PETROLEUM MANAGEMENT, INC.

Environmental Services Division

2138 Priest Bridge Ct., Suite 10 ♦ Crofton, Maryland 21114

Phone: (410) 354-0200 ♦ Fax: (410) 721-1390

November 4, 2019

Maryland Department of the Environment
Oil Control Program
Attn: Susan Bull
1800 Washington Blvd., Suite 620
Baltimore, MD 21230

RE: Corrective Action Phase Reporting
Wiley H. Bates Middle School
701 Chase Street, Annapolis
Facility ID# 3200

Dear Ms. Bull,

In cooperation with HP Environmental, Inc. (HPE), Petroleum Management, Inc. (PMI) has completed most of the directed corrective action measures in accordance with the *Corrective Action Plan Approval* dated June 11, 2019. The following report prepared by HPE details and summarizes the monitoring well installations and completion of the first quarter well sampling as well as introduction of completed Enhanced Fluid Recovery (EFR) events.

As the accumulated groundwater and EFR data is further reviewed, a conceptual site model for the hydraulic conditions will be developed in order to design a suitable permanent groundwater recovery and treatment system. It is anticipated that this data evaluation and system design will be completed by November 8, 2019.

Second quarter well sampling and analysis will be completed soon with a 2nd Quarter Sampling & Report to be completed for submittal by mid-November.

Thank you for your attention to this case.

W. Scott Alexander
W. Scott Alexander
Environmental Projects Manager

Enc.

cc: *Mr. Christopher Williams*
Environmental Issues Program Manager
Anne Arundel County Public Schools
9034 Fort Smallwood Rd.
Pasadena, MD 21122

HP ENVIRONMENTAL
INCORPORATED

October 29, 2019

Ms. Susan R. Bull
Eastern Region Supervisor
Maryland Department of the Environment
Oil Control Program
Remediation Division
1800 Washington Boulevard
Suite 620
Baltimore, Maryland 21230

Re: Well Installation Summary and First Quarterly Sampling Report
OCP Case No. 2018-0559-AA
Bates Middle School
701 Chase Street
Annapolis, Anne Arundel County, Maryland
Facility ID No. 3200

Ms. Bull,

HP Environmental, Inc. (HPE) and Petroleum Management, Inc. (PMI) have prepared this report to satisfy the Maryland Department of the Environment (MDE) requirements for submittal of a Well Installation and First Quarter Sampling Report (the "Report") for OCP Case No. 2018-0559-AA, Bates Middle School. The Site is addressed as 701 Chase Street, Annapolis, Anne Arundel County, Maryland (Figure 1).

Background

Following the discovery and report of heating oil within the stormwater outfall pipe exiting the school property and entering adjacent Spa Creek in April 2018 and reports of heating oil releases from the school's boiler room, MDE's Oil Control Program (OCP) opened current Case # 2018-0559-AA on May 2, 2018. It is reported that at least two significant heating oil releases have occurred in the boiler room, one on April 27, 2017 and another on December 31, 2017. The amount of heating oil released during each of the two recent events is unknown. The initial response to the April 2017 release at the stormwater outfall pipe included recovery of free product (liquid phase hydrocarbons, LPH) using absorbent booms and vacuum trucks. Placement and recovery of absorbent booms at the stormwater outfall continues as investigation and mitigation of the source of LPH continues.

As a result of these releases, OCP has reviewed the database regarding this Site and has noted several other releases of heating oil. MDE Case# 17-0331-AA (closed) documents a similar

heating oil release from the school's boiler room that impacted the stormwater drainage system and Spa Creek in December 2016. MDE Case# 15-0497-AA documents consecutive UST tightness test failures that resulted in UST system closure and replacement in July 2015.

In response to the persisting presence of heating oil in the stormwater outfall to Spa Creek, the County's contractor flushed out the stormwater drainage system using 2,500 gallons of water on May 2, 2018. Water was introduced into an upgradient storm drain inlet and recovered at the outfall using vacuum trucks. On June 26, 2018, the interior of the stormwater piping system was inspected using a video camera and no entry point for heating oil intrusion was identified. Following the flushing and video inspection of the stormwater piping, several MDE follow-up inspections of the stormwater outfall to Spa Creek have been completed with heating oil impacts consistently observed during each visit.

Based upon the unknown quantities of heating oil released at this Site over time and the continued impacts noted at the stormwater outfall to Spa Creek, the OCP required that a subsurface investigation of the target areas be completed to identify the source of the ongoing heating oil impacts. PMI submitted the requested Work Plan for a Limited Subsurface Investigation of the subject area on December 26, 2018 and received approval of the proposed Work Plan on January 28, 2019. The Limited Subsurface Investigation was completed and reported to the MDE by PMI on April 22, 2019. Based on the results of the investigation PMI proposed a scope of work for a Corrective Action Plan (CAP) that was approved by the MDE on June 6, 2019. The approved CAP included installation and sampling of several groundwater monitoring wells to investigate the lateral and vertical extent of both dissolved-phase and liquid petroleum hydrocarbons (LPH) at the Site.

Monitoring Well Installation

PMI retained Hillis-Carnes to install thirteen 4-inch diameter groundwater monitoring wells. The wells were installed between July 16 and 25, 2019. Well locations are shown on Figure 2. Each well was completed using hollow-stem drilling methods to approximately 30 feet below grade. Well completion forms were submitted by Hillis-Carnes to Anne Arundel County and are included in Appendix A. All contact drilling equipment was decontaminated prior to drilling and then between each well location. Decontamination fluids were collected and drummed for off-site disposal. Upon completion of the well installation each well was developed by surging and pumping methodologies. All development water was containerized for off-site disposal. Each well was gauged for depth to water and surveyed for elevation.

Geologic Setting

Geologically the Site is located on the Coastal Plain Physiographic Province of Maryland. According to the Geologic Map of Maryland, the Site is underlain by the Paleocene-aged Aquia Formation. The Aquia Formation is typified by "dark green to gray-green, argillaceous, highly glauconitic, well sorted fine- to medium-grained sand; locally indurated shell beds." This is an upper Paleocene glauconitic sand and calcareous sandstone unit, which when deeply weathered presents as a rusty sand rather than a typical olive-green glauconitic sand. This latter description agrees well with the soil samples recovered during PMI's Limited Subsurface

Investigation as well as the lithologies encountered during the installation of the groundwater monitoring wells.

First Quarter Sample Collection

Groundwater samples were collected from the wells on August 7 and 8, 2019. Measurable LPH was detected in monitoring wells MW-1, MW-2, and MW-3 therefore groundwater samples were not collected from these three wells. Prior to sampling collection, each well was gauged for depth to water and total depth and then purged of a minimum of three well volumes. All purge water was containerized for off-site disposal. A groundwater flow map for this round of sample collection is shown on Figure 3 and presents a flow direction to the south towards Spa Creek. Cross sections through the Site are shown on Figures 4 and 5. It should be noted that HPE reviewed plans from 1951 provided by the Client in an effort to determine if sub-grade building features were in contact with the local groundwater table. The exact building foundation configuration could not be determined from the Site plans provided.

Groundwater samples were collected using low-flow methodology into laboratory provided glassware and immediately placed on ice for transportation to the laboratory. Each groundwater sample was submitted for analysis of total petroleum hydrocarbons diesel-range organics (TPH-DRO) and TPH gasoline-range organics (TPH-GRO) by U.S. Environmental Protection Agency (EPA) Method 8015 and volatile organic compounds (VOCs) by EPA Method 8260. Groundwater sample results are presented in Table 1. Analytical data sheets and chain of custody forms are included in Appendix B.

As seen in Table 1 most of the groundwater sample results were non-detect (ND) for all analytical parameters. Low levels of dissolved phase contamination were only detected in the underground storage tank (UST) tank field monitoring pipes.

LPH Occurrence

On the date of the groundwater sample collection LPH was detected in monitoring wells MW-1, MW-2 and MW-3. All three of these wells are located adjacent to the boiler room foundation wall and in the vicinity of the boiler room sump (Figure 2). This is also the area of the Site where LPH had been entering the storm sewer through a perforation in a cast iron pipe. This pipe was excavated and replaced by the plumbing contractor for Anne Arundel County Schools in August of 2019. The volume of LPH observed at the storm sewer outfall to Spa Creek has been significantly reduced since the storm sewer repairs.

LPH thicknesses over time are presented in Table 2 and show a slow general decline in LPH volume over time. It is not clear if this reduction is the result of a reduction in the LPH mass in the subsurface or a response to the recent lack of rainfall. HPE and PMI will continue to monitor this condition in an effort to ascertain the significance of the LPH thickness decline in MW-1, MW-2, and MW-3.

The LPH occurrence at the Site is unusual in that there is a large thickness of LPH in MW-1 with lesser thicknesses in MW-2 and MW-3. As can be seen from Table 2 the large LPH thickness in MW-1 are a recurring condition from enhanced fluid recovery (EFR) event to EFR event. One

possibility to explain this condition could be the presence of LPH beneath the boiler room foundation slab that is migrating beyond the foundation system in some fashion near the location of MW-1. Additionally, site plans for the school from 1951 show a “coal storage” structure to the south of the existing chimney structure. This former coal storage structure was filled in or demolished at some point in the past. MW-1 has been drilled in this area so the presence of a disturbed area in the subsurface cannot be ruled out. Additional investigation may be needed to assess this condition further and to ensure that any future permanent remediation systems are designed to incorporate this possible LPH mass.

Enhanced Fluid Recovery Events

EFR events have been performed by PMI twice a week since August 8, 2019. For each of these events total fluids have been extracted from monitoring wells MW-1, MW-2, and MW-3. In general, the EFRs were conducted over a period of two hours for each well. A summary of the fluids recovered by events is presented in Table 3. As of October 16, a total of 13,361 gallons of water and 570 gallons of LPH have been recovered. EFRs are planned to continue until such time as a permanent groundwater recovery system can be designed and installed or the LPH mass is exhausted, whichever occurs first.

Future Work

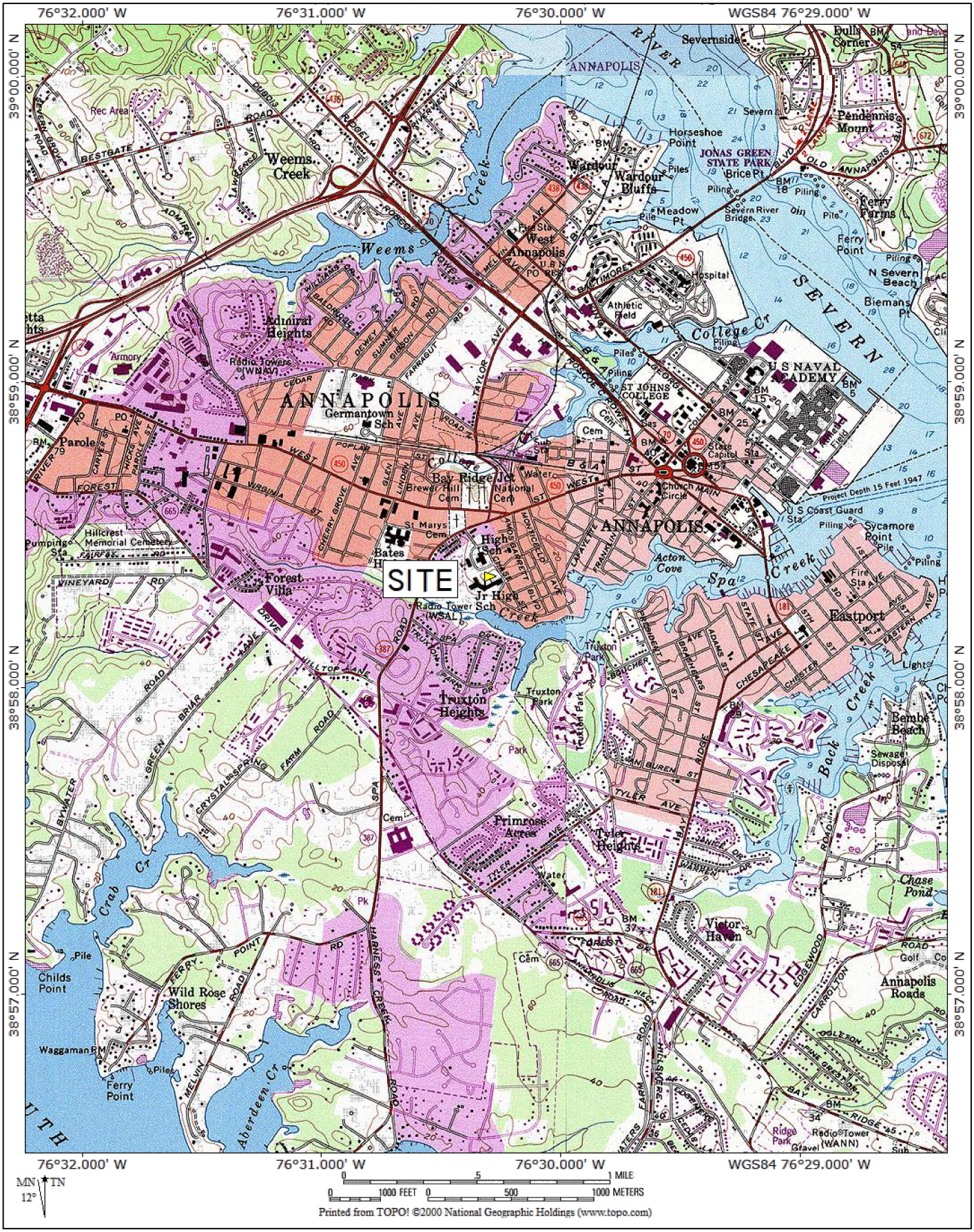
The EFR events will continue on the current once per week calendar as a methodology to control the migration of LPH away from the building and towards Spa Creek. Groundwater elevation data has been recorded during the EFR events, initially by manual gauging and lately by means of submerged data loggers. This data will be evaluated by HPE and PMI to develop a conceptual site model for the hydraulic conditions. These calculations will then be used to assess the need for installation of a permanent groundwater recovery and treatment system. If a permanent system is needed the collected groundwater data will be used to design the system. It is anticipated that this data evaluation and system design, if needed, will be completed by November 8, 2019.

Please feel free to contact myself or Scott Alexander at Petroleum Management, Inc. should you have any questions or comments.

Sincerely,

Kent D. Campbell, CPG
Director of Site Assessment, Monitoring & Compliance

Attachments



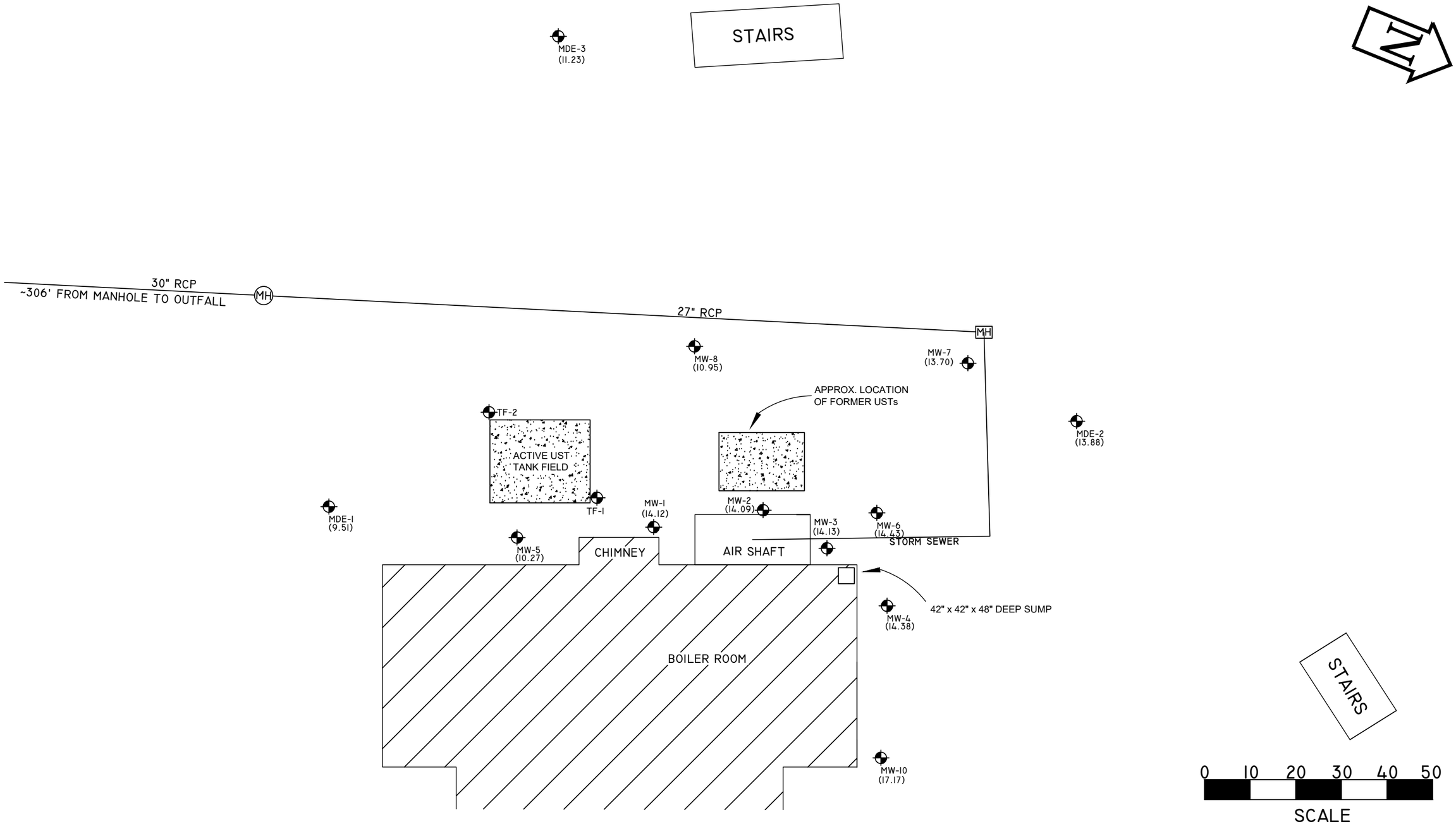
HP ENVIRONMENTAL, INC.

104 ELDEN STREET, HERNDON, VIRGINIA 20170
TELPHONE 703 471 4200 FAX 703 471 0020

FIGURE 1
SITE LOCATION MAP

Project:
BATES MIDDLE SCHOOL
701 CHASE STREET
ANNAPOLIS, MARYLAND

Date:	Drawn by:	CAD File:	Scale:
10-09-19	KDC	FIGURE1	N.T.S

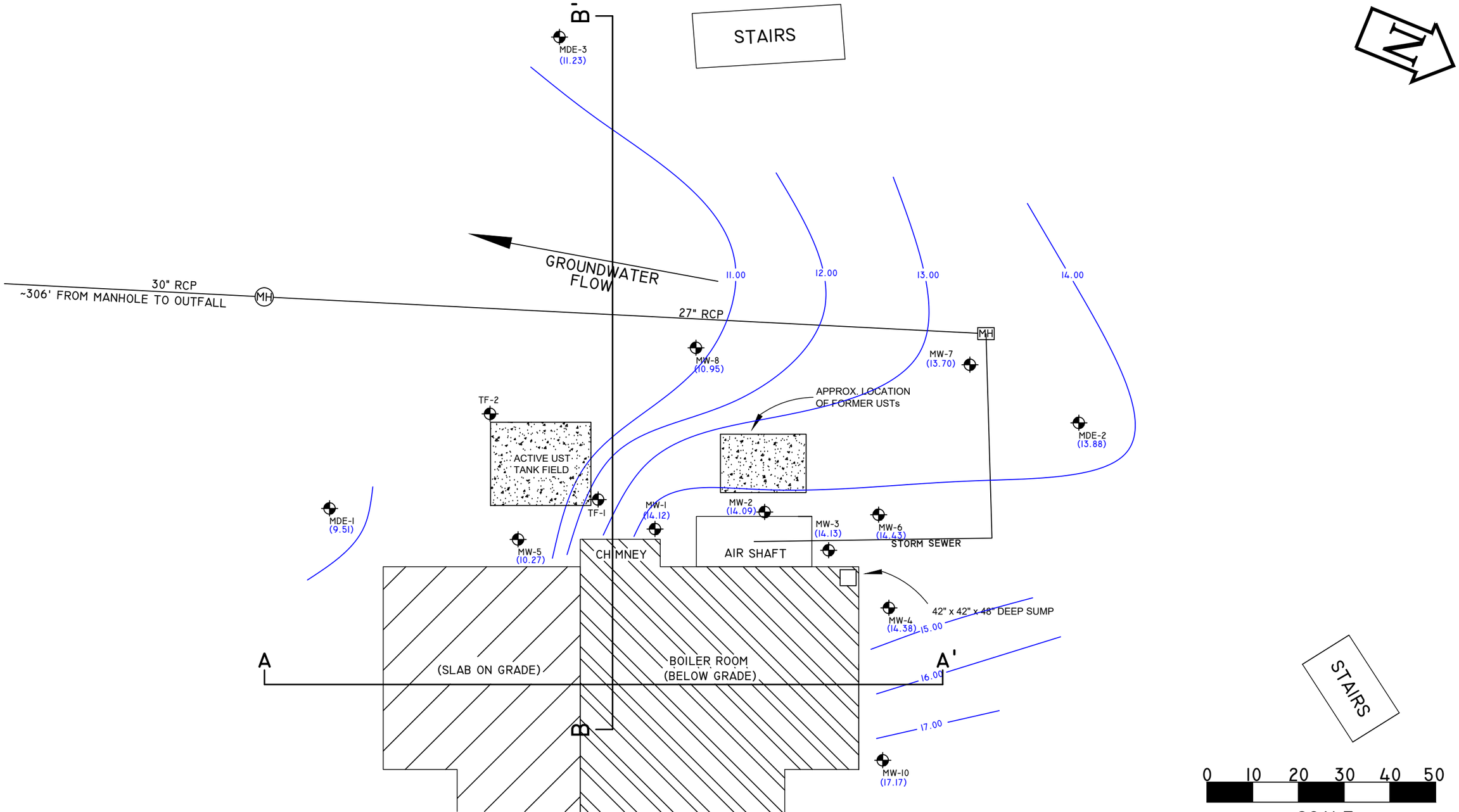


HP ENVIRONMENTAL, INC.
104 ELDEN STREET, SUITE 11
HERNDON, VIRGINIA 20170
TELEPHONE 703 471 4200 FAX 703 471 0020

FIGURE 2
SITE SKETCH

PROJECT: BATES MIDDLE SCHOOL
701 CHASE STREET
ANNAPOLIS, MARYLAND

DATE:	DRAWN BY:	CAD FILE:	SCALE:
09/13/19	KC	BATES FIG 2	AS SHOWN



HP ENVIRONMENTAL, INC.
104 ELDEN STREET, SUITE 11
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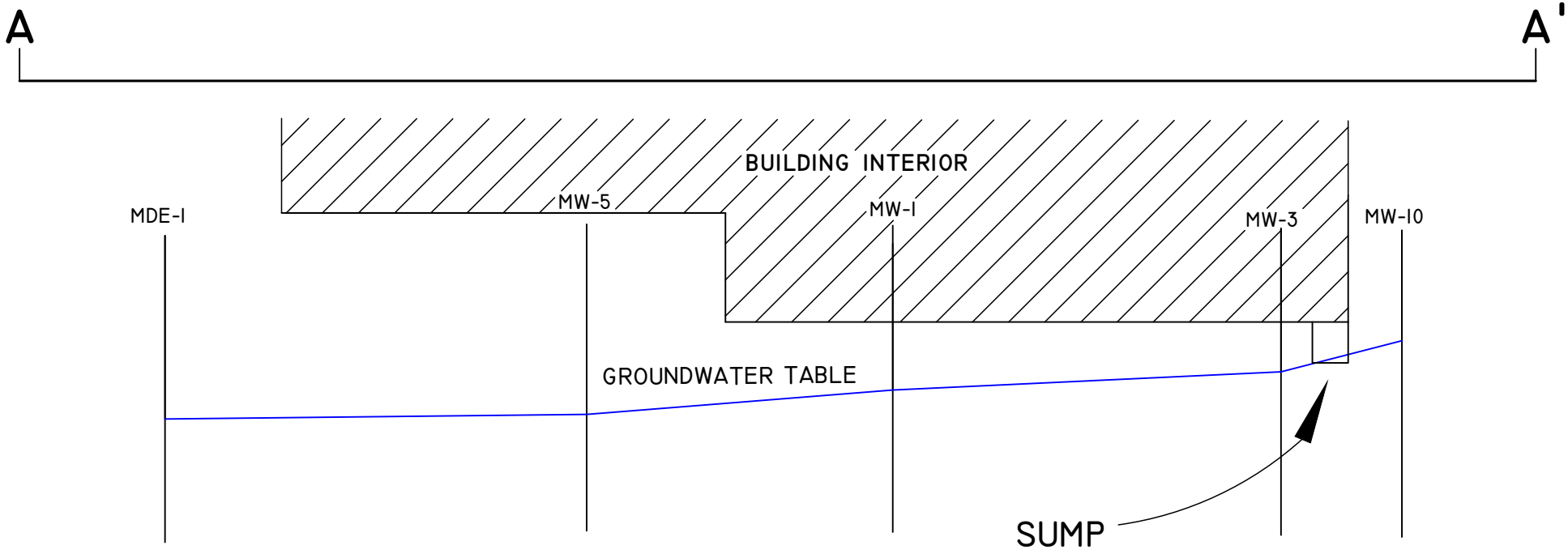
FIGURE 3
GROUNDWATER FLOW 08/08/2019

PROJECT: BATES MIDDLE SCHOOL
701 CHASE STREET
ANNAPOLIS, MARYLAND

DATE:	DRAWN BY:	CAD FILE:	SCALE:
09/13/19	KC	BATES FIG 2	AS SHOWN



HP Environmental, Inc.
104 Elden Street, Suite 11
Herndon, Virginia 20170
Telephone 703 471 4200 Fax 703 471 0020

FIGURE 4
CROSS-SECTION A-A'

Project: BATES MIDDLE SCHOOL
701 CHASE STREET
ANNAPOLIS, MARYLAND

Date:	Drawn By:	CAD File:	Scale:
09-15-19	KDC	FIG 4	NTS

TABLE 1
Groundwater Sample Analytical Results
Bates Middle School
Annapolis, Maryland
August 2019

Sample No. (Depth)	Analyte[1]	Concentration
MDE-1	VOCs[2] TPH-GRO[3] TPH-DRO[4]	ND[5] <2 µg/L [6] ND < 100 ND < 260 µg/L
MDE-2	VOCs TPH-GRO TPH-DRO	ND<2 µg/L ND < 100 µg/L ND < 260 µg/L
MDE-3	VOCs TPH-GRO TPH-DRO	ND<2 µg/L ND < 100 µg/L ND < 260 µg/L
MW-1	Not sampled due to presence of LPH	N/A
MW-2	Not sampled due to presence of LPH	N/A
MW-3	Not sampled due to presence of LPH	N/A
MW-4	VOCs TPH-GRO TPH-DRO	ND<2 µg/L ND < 100 µg/L ND < 260 µg/L
MW-5	VOCs TPH-GRO TPH-DRO	ND<2 µg/L ND < 100 µg/L ND < 260 µg/L
MW-6	VOCs TPH-GRO TPH-DRO	ND<2 µg/L ND < 100 µg/L ND < 260 µg/L
MW-7	VOCs TPH-GRO TPH-DRO	ND<2 µg/L ND < 100 µg/L ND < 260 µg/L
MW-8	VOCs TPH-GRO TPH-DRO	ND<2 µg/L ND < 100 µg/L ND < 260 µg/L
MW-10	VOCs TPH-GRO TPH-DRO	ND<2 µg/L ND < 100 µg/L ND < 260 µg/L
TF-1	VOCs TPH-GRO TPH-DRO	Naphthalene 3.3 µg/L 1,2,4-trimethylbenzne 1.9 µg/L J[7] ND < 100 µg/L 860 µg/L
TF-2	VOCs TPH-GRO TPH-DRO	ND<2 µg/L ND < 100 µg/L 940 µg/L

[1] Only positive detections presented in table
[2] VOCs – Volatile organic compounds by EPA Method 8260
[3] TPH-GRO – total petroleum hydrocarbons gasoline-range organics by EPA Method 8015
[4] TPH-DRO - total petroleum hydrocarbons diesel-range organics by EPA Method 8015
[5] ND – not detected above the method detection limit
[6] µg/L - micrograms per liter or roughly equivalent to parts per billion
[7] J – compound detected below the method reporting limit, so concentration is an estimated value.

Table 2
LPH Thickness Over Time
Bates Middle School
Annapolis, Maryland

Date	Day	Product Thickness (feet)		
		MW-1	MW-2	MW-3
8/8/2019	Thursday	13.49	1.73	0.94
8/13/2019	Tuesday	12.04	1.31	0.80
8/15/2019	Thursday	8.67	1.22	0.31
8/20/2019	Tuesday	12.46	1.33	0.53
8/22/2019	Thursday	7.4	1.21	0.24
8/27/2019	Tuesday	11.04	1.25	0.33
8/30/2019	Thursday	9.98	1.17	0.15
9/3/2019	Tuesday	8.57	1.21	0.10
9/5/2019	Thursday	5.05	1.23	0.05
9/10/2019	Tuesday	8.95	1.19	0.18
9/12/2019	Thursday	4.56	1.02	0.06
9/17/2019	Tuesday	6.97	1.41	0.02
9/19/2019	Thursday	3.36	1.10	0.07
9/24/2019	Tuesday	6.22	1.17	0.08
9/26/2019	Thursday	3.52	0.92	0.07
10/1/2019	Tuesday	5.73	1.05	0.02
10/3/2019	Thursday	2.80	1.17	0.00
10/08/19	Tuesday	3.99	1.04	0.01
10/10/19	Thursday	2.43	1.19	0.02
10/16/19	Wednesday	3.99	1.6	0.02

Table 3

EFR Event Summary
Bates Middle School
701 Chase Street
Annapolis, Maryland

Date	Well ID	Initial Time		Initial Gauge (ft.)	LPH Thickness (ft.)	Exit Time		Exit Gauge (ft.)	LPH Thickness (ft.)	Total Liquid Recovery (gallons)	Total LPH Recovery (gallons)
8/8/2019	MW-1	9:00	Depth to Liquid-	14.32	13.49	14:50	Depth to Liquid-	15.87	0.36	809	53
			Depth to Water-	27.81			Depth to Water-	16.23			
	MW-2			14.08	1.73			15.03	0.15		
				15.81				15.18			
	MW-3			14.02	0.94			14.75	0.12		
				14.96				14.87			
8/13/2019	MW-1		Depth to Liquid-	14.41	12.04		Depth to Liquid-	15.62	3.02	975	50
			Depth to Water-	26.45			Depth to Water-	18.64			
	MW-2			14.10	1.31			14.62	0.57		
				15.41				15.19			
	MW-3			14.08	0.80			14.58	0.07		
				14.88				14.65			
8/15/2019	MW-1	8:50	Depth to Liquid-	14.78	8.67		Depth to Liquid-	15.75	2.59	896	26
			Depth to Water-	23.45			Depth to Water-	18.34			
	MW-2			14.22	1.22			14.64	0.60		
				15.44				15.24			
	MW-3			14.23	0.31			14.59	0.00		
				14.54				14.59			
8/20/2019	MW-1	7:20	Depth to Liquid-	14.53	12.46	15:50	Depth to Liquid-	15.57	3.14	768	37
			Depth to Water-	26.99			Depth to Water-	18.71			
	MW-2			15.21	1.33			14.61	0.75		
				16.54				15.36			
	MW-3			14.19	0.53			14.57	0.00		
				14.72				14.57			
8/22/2019	MW-1	8:02	Depth to Liquid-	14.90	7.40	15:40	Depth to Liquid-	15.60	2.21	399	41
			Depth to Water-	22.30			Depth to Water-	17.81			
	MW-2			14.30	1.21			14.61	0.68		
				15.51				15.29			

Table 3 (con't)

EFR Event Summary

	MW-3			14.26	0.24			14.55	0.06		
				14.50				14.61			
8/27/2019	MW-1	7:20	Depth to Liquid-	14.60	11.04	14:15	Depth to Liquid-	15.22	6.36	670	24
			Depth to Water-	25.64			Depth to Water-	21.58			
	MW-2			14.26	1.25			14.73	0.58		
				15.51				15.31			
	MW-3			14.21	0.33			14.76	0.08		
				14.54				14.84			
8/30/2019	MW-1	7:40	Depth to Liquid-	14.68	9.98		Depth to Liquid-	15.64	2.59	670	24
			Depth to Water-	24.66			Depth to Water-	18.23			
	MW-2			14.32	1.17			14.65	0.66		
				15.49				15.31			
	MW-3			14.29	0.15			14.58	0.01		
				14.44				14.59			
9/3/2019	MW-1	7:12	Depth to Liquid-	14.90	8.57	2:44	Depth to Liquid-	15.69	2.53	623	23
			Depth to Water-	23.47			Depth to Water-	18.22			
	MW-2			14.35	1.21			14.65	0.68		
				15.56				15.33			
	MW-3			14.29	0.10			14.60	0.03		
				14.39				14.63			
9/5/2019	MW-1	6:30	Depth to Liquid-	15.30	5.05	2:50	Depth to Liquid-	15.75	1.63	348	9
			Depth to Water-	20.35			Depth to Water-	17.38			
	MW-2			14.39	1.23			14.68	0.60		
				15.62				15.28			
	MW-3			14.35	0.05			14.57	0.00		
				14.40				14.57			
9/10/2019	MW-1	6:50	Depth to Liquid-	14.96	8.95	2:05	Depth to Liquid-	15.76	2.14	530	18
			Depth to Water-	23.91			Depth to Water-	17.90			
	MW-2			14.38	1.19			14.68	0.55		
				15.57				15.23			
	MW-3			14.35	0.18			14.58	0.01		

Table 3 (con't)

EFR Event Summary

				14.53				14.59			
9/12/2019	MW-1	6:30	Depth to Liquid-	15.35	4.56	1:15	Depth to Liquid-	16.01	1.07	485	13
			Depth to Water-	19.91			Depth to Water-	17.08			
	MW-2			14.42	1.02			14.74	0.57		
				15.44				15.31			
	MW-3			14.37	0.06			14.69	0.05		
				14.43				14.74			
9/17/2019	MW-1	5:56	Depth to Liquid-	15.21	6.97	12:47	Depth to Liquid-	20.08	0.42	485	13
			Depth to Water-	22.18			Depth to Water-	20.50			
	MW-2			14.40	1.41			14.93	0.26		
				15.81				15.19			
	MW-3			14.38	0.02			14.75	0.00		
				14.40				14.75			
9/19/2019	MW-1	6:20	Depth to Liquid-	15.61	3.36	13:23	Depth to Liquid-	18.67	0.31	531	24
			Depth to Water-	18.97			Depth to Water-	18.98			
	MW-2			14.46	1.10			14.78	0.34		
				15.56				15.12			
	MW-3			14.42	0.07			14.67	0.01		
				14.49				14.68			
9/24/2019	MW-1	7:06	Depth to Liquid-	15.27	6.22	13:26	Depth to Liquid-	16.26	1.50	786	26.5
			Depth to Water-	21.49			Depth to Water-	17.76			
	MW-2			14.44	1.17			15.08	0.35		
				15.61				15.43			
	MW-3			14.41	0.08			14.93	0.03		
				14.49				14.96			
9/26/2019	MW-1	6:40	Depth to Liquid-	15.68	3.52	13:15	Depth to Liquid-	16.41	1.08	1201	33
			Depth to Water-	19.20			Depth to Water-	17.49			
	MW-2			14.53	0.92			15.15	0.36		
				15.45				15.51			
	MW-3			14.46	0.07			15.03	0.01		
				14.53				15.04			

Table 3 (con't)

EFR Event Summary

10/1/2019	MW-1	6:40	Depth to Liquid-	15.52	5.73	13:35	Depth to Liquid-	16.43	0.97	1433	52
			Depth to Water-	21.25			Depth to Water-	17.40			
	MW-2			14.50	1.05			15.11	0.36		
				15.55				15.47			
	MW-3			14.48	0.02			15.11	0.01		
				14.50				15.12			
10/3/2019	MW-1	6:40	Depth to Liquid-	15.94	2.80	13:15	Depth to Liquid-	16.53	0.71	577	32
			Depth to Water-	18.74			Depth to Water-	17.24			
	MW-2			14.58	0.88			15.13	0.18		
				15.46				15.31			
	MW-3			14.52	0.00			14.96	0.00		
				14.52				14.96			
10/8/2019	MW-1	8:02	Depth to Liquid-	15.90	3.99	14:39	Depth to Liquid-	16.34	1.34	441	10.62
			Depth to Water-	19.89			Depth to Water-	17.68			
	MW-2			14.54	1.04			14.90	0.44		
				15.58				15.34			
	MW-3			14.50	0.01			14.71	0.01		
				14.51				14.72			
10/10/2019	MW-1	7:45	Depth to Liquid-	16.09	2.43	14:15	Depth to Liquid-	16.54	0.70	485	10.92
			Depth to Water-	18.52			Depth to Water-	17.24			
	MW-2			14.58	1.19			14.96	0.45		
				15.77				15.41			
	MW-3			14.55	0.02			15.10	0.00		
				14.57				15.10			
10/16/2019	MW-1	7:28	Depth to Liquid-	15.91	3.99	14:08	Depth to Liquid-	16.59	1.05	820	50.34
			Depth to Water-	19.90			Depth to Water-	17.64			
	MW-2			14.54	1.60			15.08	0.57		
				16.14				15.65			
	MW-3			14.50	0.02			15.72	0.01		
				14.52				15.73			

Table 3 (con’t)

EFR Event Summary

									Running Total	13,932	570.38

APPENDIX A

Monitoring Well Completion Forms

C 1 | 39099 | SEQUENCE NO. (MDE USE ONLY)

1 2 3 6 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

STATE OF MARYLAND
WELL COMPLETION REPORT
FILL IN THIS FORM COMPLETELY
PLEASE TYPE

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.

COUNTY NUMBER 02

ST/CO USE ONLY
DATE Received MM DD YY (8–13)

DATE WELL COMPLETED MM 07 DD 16 YY 19 (15–20)

Depth of Well 27' (22–26) (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL" AA - 18 - 0200 (28–37)

OWNER Anne Arundel Co. Public Schools (last name / first name)

WELL SITE ADDRESS 701 Chase St. TOWN Annapolis

SUBDIVISION _____ SECTION _____ LOT _____

WELL LOG
Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION (Use additional sheets if needed)	FEET FROM	FEET TO	check if water bearing
Brown, Moist Sandy SILT, No clay to little clay	0'	27'	X

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED yes [Y] no [N]

CIRCLE APPROPRIATE LETTER
- A A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED
- E ELECTRIC LOG OBTAINED
- P TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS LIC. NO.: MD 151

DRILLERS SIGNATURE
(MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO.: MD 151

SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

GROUTING RECORD
WELL HAS BEEN GROUTED (Circle Appropriate Box) yes [Y] (44) no [N] (44)

TYPE OF GROUTING MATERIAL (Circle one)

CEMENT [CM] (45 46) BENTONITE CLAY [BC] (45 46)

NO. OF BAGS 1 NO. OF POUNDS 50

GALLONS OF WATER 10

DEPTH OF GROUT SEAL (to nearest foot)

from 0 (48 TOP 52) ft. to 1' (54 BOTTOM 58) ft.

(enter 0 if from surface)

CASING RECORD
casing types insert appropriate code below

[ST] STEEL [CO] CONCRETE [PL] PLASTIC [OT] OTHER

MAIN CASING TYPE	Nominal diameter top (main) casing (nearest inch)!	Total depth of main casing (nearest foot)
PL (60 61)	4" (63 64)	2' (66 70)

OTHER CASING (if used) — EACH CASING

diameter inch	depth (feet) from	to

SCREEN RECORD
screen type or open hole — insert appropriate code below

[ST] STEEL [BR] BRASS BRONZE [HO] OPEN HOLE [PL] PLASTIC [OT] OTHER

C 2 (1 2)

DEPTH (nearest ft.) — EACH SCREEN

1 PL (8 9)	0' (11 . 15)	0' (17 21)
2 (23 24)	27' (26 30)	2' (32 36)
3 (38 39)	(41 45)	(47 51)

SLOT SIZE 1 0 2 0 3 0

DIAMETER OF SCREEN 4" (56 60) (NEAREST INCH)

GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68	from	to
	27'	1'

(68)

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER)

T (70) (E.R.O.S.) (72) W Q (74 75 76)

TELESCOPE CASING — LOG INDICATOR — OTHER DATA

C 3 (1 2)

PUMPING TEST
N/A

HOURS PUMPED (nearest hour) (8 9)

PUMPING RATE (gal. per min.) (11 15)

METHOD USED TO MEASURE PUMPING RATE

WATER LEVEL (distance from land surface)

BEFORE PUMPING (17 20) ft.

WHEN PUMPING (22 25) ft.

TYPE OF PUMP USED (for test) (27)
- [A] air
- [P] piston
- [T] turbine
- [C] centrifugal
- [R] rotary
- [O] other (describe below)
- [J] jet
- [S] submersible

PUMP INSTALLED
DRILLER INSTALLED PUMP (CIRCLE) (YES or NO) YES NO

IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.

TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29. (29)

CAPACITY: GALLONS PER MINUTE (to nearest gallon) (31 35)

PUMP HORSE POWER (37 41)

PUMP COLUMN LENGTH (nearest ft.) (43 47)

CASING HEIGHT (circle appropriate box and enter casing height)
- [+] above (49) LAND SURFACE
- [–] below (49)

1 (nearest foot) (50 51)

LATITUDE 38.581962

LONGITUDE 76.302468

(DEFAULT COORD. WGS 84)

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MDE/WMA/PER.071

OWNER

C 1 | 39100 — SEQUENCE NO. (MDE USE ONLY)

1 2 3 6 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

STATE OF MARYLAND
WELL COMPLETION REPORT
FILL IN THIS FORM COMPLETELY
PLEASE TYPE

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.

COUNTY NUMBER 02

ST/CO USE ONLY
DATE Received MM DD YY (8–13)

DATE WELL COMPLETED MM DD YY: 8 14 4 (15–20)

Depth of Well: 30' (22–26) (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL": AA - 19 - 0262 (28–37)

OWNER: Anne Arundel Co. Public Schools (last name / first name)

WELL SITE ADDRESS: 701 Chase St. TOWN: Annapolis

SUBDIVISION: _____ SECTION: _____ LOT: _____

WELL LOG
Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION (Use additional sheets if needed)	FEET FROM	FEET TO	check if water bearing
Brown, moist to wet, silty clay	0	30'	X

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED (yes / no) (27): no

CIRCLE APPROPRIATE LETTER
- A — A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED
- E — ELECTRIC LOG OBTAINED
- P — TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS LIC. NO.: M D [illegible]

DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO.: __ __ D __ __ __

SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

GROUTING RECORD
WELL HAS BEEN GROUTED (Circle Appropriate Box) yes (Y) (44) / no (N) (44): no

TYPE OF GROUTING MATERIAL (Circle one)

CEMENT (CM) (45 46) BENTONITE CLAY (BC) (45 46)

NO. OF BAGS _____ NO. OF POUNDS _____

GALLONS OF WATER _____

DEPTH OF GROUT SEAL (to nearest foot)

from 1' (48 TOP 52) ft. to 3' (54 BOTTOM 58) ft.

(enter 0 if from surface)

CASING RECORD
casing types insert appropriate code below

ST STEEL; CO CONCRETE; PL PLASTIC; OT OTHER

MAIN CASING TYPE	Nominal diameter top (main) casing (nearest inch)!	Total depth of main casing (nearest foot)
PL (60 61)	4.0" (63 64)	5' (66 70)

OTHER CASING (if used) — EACH CASING

diameter inch	depth (feet) from	to

SCREEN RECORD
screen type or open hole — insert appropriate code below

ST STEEL; BR BRASS BRONZE; HO OPEN HOLE; PL PLASTIC; OT OTHER

C 2 — DEPTH (nearest ft.)

EACH SCREEN		from	to
1	PL (8 9)	5' (11 15)	3' (17 21)
2	(23 24)	(26 30)	(32 36)
3	(38 39)	(41 45)	(47 51)

SLOT SIZE 1 0 2 .2 3 0

DIAMETER OF SCREEN 4" (56 60) (NEAREST INCH)

GRAVEL PACK — from 3' to 30'

IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68 (68)

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER)

T (70) (E.R.O.S.) (72) W Q (74 75 76)

TELESCOPE CASING — LOG INDICATOR — OTHER DATA

C 3

PUMPING TEST
HOURS PUMPED (nearest hour) _____ (8 9)

PUMPING RATE (gal. per min.) _____ (11 15)

METHOD USED TO MEASURE PUMPING RATE _____

WATER LEVEL (distance from land surface)

BEFORE PUMPING _____ (17 20) ft.

WHEN PUMPING _____ (22 25) ft.

TYPE OF PUMP USED (for test) (27)
- A air
- P piston
- T turbine
- C centrifugal
- R rotary
- O other (describe below)
- J jet
- S submersible

PUMP INSTALLED
DRILLER INSTALLED PUMP (CIRCLE) (YES or NO): YES / NO

IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.

TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29. (29)

CAPACITY: GALLONS PER MINUTE (to nearest gallon) (31 35)

PUMP HORSE POWER (37 41)

PUMP COLUMN LENGTH (nearest ft.) (43 47)

CASING HEIGHT (circle appropriate box and enter casing height)

(+) above (49) / (–) below (49) LAND SURFACE

1 (nearest foot) (50 51)

LATITUDE 39.582024

LONGITUDE 76.302434

(DEFAULT COORD. WGS 84)

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OWNER

C 1 38705 — SEQUENCE NO. (MDE USE ONLY)

1 2 3 6 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

STATE OF MARYLAND
WELL COMPLETION REPORT
FILL IN THIS FORM COMPLETELY
PLEASE TYPE

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.

COUNTY NUMBER 02

ST/CO USE ONLY
DATE Received MM DD YY (8–13)

DATE WELL COMPLETED MM 07 DD 22 YY 14 (15–20)

Depth of Well 22 30 26 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL" AA - 15 - 02 13 (28–37)

OWNER Anne Arundel County Public Schools (last name / first name)

WELL SITE ADDRESS 701 Chase St. TOWN Annapolis

SUBDIVISION _____ SECTION _____ LOT _____

WELL LOG
Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION (Use additional sheets if needed)	FEET FROM	FEET TO	check if water bearing
Brown, moist to wet silt, no clay	0	35'	X

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED yes [Y] no [N]

CIRCLE APPROPRIATE LETTER
- A A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED
- E ELECTRIC LOG OBTAINED
- P TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS LIC. NO.: M D 151 — Nathan
DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO.: __ __ D __ __ __ — Nathan

SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

GROUTING RECORD
WELL HAS BEEN GROUTED (Circle Appropriate Box) yes [Y] (44) no [N] (44)

TYPE OF GROUTING MATERIAL (Circle one)

CEMENT [C M] (45 46) BENTONITE CLAY [B C] (45 46)

NO. OF BAGS 1 NO. OF POUNDS 55

GALLONS OF WATER 10

DEPTH OF GROUT SEAL (to nearest foot)

from 3' (48–52) TOP ft. to 1' (54–58) BOTTOM ft.

(enter 0 if from surface)

CASING RECORD
casing types insert appropriate code below

[S T] STEEL [C O] CONCRETE [P L] PLASTIC [O T] OTHER

MAIN CASING TYPE	Nominal diameter top (main) casing (nearest inch)!	Total depth of main casing (nearest foot)
PL (60–61)	4" (63–64)	5' (66–70)

OTHER CASING (if used) — EACH CASING

diameter inch	depth (feet) from	to

SCREEN RECORD
screen type or open hole — insert appropriate code below

[S T] STEEL [B R] BRASS BRONZE [H O] OPEN HOLE [P L] PLASTIC [O T] OTHER

C 2 (1–2)

DEPTH (nearest ft.) — EACH SCREEN

1 (8–9)	PL	30' (11–15) to 5' (17–21)
2 (23–24)		(26–30) to (32–36)
3 (38–39)		(41–45) to (47–51)

SLOT SIZE 1 0 2 3 0

DIAMETER OF SCREEN 4" (56–60) (NEAREST INCH)

GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68 (68)

from	to
30'	3'

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER)

T (70) (E.R.O.S.) (72) W Q (74 75 76)

TELESCOPE CASING — LOG INDICATOR — OTHER DATA

C 3 (1–2)

PUMPING TEST
HOURS PUMPED (nearest hour) 8 (8–9)

PUMPING RATE (gal. per min.) (11–15)

METHOD USED TO MEASURE PUMPING RATE

WATER LEVEL (distance from land surface)

BEFORE PUMPING (17–20) ft.

WHEN PUMPING (22–25) ft.

TYPE OF PUMP USED (for test)

[A] air (27) [P] piston (27) [T] turbine (27)
[C] centrifugal (27) [R] rotary (27) [O] other (describe below) (27)
[J] jet (27) [S] submersible (27)

PUMP INSTALLED
DRILLER INSTALLED PUMP (CIRCLE) (YES or NO) YES NO

IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.

TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29. (29)

CAPACITY: GALLONS PER MINUTE (to nearest gallon) (31–35)

PUMP HORSE POWER (37–41)

PUMP COLUMN LENGTH (nearest ft.) (43–47)

CASING HEIGHT (circle appropriate box and enter casing height)

[+] above (49) LAND SURFACE [–] below (49) 1 (50–51) (nearest foot)

LATITUDE 39.580244'
LONGITUDE 76.202435'
(DEFAULT COORD. WGS 84)

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MDE/WMA/PER.071

OWNER

C 1 | 38706 | SEQUENCE NO. (MDE USE ONLY)

1 2 3 6 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

STATE OF MARYLAND
WELL COMPLETION REPORT
FILL IN THIS FORM COMPLETELY
PLEASE TYPE

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.

COUNTY NUMBER 02

ST/CO USE ONLY
DATE Received MM DD YY
8 13

DATE WELL COMPLETED MM 07 DD 14 YY 14 (15 20)

Depth of Well 22 20' 26 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL" AN-15-0264 (28 29 30 31 32 33 34 35 36 37)

OWNER Anne Arundel Co. Public Schools (last name first name)

WELL SITE ADDRESS 301 Chase St TOWN Annapolis

SUBDIVISION ____ SECTION ____ LOT ____

WELL LOG
Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION (Use additional sheets if needed)	FEET FROM	FEET TO	check if water bearing
Brn, Moist to wet, Sandy SILT, some lt. Hk clay	0	30	X

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED yes [Y] no [N]

CIRCLE APPROPRIATE LETTER
- A A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED
- E ELECTRIC LOG OBTAINED
- P TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS LIC. NO.: M D [illegible]

DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO.: ___ D ___

SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

GROUTING RECORD
WELL HAS BEEN GROUTED (Circle Appropriate Box) yes [Y] (44) no [N] (44)

TYPE OF GROUTING MATERIAL (Circle one)

CEMENT [CM] (45 46) BENTONITE CLAY [BC] (45 46)

NO. OF BAGS 25 NO. OF POUNDS ____

GALLONS OF WATER 5

DEPTH OF GROUT SEAL (to nearest foot)

from 1' (48 TOP 52) ft. to 21' (54 BOTTOM 58) ft.

(enter 0 if from surface)

CASING RECORD
casing types insert appropriate code below

[ST] STEEL [CO] CONCRETE [PL] PLASTIC [OT] OTHER

MAIN CASING TYPE	Nominal diameter top (main) casing (nearest inch)!	Total depth of main casing (nearest foot)
PL (60 61)	4 (63 64)	3 (66 70)

EACH CASING

	OTHER CASING (if used) diameter inch	depth (feet) from	to

SCREEN RECORD
screen type or open hole insert appropriate code below

[ST] STEEL [BR] BRASS BRONZE [HO] OPEN HOLE [PL] PLASTIC [OT] OTHER

C 2 (1 2)

DEPTH (nearest ft.)

EACH SCREEN

1	PL (8 9)	2' (11 15)	20' (17 21)		
2	(23 24)	(26 30)	(32 36)		
3	(38 39)	(41 45)	(47 51)		

SLOT SIZE 1 0 2 .2 3 0

DIAMETER OF SCREEN 4" (56 60) (NEAREST INCH)

GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68

from	to
2'	20'

(68)

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER)

T (70) (E.R.O.S.) (72) W Q (74 75 76)

TELESCOPE CASING | LOG INDICATOR | OTHER DATA

C 3 (1 2)

PUMPING TEST
HOURS PUMPED (nearest hour) ____ (8 9)

PUMPING RATE (gal. per min.) ____ (11 15)

METHOD USED TO MEASURE PUMPING RATE ____

WATER LEVEL (distance from land surface)

BEFORE PUMPING ____ ft. (17 20)

WHEN PUMPING ____ ft. (22 25)

TYPE OF PUMP USED (for test)

- [A] air (27)
- [P] piston (27)
- [T] turbine (27)
- [C] centrifugal (27)
- [R] rotary (27)
- [O] other (describe below) (27)
- [J] jet (27)
- [S] submersible (27)

PUMP INSTALLED
DRILLER INSTALLED PUMP (CIRCLE) (YES or NO) YES NO

IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.

TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29. (29)

CAPACITY: GALLONS PER MINUTE (to nearest gallon) (31 35)

PUMP HORSE POWER (37 41)

PUMP COLUMN LENGTH (nearest ft.) (43 47)

CASING HEIGHT (circle appropriate box and enter casing height)

- [+] above (49) LAND SURFACE
- [−] below (49)

1 (50 51) (nearest foot)

LATITUDE 39° 25' 14.53"

LONGITUDE 76° 30' 23.73"

(DEFAULT COORD. WGS 84)

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MDE/WMA/PER.071

OWNER

C 1 | 38707 | SEQUENCE NO. (MDE USE ONLY)

1 2 3 6 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

STATE OF MARYLAND
WELL COMPLETION REPORT
FILL IN THIS FORM COMPLETELY
PLEASE TYPE

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.

COUNTY NUMBER 02

ST/CO USE ONLY
DATE Received MM DD YY (6–13)

DATE WELL COMPLETED MM DD YY (15–20): 07 17 14

Depth of Well (22–26): 30 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL" (28–37): AA - 18 - 0265

OWNER Anne Arundel Co. Public Schools (last name / first name)

WELL SITE ADDRESS 701 Chase St. TOWN Annapolis

SUBDIVISION _____ SECTION _____ LOT _____

WELL LOG
Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION (Use additional sheets if needed)	FEET FROM	FEET TO	check if water bearing
Brown, moist to wet, sandy silt, no to some clay	0	30	X

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED (yes / no) (45): N

CIRCLE APPROPRIATE LETTER
- A — A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED
- E — ELECTRIC LOG OBTAINED
- P — TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS LIC. NO.: M D 1511

DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO.: ___ D ___

SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

GROUTING RECORD
WELL HAS BEEN GROUTED (Circle Appropriate Box) yes (Y) / no (N) (44)

TYPE OF GROUTING MATERIAL (Circle one)

CEMENT (CM) (45–46) BENTONITE CLAY (BC) (45–46)

NO. OF BAGS 1 NO. OF POUNDS 55

GALLONS OF WATER 10

DEPTH OF GROUT SEAL (to nearest foot)

from 1 (48–52 TOP) ft. to 3 (54–58 BOTTOM) ft.

(enter 0 if from surface)

CASING RECORD
casing types insert appropriate code below

ST STEEL | CO CONCRETE | PL PLASTIC | OT OTHER

MAIN CASING TYPE	Nominal diameter top (main) casing (nearest inch)!	Total depth of main casing (nearest foot)
PL (60–61)	4" (63–64)	5' (66–70)

OTHER CASING (if used) — EACH CASING

diameter inch	depth (feet) from	to

SCREEN RECORD
screen type or open hole — insert appropriate code below

ST STEEL | BR BRASS BRONZE | HO OPEN HOLE | PL PLASTIC | OT OTHER

C 2 (1–2)

DEPTH (nearest ft.) — EACH SCREEN

1 (8–9)	PL (11–15)	5' (17–21) to 30'
2 (23–24)	(26–30)	(32–36)
3 (38–39)	(41–45)	(47–51)

SLOT SIZE 1 .02 2 .04 3 .02

DIAMETER OF SCREEN 4" (56–60) (NEAREST INCH)

GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68 (68)

from	to
3'	30'

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER)

T (70) (E.R.O.S.) (72) W Q (74–76)

TELESCOPE CASING | LOG INDICATOR | OTHER DATA

C 3 (1–2)

PUMPING TEST
HOURS PUMPED (nearest hour) (8–9)

PUMPING RATE (gal. per min.) (11–15)

METHOD USED TO MEASURE PUMPING RATE

WATER LEVEL (distance from land surface)

BEFORE PUMPING (17–20) ft.

WHEN PUMPING (22–25) ft.

TYPE OF PUMP USED (for test) (27)
- A air
- P piston
- T turbine
- C centrifugal
- R rotary
- O other (describe below)
- J jet
- S submersible

PUMP INSTALLED
DRILLER INSTALLED PUMP (CIRCLE) (YES or NO): NO

IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.

TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29. (29)

CAPACITY: GALLONS PER MINUTE (to nearest gallon) (31–35)

PUMP HORSE POWER (37–41)

PUMP COLUMN LENGTH (nearest ft.) (43–47)

CASING HEIGHT (circle appropriate box and enter casing height) (49)
- + above
- – below

LAND SURFACE 1' (nearest foot) (50–51)

LATITUDE 39.581431

LONGITUDE 76.322314

(DEFAULT COORD. WGS 84)

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MDE/WMA/PER.071

OWNER

C 1 38708 — SEQUENCE NO. (MDE USE ONLY)

1 2 3 6 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

STATE OF MARYLAND
WELL COMPLETION REPORT
FILL IN THIS FORM COMPLETELY
PLEASE TYPE

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.

COUNTY NUMBER 02

ST/CO USE ONLY
DATE Received MM DD YY
8 13

DATE WELL COMPLETED MM DD YY: 07 25 19
15 20

Depth of Well: 30' (TO NEAREST FOOT) 22 26

PERMIT NO. FROM "PERMIT TO DRILL WELL": AA - 19 - 0276
28 29 30 31 32 33 34 35 36 37

OWNER Anne Arundel Co. Public Schools (last name / first name)
WELL SITE ADDRESS 301 Chase St TOWN Annapolis
SUBDIVISION _____ SECTION _____ LOT _____

WELL LOG
Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION (Use additional sheets if needed)	FEET FROM	FEET TO	check if water bearing
Brown, moist to wet, sandy silt, mostly to some clay	0	30	X

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED: yes Y (44) / no N (44)

CIRCLE APPROPRIATE LETTER
- A — A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED
- E — ELECTRIC LOG OBTAINED
- P — TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS LIC. NO.: M D 5 1 1
DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)
LIC. NO.: D

SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

GROUTING RECORD
WELL HAS BEEN GROUTED (Circle Appropriate Box): yes Y (44) / no N (44)
TYPE OF GROUTING MATERIAL (Circle one)
CEMENT CM (45 46) BENTONITE CLAY BC (45 46)
NO. OF BAGS 1 NO. OF POUNDS 50
GALLONS OF WATER 10
DEPTH OF GROUT SEAL (to nearest foot)
from 1' (48 TOP 52) ft. to 3' (54 BOTTOM 58) ft.
(enter 0 if from surface)

CASING RECORD
casing types insert appropriate code below
ST STEEL; CO CONCRETE; PL PLASTIC; OT OTHER

MAIN CASING TYPE	Nominal diameter top (main) casing (nearest inch)!	Total depth of main casing (nearest foot)
PL (60 61)	4 (63 64)	5' (66 70)

OTHER CASING (if used) — EACH CASING

	diameter inch	depth (feet) from	to

SCREEN RECORD
screen type or open hole — insert appropriate code below
ST STEEL; BR BRASS BRONZE; HO OPEN HOLE; PL PLASTIC; OT OTHER

C 2 (1 2)

DEPTH (nearest ft.) — EACH SCREEN

1	PL (8 9)	5' (11 15)	30' (17 21)		
2					
3					

SLOT SIZE 1 0 2 3 0 3

DIAMETER OF SCREEN 4 (56 60) (NEAREST INCH)

GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68 (68)

from	to
3'	30'

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER)
T (70) (E.R.O.S.) (72) W Q (74 75 76)
TELESCOPE CASING; LOG INDICATOR; OTHER DATA

C 3 (1 2)

PUMPING TEST
HOURS PUMPED (nearest hour) (8 9)
PUMPING RATE (gal. per min.) (11 15)
METHOD USED TO MEASURE PUMPING RATE
WATER LEVEL (distance from land surface)
BEFORE PUMPING (17 20) ft.
WHEN PUMPING (22 25) ft.

TYPE OF PUMP USED (for test)
- A (27) air
- P (27) piston
- T (27) turbine
- C (27) centrifugal
- R (27) rotary
- O (27) other (describe below)
- J (27) jet
- S (27) submersible

PUMP INSTALLED
DRILLER INSTALLED PUMP (CIRCLE) (YES or NO): YES / NO
IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.
TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29. (29)
CAPACITY: GALLONS PER MINUTE (to nearest gallon) (31 35)
PUMP HORSE POWER (37 41)
PUMP COLUMN LENGTH (nearest ft.) (43 47)
CASING HEIGHT (circle appropriate box and enter casing height)
+ (49) above / – (49) below LAND SURFACE (nearest foot) (50 51)

LATITUDE 39.5114[illegible]
LONGITUDE 76.[illegible]
(DEFAULT COORD. WGS 84)

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MDE/WMA/PER.071

OWNER

C 1 38709 — SEQUENCE NO. (MDE USE ONLY)

1 2 3 6 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

STATE OF MARYLAND
WELL COMPLETION REPORT
FILL IN THIS FORM COMPLETELY
PLEASE TYPE

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.

COUNTY NUMBER 02

ST/CO USE ONLY DATE Received MM DD YY (8–13)

DATE WELL COMPLETED MM 07 DD 25 YY 14 (15–20)

Depth of Well 30' (22–26) (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL" AA - 14 - 07 (28–37)

OWNER Ann Arundel Co. Public Schools (last name / first name)

WELL SITE ADDRESS 701 Chase St. TOWN Annapolis

SUBDIVISION ____ SECTION ____ LOT ____

WELL LOG
Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION (Use additional sheets if needed)	FEET FROM	FEET TO	check if water bearing
Light brown to brown, Mostly silt, little clay	0	30'	X

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED (yes / no) — N

CIRCLE APPROPRIATE LETTER
- A — A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED
- E — ELECTRIC LOG OBTAINED
- P — TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS LIC. NO.: M D 151

DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO.: ___ D ___

SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

GROUTING RECORD
WELL HAS BEEN GROUTED (Circle Appropriate Box) yes Y (44) no N (44)

TYPE OF GROUTING MATERIAL (Circle one)

CEMENT CM (45 46) BENTONITE CLAY BC (45 46)

NO. OF BAGS 1 NO. OF POUNDS ____

GALLONS OF WATER 10

DEPTH OF GROUT SEAL (to nearest foot)

from 1' (48 TOP 52) ft. to 3' (54 BOTTOM 58) ft.

(enter 0 if from surface)

CASING RECORD
casing types insert appropriate code below

ST STEEL — CO CONCRETE — PL PLASTIC — OT OTHER

MAIN CASING TYPE	Nominal diameter top (main) casing (nearest inch)!	Total depth of main casing (nearest foot)
PL (60 61)	4" (63 64)	5' (66 70)

OTHER CASING (if used) — EACH CASING

diameter inch	depth (feet) from	to

SCREEN RECORD
screen type or open hole — insert appropriate code below

ST STEEL — BR BRASS BRONZE — HO OPEN HOLE — PL PLASTIC — OT OTHER

C 2

DEPTH (nearest ft.)

EACH SCREEN	from	to
1	PL 5' (8 9)	30' (11 15)
2	(23 24)	(26 30)
3	(38 39)	(41 45)

SLOT SIZE 1 ___ 2 2 3 ___

DIAMETER OF SCREEN 4" (56 60) (NEAREST INCH)

GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68 (68)

from	to
3'	30'

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER)

T (70) (E.R.O.S.) (72) W Q (74 75 76)

TELESCOPE CASING — LOG INDICATOR — OTHER DATA

C 3

PUMPING TEST
HOURS PUMPED (nearest hour) ___ (8 9)

PUMPING RATE (gal. per min.) ___ (11 15)

METHOD USED TO MEASURE PUMPING RATE ___

WATER LEVEL (distance from land surface)

BEFORE PUMPING ___ ft. (17 20)

WHEN PUMPING ___ ft. (22 25)

TYPE OF PUMP USED (for test)

A air (27) — P piston (27) — T turbine (27)

C centrifugal (27) — R rotary (27) — O other (describe below) (27)

J jet (27) — S submersible (27)

PUMP INSTALLED
DRILLER INSTALLED PUMP (CIRCLE) (YES or NO) YES / NO

IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.

TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29. (29)

CAPACITY: GALLONS PER MINUTE (to nearest gallon) (31 35)

PUMP HORSE POWER (37 41)

PUMP COLUMN LENGTH (nearest ft.) (43 47)

CASING HEIGHT (circle appropriate box and enter casing height)

+ above (49) — LAND SURFACE — – below (49)

1 (nearest foot) (50 51)

LATITUDE 38.582214

LONGITUDE 76.522276

(DEFAULT COORD. WGS 84)

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MDE/WMA/PER.071

OWNER

C 1 **38710** — SEQUENCE NO. (MDE USE ONLY)

1 2 3 6 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

STATE OF MARYLAND
WELL COMPLETION REPORT
FILL IN THIS FORM COMPLETELY
PLEASE TYPE

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.

COUNTY NUMBER 02

ST/CO USE ONLY
DATE Received MM DD YY (6–13)

DATE WELL COMPLETED MM 07 DD 24 YY 14 (15–20)

Depth of Well 22 31' 26 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL" AA-19-0268 (28–37)

OWNER Anne Arundel Co Public Schools (last name / first name)

WELL SITE ADDRESS 701 Chase St TOWN Annapolis

SUBDIVISION _____ SECTION _____ LOT _____

WELL LOG
Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION (Use additional sheets if needed)	FEET FROM	FEET TO	check if water bearing
Brown, most to wet, sandy SILT, little to some clay	0	31	X

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED yes Y / no N (N)

CIRCLE APPROPRIATE LETTER
- A — A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED
- E — ELECTRIC LOG OBTAINED
- P — TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS LIC. NO.: M D L S L

DRILLERS SIGNATURE
(MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO.: ___ D ____

SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

GROUTING RECORD
WELL HAS BEEN GROUTED (Circle Appropriate Box) yes Y (44) / no N (44)

TYPE OF GROUTING MATERIAL (Circle one)

CEMENT C M (45 46) BENTONITE CLAY B C (45 46)

NO. OF BAGS 1 NO. OF POUNDS _____

GALLONS OF WATER 10

DEPTH OF GROUT SEAL (to nearest foot)

from 1' (48 TOP 52) ft. to 3' (54 BOTTOM 58) ft.

(enter 0 if from surface)

CASING RECORD
casing types insert appropriate code below

S T STEEL — C O CONCRETE — P L PLASTIC — O T OTHER

MAIN CASING TYPE	Nominal diameter top (main) casing (nearest inch)!	Total depth of main casing (nearest foot)
P L (60 61)	4" (63 64)	5' (66 70)

OTHER CASING (if used) — EACH CASING

diameter inch	depth (feet) from	to

SCREEN RECORD
screen type or open hole — insert appropriate code below

S T STEEL — B R BRASS BRONZE — H O OPEN HOLE — P L PLASTIC — O T OTHER

C 2 (1 2)

DEPTH (nearest ft.)

EACH SCREEN		from	to
1	P L (8 9)	5' (11 15)	30' (17 21)
2	(23 24)	(26 30)	(32 36)
3	(38 39)	(41 45)	(47 51)

SLOT SIZE 1 ___ 2 2 3 0

DIAMETER OF SCREEN 4" (56 60) (NEAREST INCH)

GRAVEL PACK — from 3' to 32'

IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68 (68)

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER)

T (70) ___ TELESCOPE CASING

(E.R.O.S.) (72) ___ LOG INDICATOR

W Q (74 75 76) ___ OTHER DATA

C 3 (1 2)

PUMPING TEST
HOURS PUMPED (nearest hour) ___ (8 9)

PUMPING RATE (gal. per min.) ___ (11 15)

METHOD USED TO MEASURE PUMPING RATE ___

WATER LEVEL (distance from land surface)

BEFORE PUMPING ___ ft. (17 20)

WHEN PUMPING ___ ft. (22 25)

TYPE OF PUMP USED (for test)

A air (27) — P piston (27) — T turbine (27)

C centrifugal (27) — R rotary (27) — O other (describe below) (27)

J jet (27) — S submersible (27)

PUMP INSTALLED
DRILLER INSTALLED PUMP (CIRCLE) (YES or NO) YES / NO (NO)

IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.

TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29. (29)

CAPACITY: GALLONS PER MINUTE (to nearest gallon) (31 35)

PUMP HORSE POWER (37 41)

PUMP COLUMN LENGTH (nearest ft.) (43 47)

CASING HEIGHT (circle appropriate box and enter casing height)

+ above (49) / – below (49) LAND SURFACE

(nearest foot) (50 51)

LATITUDE 38 . 58 22 33

LONGITUDE 76 . 29 32 32

(DEFAULT COORD. WGS 84)

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MDE/WMA/PER.071

OWNER

C 1 38711 — SEQUENCE NO. (MDE USE ONLY)

1 2 3 6 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

STATE OF MARYLAND
WELL COMPLETION REPORT
FILL IN THIS FORM COMPLETELY
PLEASE TYPE

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.

COUNTY NUMBER 02

ST/CO USE ONLY
DATE Received MM DD YY (8–13)

DATE WELL COMPLETED MM DD YY: 07 24 19 (15–20)

Depth of Well: 30' (22–26) (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL": AA - 18 - 0269 (28–37)

OWNER Anne Arundel Co. Public Schools (last name / first name)

WELL SITE ADDRESS 201 Chase St. TOWN Annapolis

SUBDIVISION _____ SECTION _____ LOT _____

WELL LOG
Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION (Use additional sheets if needed)	FEET FROM	FEET TO	check if water bearing
Brown, moist to wet, sandy SILT, little clay	0	30'	X

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED (yes / no): N

CIRCLE APPROPRIATE LETTER
- A — A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED
- E — ELECTRIC LOG OBTAINED
- P — TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS LIC. NO.: M D [illegible]

DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO.: D [illegible]

SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

GROUTING RECORD
WELL HAS BEEN GROUTED (Circle Appropriate Box) yes Y (44) / no N (44)

TYPE OF GROUTING MATERIAL (Circle one)

CEMENT CM (45–46) BENTONITE CLAY BC (45–46)

NO. OF BAGS 1 NO. OF POUNDS 55

GALLONS OF WATER 15

DEPTH OF GROUT SEAL (to nearest foot)

from 1' (48–52 TOP) ft. to 3' (54–58 BOTTOM) ft.

(enter 0 if from surface)

CASING RECORD
casing types insert appropriate code below

ST STEEL; CO CONCRETE; PL PLASTIC; OT OTHER

MAIN CASING TYPE	Nominal diameter top (main) casing (nearest inch)!	Total depth of main casing (nearest foot)
PL (60–61)	4" (63–64)	5' (66–70)

OTHER CASING (if used) — EACH CASING

diameter inch	depth (feet) from	to

SCREEN RECORD
screen type or open hole — insert appropriate code below

ST STEEL; BR BRASS BRONZE; PL PLASTIC; HO OPEN HOLE; OT OTHER

C 2 (1–2)

DEPTH (nearest ft.) — EACH SCREEN

1 (8–9)	5' (11–15)	30' (17–21)
2 (23–24)	(26–30)	(32–36)
3 (38–39)	(41–45)	(47–51)

SLOT SIZE 1 0 2 2 3 0

DIAMETER OF SCREEN 4" (56–60) (NEAREST INCH)

GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68

from	to
3'	30'

(68)

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER)

T (70) (E.R.O.S.) (72) W Q (74 75 76)

TELESCOPE CASING — LOG INDICATOR — OTHER DATA

C 3 (1–2)

PUMPING TEST
HOURS PUMPED (nearest hour) (8–9)

PUMPING RATE (gal. per min.) (11–15)

METHOD USED TO MEASURE PUMPING RATE

WATER LEVEL (distance from land surface)

BEFORE PUMPING (17–20) ft.

WHEN PUMPING (22–25) ft.

TYPE OF PUMP USED (for test)

A air (27); P piston (27); T turbine (27); C centrifugal (27); R rotary (27); O other (describe below) (27); J jet (27); S submersible (27)

PUMP INSTALLED
DRILLER INSTALLED PUMP (CIRCLE) (YES or NO): NO

IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.

TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29. (29)

CAPACITY: GALLONS PER MINUTE (to nearest gallon) (31–35)

PUMP HORSE POWER (37–41)

PUMP COLUMN LENGTH (nearest ft.) (43–47)

CASING HEIGHT (circle appropriate box and enter casing height) (49)

+ above; – below — LAND SURFACE (nearest foot) (50–51): 1'

LATITUDE 39.5[illegible]

LONGITUDE 76.3[illegible]

(DEFAULT COORD. WGS 84)

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MDE/WMA/PER.071

OWNER

C 1 38712 — SEQUENCE NO. (MDE USE ONLY)

1 2 3 6 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

STATE OF MARYLAND
WELL COMPLETION REPORT
FILL IN THIS FORM COMPLETELY
PLEASE TYPE

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.

COUNTY NUMBER 02

ST/CO USE ONLY
DATE Received MM DD YY (8–13)

DATE WELL COMPLETED MM DD YY: 07 22 19 (15–20)

Depth of Well: 30 (22–26) (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL": AA - 18 - 0270 (28–37)

OWNER Anne Arundel Co Public Schools (last name / first name)

WELL SITE ADDRESS 701 Chase St TOWN Annapolis

SUBDIVISION _____ SECTION _____ LOT _____

WELL LOG
Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION (Use additional sheets if needed)	FEET FROM	FEET TO	check if water bearing
Brown, moist to wet, sandy silt, little clay	0	30'	X

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED (yes / no) — N

CIRCLE APPROPRIATE LETTER
- A — A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED
- E — ELECTRIC LOG OBTAINED
- P — TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS LIC. NO.: M - D - [redacted]

DRILLERS SIGNATURE [redacted]
(MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO.: __ D ____ [redacted]

SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

GROUTING RECORD
WELL HAS BEEN GROUTED (Circle Appropriate Box) (yes / no) — Y (44) / N (44)

TYPE OF GROUTING MATERIAL (Circle one)

CEMENT C M (45 46) BENTONITE CLAY B C (45 46)

NO. OF BAGS 1 NO. OF POUNDS 50

GALLONS OF WATER 10

DEPTH OF GROUT SEAL (to nearest foot)

from 1' (48 TOP 52) ft. to 3' (54 BOTTOM 58) ft.

(enter 0 if from surface)

CASING RECORD
casing types insert appropriate code below

S T STEEL — C O CONCRETE — P L PLASTIC — O T OTHER

MAIN CASING TYPE	Nominal diameter top (main) casing (nearest inch)!	Total depth of main casing (nearest foot)
PL (60 61)	4.0 (63 64)	5' (66 70)

OTHER CASING (if used) — EACH CASING

diameter inch	depth (feet) from	to

SCREEN RECORD
screen type or open hole — insert appropriate code below

S T STEEL — B R BRASS / BRONZE — H O OPEN HOLE — P L PLASTIC — O T OTHER

C 2 (1 2)

DEPTH (nearest ft.) — EACH SCREEN

1	PL (8 9)	5' (11 15) to 30' (17 21)
2	(23 24)	(26 30) to (32 36)
3	(38 39)	(41 45) to (47 51)

SLOT SIZE 1 0 2 2 3 0

DIAMETER OF SCREEN 4" (56 60) (NEAREST INCH)

GRAVEL PACK — from 30' to 3'

IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68 (68)

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER)

T (70) (E.R.O.S.) (72) W Q (74 75 76)

TELESCOPE CASING — LOG INDICATOR — OTHER DATA

C 3 (1 2)

PUMPING TEST
HOURS PUMPED (nearest hour) (8 9)

PUMPING RATE (gal. per min.) (11 15)

METHOD USED TO MEASURE PUMPING RATE

WATER LEVEL (distance from land surface)

BEFORE PUMPING (17 20) ft.

WHEN PUMPING (22 25) ft.

TYPE OF PUMP USED (for test) (27)
- A air
- P piston
- T turbine
- C centrifugal
- R rotary
- O other (describe below)
- J jet
- S submersible

PUMP INSTALLED
DRILLER INSTALLED PUMP (CIRCLE) (YES or NO) — NO

IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.

TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29. (29)

CAPACITY: GALLONS PER MINUTE (to nearest gallon) (31 35)

PUMP HORSE POWER (37 41)

PUMP COLUMN LENGTH (nearest ft.) (43 47)

CASING HEIGHT (circle appropriate box and enter casing height)
- + (49) above
- – (49) below

LAND SURFACE 1' (50 51) (nearest foot)

LATITUDE 3[redacted]

LONGITUDE 7[redacted]

(DEFAULT COORD. WGS 84)

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MDE/WMA/PER.071

OWNER

C 1 38713 — SEQUENCE NO. (MDE USE ONLY)

1 2 3 6 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

STATE OF MARYLAND
WELL COMPLETION REPORT
FILL IN THIS FORM COMPLETELY
PLEASE TYPE

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.

COUNTY NUMBER 02

ST/CO USE ONLY
DATE Received MM DD YY (5–13)

DATE WELL COMPLETED MM 07 DD 23 YY 19 (15–20)

Depth of Well 30' (22–26) (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL" AA-13-0071 (28–37)

OWNER Anne Arundel Co. Public Works (last name / first name)

WELL SITE ADDRESS 701 Chase St. TOWN Annapolis

SUBDIVISION _____ SECTION _____ LOT _____

WELL LOG
Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION (Use additional sheets if needed)	FEET FROM	FEET TO	check if water bearing
Brown, Moist to wet, Sandy SILT	0	22'	X
Green, Moist CLAY	22'	30'	

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED (yes / no) — no: N

CIRCLE APPROPRIATE LETTER
- A — A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED
- E — ELECTRIC LOG OBTAINED
- P — TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS LIC. NO.: M D 1511

DRILLERS SIGNATURE
(MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO.: __ __ D __ __ __

SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

GROUTING RECORD
WELL HAS BEEN GROUTED (Circle Appropriate Box) yes: Y (44) no: N (44)

TYPE OF GROUTING MATERIAL (Circle one)

CEMENT CM (45 46) BENTONITE CLAY BC (45 46)

NO. OF BAGS 1 NO. OF POUNDS 33

GALLONS OF WATER 15

DEPTH OF GROUT SEAL (to nearest foot)

from 1' (48 TOP 52) ft. to 3' (54 BOTTOM 58) ft.

(enter 0 if from surface)

CASING RECORD
casing types insert appropriate code below

ST STEEL; CO CONCRETE; PL PLASTIC; OT OTHER

MAIN CASING TYPE	Nominal diameter top (main) casing (nearest inch)!	Total depth of main casing (nearest foot)
PL (60 61)	4" (63 64)	5' (66 70)

EACH CASING — OTHER CASING (if used)

diameter inch	depth (feet) from	to

SCREEN RECORD
screen type or open hole — insert appropriate code below

ST STEEL; BR BRASS BRONZE; HO OPEN HOLE; PL PLASTIC; OT OTHER

C 2 (1 2)

DEPTH (nearest ft.)

EACH SCREEN

1	PL (8 9)	30' (11 15)	5' (17 21)
2	(23 24)	(26 30)	(32 36)
3	(38 39)	(41 45)	(47 51)

SLOT SIZE 1 0 2 2 3 0

DIAMETER OF SCREEN 4" (56 60) (NEAREST INCH)

GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68

from	to
30'	3'

(68)

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER)

T (70) (E.R.O.S.) (72) W Q (74 75 76)

TELESCOPE CASING — LOG INDICATOR — OTHER DATA

C 3 (1 2)

PUMPING TEST
HOURS PUMPED (nearest hour) (8 9)

PUMPING RATE (gal. per min.) (11 15)

METHOD USED TO MEASURE PUMPING RATE

WATER LEVEL (distance from land surface)

BEFORE PUMPING (17 20) ft.

WHEN PUMPING (22 25) ft.

TYPE OF PUMP USED (for test)

A air (27); P piston (27); T turbine (27); C centrifugal (27); R rotary (27); O other (describe below) (27); J jet (27); S submersible (27)

PUMP INSTALLED
DRILLER INSTALLED PUMP (CIRCLE) (YES or NO) YES / NO

IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.

TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29. (29)

CAPACITY: GALLONS PER MINUTE (to nearest gallon) (31 35)

PUMP HORSE POWER (37 41)

PUMP COLUMN LENGTH (nearest ft.) (43 47)

CASING HEIGHT (circle appropriate box and enter casing height)

+ above; – below (49) LAND SURFACE 1' (nearest foot) (50 51)

LATITUDE 39.582046"

LONGITUDE 76.302371"

(DEFAULT COORD. WGS 84)

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MDE/WMA/PER.071

OWNER

C 1 38714 — SEQUENCE NO. (MDE USE ONLY)

1 2 3 6 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

STATE OF MARYLAND
WELL COMPLETION REPORT
FILL IN THIS FORM COMPLETELY
PLEASE TYPE

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.

COUNTY NUMBER 02

ST/CO USE ONLY
DATE Received MM DD YY (8–13)

DATE WELL COMPLETED MM 07 DD 23 YY 19 (15–20)

Depth of Well 30' (22–26) (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL" AA 18 0072 (28–37)

OWNER Anne Arundel Co. Public Schools (last name / first name)

WELL SITE ADDRESS 21 Chase St. TOWN Annapolis

SUBDIVISION _____ SECTION _____ LOT _____

WELL LOG
Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION (Use additional sheets if needed)	FEET FROM	FEET TO	check if water bearing
Brown, moist to wet, sandy SILT	0	21'	X
Blue green, moist CLAY	21'	30'	

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED (yes / no) — no

CIRCLE APPROPRIATE LETTER
- A — A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED
- E — ELECTRIC LOG OBTAINED
- P — TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS LIC. NO.: M D 151

DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO.: ___ D ___

SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

GROUTING RECORD
WELL HAS BEEN GROUTED (Circle Appropriate Box) yes Y (44) / no N (44)

TYPE OF GROUTING MATERIAL (Circle one)

CEMENT CM (45 46) BENTONITE CLAY BC (45 46)

NO. OF BAGS 1 NO. OF POUNDS 33

GALLONS OF WATER 10

DEPTH OF GROUT SEAL (to nearest foot)

from 1' (48 TOP 52) ft. to 3' (54 BOTTOM 58) ft.

(enter 0 if from surface)

CASING RECORD
casing types insert appropriate code below

ST STEEL; CO CONCRETE; PL PLASTIC; OT OTHER

MAIN CASING TYPE	Nominal diameter top (main) casing (nearest inch)!	Total depth of main casing (nearest foot)
PL (60 61)	4" (63 64)	5' (66 70)

OTHER CASING (if used) — EACH CASING

diameter inch	depth (feet) from	to

SCREEN RECORD
screen type or open hole — insert appropriate code below

ST STEEL; BR BRASS BRONZE; HO OPEN HOLE; PL PLASTIC; OT OTHER

C 2 — DEPTH (nearest ft.) — EACH SCREEN

1	PL (8 9)	30' (11–15)	5' (17–21)
2		(23 24) (26–30)	(32–36)
3		(38 39) (41–45)	(47–51)

SLOT SIZE 1 0 2 20 3 0

DIAMETER OF SCREEN 4" (56–60) (NEAREST INCH)

GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68

from	to
30'	3'

(68)

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER)

T (70) (E.R.O.S.) (72) W Q (74 75 76)

TELESCOPE CASING — LOG INDICATOR — OTHER DATA

C 3

PUMPING TEST
HOURS PUMPED (nearest hour) ___ (8 9)

PUMPING RATE (gal. per min.) ___ (11–15)

METHOD USED TO MEASURE PUMPING RATE ___

WATER LEVEL (distance from land surface)

BEFORE PUMPING ___ ft. (17–20)

WHEN PUMPING ___ ft. (22–25)

TYPE OF PUMP USED (for test)

A air (27); P piston (27); T turbine (27); C centrifugal (27); R rotary (27); O other (describe below) (27); J jet (27); S submersible (27)

PUMP INSTALLED
DRILLER INSTALLED PUMP (CIRCLE) (YES or NO) YES / NO

IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.

TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29. (29)

CAPACITY: GALLONS PER MINUTE (to nearest gallon) (31–35)

PUMP HORSE POWER (37–41)

PUMP COLUMN LENGTH (nearest ft.) (43–47)

CASING HEIGHT (circle appropriate box and enter casing height)

+ above (49) / – below (49) LAND SURFACE 1 (50 51) (nearest foot)

LATITUDE 39.582061

LONGITUDE 76.302332

(DEFAULT COORD. WGS 84)

Pursuant to §10-624 of the State Govt. Article of the Maryand Code personal info. requested on this form is used in processing this form pursuant to COMAR 26.04.04. Failure to provide the info. may result in this form not being processed. You have the right to inspect, amend, or correct this form. The Maryland Department of the Environment is subject to the Maryland Public Information Act. This form may be made available on the Internet via MDE's website and is subject to inspection or copying, in whole or in part, by the pulic and other governmental agencies, if not protected by federal or state law.

MDE/WMA/PER.071

OWNER

C 1 38715 — SEQUENCE NO. (MDE USE ONLY)

1 2 3 6 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

STATE OF MARYLAND
WELL COMPLETION REPORT
FILL IN THIS FORM COMPLETELY
PLEASE TYPE

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.

COUNTY NUMBER 02

ST/CO USE ONLY
DATE Received MM DD YY (8–13)

DATE WELL COMPLETED MM 07 DD 14 YY 14 (15–20)

Depth of Well 30 (22–26) (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL" AA - 15 - 0273 (28–37)

OWNER Ann Arundel Co. Public Schools (last name / first name)

WELL SITE ADDRESS 201 Chase St. TOWN Annapolis

SUBDIVISION _____ SECTION _____ LOT _____

WELL LOG
Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION (Use additional sheets if needed)	FEET FROM	FEET TO	check if water bearing
Brown, Moist to wet, sandy silt, little clay	0	30'	X

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED (yes / no) — N

CIRCLE APPROPRIATE LETTER
- A — A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED
- E — ELECTRIC LOG OBTAINED
- P — TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS LIC. NO.: M D [illegible]

DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION) [signature]

LIC. NO.: D [signature]

SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

GROUTING RECORD
WELL HAS BEEN GROUTED (Circle Appropriate Box) yes Y (44) / no N (44)

TYPE OF GROUTING MATERIAL (Circle one)

CEMENT CM (45 46) BENTONITE CLAY BC (45 46)

NO. OF BAGS 1 NO. OF POUNDS 30

GALLONS OF WATER 10

DEPTH OF GROUT SEAL (to nearest foot)

from 1 (48 TOP 52) ft. to 3 (54 BOTTOM 58) ft.

(enter 0 if from surface)

CASING RECORD
casing types insert appropriate code below:
- ST STEEL
- CO CONCRETE
- PL PLASTIC
- OT OTHER

MAIN CASING TYPE	Nominal diameter top (main) casing (nearest inch)!	Total depth of main casing (nearest foot)
PL (60 61)	4" (63 64)	5' (66 70)

OTHER CASING (if used) — EACH CASING

diameter inch	depth (feet) from	to

SCREEN RECORD
screen type or open hole — insert appropriate code below:
- ST STEEL
- BR BRASS BRONZE
- HO OPEN HOLE
- PL PLASTIC
- OT OTHER

C 2 (1 2)

DEPTH (nearest ft.) — EACH SCREEN

1 PL (8 9)	5' (11 15)	30' (17 21)
2 (23 24)	(26 30)	(32 36)
3 (38 39)	(41 45)	(47 51)

SLOT SIZE 1 0 2 2 3 0

DIAMETER OF SCREEN 4" (56 60) (NEAREST INCH)

GRAVEL PACK — from 3' to 30'

IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68 (68)

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER)

T (70) (E.R.O.S.) (72) W Q (74 75 76)

TELESCOPE CASING — LOG INDICATOR — OTHER DATA

C 3 (1 2)

PUMPING TEST
HOURS PUMPED (nearest hour) (8 9)

PUMPING RATE (gal. per min.) (11 15)

METHOD USED TO MEASURE PUMPING RATE

WATER LEVEL (distance from land surface)

BEFORE PUMPING (17 20) ft.

WHEN PUMPING (22 25) ft.

TYPE OF PUMP USED (for test)
- A air (27)
- P piston (27)
- T turbine (27)
- C centrifugal (27)
- R rotary (27)
- O other (describe below) (27)
- J jet (27)
- S submersible (27)

PUMP INSTALLED
DRILLER INSTALLED PUMP (CIRCLE) (YES or NO) — NO

IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.

TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29. (29)

CAPACITY: GALLONS PER MINUTE (to nearest gallon) (31 35)

PUMP HORSE POWER (37 41)

PUMP COLUMN LENGTH (nearest ft.) (43 47)

CASING HEIGHT (circle appropriate box and enter casing height)
- + above (49)
- – below (49)

LAND SURFACE 1 (50 51) (nearest foot)

LATITUDE 38.581982

LONGITUDE 76.302347

(DEFAULT COORD. WGS 84)

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MDE/WMA/PER.071

OWNER

APPENDIX B

Chain of Custody Forms and Laboratory Data Sheets

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
VELAP ID 460040

14 August 2019

Scott Alexander
Petroleum Management, Inc.
2138 Priest Bridge Ct., STE 10
Crofton, MD 21114-2450
RE: Bates Middle School

Enclosed are the results of analyses for samples received by the laboratory on 08/08/19 09:38.

Maryland Spectral Services, Inc. is a TNI 2009 Standard accredited laboratory and as such, all analyses performed at Maryland Spectral Services included in this report are 2009 TNI certified except as indicated at the end of this report. Please visit our website at www.mdspectral.com for a complete listing of our TNI 2009 Standard accreditations.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Will Brewington
President

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: Bates Middle School

Project Number: 701 Chase St. Annapolis, MD
Project Manager: Scott Alexander

Reported:
08/14/19 17:38

Client Sample ID	Alternate Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MDE-1		9080802-01	Nonpotable Water	08/07/19 11:08	08/08/19 09:38
MDE-2		9080802-02	Nonpotable Water	08/07/19 10:07	08/08/19 09:38
MDE-3		9080802-03	Nonpotable Water	08/07/19 08:45	08/08/19 09:38
MW-4		9080802-04	Nonpotable Water	08/07/19 13:10	08/08/19 09:38
MW-5		9080802-05	Nonpotable Water	08/07/19 12:21	08/08/19 09:38
MW-6		9080802-06	Nonpotable Water	08/07/19 12:52	08/08/19 09:38
MW-7		9080802-07	Nonpotable Water	08/07/19 09:32	08/08/19 09:38
MW-8		9080802-08	Nonpotable Water	08/07/19 11:53	08/08/19 09:38
MW-10		9080802-09	Nonpotable Water	08/07/19 10:37	08/08/19 09:38

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, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: Bates Middle School

Project Number: 701 Chase St. Annapolis, MD
Project Manager: Scott Alexander

Reported:
08/14/19 17:38

MDE-1

9080802-01 (Nonpotable Water)
Sample Date: 08/07/19

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	08/12/19	08/12/19 13:42	GM
tert-Amyl alcohol (TAA)	ND		ug/L	20.0	20.0	1	08/12/19	08/12/19 13:42	GM
tert-Amyl methyl ether (TAME)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM
Benzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM
Bromobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM
Bromochloromethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM
Bromodichloromethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM
Bromoform	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM
Bromomethane	ND		ug/L	5.0	5.0	1	08/12/19	08/12/19 13:42	GM
tert-Butanol (TBA)	ND		ug/L	15.0	15.0	1	08/12/19	08/12/19 13:42	GM
2-Butanone (MEK)	ND		ug/L	10.0	10.0	1	08/12/19	08/12/19 13:42	GM
n-Butylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM
sec-Butylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM
tert-Butylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM
Carbon disulfide	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM
Carbon tetrachloride	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM
Chlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM
Chloroethane	ND		ug/L	5.0	5.0	1	08/12/19	08/12/19 13:42	GM
Chloroform	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM
Chloromethane	ND		ug/L	5.0	5.0	1	08/12/19	08/12/19 13:42	GM
2-Chlorotoluene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM
4-Chlorotoluene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM
Dibromochloromethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM
1,2-Dibromo-3-chloropropane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM
1,2-Dibromoethane (EDB)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM
Dibromomethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM
1,2-Dichlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM
1,3-Dichlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM
1,4-Dichlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM
Dichlorodifluoromethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM
1,1-Dichloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM
1,2-Dichloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM
1,1-Dichloroethene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM

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, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: Bates Middle School

Project Number: 701 Chase St. Annapolis, MD
Project Manager: Scott Alexander

Reported:
08/14/19 17:38

MDE-1

9080802-01 (Nonpotable Water)
Sample Date: 08/07/19

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
cis-1,2-Dichloroethene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM
trans-1,2-Dichloroethene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM
Dichlorofluoromethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM
1,2-Dichloropropane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM
1,3-Dichloropropane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM
2,2-Dichloropropane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM
1,1-Dichloropropene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM
cis-1,3-Dichloropropene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM
trans-1,3-Dichloropropene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM
Diisopropyl ether (DIPE)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM
Ethyl tert-butyl ether (ETBE)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM
Ethylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM
Hexachlorobutadiene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM
2-Hexanone	ND		ug/L	10.0	10.0	1	08/12/19	08/12/19 13:42	GM
Isopropylbenzene (Cumene)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM
4-Isopropyltoluene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM
Methyl tert-butyl ether (MTBE)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM
4-Methyl-2-pentanone	ND		ug/L	10.0	10.0	1	08/12/19	08/12/19 13:42	GM
Methylene chloride	ND		ug/L	10.0	10.0	1	08/12/19	08/12/19 13:42	GM
Naphthalene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM
n-Propylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM
Styrene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM
1,1,1,2-Tetrachloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM
1,1,2,2-Tetrachloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM
Tetrachloroethene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM
Toluene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM
1,2,3-Trichlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM
1,2,4-Trichlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM
1,1,1-Trichloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM
1,1,2-Trichloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM
Trichloroethene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM
Trichlorofluoromethane (Freon 11)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM
1,2,3-Trichloropropane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM

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Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: Bates Middle School

Project Number: 701 Chase St. Annapolis, MD
Project Manager: Scott Alexander

Reported:
08/14/19 17:38

MDE-1

9080802-01 (Nonpotable Water)
Sample Date: 08/07/19

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
1,2,4-Trimethylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM
1,3,5-Trimethylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM
Vinyl chloride	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM
o-Xylene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM
m- & p-Xylenes	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 13:42	GM
Surrogate: 1,2-Dichloroethane-d4			*75-120*	*105 %*		*08/12/19*		*08/12/19 13:42*	
Surrogate: Toluene-d8			*75-120*	*102 %*		*08/12/19*		*08/12/19 13:42*	
Surrogate: 4-Bromofluorobenzene			*78-110*	*99 %*		*08/12/19*		*08/12/19 13:42*	
GASOLINE RANGE ORGANICS BY EPA 8015C									
Gasoline-Range Organics	ND		ug/L	100	100	1	08/09/19	08/09/19 21:04	GM
DIESEL RANGE ORGANICS BY EPA 3510/8015C									
Diesel-Range Organics	ND		mg/L	0.26	0.26	1	08/09/19	08/12/19 19:05	SJA
Surrogate: o-Terphenyl			*60-120*	*93 %*		*08/09/19*		*08/12/19 19:05*	

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Analytical Results

Project: Bates Middle School

Project Number: 701 Chase St. Annapolis, MD
Project Manager: Scott Alexander

Reported:
08/14/19 17:38

MDE-2

9080802-02 (Nonpotable Water)
Sample Date: 08/07/19

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	08/12/19	08/12/19 14:08	GM
tert-Amyl alcohol (TAA)	ND		ug/L	20.0	20.0	1	08/12/19	08/12/19 14:08	GM
tert-Amyl methyl ether (TAME)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM
Benzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM
Bromobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM
Bromochloromethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM
Bromodichloromethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM
Bromoform	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM
Bromomethane	ND		ug/L	5.0	5.0	1	08/12/19	08/12/19 14:08	GM
tert-Butanol (TBA)	ND		ug/L	15.0	15.0	1	08/12/19	08/12/19 14:08	GM
2-Butanone (MEK)	ND		ug/L	10.0	10.0	1	08/12/19	08/12/19 14:08	GM
n-Butylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM
sec-Butylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM
tert-Butylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM
Carbon disulfide	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM
Carbon tetrachloride	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM
Chlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM
Chloroethane	ND		ug/L	5.0	5.0	1	08/12/19	08/12/19 14:08	GM
Chloroform	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM
Chloromethane	ND		ug/L	5.0	5.0	1	08/12/19	08/12/19 14:08	GM
2-Chlorotoluene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM
4-Chlorotoluene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM
Dibromochloromethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM
1,2-Dibromo-3-chloropropane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM
1,2-Dibromoethane (EDB)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM
Dibromomethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM
1,2-Dichlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM
1,3-Dichlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM
1,4-Dichlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM
Dichlorodifluoromethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM
1,1-Dichloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM
1,2-Dichloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM
1,1-Dichloroethene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM

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Analytical Results

Project: Bates Middle School

Project Number: 701 Chase St. Annapolis, MD
Project Manager: Scott Alexander

Reported:
08/14/19 17:38

MDE-2

9080802-02 (Nonpotable Water)
Sample Date: 08/07/19

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
cis-1,2-Dichloroethene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM
trans-1,2-Dichloroethene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM
Dichlorofluoromethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM
1,2-Dichloropropane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM
1,3-Dichloropropane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM
2,2-Dichloropropane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM
1,1-Dichloropropene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM
cis-1,3-Dichloropropene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM
trans-1,3-Dichloropropene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM
Diisopropyl ether (DIPE)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM
Ethyl tert-butyl ether (ETBE)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM
Ethylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM
Hexachlorobutadiene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM
2-Hexanone	ND		ug/L	10.0	10.0	1	08/12/19	08/12/19 14:08	GM
Isopropylbenzene (Cumene)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM
4-Isopropyltoluene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM
Methyl tert-butyl ether (MTBE)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM
4-Methyl-2-pentanone	ND		ug/L	10.0	10.0	1	08/12/19	08/12/19 14:08	GM
Methylene chloride	ND		ug/L	10.0	10.0	1	08/12/19	08/12/19 14:08	GM
Naphthalene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM
n-Propylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM
Styrene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM
1,1,1,2-Tetrachloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM
1,1,2,2-Tetrachloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM
Tetrachloroethene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM
Toluene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM
1,2,3-Trichlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM
1,2,4-Trichlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM
1,1,1-Trichloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM
1,1,2-Trichloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM
Trichloroethene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM
Trichlorofluoromethane (Freon 11)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM
1,2,3-Trichloropropane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM

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Analytical Results

Project: Bates Middle School

Project Number: 701 Chase St. Annapolis, MD
Project Manager: Scott Alexander

Reported:
08/14/19 17:38

MDE-2

9080802-02 (Nonpotable Water)
Sample Date: 08/07/19

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
1,2,4-Trimethylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM
1,3,5-Trimethylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM
Vinyl chloride	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM
o-Xylene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM
m- & p-Xylenes	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:08	GM
Surrogate: 1,2-Dichloroethane-d4			*75-120*	*105 %*	*08/12/19*		*08/12/19 14:08*		
Surrogate: Toluene-d8			*75-120*	*101 %*	*08/12/19*		*08/12/19 14:08*		
Surrogate: 4-Bromofluorobenzene			*78-110*	*98 %*	*08/12/19*		*08/12/19 14:08*		
GASOLINE RANGE ORGANICS BY EPA 8015C									
Gasoline-Range Organics	ND		ug/L	100	100	1	08/09/19	08/09/19 21:41	GM
DIESEL RANGE ORGANICS BY EPA 3510/8015C									
Diesel-Range Organics	ND		mg/L	0.24	0.24	1	08/09/19	08/12/19 19:32	SJA
Surrogate: o-Terphenyl			*60-120*	*91 %*	*08/09/19*		*08/12/19 19:32*		

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Analytical Results

Project: Bates Middle School

Project Number: 701 Chase St. Annapolis, MD
Project Manager: Scott Alexander

Reported:
08/14/19 17:38

MDE-3

9080802-03 (Nonpotable Water)
Sample Date: 08/07/19

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	08/12/19	08/12/19 14:33	GM
tert-Amyl alcohol (TAA)	ND		ug/L	20.0	20.0	1	08/12/19	08/12/19 14:33	GM
tert-Amyl methyl ether (TAME)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM
Benzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM
Bromobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM
Bromochloromethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM
Bromodichloromethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM
Bromoform	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM
Bromomethane	ND		ug/L	5.0	5.0	1	08/12/19	08/12/19 14:33	GM
tert-Butanol (TBA)	ND		ug/L	15.0	15.0	1	08/12/19	08/12/19 14:33	GM
2-Butanone (MEK)	ND		ug/L	10.0	10.0	1	08/12/19	08/12/19 14:33	GM
n-Butylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM
sec-Butylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM
tert-Butylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM
Carbon disulfide	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM
Carbon tetrachloride	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM
Chlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM
Chloroethane	ND		ug/L	5.0	5.0	1	08/12/19	08/12/19 14:33	GM
Chloroform	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM
Chloromethane	ND		ug/L	5.0	5.0	1	08/12/19	08/12/19 14:33	GM
2-Chlorotoluene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM
4-Chlorotoluene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM
Dibromochloromethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM
1,2-Dibromo-3-chloropropane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM
1,2-Dibromoethane (EDB)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM
Dibromomethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM
1,2-Dichlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM
1,3-Dichlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM
1,4-Dichlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM
Dichlorodifluoromethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM
1,1-Dichloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM
1,2-Dichloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM
1,1-Dichloroethene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM

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Analytical Results

Project: Bates Middle School

Project Number: 701 Chase St. Annapolis, MD
Project Manager: Scott Alexander

Reported:
08/14/19 17:38

MDE-3

9080802-03 (Nonpotable Water)
Sample Date: 08/07/19

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
cis-1,2-Dichloroethene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM
trans-1,2-Dichloroethene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM
Dichlorofluoromethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM
1,2-Dichloropropane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM
1,3-Dichloropropane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM
2,2-Dichloropropane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM
1,1-Dichloropropene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM
cis-1,3-Dichloropropene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM
trans-1,3-Dichloropropene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM
Diisopropyl ether (DIPE)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM
Ethyl tert-butyl ether (ETBE)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM
Ethylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM
Hexachlorobutadiene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM
2-Hexanone	ND		ug/L	10.0	10.0	1	08/12/19	08/12/19 14:33	GM
Isopropylbenzene (Cumene)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM
4-Isopropyltoluene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM
Methyl tert-butyl ether (MTBE)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM
4-Methyl-2-pentanone	ND		ug/L	10.0	10.0	1	08/12/19	08/12/19 14:33	GM
Methylene chloride	ND		ug/L	10.0	10.0	1	08/12/19	08/12/19 14:33	GM
Naphthalene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM
n-Propylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM
Styrene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM
1,1,1,2-Tetrachloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM
1,1,2,2-Tetrachloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM
Tetrachloroethene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM
Toluene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM
1,2,3-Trichlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM
1,2,4-Trichlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM
1,1,1-Trichloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM
1,1,2-Trichloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM
Trichloroethene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM
Trichlorofluoromethane (Freon 11)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM
1,2,3-Trichloropropane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM

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Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: Bates Middle School

Project Number: 701 Chase St. Annapolis, MD
Project Manager: Scott Alexander

Reported:
08/14/19 17:38

MDE-3

9080802-03 (Nonpotable Water)
Sample Date: 08/07/19

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
1,2,4-Trimethylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM
1,3,5-Trimethylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM
Vinyl chloride	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM
o-Xylene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM
m- & p-Xylenes	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:33	GM
Surrogate: 1,2-Dichloroethane-d4			*75-120*	*104 %*		*08/12/19*		*08/12/19 14:33*	
Surrogate: Toluene-d8			*75-120*	*101 %*		*08/12/19*		*08/12/19 14:33*	
Surrogate: 4-Bromofluorobenzene			*78-110*	*99 %*		*08/12/19*		*08/12/19 14:33*	
GASOLINE RANGE ORGANICS BY EPA 8015C									
Gasoline-Range Organics	ND		ug/L	100	100	1	08/09/19	08/09/19 22:18	GM
DIESEL RANGE ORGANICS BY EPA 3510/8015C									
Diesel-Range Organics	ND		mg/L	0.22	0.22	1	08/09/19	08/12/19 20:00	SJA
Surrogate: o-Terphenyl			*60-120*	*93 %*		*08/09/19*		*08/12/19 20:00*	

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Analytical Results

Project: Bates Middle School

Project Number: 701 Chase St. Annapolis, MD
Project Manager: Scott Alexander

Reported:
08/14/19 17:38

MW-4

9080802-04 (Nonpotable Water)
Sample Date: 08/07/19

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	08/12/19	08/12/19 14:59	GM
tert-Amyl alcohol (TAA)	ND		ug/L	20.0	20.0	1	08/12/19	08/12/19 14:59	GM
tert-Amyl methyl ether (TAME)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM
Benzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM
Bromobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM
Bromochloromethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM
Bromodichloromethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM
Bromoform	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM
Bromomethane	ND		ug/L	5.0	5.0	1	08/12/19	08/12/19 14:59	GM
tert-Butanol (TBA)	ND		ug/L	15.0	15.0	1	08/12/19	08/12/19 14:59	GM
2-Butanone (MEK)	ND		ug/L	10.0	10.0	1	08/12/19	08/12/19 14:59	GM
n-Butylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM
sec-Butylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM
tert-Butylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM
Carbon disulfide	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM
Carbon tetrachloride	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM
Chlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM
Chloroethane	ND		ug/L	5.0	5.0	1	08/12/19	08/12/19 14:59	GM
Chloroform	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM
Chloromethane	ND		ug/L	5.0	5.0	1	08/12/19	08/12/19 14:59	GM
2-Chlorotoluene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM
4-Chlorotoluene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM
Dibromochloromethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM
1,2-Dibromo-3-chloropropane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM
1,2-Dibromoethane (EDB)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM
Dibromomethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM
1,2-Dichlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM
1,3-Dichlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM
1,4-Dichlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM
Dichlorodifluoromethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM
1,1-Dichloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM
1,2-Dichloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM
1,1-Dichloroethene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM

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Analytical Results

Project: Bates Middle School

Project Number: 701 Chase St. Annapolis, MD
Project Manager: Scott Alexander

Reported:
08/14/19 17:38

MW-4

9080802-04 (Nonpotable Water)
Sample Date: 08/07/19

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
cis-1,2-Dichloroethene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM
trans-1,2-Dichloroethene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM
Dichlorofluoromethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM
1,2-Dichloropropane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM
1,3-Dichloropropane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM
2,2-Dichloropropane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM
1,1-Dichloropropene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM
cis-1,3-Dichloropropene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM
trans-1,3-Dichloropropene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM
Diisopropyl ether (DIPE)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM
Ethyl tert-butyl ether (ETBE)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM
Ethylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM
Hexachlorobutadiene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM
2-Hexanone	ND		ug/L	10.0	10.0	1	08/12/19	08/12/19 14:59	GM
Isopropylbenzene (Cumene)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM
4-Isopropyltoluene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM
Methyl tert-butyl ether (MTBE)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM
4-Methyl-2-pentanone	ND		ug/L	10.0	10.0	1	08/12/19	08/12/19 14:59	GM
Methylene chloride	ND		ug/L	10.0	10.0	1	08/12/19	08/12/19 14:59	GM
Naphthalene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM
n-Propylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM
Styrene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM
1,1,1,2-Tetrachloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM
1,1,2,2-Tetrachloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM
Tetrachloroethene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM
Toluene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM
1,2,3-Trichlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM
1,2,4-Trichlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM
1,1,1-Trichloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM
1,1,2-Trichloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM
Trichloroethene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM
Trichlorofluoromethane (Freon 11)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM
1,2,3-Trichloropropane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM

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Analytical Results

Project: Bates Middle School

Project Number: 701 Chase St. Annapolis, MD
Project Manager: Scott Alexander

Reported:
08/14/19 17:38

MW-4

9080802-04 (Nonpotable Water)
Sample Date: 08/07/19

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
1,2,4-Trimethylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM
1,3,5-Trimethylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM
Vinyl chloride	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM
o-Xylene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM
m- & p-Xylenes	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 14:59	GM
Surrogate: 1,2-Dichloroethane-d4			*75-120*	*107 %*		*08/12/19*		*08/12/19 14:59*	
Surrogate: Toluene-d8			*75-120*	*100 %*		*08/12/19*		*08/12/19 14:59*	
Surrogate: 4-Bromofluorobenzene			*78-110*	*96 %*		*08/12/19*		*08/12/19 14:59*	
GASOLINE RANGE ORGANICS BY EPA 8015C									
Gasoline-Range Organics	ND		ug/L	100	100	1	08/09/19	08/09/19 22:55	GM
DIESEL RANGE ORGANICS BY EPA 3510/8015C									
Diesel-Range Organics	ND		mg/L	0.24	0.24	1	08/09/19	08/12/19 20:27	SJA
Surrogate: o-Terphenyl			*60-120*	*87 %*		*08/09/19*		*08/12/19 20:27*	

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Analytical Results

Project: Bates Middle School

Project Number: 701 Chase St. Annapolis, MD
Project Manager: Scott Alexander

Reported:
08/14/19 17:38

MW-5

9080802-05 (Nonpotable Water)
Sample Date: 08/07/19

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	08/12/19	08/12/19 15:25	GM
tert-Amyl alcohol (TAA)	ND		ug/L	20.0	20.0	1	08/12/19	08/12/19 15:25	GM
tert-Amyl methyl ether (TAME)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM
Benzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM
Bromobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM
Bromochloromethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM
Bromodichloromethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM
Bromoform	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM
Bromomethane	ND		ug/L	5.0	5.0	1	08/12/19	08/12/19 15:25	GM
tert-Butanol (TBA)	ND		ug/L	15.0	15.0	1	08/12/19	08/12/19 15:25	GM
2-Butanone (MEK)	ND		ug/L	10.0	10.0	1	08/12/19	08/12/19 15:25	GM
n-Butylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM
sec-Butylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM
tert-Butylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM
Carbon disulfide	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM
Carbon tetrachloride	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM
Chlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM
Chloroethane	ND		ug/L	5.0	5.0	1	08/12/19	08/12/19 15:25	GM
Chloroform	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM
Chloromethane	ND		ug/L	5.0	5.0	1	08/12/19	08/12/19 15:25	GM
2-Chlorotoluene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM
4-Chlorotoluene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM
Dibromochloromethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM
1,2-Dibromo-3-chloropropane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM
1,2-Dibromoethane (EDB)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM
Dibromomethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM
1,2-Dichlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM
1,3-Dichlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM
1,4-Dichlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM
Dichlorodifluoromethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM
1,1-Dichloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM
1,2-Dichloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM
1,1-Dichloroethene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM

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Analytical Results

Project: Bates Middle School

Project Number: 701 Chase St. Annapolis, MD
Project Manager: Scott Alexander

Reported:
08/14/19 17:38

MW-5

9080802-05 (Nonpotable Water)
Sample Date: 08/07/19

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
cis-1,2-Dichloroethene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM
trans-1,2-Dichloroethene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM
Dichlorofluoromethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM
1,2-Dichloropropane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM
1,3-Dichloropropane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM
2,2-Dichloropropane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM
1,1-Dichloropropene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM
cis-1,3-Dichloropropene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM
trans-1,3-Dichloropropene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM
Diisopropyl ether (DIPE)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM
Ethyl tert-butyl ether (ETBE)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM
Ethylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM
Hexachlorobutadiene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM
2-Hexanone	ND		ug/L	10.0	10.0	1	08/12/19	08/12/19 15:25	GM
Isopropylbenzene (Cumene)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM
4-Isopropyltoluene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM
Methyl tert-butyl ether (MTBE)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM
4-Methyl-2-pentanone	ND		ug/L	10.0	10.0	1	08/12/19	08/12/19 15:25	GM
Methylene chloride	ND		ug/L	10.0	10.0	1	08/12/19	08/12/19 15:25	GM
Naphthalene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM
n-Propylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM
Styrene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM
1,1,1,2-Tetrachloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM
1,1,2,2-Tetrachloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM
Tetrachloroethene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM
Toluene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM
1,2,3-Trichlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM
1,2,4-Trichlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM
1,1,1-Trichloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM
1,1,2-Trichloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM
Trichloroethene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM
Trichlorofluoromethane (Freon 11)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM
1,2,3-Trichloropropane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM

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Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: Bates Middle School

Project Number: 701 Chase St. Annapolis, MD
Project Manager: Scott Alexander

Reported:
08/14/19 17:38

MW-5

9080802-05 (Nonpotable Water)
Sample Date: 08/07/19

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
1,2,4-Trimethylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM
1,3,5-Trimethylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM
Vinyl chloride	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM
o-Xylene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM
m- & p-Xylenes	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:25	GM
Surrogate: 1,2-Dichloroethane-d4			*75-120*	*107 %*		*08/12/19*		*08/12/19 15:25*	
Surrogate: Toluene-d8			*75-120*	*100 %*		*08/12/19*		*08/12/19 15:25*	
Surrogate: 4-Bromofluorobenzene			*78-110*	*97 %*		*08/12/19*		*08/12/19 15:25*	
GASOLINE RANGE ORGANICS BY EPA 8015C									
Gasoline-Range Organics	ND		ug/L	100	100	1	08/09/19	08/09/19 23:32	GM
DIESEL RANGE ORGANICS BY EPA 3510/8015C									
Diesel-Range Organics	ND		mg/L	0.25	0.25	1	08/09/19	08/12/19 20:55	SJA
Surrogate: o-Terphenyl			*60-120*	*92 %*		*08/09/19*		*08/12/19 20:55*	

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Analytical Results

Project: Bates Middle School

Project Number: 701 Chase St. Annapolis, MD
Project Manager: Scott Alexander

Reported:
08/14/19 17:38

MW-6

9080802-06 (Nonpotable Water)
Sample Date: 08/07/19

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	08/12/19	08/12/19 15:50	GM
tert-Amyl alcohol (TAA)	ND		ug/L	20.0	20.0	1	08/12/19	08/12/19 15:50	GM
tert-Amyl methyl ether (TAME)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM
Benzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM
Bromobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM
Bromochloromethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM
Bromodichloromethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM
Bromoform	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM
Bromomethane	ND		ug/L	5.0	5.0	1	08/12/19	08/12/19 15:50	GM
tert-Butanol (TBA)	ND		ug/L	15.0	15.0	1	08/12/19	08/12/19 15:50	GM
2-Butanone (MEK)	ND		ug/L	10.0	10.0	1	08/12/19	08/12/19 15:50	GM
n-Butylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM
sec-Butylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM
tert-Butylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM
Carbon disulfide	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM
Carbon tetrachloride	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM
Chlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM
Chloroethane	ND		ug/L	5.0	5.0	1	08/12/19	08/12/19 15:50	GM
Chloroform	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM
Chloromethane	ND		ug/L	5.0	5.0	1	08/12/19	08/12/19 15:50	GM
2-Chlorotoluene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM
4-Chlorotoluene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM
Dibromochloromethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM
1,2-Dibromo-3-chloropropane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM
1,2-Dibromoethane (EDB)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM
Dibromomethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM
1,2-Dichlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM
1,3-Dichlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM
1,4-Dichlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM
Dichlorodifluoromethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM
1,1-Dichloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM
1,2-Dichloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM
1,1-Dichloroethene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM

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Analytical Results

Project: Bates Middle School

Project Number: 701 Chase St. Annapolis, MD
Project Manager: Scott Alexander

Reported:
08/14/19 17:38

MW-6

9080802-06 (Nonpotable Water)
Sample Date: 08/07/19

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
cis-1,2-Dichloroethene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM
trans-1,2-Dichloroethene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM
Dichlorofluoromethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM
1,2-Dichloropropane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM
1,3-Dichloropropane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM
2,2-Dichloropropane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM
1,1-Dichloropropene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM
cis-1,3-Dichloropropene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM
trans-1,3-Dichloropropene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM
Diisopropyl ether (DIPE)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM
Ethyl tert-butyl ether (ETBE)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM
Ethylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM
Hexachlorobutadiene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM
2-Hexanone	ND		ug/L	10.0	10.0	1	08/12/19	08/12/19 15:50	GM
Isopropylbenzene (Cumene)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM
4-Isopropyltoluene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM
Methyl tert-butyl ether (MTBE)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM
4-Methyl-2-pentanone	ND		ug/L	10.0	10.0	1	08/12/19	08/12/19 15:50	GM
Methylene chloride	ND		ug/L	10.0	10.0	1	08/12/19	08/12/19 15:50	GM
Naphthalene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM
n-Propylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM
Styrene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM
1,1,1,2-Tetrachloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM
1,1,2,2-Tetrachloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM
Tetrachloroethene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM
Toluene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM
1,2,3-Trichlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM
1,2,4-Trichlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM
1,1,1-Trichloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM
1,1,2-Trichloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM
Trichloroethene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM
Trichlorofluoromethane (Freon 11)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM
1,2,3-Trichloropropane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM

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Analytical Results

Project: Bates Middle School

Project Number: 701 Chase St. Annapolis, MD
Project Manager: Scott Alexander

Reported:
08/14/19 17:38

MW-6

9080802-06 (Nonpotable Water)
Sample Date: 08/07/19

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
1,2,4-Trimethylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM
1,3,5-Trimethylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM
Vinyl chloride	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM
o-Xylene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM
m- & p-Xylenes	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 15:50	GM
Surrogate: 1,2-Dichloroethane-d4			*75-120*	*105 %*		*08/12/19*		*08/12/19 15:50*	
Surrogate: Toluene-d8			*75-120*	*100 %*		*08/12/19*		*08/12/19 15:50*	
Surrogate: 4-Bromofluorobenzene			*78-110*	*100 %*		*08/12/19*		*08/12/19 15:50*	
GASOLINE RANGE ORGANICS BY EPA 8015C									
Gasoline-Range Organics	ND		ug/L	100	100	1	08/10/19	08/10/19 00:09	GM
DIESEL RANGE ORGANICS BY EPA 3510/8015C									
Diesel-Range Organics	ND		mg/L	0.22	0.22	1	08/09/19	08/12/19 21:22	SJA
Surrogate: o-Terphenyl			*60-120*	*92 %*		*08/09/19*		*08/12/19 21:22*	

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Analytical Results

Project: Bates Middle School

Project Number: 701 Chase St. Annapolis, MD
Project Manager: Scott Alexander

Reported:
08/14/19 17:38

MW-7

9080802-07 (Nonpotable Water)
Sample Date: 08/07/19

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	08/12/19	08/12/19 16:16	GM
tert-Amyl alcohol (TAA)	ND		ug/L	20.0	20.0	1	08/12/19	08/12/19 16:16	GM
tert-Amyl methyl ether (TAME)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM
Benzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM
Bromobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM
Bromochloromethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM
Bromodichloromethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM
Bromoform	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM
Bromomethane	ND		ug/L	5.0	5.0	1	08/12/19	08/12/19 16:16	GM
tert-Butanol (TBA)	ND		ug/L	15.0	15.0	1	08/12/19	08/12/19 16:16	GM
2-Butanone (MEK)	ND		ug/L	10.0	10.0	1	08/12/19	08/12/19 16:16	GM
n-Butylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM
sec-Butylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM
tert-Butylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM
Carbon disulfide	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM
Carbon tetrachloride	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM
Chlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM
Chloroethane	ND		ug/L	5.0	5.0	1	08/12/19	08/12/19 16:16	GM
Chloroform	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM
Chloromethane	ND		ug/L	5.0	5.0	1	08/12/19	08/12/19 16:16	GM
2-Chlorotoluene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM
4-Chlorotoluene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM
Dibromochloromethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM
1,2-Dibromo-3-chloropropane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM
1,2-Dibromoethane (EDB)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM
Dibromomethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM
1,2-Dichlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM
1,3-Dichlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM
1,4-Dichlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM
Dichlorodifluoromethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM
1,1-Dichloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM
1,2-Dichloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM
1,1-Dichloroethene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM

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Analytical Results

Project: Bates Middle School

Project Number: 701 Chase St. Annapolis, MD
Project Manager: Scott Alexander

Reported:
08/14/19 17:38

MW-7

9080802-07 (Nonpotable Water)
Sample Date: 08/07/19

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
cis-1,2-Dichloroethene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM
trans-1,2-Dichloroethene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM
Dichlorofluoromethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM
1,2-Dichloropropane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM
1,3-Dichloropropane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM
2,2-Dichloropropane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM
1,1-Dichloropropene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM
cis-1,3-Dichloropropene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM
trans-1,3-Dichloropropene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM
Diisopropyl ether (DIPE)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM
Ethyl tert-butyl ether (ETBE)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM
Ethylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM
Hexachlorobutadiene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM
2-Hexanone	ND		ug/L	10.0	10.0	1	08/12/19	08/12/19 16:16	GM
Isopropylbenzene (Cumene)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM
4-Isopropyltoluene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM
Methyl tert-butyl ether (MTBE)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM
4-Methyl-2-pentanone	ND		ug/L	10.0	10.0	1	08/12/19	08/12/19 16:16	GM
Methylene chloride	ND		ug/L	10.0	10.0	1	08/12/19	08/12/19 16:16	GM
Naphthalene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM
n-Propylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM
Styrene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM
1,1,1,2-Tetrachloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM
1,1,2,2-Tetrachloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM
Tetrachloroethene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM
Toluene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM
1,2,3-Trichlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM
1,2,4-Trichlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM
1,1,1-Trichloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM
1,1,2-Trichloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM
Trichloroethene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM
Trichlorofluoromethane (Freon 11)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM
1,2,3-Trichloropropane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM

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www.mdspectral.com

Analytical Results

Project: Bates Middle School

Project Number: 701 Chase St. Annapolis, MD
Project Manager: Scott Alexander

Reported:
08/14/19 17:38

MW-7

9080802-07 (Nonpotable Water)
Sample Date: 08/07/19

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
1,2,4-Trimethylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM
1,3,5-Trimethylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM
Vinyl chloride	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM
o-Xylene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM
m- & p-Xylenes	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:16	GM
Surrogate: 1,2-Dichloroethane-d4			*75-120*	*105 %*		*08/12/19*		*08/12/19 16:16*	
Surrogate: Toluene-d8			*75-120*	*101 %*		*08/12/19*		*08/12/19 16:16*	
Surrogate: 4-Bromofluorobenzene			*78-110*	*99 %*		*08/12/19*		*08/12/19 16:16*	
GASOLINE RANGE ORGANICS BY EPA 8015C									
Gasoline-Range Organics	ND		ug/L	100	100	1	08/10/19	08/10/19 00:46	GM
DIESEL RANGE ORGANICS BY EPA 3510/8015C									
Diesel-Range Organics	ND		mg/L	0.22	0.22	1	08/09/19	08/12/19 21:49	SJA
Surrogate: o-Terphenyl			*60-120*	*88 %*		*08/09/19*		*08/12/19 21:49*	

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Analytical Results

Project: Bates Middle School

Project Number: 701 Chase St. Annapolis, MD
Project Manager: Scott Alexander

Reported:
08/14/19 17:38

MW-8

9080802-08 (Nonpotable Water)
Sample Date: 08/07/19

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	08/12/19	08/12/19 16:41	GM
tert-Amyl alcohol (TAA)	ND		ug/L	20.0	20.0	1	08/12/19	08/12/19 16:41	GM
tert-Amyl methyl ether (TAME)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM
Benzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM
Bromobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM
Bromochloromethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM
Bromodichloromethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM
Bromoform	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM
Bromomethane	ND		ug/L	5.0	5.0	1	08/12/19	08/12/19 16:41	GM
tert-Butanol (TBA)	ND		ug/L	15.0	15.0	1	08/12/19	08/12/19 16:41	GM
2-Butanone (MEK)	ND		ug/L	10.0	10.0	1	08/12/19	08/12/19 16:41	GM
n-Butylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM
sec-Butylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM
tert-Butylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM
Carbon disulfide	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM
Carbon tetrachloride	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM
Chlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM
Chloroethane	ND		ug/L	5.0	5.0	1	08/12/19	08/12/19 16:41	GM
Chloroform	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM
Chloromethane	ND		ug/L	5.0	5.0	1	08/12/19	08/12/19 16:41	GM
2-Chlorotoluene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM
4-Chlorotoluene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM
Dibromochloromethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM
1,2-Dibromo-3-chloropropane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM
1,2-Dibromoethane (EDB)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM
Dibromomethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM
1,2-Dichlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM
1,3-Dichlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM
1,4-Dichlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM
Dichlorodifluoromethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM
1,1-Dichloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM
1,2-Dichloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM
1,1-Dichloroethene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM

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Analytical Results

Project: Bates Middle School

Project Number: 701 Chase St. Annapolis, MD
Project Manager: Scott Alexander

Reported:
08/14/19 17:38

MW-8

9080802-08 (Nonpotable Water)
Sample Date: 08/07/19

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
cis-1,2-Dichloroethene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM
trans-1,2-Dichloroethene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM
Dichlorofluoromethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM
1,2-Dichloropropane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM
1,3-Dichloropropane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM
2,2-Dichloropropane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM
1,1-Dichloropropene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM
cis-1,3-Dichloropropene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM
trans-1,3-Dichloropropene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM
Diisopropyl ether (DIPE)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM
Ethyl tert-butyl ether (ETBE)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM
Ethylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM
Hexachlorobutadiene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM
2-Hexanone	ND		ug/L	10.0	10.0	1	08/12/19	08/12/19 16:41	GM
Isopropylbenzene (Cumene)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM
4-Isopropyltoluene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM
Methyl tert-butyl ether (MTBE)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM
4-Methyl-2-pentanone	ND		ug/L	10.0	10.0	1	08/12/19	08/12/19 16:41	GM
Methylene chloride	ND		ug/L	10.0	10.0	1	08/12/19	08/12/19 16:41	GM
Naphthalene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM
n-Propylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM
Styrene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM
1,1,1,2-Tetrachloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM
1,1,2,2-Tetrachloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM
Tetrachloroethene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM
Toluene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM
1,2,3-Trichlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM
1,2,4-Trichlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM
1,1,1-Trichloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM
1,1,2-Trichloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM
Trichloroethene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM
Trichlorofluoromethane (Freon 11)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM
1,2,3-Trichloropropane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM

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Analytical Results

Project: Bates Middle School

Project Number: 701 Chase St. Annapolis, MD
Project Manager: Scott Alexander

Reported:
08/14/19 17:38

MW-8

9080802-08 (Nonpotable Water)
Sample Date: 08/07/19

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
1,2,4-Trimethylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM
1,3,5-Trimethylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM
Vinyl chloride	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM
o-Xylene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM
m- & p-Xylenes	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 16:41	GM
Surrogate: 1,2-Dichloroethane-d4			*75-120*	*107 %*	*08/12/19*		*08/12/19 16:41*		
Surrogate: Toluene-d8			*75-120*	*100 %*	*08/12/19*		*08/12/19 16:41*		
Surrogate: 4-Bromofluorobenzene			*78-110*	*98 %*	*08/12/19*		*08/12/19 16:41*		
GASOLINE RANGE ORGANICS BY EPA 8015C									
Gasoline-Range Organics	ND		ug/L	100	100	1	08/10/19	08/10/19 01:24	GM
DIESEL RANGE ORGANICS BY EPA 3510/8015C									
Diesel-Range Organics	ND		mg/L	0.25	0.25	1	08/09/19	08/12/19 22:44	SJA
Surrogate: o-Terphenyl			*60-120*	*91 %*	*08/09/19*		*08/12/19 22:44*		

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Analytical Results

Project: Bates Middle School

Project Number: 701 Chase St. Annapolis, MD
Project Manager: Scott Alexander

Reported:
08/14/19 17:38

MW-10

9080802-09 (Nonpotable Water)
Sample Date: 08/07/19

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	08/12/19	08/12/19 17:07	GM
tert-Amyl alcohol (TAA)	ND		ug/L	20.0	20.0	1	08/12/19	08/12/19 17:07	GM
tert-Amyl methyl ether (TAME)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM
Benzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM
Bromobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM
Bromochloromethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM
Bromodichloromethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM
Bromoform	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM
Bromomethane	ND		ug/L	5.0	5.0	1	08/12/19	08/12/19 17:07	GM
tert-Butanol (TBA)	ND		ug/L	15.0	15.0	1	08/12/19	08/12/19 17:07	GM
2-Butanone (MEK)	ND		ug/L	10.0	10.0	1	08/12/19	08/12/19 17:07	GM
n-Butylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM
sec-Butylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM
tert-Butylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM
Carbon disulfide	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM
Carbon tetrachloride	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM
Chlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM
Chloroethane	ND		ug/L	5.0	5.0	1	08/12/19	08/12/19 17:07	GM
Chloroform	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM
Chloromethane	ND		ug/L	5.0	5.0	1	08/12/19	08/12/19 17:07	GM
2-Chlorotoluene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM
4-Chlorotoluene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM
Dibromochloromethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM
1,2-Dibromo-3-chloropropane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM
1,2-Dibromoethane (EDB)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM
Dibromomethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM
1,2-Dichlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM
1,3-Dichlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM
1,4-Dichlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM
Dichlorodifluoromethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM
1,1-Dichloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM
1,2-Dichloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM
1,1-Dichloroethene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM

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Analytical Results

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Project: Bates Middle School

Project Number: 701 Chase St. Annapolis, MD
Project Manager: Scott Alexander

Reported:
08/14/19 17:38

MW-10

9080802-09 (Nonpotable Water)
Sample Date: 08/07/19

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
cis-1,2-Dichloroethene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM
trans-1,2-Dichloroethene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM
Dichlorofluoromethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM
1,2-Dichloropropane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM
1,3-Dichloropropane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM
2,2-Dichloropropane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM
1,1-Dichloropropene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM
cis-1,3-Dichloropropene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM
trans-1,3-Dichloropropene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM
Diisopropyl ether (DIPE)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM
Ethyl tert-butyl ether (ETBE)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM
Ethylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM
Hexachlorobutadiene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM
2-Hexanone	ND		ug/L	10.0	10.0	1	08/12/19	08/12/19 17:07	GM
Isopropylbenzene (Cumene)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM
4-Isopropyltoluene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM
Methyl tert-butyl ether (MTBE)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM
4-Methyl-2-pentanone	ND		ug/L	10.0	10.0	1	08/12/19	08/12/19 17:07	GM
Methylene chloride	ND		ug/L	10.0	10.0	1	08/12/19	08/12/19 17:07	GM
Naphthalene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM
n-Propylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM
Styrene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM
1,1,1,2-Tetrachloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM
1,1,2,2-Tetrachloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM
Tetrachloroethene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM
Toluene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM
1,2,3-Trichlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM
1,2,4-Trichlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM
1,1,1-Trichloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM
1,1,2-Trichloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM
Trichloroethene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM
Trichlorofluoromethane (Freon 11)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM
1,2,3-Trichloropropane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM

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Will Brewington, President

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1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: Bates Middle School

Project Number: 701 Chase St. Annapolis, MD
Project Manager: Scott Alexander

Reported:
08/14/19 17:38

MW-10

9080802-09 (Nonpotable Water)
Sample Date: 08/07/19

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
1,2,4-Trimethylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM
1,3,5-Trimethylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM
Vinyl chloride	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM
o-Xylene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM
m- & p-Xylenes	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:07	GM
Surrogate: 1,2-Dichloroethane-d4			*75-120*	*104 %*		*08/12/19*		*08/12/19 17:07*	
Surrogate: Toluene-d8			*75-120*	*100 %*		*08/12/19*		*08/12/19 17:07*	
Surrogate: 4-Bromofluorobenzene			*78-110*	*97 %*		*08/12/19*		*08/12/19 17:07*	
GASOLINE RANGE ORGANICS BY EPA 8015C									
Gasoline-Range Organics	ND		ug/L	100	100	1	08/10/19	08/10/19 02:01	GM
DIESEL RANGE ORGANICS BY EPA 3510/8015C									
Diesel-Range Organics	ND		mg/L	0.23	0.23	1	08/09/19	08/12/19 23:12	SJA
Surrogate: o-Terphenyl			*60-120*	*92 %*		*08/09/19*		*08/12/19 23:12*	

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Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: Bates Middle School

Project Number: 701 Chase St. Annapolis, MD
Project Manager: Scott Alexander

Reported:
08/14/19 17:38

Notes and Definitions

S-FAIL	Surrogate recovery was outside of established QC limits
J	Detected but below the reporting limit; therefore, result is an estimated concentration (CLP J-Flag).
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
%-Solids	Percent Solids is a supportive test and as such does not require accreditation

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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

Company Name:	Project Manager:
Petroleum Management, Inc.	**Scott Alexander**
Project Name: Bates Middle School	Project ID: 701 Chase St.
Sampler(s): S. Alexander, K. Potts	P.O. Number: Annapolis, MD

Matrix Codes: NW (nonpotable water), PW (potable water)

Field Sample ID	Date	Time	Water	Soil	Other	No. of Containers	TPH-DRO (8015)	TPH-GRO (8015)	Total VOC (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
MDE-1	8/7/19	11:08	X			3	X	X	X			1080802-01
MDE-2		10:07	X			3	X	X	X			-02
MDE-3		08:45	X			3	X	X	X			-03
MW-4		13:10	X			3	X	X	X			-04
MW-5		12:21	X			3	X	X	X			-05
MW-6		12:52	X			3	X	X	X			-06
MW-7		09:32	X			3	X	X	X			-07
MW-8		11:53	X			3	X	X	X			-08
MW-10	↓	10:37	X			3	X	X	X			-09

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Donald Wolfe	8/8/19 0938				
(Printed) DONALD WOLFE		(Printed) Samantha Chan	(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: 4.4 °C
- ☑ Received on Ice
- ☐ Received same day
- ☐ Preservation Appropriate

Delivery Method:
- ☐ Courier
- ☒ Client
- ☐ UPS
- ☐ FedEx
- ☐ USPS
- ☐ Other: _____

Special Instructions/QC Requirements & Comments:
MDE Case # 18-0559-AA
Initial MW Sampling

Sample Disposal:
- ☐ Return to Client
- ☐ Disposal by lab
- ☐ Archive for _____ days

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
VELAP ID 460040

14 August 2019

Scott Alexander
Petroleum Management, Inc.
2138 Priest Bridge Ct., STE 10
Crofton, MD 21114-2450
RE: Bates Middle School

Enclosed are the results of analyses for samples received by the laboratory on 08/09/19 10:13.

Maryland Spectral Services, Inc. is a TNI 2009 Standard accredited laboratory and as such, all analyses performed at Maryland Spectral Services included in this report are 2009 TNI certified except as indicated at the end of this report. Please visit our website at www.mdspectral.com for a complete listing of our TNI 2009 Standard accreditations.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Will Brewington
President

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: Bates Middle School

Project Number: 701 Chase St. Annapolis, MD
Project Manager: Scott Alexander

Reported:
08/14/19 17:46

Client Sample ID	Alternate Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TF-1		9080903-01	Nonpotable Water	08/08/19 14:00	08/09/19 10:13
TF-2		9080903-02	Nonpotable Water	08/08/19 14:20	08/09/19 10:13

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Analytical Results

Project: Bates Middle School

Project Number: 701 Chase St. Annapolis, MD
Project Manager: Scott Alexander

Reported:
08/14/19 17:46

TF-1

9080903-01 (Nonpotable Water)
Sample Date: 08/08/19

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	08/12/19	08/12/19 17:33	GM
tert-Amyl alcohol (TAA)	ND		ug/L	20.0	20.0	1	08/12/19	08/12/19 17:33	GM
tert-Amyl methyl ether (TAME)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM
Benzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM
Bromobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM
Bromochloromethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM
Bromodichloromethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM
Bromoform	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM
Bromomethane	ND		ug/L	5.0	5.0	1	08/12/19	08/12/19 17:33	GM
tert-Butanol (TBA)	ND		ug/L	15.0	15.0	1	08/12/19	08/12/19 17:33	GM
2-Butanone (MEK)	ND		ug/L	10.0	10.0	1	08/12/19	08/12/19 17:33	GM
n-Butylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM
sec-Butylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM
tert-Butylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM
Carbon disulfide	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM
Carbon tetrachloride	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM
Chlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM
Chloroethane	ND		ug/L	5.0	5.0	1	08/12/19	08/12/19 17:33	GM
Chloroform	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM
Chloromethane	ND		ug/L	5.0	5.0	1	08/12/19	08/12/19 17:33	GM
2-Chlorotoluene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM
4-Chlorotoluene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM
Dibromochloromethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM
1,2-Dibromo-3-chloropropane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM
1,2-Dibromoethane (EDB)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM
Dibromomethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM
1,2-Dichlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM
1,3-Dichlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM
1,4-Dichlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM
Dichlorodifluoromethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM
1,1-Dichloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM
1,2-Dichloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM
1,1-Dichloroethene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM

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Analytical Results

Project: Bates Middle School

Project Number: 701 Chase St. Annapolis, MD
Project Manager: Scott Alexander

Reported:
08/14/19 17:46

TF-1

9080903-01 (Nonpotable Water)
Sample Date: 08/08/19

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
cis-1,2-Dichloroethene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM
trans-1,2-Dichloroethene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM
Dichlorofluoromethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM
1,2-Dichloropropane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM
1,3-Dichloropropane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM
2,2-Dichloropropane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM
1,1-Dichloropropene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM
cis-1,3-Dichloropropene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM
trans-1,3-Dichloropropene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM
Diisopropyl ether (DIPE)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM
Ethyl tert-butyl ether (ETBE)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM
Ethylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM
Hexachlorobutadiene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM
2-Hexanone	ND		ug/L	10.0	10.0	1	08/12/19	08/12/19 17:33	GM
Isopropylbenzene (Cumene)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM
4-Isopropyltoluene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM
Methyl tert-butyl ether (MTBE)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM
4-Methyl-2-pentanone	ND		ug/L	10.0	10.0	1	08/12/19	08/12/19 17:33	GM
Methylene chloride	ND		ug/L	10.0	10.0	1	08/12/19	08/12/19 17:33	GM
Naphthalene	**3.3**		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM
n-Propylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM
Styrene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM
1,1,1,2-Tetrachloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM
1,1,2,2-Tetrachloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM
Tetrachloroethene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM
Toluene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM
1,2,3-Trichlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM
1,2,4-Trichlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM
1,1,1-Trichloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM
1,1,2-Trichloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM
Trichloroethene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM
Trichlorofluoromethane (Freon 11)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM
1,2,3-Trichloropropane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM

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Analytical Results

Project: Bates Middle School

Project Number: 701 Chase St. Annapolis, MD
Project Manager: Scott Alexander

Reported:
08/14/19 17:46

TF-1

9080903-01 (Nonpotable Water)
Sample Date: 08/08/19

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
1,2,4-Trimethylbenzene	**1.9**	J	ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM
1,3,5-Trimethylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM
Vinyl chloride	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM
o-Xylene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM
m- & p-Xylenes	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:33	GM
Surrogate: 1,2-Dichloroethane-d4			*75-120*	*105 %*		*08/12/19*		*08/12/19 17:33*	
Surrogate: Toluene-d8			*75-120*	*102 %*		*08/12/19*		*08/12/19 17:33*	
Surrogate: 4-Bromofluorobenzene			*78-110*	*97 %*		*08/12/19*		*08/12/19 17:33*	
GASOLINE RANGE ORGANICS BY EPA 8015C									
Gasoline-Range Organics	ND		ug/L	100	100	1	08/12/19	08/12/19 16:35	GM
DIESEL RANGE ORGANICS BY EPA 3510/8015C									
Diesel-Range Organics	**0.86**		mg/L	0.24	0.24	1	08/12/19	08/13/19 22:36	SJA
Surrogate: o-Terphenyl			*60-120*	*108 %*		*08/12/19*		*08/13/19 22:36*	

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Will Brewington, President

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Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: Bates Middle School

Project Number: 701 Chase St. Annapolis, MD
Project Manager: Scott Alexander

Reported:
08/14/19 17:46

TF-2

9080903-02 (Nonpotable Water)
Sample Date: 08/08/19

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS)									
Acetone	**17.7**		ug/L	10.0	10.0	1	08/12/19	08/12/19 17:58	GM
tert-Amyl alcohol (TAA)	ND		ug/L	20.0	20.0	1	08/12/19	08/12/19 17:58	GM
tert-Amyl methyl ether (TAME)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM
Benzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM
Bromobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM
Bromochloromethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM
Bromodichloromethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM
Bromoform	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM
Bromomethane	ND		ug/L	5.0	5.0	1	08/12/19	08/12/19 17:58	GM
tert-Butanol (TBA)	ND		ug/L	15.0	15.0	1	08/12/19	08/12/19 17:58	GM
2-Butanone (MEK)	ND		ug/L	10.0	10.0	1	08/12/19	08/12/19 17:58	GM
n-Butylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM
sec-Butylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM
tert-Butylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM
Carbon disulfide	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM
Carbon tetrachloride	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM
Chlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM
Chloroethane	ND		ug/L	5.0	5.0	1	08/12/19	08/12/19 17:58	GM
Chloroform	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM
Chloromethane	ND		ug/L	5.0	5.0	1	08/12/19	08/12/19 17:58	GM
2-Chlorotoluene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM
4-Chlorotoluene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM
Dibromochloromethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM
1,2-Dibromo-3-chloropropane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM
1,2-Dibromoethane (EDB)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM
Dibromomethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM
1,2-Dichlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM
1,3-Dichlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM
1,4-Dichlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM
Dichlorodifluoromethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM
1,1-Dichloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM
1,2-Dichloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM
1,1-Dichloroethene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM

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Analytical Results

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410-247-7600
www.mdspectral.com

Project: Bates Middle School

Project Number: 701 Chase St. Annapolis, MD
Project Manager: Scott Alexander

Reported:
08/14/19 17:46

TF-2

9080903-02 (Nonpotable Water)
Sample Date: 08/08/19

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
cis-1,2-Dichloroethene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM
trans-1,2-Dichloroethene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM
Dichlorofluoromethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM
1,2-Dichloropropane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM
1,3-Dichloropropane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM
2,2-Dichloropropane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM
1,1-Dichloropropene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM
cis-1,3-Dichloropropene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM
trans-1,3-Dichloropropene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM
Diisopropyl ether (DIPE)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM
Ethyl tert-butyl ether (ETBE)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM
Ethylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM
Hexachlorobutadiene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM
2-Hexanone	ND		ug/L	10.0	10.0	1	08/12/19	08/12/19 17:58	GM
Isopropylbenzene (Cumene)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM
4-Isopropyltoluene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM
Methyl tert-butyl ether (MTBE)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM
4-Methyl-2-pentanone	ND		ug/L	10.0	10.0	1	08/12/19	08/12/19 17:58	GM
Methylene chloride	ND		ug/L	10.0	10.0	1	08/12/19	08/12/19 17:58	GM
Naphthalene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM
n-Propylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM
Styrene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM
1,1,1,2-Tetrachloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM
1,1,2,2-Tetrachloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM
Tetrachloroethene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM
Toluene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM
1,2,3-Trichlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM
1,2,4-Trichlorobenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM
1,1,1-Trichloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM
1,1,2-Trichloroethane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM
Trichloroethene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM
Trichlorofluoromethane (Freon 11)	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM
1,2,3-Trichloropropane	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM

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Analytical Results

Project: Bates Middle School

Project Number: 701 Chase St. Annapolis, MD
Project Manager: Scott Alexander

Reported:
08/14/19 17:46

TF-2

9080903-02 (Nonpotable Water)
Sample Date: 08/08/19

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)									
1,2,4-Trimethylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM
1,3,5-Trimethylbenzene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM
Vinyl chloride	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM
o-Xylene	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM
m- & p-Xylenes	ND		ug/L	2.0	1.0	1	08/12/19	08/12/19 17:58	GM
Surrogate: 1,2-Dichloroethane-d4			*75-120*	*105 %*		*08/12/19*		*08/12/19 17:58*	
Surrogate: Toluene-d8			*75-120*	*101 %*		*08/12/19*		*08/12/19 17:58*	
Surrogate: 4-Bromofluorobenzene			*78-110*	*98 %*		*08/12/19*		*08/12/19 17:58*	
GASOLINE RANGE ORGANICS BY EPA 8015C									
Gasoline-Range Organics	ND		ug/L	100	100	1	08/12/19	08/12/19 17:12	GM
DIESEL RANGE ORGANICS BY EPA 3510/8015C									
Diesel-Range Organics	**0.94**		mg/L	0.28	0.28	1	08/12/19	08/13/19 23:04	SJA
Surrogate: o-Terphenyl			*60-120*	*107 %*		*08/12/19*		*08/13/19 23:04*	

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Project: Bates Middle School

Project Number: 701 Chase St. Annapolis, MD
Project Manager: Scott Alexander

Reported:
08/14/19 17:46

Notes and Definitions

J	Detected but below the reporting limit; therefore, result is an estimated concentration (CLP J-Flag).
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
%-Solids	Percent Solids is a supportive test and as such does not require accreditation

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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

Company Name: **Petroleum Management, Inc.**

Project Manager: **Scott Alexander**

Project Name: Bates Middle School

Project ID: 701 Chase St. Annapolis, MD

Sampler(s): S. Alexander

P.O. Number:

Matrix Codes: NW (nonpotable water) PW (potable water)

Field Sample ID	Date	Time	Water	Soil	Other	No. of Containers	TPH-DRO (8015)	TPH-GRO (8015)	Total VOC (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
TF-1	8/8/19	14:00	X			3	X	X	X	1+1 HCL		19080903-01
TF-2	8/8/19	14:20	X			3	X	X	X			-02

Relinquished by: *(Signature)* Donald Wolfe
(Printed) DONALD WOLFE
Date/Time
Received by: *(Signature)*
(Printed)

Relinquished by: *(Signature)*
(Printed)
Date/Time
Received by: *(Signature)*
(Printed)

Relinquished by: *(Signature)*
(Printed)
Date/Time: 8/9/19 1013
Received by Lab: *(Signature)*
(Printed) Grady Mulhall

Turn Around Time:
- ☑ Normal (7 day)
- ☐ 5 day
- ☐ 4 day
- ☐ 3 day
- ☐ Rush (2 day)
- ☐ Next Day
- ☐ Other: _____
- ☐ Specific Due Date: _____

Lab Use:
Temp: 3.0 °C
- ☑ Received on Ice
- ☐ Received same day
- ☐ Preservation Appropriate

Delivery Method:
- ☐ Courier
- ☐ Client
- ☐ UPS
- ☐ FedEx
- ☐ USPS
- ☐ Other: _____

Special Instructions/QC Requirements & Comments:
Tank Field Water Samples
MDE Case # 18-0559-AA

Sample Disposal:
- ☐ Return to Client
- ☐ Disposal by lab
- ☐ Archive for _____ days