



Strong Advocates, Effective Solutions, Integrated Implementation

March 30, 2022

Mr. Andrew Zwack  
Project Manager  
New York State Department of Environmental Conservation  
Division of Environmental Remediation, Region 9  
270 Michigan Avenue  
Buffalo, New York 14203-2915

Re: Tecumseh Redevelopment Inc., Lackawanna, NY Site  
ATP SWMU Group ECM  
Annual Monitoring & Maintenance Summary Report  
Reporting Period January 1- December 31, 2021

Dear Mr. Zwack:

On behalf of Tecumseh Redevelopment Inc., TurnKey Environmental Restoration, LLC (TurnKey) is herein providing the Annual Monitoring and Maintenance Summary Report for the Acid Tar Pits (ATP) Solid Waste Management Unit (SWMU) Group Expedited Corrective Measure (ECM) for calendar year 2021. This summary report has been prepared in accordance with the monitoring requirements contained in the Operation, Maintenance, and Monitoring (OM&M) Plan (May 2017).

## **1.0 BACKGROUND**

The ATP-ECM is comprised of three remedial components: a soil-bentonite slurry wall keyed into native confining soils; a cover system; and a groundwater collection and pretreatment system. The approximately 40-foot-deep soil-bentonite slurry wall (the lateral component of the containment cell), was completed in the fall of 2011 and surrounds SWMUs S-11 and S-22 (see Figure 1).

In 2012, waste/fill from SWMU S-24 was excavated, transported, and consolidated within the containment cell, and partially covered with a final low-permeability multi-layer geosynthetic cover around the perimeter with just a temporary soil cover in the center to allow addition wastes to be subsequently consolidated there. Groundwater/leachate extraction wells EW-1 and EW-2, installed within the containment cell, were activated in December 2012 (see Figure 1 for locations). Groundwater/leachate is extracted from these wells via submersible pumps and conveyed to an onsite pretreatment system incorporating oil/water separation, filtration, pH adjustment and air stripping unit processes. The pretreated water is discharged to the plant sanitary sewer and ultimately the publicly operated sewerage system under a discharge permit with Erie County Sewer District No. 6. A third

extraction well (EW-3) originally installed within the northern portion of the containment cell was not used due to localized groundwater quality (e.g., low pH, foaming) and other waste fill characteristics (e.g., low hydraulic conductivity) proximate to the well screen. A replacement well for EW-3, deemed “EW-3R,” was installed in the northwestern portion of the cell near piezometer P-62D (see Figure 1) and became operational in August 2015.

Final waste consolidation and cover system construction was completed in late 2015. This phase of the remedial work, deemed Operable Units (OU) 2 and 3 respectively, is detailed in the January 2016 Construction Completion Report (CCR) prepared by Benchmark Environmental Engineering & Science, PLLC (Benchmark) in association with TurnKey.

### **Downgradient Pumping Well Installation**

The results of the RCRA Corrective Measures Study (CMS) indicated that prior to the construction of the ATP-ECM containment cell, contamination from the Acid Tar Pits area had migrated northerly towards Smokes Creek. Although significant improvement in groundwater quality was observed following containment cell construction, downgradient concentrations in groundwater outside the ATP containment cell remained at levels significantly above NY Groundwater Quality Standards. TurnKey prepared a conceptual remedial approach for this groundwater in a report titled “Engineering Report for Acid Tar Pit (ATP) SWMU Group Operable Unit OU-2<sup>1</sup> - External Groundwater Corrective Measure” dated April 2014 which was approved for implementation by the NYSDEC.

The external groundwater corrective measure called for installation of four groundwater pumping wells (PW-1 through PW-4) between the containment cell and Smokes Creek, with discharge from the external pumping wells directed via a new force main to the ATP pretreatment system. The new wells were installed and placed into service in Fall of 2015. Details of the pumping well and force main construction were provided to the Department in an April 2016 amendment to the February 2013 ATP SWMU Group Phase III Construction Completion Report. Both interior and exterior pumping well set-point elevations are controlled from the pretreatment building and are operated to maintain a delicate balance between slight drawdown from static conditions in exterior pumping wells while maintaining an inward gradient across the containment wall.

### **Interior Extraction Well Maintenance and Replacement**

Indications of screen clogging were observed in early 2019 at the extraction wells within the containment cell. Well redevelopment work was performed in June 2019. The post-redevelopment recovery rates were similar to those observed when EW-1 and EW-3R were first installed (5 gpm and 0.4 gpm, respectively), but the recovery rate measured at EW-2 (0.2 gpm in June 2019) was nearly an order of magnitude below initial recovery rate (1.4 gpm).

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<sup>1</sup> OU-2 was re-designated by the NYSDEC to OU-3 in April 2015.

Based upon the significant drop in the recovery rate at EW-2 and the comparatively low recovery rate at EW-3R, Tecumseh elected to replace those wells via over-drilling and install replacement wells with an improved screen/sand pack design at the same locations. Between the period of August - September 2019, EW-2 and EW-3R wells were over-drilled and reinstalled with replacement Schedule 80 PVC wells fitted with 20-foot PVC wedge wire (aka V-wire) screens. The wedge wire design and increased screen length<sup>2</sup> was designed to improve recovery performance by allowing a larger, more direct path for groundwater to enter the well. Wedge wire screens are also more resistant to clogging/fouling than conventional slotted screen, thereby providing greater long-term reliability.

The wells were built with one-foot sumps in the bottom followed by the 20-foot screen, with the PVC riser extending into the manhole. Sand was placed around the sump, screen and the bottom 4-feet of the riser followed by two-feet of bentonite and soil cuttings up to the bottom of the manhole. The new wells were developed using a surge and purge method employing the drill rig for surging.

Groundwater recovery rates were measured following purging. The recovery rate at EW-2 increased significantly, climbing from 0.2 gpm to 6 gpm following replacement. The recovery rate at well EW-3R increased by approximately 75% from 0.4 gpm to 0.7 gpm.

## **2.0 GROUNDWATER CAPTURE SYSTEM PERFORMANCE**

During 2021, the groundwater elevations in the network of wells and piezometers within and surrounding the ATP containment cell was monitored on a minimum quarterly basis per the OM&M Plan. Table 1 presents groundwater elevation data obtained on March 30, June 29, September 28, and December 28, 2021. Isopotential maps corresponding to each of these events are presented as Figures 2 through 5. When generating the groundwater contours at paired wells, the well that is screened in the sand layer is used because the extraction wells and piezometers are all screened in the sand layer. We have used wells screened in the fill layer (i.e., MWS-02, MWS-03, MWS-15, and MWS-29A) to expand the view and “fill in” data points for the isopotential map where wells completed in the sand layer are fewer or farther apart.

The isopotential maps all illustrate pronounced inward gradient toward the extraction wells within the interior of the containment cell reflecting active removal of contained groundwater from contained saturated soil/fill porous media. An inward gradient across the slurry wall was achieved after the replacement wells were installed and placed back into service. This reflects effective hydraulic control being achieved by the combined effects of the lateral low-permeability slurry wall barrier, low infiltration through the geocomposite cover system, and improved interior groundwater extraction (from the redevelopment of interior groundwater extraction well EW-1 and the replacement of interior groundwater extraction wells EW-2 and EW-3R). The isopotential maps also clearly indicate that the

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<sup>2</sup> Original wells were fitted with 5-foot conventional slotted screen.

exterior groundwater pumping wells (ATP- PW1, -PW2, -PW3, and -PW4) are effectively capturing impacted groundwater that escaped the ATP SWMU Group prior to implementation of the final ATP-ECM remedy.

Table 1 shows a significant elevation difference between the well pair MWS-23A and MWS-23B. The significant groundwater elevation difference between MWS-23A and MWS-23B is likely due to a zone of very dense material located between the screened zones of these two wells. When reviewing the boring log for MWS-23B there is a zone just above the sand layer that is very dense with drilling blow counts of greater than 50 blows to advance 0.4 feet. We believe this very dense layer is acting as an aquitard and causing a localized perched water table. The screened interval of MWS-23A is located above the dense layer and is able to observe the localized perch water table. The screened zone for MWS-23B is located below the dense layer and not subject to the localized perched water table.

### **3.0 GROUNDWATER PRETREATMENT SYSTEM PERFORMANCE**

The groundwater pretreatment system was generally operated without interruption during the current monitoring period except for short-duration shutdowns related to routine maintenance (e.g., cleaning of the air stripper, changing out bag filters, etc.).

#### **Groundwater Pretreatment System Maintenance**

Major routine and non-routine maintenance events as well as alarm conditions/corrective actions taken during the reporting period are listed on Table 2. The recorded hours of operation and cycle counts for 2021 are presented for each of the extraction and pumping wells on Table 3.

#### **Groundwater Pretreatment System Effluent Monitoring**

Attachment 1 includes the April 2021 and October 2021 Semi-Annual Reports submitted to Erie County Sewer District No. 6. As presented in these reports, the pretreatment system effluent flow, pH, and regulated parameter concentrations were conformant with the permitted discharge limits during both events.

#### **Groundwater Extraction Volumes**

The pretreatment system process flow rate and total gallons treated are monitored on the process discharge line via a flow sensor and transmitter. Similarly, a flow sensor and transmitter is located on the extraction well manifold in the pretreatment building. The total flow through the pretreatment system during the period of December 27, 2020 through December 30, 2021 was approximately 534,000 gallons. For that same period, approximately 264,000 gallons of groundwater was collected by the interior extraction wells based upon the readings recorded on the extraction well flow meter. Table 4 provides a summary of the pretreatment system flow readings with monthly and yearly totals. During the current monitoring period, the interior groundwater extraction well volume was measured to be approximately 49% of the total flow processed through the pretreatment system, with the remaining 51% produced by the exterior groundwater extraction wells. As

the containment cell has dewatered, the ratio has shifted, with the interior extraction wells producing lesser amounts and the exterior extraction wells staying roughly the same with some seasonal variation.

In accordance with NYSDEC's request, Table 5 presents a summary of the volume of groundwater processed through the pretreatment system and the estimated breakdown between interior and exterior extraction well volumes beginning in 2016. Annual rainfall precipitation amounts are also summarized for this period on Table 5. Note that prior to 2019 the flows and associated ratio between interior and exterior flows was determined by multiplying the cycle counts by the approximate volume of water removed between on and off setpoints, which was assumed to include the volume of water within the well casing and surrounding sand pack. Following the installation of the interior extraction well flow meter in November 2019, the ratio between interior and exterior flow is more accurate.

#### **4.0 GROUNDWATER QUALITY MONITORING**

In accordance with the approved OM&M Plan, monitoring wells MWS-02, MWS-18A, MWS-18C, MWS-19A, MWS-19B, MWS-20A, and MWS-20B located downgradient of the containment cell are sampled annually in April for analysis of Target Compound List (TCL) volatile organic compounds (VOCs), TCL semi-volatile organic compounds (SVOCs), arsenic, barium, chromium, lead, and cyanide. The primary constituents of concern (COCs) that are historically prevalent in groundwater in and around the ATP at concentrations in excess of the groundwater quality standards (GWQS) are benzene, phenolics, PAHs and cyanide.

Sample results from April 2021 are summarized on Table 6 along with historical data from prior sampling events. The groundwater monitoring laboratory analytical data package is included in Attachment 2. Time versus concentration plots for BTEX (sum of benzene, toluene, ethylbenzene, and xylene) and cyanide are in Attachment 3. The data have been entered into the NYSDEC's EQulS database. The BTEX plot and Table 6 clearly illustrate that since the completion of the slurry wall (part of ECM remedial measures) nearly ten years ago, concentrations of these COCs in the most impacted groundwater monitoring wells (i.e., MWS-18A/C and MWS-19A/B) have decreased considerably. In fact, BTEX levels at MWS 18A/C have decreased by 97% and 97% percent, respectively, and BTEX levels at MWS 19A/B have decreased by 84% and 99% percent, respectively. Similarly, cyanide concentrations at MWS 18A/C have decreased by 50% and 90% percent, respectively, and cyanide levels at MWS 19A/B have decreased by 79% and 60% percent, respectively. Further evaluation of the BTEX data shows all wells have decreased by at least one order of magnitude and are continuing an overall downward trend. Table 6 also shows that BTEX concentrations in groundwater monitoring wells MWS-02 and MWS-20A/B that are not directly downgradient of the ATP are historically not significantly above GWQS and have a slightly decreasing trend. Phenolic concentrations in ATP area groundwater show downward trends with all downgradient monitoring wells near or below groundwater quality standards except MWS-18C. The cyanide concentrations have been trending downward and are

approaching or below the GWQS in all downgradient monitoring wells except MWS-02. The cyanide concentration at MWS-02 remains above GWQS and has been somewhat erratic but has trended downward since 2018.

## **5.0 COVER SYSTEM MONITORING**

A completed Post-Closure Field Inspection Report is included in Attachment 4. As presented in Attachment 4, the cover system, stormwater pond, and conveyance piping are in good condition and no corrective actions are required at this time.

## **6.0 CONCLUSIONS AND RECOMMENDATIONS**

The groundwater pretreatment system is functioning as intended and in compliance with discharge permit limits. Significant improvement in interior extraction well performance occurred following redevelopment of EW-1 and replacement of EW-2 and EW-3R. The containment cell inward gradient was re-established across the slurry wall perimeter. The exterior groundwater extraction wells are performing as designed to control impacted groundwater immediately downgradient of the containment cell.

Please contact us if you have any questions or require additional information.

Sincerely,  
TurnKey Environmental Restoration, LLC



Brock Greene  
Senior Project Environmental Scientist

cc: S. Radon, (NYSDEC – Region 9)  
K. Nagel (Tecumseh)  
P. Werthman (TurnKey)  
T. Forbes (TurnKey)

## TABLES





**TABLE 1**  
**ATP GROUNDWATER PRETREATMENT SYSTEM**  
**GROUNDWATER ELEVATION SUMMARY <sup>1,2,3</sup>**

**ATP ECM 2021 ANNUAL REPORT**  
**TECUMSEH REDEVELOPMENT, INC.**

Well Designation	Hydrogeologic Unit	03/30/21	06/29/21	09/28/21	12/28/21
MWS-02	F	574.7	574.4	574.6	575.6
MWS-03	F	573.7	573.2	573.6	574.3
MWS-10	F	576.1	575.7	576.4	577.4
MWS-10B	S	576.0	575.5	576.2	577.3
MWS-11A	S	574.3	573.8	574.4	575.2
MWS-12A	F	575.2	574.8	575.6	576.7
MWS-12B	F,S	575.3	574.6	575.4	576.5
MWS-13	F,S	574.8	574.3	574.9	576.2
MWS-14	F,S	576.0	575.9	575.8	577.4
MWS-14B	S	575.4	575.0	575.8	576.9
MWS-15		574.5	574.0	574.5	575.4
MWS-18A	F	574.7	573.7	574.3	575.1
MWS-18C	S,CS	574.9	573.9	575.1	575.5
MWS-19A	F	573.4	573.2	573.3	573.7
MWS-19B	S	573.4	573.2	573.3	573.7
MWS-20A	S	575.9	574.7	576.2	577.1
MWS-20B	S,CS	575.8	574.8	575.8	576.8
MWS-21A	F,S	575.8	575.2	576.0	577.0
MWS-21B	S	575.7	575.3	575.9	577.0
MWS-23A	F	581.9	580.8	581.2	582.2
MWS-23B	S	575.9	575.4	576.2	577.2
MWS-24AR	F,S	576.0	575.4	576.3	577.3
MWS-24B	S,C	574.8	574.5	575.1	575.8
MWS-25A	F,S	575.7	575.4	575.9	576.9
MWS-25B	F,S	575.7	575.2	575.9	577.0
MWS-29A	F	577.5	577.2	577.3	577.3
MWS-2U1B		574.4	573.9	574.5	575.3
P-61D	S	573.8	573.4	573.6	573.9
P-62D	S	574.1	573.8	573.6	573.9
P-63D	S	575.8	574.8	575.6	576.6
P-64D	S	574.0	573.7	573.4	573.9
EW-1	S	572.5	572.5	572.5	572.5
EW-2	S	572.5	572.5	572.5	572.5
EW-3 <sup>4</sup>	S	574.6	572.7	572.4	572.7
EW-3R	S	572.5	572.5	572.5	572.5
PW-1	S	572.0	572.0	572.0	572.0
PW-2	S	572.0	572.0	572.0	572.0
PW-3	S	572.0	572.0	572.0	572.0
PW-4	S	573.0	572.0	572.0	572.0
SG-02	--	572.5	572.9	572.3	573.4
Lake Erie (average) <sup>5</sup>	--	572.7	573.2	572.8	573.0

**Notes:**

1. Elevation is measured in feet; distance above mean sea level (fmsl).
2. Groundwater elevation corrected based on the presence of free product (i.e., LNAPL), if applicable.
3. Groundwater elevations for extraction wells EW-1, EW-2, EW-3R, PW-1, PW-2, PW-3, and PW-4 presented in the table are reflective of the average of "pump on" and "pump off" elevations.
4. Extraction well EW-3 is utilized as a monitoring well not as a pumping extraction well.
5. Lake Erie Elevation is an average elevation for the day and is taken from NOAA's Buffalo NY station 9063020.

**Definitions:**

fbTOR = feet below top of riser or reference elevation.  
fmsl = feet above mean sea level.  
Hydrogeologic Unit = as identified in the RFI & CMS  
NM = not measured  
NP = no product was observed  
NA = not applicable





**TABLE 2**  
**ATP GROUNDWATER PRETREATMENT SYSTEM**  
**SUMMARY OF MAJOR AND NON-ROUTINE SYSTEM O&M EVENTS**

**ATP ECM 2021 ANNUAL REPORT**  
**TECUMSEH REDEVELOPMENT, INC.**

Date	Alarm Condition	Cause	Response/Corrective Measure
1/6/21	None	Deposit buildup in Air Stripper	Cleaned air stripper
1/29/21	None	Deposit buildup in oil/water separator	Removed sediment buildup from the oil/water
2/2/21	None	pH probe not reading properly	Installed new pH probe
2/3/21	None	Deposit buildup in EQ tank	Removed sediment buildup from the EQ tank
4/5/21	None	Alarm system no longer supported	Replace Sensaphone Alarm System
4/6/21	None	Deposit buildup in Air Stripper	Cleaned air stripper
4/13/21	None	EW-1 pump not working	Repair EW-1 pump wires
4/21/21	None	PW-4 pump not working	PW-4 water level probe stopped working. Probe was replaced on 4/23/21 and PW-4 working normal.
6/16/21	None	Deposit buildup in Air Stripper	Cleaned air stripper
10/6/21	None	PW-4 not pumping down	Clean PW-4 impellers and repair pump wires



**TABLE 3**  
**ATP GROUNDWATER PRETREATMENT SYSTEM**  
**EXTRACTION AND PUMPING WELL OPERATION SUMMARY**

**ATP ECM 2021 ANNUAL REPORT**  
**TECUMSEH REDEVELOPMENT, INC.**

Date	EW-1 Hours	EW-1 Cycles	EW-2 Hours	EW-2 Cycles	EW-3R Hours	EW-3R Cycles	PW-1 Hours	PW-1 Cycles	PW-2 Hours	PW-2 Cycles	PW-3 Hours	PW-3 Cycles	PW-4 Hours	PW-4 Cycles
1/29/2021	2696.70	536941	3299.53	76181	2549.11	105965	3868.77	831991	3010.52	247115	369.94	40483	6454.33	111032
2/26/2021	2711.52	545487	3324.22	84410	2551.61	107315	3889.81	840766	3023.58	250367	441.31	40838	6454.33	111032
3/26/2021	2731.03	556831	3347.22	92157	2553.72	108459	3903.96	846710	3033.46	253049	491.94	41099	6454.33	111033
4/30/2021	2827.54	567891	3374.50	101367	2555.07	109185	3920.62	853459	3046.09	256521	545.32	41367	6529.66	118224
5/28/2021	2844.00	576423	3394.77	107997	2556.14	109758	3930.95	858725	3055.45	259109	640.39	42440	6612.88	130982
6/25/2021	2859.00	584346	3415.79	114670	2557.50	110490	3942.02	864238	3064.94	261459	681.66	43372	6710.97	135421
7/30/2021	2875.15	593138	3442.90	122842	2558.68	111123	3959.33	872539	3079.37	264263	697.19	43790	7040.19	147385
8/27/2021	2886.80	599630	3465.50	129339	2559.25	111427	3973.32	879227	3090.40	266415	706.60	44046	7151.90	159819
9/24/2021	2847.45	605353	3489.07	135493	2559.58	111603	3985.64	885116	3101.02	268788	714.28	44246	7356.67	163328
10/29/2021	2910.05	612038	3520.64	143170	2559.97	111807	4001.80	892743	3114.46	271966	725.26	44538	7670.51	168760
11/26/2021	2922.15	618244	3551.65	149775	2560.28	111980	4016.33	899320	3126.59	274981	736.90	44856	7796.89	173995
12/30/2021	2938.00	626382	3593.85	158200	2560.69	112209	4052.91	917964	3143.00	279704	760.27	45455	8422.70	175702



**TABLE 4**  
**ATP GROUNDWATER COLLECTION**  
**AND PRETREATMENT SYSTEM**  
**SUMMARY OF PROCESS FLOW DATA**

**ATP ECM 2021 ANNUAL REPORT**  
**TECUMSEH REDEVELOPMENT, INC.**

Date	Pretreatment System Effluent Totalizer (gallons)	Monthly Total Flow (gallons)	Extraction Well Totalizer (gallons)	Extraction Well Monthly Flow (gallons)	Calculated Pumping Well Monthly Flow (gallons)
12/27/2020	10868911	--	455234	--	--
1/3/2021	10879343	51,920	460892	27,595	24,325
1/8/2021	10886553		465059		
1/15/2021	10895376		470797		
1/22/2021	10907237		476920		
1/29/2021	10920831		482829		
2/5/2021	10933422	41869	488399	22,327	19,542
2/12/2021	10944552		493988		
2/19/2021	10953418		499663		
2/26/2021	10962700		505156		
3/5/2021	10972103		510370		
3/12/2021	10980593	34,465	515479	20,407	14,058
3/19/2021	10989044		520547		
3/26/2021	10997165		525563		
4/2/2021	11006113		530487		
4/9/2021	11013583	48,381	535522	27,824	20,557
4/16/2021	11021403		540430		
4/23/2021	11033375		546785		
4/30/2021	11045546		553387		
5/7/2021	11055536		558577		
5/14/2021	11067266	44,649	564329	22,358	22,291
5/21/2021	11078787		570113		
5/28/2021	11090195		575745		
6/4/2021	11101124		581211		
6/11/2021	11104298	31,040	586485	20,960	10,080
6/18/2021	11111660		591762		
6/25/2021	11121235		596705		
7/2/2021	11130637		601526		
7/9/2021	11140732	53,555	606413	24,181	29,374
7/16/2021	11150787		611136		
7/23/2021	11161178		615968		
7/30/2021	11174790		620886		
8/6/2021	11185986		625315		
8/13/2021	11198753	48,417	630186	18,574	29,843
8/20/2021	11211185		634853		
8/27/2021	11223207		639460		
9/3/2021	11233951		643964		
9/10/2021	11245010	42,249	648532	17,386	24,863
9/17/2021	11255819		652798		
9/24/2021	11265456		656846		
10/1/2021	11273592		661179		
10/8/2021	11282646	52,418	665401	21,421	30,997
10/15/2021	11293953		669647		
10/22/2021	11305442		673983		
10/29/2021	11317874		678267		
11/5/2021	11331219		682809		
11/12/2021	11338094	37,443	687301	18,274	19,169
11/19/2021	11346562		691784		
11/26/2021	11355317		696541		
12/3/2021	11363040		701118		
12/10/2021	11371873	47,539	705837	22,877	24,662
12/17/2021	11382820		710716		
12/23/2021	11392205		714689		
12/30/2021	11402856		719418		
<b>Total Volume Treated 12/27/20-12/31/21</b>	<b>533,945</b>	<b>533,945</b>	<b>264,184</b>	<b>264,184</b>	<b>269,761</b>



**TABLE 5**  
**ATP GROUNDWATER TREATMENT VS. ANNUAL PRECIPITATION**

**ATP ECM 2021 ANNUAL REPORT**  
**TECUMSEH REDEVELOPMENT, INC.**

<b>Year</b>	<b>Annual Precipitation (inches) <sup>1</sup></b>	<b>Total Annual Volume Treated (gallons)</b>	<b>Annual Volume from Extraction Wells (gallons)</b>	<b>Annual Volume from Pumping Wells (gallons)</b>
2016 <sup>2</sup>	33.87	2,422,004	788,500	1,633,500
2017 <sup>2</sup>	48.48	1,616,120	360,674	1,255,446
2018 <sup>2</sup>	41.64	925,430	288,160	637,270
2019 <sup>2</sup>	47.82	1,150,231	743,800	406,431
2020	39.67	758,713	391,423	367,290
2021	40.33	533,945	264,184	269,761

**Note:**

1. Annual precipitation data from National Weather Service, Buffalo, NY historical data (<https://www.weather.gov/buf/BufaloPcpn>)
2. Annual volume amounts from extraction and pumping wells for 2016-2018 and a portion of 2019 are inaccurate estimates prior to installation of the flow meter on the incoming force main from the interior extraction wells in November 2019.



TABLE 6  
ATP GROUNDWATER COLLECTION AND PRETREATMENT SYSTEM  
GOUNDWATER ANALYTICAL SUMMARY<sup>1</sup>

ATP ECM ANNUAL REPORT  
TECUMSEH REDEVELOPMENT, INC.

Parameter	CAS No.	GWQS/GV <sup>2</sup>	Units	Monitoring Well Location and Sample Date(s)																			
				MWS-02 <sup>3,4</sup>										MWS-18A									
				11/8/1999	2/28/2012	4/10/2014	4/28/2015	4/7/2016	4/11/2017	4/17/2018	4/9/2019	4/10/2020	4/27/2021	11/9/1999	2/28/2012	4/10/2014	4/28/2015	4/8/2016	4/11/2017	4/17/2018	4/9/2019	4/9/2020	4/27/2021
Field Measurements																							
Dissolved Oxygen	NA	-	MG/L	1.4	4.06	NA	1.85	3.6	2.27	3.66	2.44	1.3	1.16	0.4	2.5	NA	3.63	2.08	2.77	2.1	1.56	1.56	1.34
Field pH	NA	6.5 - 8.5	S.U	11.07	10.99	10.30	10.75	10.67	11.41	10.68	11.19	11.30	11.00	9.03	9.28	9.47	8.85	8.73	10.34	9.84	8.95	9.38	8.60
Redox Potential	NA	-	mV	-156	-156	205	210	-81	-245	221	-243	-191	-224	-474	-103	-104	-54	-92	-1.23	-120	-178	-136	-188
Specific Conductance	NA	-	UMHOS/CM	2,590	2280	2053	1905	1803	2096	1639	2016	1830	1704	4,700	3323	2649	2623	2767	2470	2725	3042	2717	2928
Temperature	NA	-	DEG C	14.8	10.1	13.1	13.6	11.3	12.9	7.9	10.4	11.5	14.2	15.3	12.2	13.7	13.7	9.1	13.2	8.4	9.3	10.9	16.8
Turbidity	NA	-	NTU	18	14.6	1.96	8.9	8.0	4.2	1.3	3.86	2.92	3.4	91	17.4	16.4	30	14.6	5.64	3.4	4.86	10.3	14.7
Volatile Organics (Method 8260B) (STARS List parameters in blue)																							
1,1-Dichloroethane	75-34-3	5	ug/l	8.3	9.8	1.1 J	1 J	1.2 J	3	ND	1.1 J	0.93 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	95-63-6	5	ug/l	-	ND	-	-	-	1 J	-	-	ND	ND	-	ND	-	-	-	ND	-	-	ND	ND
1,2-Dichloroethane	107-06-2	0.6	ug/l	ND	1.7	ND	0.43 J	0.91	2.6	0.21 J	0.99	0.82	ND	ND	ND	ND	ND	ND	110	ND	ND	ND	ND
1,3,5-Trimethylbenzene	108-67-8	5	ug/l	-	0.54 J	-	-	-	ND	-	-	ND	ND	-	ND	-	-	-	ND	-	-	ND	ND
1,4-Diethylbenzene	105-05-5	-	ug/l	-	0.55 J	-	-	-	-	-	-	-	-	-	ND	-	-	-	-	-	-	-	-
Acetone	67-64-1	50	ug/l	-	ND	7.2	14	2	5.1	7.8	4.7 J	2.5 J	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	71-43-2	1	ug/l	14	0.49 J	2.1	8.5	4.1	12	1	6.8	7.2	ND	140000	39000 D	4200 D	7100 D	7000 D	4600 D	1900 D	7500 D2	5000	4100 D2
Bromomethane	74-83-9	5	ug/l	ND	ND	ND	1.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	75-15-0	60	ug/l	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane (Methyl chloride)	74-87-3	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	156-59-2	5	ug/l	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane	110-82-7	-	ug/l	-	0.37 J	0.4 J	0.84 J	0.93 J	1.5 J	ND	0.97 J	0.77 J	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	100-41-4	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	98-82-8	5	ug/l	-	ND	ND	2.3 J	ND	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl cyclohexane	108-87-2	-	ug/l	-	ND	2.2 J	3.6 J	3.3 J	8.7 J	1 J	6.9 J	4.4 J	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	75-09-2	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	127-18-4	5	ug/l	ND	0.38 J	ND	ND	0.3 J	0.52 J	ND	0.35 J	0.25 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	108-88-3	5	ug/l	1.2 J	ND	ND	1.3 J	ND	1.1 J	ND	ND	0.76 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	79-01-6	5	ug/l	ND	0.57	ND	0.32 J	0.4 J	1	ND	ND	0.42 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.2 J	ND
Vinyl chloride	75-01-4	2	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes, m/p	179601-23-1	5	ug/l	-	ND	ND	ND	ND	0.85 J	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes, o	95-47-6	5	ug/l	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes, Total	1330-20-7	5	ug/l	1.9 J	ND	ND	ND	ND	0.85 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TOTAL BTEX	NA	NA	ug/l	17.1	0.49	2.1	9.8	4.1	13.95	1	6.8	7.96	ND	140000	39000	4200	7100	7000	4600	1900	7500	5000	4100
Semivolatile Organics (Method 8270C) (Base-Neutrals in black, Acid Extractables in blue and PAHs in red)																							
2,4-Dimethylphenol	105-67-9	50	ug/l	R	-	ND	ND	ND	ND	ND	ND	ND	ND	21 J	-	1.8 J	0.81 J	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	91-58-7	10	ug/l	ND	ND	ND	ND	0.79	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	91-57-6	-	ug/l	-	0.16 J	0.65	0.21 J	1.9	2.4	0.27	1.4	1.3	ND	-	0.12 J	0.08 J	0.09 J	0.19 J	0.15 J	0.11	0.37	0.21	0.41
2-Methylphenol (o-Cresol)	95-48-7	1 *	ug/l	R	-	ND	ND	ND	ND	ND	ND	ND	ND	31	-	6.8	3.5 J	1.6 J	ND	ND	ND	ND	0.89 J
3-Methylphenol (m-Cresol) / 4-Methylphenol (p-Cresol)	108-39-4/106-44-5	1 *	ug/l	R	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	1.8 J	8.4	1.6 J	ND	ND	ND	ND	ND
Acenaphthene	83-32-9	20	ug/l	-	0.29	0.15 J	ND	0.46	0.53	0.1	0.36	0.33	ND	-	0.1 J	0.08 J	0.08 J	ND	0.09 J	0.06 J	0.18	0.14	0.18
Acenaphthylene	208-96-8	-	ug/l	ND	0.7	0.47	ND	1.5	1.8	0.32	0.95	1	ND	ND	0.05 J	ND	ND	ND	0.06 J	0.05 J	0.12	0.07 J	0.09 J
Acetophenone	98-86-2	-	ug/l	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	48	1.9 J	1.1 J	ND	ND	ND	ND	ND	0.54 J
Anthracene	120-12-7	50	ug/l	ND	0.18 J	0.36	0.19 J	1.3 J	1.3	0.13	0.67	0.61	ND	ND	ND	0.07 J	0.07 J	ND	0.04 J	0.04 J	0.06 J	0.02 J	0.05 J
Benzo(a)anthracene	56-55-3	0.002	ug/l	ND	ND	ND	ND	ND	ND	ND	0.03 J	0.03 J	ND	ND	ND	ND	ND	ND	ND	ND	0.05 J	ND	0.02 J
Benzo(a)pyrene	50-32-8	0 (ND)	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	205-99-2	0.002	ug/l	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	0.04 J	ND	0.02 J
Benzo(ghi)perylene	191-24-2	-	ug/l	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	0.01 J
Benzo(k)fluoranthene	207-08-9	0.002	ug/l	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	0.02 J
Benzoic Acid	65-85-0	-	ug/l	-	-	ND	9.1 J	-	-	-	-	-	-	-	-	ND	8.2 J	-	-	-	-	-	-
Bis(2-ethylhexyl)phthalate	117-81-7	5	ug/l	3.8 J	ND	ND	2.3 J	ND	ND	3.9	ND	3.3	1.6 J	ND	ND	1.3 J	11	ND	ND	ND	ND	ND	2.4 J
Caprolactam	34876-18-1	-	ug/l	-	-	ND	2.7 J	3.9 J	ND	ND	ND	ND	ND	-	-	ND	ND	ND	ND	ND	ND	28	ND
Carbazole	86-74-8	-	ug/l	-	ND	0.5 J	ND	1.1 J	1.1 J	ND	0.96 J	0.79 J	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ch																							



TABLE 6  
ATP GROUNDWATER COLLECTION AND PRETREATMENT SYSTEM  
GOUNDWATER ANALYTICAL SUMMARY<sup>1</sup>

ATP ECM ANNUAL REPORT  
TECUMSEH REDEVELOPMENT, INC.

Parameter	CAS No.	GWQS/GV <sup>2</sup>	Units	Monitoring Well Location and Sample Date(s)																			
				MWS-18C										MWS-19A									
				12/19,28/00	2/28/2012	4/10/2014	4/28/2015	4/8/2016	4/11/2017	4/17/2018	4/9/2019	4/9/2020	4/27/2021	11/8/1999	2/28/2012	4/10/2014	4/28/2015	4/7/2016	4/11/2017	4/17/2018	4/9/2019	4/17/2020	4/27/2021
Field Measurements																							
Dissolved Oxygen	NA	-	MGL	NA	3.76	NA	1.57	1.83	2.03	1.84	1.11	1.33	2.56	0.5	1.71	NA	1.33	1.68	1.60	2.80	2.09	2.24	1.50
Field pH	NA	6.5 - 8.5	S.U	6.93	4.57	6.40	6.62	4.48	4.71	6.84	5.28	4.82	4.25	8.45	7.29	7.60	7.65	7.76	7.51	7.92	7.62	7.75	7.62
Redox Potential	NA	-	mV	-73	33	-83	-86	144	140	-78	-36	72	133	-310	-159	-147	-163	-125	-96	-57	-116	-117	-150
Specific Conductance	NA	-	UMHOS/CM	4,100	6634	3369	2746	7342	4660	3012	4110	4496	6319	4,450	2743	1957	2121	2064	2055	1612	2475	1825	2561
Temperature	NA	-	DEG C	11.2	12.1	13.0	12.4	10.8	13.1	9.0	9.8	11.9	15.7	13.3	10.4	15.4	13.1	11.6	12.7	9.6	11.2	10.9	13.7
Turbidity	NA	-	NTU	233	39.6	107	112	73.9	124	16.6	45.6	268	112	72	10.6	2.55	3.55	6.0	6.31	49.1	3.0	3.1	2.5
Volatile Organics (Method 8260B) (STARS List parameters in blue)																							
1,1-Dichloroethane	75-34-3	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4 J	ND	1 J	1.5 J	1 J	ND	1.4 J	ND	ND
1,2,4-Trimethylbenzene	95-63-6	5	ug/l	-	ND	-	-	-	ND	-	-	ND	ND	-	ND	-	-	-	ND	-	-	ND	ND
1,2-Dichloroethane	107-06-2	0.6	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.17 J	ND	ND
1,3,5-Trimethylbenzene	108-67-8	5	ug/l	-	ND	-	-	-	ND	-	-	ND	ND	-	ND	-	-	-	ND	-	-	ND	ND
1,4-Diethylbenzene	105-05-5	-	ug/l	-	ND	-	-	-	-	-	-	-	-	-	ND	-	-	-	-	-	-	-	-
Acetone	67-64-1	50	ug/l	-	ND	ND	ND	ND	ND	ND	19 D J	15 J	17 D J	-	ND	ND	ND	ND	ND	ND	1.7 J	ND	ND
Benzene	71-43-2	1	ug/l	65000 D	9600	340	910	4400	1400	43	1200 D	470	1600 D	1200	ND	34	70	56	40	13	150	25	190 D
Bromomethane	74-83-9	5	ug/l	R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	75-15-0	60	ug/l	-	660	6.3 J	24 J	480	140 J	ND	250 D	53	260 D	-	ND	ND	ND	ND	ND	ND	ND	ND	2.1 D J
Chloromethane (Methyl chloride)	74-87-3	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	4.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	156-59-2	5	ug/l	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	ND	ND	0.77 J	ND	ND	1.1 J	ND	ND
Cyclohexane	110-82-7	-	ug/l	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	ND	ND	0.47 J	ND	ND	ND	ND	ND
Ethylbenzene	100-41-4	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	98-82-8	5	ug/l	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	ND	2.2 J	ND	ND	ND	ND	ND	ND
Methyl cyclohexane	108-87-2	-	ug/l	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	75-09-2	5	ug/l	1.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	127-18-4	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	108-88-3	5	ug/l	340 J	51 J	ND	11 J	140 J	72 J	ND	38 D	16	57 D	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	79-01-6	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	75-01-4	2	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.84 J	ND	0.42 J	ND	0.32 J	0.21 J	0.6 J	0.09 J	0.86 D J
Xylenes, m/p	179601-23-1	5	ug/l	-	85 J	ND	9.3 J	150	54 J	ND	44 D	13	54 D	-	2.6	ND	1.5 J	1.4 J	0.78 J	ND	0.92 J	ND	1.8 D J
Xylenes, o	95-47-6	5	ug/l	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes, Total	1330-20-7	5	ug/l	500 J	85 J	ND	9.3 J	150	54 J	ND	44	13	54 D	13 J	2.6	ND	1.5	1.4 J	0.78 J	ND	ND	ND	ND
TOTAL BTEX	NA	NA	ug/l	65840	9736	340	930.3	4690	1526	43	1282	499	1711	1213	2.6	34	71.5	57.4	40.78	13	150	25.09	190.86
Semivolatile Organics (Method 8270C) (Base-Neutrals in black, Acid Extractables in blue and PAH)																							
2,4-Dimethylphenol	105-67-9	50	ug/l	20 J	-	1.8 J	5.4	12	4.8 J	ND	5.4	7.1	13	10	-	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	91-58-7	10	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.08 J	ND	ND	ND	ND
2-Methylnaphthalene	91-57-6	-	ug/l	-	0.23	ND	ND	ND	0.07 J	ND	0.06 J	0.05 J	0.21	-	ND	ND	ND	ND	0.09 J	ND	ND	0.03 J	0.26
2-Methylphenol (o-Cresol)	95-48-7	1 *	ug/l	19 J	-	ND	2.3 J	8.2	ND	ND	ND	ND	5.4	ND	-	ND	ND	ND	ND	ND	ND	ND	ND
3-Methylphenol (m-Cresol) / 4-Methylphenol (p-Cresol)	108-39-4/106-44-5	1 *	ug/l	40 J	-	ND	9.5	31	9.9	ND	12	18	25	ND	-	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	83-32-9	20	ug/l	-	ND	ND	ND	0.09 J	ND	ND	0.07 J	ND	0.04 J	-	0.09 J	ND	0.07 J	ND	0.1	0.04 J	0.05 J	0.04 J	0.26
Acenaphthylene	208-96-8	-	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	0.03 J	ND	ND	ND	ND	ND	ND	0.07 J	ND	ND	ND	0.12
Acetophenone	98-86-2	-	ug/l	-	4.6 J	2.9 J	9.3	43	11	ND	17	7.5	23	-	ND	ND	ND	ND	ND	ND	ND	ND	1.9 J
Anthracene	120-12-7	50	ug/l	ND	0.07 J	0.12 J	0.08 J	0.14 J	0.06 J	0.06 J	0.06 J	0.07 J	0.08 J	ND	0.07 J	0.07 J	0.09 J	ND	0.04 J	0.09 J	ND	0.03 J	0.48
Benzo(a)anthracene	56-55-3	0.002	ug/l	ND	ND	ND	ND	ND	ND	ND	0.03 J	ND	ND	ND	ND	ND	ND	ND	ND	0.16	0.02 J	ND	1.4
Benzo(a)pyrene	50-32-8	0 (ND)	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.14	ND	ND	1.2
Benzo(b)fluoranthene	205-99-2	0.002	ug/l	-	ND	ND	ND	ND	ND	ND	0.02 J	ND	0.02 J	-	0.16 J	ND	ND	ND	ND	0.18	ND	ND	1.7
Benzo(ghi)perylene	191-24-2	-	ug/l	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	0.09 J	ND	ND	0.7
Benzo(k)fluoranthene	207-08-9	0.002	ug/l	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	0.08 J	ND	ND	0.5
Benzoic Acid	65-85-0	-	ug/l	-	-	ND	62	-	-	-	-	-	-	-	-	ND	ND	-	-	-	-	-	-
Bis(2-ethylhexyl)phthalate	117-81-7	5	ug/l	ND	ND	ND	15	ND	ND	5.8	ND	1.8 J	3.3	4.4 J	ND	ND	6.4	ND	ND	3.6	ND	ND	2.3 J
Caprolactam	34876-18-1	-	ug/l	-	-	22	16	ND	ND	ND	ND	ND	ND	-	-	ND	ND	ND	ND	ND	ND	ND	ND
Carbazole	86-74-8	-	ug/l	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	218-01-9	0.002	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1			



TABLE 6  
ATP GROUNDWATER COLLECTION AND PRETREATMENT SYSTEM  
GOUNDWATER ANALYTICAL SUMMARY<sup>1</sup>

ATP ECM ANNUAL REPORT  
TECUMSEH REDEVELOPMENT, INC.

Parameter	CAS No.	GWQS/GV <sup>2</sup>	Units	Monitoring Well Location and Sample Date(s)																				
				MWS-19B										MWS-20A										
				11/8/1999	2/28/2012	4/10/2014	4/28/2015	4/8/2016	4/11/2017	4/17/2018	4/9/2019	4/17/2020	4/27/2021	11/9/1999	2/28/2012	4/10/2014	4/28/2015	4/8/2016	4/11/2017	4/17/2018	4/9/2019	4/17/2020	4/27/2021	
<b>Field Measurements</b>																								
Dissolved Oxygen	NA	-	MG/L	0.4	1.53	NA	1.06	0.92	1.44	1.33	1.25	0.81	0.96	1.1	2.04	NA	3.7	4.12	2.55	2.4	2.9	1.3	1.74	
Field pH	NA	6.5 - 8.5	S.U	5.84	5.66	6.22	6.21	6.67	6.99	7.65	6.90	6.95	7.04	9.02	9.20	9.37	9.47	9.66	9.78	10.09	9.63	9.56	9.38	
Redox Potential	NA	-	mV	-136	-95	-43	-47	-67	-109	-141	-103	-110	-124	416	0	-89	51	194	111	-57	58	12	171	
Specific Conductance	NA	-	UMHOS/CM	1,030	7966	5077	4529	4433	3394	3175	4317	4188	4255	2,130	985.9	926	656	895.2	1183	1193	915	949.5	1377	
Temperature	NA	-	DEG C	13.1	10.4	15.1	13.3	12.0	12.8	8.3	12.2	11.5	15.1	15.9	10.5	12.5	10.6	10.6	12.0	9.2	9.8	10.1	13.3	
Turbidity	NA	-	NTU	430	25.7	22.4	30	88	128	8.3	9.4	17.2	6.8	0.1	5.23	1.69	256	7.19	5.08	2.28	2.9	2.6	1.84	
<b>Volatile Organics (Method 8260B) (STARS List parameters in blue)</b>																								
1,1-Dichloroethane	75-34-3	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,2,4-Trimethylbenzene	95-63-6	5	ug/l	-	ND	-	-	-	ND	-	-	ND	ND	-	ND	-	-	-	ND	-	-	ND	ND	
1,2-Dichloroethane	107-06-2	0.6	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,3,5-Trimethylbenzene	108-67-8	5	ug/l	-	ND	-	-	-	ND	-	-	ND	ND	-	ND	-	-	-	ND	-	-	ND	ND	
1,4-Diethylbenzene	105-05-5	-	ug/l	-	ND	-	-	-	-	-	-	-	-	-	ND	-	-	-	-	-	-	-	-	
Acetone	67-64-1	50	ug/l	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Benzene	71-43-2	1	ug/l	27000	18000	2800 D	390 D	1500 D	5800 D	520	500 D	480	150	33	ND	ND	ND	ND	0.22 J	0.63	ND	0.17 J	0.41 J	0.37 J
Bromomethane	74-83-9	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Carbon disulfide	75-15-0	60	ug/l	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Chloromethane (Methyl chloride)	74-87-3	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
cis-1,2-Dichloroethene	156-59-2	5	ug/l	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Cyclohexane	110-82-7	-	ug/l	-	ND	ND	1.3 J	ND	ND	ND	ND	ND	0.35 J	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Ethylbenzene	100-41-4	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Isopropylbenzene	98-82-8	5	ug/l	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Methyl cyclohexane	108-87-2	-	ug/l	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Methylene chloride	75-09-2	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Tetrachloroethene	127-18-4	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Toluene	108-88-3	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Trichloroethene	79-01-6	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Vinyl chloride	75-01-4	2	ug/l	ND	ND	75-01-4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Xylenes, m/p	179601-23-1	5	ug/l	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Xylenes, o	95-47-6	5	ug/l	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Xylenes, Total	1330-20-7	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	
TOTAL BTEX	NA	NA	ug/l	27000	18000	2800	390	1500	5800	520	500	480	150	34.2	ND	ND	ND	0.22	0.63	ND	0.17	0.41	0.37	
<b>Semivolatile Organics (Method 8270C) (Base-Neutrals in black, Acid Extractables in blue and PAH)</b>																								
2,4-Dimethylphenol	105-67-9	50	ug/l	73 J	-	19	14	ND	ND	ND	2 J	2 J	3.3 J	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	
2-Chloronaphthalene	91-58-7	10	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	
2-Methylnaphthalene	91-57-6	-	ug/l	-	ND	0.09 J	ND	ND	ND	ND	ND	ND	0.12	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	
2-Methylphenol (o-Cresol)	95-48-7	1 *	ug/l	150 J	-	ND	ND	ND	ND	ND	ND	0.52 J	0.66 J	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	
3-Methylphenol (m-Cresol) / 4-Methylphenol (p-Cresol)	108-39-4/106-44-5	1 *	ug/l	200 J	-	2.6 J	2.3 J	ND	ND	ND	ND	2.7 J	2.9 J	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	
Acenaphthene	83-32-9	20	ug/l	-	0.19 J	0.12 J	ND	0.11 J	0.1	0.05 J	0.1	0.06 J	0.08 J	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Acenaphthylene	208-96-8	-	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Acetophenone	98-86-2	-	ug/l	-	8.4	ND	ND	ND	ND	ND	ND	0.65 J	1.2 J	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Anthracene	120-12-7	50	ug/l	ND	ND	ND	ND	ND	0.05 J	0.04 J	0.04 J	0.03 J	0.05 J	ND	0.07 J	0.12 J	ND	0.21	0.08 J	0.1 J	0.07 J	0.04 J	0.02 J	
Benzo(a)anthracene	56-55-3	0.002	ug/l	ND	ND	ND	ND	ND	0.04 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Benzo(a)pyrene	50-32-8	0 (ND)	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Benzo(b)fluoranthene	205-99-2	0.002	ug/l	-	ND	ND	ND	ND	0.05 J	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Benzo(ghi)perylene	191-24-2	-	ug/l	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Benzo(k)fluoranthene	207-08-9	0.002	ug/l	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Benzoic Acid	65-85-0	-	ug/l	-	-	ND	ND	-	-	-	-	-	-	-	-	ND	-	-	-	-	-	-	-	
Bis(2-ethylhexyl)phthalate	117-81-7	5	ug/l	ND	ND	ND	11	ND	ND	3.4	0.93 J	ND	2 J	ND	ND	ND	4.2	ND	ND	4	ND	ND	1.9 J	
Caprolactam	34876-18-1	-	ug/l	-	-	ND	ND	ND	ND	ND	ND	9.8 J	ND	-	-	ND	ND	ND	ND	ND	ND	ND	ND	
Carbazole	86-74-8	-	ug/l	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Chrysene	218-01-9	0.002	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Dibenzo(a,h)anthracene	53-70-3	-	ug/l	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Dibenzofuran	132-64-9	-	ug/l	-	ND	ND	ND	ND																





TABLE 6  
ATP GROUNDWATER COLLECTION AND PRETREATMENT SYSTEM  
GOUNDWATER ANALYTICAL SUMMARY<sup>1</sup>

ATP ECM ANNUAL REPORT  
TECUMSEH REDEVELOPMENT, INC.

Parameter	CAS No.	GWQS/GV <sup>2</sup>	Units	Monitoring Well Location and Sample Date(s)									
				MWS-20B									
				11/9/1999	2/28/2012	4/10/2014	4/28/2015	4/8/2016	4/11/2017	4/17/2018	4/9/2019	4/17/2020	4/27/2021
Field Measurements													
Dissolved Oxygen	NA	-	MG/L	0.4	2.11	NA	0.85	2.04	1.81	2.01	1.83	0.85	1.27
Field pH	NA	6.5 - 8.5	S.U	7.29	7.38	7.63	7.63	7.49	7.23	8.48	7.58	7.35	7.88
Redox Potential	NA	-	mV	204	-150	-170	-180	-118	-58	-196	-167	-129	-197
Specific Conductance	NA	-	UMHOS/CM	2,500	1329	1447	1076	1375	1275	1058	1385	1480	1639
Temperature	NA	-	DEG C	13.2	10.7	13.5	10.9	10.2	12.7	9.6	10.7	11.0	14.2
Turbidity	NA	-	NTU	146	11.1	26.6	3.92	20.4	9.52	22.2	3.02	20.2	2.03
Volatile Organics (Method 8260B) (STARS List parameters in blue)													
1,1-Dichloroethane	75-34-3	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	95-63-6	5	ug/l	-	ND	-	-	-	ND	-	-	ND	ND
1,2-Dichloroethane	107-06-2	0.6	ug/l	ND	ND	2.5	2.2	2.2	2.8	1.4	2.3	1.8	1.6
1,3,5-Trimethylbenzene	108-67-8	5	ug/l	-	ND	-	-	-	ND	-	-	ND	ND
1,4-Diethylbenzene	105-05-5	-	ug/l	-	ND	-	-	-	-	-	-	-	-
Acetone	67-64-1	50	ug/l	-	ND	ND	ND	1.7 J	ND	1.6 J	2.1 J	ND	ND
Benzene	71-43-2	1	ug/l	ND	ND	0.28 J	0.63 J	0.32 J	0.5	0.23 J	0.28 J	0.26 J	0.35 J
Bromomethane	74-83-9	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	75-15-0	60	ug/l	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane (Methyl chloride)	74-87-3	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	156-59-2	5	ug/l	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane	110-82-7	-	ug/l	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	100-41-4	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	98-82-8	5	ug/l	-	ND	ND	2.3 J	ND	ND	ND	ND	ND	ND
Methyl cyclohexane	108-87-2	-	ug/l	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	75-09-2	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	127-18-4	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	108-88-3	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	79-01-6	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	75-01-4	2	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes, m/p	179601-23-1	5	ug/l	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes, o	95-47-6	5	ug/l	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes, Total	1330-20-7	5	ug/l	2.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
TOTAL BTX	NA	NA	ug/l	2.5	ND	0.28	0.63	0.32	0.5	0.23	0.28	0.26	0.35
Semivolatile Organics (Method 8270C) (Base-Neutrals in black, Acid Extractables in blue and PAHs in red)													
2,4-Dimethylphenol	105-67-9	50	ug/l	ND	-	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	91-58-7	10	ug/l	ND	-	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	91-57-6	-	ug/l	-	ND	ND	ND	ND	ND	ND	ND	0.04 J	0.03 J
2-Methylphenol (o-Cresol)	95-48-7	1 *	ug/l	ND	-	ND	ND	ND	ND	ND	ND	ND	ND
3-Methylphenol (m-Cresol) / 4-Methylphenol (p-Cresol)	108-39-4/106-44-5	1 *	ug/l	ND	-	ND	ND	1.3 J	ND	ND	ND	ND	ND
Acenaphthene	83-32-9	20	ug/l	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	208-96-8	-	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetophenone	98-86-2	-	ug/l	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	120-12-7	50	ug/l	ND	0.09 J	0.17 J	0.07 J	0.23 J	0.05 J	0.1 J	ND	0.09 J	0.07 J
Benzo(a)anthracene	56-55-3	0.002	ug/l	ND	ND	ND	ND	ND	0.02 J	0.02 J	ND	0.06 J	ND
Benzo(a)pyrene	50-32-8	0 (ND)	ug/l	ND	ND	0.11 J	ND	ND	ND	ND	ND	0.04 J	ND
Benzo(b)fluoranthene	205-99-2	0.002	ug/l	-	ND	0.08 J	ND	ND	ND	ND	ND	0.06 J	0.07 J
Benzo(ghi)perylene	191-24-2	-	ug/l	-	ND	ND	ND	ND	ND	ND	ND	0.03 J	ND
Benzo(k)fluoranthene	207-08-9	0.002	ug/l	-	ND	ND	ND	ND	ND	ND	ND	0.02 J	ND
Benzoic Acid	65-85-0	-	ug/l	-	-	ND	ND	-	-	-	-	-	-
Bis(2-ethylhexyl)phthalate	117-81-7	5	ug/l	ND	ND	ND	5.6	ND	ND	ND	ND	ND	1.9 J
Caprolactam	34876-18-1	-	ug/l	-	-	ND	ND	ND	ND	24	ND	ND	ND
Carbazole	86-74-8	-	ug/l	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	218-01-9	0.002	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	0.04 J	ND
Dibenzo(a,h)anthracene	53-70-3	-	ug/l	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	132-64-9	-	ug/l	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diethyl phthalate	84-66-2	50	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	206-44-0	50	ug/l	ND	ND	0.09 J	ND	0.07 J	ND	ND	ND	0.08 J	ND
Fluorene	86-73-7	50	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	0.03 J	0.02 J
Hexachloroethane	67-72-1	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)Pyrene	193-39-5	0.002	ug/l	-	ND	ND	ND	ND	ND	ND	ND	0.03 J	ND
Naphthalene	91-20-3	10	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.07 J
Pentachlorophenol	87-86-5	1 *	ug/l	ND	-	ND	ND	ND	ND	ND	ND	ND	0.31 J
Phenanthrene	85-01-8	50	ug/l	ND	ND	ND	ND	ND	0.02 J	ND	ND	0.05 J	ND
Phenol	108-95-2	1 *	ug/l	ND	-	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	129-00-0	50	ug/l	ND	ND	0.09 J	ND	0.06 J	ND	ND	ND	0.07 J	ND
Pyridine	110-86-1	50	ug/l	ND	-	-	-	-	-	-	-	-	-
TOTAL PAHs	NA	NA	ug/l	ND	0.09	0.54	0.07	0.36	0.09	0.12	ND	0.64	0.26
TOTAL Phenolic Compounds	NA	1	ug/l	ND	-	ND	ND	1.3	ND	ND	ND	ND	0.31
Total Metals													
Arsenic, Total	7440-38-2	25	ug/l	3.9 B	7	3.71	3.59	6.6	2.87	2.93	3.2	3.22	3.28
Barium, Total	7440-39-3	1000	ug/l	54.7 B	31	39.08	24.7	39	33.75	30.93	34.84	56.76	39.29
Cadmium, Total	7440-43-9	5	ug/l	ND	-	-	-	-	-	-	-	-	-
Chromium, Total	7440-47-3	50	ug/l	37.6	3 J	10.49	1.57	5.3	1.23	3.36	0.59 J	5.36	0.7 J
Lead, Total	7439-92-1	25	ug/l	10.2	ND	4.43	0.14	ND	0.35 J	1.23 J	ND	1.94	ND
Selenium, Total	7782-49-2	10	ug/l	ND	-	-	-	-	-	-	-	-	-
General Chemistry													
Cyanide, Total	57-12-5	200	ug/l	44 J	-	47	48	38	68	47	28	51	17
Total Recoverable Phenolics (TRP)	NONE	-	ug/l	ND	40	-	-	-	-	-	-	-	-

- Notes:
- Only those compounds detected above the method detection limit at a minimum of one sample location are reported in this table.
  - NYSDEC Class "GA" Groundwater Quality Standards/Guldance Values (GWQS/GV) as per 6 NYCRR Part 703.
  - Acid extractables for recent groundwater were analyzed via Method 8270 in August 2013.
  - Surrogate recoveries for SVOC Acid Extractables were below acceptance criteria, re-extraction was performed outside holding time of 7 days, but within 14 days for analysis. Therefore, re-extracted results are presented as estimated (J qualified).

Qualifier Key:

B = The analyte was detected above the reporting limit in the associated method blank.

J = Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs)

ND = Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

R = Sample result was rejected by a third party validator.

D = Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

- = Not analyzed for this parameter

\* = The general standard of 1.0 ug/L for phenolic compounds was used.

Color Code:

= concentration exceeds the GWQS/GV, but is less than 10 times the GWQS/GV

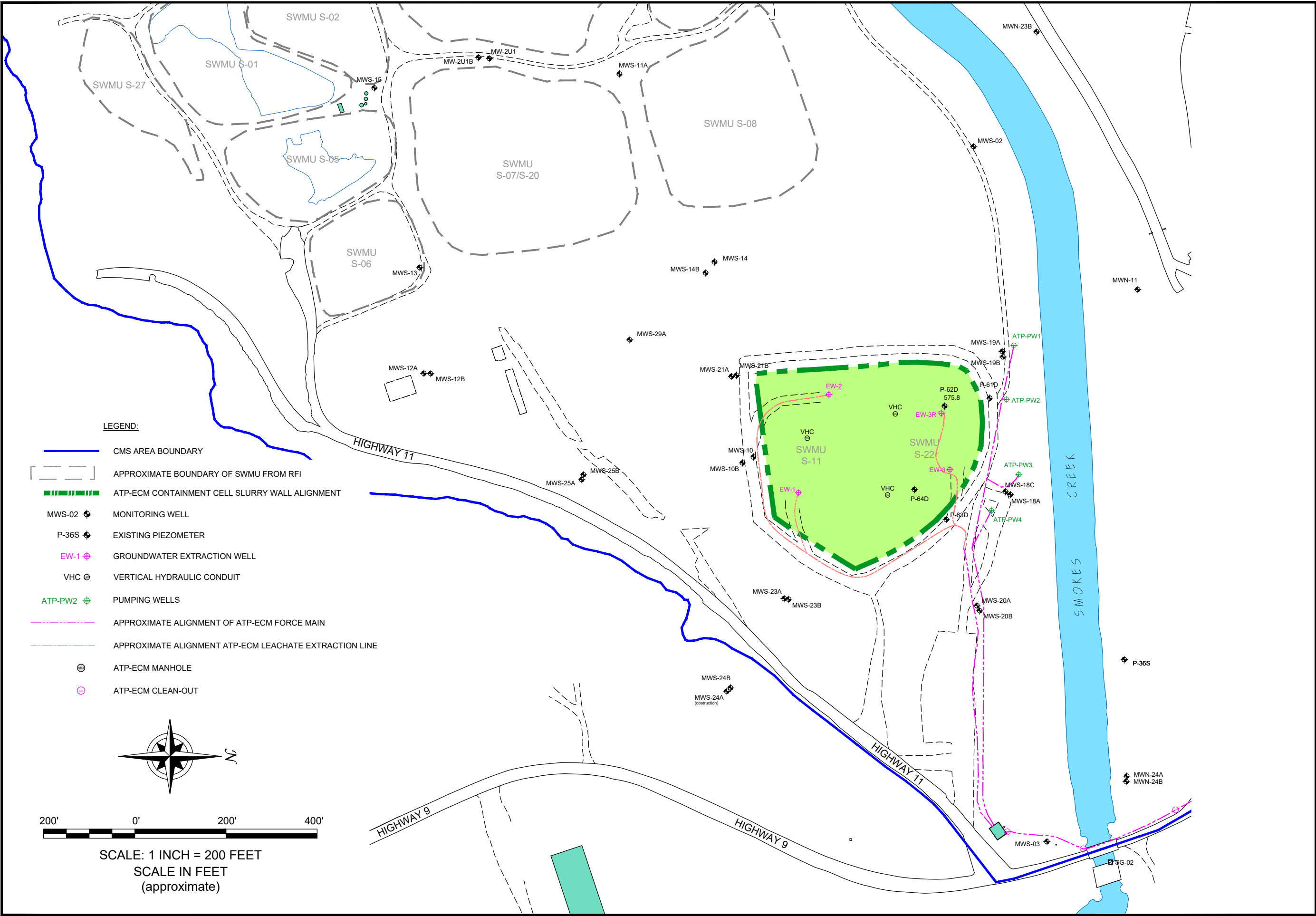
= concentration exceeds 10 times the GWQS/GV, but is less than 100 times the GWQS/GV

= concentration exceeds 100 times the GWQS/GV

## FIGURES

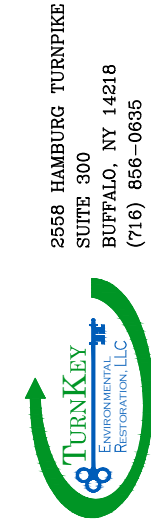
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DATE: FEBRUARY 2021  
DRAFTED BY: CMC



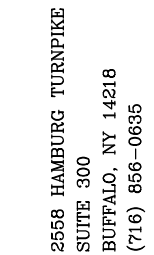
**ATP SWMU GROUP & ECM**  
ANNUAL MONITORING & MAINTENANCE SUMMARY REPORT  
TECUMSEH LACKAWANNA SITE  
LACKAWANNA, NEW YORK

PREPARED FOR  
TECUMSEH REDEVELOPMENT INC.



JOB NO.:

**FIGURE 1**



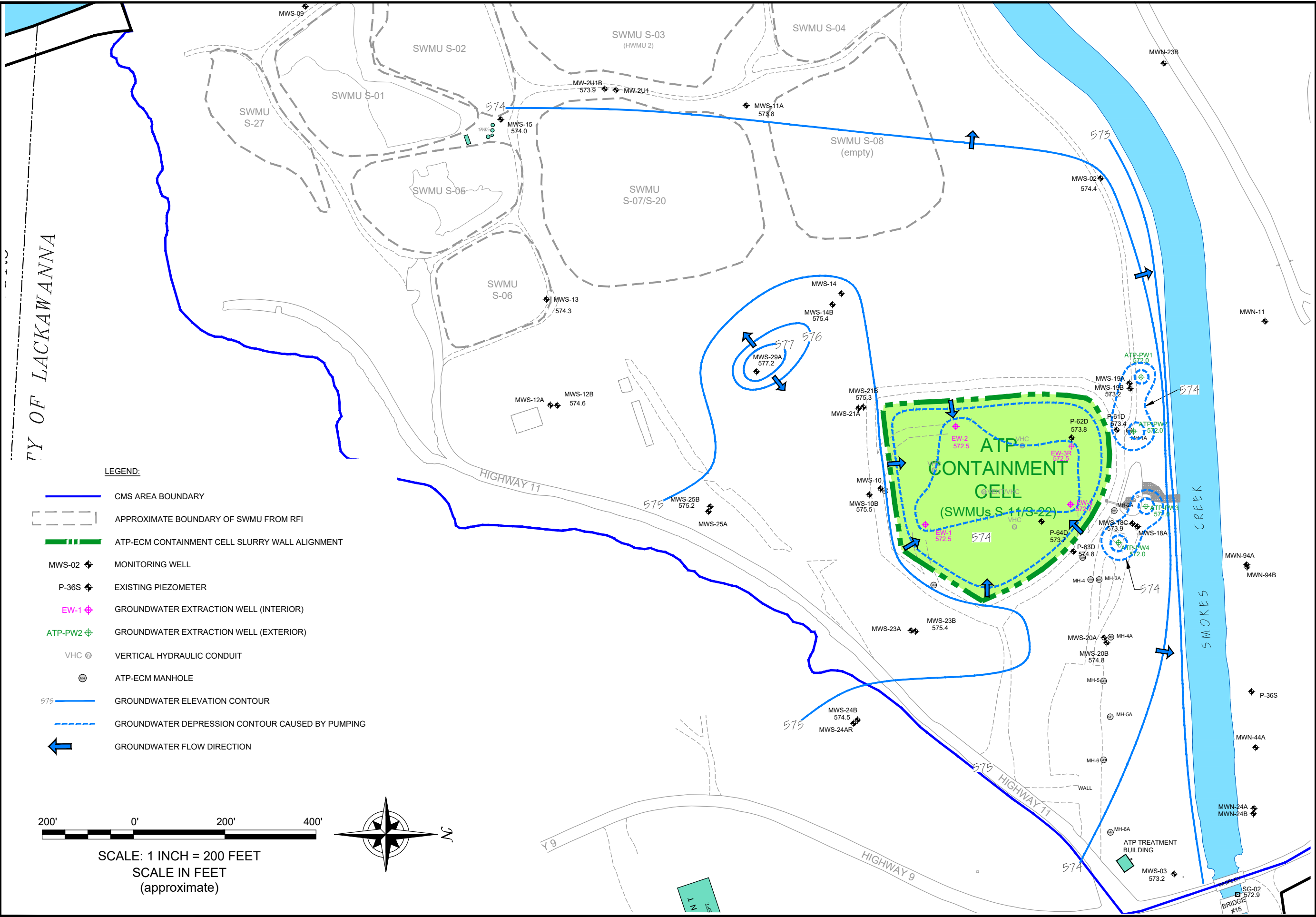
JOB NO.: 0071-020-222

# ISOPOTENTIAL MAP - MARCH 2021

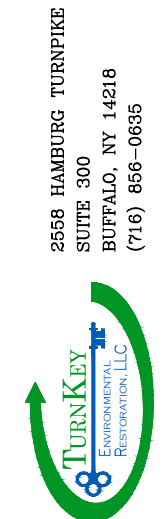
TECUMSEH LACKAWANNA SITE  
LACKAWANNA, NEW YORK

PREPARED FOR  
TECUMSEH REDEVELOPMENT INC.

## FIGURE 2



**ISOPOTENTIAL MAP - JUNE 2021**  
ANNUAL MONITORING & MAINTENANCE SUMMARY REPORT  
TECUMSEH LACKAWANNA SITE  
LACKAWANNA, NEW YORK

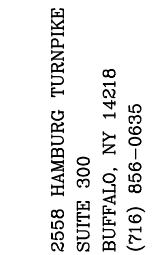


JOB NO.: 0071-020-222

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TECUMSEH REDEVELOPMENT INC.

**FIGURE 3**





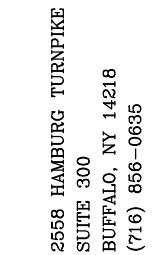
JOB NO.: 0071-020-222

# ISOPOTENTIAL MAP - NOVEMBER 2021

TECUMSEH LACKAWANNA SITE  
LACKAWANNA, NEW YORK

PREPARED FOR  
TECUMSEH REDEVELOPMENT INC.

### FIGURE 4



JOB NO.: 0071-020-222

# ISOPOTENTIAL MAP - DECEMBER 2021

TECUMSEH LACKAWANNA SITE  
LACKAWANNA, NEW YORK

PREPARED FOR  
TECUMSEH REDEVELOPMENT INC.

### FIGURE 5



# ATTACHMENT 1

## REPORTS TO ERIE COUNTY SEWER DISTRICT NO. 6



**Strong Advocates, Effective Solutions, Integrated Implementation**

May 3, 2021

Ms. Laura Surdej  
Erie County Sewer/Southtown's Sewage Treatment Plant  
260 Lehigh Ave.  
Lackawanna, NY 14218

Re: ECSD No.6 Discharge Permit LA-03  
Semi-Annual Report (October 2020 - April 2021)  
Lackawanna, New York

Dear Ms. Surdej:

TurnKey Environmental Restoration, LLC (TurnKey) has prepared the following certification statement for the April 2021 Semi-Annual Monitoring Report on behalf of our client, Tecumseh Redevelopment Inc., in accordance with Erie County Sewer District No. 6 (ECSD No.6), Permit No. LA-03:

*I certify, under penalty of law, that this document and all attachments were prepared under/by direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.*

Sincerely,  
TurnKey Environmental Restoration, LLC

A handwritten signature in blue ink, appearing to read "Brock Greene".

Brock Greene  
Senior Project Environmental Scientist



**Strong Advocates, Effective Solutions, Integrated Implementation**

May 3, 2021

Ms. Laura Surdej  
Erie County Sewer/Southtown's Sewage Treatment Plant  
260 Lehigh Ave  
Lackawanna, NY 14218

Re: ECSD No.6 Discharge Permit LA-03 –Semi-Annual Report (October 2020 – April 2021)  
Lackawanna, New York

Dear Ms. Surdej:

TurnKey Environmental Restoration, LLC (TurnKey) has prepared this correspondence on behalf of our client, Tecumseh Redevelopment Inc., in accordance with Erie County Sewer District No. 6 (ECSD No. 6) Permit No. LA-03, effective July 1, 2018. As required by the permit, this semi-annual report summarizes flow, pH and compliance sample results for the report period from October 30, 2020 through April 30, 2021.

Turnkey personnel recorded totalizer (total gallons) and pH readings weekly during the reporting period. Table 1 summarizes the total volume (gallons), calculated daily flow (gallons per day) and pH readings.

On April 8, 2021 TurnKey personnel collected an effluent (outfall) water sample and submitted the sample under chain-of-custody command to Alpha Analytical for laboratory analysis in accordance with the discharge permit. Table 2 summarizes the analytical results; Attachment 1 contains the Laboratory Analytical Report. As indicated on Table 2 all parameter detections meet corresponding permitted discharge limits.

As of April 30, 2021 a total of 11,045,546 gallons of water has been pre-treated and discharged to the ECSD No.6 collection and conveyance system. The calculated daily flow for the reporting period has ranged between 1,045 and 3,518 GPD, well below permitted flows of up to 45,000 GPD. The pH readings have been between 5.65 and 6.54 standard units, with a permitted operating range of 5 and 12 standard units.

Please contact us if you have any questions or require additional information.

Sincerely,  
TurnKey Environmental Restoration, LLC

A handwritten signature in blue ink, appearing to read "Brock Greene".

Brock Greene  
Senior Project Environmental Scientist

# TABLES



**TABLE 1**

**SUMMARY OF EFFLUENT FLOW AND pH**

**ATP GROUNDWATER PRE-TREATMENT SYSTEM**

**Tecumseh Redevelopment, Inc.**

**Lackawanna, New York**

Date	Totalizer (gallons)	Total Gallons this event	Calculated GPD (gallons/day)	pH
<b>Permit Limits:</b>			<b>45,000 GPD</b>	<b>5-12</b>
10/30/20	10,729,470	14,070	3,518	5.72
11/6/20	10,745,059	15,589	2,598	6.54
11/13/20	10,760,209	15,150	2,164	5.81
11/20/20	10,775,974	15,765	2,252	5.80
11/27/20	10,794,360	18,386	2,627	5.74
12/4/20	10,812,354	17,994	2,571	5.83
12/11/20	10,829,491	17,137	2,448	6.00
12/18/20	10,848,392	18,901	2,700	5.85
12/27/20	10,868,911	20,519	2,280	5.65
1/3/21	10,879,343	10,432	1,739	5.87
1/8/21	10,886,553	7,210	1,442	6.02
1/15/21	10,895,376	8,823	1,260	6.00
1/21/21	10,907,237	11,861	1,977	5.92
1/29/21	10,920,831	13,594	1,699	6.10
2/5/21	10,933,422	12,591	2,099	6.27
2/12/21	10,944,552	11,130	1,590	6.37
2/19/21	10,953,418	8,866	1,267	6.29
2/26/21	10,962,700	9,282	1,326	6.11
3/5/21	10,972,103	9,403	1,045	6.12
3/12/21	10,980,593	8,490	1,213	6.17
3/19/21	10,989,044	16,941	2,420	6.14
3/26/21	10,997,165	16,572	2,367	6.07
4/2/21	11,006,113	8,948	1,491	6.04
4/9/21	11,013,583	7,470	1,067	6.09
4/16/21	11,021,403	15,290	2,184	6.07
4/23/21	11,033,375	19,792	2,827	6.06
4/30/21	11,045,546	12,171	1,739	6.19



**TABLE 2**

**SUMMARY OF EFFLUENT WATER ANALYTICAL DATA**

**ATP GROUNDWATER PRE-TREATMENT SYSTEM**

**Tecumseh Redevelopment, Inc.**

**Lackawanna, New York**

Parameter <sup>1</sup>	Effluent	Discharge Permit Limitations <sup>2</sup>
	04/08/21	
Volatile Organic Compounds (VOCs - Method 624) - mg/L		
Benzene	0.0092	--
Bromomethane	0.0061 J	--
TOTAL VOCs (mg/L)	0.01530	--
Metal Compounds (Method 200.7 Rev 4.4) - mg/L <sup>3</sup>		
Arsenic	0.006	Monitor
Barium	0.027	Monitor
Cadmium	0.003 J	Monitor
Iron	91.5	Monitor
Selenium	0.019	Monitor
Titanium	0.005 J	Monitor
General Chemistry - mg/L		
Cyanide, Total	0.499	Monitor
Ammonia (as N)	43.4	Monitor
Phenolics, Total Recoverable	0.21	Monitor
Sulfate	1800	Monitor
pH	6.1	5-12
Total Toxic Organic Pollutants (TTO) <sup>4</sup>	0.0153	2.13

**Notes:**

1. Only those parameters detected are presented in this table; all others were reported as non-detect.
2. Per Erie County Sewer District No. 6 Discharge Permit LA-03 (July 2018)
3. Metals include Ag, As, Ba, Be, Cd, Cr, Cu, Fe, Hg, Ni, Pb, Sb, Se, Ti, and Zn
4. TTO is determined by totaling the reported compound concentrations detected via EPA Method 624.1

**Definitions:**

J = Estimated value; result is less than the sample quantitation limit but greater than zero.

# ATTACHMENT 1

Laboratory Data





## ANALYTICAL REPORT

Lab Number:	L2117698
Client:	Benchmark & Turnkey Companies 2558 Hamburg Turnpike Suite 300 Buffalo, NY 14218
ATTN:	Tom Forbes
Phone:	(716) 856-0599
Project Name:	ATP PRE-TREATMENT OM&M
Project Number:	T007-019-222
Report Date:	04/15/21

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

---

Eight Walkup Drive, Westborough, MA 01581-1019  
508-898-9220 (Fax) 508-898-9193 800-624-9220 - [www.alphalab.com](http://www.alphalab.com)



**Project Name:** ATP PRE-TREATMENT OM&M  
**Project Number:** T007-019-222

**Lab Number:** L2117698  
**Report Date:** 04/15/21

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Matrix</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>	<b>Receive Date</b>
L2117698-01	EFFLUENT	WATER	1951 HAMBURG TURNPIKE	04/08/21 11:15	04/08/21

**Project Name:** ATP PRE-TREATMENT OM&M  
**Project Number:** T007-019-222

**Lab Number:** L2117698  
**Report Date:** 04/15/21

### Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

**HOLD POLICY** - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

---

**Project Name:** ATP PRE-TREATMENT OM&M  
**Project Number:** T007-019-222

**Lab Number:** L2117698  
**Report Date:** 04/15/21

### Case Narrative (continued)

#### Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

#### Volatile Organics by Method 624

L2117698-01D: The sample has elevated detection limits due to the dilution required by the sample matrix. Sample is cloudy and has particles.

L2117698-01D: Due to the matrix of the sample (foam generation during purging/analysis), the laboratory used Anti-Foam solution in the sample and associated QC.

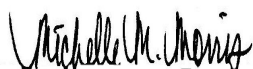
#### Total Metals

The WG1484459-3 MS recovery, performed on L2117698-01, is outside the acceptance criteria for selenium (132%). A post digestion spike was performed and was within acceptance criteria.

The WG1484459-3 MS recovery for iron (0%), performed on L2117698-01, does not apply because the sample concentration is greater than four times the spike amount added.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:



Michelle M. Morris

Title: Technical Director/Representative

Date: 04/15/21

# ORGANICS

# **VOLATILES**

**Project Name:** ATP PRE-TREATMENT OM&M**Lab Number:** L2117698**Project Number:** T007-019-222**Report Date:** 04/15/21**SAMPLE RESULTS**

Lab ID: L2117698-01 D  
 Client ID: EFFLUENT  
 Sample Location: 1951 HAMBURG TURNPIKE

Date Collected: 04/08/21 11:15  
 Date Received: 04/08/21  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 128,624.1  
 Analytical Date: 04/09/21 19:44  
 Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	5.0	2.8	5
1,1-Dichloroethane	ND		ug/l	7.5	2.0	5
Chloroform	ND		ug/l	5.0	1.9	5
Carbon tetrachloride	ND		ug/l	5.0	1.2	5
1,2-Dichloropropane	ND		ug/l	18	2.3	5
Dibromochloromethane	ND		ug/l	5.0	1.4	5
1,1,2-Trichloroethane	ND		ug/l	7.5	1.7	5
2-Chloroethylvinyl ether	ND		ug/l	50	1.7	5
Tetrachloroethene	ND		ug/l	5.0	1.3	5
Chlorobenzene	ND		ug/l	18	1.5	5
1,2-Dichloroethane	ND		ug/l	7.5	2.4	5
1,1,1-Trichloroethane	ND		ug/l	10	1.4	5
Bromodichloromethane	ND		ug/l	5.0	1.4	5
trans-1,3-Dichloropropene	ND		ug/l	7.5	1.6	5
cis-1,3-Dichloropropene	ND		ug/l	7.5	1.7	5
1,3-Dichloropropene, Total	ND		ug/l	7.5	1.6	5
Bromoform	ND		ug/l	5.0	1.1	5
1,1,2,2-Tetrachloroethane	ND		ug/l	5.0	1.0	5
Benzene	9.2		ug/l	5.0	1.9	5
Toluene	ND		ug/l	5.0	1.6	5
Ethylbenzene	ND		ug/l	5.0	1.4	5
Chloromethane	ND		ug/l	25	5.2	5
Bromomethane	6.1	J	ug/l	25	6.1	5
Vinyl chloride	ND		ug/l	5.0	1.9	5
Chloroethane	ND		ug/l	10	1.8	5
1,1-Dichloroethene	ND		ug/l	5.0	1.5	5
trans-1,2-Dichloroethene	ND		ug/l	7.5	1.6	5
Trichloroethene	ND		ug/l	5.0	1.7	5



**Project Name:** ATP PRE-TREATMENT OM&M  
**Project Number:** T007-019-222

**Lab Number:** L2117698  
**Report Date:** 04/15/21

**SAMPLE RESULTS**

**Lab ID:** L2117698-01      D  
**Client ID:** EFFLUENT  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 04/08/21 11:15  
**Date Received:** 04/08/21  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2-Dichlorobenzene	ND		ug/l	25	1.4	5
1,3-Dichlorobenzene	ND		ug/l	25	1.4	5
1,4-Dichlorobenzene	ND		ug/l	25	1.4	5
Acrolein	ND		ug/l	40	9.1	5
Acrylonitrile	ND		ug/l	50	1.7	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	107		60-140
Fluorobenzene	102		60-140
4-Bromofluorobenzene	93		60-140

**Project Name:** ATP PRE-TREATMENT OM&M  
**Project Number:** T007-019-222

**Lab Number:** L2117698  
**Report Date:** 04/15/21

### Method Blank Analysis Batch Quality Control

Analytical Method: 128,624.1  
 Analytical Date: 04/09/21 14:22  
 Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1485337-4					
Methylene chloride	ND		ug/l	1.0	0.56
1,1-Dichloroethane	ND		ug/l	1.5	0.40
Chloroform	ND		ug/l	1.0	0.38
Carbon tetrachloride	ND		ug/l	1.0	0.24
1,2-Dichloropropane	ND		ug/l	3.5	0.46
Dibromochloromethane	ND		ug/l	1.0	0.27
1,1,2-Trichloroethane	ND		ug/l	1.5	0.34
2-Chloroethylvinyl ether	ND		ug/l	10	0.35
Tetrachloroethene	ND		ug/l	1.0	0.26
Chlorobenzene	ND		ug/l	3.5	0.30
1,2-Dichloroethane	ND		ug/l	1.5	0.47
1,1,1-Trichloroethane	ND		ug/l	2.0	0.29
Bromodichloromethane	ND		ug/l	1.0	0.28
trans-1,3-Dichloropropene	ND		ug/l	1.5	0.31
cis-1,3-Dichloropropene	ND		ug/l	1.5	0.34
1,3-Dichloropropene, Total	ND		ug/l	1.5	0.31
Bromoform	ND		ug/l	1.0	0.22
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	0.20
Benzene	ND		ug/l	1.0	0.38
Toluene	ND		ug/l	1.0	0.31
Ethylbenzene	ND		ug/l	1.0	0.28
Chloromethane	ND		ug/l	5.0	1.0
Bromomethane	1.6	J	ug/l	5.0	1.2
Vinyl chloride	ND		ug/l	1.0	0.38
Chloroethane	ND		ug/l	2.0	0.37
1,1-Dichloroethene	ND		ug/l	1.0	0.31
trans-1,2-Dichloroethene	ND		ug/l	1.5	0.33
Trichloroethene	ND		ug/l	1.0	0.33
1,2-Dichlorobenzene	ND		ug/l	5.0	0.28

**Project Name:** ATP PRE-TREATMENT OM&M  
**Project Number:** T007-019-222

**Lab Number:** L2117698  
**Report Date:** 04/15/21

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 128,624.1  
 Analytical Date: 04/09/21 14:22  
 Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1485337-4					
1,3-Dichlorobenzene	ND		ug/l	5.0	0.27
1,4-Dichlorobenzene	ND		ug/l	5.0	0.29
Acrolein	ND		ug/l	8.0	1.8
Acrylonitrile	ND		ug/l	10	0.33

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	105		60-140
Fluorobenzene	96		60-140
4-Bromofluorobenzene	95		60-140

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** ATP PRE-TREATMENT OM&M

**Project Number:** T007-019-222

**Lab Number:** L2117698

**Report Date:** 04/15/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1485337-3								
Methylene chloride	95		-		60-140	-		28
1,1-Dichloroethane	100		-		50-150	-		49
Chloroform	100		-		70-135	-		54
Carbon tetrachloride	90		-		70-130	-		41
1,2-Dichloropropane	105		-		35-165	-		55
Dibromochloromethane	85		-		70-135	-		50
1,1,2-Trichloroethane	100		-		70-130	-		45
2-Chloroethylvinyl ether	105		-		1-225	-		71
Tetrachloroethene	100		-		70-130	-		39
Chlorobenzene	85		-		65-135	-		53
1,2-Dichloroethane	105		-		70-130	-		49
1,1,1-Trichloroethane	100		-		70-130	-		36
Bromodichloromethane	95		-		65-135	-		56
trans-1,3-Dichloropropene	95		-		50-150	-		86
cis-1,3-Dichloropropene	100		-		25-175	-		58
Bromoform	75		-		70-130	-		42
1,1,2,2-Tetrachloroethane	100		-		60-140	-		61
Benzene	105		-		65-135	-		61
Toluene	105		-		70-130	-		41
Ethylbenzene	95		-		60-140	-		63
Chloromethane	90		-		1-205	-		60
Bromomethane	80		-		15-185	-		61
Vinyl chloride	90		-		5-195	-		66

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** ATP PRE-TREATMENT OM&M

**Project Number:** T007-019-222

**Lab Number:** L2117698

**Report Date:** 04/15/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1485337-3								
Chloroethane	100		-		40-160	-		78
1,1-Dichloroethene	100		-		50-150	-		32
trans-1,2-Dichloroethene	100		-		70-130	-		45
Trichloroethene	95		-		65-135	-		48
1,2-Dichlorobenzene	95		-		65-135	-		57
1,3-Dichlorobenzene	90		-		70-130	-		43
1,4-Dichlorobenzene	90		-		65-135	-		57
Acrolein	120		-		60-140	-		30
Acrylonitrile	110		-		60-140	-		60

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Pentafluorobenzene	111				60-140
Fluorobenzene	100				60-140
4-Bromofluorobenzene	93				60-140

## METALS

**Project Name:** ATP PRE-TREATMENT OM&M**Lab Number:** L2117698**Project Number:** T007-019-222**Report Date:** 04/15/21**SAMPLE RESULTS**

Lab ID: L2117698-01

Date Collected: 04/08/21 11:15

Client ID: EFFLUENT

Date Received: 04/08/21

Sample Location: 1951 HAMBURG TURNPIKE

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Antimony, Total	ND		mg/l	0.050	0.007	1	04/12/21 11:11	04/14/21 16:10	EPA 3005A	19,200.7	BV
Arsenic, Total	0.006		mg/l	0.005	0.002	1	04/12/21 11:11	04/14/21 13:33	EPA 3005A	19,200.7	EW
Barium, Total	0.027		mg/l	0.010	0.002	1	04/12/21 11:11	04/14/21 13:33	EPA 3005A	19,200.7	EW
Beryllium, Total	ND		mg/l	0.005	0.001	1	04/12/21 11:11	04/14/21 13:33	EPA 3005A	19,200.7	EW
Cadmium, Total	0.003	J	mg/l	0.005	0.001	1	04/12/21 11:11	04/14/21 13:33	EPA 3005A	19,200.7	EW
Chromium, Total	ND		mg/l	0.010	0.002	1	04/12/21 11:11	04/14/21 13:33	EPA 3005A	19,200.7	EW
Copper, Total	ND		mg/l	0.010	0.002	1	04/12/21 11:11	04/14/21 13:33	EPA 3005A	19,200.7	EW
Iron, Total	91.5		mg/l	0.050	0.009	1	04/12/21 11:11	04/14/21 13:33	EPA 3005A	19,200.7	EW
Lead, Total	ND		mg/l	0.010	0.003	1	04/12/21 11:11	04/14/21 13:33	EPA 3005A	19,200.7	EW
Mercury, Total	ND		mg/l	0.00020	0.00009	1	04/12/21 11:57	04/13/21 14:01	EPA 245.1	3,245.1	OU
Nickel, Total	ND		mg/l	0.025	0.002	1	04/12/21 11:11	04/14/21 13:33	EPA 3005A	19,200.7	EW
Selenium, Total	0.019		mg/l	0.010	0.004	1	04/12/21 11:11	04/14/21 13:33	EPA 3005A	19,200.7	EW
Silver, Total	ND		mg/l	0.007	0.003	1	04/12/21 11:11	04/14/21 13:33	EPA 3005A	19,200.7	EW
Titanium, Total	0.005	J	mg/l	0.010	0.002	1	04/12/21 11:11	04/14/21 13:33	EPA 3005A	19,200.7	EW
Zinc, Total	ND		mg/l	0.050	0.002	1	04/12/21 11:11	04/14/21 13:33	EPA 3005A	19,200.7	EW



Project Name: ATP PRE-TREATMENT OM&amp;M

Lab Number: L2117698

Project Number: T007-019-222

Report Date: 04/15/21

## Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1484459-1										
Antimony, Total	ND		mg/l	0.050	0.007	1	04/12/21 11:11	04/14/21 16:00	19,200.7	BV
Arsenic, Total	ND		mg/l	0.005	0.002	1	04/12/21 11:11	04/14/21 13:09	19,200.7	EW
Barium, Total	ND		mg/l	0.010	0.002	1	04/12/21 11:11	04/14/21 13:09	19,200.7	EW
Beryllium, Total	ND		mg/l	0.005	0.001	1	04/12/21 11:11	04/14/21 13:09	19,200.7	EW
Cadmium, Total	ND		mg/l	0.005	0.001	1	04/12/21 11:11	04/14/21 13:09	19,200.7	EW
Chromium, Total	ND		mg/l	0.010	0.002	1	04/12/21 11:11	04/14/21 13:09	19,200.7	EW
Copper, Total	ND		mg/l	0.010	0.002	1	04/12/21 11:11	04/14/21 13:09	19,200.7	EW
Iron, Total	ND		mg/l	0.050	0.009	1	04/12/21 11:11	04/14/21 13:09	19,200.7	EW
Lead, Total	ND		mg/l	0.010	0.003	1	04/12/21 11:11	04/14/21 13:09	19,200.7	EW
Nickel, Total	ND		mg/l	0.025	0.002	1	04/12/21 11:11	04/14/21 13:09	19,200.7	EW
Selenium, Total	ND		mg/l	0.010	0.004	1	04/12/21 11:11	04/14/21 13:09	19,200.7	EW
Silver, Total	ND		mg/l	0.007	0.003	1	04/12/21 11:11	04/14/21 13:09	19,200.7	EW
Titanium, Total	ND		mg/l	0.010	0.002	1	04/12/21 11:11	04/14/21 13:09	19,200.7	EW
Zinc, Total	ND		mg/l	0.050	0.002	1	04/12/21 11:11	04/14/21 13:09	19,200.7	EW

### Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1484463-1										
Mercury, Total	ND		mg/l	0.00020	0.00009	1	04/12/21 11:57	04/13/21 13:41	3,245.1	OU

### Prep Information

Digestion Method: EPA 245.1





## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** ATP PRE-TREATMENT OM&M

**Lab Number:** L2117698

**Project Number:** T007-019-222

**Report Date:** 04/15/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1484459-2								
Antimony, Total	107		-		85-115	-		
Arsenic, Total	113		-		85-115	-		
Barium, Total	103		-		85-115	-		
Beryllium, Total	104		-		85-115	-		
Cadmium, Total	111		-		85-115	-		
Chromium, Total	102		-		85-115	-		
Copper, Total	107		-		85-115	-		
Iron, Total	96		-		85-115	-		
Lead, Total	112		-		85-115	-		
Nickel, Total	102		-		85-115	-		
Selenium, Total	113		-		85-115	-		
Silver, Total	107		-		85-115	-		
Titanium, Total	105		-		85-115	-		
Zinc, Total	109		-		85-115	-		

Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1484463-2

Mercury, Total	99		-		85-115	-		
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# Matrix Spike Analysis

## Batch Quality Control

**Project Name:** ATP PRE-TREATMENT OM&M

**Project Number:** T007-019-222

**Lab Number:** L2117698

**Report Date:** 04/15/21

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01    QC Batch ID: WG1484459-3    QC Sample: L2117698-01    Client ID: EFFLUENT												
Antimony, Total	ND	0.5	0.554	111		-	-		75-125	-		20
Arsenic, Total	0.006	0.12	0.154	123		-	-		75-125	-		20
Barium, Total	0.027	2	2.12	105		-	-		75-125	-		20
Beryllium, Total	ND	0.05	0.052	103		-	-		75-125	-		20
Cadmium, Total	0.003J	0.051	0.056	109		-	-		75-125	-		20
Chromium, Total	ND	0.2	0.198	99		-	-		75-125	-		20
Copper, Total	ND	0.25	0.271	108		-	-		75-125	-		20
Iron, Total	91.5	1	89.8	0	Q	-	-		75-125	-		20
Lead, Total	ND	0.51	0.512	100		-	-		75-125	-		20
Nickel, Total	ND	0.5	0.480	96		-	-		75-125	-		20
Selenium, Total	0.019	0.12	0.177	132	Q	-	-		75-125	-		20
Silver, Total	ND	0.05	0.059	118		-	-		75-125	-		20
Titanium, Total	0.005J	1	1.06	106		-	-		75-125	-		20
Zinc, Total	ND	0.5	0.506	101		-	-		75-125	-		20

# **Matrix Spike Analysis** **Batch Quality Control**

**Project Name:** ATP PRE-TREATMENT OM&M

**Project Number:** T007-019-222

**Lab Number:** L2117698

**Report Date:** 04/15/21

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01    QC Batch ID: WG1484459-7    QC Sample: L2117770-01    Client ID: MS Sample									
Antimony, Total	ND	0.5	0.570	114	-	-	75-125	-	20
Arsenic, Total	ND	0.12	0.139	116	-	-	75-125	-	20
Barium, Total	0.041	2	2.09	102	-	-	75-125	-	20
Beryllium, Total	ND	0.05	0.052	105	-	-	75-125	-	20
Cadmium, Total	ND	0.051	0.056	110	-	-	75-125	-	20
Chromium, Total	0.008J	0.2	0.207	104	-	-	75-125	-	20
Copper, Total	0.124	0.25	0.387	105	-	-	75-125	-	20
Iron, Total	0.609	1	1.54	93	-	-	75-125	-	20
Lead, Total	0.048	0.51	0.592	107	-	-	75-125	-	20
Nickel, Total	0.013J	0.5	0.508	102	-	-	75-125	-	20
Selenium, Total	ND	0.12	0.136	113	-	-	75-125	-	20
Silver, Total	ND	0.05	0.055	109	-	-	75-125	-	20
Titanium, Total	0.010J	1	1.06	106	-	-	75-125	-	20
Zinc, Total	0.110	0.5	0.646	107	-	-	75-125	-	20
Total Metals - Mansfield Lab Associated sample(s): 01    QC Batch ID: WG1484463-3    QC Sample: L2117810-01    Client ID: MS Sample									
Mercury, Total	ND	0.005	0.00524	105	-	-	70-130	-	20

# **Lab Duplicate Analysis** *Batch Quality Control*

**Project Name:** ATP PRE-TREATMENT OM&M

**Project Number:** T007-019-222

**Lab Number:** L2117698

**Report Date:** 04/15/21

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1484459-4 QC Sample: L2117698-01 Client ID: EFFLUENT						
Arsenic, Total	0.006	0.008	mg/l	20		20
Barium, Total	0.027	0.027	mg/l	1		20
Beryllium, Total	ND	ND	mg/l	NC		20
Cadmium, Total	0.003J	0.003J	mg/l	NC		20
Chromium, Total	ND	ND	mg/l	NC		20
Copper, Total	ND	ND	mg/l	NC		20
Iron, Total	91.5	90.2	mg/l	1		20
Lead, Total	ND	ND	mg/l	NC		20
Nickel, Total	ND	ND	mg/l	NC		20
Selenium, Total	0.019	0.018	mg/l	6		20
Silver, Total	ND	ND	mg/l	NC		20
Titanium, Total	0.005J	0.005J	mg/l	NC		20
Zinc, Total	ND	ND	mg/l	NC		20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1484459-4 QC Sample: L2117698-01 Client ID: EFFLUENT						
Antimony, Total	ND	ND	mg/l	NC		20

# **Lab Duplicate Analysis** *Batch Quality Control*

**Project Name:** ATP PRE-TREATMENT OM&M

**Project Number:** T007-019-222

**Lab Number:** L2117698

**Report Date:** 04/15/21

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1484459-8 QC Sample: L2117770-01 Client ID: DUP Sample					
Arsenic, Total	ND	ND	mg/l	NC	20
Cadmium, Total	ND	ND	mg/l	NC	20
Chromium, Total	0.008J	0.008J	mg/l	NC	20
Copper, Total	0.124	0.122	mg/l	2	20
Lead, Total	0.048	0.048	mg/l	0	20
Silver, Total	ND	ND	mg/l	NC	20
Zinc, Total	0.110	0.108	mg/l	2	20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1484463-4 QC Sample: L2117810-01 Client ID: DUP Sample					
Mercury, Total	ND	ND	mg/l	NC	20

**Project Name:** ATP PRE-TREATMENT OM&M  
**Project Number:** T007-019-222

**Lab Serial Dilution  
Analysis**  
Batch Quality Control

**Lab Number:** L2117698  
**Report Date:** 04/15/21

Parameter	Native Sample	Serial Dilution	Units	% D	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1484459-6 QC Sample: L2117698-01 Client ID: EFFLUENT						
Iron, Total	91.5	85.0	mg/l	7		20

# **INORGANICS & MISCELLANEOUS**

**Project Name:** ATP PRE-TREATMENT OM&M  
**Project Number:** T007-019-222

**Lab Number:** L2117698  
**Report Date:** 04/15/21

### SAMPLE RESULTS

**Lab ID:** L2117698-01  
**Client ID:** EFFLUENT  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 04/08/21 11:15  
**Date Received:** 04/08/21  
**Field Prep:** Not Specified

**Sample Depth:**  
**Matrix:** Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.499		mg/l	0.005	0.001	1	04/10/21 13:50	04/12/21 11:42	121,4500CN-CE	CR
pH (H)	6.1		SU	-	NA	1	-	04/12/21 17:22	121,4500H+-B	AS
Nitrogen, Ammonia	43.4		mg/l	0.750	0.240	10	04/14/21 03:38	04/14/21 19:34	44,350.1	AT
Sulfate	1800		mg/l	1000	140	100	04/14/21 16:54	04/14/21 16:54	121,4500SO4-E	JB
Phenolics, Total	0.21		mg/l	0.030	0.006	1	04/12/21 07:24	04/12/21 11:21	4,420.1	KP





Project Name: ATP PRE-TREATMENT OM&amp;M

Lab Number: L2117698

Project Number: T007-019-222

Report Date: 04/15/21

### Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1484736-1										
Cyanide, Total	ND		mg/l	0.005	0.001	1	04/10/21 13:50	04/12/21 11:26	121,4500CN-CE	CR
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1484977-1										
Phenolics, Total	ND		mg/l	0.030	0.006	1	04/12/21 07:24	04/12/21 10:22	4,420.1	KP
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1485892-1										
Nitrogen, Ammonia	ND		mg/l	0.075	0.024	1	04/14/21 03:38	04/14/21 19:17	44,350.1	AT
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1486158-1										
Sulfate	1.7	J	mg/l	10	1.4	1	04/14/21 16:54	04/14/21 16:54	121,4500SO4-E	JB

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** ATP PRE-TREATMENT OM&M

**Project Number:** T007-019-222

**Lab Number:** L2117698

**Report Date:** 04/15/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1484736-2								
Cyanide, Total	97		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1484977-2								
Phenolics, Total	101		-		70-130	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1485336-1								
pH	100		-		99-101	-		5
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1485892-2								
Nitrogen, Ammonia	96		-		90-110	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1486158-2								
Sulfate	100		-		90-110	-		

# Matrix Spike Analysis

## Batch Quality Control

**Project Name:** ATP PRE-TREATMENT OM&M

**Project Number:** T007-019-222

**Lab Number:** L2117698

**Report Date:** 04/15/21

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1484736-4 QC Sample: L2117615-01 Client ID: MS Sample												
Cyanide, Total	ND	0.2	0.189	94		-	-		90-110	-		30
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1484977-4 QC Sample: L2118151-01 Client ID: MS Sample												
Phenolics, Total	ND	0.4	0.34	84		-	-		70-130	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1485892-4 QC Sample: L2117605-03 Client ID: MS Sample												
Nitrogen, Ammonia	0.180	4	3.66	87	Q	-	-		90-110	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1486158-4 QC Sample: L2118406-02 Client ID: MS Sample												
Sulfate	16.	40	56	100		-	-		55-147	-		14

# Lab Duplicate Analysis

*Batch Quality Control*

**Project Name:** ATP PRE-TREATMENT OM&M

**Project Number:** T007-019-222

**Lab Number:** L2117698

**Report Date:** 04/15/21

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1484736-3 QC Sample: L2117615-01 Client ID: DUP Sample						
Cyanide, Total	ND	ND	mg/l	NC		30
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1484977-3 QC Sample: L2118151-01 Client ID: DUP Sample						
Phenolics, Total	ND	0.013J	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1485336-2 QC Sample: L2117698-01 Client ID: EFFLUENT						
pH (H)	6.1	6.1	SU	0		5
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1485892-3 QC Sample: L2117605-03 Client ID: DUP Sample						
Nitrogen, Ammonia	0.180	0.222	mg/l	21	Q	20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1486158-3 QC Sample: L2118406-02 Client ID: DUP Sample						
Sulfate	16.	15	mg/l	6		14

**Project Name:** ATP PRE-TREATMENT OM&M**Lab Number:** L2117698**Project Number:** T007-019-222**Report Date:** 04/15/21**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

**Cooler Information**

<b>Cooler</b>	<b>Custody Seal</b>
A	Absent

**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L2117698-01A	Vial Na2S2O3 preserved	A	NA		4.3	Y	Absent		624.1(3)
L2117698-01B	Vial Na2S2O3 preserved	A	NA		4.3	Y	Absent		624.1(3)
L2117698-01C	Vial Na2S2O3 preserved	A	NA		4.3	Y	Absent		624.1(3)
L2117698-01D	Plastic 250ml HNO3 preserved	A	<2	<2	4.3	Y	Absent		BA-UI(180),NI-UI(180),SB-UI(180),AG-UI(180),ZN-UI(180),TI-UI(180),SE-UI(180),FE-UI(180),HG-U(28),CD-UI(180),CR-UI(180),BE-UI(180),AS-UI(180),CU-UI(180),PB-UI(180)
L2117698-01E	Plastic 500ml H2SO4 preserved	A	<2	<2	4.3	Y	Absent		NH3-350(28)
L2117698-01F	Amber 1000ml H2SO4 preserved	A	<2	<2	4.3	Y	Absent		NY-TPHENOL-420(28)
L2117698-01G	Plastic 500ml unpreserved	A	7	7	4.3	Y	Absent		SO4-4500(28),PH-4500(.01)
L2117698-01H	Plastic 250ml NaOH preserved	A	>12	>12	4.3	Y	Absent		TCN-4500(14)

**Project Name:** ATP PRE-TREATMENT OM&M**Lab Number:** L2117698**Project Number:** T007-019-222**Report Date:** 04/15/21

## GLOSSARY

### Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)  Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

*Report Format: DU Report with 'J' Qualifiers*

**Project Name:** ATP PRE-TREATMENT OM&M  
**Project Number:** T007-019-222

**Lab Number:** L2117698  
**Report Date:** 04/15/21

### Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

### Terms

**Analytical Method:** Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

**Difference:** With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

**Final pH:** As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

**Frozen Date/Time:** With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

**Initial pH:** As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

**PAH Total:** With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

**PFAS Total:** With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. (Note: 'PFAS, Total (6)' is applicable to MassDEP DW compliance analysis only.). If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

**Total:** With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

### Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

**Report Format:** DU Report with 'J' Qualifiers



**Project Name:** ATP PRE-TREATMENT OM&M  
**Project Number:** T007-019-222

**Lab Number:** L2117698  
**Report Date:** 04/15/21

**Data Qualifiers**

- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.

Report Format: DU Report with 'J' Qualifiers





**Project Name:** ATP PRE-TREATMENT OM&M  
**Project Number:** T007-019-222

**Lab Number:** L2117698  
**Report Date:** 04/15/21

## REFERENCES

- 3 Methods for the Determination of Metals in Environmental Samples, Supplement I. EPA/600/R-94/111. May 1994.
- 4 Methods for Chemical Analysis of Water and Wastes. EPA 600/4-79-020. Revised March 1983.
- 19 Inductively Coupled Plasma Atomic Emission Spectrometric Method for Trace Element Analysis of Water and Wastes. Appendix C, Part 136, 40 CFR (Code of Federal Regulations). July 1, 1999 edition.
- 44 Methods for the Determination of Inorganic Substances in Environmental Samples, EPA/600/R-93/100, August 1993.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.
- 128 Method 624.1: Purgeables by GC/MS, EPA 821-R-16-008, December 2016.

## LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



**Alpha Analytical, Inc.**Facility: **Company-wide**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**

Revision 19

Published Date: 4/2/2021 1:14:23 PM

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**Certification Information**

The following analytes are not included in our Primary NELAP Scope of Accreditation:

**Westborough Facility****EPA 624/624.1:** m/p-xylene, o-xylene, Naphthalene**EPA 625/625.1:** alpha-Terpineol**EPA 8260C/8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270D/8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO<sub>2</sub>, NO<sub>3</sub>.**Mansfield Facility****SM 2540D:** TSS**EPA 8082A:** NPW: PCB: 1, 5, 31, 87, 101, 110, 141, 151, 153, 180, 183, 187.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

**Biological Tissue Matrix:** EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

**Westborough Facility:****Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,****EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 332:** Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.****Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:**Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,****SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.****Mansfield Facility:****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.****EPA 522, EPA 537.1.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1 Hg.****SM2340B**

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

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Strong Advocates, Effective Solutions, Integrated Implementation

November 2, 2021

Ms. Laura Surdej  
Erie County Sewer/Southtown's Sewage Treatment Plant  
260 Lehigh Ave.  
Lackawanna, NY 14218

Re: ECSD No.6 Discharge Permit LA-03 Rev. 1 (10/27/21)  
Semi-Annual Report (May 2021 – October 2021)  
Lackawanna, New York

Dear Ms. Surdej:

TurnKey Environmental Restoration, LLC (TurnKey) has prepared the following certification statement for the October 2021 Semi-Annual Monitoring Report on behalf of our client, Tecumseh Redevelopment Inc., in accordance with Erie County Sewer District No. 6 (ECSD No.6), Permit No. LA-03 Rev. 1 (10/27/21):

*I certify, under penalty of law, that this document and all attachments were prepared under/by direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.*

Sincerely,  
TurnKey Environmental Restoration, LLC

A handwritten signature in blue ink, appearing to read "Brock Greene".

Brock Greene  
Senior Project Environmental Scientist



**Strong Advocates, Effective Solutions, Integrated Implementation**

November 2, 2021

Ms. Laura Surdej  
Erie County Sewer/Southtown's Sewage Treatment Plant  
260 Lehigh Ave  
Lackawanna, NY 14218

Re: ECSD No.6 Discharge Permit LA-03, Rev. 1 (10/27/21)  
Semi-Annual Report (May 2021 – October 2021)  
Lackawanna, New York

Dear Ms. Surdej:

TurnKey Environmental Restoration, LLC (TurnKey) has prepared this correspondence on behalf of our client, Tecumseh Redevelopment Inc., in accordance with Erie County Sewer District No. 6 (ECSD No. 6) Permit No. LA-03, Rev. 1 (10/27/21). As required by the permit, this semi-annual report summarizes flow, pH and compliance sample results for the report period from May 1, 2021 through October 29, 2021.

Turnkey personnel recorded totalizer (total gallons) and pH readings weekly during the reporting period. Table 1 summarizes the total volume (gallons), calculated daily flow (gallons per day) and pH readings.

On October 25, 2021 TurnKey personnel collected an effluent (outfall) water sample and submitted the sample under chain-of-custody command to Alpha Analytical for laboratory analysis in accordance with the discharge permit. Table 2 summarizes the analytical results; Attachment 1 contains the Laboratory Analytical Report. As indicated on Table 2 all parameter detections meet corresponding permitted discharge limits.

As of October 29, 2021 a total of 11,317,874 gallons of water has been pre-treated and discharged to the ECSD No.6 collection and conveyance system. The calculated daily flow for the reporting period has ranged between 1,505 and 5,866 GPD, well below permitted flows of up to 45,000 GPD. The flow meter was subjected to third party annual calibration on May 13, 2021. The calibration certificate is presented as Attachment 2. The pH readings have been between 5.75 and 7.13 standard units, with a permitted operating range of 5 and 12 standard units.

Please contact us if you have any questions or require additional information.

Sincerely,  
TurnKey Environmental Restoration, LLC

A handwritten signature in blue ink, appearing to read "Brock Greene".

Brock Greene  
Senior Project Environmental Scientist

# TABLES



**TABLE 1**

**SUMMARY OF EFFLUENT FLOW AND pH**

**ATP GROUNDWATER PRE-TREATMENT SYSTEM**

**Tecumseh Redevelopment, Inc.**

**Lackawanna, New York**

Date	Totalizer (gallons)	Total Gallons this event	Calculated GPD (gallons/day)	pH
<b>Permit Limits:</b>			<b>45,000 GPD</b>	<b>5-12</b>
5/7/21	11,055,536	22,161	3,166	6.10
5/14/21	11,067,266	21,720	3,103	6.20
5/21/21	11,078,787	23,251	3,322	6.12
5/28/21	11,090,195	22,929	3,276	6.17
6/4/21	11,101,124	22,337	3,723	6.20
6/11/21	11,104,298	14,103	2,015	6.17
6/18/21	11,111,660	10,536	1,505	5.90
6/25/21	11,121,235	16,937	2,420	6.22
7/2/21	11,130,637	18,977	2,711	6.10
7/9/21	11,140,732	19,497	2,785	6.14
7/16/21	11,150,787	20,150	2,879	5.91
7/23/21	11,161,178	20,446	2,921	5.79
7/30/21	11,174,790	24,003	3,429	5.75
8/6/21	11,185,986	24,808	4,135	5.94
8/13/21	11,185,986	11,196	1,599	5.82
8/20/21	11,198,753	12,767	1,824	6.11
8/27/21	11,211,185	25,199	3,600	5.80
9/3/21	11,233,951	35,198	5,866	5.84
9/10/21	11,245,010	33,825	4,832	5.82
9/17/21	11,255,819	21,868	3,124	5.80
9/24/21	11,265,456	20,446	2,921	5.79
10/1/21	11,273,592	17,773	2,539	6.95
10/8/21	11,282,646	17,190	2,456	7.13
10/15/21	11,293,953	20,361	2,909	5.91
10/22/21	11,305,442	22,796	3,257	5.88
10/29/21	11,317,874	23,921	3,417	5.80





**TABLE 2**

**SUMMARY OF EFFLUENT WATER ANALYTICAL DATA**

**ATP GROUNDWATER PRE-TREATMENT SYSTEM**

**Tecumseh Redevelopment, Inc.**

**Lackawanna, New York**

Parameter <sup>1</sup>	Effluent	Discharge Permit Limitations <sup>2</sup>
	10/25/21	
Volatile Organic Compounds (VOCs - Method 624) - mg/L		
1,1-Dichloroethane	0.006	--
1,2-Dichloroethane	0.012	--
Benzene	0.51	--
TOTAL VOCs (mg/L)	0.5280	--
Semi-Volatile Organic Compounds (SVOCs - Method 625) - mg/L		
2,4-Dimethylphenol	0.00335 J	--
Phenol	0.00371 J	--
Naphthalene	0.00398	--
TOTAL SVOCs (mg/L)	0.01104 J	--
Polychlorinated Biphenyls (PCBs ) (Method 608)- mg/L		
All Compounds Non-Detect		--
Organochlorine Pesticide Compounds (Method 608) - mg/L		
All Compounds Non-Detect		--
Metal Compounds (Method 200.7 Rev 4.4) - mg/L <sup>3</sup>		
Arsenic	0.003 J	0.18
Barium	0.026	Monitor
Chromium	0.005 J	4.85
Iron	67.3	Monitor
Lead	0.004 J	0.4
Titanium	0.006 J	Monitor
TOTAL Metals (mg/L)	67.34 J	Monitor
General Chemistry - mg/L		
Cyanide, Total	0.616	Monitor
Ammonia (as N)	37.7	Monitor
Phenolics, Total Recoverable	0.11	Monitor
Sulfate	2000	Monitor
Oil & Grease	3.8	100
pH <sup>4</sup>	6.1	5-12
Total Toxic Organic Pollutants (TTO) <sup>4</sup>	0.54	2.13

**Notes:**

1. Only those parameters detected are presented in this table; all others were reported as non-detect.
2. Per the Erie County Sewer District No. 6 Discharge Permit LA-03 Rev. 1 (10/27/21)
3. Metals include Ag, As, Ba, Be, Cd, Cr, Fe, Cu, Hg, Ni, Pb, Sb, Se, Ti, and Zn
4. TTO is determined by totaling the reported compound concentrations detected via EPA Methods 608, 624, & 625.

**Definitions:**

J = Estimated value; result is less than the sample quantitation limit but greater than zero.



# ATTACHMENT 1

Laboratory Data



## ANALYTICAL REPORT

Lab Number:	L2158360
Client:	Benchmark & Turnkey Companies 2558 Hamburg Turnpike Suite 300 Buffalo, NY 14218
ATTN:	Brock Greene
Phone:	(716) 856-0599
Project Name:	ATP PRE-TRAETMENT OM&M
Project Number:	T0071-021-222
Report Date:	11/02/21

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

---

Eight Walkup Drive, Westborough, MA 01581-1019  
508-898-9220 (Fax) 508-898-9193 800-624-9220 - [www.alphalab.com](http://www.alphalab.com)



**Project Name:** ATP PRE-TRAETMENT OM&M  
**Project Number:** T0071-021-222

**Lab Number:** L2158360  
**Report Date:** 11/02/21

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Matrix</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>	<b>Receive Date</b>
L2158360-01	SYSTEM EFFLUENT	WATER	1951 HAMBURG TURNPIKE	10/25/21 15:50	10/25/21

**Project Name:** ATP PRE-TRAETMENT OM&M  
**Project Number:** T0071-021-222

**Lab Number:** L2158360  
**Report Date:** 11/02/21

### Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

**HOLD POLICY** - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

---

**Project Name:** ATP PRE-TRAETMENT OM&M  
**Project Number:** T0071-021-222

**Lab Number:** L2158360  
**Report Date:** 11/02/21

**Case Narrative (continued)**

Report Revision

November 02, 2021: The Semivolatile and Volatile Organics analyte lists have been amended.

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:



Cristin Walker

Title: Technical Director/Representative

Date: 11/02/21

# ORGANICS

# **VOLATILES**

**Project Name:** ATP PRE-TRAETMENT OM&M**Lab Number:** L2158360**Project Number:** T0071-021-222**Report Date:** 11/02/21**SAMPLE RESULTS**

Lab ID: L2158360-01 D  
 Client ID: SYSTEM EFFLUENT  
 Sample Location: 1951 HAMBURG TURNPIKE

Date Collected: 10/25/21 15:50  
 Date Received: 10/25/21  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 128,624.1  
 Analytical Date: 10/27/21 10:08  
 Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	4.0	2.2	4
1,1-Dichloroethane	6.0		ug/l	6.0	1.6	4
Chloroform	ND		ug/l	4.0	1.5	4
Carbon tetrachloride	ND		ug/l	4.0	0.98	4
1,2-Dichloropropane	ND		ug/l	14	1.9	4
Dibromochloromethane	ND		ug/l	4.0	1.1	4
1,1,2-Trichloroethane	ND		ug/l	6.0	1.4	4
2-Chloroethylvinyl ether	ND		ug/l	40	1.4	4
Tetrachloroethene	ND		ug/l	4.0	1.0	4
Chlorobenzene	ND		ug/l	14	1.2	4
1,2-Dichloroethane	12		ug/l	6.0	1.9	4
1,1,1-Trichloroethane	ND		ug/l	8.0	1.1	4
Bromodichloromethane	ND		ug/l	4.0	1.1	4
trans-1,3-Dichloropropene	ND		ug/l	6.0	1.2	4
cis-1,3-Dichloropropene	ND		ug/l	6.0	1.3	4
1,3-Dichloropropene, Total	ND		ug/l	6.0	1.2	4
Bromoform	ND		ug/l	4.0	0.86	4
1,1,2,2-Tetrachloroethane	ND		ug/l	4.0	0.81	4
Benzene	510		ug/l	4.0	1.5	4
Toluene	ND		ug/l	4.0	1.2	4
Ethylbenzene	ND		ug/l	4.0	1.1	4
Chloromethane	ND		ug/l	20	4.2	4
Bromomethane	ND		ug/l	20	4.9	4
Vinyl chloride	ND		ug/l	4.0	1.5	4
Chloroethane	ND		ug/l	8.0	1.5	4
1,1-Dichloroethene	ND		ug/l	4.0	1.2	4
trans-1,2-Dichloroethene	ND		ug/l	6.0	1.3	4
Trichloroethene	ND		ug/l	4.0	1.3	4



**Project Name:** ATP PRE-TRAETMENT OM&M  
**Project Number:** T0071-021-222

**Lab Number:** L2158360  
**Report Date:** 11/02/21

**SAMPLE RESULTS**

**Lab ID:** L2158360-01 D  
**Client ID:** SYSTEM EFFLUENT  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 10/25/21 15:50  
**Date Received:** 10/25/21  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2-Dichlorobenzene	ND		ug/l	20	1.1	4
1,3-Dichlorobenzene	ND		ug/l	20	1.1	4
1,4-Dichlorobenzene	ND		ug/l	20	1.1	4
Acrolein	ND		ug/l	32	7.3	4
Acrylonitrile	ND		ug/l	40	1.3	4

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	100		60-140
Fluorobenzene	110		60-140
4-Bromofluorobenzene	97		60-140

**Project Name:** ATP PRE-TRAETMENT OM&M**Lab Number:** L2158360**Project Number:** T0071-021-222**Report Date:** 11/02/21

### Method Blank Analysis Batch Quality Control

Analytical Method: 128,624.1  
 Analytical Date: 10/27/21 06:31  
 Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1564327-4					
Methylene chloride	ND		ug/l	1.0	0.56
1,1-Dichloroethane	ND		ug/l	1.5	0.40
Chloroform	ND		ug/l	1.0	0.38
Carbon tetrachloride	ND		ug/l	1.0	0.24
1,2-Dichloropropane	ND		ug/l	3.5	0.46
Dibromochloromethane	ND		ug/l	1.0	0.27
1,1,2-Trichloroethane	ND		ug/l	1.5	0.34
2-Chloroethylvinyl ether	ND		ug/l	10	0.35
Tetrachloroethene	ND		ug/l	1.0	0.26
Chlorobenzene	ND		ug/l	3.5	0.30
1,2-Dichloroethane	ND		ug/l	1.5	0.47
1,1,1-Trichloroethane	ND		ug/l	2.0	0.29
Bromodichloromethane	ND		ug/l	1.0	0.28
trans-1,3-Dichloropropene	ND		ug/l	1.5	0.31
cis-1,3-Dichloropropene	ND		ug/l	1.5	0.34
1,3-Dichloropropene, Total	ND		ug/l	1.5	0.31
Bromoform	ND		ug/l	1.0	0.22
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	0.20
Benzene	ND		ug/l	1.0	0.38
Toluene	ND		ug/l	1.0	0.31
Ethylbenzene	ND		ug/l	1.0	0.28
Chloromethane	ND		ug/l	5.0	1.0
Bromomethane	ND		ug/l	5.0	1.2
Vinyl chloride	ND		ug/l	1.0	0.38
Chloroethane	ND		ug/l	2.0	0.37
1,1-Dichloroethene	ND		ug/l	1.0	0.31
trans-1,2-Dichloroethene	ND		ug/l	1.5	0.33
Trichloroethene	ND		ug/l	1.0	0.33
1,2-Dichlorobenzene	ND		ug/l	5.0	0.28

**Project Name:** ATP PRE-TRAETMENT OM&M  
**Project Number:** T0071-021-222

**Lab Number:** L2158360  
**Report Date:** 11/02/21

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 128,624.1  
 Analytical Date: 10/27/21 06:31  
 Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1564327-4					
1,3-Dichlorobenzene	ND		ug/l	5.0	0.27
1,4-Dichlorobenzene	ND		ug/l	5.0	0.29
Acrolein	ND		ug/l	8.0	1.8
Acrylonitrile	ND		ug/l	10	0.33

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	98		60-140
Fluorobenzene	104		60-140
4-Bromofluorobenzene	96		60-140

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** ATP PRE-TRAETMENT OM&M

**Project Number:** T0071-021-222

**Lab Number:** L2158360

**Report Date:** 11/02/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1564327-3								
Methylene chloride	100		-		60-140	-		28
1,1-Dichloroethane	105		-		50-150	-		49
Chloroform	105		-		70-135	-		54
Carbon tetrachloride	100		-		70-130	-		41
1,2-Dichloropropane	115		-		35-165	-		55
Dibromochloromethane	95		-		70-135	-		50
1,1,2-Trichloroethane	95		-		70-130	-		45
2-Chloroethylvinyl ether	150		-		1-225	-		71
Tetrachloroethene	90		-		70-130	-		39
Chlorobenzene	90		-		65-135	-		53
1,2-Dichloroethane	120		-		70-130	-		49
1,1,1-Trichloroethane	105		-		70-130	-		36
Bromodichloromethane	100		-		65-135	-		56
trans-1,3-Dichloropropene	95		-		50-150	-		86
cis-1,3-Dichloropropene	100		-		25-175	-		58
Bromoform	80		-		70-130	-		42
1,1,2,2-Tetrachloroethane	95		-		60-140	-		61
Benzene	110		-		65-135	-		61
Toluene	105		-		70-130	-		41
Ethylbenzene	100		-		60-140	-		63
Chloromethane	120		-		1-205	-		60
Bromomethane	100		-		15-185	-		61
Vinyl chloride	95		-		5-195	-		66

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** ATP PRE-TRAETMENT OM&M

**Project Number:** T0071-021-222

**Lab Number:** L2158360

**Report Date:** 11/02/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1564327-3								
Chloroethane	105		-		40-160	-		78
1,1-Dichloroethene	95		-		50-150	-		32
trans-1,2-Dichloroethene	95		-		70-130	-		45
Trichloroethene	105		-		65-135	-		48
1,2-Dichlorobenzene	90		-		65-135	-		57
1,3-Dichlorobenzene	90		-		70-130	-		43
1,4-Dichlorobenzene	90		-		65-135	-		57
Acrolein	102		-		60-140	-		30
Acrylonitrile	112		-		60-140	-		60

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Pentafluorobenzene	99				60-140
Fluorobenzene	108				60-140
4-Bromofluorobenzene	92				60-140

# SEMIVOLATILES

**Project Name:** ATP PRE-TRAETMENT OM&M**Lab Number:** L2158360**Project Number:** T0071-021-222**Report Date:** 11/02/21**SAMPLE RESULTS**

Lab ID: L2158360-01  
 Client ID: SYSTEM EFFLUENT  
 Sample Location: 1951 HAMBURG TURNPIKE

Date Collected: 10/25/21 15:50  
 Date Received: 10/25/21  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 129,625.1  
 Analytical Date: 10/29/21 04:29  
 Analyst: JG

Extraction Method: EPA 625.1  
 Extraction Date: 10/27/21 09:20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/l	2.00	0.407	1
Benzidine <sup>1</sup>	ND		ug/l	20.0	12.1	1
1,2,4-Trichlorobenzene	ND		ug/l	5.00	1.49	1
Hexachlorobenzene	ND		ug/l	2.00	0.952	1
Bis(2-chloroethyl)ether	ND		ug/l	2.00	0.600	1
2-Chloronaphthalene	ND		ug/l	2.00	0.319	1
3,3'-Dichlorobenzidine	ND		ug/l	5.00	0.457	1
2,4-Dinitrotoluene	ND		ug/l	5.00	0.636	1
2,6-Dinitrotoluene	ND		ug/l	5.00	0.631	1
Azobenzene <sup>1</sup>	ND		ug/l	2.00	0.889	1
Fluoranthene	ND		ug/l	2.00	0.736	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.00	0.371	1
4-Bromophenyl phenyl ether	ND		ug/l	2.00	0.447	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.00	0.822	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.00	0.585	1
Hexachlorobutadiene	ND		ug/l	2.00	0.921	1
Hexachlorocyclopentadiene <sup>1</sup>	ND		ug/l	10.0	1.36	1
Hexachloroethane	ND		ug/l	2.00	0.973	1
Isophorone	ND		ug/l	5.00	0.546	1
Naphthalene	3.98		ug/l	2.00	0.896	1
Nitrobenzene	ND		ug/l	2.00	0.788	1
NDPA/DPA <sup>1</sup>	ND		ug/l	2.00	0.783	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.00	0.630	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	2.20	1.70	1
Butyl benzyl phthalate	ND		ug/l	5.00	0.670	1
Di-n-butylphthalate	ND		ug/l	5.00	0.631	1
Di-n-octylphthalate	ND		ug/l	5.00	0.633	1
Diethyl phthalate	ND		ug/l	5.00	0.717	1

**Project Name:** ATP PRE-TRAETMENT OM&M**Lab Number:** L2158360**Project Number:** T0071-021-222**Report Date:** 11/02/21**SAMPLE RESULTS****Lab ID:** L2158360-01**Date Collected:** 10/25/21 15:50**Client ID:** SYSTEM EFFLUENT**Date Received:** 10/25/21**Sample Location:** 1951 HAMBURG TURNPIKE**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dimethyl phthalate	ND		ug/l	5.00	1.40	1
Benzo(a)anthracene	ND		ug/l	2.00	0.665	1
Benzo(a)pyrene	ND		ug/l	2.00	0.610	1
Benzo(b)fluoranthene	ND		ug/l	2.00	0.741	1
Benzo(k)fluoranthene	ND		ug/l	2.00	0.739	1
Chrysene	ND		ug/l	2.00	0.668	1
Acenaphthylene	ND		ug/l	2.00	0.930	1
Anthracene	ND		ug/l	2.00	0.791	1
Benzo(ghi)perylene	ND		ug/l	2.00	0.672	1
Fluorene	ND		ug/l	2.00	0.927	1
Phenanthrene	ND		ug/l	2.00	0.818	1
Dibenzo(a,h)anthracene	ND		ug/l	2.00	0.687	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.00	0.633	1
Pyrene	ND		ug/l	2.00	0.728	1
n-Nitrosodimethylamine <sup>1</sup>	ND		ug/l	2.00	0.407	1
2,4,6-Trichlorophenol	ND		ug/l	5.00	0.607	1
p-Chloro-m-cresol <sup>1</sup>	ND		ug/l	2.00	0.533	1
2-Chlorophenol	ND		ug/l	2.00	0.513	1
2,4-Dichlorophenol	ND		ug/l	5.00	0.554	1
2,4-Dimethylphenol	3.35	J	ug/l	5.00	0.851	1
2-Nitrophenol	ND		ug/l	5.00	0.604	1
4-Nitrophenol	ND		ug/l	10.0	0.834	1
2,4-Dinitrophenol	ND		ug/l	20.0	1.21	1
4,6-Dinitro-o-cresol	ND		ug/l	10.0	1.20	1
Pentachlorophenol	ND		ug/l	5.00	0.622	1
Phenol	3.71	J	ug/l	5.00	0.262	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	42		25-87
Phenol-d6	31		16-65
Nitrobenzene-d5	81		42-122
2-Fluorobiphenyl	84		46-121
2,4,6-Tribromophenol	116		45-128
4-Terphenyl-d14	99		47-138



**Project Name:** ATP PRE-TRAETMENT OM&M  
**Project Number:** T0071-021-222

**Lab Number:** L2158360  
**Report Date:** 11/02/21

### Method Blank Analysis Batch Quality Control

Analytical Method: 129,625.1  
 Analytical Date: 10/29/21 02:35  
 Analyst: JG

Extraction Method: EPA 625.1  
 Extraction Date: 10/27/21 09:20

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1563688-1					
Acenaphthene	ND		ug/l	2.00	0.407
Benzidine <sup>1</sup>	ND		ug/l	20.0	12.1
1,2,4-Trichlorobenzene	ND		ug/l	5.00	1.49
Hexachlorobenzene	ND		ug/l	2.00	0.952
Bis(2-chloroethyl)ether	ND		ug/l	2.00	0.600
2-Chloronaphthalene	ND		ug/l	2.00	0.319
3,3'-Dichlorobenzidine	ND		ug/l	5.00	0.457
2,4-Dinitrotoluene	ND		ug/l	5.00	0.636
2,6-Dinitrotoluene	ND		ug/l	5.00	0.631
Azobenzene <sup>1</sup>	ND		ug/l	2.00	0.889
Fluoranthene	ND		ug/l	2.00	0.736
4-Chlorophenyl phenyl ether	ND		ug/l	2.00	0.371
4-Bromophenyl phenyl ether	ND		ug/l	2.00	0.447
Bis(2-chloroisopropyl)ether	ND		ug/l	2.00	0.822
Bis(2-chloroethoxy)methane	ND		ug/l	5.00	0.585
Hexachlorobutadiene	ND		ug/l	2.00	0.921
Hexachlorocyclopentadiene <sup>1</sup>	ND		ug/l	10.0	1.36
Hexachloroethane	ND		ug/l	2.00	0.973
Isophorone	ND		ug/l	5.00	0.546
Naphthalene	ND		ug/l	2.00	0.896
Nitrobenzene	ND		ug/l	2.00	0.788
NDPA/DPA <sup>1</sup>	ND		ug/l	2.00	0.783
n-Nitrosodi-n-propylamine	ND		ug/l	5.00	0.630
Bis(2-ethylhexyl)phthalate	ND		ug/l	2.20	1.70
Butyl benzyl phthalate	ND		ug/l	5.00	0.670
Di-n-butylphthalate	ND		ug/l	5.00	0.631
Di-n-octylphthalate	ND		ug/l	5.00	0.633
Diethyl phthalate	ND		ug/l	5.00	0.717
Dimethyl phthalate	ND		ug/l	5.00	1.40

**Project Name:** ATP PRE-TRAETMENT OM&M  
**Project Number:** T0071-021-222

**Lab Number:** L2158360  
**Report Date:** 11/02/21

### Method Blank Analysis Batch Quality Control

Analytical Method: 129,625.1  
 Analytical Date: 10/29/21 02:35  
 Analyst: JG

Extraction Method: EPA 625.1  
 Extraction Date: 10/27/21 09:20

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1563688-1					
Benzo(a)anthracene	ND		ug/l	2.00	0.665
Benzo(a)pyrene	ND		ug/l	2.00	0.610
Benzo(b)fluoranthene	ND		ug/l	2.00	0.741
Benzo(k)fluoranthene	ND		ug/l	2.00	0.739
Chrysene	ND		ug/l	2.00	0.668
Acenaphthylene	ND		ug/l	2.00	0.930
Anthracene	ND		ug/l	2.00	0.791
Benzo(ghi)perylene	ND		ug/l	2.00	0.672
Fluorene	ND		ug/l	2.00	0.927
Phenanthrene	ND		ug/l	2.00	0.818
Dibenzo(a,h)anthracene	ND		ug/l	2.00	0.687
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.00	0.633
Pyrene	ND		ug/l	2.00	0.728
n-Nitrosodimethylamine <sup>1</sup>	ND		ug/l	2.00	0.407
2,4,6-Trichlorophenol	ND		ug/l	5.00	0.607
p-Chloro-m-cresol <sup>1</sup>	ND		ug/l	2.00	0.533
2-Chlorophenol	ND		ug/l	2.00	0.513
2,4-Dichlorophenol	ND		ug/l	5.00	0.554
2,4-Dimethylphenol	ND		ug/l	5.00	0.851
2-Nitrophenol	ND		ug/l	5.00	0.604
4-Nitrophenol	ND		ug/l	10.0	0.834
2,4-Dinitrophenol	ND		ug/l	20.0	1.21
4,6-Dinitro-o-cresol	ND		ug/l	10.0	1.20
Pentachlorophenol	ND		ug/l	5.00	0.622
Phenol	ND		ug/l	5.00	0.262

**Project Name:** ATP PRE-TRAETMENT OM&M  
**Project Number:** T0071-021-222

**Lab Number:** L2158360  
**Report Date:** 11/02/21

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 129,625.1  
 Analytical Date: 10/29/21 02:35  
 Analyst: JG

Extraction Method: EPA 625.1  
 Extraction Date: 10/27/21 09:20

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1563688-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	35		25-87
Phenol-d6	26		16-65
Nitrobenzene-d5	64		42-122
2-Fluorobiphenyl	67		46-121
2,4,6-Tribromophenol	80		45-128
4-Terphenyl-d14	83		47-138

# **Lab Control Sample Analysis** **Batch Quality Control**

**Project Name:** ATP PRE-TRAETMENT OM&M

**Project Number:** T0071-021-222

**Lab Number:** L2158360

**Report Date:** 11/02/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1563688-3								
Acenaphthene	75		-		60-132	-		48
Benzidine <sup>1</sup>	30		-		0-70	-		30
1,2,4-Trichlorobenzene	74		-		57-130	-		50
Hexachlorobenzene	94		-		8-142	-		55
Bis(2-chloroethyl)ether	69		-		43-126	-		108
2-Chloronaphthalene	79		-		65-120	-		24
3,3'-Dichlorobenzidine	37		-		8-213	-		108
2,4-Dinitrotoluene	112		-		48-127	-		42
2,6-Dinitrotoluene	110		-		68-137	-		48
Azobenzene <sup>1</sup>	72		-		44-115	-		23
Fluoranthene	83		-		43-121	-		66
4-Chlorophenyl phenyl ether	83		-		38-145	-		61
4-Bromophenyl phenyl ether	92		-		65-120	-		43
Bis(2-chloroethoxy)methane	76		-		49-165	-		54
Hexachlorobutadiene	73		-		38-120	-		62
Hexachlorocyclopentadiene <sup>1</sup>	71		-		7-118	-		35
Hexachloroethane	65		-		55-120	-		52
Isophorone	73		-		47-180	-		93
Naphthalene	69		-		36-120	-		65
Nitrobenzene	77		-		54-158	-		62
NDPA/DPA <sup>1</sup>	83		-		45-112	-		36
n-Nitrosodi-n-propylamine	69		-		14-198	-		87
Bis(2-ethylhexyl)phthalate	94		-		29-137	-		82

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** ATP PRE-TRAETMENT OM&M

**Project Number:** T0071-021-222

**Lab Number:** L2158360

**Report Date:** 11/02/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1563688-3								
Butyl benzyl phthalate	90		-		1-140	-		60
Di-n-butylphthalate	89		-		8-120	-		47
Di-n-octylphthalate	91		-		19-132	-		69
Diethyl phthalate	86		-		1-120	-		100
Dimethyl phthalate	89		-		1-120	-		183
Benzo(a)anthracene	78		-		42-133	-		53
Benzo(a)pyrene	73		-		32-148	-		72
Benzo(b)fluoranthene	82		-		42-140	-		71
Benzo(k)fluoranthene	83		-		25-146	-		63
Chrysene	79		-		44-140	-		87
Acenaphthylene	78		-		54-126	-		74
Anthracene	80		-		43-120	-		66
Benzo(ghi)perylene	80		-		1-195	-		97
Fluorene	80		-		70-120	-		38
Phenanthrene	79		-		65-120	-		39
Dibenzo(a,h)anthracene	82		-		1-200	-		126
Indeno(1,2,3-cd)pyrene	76		-		1-151	-		99
Pyrene	82		-		70-120	-		49
n-Nitrosodimethylamine <sup>1</sup>	36		-		15-68	-		17
2,4,6-Trichlorophenol	89		-		52-129	-		58
p-Chloro-m-cresol <sup>1</sup>	79		-		68-130	-		73
2-Chlorophenol	71		-		36-120	-		61
2,4-Dichlorophenol	84		-		53-122	-		50

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** ATP PRE-TRAETMENT OM&M

**Lab Number:** L2158360

**Project Number:** T0071-021-222

**Report Date:** 11/02/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1563688-3								
2,4-Dimethylphenol	73		-		42-120	-		58
2-Nitrophenol	96		-		45-167	-		55
4-Nitrophenol	52		-		13-129	-		131
2,4-Dinitrophenol	92		-		1-173	-		132
4,6-Dinitro-o-cresol	111		-		56-130	-		203
Pentachlorophenol	84		-		38-152	-		86
Phenol	33		-		17-120	-		64

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	45				25-87
Phenol-d6	33				16-65
Nitrobenzene-d5	81				42-122
2-Fluorobiphenyl	84				46-121
2,4,6-Tribromophenol	109				45-128
4-Terphenyl-d14	95				47-138

# PCBS

**Project Name:** ATP PRE-TRAETMENT OM&M  
**Project Number:** T0071-021-222

**Lab Number:** L2158360  
**Report Date:** 11/02/21

**SAMPLE RESULTS**

**Lab ID:** L2158360-01  
**Client ID:** SYSTEM EFFLUENT  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 10/25/21 15:50  
**Date Received:** 10/25/21  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Water  
**Analytical Method:** 127,608.3  
**Analytical Date:** 10/29/21 09:17  
**Analyst:** CW

**Extraction Method:** EPA 608.3  
**Extraction Date:** 10/27/21 11:43  
**Cleanup Method:** EPA 3665A  
**Cleanup Date:** 10/28/21  
**Cleanup Method:** EPA 3660B  
**Cleanup Date:** 10/29/21

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.050	0.008	1	A
Aroclor 1221	ND		ug/l	0.050	0.011	1	A
Aroclor 1232	ND		ug/l	0.050	0.023	1	A
Aroclor 1242	ND		ug/l	0.050	0.018	1	A
Aroclor 1248	ND		ug/l	0.050	0.023	1	A
Aroclor 1254	ND		ug/l	0.050	0.008	1	A
Aroclor 1260	ND		ug/l	0.050	0.017	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	65		37-123	A
Decachlorobiphenyl	51		38-114	A
2,4,5,6-Tetrachloro-m-xylene	<b>129</b>	Q	37-123	B
Decachlorobiphenyl	38		38-114	B



**Project Name:** ATP PRE-TRAETMENT OM&M  
**Project Number:** T0071-021-222

**Lab Number:** L2158360  
**Report Date:** 11/02/21

### Method Blank Analysis Batch Quality Control

Analytical Method: 127,608.3  
 Analytical Date: 10/27/21 08:59  
 Analyst: CW

Extraction Method: EPA 608.3  
 Extraction Date: 10/26/21 21:13  
 Cleanup Method: EPA 3665A  
 Cleanup Date: 10/27/21  
 Cleanup Method: EPA 3660B  
 Cleanup Date: 10/27/21

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01 Batch: WG1563536-1						
Aroclor 1016	ND		ug/l	0.050	0.008	A
Aroclor 1221	ND		ug/l	0.050	0.011	A
Aroclor 1232	ND		ug/l	0.050	0.023	A
Aroclor 1242	ND		ug/l	0.050	0.018	A
Aroclor 1248	ND		ug/l	0.050	0.023	A
Aroclor 1254	ND		ug/l	0.050	0.008	A
Aroclor 1260	ND		ug/l	0.050	0.017	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	128	Q	37-123	A
Decachlorobiphenyl	139	Q	38-114	A
2,4,5,6-Tetrachloro-m-xylene	118		37-123	B
Decachlorobiphenyl	111		38-114	B

**Lab Control Sample Analysis****Batch Quality Control****Project Name:** ATP PRE-TRAETMENT OM&M**Lab Number:** L2158360**Project Number:** T0071-021-222**Report Date:** 11/02/21

<b>Parameter</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>%Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>	<b>Column</b>
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 Batch: WG1563536-2									
Aroclor 1016	96		-		50-140	-		36	A
Aroclor 1260	100		-		8-140	-		38	A

<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>Acceptance Criteria</b>	<b>Column</b>
2,4,5,6-Tetrachloro-m-xylene	88				37-123	A
Decachlorobiphenyl	95				38-114	A
2,4,5,6-Tetrachloro-m-xylene	82				37-123	B
Decachlorobiphenyl	79				38-114	B

# PESTICIDES

**Project Name:** ATP PRE-TRAETMENT OM&M  
**Project Number:** T0071-021-222

**Lab Number:** L2158360  
**Report Date:** 11/02/21

**SAMPLE RESULTS**

**Lab ID:** L2158360-01  
**Client ID:** SYSTEM EFFLUENT  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 10/25/21 15:50  
**Date Received:** 10/25/21  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Water  
**Analytical Method:** 127,608.3  
**Analytical Date:** 10/28/21 13:58  
**Analyst:** SDC

**Extraction Method:** EPA 608.3  
**Extraction Date:** 10/27/21 08:25  
**Cleanup Method:** EPA 3620B  
**Cleanup Date:** 10/28/21

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.020	0.005	1	A
Lindane	ND		ug/l	0.020	0.003	1	A
Alpha-BHC	ND		ug/l	0.020	0.004	1	A
Beta-BHC	ND		ug/l	0.020	0.009	1	A
Heptachlor	ND		ug/l	0.020	0.005	1	A
Aldrin	ND		ug/l	0.020	0.005	1	A
Heptachlor epoxide	ND		ug/l	0.020	0.007	1	A
Endrin	ND		ug/l	0.040	0.004	1	A
Endrin aldehyde	ND		ug/l	0.040	0.017	1	A
Endrin ketone <sup>1</sup>	ND		ug/l	0.040	0.005	1	A
Dieldrin	ND		ug/l	0.040	0.003	1	A
4,4'-DDE	ND		ug/l	0.040	0.003	1	A
4,4'-DDD	ND		ug/l	0.040	0.008	1	A
4,4'-DDT	ND		ug/l	0.040	0.008	1	A
Endosulfan I	ND		ug/l	0.020	0.008	1	A
Endosulfan II	ND		ug/l	0.040	0.003	1	A
Endosulfan sulfate	ND		ug/l	0.040	0.017	1	A
Methoxychlor <sup>1</sup>	ND		ug/l	0.100	0.008	1	A
Toxaphene	ND		ug/l	0.400	0.126	1	A
Chlordane	ND		ug/l	0.200	0.042	1	A
cis-Chlordane <sup>1</sup>	ND		ug/l	0.020	0.005	1	A
trans-Chlordane <sup>1</sup>	ND		ug/l	0.020	0.008	1	A

**Project Name:** ATP PRE-TRAETMENT OM&M  
**Project Number:** T0071-021-222

**Lab Number:** L2158360  
**Report Date:** 11/02/21

**SAMPLE RESULTS**

**Lab ID:** L2158360-01  
**Client ID:** SYSTEM EFFLUENT  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 10/25/21 15:50  
**Date Received:** 10/25/21  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	77		47-124	A
Decachlorobiphenyl	48		32-167	A
2,4,5,6-Tetrachloro-m-xylene	69		47-124	B
Decachlorobiphenyl	35		32-167	B

**Project Name:** ATP PRE-TRAETMENT OM&M  
**Project Number:** T0071-021-222

**Lab Number:** L2158360  
**Report Date:** 11/02/21

### Method Blank Analysis Batch Quality Control

Analytical Method: 127,608.3  
 Analytical Date: 10/28/21 15:13  
 Analyst: SDC

Extraction Method: EPA 608.3  
 Extraction Date: 10/27/21 00:35  
 Cleanup Method: EPA 3620B  
 Cleanup Date: 10/27/21

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01 Batch: WG1563562-1						
Delta-BHC	ND		ug/l	0.020	0.005	A
Lindane	ND		ug/l	0.020	0.003	A
Alpha-BHC	ND		ug/l	0.020	0.004	A
Beta-BHC	ND		ug/l	0.020	0.009	A
Heptachlor	ND		ug/l	0.020	0.005	A
Aldrin	ND		ug/l	0.020	0.005	A
Heptachlor epoxide	ND		ug/l	0.020	0.007	A
Endrin	ND		ug/l	0.040	0.004	A
Endrin aldehyde	ND		ug/l	0.040	0.017	A
Endrin ketone <sup>1</sup>	ND		ug/l	0.040	0.005	A
Dieldrin	ND		ug/l	0.040	0.003	A
4,4'-DDE	ND		ug/l	0.040	0.003	A
4,4'-DDD	ND		ug/l	0.040	0.008	A
4,4'-DDT	ND		ug/l	0.040	0.008	A
Endosulfan I	ND		ug/l	0.020	0.008	A
Endosulfan II	ND		ug/l	0.040	0.003	A
Endosulfan sulfate	ND		ug/l	0.040	0.017	A
Methoxychlor <sup>1</sup>	ND		ug/l	0.100	0.008	A
Toxaphene	ND		ug/l	0.400	0.126	A
Chlordane	ND		ug/l	0.200	0.042	A
cis-Chlordane <sup>1</sup>	ND		ug/l	0.020	0.005	A
trans-Chlordane <sup>1</sup>	ND		ug/l	0.020	0.008	A

**Project Name:** ATP PRE-TRAETMENT OM&M  
**Project Number:** T0071-021-222

**Lab Number:** L2158360  
**Report Date:** 11/02/21

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 127,608.3  
 Analytical Date: 10/28/21 15:13  
 Analyst: SDC

Extraction Method: EPA 608.3  
 Extraction Date: 10/27/21 00:35  
 Cleanup Method: EPA 3620B  
 Cleanup Date: 10/27/21

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01 Batch: WG1563562-1						

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	79		47-124	A
Decachlorobiphenyl	91		32-167	A
2,4,5,6-Tetrachloro-m-xylene	66		47-124	B
Decachlorobiphenyl	90		32-167	B

# **Lab Control Sample Analysis** Batch Quality Control

**Project Name:** ATP PRE-TRAETMENT OM&M

**Lab Number:** L2158360

**Project Number:** T0071-021-222

**Report Date:** 11/02/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01 Batch: WG1563562-2									
Delta-BHC	84		-		19-140	-		52	A
Lindane	87		-		32-140	-		39	A
Alpha-BHC	91		-		37-140	-		36	A
Beta-BHC	106		-		17-147	-		44	A
Heptachlor	79		-		34-140	-		43	A
Aldrin	78		-		42-140	-		35	A
Heptachlor epoxide	82		-		37-142	-		26	A
Endrin	108		-		30-147	-		48	A
Endrin aldehyde	70		-		30-150	-		30	A
Endrin ketone <sup>1</sup>	108		-		30-150	-		30	A
Dieldrin	93		-		36-146	-		49	A
4,4'-DDE	86		-		30-145	-		35	A
4,4'-DDD	97		-		31-141	-		39	A
4,4'-DDT	101		-		25-160	-		42	A
Endosulfan I	84		-		45-153	-		28	A
Endosulfan II	90		-		1-202	-		53	A
Endosulfan sulfate	86		-		26-144	-		38	A
Methoxychlor <sup>1</sup>	126		-		30-150	-		30	A
cis-Chlordane <sup>1</sup>	88		-		45-140	-		35	A
trans-Chlordane <sup>1</sup>	110		-		45-140	-		35	A



## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** ATP PRE-TRAETMENT OM&M

**Lab Number:** L2158360

**Project Number:** T0071-021-222

**Report Date:** 11/02/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
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Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01 Batch: WG1563562-2

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	82				47-124	A
Decachlorobiphenyl	81				32-167	A
2,4,5,6-Tetrachloro-m-xylene	68				47-124	B
Decachlorobiphenyl	79				32-167	B

## METALS

**Project Name:** ATP PRE-TRAETMENT OM&M**Lab Number:** L2158360**Project Number:** T0071-021-222**Report Date:** 11/02/21**SAMPLE RESULTS**

Lab ID: L2158360-01

Date Collected: 10/25/21 15:50

Client ID: SYSTEM EFFLUENT

Date Received: 10/25/21

Sample Location: 1951 HAMBURG TURNPIKE

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Antimony, Total	ND		mg/l	0.050	0.007	1	10/28/21 09:23	10/28/21 20:42	EPA 3005A	19,200.7	GD
Arsenic, Total	0.003	J	mg/l	0.005	0.002	1	10/28/21 09:23	10/28/21 20:42	EPA 3005A	19,200.7	GD
Barium, Total	0.026		mg/l	0.010	0.002	1	10/28/21 09:23	10/28/21 20:42	EPA 3005A	19,200.7	GD
Beryllium, Total	ND		mg/l	0.005	0.001	1	10/28/21 09:23	10/28/21 20:42	EPA 3005A	19,200.7	GD
Cadmium, Total	ND		mg/l	0.005	0.001	1	10/28/21 09:23	10/28/21 20:42	EPA 3005A	19,200.7	GD
Chromium, Total	0.005	J	mg/l	0.010	0.002	1	10/28/21 09:23	10/28/21 20:42	EPA 3005A	19,200.7	GD
Copper, Total	ND		mg/l	0.010	0.002	1	10/28/21 09:23	10/28/21 20:42	EPA 3005A	19,200.7	GD
Iron, Total	67.3		mg/l	0.050	0.009	1	10/28/21 09:23	10/28/21 20:42	EPA 3005A	19,200.7	GD
Lead, Total	0.004	J	mg/l	0.010	0.003	1	10/28/21 09:23	10/28/21 20:42	EPA 3005A	19,200.7	GD
Mercury, Total	ND		mg/l	0.00020	0.00009	1	10/28/21 10:18	10/28/21 13:33	EPA 245.1	3,245.1	AC
Nickel, Total	ND		mg/l	0.025	0.002	1	10/28/21 09:23	10/28/21 20:42	EPA 3005A	19,200.7	GD
Selenium, Total	ND		mg/l	0.010	0.004	1	10/28/21 09:23	10/28/21 20:42	EPA 3005A	19,200.7	GD
Silver, Total	ND		mg/l	0.007	0.003	1	10/28/21 09:23	10/28/21 20:42	EPA 3005A	19,200.7	GD
Titanium, Total	0.006	J	mg/l	0.010	0.002	1	10/28/21 09:23	10/28/21 20:42	EPA 3005A	19,200.7	GD
Zinc, Total	ND		mg/l	0.050	0.002	1	10/28/21 09:23	10/28/21 20:42	EPA 3005A	19,200.7	GD



Project Name: ATP PRE-TRAETMENT OM&amp;M

Lab Number: L2158360

Project Number: T0071-021-222

Report Date: 11/02/21

## Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1563899-1										
Antimony, Total	ND		mg/l	0.050	0.007	1	10/28/21 09:23	10/28/21 18:53	19,200.7	GD
Arsenic, Total	ND		mg/l	0.005	0.002	1	10/28/21 09:23	10/28/21 18:53	19,200.7	GD
Barium, Total	ND		mg/l	0.010	0.002	1	10/28/21 09:23	10/28/21 18:53	19,200.7	GD
Beryllium, Total	ND		mg/l	0.005	0.001	1	10/28/21 09:23	10/28/21 18:53	19,200.7	GD
Cadmium, Total	ND		mg/l	0.005	0.001	1	10/28/21 09:23	10/28/21 18:53	19,200.7	GD
Chromium, Total	ND		mg/l	0.010	0.002	1	10/28/21 09:23	10/28/21 18:53	19,200.7	GD
Copper, Total	ND		mg/l	0.010	0.002	1	10/28/21 09:23	10/28/21 18:53	19,200.7	GD
Iron, Total	ND		mg/l	0.050	0.009	1	10/28/21 09:23	10/28/21 18:53	19,200.7	GD
Lead, Total	ND		mg/l	0.010	0.003	1	10/28/21 09:23	10/28/21 18:53	19,200.7	GD
Nickel, Total	ND		mg/l	0.025	0.002	1	10/28/21 09:23	10/28/21 18:53	19,200.7	GD
Selenium, Total	ND		mg/l	0.010	0.004	1	10/28/21 09:23	10/28/21 18:53	19,200.7	GD
Silver, Total	ND		mg/l	0.007	0.003	1	10/28/21 09:23	10/28/21 18:53	19,200.7	GD
Titanium, Total	ND		mg/l	0.010	0.002	1	10/28/21 09:23	10/28/21 18:53	19,200.7	GD
Zinc, Total	ND		mg/l	0.050	0.002	1	10/28/21 09:23	10/28/21 18:53	19,200.7	GD

### Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1563906-1										
Mercury, Total	ND		mg/l	0.00020	0.00009	1	10/28/21 10:18	10/28/21 12:54	3,245.1	AC

### Prep Information

Digestion Method: EPA 245.1



## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** ATP PRE-TRAETMENT OM&M

**Project Number:** T0071-021-222

**Lab Number:** L2158360

**Report Date:** 11/02/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1563899-2								
Antimony, Total	95		-		85-115	-		
Arsenic, Total	104		-		85-115	-		
Barium, Total	100		-		85-115	-		
Beryllium, Total	103		-		85-115	-		
Cadmium, Total	100		-		85-115	-		
Chromium, Total	98		-		85-115	-		
Copper, Total	97		-		85-115	-		
Iron, Total	95		-		85-115	-		
Lead, Total	97		-		85-115	-		
Nickel, Total	96		-		85-115	-		
Selenium, Total	103		-		85-115	-		
Silver, Total	102		-		85-115	-		
Titanium, Total	99		-		85-115	-		
Zinc, Total	99		-		85-115	-		

**Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1563906-2**

Mercury, Total	96		-		85-115	-		
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# Matrix Spike Analysis

## Batch Quality Control

**Project Name:** ATP PRE-TRAETMENT OM&M  
**Project Number:** T0071-021-222

**Lab Number:** L2158360  
**Report Date:** 11/02/21

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01    QC Batch ID: WG1563899-3    QC Sample: L2158480-01    Client ID: MS Sample												
Antimony, Total	ND	0.5	0.480	96		-	-		75-125	-		20
Arsenic, Total	ND	0.12	0.132	110		-	-		75-125	-		20
Barium, Total	0.059	2	2.05	100		-	-		75-125	-		20
Beryllium, Total	ND	0.05	0.050	101		-	-		75-125	-		20
Cadmium, Total	ND	0.053	0.053	99		-	-		75-125	-		20
Chromium, Total	ND	0.2	0.195	98		-	-		75-125	-		20
Copper, Total	0.003J	0.25	0.247	99		-	-		75-125	-		20
Iron, Total	0.089	1	1.04	95		-	-		75-125	-		20
Lead, Total	ND	0.53	0.499	94		-	-		75-125	-		20
Nickel, Total	ND	0.5	0.471	94		-	-		75-125	-		20
Selenium, Total	ND	0.12	0.131	109		-	-		75-125	-		20
Silver, Total	ND	0.05	0.049	98		-	-		75-125	-		20
Titanium, Total	0.006J	1	1.02	102		-	-		75-125	-		20
Zinc, Total	0.026J	0.5	0.519	104		-	-		75-125	-		20

# Matrix Spike Analysis

## Batch Quality Control

**Project Name:** ATP PRE-TRAETMENT OM&M

**Project Number:** T0071-021-222

**Lab Number:** L2158360

**Report Date:** 11/02/21

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01    QC Batch ID: WG1563899-7    QC Sample: L2158480-02    Client ID: MS Sample									
Antimony, Total	ND	0.5	0.473	95	-	-	75-125	-	20
Arsenic, Total	ND	0.12	0.132	110	-	-	75-125	-	20
Barium, Total	0.059	2	2.06	100	-	-	75-125	-	20
Beryllium, Total	ND	0.05	0.051	103	-	-	75-125	-	20
Cadmium, Total	ND	0.053	0.053	99	-	-	75-125	-	20
Chromium, Total	ND	0.2	0.197	98	-	-	75-125	-	20
Copper, Total	0.003J	0.25	0.248	99	-	-	75-125	-	20
Iron, Total	0.385	1	1.31	92	-	-	75-125	-	20
Lead, Total	ND	0.53	0.499	94	-	-	75-125	-	20
Nickel, Total	ND	0.5	0.471	94	-	-	75-125	-	20
Selenium, Total	ND	0.12	0.129	108	-	-	75-125	-	20
Silver, Total	ND	0.05	0.050	101	-	-	75-125	-	20
Titanium, Total	0.015	1	1.03	102	-	-	75-125	-	20
Zinc, Total	0.017J	0.5	0.513	103	-	-	75-125	-	20
Total Metals - Mansfield Lab Associated sample(s): 01    QC Batch ID: WG1563906-3    QC Sample: L2158623-01    Client ID: MS Sample									
Mercury, Total	ND	0.005	0.00458	92	-	-	70-130	-	20

# Lab Duplicate Analysis

*Batch Quality Control*

**Project Name:** ATP PRE-TRAETMENT OM&M

**Project Number:** T0071-021-222

**Lab Number:** L2158360

**Report Date:** 11/02/21

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1563899-4 QC Sample: L2158480-01 Client ID: DUP Sample						
Iron, Total	0.089	0.100	mg/l	12		20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1563899-8 QC Sample: L2158480-02 Client ID: DUP Sample						
Iron, Total	0.385	0.368	mg/l	5		20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1563906-4 QC Sample: L2158623-01 Client ID: DUP Sample						
Mercury, Total	ND	ND	mg/l	NC		20



# **INORGANICS & MISCELLANEOUS**

**Project Name:** ATP PRE-TRAETMENT OM&M  
**Project Number:** T0071-021-222

**Lab Number:** L2158360  
**Report Date:** 11/02/21

### SAMPLE RESULTS

**Lab ID:** L2158360-01  
**Client ID:** SYSTEM EFFLUENT  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 10/25/21 15:50  
**Date Received:** 10/25/21  
**Field Prep:** Not Specified

**Sample Depth:**  
**Matrix:** Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Westborough Lab</b>										
Cyanide, Total	0.616		mg/l	0.010	0.003	2	10/26/21 07:30	10/26/21 13:52	121,4500CN-CE	JO
pH (H)	6.1		SU	-	NA	1	-	10/26/21 21:33	121,4500H+-B	AS
Nitrogen, Ammonia	37.7		mg/l	0.750	0.240	10	10/27/21 00:21	10/27/21 21:54	121,4500NH3-BH	AT
Oil & Grease, Hem-Grav	3.8		mg/l	2.0	0.46	1	10/29/21 14:00	10/29/21 17:30	140,1664B	TL
Phenolics, Total	0.11		mg/l	0.030	0.016	1	10/27/21 07:28	10/27/21 11:37	4,420.1	KP
<b>Anions by Ion Chromatography - Westborough Lab</b>										
Sulfate	2000		mg/l	100	45.4	100	-	10/28/21 19:00	44,300.0	AT



**Project Name:** ATP PRE-TRAETMENT OM&M  
**Project Number:** T0071-021-222

**Lab Number:** L2158360  
**Report Date:** 11/02/21

**Method Blank Analysis**  
**Batch Quality Control**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1563004-1										
Cyanide, Total	ND		mg/l	0.005	0.001	1	10/26/21 07:30	10/26/21 13:57	121,4500CN-CE	JO
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1563529-1										
Nitrogen, Ammonia	ND		mg/l	0.075	0.024	1	10/27/21 00:21	10/27/21 21:11	121,4500NH3-BH	AT
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1563633-1										
Phenolics, Total	ND		mg/l	0.030	0.016	1	10/27/21 07:28	10/27/21 10:51	4,420.1	KP
Anions by Ion Chromatography - Westborough Lab for sample(s): 01 Batch: WG1564599-1										
Sulfate	ND		mg/l	1.00	0.454	1	-	10/28/21 17:40	44,300.0	AT
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1564960-1										
Oil & Grease, Hem-Grav	ND		mg/l	2.0	0.46	1	10/29/21 14:00	10/29/21 17:30	140,1664B	TL

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** ATP PRE-TRAETMENT OM&M

**Project Number:** T0071-021-222

**Lab Number:** L2158360

**Report Date:** 11/02/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1563004-2								
Cyanide, Total	91		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1563529-2								
Nitrogen, Ammonia	92		-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1563530-1								
pH	100		-		99-101	-		5
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1563633-2								
Phenolics, Total	105		-		70-130	-		
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 Batch: WG1564599-2								
Sulfate	98		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1564960-2								
Oil & Grease, Hem-Grav	101		-		78-114	-		18

# **Matrix Spike Analysis** **Batch Quality Control**

**Project Name:** ATP PRE-TRAETMENT OM&M

**Lab Number:** L2158360

**Project Number:** T0071-021-222

**Report Date:** 11/02/21

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1563004-4 QC Sample: L2157493-01 Client ID: MS Sample												
Cyanide, Total	0.011	0.2	0.190	89	Q	-	-		90-110	-		30
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1563529-4 QC Sample: L2157305-01 Client ID: MS Sample												
Nitrogen, Ammonia	0.024J	4	3.55	89		-	-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1563633-4 QC Sample: L2158360-01 Client ID: SYSTEM EFFLUENT												
Phenolics, Total	0.11	0.4	0.42	78		-	-		70-130	-		20
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1564599-3 QC Sample: L2157051-02 Client ID: MS Sample												
Sulfate	18.6	8	26.0	92		-	-		90-110	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1564960-4 QC Sample: L2153475-169 Client ID: MS Sample												
Oil & Grease, Hem-Grav	0.75J	38.8	36	92		-	-		78-114	-		18

# **Lab Duplicate Analysis** *Batch Quality Control*

**Project Name:** ATP PRE-TRAETMENT OM&M  
**Project Number:** T0071-021-222

**Lab Number:** L2158360  
**Report Date:** 11/02/21

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1563004-3 QC Sample: L2155923-01 Client ID: DUP Sample						
Cyanide, Total	ND	0.002J	mg/l	NC		30
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1563529-3 QC Sample: L2157305-01 Client ID: DUP Sample						
Nitrogen, Ammonia	0.024J	0.098	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1563530-2 QC Sample: L2158249-01 Client ID: DUP Sample						
pH	6.8	6.9	SU	1		5
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1563633-3 QC Sample: L2158360-01 Client ID: SYSTEM EFFLUENT						
Phenolics, Total	0.11	0.11	mg/l	0		20
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1564599-4 QC Sample: L2157051-02 Client ID: DUP Sample						
Sulfate	18.6	18.5	mg/l	1		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1564960-3 QC Sample: L2153475-168 Client ID: DUP Sample						
Oil & Grease, Hem-Grav	ND	ND	mg/l	NC		18

**Project Name:** ATP PRE-TRAETMENT OM&M**Lab Number:** L2158360**Project Number:** T0071-021-222**Report Date:** 11/02/21**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

**Cooler Information****Cooler**                      **Custody Seal**

A                                  Absent

**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L2158360-01A	Vial Na2S2O3 preserved	A	NA		3.4	Y	Absent		624.1(3)
L2158360-01B	Vial Na2S2O3 preserved	A	NA		3.4	Y	Absent		624.1(3)
L2158360-01C	Vial Na2S2O3 preserved	A	NA		3.4	Y	Absent		624.1(3)
L2158360-01D	Plastic 250ml unpreserved	A	7	7	3.4	Y	Absent		PH-4500(.01)
L2158360-01E	Plastic 250ml NaOH preserved	A	>12	>12	3.4	Y	Absent		TCN-4500(14)
L2158360-01F	Plastic 250ml HNO3 preserved	A	<2	<2	3.4	Y	Absent		SB-UI(180),BA-UI(180),NI-UI(180),AG-UI(180),ZN-UI(180),TI-UI(180),FE-UI(180),SE-UI(180),HG-U(28),CD-UI(180),CR-UI(180),BE-UI(180),CU-UI(180),AS-UI(180),PB-UI(180)
L2158360-01G	Plastic 500ml H2SO4 preserved	A	<2	<2	3.4	Y	Absent		NH3-4500(28)
L2158360-01H	Amber 950ml H2SO4 preserved	A	<2	<2	3.4	Y	Absent		SO4-300(28),TPHENOL-420(28)
L2158360-01I	Amber 1000ml Na2S2O3	A	7	7	3.4	Y	Absent		NYPGB-608-2L(365)
L2158360-01J	Amber 1000ml Na2S2O3	A	7	7	3.4	Y	Absent		NYPGB-608-2L(365)
L2158360-01K	Amber 1000ml Na2S2O3	A	7	7	3.4	Y	Absent		PESTICIDE-608.3(7)
L2158360-01L	Amber 1000ml Na2S2O3	A	7	7	3.4	Y	Absent		PESTICIDE-608.3(7)
L2158360-01M	Amber 1000ml Na2S2O3	A	7	7	3.4	Y	Absent		625.1(7)
L2158360-01N	Amber 1000ml Na2S2O3	A	7	7	3.4	Y	Absent		625.1(7)
L2158360-01O	Amber 1000ml Na2S2O3	A	7	7	3.4	Y	Absent		NYPGB-608-2L(365)
L2158360-01P	Amber 1000ml Na2S2O3	A	7	7	3.4	Y	Absent		NYPGB-608-2L(365)
L2158360-01Q	Amber 1000ml HCl preserved	A	NA		3.4	Y	Absent		NY-OG-1664-LOW(28)
L2158360-01R	Amber 1000ml HCl preserved	A	NA		3.4	Y	Absent		NY-OG-1664-LOW(28)

**Project Name:** ATP PRE-TRAETMENT OM&M**Lab Number:** L2158360**Project Number:** T0071-021-222**Report Date:** 11/02/21

## GLOSSARY

### Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)  Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

*Report Format: DU Report with 'J' Qualifiers*



**Project Name:** ATP PRE-TRAETMENT OM&M  
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### Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

### Terms

**Analytical Method:** Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

**Difference:** With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

**Final pH:** As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

**Frozen Date/Time:** With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

**Initial pH:** As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

**PAH Total:** With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

**PFAS Total:** With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

**Total:** With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

### Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

**Report Format:** DU Report with 'J' Qualifiers



**Project Name:** ATP PRE-TRAETMENT OM&M  
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**Data Qualifiers**

- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Report Format: DU Report with 'J' Qualifiers



**Project Name:** ATP PRE-TRAETMENT OM&M  
**Project Number:** T0071-021-222

**Lab Number:** L2158360  
**Report Date:** 11/02/21

## REFERENCES

- 3 Methods for the Determination of Metals in Environmental Samples, Supplement I. EPA/600/R-94/111. May 1994.
- 4 Methods for Chemical Analysis of Water and Wastes. EPA 600/4-79-020. Revised March 1983.
- 19 Inductively Coupled Plasma Atomic Emission Spectrometric Method for Trace Element Analysis of Water and Wastes. Appendix C, Part 136, 40 CFR (Code of Federal Regulations). July 1, 1999 edition.
- 44 Methods for the Determination of Inorganic Substances in Environmental Samples, EPA/600/R-93/100, August 1993.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.
- 127 Method 608.3: Organochlorine Pesticides and PCBs by GC/HSD, EPA 821-R-16-009, December 2016.
- 128 Method 624.1: Purgeables by GC/MS, EPA 821-R-16-008, December 2016.
- 129 Method 625.1: Base/Neutrals and Acids by GC/MS, EPA 821-R-16-007, December 2016.
- 140 Method 1664, Revision B: N-Hexane Extractable Material (HEM; Oil & Grease) and Silica Gel Treated N-Hexane Extractable Material (SGT-HEM; Non-polar Material) by Extraction and Gravimetry, EPA-821-R-10-001, February 2010.

## LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



**Alpha Analytical, Inc.**

ID No.:17873

Facility: **Company-wide**

Revision 19

Department: **Quality Assurance**

Published Date: 4/2/2021 1:14:23 PM

Title: **Certificate/Approval Program Summary**

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**Certification Information**

The following analytes are not included in our Primary NELAP Scope of Accreditation:

**Westborough Facility****EPA 624/624.1:** m/p-xylene, o-xylene, Naphthalene**EPA 625/625.1:** alpha-Terpineol**EPA 8260C/8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270D/8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO<sub>2</sub>, NO<sub>3</sub>.**Mansfield Facility****SM 2540D:** TSS**EPA 8082A:** NPW: PCB: 1, 5, 31, 87, 101, 110, 141, 151, 153, 180, 183, 187.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

**Biological Tissue Matrix:** EPA 3050B


The following analytes are included in our Massachusetts DEP Scope of Accreditation

**Westborough Facility:****Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,****EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 332:** Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.****Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:**Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,****SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II,

Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.****Mansfield Facility:****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.****EPA 522, EPA 537.1.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1 Hg.****SM2340B**

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

 <b>NEW YORK CHAIN OF CUSTODY</b> Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193 Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288		<b>Service Centers</b> Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105		Page 1 of 1		Date Rec'd in Lab <b>10/26/21</b>		ALPHA Job # <b>L2158360</b>																																																																																																																																																																																													
		<b>Project Information</b> Project Name: ATP Pre-treatment OM&M Project Location: 1951 Hamburg Turnpike Project #: T0071-021-222 (Use Project name as Project #) <input type="checkbox"/>		<b>Deliverables</b> <input type="checkbox"/> ASP-A <input type="checkbox"/> ASP-B <input type="checkbox"/> EQUIS (1 File) <input type="checkbox"/> EQUIS (4 File) <input checked="" type="checkbox"/> Other		<b>Billing Information</b> <input checked="" type="checkbox"/> Same as Client Info PO #																																																																																																																																																																																															
<b>Client Information</b> Client: Benchmark Environmental Address: 2558 Hamburg Turnpike, Ste 300 Buffalo, NY 14218 Phone: 716-856-0599 Fax: <i>by email</i> Email: <i>forbes@benchmarkturnkey.com</i>		<b>Project Manager:</b> Candace Fox <b>ALPHAQuote #:</b> <b>Turn-Around Time</b> Standard <input type="checkbox"/> Due Date: Rush (only if pre approved) <input type="checkbox"/> # of Days:		<b>Regulatory Requirement</b> <input type="checkbox"/> NY TOGS <input type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input checked="" type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge		<b>Disposal Site Information</b> Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other: NA																																																																																																																																																																																															
These samples have been previously analyzed by Alpha <input type="checkbox"/> Other project specific requirements/comments: Total Metals: Sb,As,Ba,Be,Cd,Cr,Cu,Fe,Pb,Hg,Ni,Se,Ag,Ti,Zn    PCB has an RL of 65 ppt Please specify Metals or TAL.		<b>ANALYSIS</b> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>624 PP List</th> <th>Metals, Total</th> <th>Ammonia</th> <th>608 PEST/PCB/625 PP List</th> <th>Phenolics (TRP)</th> <th>O&amp;G</th> <th>Cyanide</th> <th>pH, Sulfate</th> </tr> <tr> <td>x</td> <td>x</td> <td>x</td> <td>x</td> <td>x</td> <td>x</td> <td>x</td> <td>x</td> </tr> </table>						624 PP List	Metals, Total	Ammonia	608 PEST/PCB/625 PP List	Phenolics (TRP)	O&G	Cyanide	pH, Sulfate	x	x	x	x	x	x	x	x	<b>Sample Filtration</b> <input type="checkbox"/> Done <input type="checkbox"/> Lab to do <b>Preservation</b> <input type="checkbox"/> Lab to do (Please Specify below) Sample Specific Comments																																																																																																																																																																													
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ALPHA Lab ID (Lab Use Only)	Sample ID			Collection														Sample Matrix	Sampler's Initials	624 PP List	Metals, Total	Ammonia	608 PEST/PCB/625 PP List	Phenolics (TRP)	O&G	Cyanide	pH, Sulfate	Sample Specific Comments	Total Bottles																																																																																																																																																																								
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Relinquished By: <i>Brooks Enne</i> <i>SPY AMAL</i>		Date/Time: <i>10-25-21/ 1630</i>		Received By: <i>SPY AMAL</i> <i>SPY</i>		Date/Time: <i>10/25/21 1600</i> <i>10/26/21 0020</i>		Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S <u>TERMS &amp; CONDITIONS.</u>																																																																																																																																																																																													

# ATTACHMENT 2

## Flow Meter Calibration Certificate

# Cold Spring Environmental

3248 Buffalo Rd., Varysburg, N.Y. 14167

Ph: 716-863-7052

May 13, 2021

Ref: Flow Meter Calibration

Dear Mr. Greene

Calibration Date: May 12, 2021  
Site location: Pretreatment Building  
Equipment Model: Signet GF 8550  
Equipment type: Closed Pipe impellor  
Equipment S/N: 61009161010  
Measuring device: 2 inch pipe  
Output type: none  
Totalizer multiplier: 1 gallon

## Initial Readings:

Meter Flow Rate 4.5 GPM	
Totalizer 11 gallons	Water meter 10 gallons
Difference 11%	

## After Adjustment:

### Readings:

Meter Flow Rate 4.5 GPM	
Totalizer 10 gallons	Water meter 10 gallons
Difference 0%	

### Readings:

Meter Flow Rate 2.2 GPM	
Totalizer 10 gallons	Water meter 10 gallons
Difference 0%	

Please contact me with any questions.

Sincerely, Jon Wolak

716-863-7052

[jonwolak@yahoo.com](mailto:jonwolak@yahoo.com)

## ATTACHMENT 2

### GROUNDWATER MONITORING LABORATORY ANALYTICAL DATA PACKAGE





## ANALYTICAL REPORT

Lab Number:	L2121696
Client:	Benchmark & Turnkey Companies 2558 Hamburg Turnpike Suite 300 Buffalo, NY 14218
ATTN:	Tom Forbes
Phone:	(716) 856-0599
Project Name:	ATP GWS
Project Number:	T0071-020-222
Report Date:	05/06/21

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

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Eight Walkup Drive, Westborough, MA 01581-1019  
508-898-9220 (Fax) 508-898-9193 800-624-9220 - [www.alphalab.com](http://www.alphalab.com)



**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2121696-01	MWS-02	WATER	1951 HAMBURG TURNPIKE	04/27/21 16:30	04/28/21
L2121696-02	MWS-18A	WATER	1951 HAMBURG TURNPIKE	04/27/21 15:00	04/28/21
L2121696-03	MWS-18C	WATER	1951 HAMBURG TURNPIKE	04/27/21 15:30	04/28/21
L2121696-04	MWS-19A	WATER	1951 HAMBURG TURNPIKE	04/27/21 14:40	04/28/21
L2121696-05	MWS-19B	WATER	1951 HAMBURG TURNPIKE	04/27/21 14:00	04/28/21
L2121696-06	MWS-20A	WATER	1951 HAMBURG TURNPIKE	04/27/21 10:00	04/28/21
L2121696-07	MWS-20B	WATER	1951 HAMBURG TURNPIKE	04/27/21 10:45	04/28/21

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

### Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

**HOLD POLICY** - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

---

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

### Case Narrative (continued)

#### Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.


#### Sample Receipt

L2121696-04: The collection date and time on the chain of custody was 27-APR-21 14:00; however, the collection date/time on the container label was 27-APR-21 14:40. At the client's request, the collection date/time is reported as 27-APR-21 14:40.

L2121696-05: The collection date and time on the chain of custody was 27-APR-21 14:40; however, the collection date/time on the container label was 27-APR-21 14:00. At the client's request, the collection date/time is reported as 27-APR-21 14:00.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:



Lisa Westerlind

Title: Technical Director/Representative

Date: 05/06/21

# ORGANICS

# **VOLATILES**

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**SAMPLE RESULTS**

**Lab ID:** L2121696-01  
**Client ID:** MWS-02  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 04/27/21 16:30  
**Date Received:** 04/28/21  
**Field Prep:** Not Specified

**Sample Depth:**  
**Matrix:** Water  
**Analytical Method:** 1,8260C  
**Analytical Date:** 05/04/21 00:20  
**Analyst:** NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**SAMPLE RESULTS**

**Lab ID:** L2121696-01  
**Client ID:** MWS-02  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 04/27/21 16:30  
**Date Received:** 04/28/21  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	82		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	99		70-130



**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**SAMPLE RESULTS**

**Lab ID:** L2121696-02      D2  
**Client ID:** MWS-18A  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 04/27/21 15:00  
**Date Received:** 04/28/21  
**Field Prep:** Not Specified

**Sample Depth:**  
**Matrix:** Water  
**Analytical Method:** 1,8260C  
**Analytical Date:** 05/05/21 00:04  
**Analyst:** NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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## Volatile Organics by GC/MS - Westborough Lab

Benzene	4100		ug/l	50	16.	100
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	113		70-130
4-Bromofluorobenzene	87		70-130
Dibromofluoromethane	107		70-130

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**SAMPLE RESULTS**

**Lab ID:** L2121696-02      **D**  
**Client ID:** MWS-18A  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 04/27/21 15:00  
**Date Received:** 04/28/21  
**Field Prep:** Not Specified

**Sample Depth:**  
**Matrix:** Water  
**Analytical Method:** 1,8260C  
**Analytical Date:** 05/04/21 01:44  
**Analyst:** NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	50	14.	20
1,1-Dichloroethane	ND		ug/l	50	14.	20
Chloroform	ND		ug/l	50	14.	20
Carbon tetrachloride	ND		ug/l	10	2.7	20
1,2-Dichloropropane	ND		ug/l	20	2.7	20
Dibromochloromethane	ND		ug/l	10	3.0	20
1,1,2-Trichloroethane	ND		ug/l	30	10.	20
Tetrachloroethene	ND		ug/l	10	3.6	20
Chlorobenzene	ND		ug/l	50	14.	20
Trichlorofluoromethane	ND		ug/l	50	14.	20
1,2-Dichloroethane	ND		ug/l	10	2.6	20
1,1,1-Trichloroethane	ND		ug/l	50	14.	20
Bromodichloromethane	ND		ug/l	10	3.8	20
trans-1,3-Dichloropropene	ND		ug/l	10	3.3	20
cis-1,3-Dichloropropene	ND		ug/l	10	2.9	20
Bromoform	ND		ug/l	40	13.	20
1,1,2,2-Tetrachloroethane	ND		ug/l	10	3.3	20
Benzene	4500	E	ug/l	10	3.2	20
Toluene	ND		ug/l	50	14.	20
Ethylbenzene	ND		ug/l	50	14.	20
Chloromethane	ND		ug/l	50	14.	20
Bromomethane	ND		ug/l	50	14.	20
Vinyl chloride	ND		ug/l	20	1.4	20
Chloroethane	ND		ug/l	50	14.	20
1,1-Dichloroethene	ND		ug/l	10	3.4	20
trans-1,2-Dichloroethene	ND		ug/l	50	14.	20
Trichloroethene	ND		ug/l	10	3.5	20
1,2-Dichlorobenzene	ND		ug/l	50	14.	20

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**SAMPLE RESULTS**

**Lab ID:** L2121696-02      **D**  
**Client ID:** MWS-18A  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 04/27/21 15:00  
**Date Received:** 04/28/21  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	50	14.	20
1,4-Dichlorobenzene	ND		ug/l	50	14.	20
Methyl tert butyl ether	ND		ug/l	50	14.	20
p/m-Xylene	ND		ug/l	50	14.	20
o-Xylene	ND		ug/l	50	14.	20
cis-1,2-Dichloroethene	ND		ug/l	50	14.	20
Styrene	ND		ug/l	50	14.	20
Dichlorodifluoromethane	ND		ug/l	100	20.	20
Acetone	ND		ug/l	100	29.	20
Carbon disulfide	ND		ug/l	100	20.	20
2-Butanone	ND		ug/l	100	39.	20
4-Methyl-2-pentanone	ND		ug/l	100	20.	20
2-Hexanone	ND		ug/l	100	20.	20
Bromochloromethane	ND		ug/l	50	14.	20
1,2-Dibromoethane	ND		ug/l	40	13.	20
1,2-Dibromo-3-chloropropane	ND		ug/l	50	14.	20
Isopropylbenzene	ND		ug/l	50	14.	20
1,2,3-Trichlorobenzene	ND		ug/l	50	14.	20
1,2,4-Trichlorobenzene	ND		ug/l	50	14.	20
Methyl Acetate	ND		ug/l	40	4.7	20
Cyclohexane	ND		ug/l	200	5.4	20
1,4-Dioxane	ND		ug/l	5000	1200	20
Freon-113	ND		ug/l	50	14.	20
Methyl cyclohexane	ND		ug/l	200	7.9	20

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	76		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	89		70-130

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**SAMPLE RESULTS**

**Lab ID:** L2121696-03      **D**  
**Client ID:** MWS-18C  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 04/27/21 15:30  
**Date Received:** 04/28/21  
**Field Prep:** Not Specified

**Sample Depth:**  
**Matrix:** Water  
**Analytical Method:** 1,8260C  
**Analytical Date:** 05/04/21 02:05  
**Analyst:** NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	25	7.0	10
1,1-Dichloroethane	ND		ug/l	25	7.0	10
Chloroform	ND		ug/l	25	7.0	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
1,2-Dichloropropane	ND		ug/l	10	1.4	10
Dibromochloromethane	ND		ug/l	5.0	1.5	10
1,1,2-Trichloroethane	ND		ug/l	15	5.0	10
Tetrachloroethene	ND		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	25	7.0	10
Trichlorofluoromethane	ND		ug/l	25	7.0	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
1,1,1-Trichloroethane	ND		ug/l	25	7.0	10
Bromodichloromethane	ND		ug/l	5.0	1.9	10
trans-1,3-Dichloropropene	ND		ug/l	5.0	1.6	10
cis-1,3-Dichloropropene	ND		ug/l	5.0	1.4	10
Bromoform	ND		ug/l	20	6.5	10
1,1,2,2-Tetrachloroethane	ND		ug/l	5.0	1.7	10
Benzene	1600		ug/l	5.0	1.6	10
Toluene	57		ug/l	25	7.0	10
Ethylbenzene	ND		ug/l	25	7.0	10
Chloromethane	ND		ug/l	25	7.0	10
Bromomethane	ND		ug/l	25	7.0	10
Vinyl chloride	ND		ug/l	10	0.71	10
Chloroethane	ND		ug/l	25	7.0	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
trans-1,2-Dichloroethene	ND		ug/l	25	7.0	10
Trichloroethene	ND		ug/l	5.0	1.8	10
1,2-Dichlorobenzene	ND		ug/l	25	7.0	10

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**SAMPLE RESULTS**

**Lab ID:** L2121696-03      **D**  
**Client ID:** MWS-18C  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 04/27/21 15:30  
**Date Received:** 04/28/21  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	25	7.0	10
1,4-Dichlorobenzene	ND		ug/l	25	7.0	10
Methyl tert butyl ether	ND		ug/l	25	7.0	10
p/m-Xylene	54		ug/l	25	7.0	10
o-Xylene	ND		ug/l	25	7.0	10
cis-1,2-Dichloroethene	ND		ug/l	25	7.0	10
Styrene	ND		ug/l	25	7.0	10
Dichlorodifluoromethane	ND		ug/l	50	10.	10
Acetone	17	J	ug/l	50	15.	10
Carbon disulfide	260		ug/l	50	10.	10
2-Butanone	ND		ug/l	50	19.	10
4-Methyl-2-pentanone	ND		ug/l	50	10.	10
2-Hexanone	ND		ug/l	50	10.	10
Bromochloromethane	ND		ug/l	25	7.0	10
1,2-Dibromoethane	ND		ug/l	20	6.5	10
1,2-Dibromo-3-chloropropane	ND		ug/l	25	7.0	10
Isopropylbenzene	ND		ug/l	25	7.0	10
1,2,3-Trichlorobenzene	ND		ug/l	25	7.0	10
1,2,4-Trichlorobenzene	ND		ug/l	25	7.0	10
Methyl Acetate	ND		ug/l	20	2.3	10
Cyclohexane	ND		ug/l	100	2.7	10
1,4-Dioxane	ND		ug/l	2500	610	10
Freon-113	ND		ug/l	25	7.0	10
Methyl cyclohexane	ND		ug/l	100	4.0	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	80		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	93		70-130

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**SAMPLE RESULTS**

**Lab ID:** L2121696-04      **D**  
**Client ID:** MWS-19A  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 04/27/21 14:40  
**Date Received:** 04/28/21  
**Field Prep:** Not Specified

**Sample Depth:**  
**Matrix:** Water  
**Analytical Method:** 1,8260C  
**Analytical Date:** 05/04/21 02:26  
**Analyst:** NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	5.0	1.4	2
1,1-Dichloroethane	ND		ug/l	5.0	1.4	2
Chloroform	ND		ug/l	5.0	1.4	2
Carbon tetrachloride	ND		ug/l	1.0	0.27	2
1,2-Dichloropropane	ND		ug/l	2.0	0.27	2
Dibromochloromethane	ND		ug/l	1.0	0.30	2
1,1,2-Trichloroethane	ND		ug/l	3.0	1.0	2
Tetrachloroethene	ND		ug/l	1.0	0.36	2
Chlorobenzene	ND		ug/l	5.0	1.4	2
Trichlorofluoromethane	ND		ug/l	5.0	1.4	2
1,2-Dichloroethane	ND		ug/l	1.0	0.26	2
1,1,1-Trichloroethane	ND		ug/l	5.0	1.4	2
Bromodichloromethane	ND		ug/l	1.0	0.38	2
trans-1,3-Dichloropropene	ND		ug/l	1.0	0.33	2
cis-1,3-Dichloropropene	ND		ug/l	1.0	0.29	2
Bromoform	ND		ug/l	4.0	1.3	2
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	0.33	2
Benzene	190		ug/l	1.0	0.32	2
Toluene	ND		ug/l	5.0	1.4	2
Ethylbenzene	ND		ug/l	5.0	1.4	2
Chloromethane	ND		ug/l	5.0	1.4	2
Bromomethane	ND		ug/l	5.0	1.4	2
Vinyl chloride	0.86	J	ug/l	2.0	0.14	2
Chloroethane	ND		ug/l	5.0	1.4	2
1,1-Dichloroethene	ND		ug/l	1.0	0.34	2
trans-1,2-Dichloroethene	ND		ug/l	5.0	1.4	2
Trichloroethene	ND		ug/l	1.0	0.35	2
1,2-Dichlorobenzene	ND		ug/l	5.0	1.4	2

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**SAMPLE RESULTS**

**Lab ID:** L2121696-04      **D**  
**Client ID:** MWS-19A  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 04/27/21 14:40  
**Date Received:** 04/28/21  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	5.0	1.4	2
1,4-Dichlorobenzene	ND		ug/l	5.0	1.4	2
Methyl tert butyl ether	ND		ug/l	5.0	1.4	2
p/m-Xylene	1.8	J	ug/l	5.0	1.4	2
o-Xylene	ND		ug/l	5.0	1.4	2
cis-1,2-Dichloroethene	ND		ug/l	5.0	1.4	2
Styrene	ND		ug/l	5.0	1.4	2
Dichlorodifluoromethane	ND		ug/l	10	2.0	2
Acetone	ND		ug/l	10	2.9	2
Carbon disulfide	2.1	J	ug/l	10	2.0	2
2-Butanone	ND		ug/l	10	3.9	2
4-Methyl-2-pentanone	ND		ug/l	10	2.0	2
2-Hexanone	ND		ug/l	10	2.0	2
Bromochloromethane	ND		ug/l	5.0	1.4	2
1,2-Dibromoethane	ND		ug/l	4.0	1.3	2
1,2-Dibromo-3-chloropropane	ND		ug/l	5.0	1.4	2
Isopropylbenzene	ND		ug/l	5.0	1.4	2
1,2,3-Trichlorobenzene	ND		ug/l	5.0	1.4	2
1,2,4-Trichlorobenzene	ND		ug/l	5.0	1.4	2
Methyl Acetate	ND		ug/l	4.0	0.47	2
Cyclohexane	ND		ug/l	20	0.54	2
1,4-Dioxane	ND		ug/l	500	120	2
Freon-113	ND		ug/l	5.0	1.4	2
Methyl cyclohexane	ND		ug/l	20	0.79	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	79		70-130
Toluene-d8	92		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	92		70-130

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**SAMPLE RESULTS**

**Lab ID:** L2121696-05  
**Client ID:** MWS-19B  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 04/27/21 14:00  
**Date Received:** 04/28/21  
**Field Prep:** Not Specified

**Sample Depth:**  
**Matrix:** Water  
**Analytical Method:** 1,8260C  
**Analytical Date:** 05/04/21 00:40  
**Analyst:** NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	150		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1



**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**SAMPLE RESULTS**

**Lab ID:** L2121696-05  
**Client ID:** MWS-19B  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 04/27/21 14:00  
**Date Received:** 04/28/21  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	0.35	J	ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	79		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	87		70-130

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**SAMPLE RESULTS**

**Lab ID:** L2121696-06  
**Client ID:** MWS-20A  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 04/27/21 10:00  
**Date Received:** 04/28/21  
**Field Prep:** Not Specified

**Sample Depth:**  
**Matrix:** Water  
**Analytical Method:** 1,8260C  
**Analytical Date:** 05/04/21 01:02  
**Analyst:** NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	0.37	J	ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**SAMPLE RESULTS**

**Lab ID:** L2121696-06  
**Client ID:** MWS-20A  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 04/27/21 10:00  
**Date Received:** 04/28/21  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	81		70-130
Toluene-d8	91		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	95		70-130

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**SAMPLE RESULTS**

**Lab ID:** L2121696-07  
**Client ID:** MWS-20B  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 04/27/21 10:45  
**Date Received:** 04/28/21  
**Field Prep:** Not Specified

**Sample Depth:**  
**Matrix:** Water  
**Analytical Method:** 1,8260C  
**Analytical Date:** 05/04/21 01:23  
**Analyst:** NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	1.6		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	0.35	J	ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**SAMPLE RESULTS**

**Lab ID:** L2121696-07  
**Client ID:** MWS-20B  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 04/27/21 10:45  
**Date Received:** 04/28/21  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	84		70-130
Toluene-d8	93		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	97		70-130

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8260C  
**Analytical Date:** 05/03/21 19:18  
**Analyst:** AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-07 Batch: WG1494246-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

### Method Blank Analysis Batch Quality Control

**Analytical Method:** 1,8260C  
**Analytical Date:** 05/03/21 19:18  
**Analyst:** AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-07 Batch: WG1494246-5					
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
Methyl Acetate	ND		ug/l	2.0	0.23
Cyclohexane	ND		ug/l	10	0.27
1,4-Dioxane	ND		ug/l	250	61.
Freon-113	ND		ug/l	2.5	0.70
Methyl cyclohexane	ND		ug/l	10	0.40

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
 Analytical Date: 05/03/21 19:18  
 Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-07 Batch: WG1494246-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	77		70-130
Toluene-d8	92		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	92		70-130



**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
 Analytical Date: 05/04/21 17:48  
 Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG1494635-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8260C  
**Analytical Date:** 05/04/21 17:48  
**Analyst:** LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG1494635-5					
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
Methyl Acetate	ND		ug/l	2.0	0.23
Cyclohexane	ND		ug/l	10	0.27
1,4-Dioxane	ND		ug/l	250	61.
Freon-113	ND		ug/l	2.5	0.70
Methyl cyclohexane	ND		ug/l	10	0.40

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
Analytical Date: 05/04/21 17:48  
Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG1494635-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	103		70-130

# **Lab Control Sample Analysis** **Batch Quality Control**

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07 Batch: WG1494246-3 WG1494246-4								
Methylene chloride	82		84		70-130	2		20
1,1-Dichloroethane	89		96		70-130	8		20
Chloroform	83		84		70-130	1		20
Carbon tetrachloride	78		79		63-132	1		20
1,2-Dichloropropane	96		99		70-130	3		20
Dibromochloromethane	78		80		63-130	3		20
1,1,2-Trichloroethane	87		93		70-130	7		20
Tetrachloroethene	83		82		70-130	1		20
Chlorobenzene	97		100		75-130	3		20
Trichlorofluoromethane	82		85		62-150	4		20
1,2-Dichloroethane	76		80		70-130	5		20
1,1,1-Trichloroethane	81		86		67-130	6		20
Bromodichloromethane	80		83		67-130	4		20
trans-1,3-Dichloropropene	80		90		70-130	12		20
cis-1,3-Dichloropropene	80		85		70-130	6		20
Bromoform	72		82		54-136	13		20
1,1,2,2-Tetrachloroethane	90		100		67-130	11		20
Benzene	99		100		70-130	1		20
Toluene	90		94		70-130	4		20
Ethylbenzene	98		99		70-130	1		20
Chloromethane	97		96		64-130	1		20
Bromomethane	61		68		39-139	11		20
Vinyl chloride	93		91		55-140	2		20

# **Lab Control Sample Analysis** **Batch Quality Control**

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07 Batch: WG1494246-3 WG1494246-4								
Chloroethane	110		120		55-138	9		20
1,1-Dichloroethene	92		99		61-145	7		20
trans-1,2-Dichloroethene	96		93		70-130	3		20
Trichloroethene	91		93		70-130	2		20
1,2-Dichlorobenzene	94		98		70-130	4		20
1,3-Dichlorobenzene	99		98		70-130	1		20
1,4-Dichlorobenzene	97		100		70-130	3		20
Methyl tert butyl ether	75		83		63-130	10		20
p/m-Xylene	105		110		70-130	5		20
o-Xylene	100		110		70-130	10		20
cis-1,2-Dichloroethene	92		96		70-130	4		20
Styrene	105		110		70-130	5		20
Dichlorodifluoromethane	63		63		36-147	0		20
Acetone	87		94		58-148	8		20
Carbon disulfide	93		91		51-130	2		20
2-Butanone	100		96		63-138	4		20
4-Methyl-2-pentanone	83		87		59-130	5		20
2-Hexanone	87		100		57-130	14		20
Bromochloromethane	83		85		70-130	2		20
1,2-Dibromoethane	86		94		70-130	9		20
1,2-Dibromo-3-chloropropane	64		77		41-144	18		20
Isopropylbenzene	110		110		70-130	0		20
1,2,3-Trichlorobenzene	85		88		70-130	3		20

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07 Batch: WG1494246-3 WG1494246-4								
1,2,4-Trichlorobenzene	85		93		70-130	9		20
Methyl Acetate	93		100		70-130	7		20
Cyclohexane	99		100		70-130	1		20
1,4-Dioxane	80		88		56-162	10		20
Freon-113	94		93		70-130	1		20
Methyl cyclohexane	89		98		70-130	10		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	79		82		70-130
Toluene-d8	96		95		70-130
4-Bromofluorobenzene	99		102		70-130
Dibromofluoromethane	92		95		70-130

# **Lab Control Sample Analysis** **Batch Quality Control**

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG1494635-3 WG1494635-4								
Methylene chloride	93		91		70-130	2		20
1,1-Dichloroethane	96		94		70-130	2		20
Chloroform	97		96		70-130	1		20
Carbon tetrachloride	81		83		63-132	2		20
1,2-Dichloropropane	120		120		70-130	0		20
Dibromochloromethane	91		100		63-130	9		20
1,1,2-Trichloroethane	110		110		70-130	0		20
Tetrachloroethene	120		120		70-130	0		20
Chlorobenzene	110		110		75-130	0		20
Trichlorofluoromethane	81		78		62-150	4		20
1,2-Dichloroethane	100		100		70-130	0		20
1,1,1-Trichloroethane	94		92		67-130	2		20
Bromodichloromethane	87		87		67-130	0		20
trans-1,3-Dichloropropene	88		96		70-130	9		20
cis-1,3-Dichloropropene	91		90		70-130	1		20
Bromoform	86		94		54-136	9		20
1,1,2,2-Tetrachloroethane	100		110		67-130	10		20
Benzene	100		100		70-130	0		20
Toluene	120		110		70-130	9		20
Ethylbenzene	110		110		70-130	0		20
Chloromethane	69		68		64-130	1		20
Bromomethane	110		110		39-139	0		20
Vinyl chloride	120		110		55-140	9		20

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG1494635-3 WG1494635-4								
Chloroethane	93		94		55-138	1		20
1,1-Dichloroethene	92		90		61-145	2		20
trans-1,2-Dichloroethene	95		95		70-130	0		20
Trichloroethene	100		100		70-130	0		20
1,2-Dichlorobenzene	100		110		70-130	10		20
1,3-Dichlorobenzene	100		110		70-130	10		20
1,4-Dichlorobenzene	100		110		70-130	10		20
Methyl tert butyl ether	83		83		63-130	0		20
p/m-Xylene	105		105		70-130	0		20
o-Xylene	105		105		70-130	0		20
cis-1,2-Dichloroethene	100		100		70-130	0		20
Styrene	105		105		70-130	0		20
Dichlorodifluoromethane	80		77		36-147	4		20
Acetone	89		95		58-148	7		20
Carbon disulfide	84		85		51-130	1		20
2-Butanone	110		110		63-138	0		20
4-Methyl-2-pentanone	130		140	Q	59-130	7		20
2-Hexanone	110		120		57-130	9		20
Bromochloromethane	110		110		70-130	0		20
1,2-Dibromoethane	100		110		70-130	10		20
1,2-Dibromo-3-chloropropane	88		100		41-144	13		20
Isopropylbenzene	93		94		70-130	1		20
1,2,3-Trichlorobenzene	110		110		70-130	0		20



## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG1494635-3 WG1494635-4								
1,2,4-Trichlorobenzene	110		110		70-130	0		20
Methyl Acetate	87		90		70-130	3		20
Cyclohexane	120		120		70-130	0		20
1,4-Dioxane	110		114		56-162	4		20
Freon-113	89		86		70-130	3		20
Methyl cyclohexane	98		99		70-130	1		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	97		97		70-130
Toluene-d8	110		111		70-130
4-Bromofluorobenzene	88		91		70-130
Dibromofluoromethane	101		101		70-130

# SEMIVOLATILES

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**SAMPLE RESULTS**

**Lab ID:** L2121696-01  
**Client ID:** MWS-02  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 04/27/21 16:30  
**Date Received:** 04/28/21  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Water  
**Analytical Method:** 1,8270D  
**Analytical Date:** 05/04/21 04:35  
**Analyst:** JG

**Extraction Method:** EPA 3510C  
**Extraction Date:** 05/03/21 08:17

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	1.6	J	ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**SAMPLE RESULTS**

**Lab ID:** L2121696-01  
**Client ID:** MWS-02  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 04/27/21 16:30  
**Date Received:** 04/28/21  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	ND		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	46		21-120
Phenol-d6	34		10-120
Nitrobenzene-d5	58		23-120
2-Fluorobiphenyl	64		15-120
2,4,6-Tribromophenol	81		10-120
4-Terphenyl-d14	63		41-149

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**SAMPLE RESULTS**

**Lab ID:** L2121696-01  
**Client ID:** MWS-02  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 04/27/21 16:30  
**Date Received:** 04/28/21  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Water  
**Analytical Method:** 1,8270D-SIM  
**Analytical Date:** 05/05/21 21:00  
**Analyst:** DV

**Extraction Method:** EPA 3510C  
**Extraction Date:** 05/03/21 08:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.02	J	ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	0.03	J	ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	0.08	J	ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	0.04	J	ug/l	0.10	0.01	1
Anthracene	0.03	J	ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	0.06	J	ug/l	0.10	0.01	1
Phenanthrene	0.05	J	ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	0.03	J	ug/l	0.10	0.02	1
2-Methylnaphthalene	0.03	J	ug/l	0.10	0.02	1
Pentachlorophenol	0.35	J	ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**SAMPLE RESULTS**

**Lab ID:** L2121696-01  
**Client ID:** MWS-02  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 04/27/21 16:30  
**Date Received:** 04/28/21  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	65		21-120
Phenol-d6	53		10-120
Nitrobenzene-d5	83		23-120
2-Fluorobiphenyl	89		15-120
2,4,6-Tribromophenol	123	Q	10-120
4-Terphenyl-d14	114		41-149

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**SAMPLE RESULTS**

**Lab ID:** L2121696-02  
**Client ID:** MWS-18A  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 04/27/21 15:00  
**Date Received:** 04/28/21  
**Field Prep:** Not Specified

**Sample Depth:**  
**Matrix:** Water  
**Analytical Method:** 1,8270D  
**Analytical Date:** 05/04/21 04:57  
**Analyst:** JG

**Extraction Method:** EPA 3510C  
**Extraction Date:** 05/03/21 08:17

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	2.4	J	ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	0.54	J	ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**SAMPLE RESULTS**

**Lab ID:** L2121696-02  
**Client ID:** MWS-18A  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 04/27/21 15:00  
**Date Received:** 04/28/21  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	0.89	J	ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	ND		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	65		21-120
Phenol-d6	51		10-120
Nitrobenzene-d5	83		23-120
2-Fluorobiphenyl	84		15-120
2,4,6-Tribromophenol	130	Q	10-120
4-Terphenyl-d14	96		41-149



**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**SAMPLE RESULTS**

**Lab ID:** L2121696-02  
**Client ID:** MWS-18A  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 04/27/21 15:00  
**Date Received:** 04/28/21  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Water  
**Analytical Method:** 1,8270D-SIM  
**Analytical Date:** 05/05/21 21:20  
**Analyst:** DV

**Extraction Method:** EPA 3510C  
**Extraction Date:** 05/03/21 08:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.18		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	0.04	J	ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	3.8		ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	0.02	J	ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.02	J	ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.02	J	ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	0.09	J	ug/l	0.10	0.01	1
Anthracene	0.05	J	ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.01	J	ug/l	0.10	0.01	1
Fluorene	0.05	J	ug/l	0.10	0.01	1
Phenanthrene	0.16		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	0.02	J	ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	0.02	J	ug/l	0.10	0.01	1
Pyrene	0.03	J	ug/l	0.10	0.02	1
2-Methylnaphthalene	0.41		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**SAMPLE RESULTS**

**Lab ID:** L2121696-02  
**Client ID:** MWS-18A  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 04/27/21 15:00  
**Date Received:** 04/28/21  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	68		21-120
Phenol-d6	58		10-120
Nitrobenzene-d5	88		23-120
2-Fluorobiphenyl	91		15-120
2,4,6-Tribromophenol	142	Q	10-120
4-Terphenyl-d14	116		41-149

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**SAMPLE RESULTS**

**Lab ID:** L2121696-03  
**Client ID:** MWS-18C  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 04/27/21 15:30  
**Date Received:** 04/28/21  
**Field Prep:** Not Specified

**Sample Depth:**  
**Matrix:** Water  
**Analytical Method:** 1,8270D  
**Analytical Date:** 05/04/21 06:06  
**Analyst:** JG

**Extraction Method:** EPA 3510C  
**Extraction Date:** 05/03/21 08:17

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	3.3		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	0.48	J	ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	23.		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**SAMPLE RESULTS**

**Lab ID:** L2121696-03  
**Client ID:** MWS-18C  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 04/27/21 15:30  
**Date Received:** 04/28/21  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	13.		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	50.		ug/l	5.0	0.57	1
2-Methylphenol	5.4		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	25.		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	ND		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	76		21-120
Phenol-d6	62		10-120
Nitrobenzene-d5	101		23-120
2-Fluorobiphenyl	97		15-120
2,4,6-Tribromophenol	157	Q	10-120
4-Terphenyl-d14	114		41-149

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**SAMPLE RESULTS**

**Lab ID:** L2121696-03  
**Client ID:** MWS-18C  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 04/27/21 15:30  
**Date Received:** 04/28/21  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Water  
**Analytical Method:** 1,8270D-SIM  
**Analytical Date:** 05/05/21 21:39  
**Analyst:** DV

**Extraction Method:** EPA 3510C  
**Extraction Date:** 05/03/21 08:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.04	J	ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	0.05	J	ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	0.89		ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.02	J	ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	0.08	J	ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	0.05	J	ug/l	0.10	0.01	1
Phenanthrene	0.06	J	ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	0.04	J	ug/l	0.10	0.02	1
2-Methylnaphthalene	0.21		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**SAMPLE RESULTS**

**Lab ID:** L2121696-03  
**Client ID:** MWS-18C  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 04/27/21 15:30  
**Date Received:** 04/28/21  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	75		21-120
Phenol-d6	65		10-120
Nitrobenzene-d5	104		23-120
2-Fluorobiphenyl	99		15-120
2,4,6-Tribromophenol	<b>168</b>	Q	10-120
4-Terphenyl-d14	132		41-149

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**SAMPLE RESULTS**

**Lab ID:** L2121696-04  
**Client ID:** MWS-19A  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 04/27/21 14:40  
**Date Received:** 04/28/21  
**Field Prep:** Not Specified

**Sample Depth:**  
**Matrix:** Water  
**Analytical Method:** 1,8270D  
**Analytical Date:** 05/04/21 08:22  
**Analyst:** JG

**Extraction Method:** EPA 3510C  
**Extraction Date:** 05/03/21 08:17

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	2.3	J	ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	1.9	J	ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**SAMPLE RESULTS**

**Lab ID:** L2121696-04  
**Client ID:** MWS-19A  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 04/27/21 14:40  
**Date Received:** 04/28/21  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	ND		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	56		21-120
Phenol-d6	44		10-120
Nitrobenzene-d5	75		23-120
2-Fluorobiphenyl	70		15-120
2,4,6-Tribromophenol	104		10-120
4-Terphenyl-d14	74		41-149



**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**SAMPLE RESULTS**

**Lab ID:** L2121696-04  
**Client ID:** MWS-19A  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 04/27/21 14:40  
**Date Received:** 04/28/21  
**Field Prep:** Not Specified

**Sample Depth:**  
**Matrix:** Water  
**Analytical Method:** 1,8270D-SIM  
**Analytical Date:** 05/06/21 04:10  
**Analyst:** DV

**Extraction Method:** EPA 3510C  
**Extraction Date:** 05/03/21 08:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.26		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	2.2		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	0.35		ug/l	0.10	0.05	1
Benzo(a)anthracene	1.4		ug/l	0.10	0.02	1
Benzo(a)pyrene	1.2		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	1.7		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.50		ug/l	0.10	0.01	1
Chrysene	1.2		ug/l	0.10	0.01	1
Acenaphthylene	0.12		ug/l	0.10	0.01	1
Anthracene	0.48		ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.70		ug/l	0.10	0.01	1
Fluorene	1.2		ug/l	0.10	0.01	1
Phenanthrene	1.3		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	0.26		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	0.84		ug/l	0.10	0.01	1
Pyrene	1.7		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.26		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**SAMPLE RESULTS**

**Lab ID:** L2121696-04  
**Client ID:** MWS-19A  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 04/27/21 14:40  
**Date Received:** 04/28/21  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	81		21-120
Phenol-d6	67		10-120
Nitrobenzene-d5	114		23-120
2-Fluorobiphenyl	105		15-120
2,4,6-Tribromophenol	<b>168</b>	Q	10-120
4-Terphenyl-d14	131		41-149

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**SAMPLE RESULTS**

**Lab ID:** L2121696-05  
**Client ID:** MWS-19B  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 04/27/21 14:00  
**Date Received:** 04/28/21  
**Field Prep:** Not Specified

**Sample Depth:**  
**Matrix:** Water  
**Analytical Method:** 1,8270D  
**Analytical Date:** 05/04/21 05:20  
**Analyst:** JG

**Extraction Method:** EPA 3510C  
**Extraction Date:** 05/03/21 08:17

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	2.0	J	ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	1.2	J	ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**SAMPLE RESULTS**

**Lab ID:** L2121696-05  
**Client ID:** MWS-19B  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 04/27/21 14:00  
**Date Received:** 04/28/21  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	3.3	J	ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	0.69	J	ug/l	5.0	0.57	1
2-Methylphenol	0.66	J	ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	2.9	J	ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	ND		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	69		21-120
Phenol-d6	53		10-120
Nitrobenzene-d5	98		23-120
2-Fluorobiphenyl	94		15-120
2,4,6-Tribromophenol	141	Q	10-120
4-Terphenyl-d14	106		41-149

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**SAMPLE RESULTS**

**Lab ID:** L2121696-05  
**Client ID:** MWS-19B  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 04/27/21 14:00  
**Date Received:** 04/28/21  
**Field Prep:** Not Specified

**Sample Depth:**  
**Matrix:** Water  
**Analytical Method:** 1,8270D-SIM  
**Analytical Date:** 05/05/21 21:59  
**Analyst:** DV

**Extraction Method:** EPA 3510C  
**Extraction Date:** 05/03/21 08:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.08	J	ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	0.02	J	ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	0.42		ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	0.05	J	ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	0.14		ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.12		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**SAMPLE RESULTS**

**Lab ID:** L2121696-05  
**Client ID:** MWS-19B  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 04/27/21 14:00  
**Date Received:** 04/28/21  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	78		21-120
Phenol-d6	66		10-120
Nitrobenzene-d5	113		23-120
2-Fluorobiphenyl	104		15-120
2,4,6-Tribromophenol	<b>168</b>	Q	10-120
4-Terphenyl-d14	129		41-149

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**SAMPLE RESULTS**

**Lab ID:** L2121696-06  
**Client ID:** MWS-20A  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 04/27/21 10:00  
**Date Received:** 04/28/21  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Water  
**Analytical Method:** 1,8270D  
**Analytical Date:** 05/04/21 02:44  
**Analyst:** JG

**Extraction Method:** EPA 3510C  
**Extraction Date:** 05/02/21 14:34

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	1.9	J	ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**SAMPLE RESULTS**

**Lab ID:** L2121696-06  
**Client ID:** MWS-20A  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 04/27/21 10:00  
**Date Received:** 04/28/21  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	ND		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	69		21-120
Phenol-d6	52		10-120
Nitrobenzene-d5	90		23-120
2-Fluorobiphenyl	73		15-120
2,4,6-Tribromophenol	74		10-120
4-Terphenyl-d14	77		41-149



**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**SAMPLE RESULTS**

**Lab ID:** L2121696-06  
**Client ID:** MWS-20A  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 04/27/21 10:00  
**Date Received:** 04/28/21  
**Field Prep:** Not Specified

**Sample Depth:**  
**Matrix:** Water  
**Analytical Method:** 1,8270D-SIM  
**Analytical Date:** 05/06/21 11:53  
**Analyst:** DV

**Extraction Method:** EPA 3510C  
**Extraction Date:** 05/02/21 14:36

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	ND		ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	0.02	J	ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	0.02	J	ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**SAMPLE RESULTS**

**Lab ID:** L2121696-06  
**Client ID:** MWS-20A  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 04/27/21 10:00  
**Date Received:** 04/28/21  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	39		21-120
Phenol-d6	33		10-120
Nitrobenzene-d5	49		23-120
2-Fluorobiphenyl	64		15-120
2,4,6-Tribromophenol	58		10-120
4-Terphenyl-d14	72		41-149

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**SAMPLE RESULTS**

**Lab ID:** L2121696-07  
**Client ID:** MWS-20B  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 04/27/21 10:45  
**Date Received:** 04/28/21  
**Field Prep:** Not Specified

**Sample Depth:**  
**Matrix:** Water  
**Analytical Method:** 1,8270D  
**Analytical Date:** 05/04/21 05:43  
**Analyst:** JG

**Extraction Method:** EPA 3510C  
**Extraction Date:** 05/03/21 08:17

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	1.9	J	ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**SAMPLE RESULTS**

**Lab ID:** L2121696-07  
**Client ID:** MWS-20B  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 04/27/21 10:45  
**Date Received:** 04/28/21  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	ND		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	64		21-120
Phenol-d6	47		10-120
Nitrobenzene-d5	82		23-120
2-Fluorobiphenyl	85		15-120
2,4,6-Tribromophenol	124	Q	10-120
4-Terphenyl-d14	96		41-149

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**SAMPLE RESULTS**

**Lab ID:** L2121696-07  
**Client ID:** MWS-20B  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 04/27/21 10:45  
**Date Received:** 04/28/21  
**Field Prep:** Not Specified

**Sample Depth:**  
**Matrix:** Water  
**Analytical Method:** 1,8270D-SIM  
**Analytical Date:** 05/05/21 22:18  
**Analyst:** DV

**Extraction Method:** EPA 3510C  
**Extraction Date:** 05/03/21 08:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	0.07	J	ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.02	J	ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	0.07	J	ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	0.02	J	ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.03	J	ug/l	0.10	0.02	1
Pentachlorophenol	0.31	J	ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**SAMPLE RESULTS**

**Lab ID:** L2121696-07  
**Client ID:** MWS-20B  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 04/27/21 10:45  
**Date Received:** 04/28/21  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	66		21-120
Phenol-d6	56		10-120
Nitrobenzene-d5	98		23-120
2-Fluorobiphenyl	96		15-120
2,4,6-Tribromophenol	145	Q	10-120
4-Terphenyl-d14	108		41-149

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

### Method Blank Analysis Batch Quality Control

**Analytical Method:** 1,8270D  
**Analytical Date:** 05/04/21 00:22  
**Analyst:** EK

**Extraction Method:** EPA 3510C  
**Extraction Date:** 05/02/21 14:34

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 06 Batch: WG1493452-1					
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
Isophorone	ND		ug/l	5.0	1.2
Nitrobenzene	ND		ug/l	2.0	0.77
NDPA/DPA	ND		ug/l	2.0	0.42
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5
Butyl benzyl phthalate	ND		ug/l	5.0	1.2
Di-n-butylphthalate	ND		ug/l	5.0	0.39
Di-n-octylphthalate	ND		ug/l	5.0	1.3
Diethyl phthalate	ND		ug/l	5.0	0.38
Dimethyl phthalate	ND		ug/l	5.0	1.8
Biphenyl	ND		ug/l	2.0	0.46
4-Chloroaniline	ND		ug/l	5.0	1.1
2-Nitroaniline	ND		ug/l	5.0	0.50
3-Nitroaniline	ND		ug/l	5.0	0.81
4-Nitroaniline	ND		ug/l	5.0	0.80
Dibenzofuran	ND		ug/l	2.0	0.50
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44
Acetophenone	ND		ug/l	5.0	0.53
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61
p-Chloro-m-cresol	ND		ug/l	2.0	0.35

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

### Method Blank Analysis Batch Quality Control

**Analytical Method:** 1,8270D  
**Analytical Date:** 05/04/21 00:22  
**Analyst:** EK

**Extraction Method:** EPA 3510C  
**Extraction Date:** 05/02/21 14:34

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 06 Batch: WG1493452-1					
2-Chlorophenol	ND		ug/l	2.0	0.48
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
2-Nitrophenol	ND		ug/l	10	0.85
4-Nitrophenol	ND		ug/l	10	0.67
2,4-Dinitrophenol	ND		ug/l	20	6.6
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8
Phenol	ND		ug/l	5.0	0.57
2-Methylphenol	ND		ug/l	5.0	0.49
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Carbazole	ND		ug/l	2.0	0.49
Atrazine	ND		ug/l	10	0.76
Benzaldehyde	ND		ug/l	5.0	0.53
Caprolactam	ND		ug/l	10	3.3
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	72		21-120
Phenol-d6	59		10-120
Nitrobenzene-d5	112		23-120
2-Fluorobiphenyl	97		15-120
2,4,6-Tribromophenol	77		10-120
4-Terphenyl-d14	101		41-149



**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

### Method Blank Analysis Batch Quality Control

**Analytical Method:** 1,8270D-SIM  
**Analytical Date:** 05/04/21 13:33  
**Analyst:** JRW

**Extraction Method:** EPA 3510C  
**Extraction Date:** 05/02/21 14:36

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 06 Batch: WG1493454-1					
Acenaphthene	ND		ug/l	0.10	0.01
2-Chloronaphthalene	ND		ug/l	0.20	0.02
Fluoranthene	ND		ug/l	0.10	0.02
Hexachlorobutadiene	ND		ug/l	0.50	0.05
Naphthalene	ND		ug/l	0.10	0.05
Benzo(a)anthracene	ND		ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01
Chrysene	ND		ug/l	0.10	0.01
Acenaphthylene	ND		ug/l	0.10	0.01
Anthracene	ND		ug/l	0.10	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01
Fluorene	ND		ug/l	0.10	0.01
Phenanthrene	ND		ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Pyrene	ND		ug/l	0.10	0.02
2-Methylnaphthalene	ND		ug/l	0.10	0.02
Pentachlorophenol	ND		ug/l	0.80	0.01
Hexachlorobenzene	ND		ug/l	0.80	0.01
Hexachloroethane	ND		ug/l	0.80	0.06

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8270D-SIM  
 Analytical Date: 05/04/21 13:33  
 Analyst: JRW

Extraction Method: EPA 3510C  
 Extraction Date: 05/02/21 14:36

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 06 Batch: WG1493454-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	64		21-120
Phenol-d6	55		10-120
Nitrobenzene-d5	89		23-120
2-Fluorobiphenyl	98		15-120
2,4,6-Tribromophenol	78		10-120
4-Terphenyl-d14	125		41-149

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

### Method Blank Analysis Batch Quality Control

**Analytical Method:** 1,8270D  
**Analytical Date:** 05/03/21 23:14  
**Analyst:** EK

**Extraction Method:** EPA 3510C  
**Extraction Date:** 05/03/21 08:17

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-05,07 Batch: WG1493602-1					
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
Isophorone	ND		ug/l	5.0	1.2
Nitrobenzene	ND		ug/l	2.0	0.77
NDPA/DPA	ND		ug/l	2.0	0.42
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5
Butyl benzyl phthalate	ND		ug/l	5.0	1.2
Di-n-butylphthalate	ND		ug/l	5.0	0.39
Di-n-octylphthalate	ND		ug/l	5.0	1.3
Diethyl phthalate	ND		ug/l	5.0	0.38
Dimethyl phthalate	ND		ug/l	5.0	1.8
Biphenyl	ND		ug/l	2.0	0.46
4-Chloroaniline	ND		ug/l	5.0	1.1
2-Nitroaniline	ND		ug/l	5.0	0.50
3-Nitroaniline	ND		ug/l	5.0	0.81
4-Nitroaniline	ND		ug/l	5.0	0.80
Dibenzofuran	ND		ug/l	2.0	0.50
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44
Acetophenone	ND		ug/l	5.0	0.53
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61
p-Chloro-m-cresol	ND		ug/l	2.0	0.35

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

### Method Blank Analysis Batch Quality Control

**Analytical Method:** 1,8270D  
**Analytical Date:** 05/03/21 23:14  
**Analyst:** EK

**Extraction Method:** EPA 3510C  
**Extraction Date:** 05/03/21 08:17

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-05,07 Batch: WG1493602-1					
2-Chlorophenol	ND		ug/l	2.0	0.48
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
2-Nitrophenol	ND		ug/l	10	0.85
4-Nitrophenol	ND		ug/l	10	0.67
2,4-Dinitrophenol	ND		ug/l	20	6.6
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8
Phenol	ND		ug/l	5.0	0.57
2-Methylphenol	ND		ug/l	5.0	0.49
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Carbazole	ND		ug/l	2.0	0.49
Atrazine	ND		ug/l	10	0.76
Benzaldehyde	ND		ug/l	5.0	0.53
Caprolactam	ND		ug/l	10	3.3
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	43		21-120
Phenol-d6	32		10-120
Nitrobenzene-d5	51		23-120
2-Fluorobiphenyl	58		15-120
2,4,6-Tribromophenol	61		10-120
4-Terphenyl-d14	69		41-149

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

### Method Blank Analysis Batch Quality Control

**Analytical Method:** 1,8270D-SIM  
**Analytical Date:** 05/04/21 15:45  
**Analyst:** DV

**Extraction Method:** EPA 3510C  
**Extraction Date:** 05/03/21 08:19

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-05,07 Batch: WG1493604-1					
Acenaphthene	ND		ug/l	0.10	0.01
2-Chloronaphthalene	ND		ug/l	0.20	0.02
Fluoranthene	ND		ug/l	0.10	0.02
Hexachlorobutadiene	ND		ug/l	0.50	0.05
Naphthalene	ND		ug/l	0.10	0.05
Benzo(a)anthracene	ND		ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Benzo(b)fluoranthene	0.02	J	ug/l	0.10	0.01
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01
Chrysene	ND		ug/l	0.10	0.01
Acenaphthylene	ND		ug/l	0.10	0.01
Anthracene	ND		ug/l	0.10	0.01
Benzo(ghi)perylene	0.02	J	ug/l	0.10	0.01
Fluorene	ND		ug/l	0.10	0.01
Phenanthrene	ND		ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01
Indeno(1,2,3-cd)pyrene	0.02	J	ug/l	0.10	0.01
Pyrene	ND		ug/l	0.10	0.02
2-Methylnaphthalene	ND		ug/l	0.10	0.02
Pentachlorophenol	ND		ug/l	0.80	0.01
Hexachlorobenzene	ND		ug/l	0.80	0.01
Hexachloroethane	ND		ug/l	0.80	0.06

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8270D-SIM  
**Analytical Date:** 05/04/21 15:45  
**Analyst:** DV

**Extraction Method:** EPA 3510C  
**Extraction Date:** 05/03/21 08:19

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-05,07 Batch: WG1493604-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	43		21-120
Phenol-d6	36		10-120
Nitrobenzene-d5	61		23-120
2-Fluorobiphenyl	54		15-120
2,4,6-Tribromophenol	66		10-120
4-Terphenyl-d14	59		41-149

# **Lab Control Sample Analysis** **Batch Quality Control**

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 06 Batch: WG1493452-2 WG1493452-3								
Bis(2-chloroethyl)ether	65		65		40-140	0		30
3,3'-Dichlorobenzidine	64		63		40-140	2		30
2,4-Dinitrotoluene	73		76		48-143	4		30
2,6-Dinitrotoluene	79		79		40-140	0		30
4-Chlorophenyl phenyl ether	62		64		40-140	3		30
4-Bromophenyl phenyl ether	63		62		40-140	2		30
Bis(2-chloroisopropyl)ether	81		80		40-140	1		30
Bis(2-chloroethoxy)methane	77		72		40-140	7		30
Hexachlorocyclopentadiene	61		61		40-140	0		30
Isophorone	80		77		40-140	4		30
Nitrobenzene	84		81		40-140	4		30
NDPA/DPA	68		70		40-140	3		30
n-Nitrosodi-n-propylamine	88		82		29-132	7		30
Bis(2-ethylhexyl)phthalate	90		92		40-140	2		30
Butyl benzyl phthalate	88		87		40-140	1		30
Di-n-butylphthalate	78		77		40-140	1		30
Di-n-octylphthalate	95		98		40-140	3		30
Diethyl phthalate	73		74		40-140	1		30
Dimethyl phthalate	77		73		40-140	5		30
Biphenyl	70		66		40-140	6		30
4-Chloroaniline	75		78		40-140	4		30
2-Nitroaniline	82		81		52-143	1		30
3-Nitroaniline	63		68		25-145	8		30

# **Lab Control Sample Analysis** **Batch Quality Control**

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 06 Batch: WG1493452-2 WG1493452-3								
4-Nitroaniline	65		65		51-143	0		30
Dibenzofuran	64		65		40-140	2		30
1,2,4,5-Tetrachlorobenzene	66		64		2-134	3		30
Acetophenone	71		71		39-129	0		30
2,4,6-Trichlorophenol	75		68		30-130	10		30
p-Chloro-m-cresol	89		82		23-97	8		30
2-Chlorophenol	70		66		27-123	6		30
2,4-Dichlorophenol	74		74		30-130	0		30
2,4-Dimethylphenol	75		76		30-130	1		30
2-Nitrophenol	90		91		30-130	1		30
4-Nitrophenol	54		57		10-80	5		30
2,4-Dinitrophenol	65		61		20-130	6		30
4,6-Dinitro-o-cresol	69		73		20-164	6		30
Phenol	56		55		12-110	2		30
2-Methylphenol	68		70		30-130	3		30
3-Methylphenol/4-Methylphenol	72		72		30-130	0		30
2,4,5-Trichlorophenol	81		67		30-130	19		30
Carbazole	76		75		55-144	1		30
Atrazine	90		89		40-140	1		30
Benzaldehyde	65		61		40-140	6		30
Caprolactam	47		43		10-130	9		30
2,3,4,6-Tetrachlorophenol	65		68		40-140	5		30



# **Lab Control Sample Analysis** **Batch Quality Control**

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

<b>Parameter</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>%Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
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Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 06 Batch: WG1493452-2 WG1493452-3

<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>Acceptance Criteria</b>
2-Fluorophenol	76		73		21-120
Phenol-d6	60		59		10-120
Nitrobenzene-d5	106		106		23-120
2-Fluorobiphenyl	90		88		15-120
2,4,6-Tribromophenol	81		90		10-120
4-Terphenyl-d14	90		99		41-149

# **Lab Control Sample Analysis** **Batch Quality Control**

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 06 Batch: WG1493454-2 WG1493454-3								
Acenaphthene	80		86		40-140	7		40
2-Chloronaphthalene	78		84		40-140	7		40
Fluoranthene	91		103		40-140	12		40
Hexachlorobutadiene	66		72		40-140	9		40
Naphthalene	74		80		40-140	8		40
Benzo(a)anthracene	83		89		40-140	7		40
Benzo(a)pyrene	90		98		40-140	9		40
Benzo(b)fluoranthene	90		103		40-140	13		40
Benzo(k)fluoranthene	92		97		40-140	5		40
Chrysene	83		93		40-140	11		40
Acenaphthylene	82		89		40-140	8		40
Anthracene	85		94		40-140	10		40
Benzo(ghi)perylene	85		91		40-140	7		40
Fluorene	85		91		40-140	7		40
Phenanthrene	82		90		40-140	9		40
Dibenzo(a,h)anthracene	92		99		40-140	7		40
Indeno(1,2,3-cd)pyrene	89		93		40-140	4		40
Pyrene	90		102		40-140	13		40
2-Methylnaphthalene	81		87		40-140	7		40
Pentachlorophenol	77		84		40-140	9		40
Hexachlorobenzene	73		79		40-140	8		40
Hexachloroethane	64		70		40-140	9		40

# **Lab Control Sample Analysis** **Batch Quality Control**

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

<b>Parameter</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>%Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
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Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 06 Batch: WG1493454-2 WG1493454-3

<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>Acceptance Criteria</b>
2-Fluorophenol	70		76		21-120
Phenol-d6	60		63		10-120
Nitrobenzene-d5	89		97		23-120
2-Fluorobiphenyl	95		103		15-120
2,4,6-Tribromophenol	88		103		10-120
4-Terphenyl-d14	123		140		41-149

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05,07 Batch: WG1493602-2 WG1493602-3								
Bis(2-chloroethyl)ether	39	Q	38	Q	40-140	3		30
3,3'-Dichlorobenzidine	50		57		40-140	13		30
2,4-Dinitrotoluene	55		69		48-143	23		30
2,6-Dinitrotoluene	52		58		40-140	11		30
4-Chlorophenyl phenyl ether	55		62		40-140	12		30
4-Bromophenyl phenyl ether	60		70		40-140	15		30
Bis(2-chloroisopropyl)ether	29	Q	30	Q	40-140	3		30
Bis(2-chloroethoxy)methane	42		43		40-140	2		30
Hexachlorocyclopentadiene	46		47		40-140	2		30
Isophorone	40		44		40-140	10		30
Nitrobenzene	40		41		40-140	2		30
NDPA/DPA	56		66		40-140	16		30
n-Nitrosodi-n-propylamine	39		44		29-132	12		30
Bis(2-ethylhexyl)phthalate	46		63		40-140	31	Q	30
Butyl benzyl phthalate	53		70		40-140	28		30
Di-n-butylphthalate	53		63		40-140	17		30
Di-n-octylphthalate	47		76		40-140	47	Q	30
Diethyl phthalate	62		76		40-140	20		30
Dimethyl phthalate	60		70		40-140	15		30
Biphenyl	48		52		40-140	8		30
4-Chloroaniline	34	Q	34	Q	40-140	0		30
2-Nitroaniline	52		62		52-143	18		30
3-Nitroaniline	45		57		25-145	24		30

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05,07 Batch: WG1493602-2 WG1493602-3								
4-Nitroaniline	52		66		51-143	24		30
Dibenzofuran	51		57		40-140	11		30
1,2,4,5-Tetrachlorobenzene	51		53		2-134	4		30
Acetophenone	44		45		39-129	2		30
2,4,6-Trichlorophenol	58		62		30-130	7		30
p-Chloro-m-cresol	50		59		23-97	17		30
2-Chlorophenol	45		45		27-123	0		30
2,4-Dichlorophenol	50		56		30-130	11		30
2,4-Dimethylphenol	46		50		30-130	8		30
2-Nitrophenol	48		50		30-130	4		30
4-Nitrophenol	44		61		10-80	32	Q	30
2,4-Dinitrophenol	69		73		20-130	6		30
4,6-Dinitro-o-cresol	67		81		20-164	19		30
Phenol	30		34		12-110	13		30
2-Methylphenol	42		44		30-130	5		30
3-Methylphenol/4-Methylphenol	43		50		30-130	15		30
2,4,5-Trichlorophenol	59		66		30-130	11		30
Carbazole	53	Q	68		55-144	25		30
Atrazine	87		112		40-140	25		30
Benzaldehyde	41		41		40-140	0		30
Caprolactam	21		28		10-130	29		30
2,3,4,6-Tetrachlorophenol	57		67		40-140	16		30

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05,07 Batch: WG1493602-2 WG1493602-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	45		48		21-120
Phenol-d6	36		41		10-120
Nitrobenzene-d5	47		52		23-120
2-Fluorobiphenyl	59		61		15-120
2,4,6-Tribromophenol	76		93		10-120
4-Terphenyl-d14	61		76		41-149

# **Lab Control Sample Analysis** Batch Quality Control

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-05,07 Batch: WG1493604-2 WG1493604-3								
Acenaphthene	50		51		40-140	2		40
2-Chloronaphthalene	48		49		40-140	2		40
Fluoranthene	66		60		40-140	10		40
Hexachlorobutadiene	37	Q	41		40-140	10		40
Naphthalene	46		48		40-140	4		40
Benzo(a)anthracene	68		63		40-140	8		40
Benzo(a)pyrene	70		63		40-140	11		40
Benzo(b)fluoranthene	70		62		40-140	12		40
Benzo(k)fluoranthene	62		60		40-140	3		40
Chrysene	62		58		40-140	7		40
Acenaphthylene	50		49		40-140	2		40
Anthracene	60		56		40-140	7		40
Benzo(ghi)perylene	74		68		40-140	8		40
Fluorene	55		53		40-140	4		40
Phenanthrene	55		52		40-140	6		40
Dibenzo(a,h)anthracene	77		71		40-140	8		40
Indeno(1,2,3-cd)pyrene	78		72		40-140	8		40
Pyrene	66		61		40-140	8		40
2-Methylnaphthalene	48		49		40-140	2		40
Pentachlorophenol	72		58		40-140	22		40
Hexachlorobenzene	46		43		40-140	7		40
Hexachloroethane	39	Q	43		40-140	10		40

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
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Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-05,07 Batch: WG1493604-2 WG1493604-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	46		50		21-120
Phenol-d6	41		42		10-120
Nitrobenzene-d5	58		62		23-120
2-Fluorobiphenyl	54		54		15-120
2,4,6-Tribromophenol	80		76		10-120
4-Terphenyl-d14	72		66		41-149



## METALS

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**SAMPLE RESULTS**

**Lab ID:** L2121696-01  
**Client ID:** MWS-02  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 04/27/21 16:30  
**Date Received:** 04/28/21  
**Field Prep:** Not Specified

**Sample Depth:**  
**Matrix:** Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	0.00136		mg/l	0.00050	0.00016	1	05/01/21 06:16	05/03/21 15:07	EPA 3005A	1,6020B	CD
Barium, Total	0.02653		mg/l	0.00050	0.00017	1	05/01/21 06:16	05/03/21 15:07	EPA 3005A	1,6020B	CD
Chromium, Total	0.00652		mg/l	0.00100	0.00017	1	05/01/21 06:16	05/03/21 15:07	EPA 3005A	1,6020B	CD
Lead, Total	ND		mg/l	0.00100	0.00034	1	05/01/21 06:16	05/03/21 15:07	EPA 3005A	1,6020B	CD



**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**SAMPLE RESULTS**

Lab ID: L2121696-02  
 Client ID: MWS-18A  
 Sample Location: 1951 HAMBURG TURNPIKE

Date Collected: 04/27/21 15:00  
 Date Received: 04/28/21  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	0.00332		mg/l	0.00050	0.00016	1	05/01/21 06:16	05/03/21 15:12	EPA 3005A	1,6020B	CD
Barium, Total	0.02046		mg/l	0.00050	0.00017	1	05/01/21 06:16	05/03/21 15:12	EPA 3005A	1,6020B	CD
Chromium, Total	0.00065	J	mg/l	0.00100	0.00017	1	05/01/21 06:16	05/03/21 15:12	EPA 3005A	1,6020B	CD
Lead, Total	ND		mg/l	0.00100	0.00034	1	05/01/21 06:16	05/03/21 15:12	EPA 3005A	1,6020B	CD



**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**SAMPLE RESULTS**

**Lab ID:** L2121696-03  
**Client ID:** MWS-18C  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 04/27/21 15:30  
**Date Received:** 04/28/21  
**Field Prep:** Not Specified

**Sample Depth:**  
**Matrix:** Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	0.00638		mg/l	0.00050	0.00016	1	05/01/21 06:16	05/03/21 15:17	EPA 3005A	1,6020B	CD
Barium, Total	0.01889		mg/l	0.00050	0.00017	1	05/01/21 06:16	05/03/21 15:17	EPA 3005A	1,6020B	CD
Chromium, Total	0.1282		mg/l	0.00100	0.00017	1	05/01/21 06:16	05/03/21 15:17	EPA 3005A	1,6020B	CD
Lead, Total	ND		mg/l	0.00100	0.00034	1	05/01/21 06:16	05/03/21 15:17	EPA 3005A	1,6020B	CD



**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**SAMPLE RESULTS**

**Lab ID:** L2121696-04  
**Client ID:** MWS-19A  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 04/27/21 14:40  
**Date Received:** 04/28/21  
**Field Prep:** Not Specified

**Sample Depth:**  
**Matrix:** Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	0.00450		mg/l	0.00050	0.00016	1	05/01/21 06:16	05/03/21 15:22	EPA 3005A	1,6020B	CD
Barium, Total	0.02797		mg/l	0.00050	0.00017	1	05/01/21 06:16	05/03/21 15:22	EPA 3005A	1,6020B	CD
Chromium, Total	0.00225		mg/l	0.00100	0.00017	1	05/01/21 06:16	05/03/21 15:22	EPA 3005A	1,6020B	CD
Lead, Total	0.00212		mg/l	0.00100	0.00034	1	05/01/21 06:16	05/03/21 15:22	EPA 3005A	1,6020B	CD



**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**SAMPLE RESULTS**

**Lab ID:** L2121696-05  
**Client ID:** MWS-19B  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 04/27/21 14:00  
**Date Received:** 04/28/21  
**Field Prep:** Not Specified

**Sample Depth:**  
**Matrix:** Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	0.00486		mg/l	0.00050	0.00016	1	05/01/21 06:16	05/03/21 15:27	EPA 3005A	1,6020B	CD
Barium, Total	0.01885		mg/l	0.00050	0.00017	1	05/01/21 06:16	05/03/21 15:27	EPA 3005A	1,6020B	CD
Chromium, Total	0.00112		mg/l	0.00100	0.00017	1	05/01/21 06:16	05/03/21 15:27	EPA 3005A	1,6020B	CD
Lead, Total	0.00048	J	mg/l	0.00100	0.00034	1	05/01/21 06:16	05/03/21 15:27	EPA 3005A	1,6020B	CD



**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**SAMPLE RESULTS**

Lab ID: L2121696-06  
 Client ID: MWS-20A  
 Sample Location: 1951 HAMBURG TURNPIKE

Date Collected: 04/27/21 10:00  
 Date Received: 04/28/21  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	0.00333		mg/l	0.00050	0.00016	1	05/01/21 06:16	05/03/21 15:32	EPA 3005A	1,6020B	CD
Barium, Total	0.02833		mg/l	0.00050	0.00017	1	05/01/21 06:16	05/03/21 15:32	EPA 3005A	1,6020B	CD
Chromium, Total	0.00310		mg/l	0.00100	0.00017	1	05/01/21 06:16	05/03/21 15:32	EPA 3005A	1,6020B	CD
Lead, Total	ND		mg/l	0.00100	0.00034	1	05/01/21 06:16	05/03/21 15:32	EPA 3005A	1,6020B	CD



**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**SAMPLE RESULTS**

**Lab ID:** L2121696-07  
**Client ID:** MWS-20B  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 04/27/21 10:45  
**Date Received:** 04/28/21  
**Field Prep:** Not Specified

**Sample Depth:**  
**Matrix:** Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	0.00328		mg/l	0.00050	0.00016	1	05/01/21 06:16	05/03/21 15:37	EPA 3005A	1,6020B	CD
Barium, Total	0.03929		mg/l	0.00050	0.00017	1	05/01/21 06:16	05/03/21 15:37	EPA 3005A	1,6020B	CD
Chromium, Total	0.00070	J	mg/l	0.00100	0.00017	1	05/01/21 06:16	05/03/21 15:37	EPA 3005A	1,6020B	CD
Lead, Total	ND		mg/l	0.00100	0.00034	1	05/01/21 06:16	05/03/21 15:37	EPA 3005A	1,6020B	CD





**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

## Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-07 Batch: WG1491968-1										
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	05/01/21 06:16	05/03/21 13:50	1,6020B	CD
Barium, Total	ND		mg/l	0.00050	0.00017	1	05/01/21 06:16	05/03/21 13:50	1,6020B	CD
Chromium, Total	ND		mg/l	0.00100	0.00017	1	05/01/21 06:16	05/03/21 13:50	1,6020B	CD
Lead, Total	ND		mg/l	0.00100	0.00034	1	05/01/21 06:16	05/03/21 13:50	1,6020B	CD

### Prep Information

Digestion Method: EPA 3005A

# **Lab Control Sample Analysis** **Batch Quality Control**

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-07 Batch: WG1491968-2								
Arsenic, Total	107		-		80-120	-		
Barium, Total	105		-		80-120	-		
Chromium, Total	102		-		80-120	-		
Lead, Total	108		-		80-120	-		

# Matrix Spike Analysis

## Batch Quality Control

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-07 QC Batch ID: WG1491968-3 WG1491968-4 QC Sample: L2120900-01 Client ID: MS Sample												
Arsenic, Total	ND	0.12	0.1313	109		0.1293	108		75-125	2		20
Barium, Total	0.0558	2	2.089	102		2.150	105		75-125	3		20
Chromium, Total	ND	0.2	0.1973	99		0.2049	102		75-125	4		20
Lead, Total	ND	0.51	0.5405	106		0.5386	106		75-125	0		20

# **INORGANICS & MISCELLANEOUS**

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

### SAMPLE RESULTS

**Lab ID:** L2121696-01  
**Client ID:** MWS-02  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 04/27/21 16:30  
**Date Received:** 04/28/21  
**Field Prep:** Not Specified

**Sample Depth:**  
**Matrix:** Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	1.92		mg/l	0.050	0.018	1	05/05/21 13:25	05/05/21 15:50	1,9010C/9012B	CR



**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**SAMPLE RESULTS**

**Lab ID:** L2121696-02  
**Client ID:** MWS-18A  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 04/27/21 15:00  
**Date Received:** 04/28/21  
**Field Prep:** Not Specified

**Sample Depth:**  
**Matrix:** Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.267		mg/l	0.005	0.001	1	05/05/21 13:25	05/05/21 15:51	1,9010C/9012B	CR



**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**SAMPLE RESULTS**

**Lab ID:** L2121696-03  
**Client ID:** MWS-18C  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 04/27/21 15:30  
**Date Received:** 04/28/21  
**Field Prep:** Not Specified

**Sample Depth:**  
**Matrix:** Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.249		mg/l	0.005	0.001	1	05/05/21 13:25	05/05/21 15:52	1,9010C/9012B	CR



**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**SAMPLE RESULTS**

**Lab ID:** L2121696-04  
**Client ID:** MWS-19A  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 04/27/21 14:40  
**Date Received:** 04/28/21  
**Field Prep:** Not Specified

**Sample Depth:**  
**Matrix:** Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.107		mg/l	0.005	0.001	1	05/05/21 13:25	05/05/21 15:55	1,9010C/9012B	CR





**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**SAMPLE RESULTS**

**Lab ID:** L2121696-05  
**Client ID:** MWS-19B  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 04/27/21 14:00  
**Date Received:** 04/28/21  
**Field Prep:** Not Specified

**Sample Depth:**  
**Matrix:** Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.331		mg/l	0.005	0.001	1	05/05/21 13:25	05/05/21 15:56	1,9010C/9012B	CR



**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

### SAMPLE RESULTS

**Lab ID:** L2121696-06  
**Client ID:** MWS-20A  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 04/27/21 10:00  
**Date Received:** 04/28/21  
**Field Prep:** Not Specified

**Sample Depth:**  
**Matrix:** Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.043		mg/l	0.005	0.001	1	05/05/21 13:25	05/05/21 15:57	1,9010C/9012B	CR



**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**SAMPLE RESULTS**

**Lab ID:** L2121696-07  
**Client ID:** MWS-20B  
**Sample Location:** 1951 HAMBURG TURNPIKE

**Date Collected:** 04/27/21 10:45  
**Date Received:** 04/28/21  
**Field Prep:** Not Specified

**Sample Depth:**  
**Matrix:** Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.017		mg/l	0.005	0.001	1	05/05/21 13:25	05/05/21 16:00	1,9010C/9012B	CR



**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**Method Blank Analysis**  
**Batch Quality Control**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-07 Batch: WG1494272-1										
Cyanide, Total	ND		mg/l	0.005	0.001	1	05/05/21 13:25	05/05/21 15:42	1,9010C/9012B	CR

# **Lab Control Sample Analysis** **Batch Quality Control**

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-07 Batch: WG1494272-2 WG1494272-3								
Cyanide, Total	97		98		85-115	1		20

# Matrix Spike Analysis

## Batch Quality Control

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-07 QC Batch ID: WG1494272-4 WG1494272-5 QC Sample: L2121696-06 Client ID: MWS-20A												
Cyanide, Total	0.043	0.2	0.245	101		0.226	91		80-120	8		20

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

Serial\_No:05062116:32  
**Lab Number:** L2121696  
**Report Date:** 05/06/21

### Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

#### Cooler Information

**Cooler**                      **Custody Seal**  
A                                      Absent

#### Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2121696-01A	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L2121696-01B	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L2121696-01C	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L2121696-01D	Plastic 250ml HNO3 preserved	A	<2	<2	3.1	Y	Absent		BA-6020T(180),CR-6020T(180),PB-6020T(180),AS-6020T(180)
L2121696-01E	Plastic 250ml NaOH preserved	A	>12	>12	3.1	Y	Absent		TCN-9010(14)
L2121696-01F	Amber 250ml unpreserved	A	10	10	3.1	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2121696-01G	Amber 250ml unpreserved	A	10	10	3.1	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2121696-02A	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L2121696-02B	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L2121696-02C	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L2121696-02D	Plastic 250ml HNO3 preserved	A	<2	<2	3.1	Y	Absent		BA-6020T(180),CR-6020T(180),PB-6020T(180),AS-6020T(180)
L2121696-02E	Plastic 250ml NaOH preserved	A	>12	>12	3.1	Y	Absent		TCN-9010(14)
L2121696-02F	Amber 250ml unpreserved	A	9	9	3.1	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2121696-02G	Amber 250ml unpreserved	A	9	9	3.1	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2121696-03A	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L2121696-03B	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L2121696-03C	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L2121696-03D	Plastic 250ml HNO3 preserved	A	<2	<2	3.1	Y	Absent		BA-6020T(180),CR-6020T(180),PB-6020T(180),AS-6020T(180)
L2121696-03E	Plastic 250ml NaOH preserved	A	>12	>12	3.1	Y	Absent		TCN-9010(14)
L2121696-03F	Amber 250ml unpreserved	A	5	5	3.1	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2121696-03G	Amber 250ml unpreserved	A	5	5	3.1	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2121696-04A	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Serial\_No:** 05062116:32  
**Lab Number:** L2121696  
**Report Date:** 05/06/21

**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L2121696-04B	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L2121696-04C	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L2121696-04D	Plastic 250ml HNO3 preserved	A	<2	<2	3.1	Y	Absent		BA-6020T(180),CR-6020T(180),PB-6020T(180),AS-6020T(180)
L2121696-04E	Plastic 250ml NaOH preserved	A	>12	>12	3.1	Y	Absent		TCN-9010(14)
L2121696-04F	Amber 250ml unpreserved	A	7	7	3.1	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2121696-04G	Amber 250ml unpreserved	A	7	7	3.1	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2121696-05A	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L2121696-05B	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L2121696-05C	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L2121696-05D	Plastic 250ml HNO3 preserved	A	<2	<2	3.1	Y	Absent		BA-6020T(180),CR-6020T(180),PB-6020T(180),AS-6020T(180)
L2121696-05E	Plastic 250ml NaOH preserved	A	>12	>12	3.1	Y	Absent		TCN-9010(14)
L2121696-05F	Amber 250ml unpreserved	A	7	7	3.1	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2121696-05G	Amber 250ml unpreserved	A	7	7	3.1	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2121696-06A	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L2121696-06B	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L2121696-06C	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L2121696-06D	Plastic 250ml HNO3 preserved	A	<2	<2	3.1	Y	Absent		BA-6020T(180),CR-6020T(180),PB-6020T(180),AS-6020T(180)
L2121696-06E	Plastic 250ml NaOH preserved	A	>12	>12	3.1	Y	Absent		TCN-9010(14)
L2121696-06F	Amber 250ml unpreserved	A	7	7	3.1	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2121696-06G	Amber 250ml unpreserved	A	7	7	3.1	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2121696-07A	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L2121696-07B	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L2121696-07C	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L2121696-07D	Plastic 250ml HNO3 preserved	A	<2	<2	3.1	Y	Absent		BA-6020T(180),CR-6020T(180),PB-6020T(180),AS-6020T(180)
L2121696-07E	Plastic 250ml NaOH preserved	A	>12	>12	3.1	Y	Absent		TCN-9010(14)
L2121696-07F	Amber 250ml unpreserved	A	7	7	3.1	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2121696-07G	Amber 250ml unpreserved	A	7	7	3.1	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)



**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

Serial\_No:05062116:32  
**Lab Number:** L2121696  
**Report Date:** 05/06/21

**Container Information**

**Container ID    Container Type**

<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
---------------	-----------------------	---------------------	-----------------------	-------------	-------------	-----------------------------	--------------------

**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

## GLOSSARY

### Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
	Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

*Report Format: DU Report with 'J' Qualifiers*



**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

### Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

### Terms

**Analytical Method:** Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

**Difference:** With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

**Final pH:** As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

**Frozen Date/Time:** With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

**Initial pH:** As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

**PAH Total:** With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

**PFAS Total:** With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. (Note: 'PFAS, Total (6)' is applicable to MassDEP DW compliance analysis only.). If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

**Total:** With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

### Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

**Report Format:** DU Report with 'J' Qualifiers



**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

**Data Qualifiers**

- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.

Report Format: DU Report with 'J' Qualifiers

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**Project Name:** ATP GWS  
**Project Number:** T0071-020-222

**Lab Number:** L2121696  
**Report Date:** 05/06/21

## REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

## LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



**Alpha Analytical, Inc.**Facility: **Company-wide**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**

Revision 19

Published Date: 4/2/2021 1:14:23 PM

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**Certification Information**

The following analytes are not included in our Primary NELAP Scope of Accreditation:

**Westborough Facility****EPA 624/624.1:** m/p-xylene, o-xylene, Naphthalene**EPA 625/625.1:** alpha-Terpineol**EPA 8260C/8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270D/8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO<sub>2</sub>, NO<sub>3</sub>.**Mansfield Facility****SM 2540D:** TSS**EPA 8082A:** NPW: PCB: 1, 5, 31, 87, 101, 110, 141, 151, 153, 180, 183, 187.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

**Biological Tissue Matrix:** EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation


**Westborough Facility:****Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,****EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 332:** Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.****Non-Potable Water****SM4500H-B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:**Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,****SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II,

Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.****Mansfield Facility:****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.****EPA 522, EPA 537.1.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1 Hg.****SM2340B**

For a complete listing of analytes and methods, please contact your Alpha Project Manager.



 <b>NEW YORK CHAIN OF CUSTODY</b> Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193		<b>Service Centers</b> Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105		Page 1 1 of 1		Date Rec'd in Lab <b>4/29/21</b>		ALPHA Job # <b>L2121696</b>					
		<b>Project Information</b> Project Name: ATP GWS Project Location: 1951 Hamburg Turnpike Project #: T0071-020-222 (Use Project name as Project #) <input type="checkbox"/>		<b>Deliverables</b> <input type="checkbox"/> ASP-A <input type="checkbox"/> ASP-B <input type="checkbox"/> EQUIS (1 File) <input type="checkbox"/> EQUIS (4 File) <input checked="" type="checkbox"/> Other		<b>Billing Information</b> <input checked="" type="checkbox"/> Same as Client Info PO #							
<b>Client Information</b> Client: Benchmark Environmental Address: 2558 Hamburg Turnpike, Ste 300 Buffalo, NY 14218 Phone: 716-856-0599 Fax: Email: tforbes@benchmarkturnkey.com		Project Manager: Candace Fox ALPHAQuote #: Turn-Around Time: Standard <input checked="" type="checkbox"/> Due Date: Rush (only if pre approved) <input type="checkbox"/> # of Days:		<b>Regulatory Requirement</b> <input type="checkbox"/> NY TOGS <input type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input checked="" type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge		<b>Disposal Site Information</b> Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other:    NA							
These samples have been previously analyzed by Alpha <input type="checkbox"/> Other project specific requirements/comments: Total Metals: arsenic, barium, chromium, lead Please specify Metals or TAL.						<b>ANALYSIS</b>		<b>Sample Filtration</b> <input type="checkbox"/> Done <input type="checkbox"/> Lab to do <b>Preservation</b> <input type="checkbox"/> Lab to do (Please Specify below)					
ALPHA Lab ID (Lab Use Only)		Sample ID		Collection Date    Time		Sample Matrix		Sampler's Initials		TCL VOC Metals, Total* TCL SVOC Cyanide		Total Bottle	
21696-01		MWS-02		4-27-21 1630		Water		CEH		x x x x		7	
-02		MWS-18A		4-27-21 1500		Water		CEH		x x x x		7	
-03		MWS-18C		4-27-21 1530		Water		CEH		x x x x		7	
-04		MWS-19A		4-27-21 1400		Water		CEH		x x x x		7	
-05		MWS-19B		4-27-21 1440		Water		CEH		x x x x		7	
-06		MWS-20A		4-27-21 1000		Water		CEH		x x x x		7	
-07		MWS-20B		4-27-21 1045		Water		CEH		x x x x		7	
Preservative Code: A = None B = HCl C = HNO <sub>3</sub> D = H <sub>2</sub> SO <sub>4</sub> E = NaOH F = MeOH G = NaHSO <sub>4</sub> H = Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> K/E = Zn Ac/NaOH O = Other		Container Code P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle		Westboro: Certification No: MA935 Mansfield: Certification No: MA015		Container Type Preservative		V    P    P    P H    C    D    E		Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS.			
Relinquished By: <i>Christi Hord</i>		Date/Time: <i>4-27-21 1700</i>		Received By: <i>[Signature]</i>		Date/Time: <i>4/28/21 1107</i>		Date/Time: <i>4/29/21 01:15</i>					

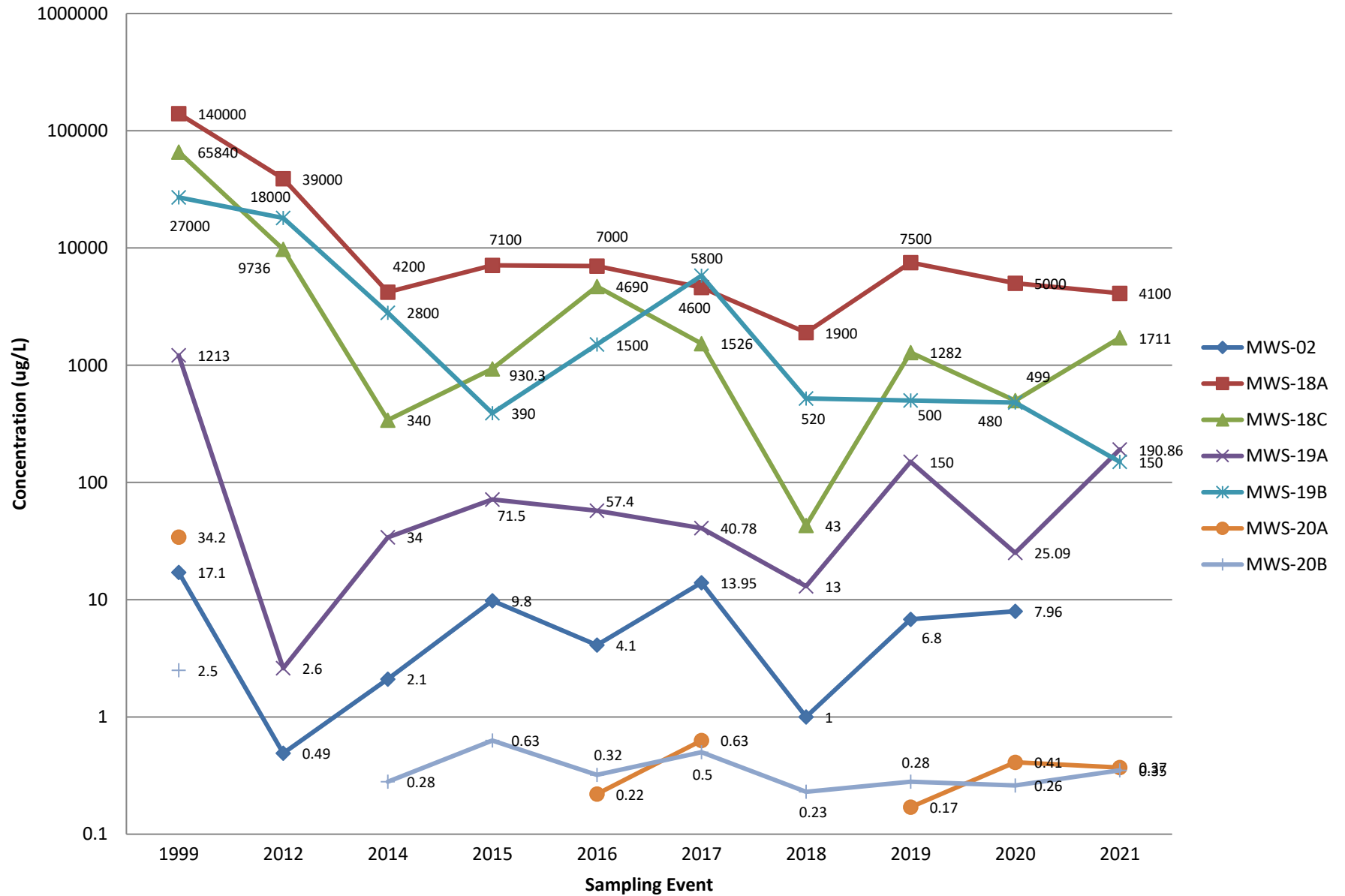
## ATTACHMENT 3

### CONCENTRATION PLOT



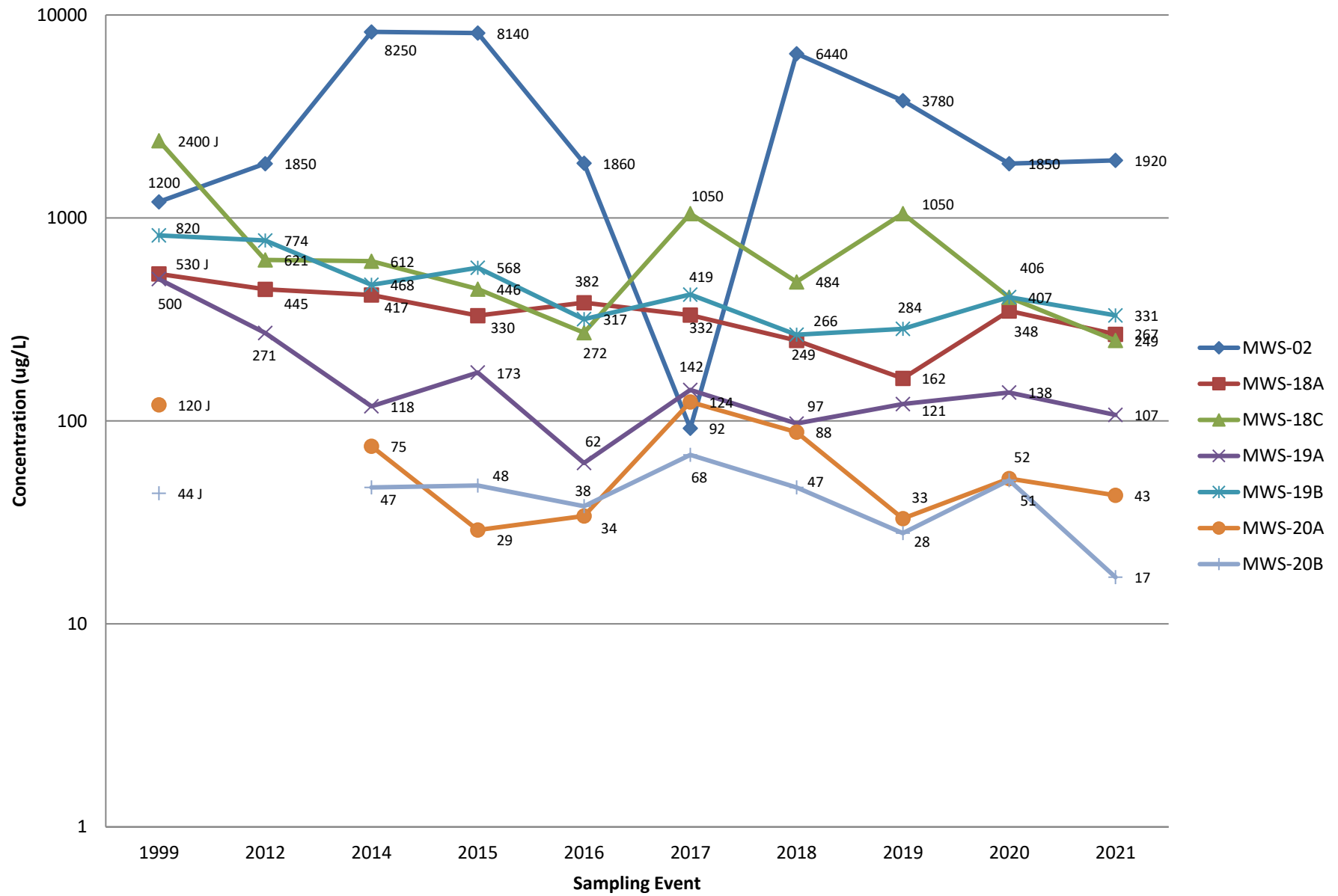
# ATP AREA WELLS

## Total BTEX



# ATP AREA WELLS

## Cyanide



## ATTACHMENT 4

### POST-CLOSURE FIELD INSPECTION REPORT

# Field Inspection Report Post-Remedial Operation, Maintenance & Monitoring Plan

Property Name: ATP SWMU Group ECM Project No.:  
 Client: Tecumseh Redevelopment, Inc.  
 Property Address: 2303 Hamburg Turnpike City, State: Lackawanna, NY Zip Code: 14218  
 Preparer's Name: Brock Greene Date/Time: 6-17-21

## CERTIFICATION

The results of this inspection were discussed with the Site Manager. Any corrective actions required have been identified and noted in this report, and a supplemental Corrective Action Form has been completed. Proper implementation of these corrective actions have been discussed with the Site Manager, agreed upon, and scheduled.

Preparer / Inspector: Brock Greene Date: 6-17-21  
 Signature: [Signature]  
 Next Scheduled Inspection Date: June 2022

## ATP Containment Cell and Pretreatment Building Access

1. Is the access road in need of repair? ☐ yes ☒ no ☐ N/A
2. Sufficient signage posted (No Trespassing)? ☒ yes ☐ no ☐ N/A
3. Has there been any noted or reported trespassing? ☐ yes ☒ no ☐ N/A

Please note any irregularities/ changes in site access and security: None

## Final Surface Cover / Vegetation

The integrity of the vegetative soil cover or other surface coverage (e.g., slag) over the entire Site must be maintained. The following documents the condition of the above.

1. Final Cover is in Place and in good condition? ☒ yes ☐ no ☐ N/A

Cover consists of (mainly): Vegetated soil cover

2. Evidence of erosion? ☐ yes ☒ no ☐ N/A
3. Cracks visible in slag perimeter road? ☐ yes ☒ no ☐ N/A
4. Evidence of distressed vegetation/turf? ☐ yes ☒ no ☐ N/A
5. Evidence of unintended traffic and/or rutting? ☐ yes ☒ no ☐ N/A
6. Evidence of uneven settlement and/or ponding? ☐ yes ☒ no ☐ N/A

## Field Inspection Report

### Post-Remedial Operation, Maintenance & Monitoring Plan

#### Final Surface Cover / Vegetation

7. Damage to any surface coverage? ☐ yes ☒ no ☐ N/A
8. Extraction Well access roads (3) in stable condition? ☒ yes ☐ no ☐ N/A

Please provide more information below.

*Cover is in good condition*

#### Storm Water Pond

1. Is there water accumulation in the pond? ☐ yes ☒ no ☐ N/A
2. Is there sign of erosion or loss of oversized slag on sideslopes of pond? ☐ yes ☒ no ☐ N/A
3. Are the inlet or outlet structures/pipes clogged with debris? ☐ yes ☒ no ☐ N/A
4. Is there sign of erosion on the emergency spillway and the down chute to Smokes Creek? ☐ yes ☒ no ☐ N/A

If yes to any questions 2 through 4 above, please provide more information below.

#### Gas Vent Monitoring and Maintenance

- Are there signs of stressed vegetation around gas vents? ☐ yes ☒ no ☐ N/A
- Is gas vent currently intact and operational? ☒ yes ☐ no ☐ N/A
- Has regular maintenance and monitoring been documented and enclosed or referenced? ☐ yes ☐ no ☒ N/A

*No maintenance has been required, vent remains intact and free of blockage.*

## Field Inspection Report Post-Remedial Operation, Maintenance & Monitoring Plan

---

### Conveyance Piping Leak Detection

Are there signs of a groundwater/leachate leak in the cleanout manholes?

☐ yes

☒ no

☐ N/A

Is there evidence of a leak having occurred before this inspection date?

☐ yes

☒ no

☐ N/A

---

### This space for Notes and Comments

---

### Please include the following Attachments:

1. Photographs
-

## SITE PHOTOGRAPHS

Photo 1:



Photo 2:



Photo 3:



Photo 4:



Photo 1: ATP Treatment Building (Looking north)

Photo 2: ATP control Panel (Looking southeast)

Photo 3: ATP Treatment Building (Looking west)

Photo 4: ATP Treatment Building (Looking northeast)



## SITE PHOTOGRAPHS

Photo 5:



Photo 6:



Photo 7:



Photo 8:



Photo 5: East side of containment cell (Looking south)

Photo 6: East side of containment cell (Looking north)

Photo 7: West side of containment cell (Looking north)

Photo 8: West side of containment cell (Looking south)



## SITE PHOTOGRAPHS

Photo 9:



Photo 10:



Photo 11:



Photo 12:



Photo 9: Dry stormwater pond (Looking northwest)

Photo 10: Outlet structure for the stormwater pond (Looking north)

Photo 11: Inlet structure for the stormwater pond (Looking north)

Photo 12: Gas vent at the top of the containment cell (Looking west)