is the Federal agency responsible for ensuring the safe and efficient use of the nation's airspace, for developing civil aeronautics and air commerce, and for supporting the requirements of national defense.

Federal Aviation Regulation (FAR) - Series of rules and regulations administered by the FAA that govern the operation, maintenance, construction, acquisition, etc. of airports, aircraft, and associated aviation activities.

Finding of No Significant Impact (FONSI) - A FONSI is a document briefly explaining the reasons why an action would not have a significant effect on the human environment and for which an EIS, therefore, is not necessary.

Fixed Based Operator (FBO) - An FBO is the primary provider of services to general aviation (GA) aircraft and operators at an airport. An FBO may be a private enterprise, municipality, or airport-owner operated. Multiple FBOs may be located at an airport.

Fleet Mix - The mix or differing types of aircraft operating in a particular environment.

Flight Tracks - The use of established routes for arrival and departure by aircraft to and from the runways at the airport.

General Aviation (GA) - GA includes all facets of aeronautical activity except for those carriers certified by the US DOT to provide commercial passenger and air cargo service. GA activities includes corporate aviation, recreational and sport flying, flight training, aerial application flights (crop dusting), aerial mapping, and air ambulance flights.

Geographic Information Systems (GIS) - An information system that is designed for storing, integrating, manipulating, analyzing, and displaying data referenced by spatial or geographic coordinates.

Hazardous Materials - For the purposes of this Environmental Assessment, hazardous materials includes regulated hazardous wastes, hazardous substances, and dangerous goods; environmental contamination to soil, surface waters, and groundwater; as well the range of similarly regulated substances such as fuel and other petroleum-based products commonly associated with airports.

Independent Instrument Approaches - Simultaneous approaches to parallel or near-parallel instrument runways where radar separation minima between aircraft on adjacent extended runway center lines are not prescribed.

Instrument Approach Procedures (IAP) – An instrument approach procedure is a defined method of air navigation that allow a pilot to land an aircraft on a particular runway in instrument meteorological conditions (IMC) (reduced visibility) or to reach visual conditions permitting a visual landing. The FAA develops and publishes IAPs for airports in the US. Approaches are classified as either precision or nonprecision, depending on the accuracy and capabilities of the navigation aids used.

Instrument Meteorological Conditions (IMC) - An aviation flight category that describes weather conditions that normally require pilots to fly primarily by reference to instruments and, therefore, under Instrument Flight Rules (IFR), rather than by outside visual references under Visual Flight Rules (VFR).

Land Use Compatibility - The ability of land uses surrounding the airport to co-exist with airport-related activities with minimum conflict.

Local Operation **–** An aircraft flight that begins and ends at the same airport.

Mean Sea Level (MSL) - The average height of the surface of the sea for all stages of the tide; used as a reference for elevations; also called sea level datum.

Mitigation Measures – Action taken to reduce or eliminate environmental impacts of a proposed action.

National Ambient Air Quality Standards (NAAQS) - Standards established by the US Environmental Protection Agency (EPA) used for protecting and improving air quality.

National Environmental Policy Act of 1969 (NEPA) - The original legislation establishing the environmental review process for proposed Federal actions.

National Historic Preservation Act of 1966 (NHPA) –This legislation requires that projects that occur on Federal lands, are funded by Federal monies, or that require a Federally-issued permit, be evaluated for their impacts to historic properties.

National Pollution Discharge Elimination System (NPDES) - Federal permit required by the EPA for point source and non-point source stormwater discharges.

Navigational Aids (NAVAIDs) - Any facility used by an aircraft for navigation.

Object Free Area (OFA) – An area on the ground centered on a runway, taxiway, or taxilane centerline provided to enhance the safety of aircraft operations by having the area free of objects, except for objects that need to be located in the OFA for air navigation or aircraft ground maneuvering purposes.

Operation **-** A take-off or landing by an aircraft.

Record of Decision (ROD) - The ROD is a concise public record that states FAA official's decision and rationale for approving or not approving a proposed action.

Runway Protection Zone (RPZ) - An area, trapezoidal in shape and centered about the extended runway centerline, designated to enhance the safety of aircraft operations. It begins 200 feet beyond the end of the area usable for take-off or landing. The RPZ dimensions are functions of the aircraft, type of operation, and visibility minimums.

Runway Safety Area (RSA) - A defined surface surrounding the runway prepared or suitable for reducing the risk or damage to airplanes in the event of an undershoot, overshoot, or excursion from the runway.

Scoping - The Scoping process is the initial step in the preparation of an EIS. As a part of the scoping process, formal Scoping meetings are held to obtain input from agencies and the public as to the scope of studies conducted for the EIS and to identify issues of concern.

Social Impacts - Social impacts are those generally associated with property acquisition or relocation, changes to surface transportation, or other community disruptions that may be caused by airport development.

Socioeconomic Impacts - Patterns of population movement and growth, public service demands, and changes in business and economic activity may be affected by airport development.

Visual Flight Rules (VFR) - A set of regulations which allow a pilot to operate an aircraft in weather conditions generally clear enough to allow the pilot to see where the aircraft is going. Specifically, the weather must be better than basic VFR weather minimums, as published for an airport. If the weather is worse than VFR minimums, pilots are required to use IFR.

Wetlands - Those areas that are influenced by surface or ground water at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar are

Appendix K: Agency Coordination and Public Involvement on Draft Environmental Assessment

DRAFT ENVIRONMENTAL ASSESSMENT
AGENCY COORDINATION AND PUBLIC INVOLVEMENT PROGRAM

Agency coordination and a public involvement program is being implemented to ensure information regarding the proposed airport development and potential environmental impact is made available to the general public and public agencies and that input from interested parties is received and considered. The primary components of the agency and public participation program for this Environmental Assessment include:

- Early agency coordination during the development of the Draft Environmental Assessment,
- Publication of the Draft Environmental Assessment for public and public agency review, and
- Public notice of the FAA's decision of whether to issue a Finding of No Significant Impact or to prepare an Environmental Impact Statement.

The following summarizes the public involvement and review process.

EARLY AGENCY COORDINATION: Federal, state, and local agencies and local governments were contacted to inform the agencies that an Environmental Assessment was to be prepared, to provide information on the Proposed Action, and to solicit information and preliminary comments. Coordination was conducted for environmental issues having greatest potential for impact and with agencies having specific regulatory authority. Copies of response letters received during this early coordination phase are contained in this Environmental Assessment (see **Appendix B**).

DRAFT ENVIRONMENTAL ASSESSMENT AVAILABILITY FOR REVIEW: This Draft Environmental Assessment is being made available for review by the general public and interested parties from **June 18, 2018** through **July 17, 2018**. Notification of the document's availability was accomplished through legal advertisements in **The Star Democrat**, a newspaper of local circulation.

This Draft Environmental Assessment document is being made available for review at the locations listed below.

Talbot County Circuit Courthouse – County Manager's Office
11 North Washington Street
Easton, MD 21601

Talbot County Free Library – Easton
100 West Dover Street
Easton, MD 21601

Talbot County Free Library – St. Michaels
106 Fremont Street
St. Michaels, MD 21663

Town of Easton
14 South Harrison Street
Easton, MD 21601

Talbot County Community Center
10028 Ocean Gateway
Easton, MD 21601

Easton / Newnam Field Airport
29137 Newnam Road
Easton, MD 21601

Anyone wishing to comment on the information and conclusions in this Draft Environmental Assessment are invited to do so at any time during the advertised public review and comment period. All comments are to be submitted in written form to the following address:

Jennifer Lutz, Project Manager
AECOM
4 North Park Drive, Suite 300
Hunt Valley, MD 21030

LIST OF AGENCIES RECEIVING THE DRAFT ENVIRONMENTAL ASSESSMENT: Agencies receiving a copy of the Draft Environmental Assessment include:

Federal
Federal Aviation Administration

State
Maryland Aviation Administration
Maryland Department of the Environment – Wetland and Waterways Program - Nontidal Division
Maryland Department of Planning - Clearinghouse and Plan Review Unit

Local
Talbot County– Department of Planning and Zoning
Town of Easton – Department of Planning and Zoning