From:	Butler, Matthew
To:	Puco Docketing
Subject:	public comment 16-2443-EL-BGN, 18-0090-EL-BGA, 20-0033-EL-BGA, and 21-0182-EL-BGA
Date:	Wednesday, February 16, 2022 10:48:15 AM
Attachments:	Lab Results 10861 Seneca Ln.pdf Narrative.pdf Monitor Status Report-Kevin Young.docx Young Gas Sample Data (1).docx

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From: Leatra Harper <wewantcleanwater@gmail.com>
Sent: Wednesday, February 16, 2022 10:10 AM
To: Butler, Matthew <matthew.butler@puco.ohio.gov>
Cc: Buck-Priddy, Allison <Allison.Buck-Priddy@odh.ohio.gov>; Gregg, Anne <Anne.Gregg@odh.ohio.gov>; Kallipolitis, Harry <Harry.Kallipolitis@epa.ohio.gov>; Langdon, Jessica <Jessica.Langdon@epa.ohio.gov>; Amy McCance <amccance@guernseycounty.org>
Subject: Re: Guernsey Power Station Fwd: Public Comment - Permit Application No. DSW401175544

Thank you so much, Mr Butler. We will continue to send you the documentation we have of the harms the Youngs continue to experience. The Ohio Department of Health has questioned why there were no adequate setback distances established before the mine stabilization and construction of the Guernsey Power Station began. We understand there is an inter-agency review of the air and water pollution and health impacts of this project. I have copied the people here that we have been in contact with, and hopefully, all agencies involved can continue with a full review. I will also send the most recent correspondence. In the meantime, Seneca Lane continues to be inadequately maintained with dust contaminating homes and cars (see attached photo furnished yesterday). The build-up of the foundation for the GPS has dramatically altered water flow, forcing flooding onto the Youngs' property and elsewhere which will likely be a major problem this Spring. There were geysers and sinkholes on the Youngs' property. I have attached water test results and Summa canister results fyi. We plan to do more testing. We question why a full EIS review was not done before a project of this impact would be permitted. We need a full review of permitting parameters and compliance. We thank you in advance for your prompt attention to this serious matter.
Best,
Lea Harper
Managing Director
FreshWater Accountability Project
www.FWAP.org
419-450-7042

Alco
AmeriFence
TEXACO
STONES

DUQUESNE UNIVERSITY

BAYER SCHOOL OF NATURAL AND ENVIRONMENTAL SCIENCES
CENTER FOR ENVIRONMENTAL RESEARCH & EDUCATION

August 27, 2021

10861 Seneca Ln
Byesville, OH

Dear Homeowner:

Enclosed are the results of your well water collected on 6/22/2021. We have included analyses of the water done on-site using the YSI Professional Plus (ProPlus) meter, lab results using the Dionex ICS-1100 Ion Chromatography System (anions) and the NexION 300 ICP-MS (cations), and VOC (volatile organics) testing done with the Shimadzu GC-2030 with HS-20 Trap Headspace Autosampler. We have included the US EPA's National Primary and Secondary Drinking Water Standards as a reference.

Both the field and lab analyses indicate that for those analytes that we tested for, Total Dissolved Solids (TDS), Manganese (Mn), Iron (Fe), and Arsenic (As) exceeded the primary and secondary standards set by the US EPA. Light hydrocarbon analysis indicates that methane at an elevated level. We recommend additional monitoring because levels can vary over time. The level of concern is 28 mg/L (28 ppm or 28,000 ppb), the saturation level of methane (where it comes out of solution). The PA DEP, however, notifies homeowners when levels are above 7 mg/L (7 ppm or 7,000 ppb) and recommends an abatement system as the levels can change and may build up above the well head.

Please note that while every effort has been taken to ensure the quality of the sampling and analysis, the enclosed results are not certified and were collected for research purposes only. If any of the parameters were above the US EPA standards, we recommend that you have additional testing by a certified lab.

Should you have any questions or notice changes in your water quality or quantity in the future please contact us.

Thank you for your time and the opportunity to conduct this study.

Sincerely,

John Stolz, Ph.D.
Director, Center for Environmental Research and Education
332 Fisher Hall
Duquesne University
Pittsburgh PA 15282
412-396-4367

Sample Analysis Report

Address:	10861 Seneca Ln	**Sample Type:** groundwater	
City/State/Zip:	Byesville, OH	**Sample Source:**	
County:	Guernsey	**Sampler:** JFS	
Township:	Valley/Jackson	**Well Depth:** 100'	
Sample Date:	6/22/2021	**Well GPS Coord.:** 39.9405, -81.5387	

Sample	Sample Date	Temp (°C)	DO (%)	DO (mg/L)	pH	Pressure (mmHg)	Spf. Cond (µS/cm)	Conductivity (µS)	TDS based on SpC (mg/L)
Sample 1	6/22/2021	22	17.7	1.5	7.16	738.7	949.0	900.0	**617**

Note: All data gathered on site using YSI Professional Plus (ProPlus) meter. Meter was calibrated prior to use. All samples were collected after approximately 10 minutes of flushing, prior to any filtration device unless otherwise stated.

Sample	Sample Date	Analysis Date	Fluoride (mg/L)	Chloride (mg/L)	Nitrite (mg/L)	Bromide (mg/L)	Nitrate (mg/L)	Phosphate (mg/L)	Sulfate (mg/L)	Analyst
Sample 1	6/22/2021	6/23/2021	0.04	46.60	bdl	bdl	0.05	bdl	0.20	TK

b.d.l. – below method detection limit

Note: Analysis carried out using Dionex ICS-1100 Ion Chromatography System.

Sample 1 Analyte	Sample Date 6/22/2021	Analysis Date 7/22/2021	Units	Analyst
Lithium (Li)	0.011		mg/L	TK
Boron (B)	0.078		mg/L	TK
Sodium (Na)	93.16		mg/L	TK
Magnesium (Mg)	19.32		mg/L	TK
Aluminum (Al)	0.003		mg/L	TK
Silicon (Si)	8.07		mg/L	TK
Phosphorus (P)	0.285		mg/L	TK
Potassium (K)	1.92		mg/L	TK
Calcium (Ca)	61.34		mg/L	TK
Titanium (Ti)	0.003		mg/L	TK
Vanadium (V)	bdl		mg/L	TK
Chromium (Cr)	bdl		mg/L	TK
Manganese (Mn)	**0.099**		mg/L	TK
Iron (Fe)	**5.27**		mg/L	TK

Cobalt (Co)	0.0002	mg/L	TK
Nickel (Ni)	bdl	mg/L	TK
Copper (Cu)	<0.001	mg/L	TK
Zinc (Zn)	bdl	mg/L	TK
Arsenic (As)	**0.055**	mg/L	TK
Selenium (Se)	0.002	mg/L	TK
Rubidium (Rb)	0.006	mg/L	TK
Strontium (Sr)	0.730	mg/L	TK
Molybdenum (Mo)	0.0015	mg/L	TK
Silver (Ag)	bdl	mg/L	TK
Cadmium (Cd)	0.0001	mg/L	TK
Tin (Sn)	bdl	mg/L	TK
Antimony (Sb)	0.0016	mg/L	TK
Barium (Ba)	0.96	mg/L	TK
Tungsten (W)	bdl	mg/L	TK
Lead (Pb)	bdl	mg/L	TK
Uranium (U)	bdl	mg/L	TK

b.d.l. – below method detection limit

Note: Analysis carried out using NexION 300 ICP-MS.

Light Hydrocarbons (reported in µg/L or ppb)

	Sample Date	Sample Time	Lab Analysis Date	Methane (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Propane (µg/L)
Sample 1	6/22/2021	1:50 PM	6/23/2021	**16,300**	bdl	bdl	bdl
		MDL		5	3	3	3

MDL – denotes lower 'Method Detection Limit'
b.d.l. – below method detection limit

Monitor Status Report September 30, 2021
Home of Kevin Young,
10861 Seneca Lane, Byesville, Ohio
Prepared by Dr. Yuri Gorby

Monitor 000b8 produced by AirViz was installed outside of the home of Kevin Young on February 28, 2021, to record temperature, barometric pressure, relative humidity and total volatile organic compounds (tVOCs). Relative amounts of particulates (PM2.5) were documented using a channel labelled Voltage.

Data from this and all monitors produced by AirViz are accessible by two methods. The first visualization tool is designed to provide public accessibility to tVOC data for all monitors on the AirViz network. Graphic display of data is prompted either by clicking on circular icons located on the map itself or by clicking the toggle button in the bottom right-hand corner of the display and then clicking on the name given to each monitor. The monitor located at the Young residence is named Gurnsey Power Station. The second visualization tool provides complete access to all sensor data for a broad range of monitors (including AirViz) and is designed for more detailed analyses by researchers. Data for individual monitors can be chosen by clicking icons located on the interactive map or by entering serial numbers for individual numbers in the window located in the upper left-hand corner of the page. Here is the link for visualizing all data generated by monitor 000b8 located at the Young's residence. Data channels for each sensor (VOC, temperature, pressure, humidity, and particulates/voltage) can be selected and deselected using the boxes located in front of each parameter.

Extremely high concentrations of tVOCs were detected several times since monitoring began in February. These dates include:

March 3rd to March 5th—tVOC values remained above 1,000 ppb with peaks exceeding 5,000 ppb.

May 12th to May 27th—tVOC values remained above 1,000 ppb with sustained peaks registering above 50,000 ppm lasting for hours or days.

June 9th to June 14th—tVOC values remained above 1,000 ppb with sustained peaks above 10,000 ppb

June 20th—tVOC values registered above 8,000 ppb for nearly 18 hours

Water samples were collected from an outdoor faucet by Dr. John Stolz (Duquesne University) on June 22, 2021 and analyzed for methane, total dissolved solids, and a suite of heavy metals and radionuclides. Results are presented in the attached letter from Dr. Stolz. The sample contained elevated concentrations of methane, iron, manganese and arsenic. These results are consistent with a sustained increase in the water table where previously unsaturated subsurface sediments become saturated. Saturated sediments elicit a series of anoxic biogeochemical reactions involving iron-reducing bacteria that use Fe(III)-bearing minerals bound to subsurface sediments as a terminal electron acceptor for growth. This metabolism transforms Fe(III) and Mn(IV) bearing minerals into soluble Fe(II) and Mn(II) and releases dissolved arsenic into the groundwater. Once Fe(III) and Mn(IV) minerals are consumed, methanogenic microbes generate methane that accumulates in groundwater.

2655 Park Center Dr., Suite A
Simi Valley, CA 93065
T: +1 805 526 7161
www.alsglobal.com

LABORATORY REPORT

December 10, 2021

Leatra Harper
Freshwater Accountability Project
729 Pine Valley Dr.
Bowling Green, OH 43402

Dear Leatra:

Enclosed are the results of the samples submitted to our laboratory on November 17, 2021. For your reference, these analyses have been assigned our service request number P2106057.

All analyses were performed according to our laboratory's NELAP and DoD-ELAP-approved quality assurance program. The test results meet requirements of the current NELAP and DoD-ELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP and DoD-ELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

ALS | Environmental

By Sue Anderson at 8:22 am, Nov 09, 2021

Sue Anderson
Project Manager

2655 Park Center Dr., Suite A
Simi Valley, CA 93065
T: +1 805 526 7161
www.alsglobal.com

Client: Freshwater Accountability Project Service Request No: P2106057

CASE NARRATIVE

The samples were received intact under chain of custody on November 17, 2021 and were stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the samples at the time of sample receipt.

Methane Analysis

The samples were analyzed per modified EPA Method TO-3 for methane using a gas chromatograph equipped with a flame ionization detector (FID). This procedure is described in laboratory SOP VOA-TO3C1C6. This method is included on the laboratory's DoD-ELAP scope of accreditation, however it is not part of the NELAP accreditation.

Volatile Organic Compound Analysis

The samples were analyzed for volatile organic compounds in accordance with EPA Method TO-15 from the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition (EPA/625/R-96/010b), January, 1999. This procedure is described in laboratory SOP VOA-TO15. The analytical system was comprised of a gas chromatograph / mass spectrometer (GC/MS) interfaced to a whole-air preconcentrator. This method is included on the laboratory's NELAP and DoD-ELAP scope of accreditation. Any analytes flagged with an X are not included on the NELAP or DoD-ELAP accreditation.

The minimum criterion for hexachlorobutadiene was not met in the Continuing Calibration Verification (CCV) and Duplicate Laboratory Control Sample (DLCS) analyzed on November 30, 2021. In accordance with ALS Environmental standard operating procedures, a Method Reporting Limit (MRL) check standard containing the analyte of concern was analyzed. The MRL check standard verified that instrument sensitivity was adequate to detect the analyte at the MRL. Because the sensitivity was shown to be adequate to detect the compound in question and the compound was not detected in the field samples, the data quality has not been significantly affected. This procedure is a quantitative confirmation of non-detect results at or below the MRL. No further corrective action was necessary.

The containers were cleaned, prior to sampling, down to the method reporting limit (MRL) reported for this project. For projects requiring DoD QSM 5.3 compliance canisters were cleaned to <1/2 the MRL. Please note, projects which require reporting below the MRL could have results between the MRL and method detection limit (MDL) that are biased high.

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and ALS Environmental (ALS) is not responsible for utilization of less than the complete report.

Use of ALS Environmental (ALS)'s Name. Client shall not use ALS's name or trademark in any marketing or reporting materials, press releases or in any other manner ("Materials") whatsoever and shall not attribute to ALS any test result, tolerance or specification derived from ALS's data ("Attribution") without ALS's prior written consent, which may be withheld by ALS for any reason in its sole discretion. To request ALS's consent, Client shall provide copies of the proposed Materials or Attribution and describe in writing Client's proposed use of such Materials or Attribution. If ALS has not provided written approval of the Materials or Attribution within ten (10) days of receipt from Client, Client's request to use ALS's name or trademark in any Materials or Attribution shall be deemed denied. ALS may, in its discretion, reasonably charge Client for its time in reviewing Materials or Attribution requests. Client acknowledges and agrees that the unauthorized use of ALS's name or trademark may cause ALS to incur irreparable harm for which the recovery of money damages will be inadequate. Accordingly, Client acknowledges and agrees that a violation shall justify preliminary injunctive relief. For questions contact the laboratory.

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ALS Environmental – Simi Valley

CERTIFICATIONS, ACCREDITATIONS, AND REGISTRATIONS

Agency	Web Site	Number
Alaska DEC	http://dec.alaska.gov/eh/lab.aspx	17-019
Arizona DHS	http://www.azdhs.gov/preparedness/state-laboratory/lab-licensure-certification/index.php#laboratory-licensure-home	AZ0694
Florida DOH (NELAP)	http://www.floridahealth.gov/licensing-and-regulation/environmental-laboratories/index.html	E871020
Louisiana DEQ (NELAP)	http://www.deq.louisiana.gov/page/la-lab-accreditation	05071
Maine DHHS	http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/professionals/labCert.shtml	2018027
Minnesota DOH (NELAP)	http://www.health.state.mn.us/accreditation	1776326
New Jersey DEP (NELAP)	http://www.nj.gov/dep/enforcement/oqa.html	CA009
New York DOH (NELAP)	http://www.wadsworth.org/labcert/elap/elap.html	11221
Oregon PHD (NELAP)	http://www.oregon.gov/oha/ph/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	4068-008
Pennsylvania DEP	http://www.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx	68-03307 (Registration)
PJLA (DoD ELAP)	http://www.pjlabs.com/search-accredited-labs	65818 (Testing)
Texas CEQ (NELAP)	http://www.tceq.texas.gov/agency/qa/env_lab_accreditation.html	T104704413-19-10
Utah DOH (NELAP)	http://health.utah.gov/lab/lab_cert_env	CA016272019-10
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C946

Analyses were performed according to our laboratory's NELAP and DoD-ELAP approved quality assurance program. A complete listing of specific NELAP and DoD-ELAP certified analytes can be found in the certifications section at www.alsglobal.com, or at the accreditation body's website.

Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact the laboratory for information corresponding to a particular certification.

ALS ENVIRONMENTAL

DETAIL SUMMARY REPORT

Client: Freshwater Accountability Project

Service Request: P2106057

Date Received: 11/17/2021
Time Received: 16:00

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	Container ID	Pi1 (psig)	Pf1 (psig)	TO-3 Modified - C1C6+ Can	TO-15 - VOC Cans
AS00337	P2106057-001	Air	11/13/2021	14:30	AS00337	-3.74	3.92	X	X
AS00489	P2106057-002	Air	11/13/2021	14:00	AS00489	0.20	3.70	X	X

Air - Chain of Custody Record & Analytical Service Request

2655 Park Center Drive, Suite A
Simi Valley, California 93065
Phone (805) 526-7161

Requested Turnaround Time in Business Days (Surcharges) please circle
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10 Day-Standard

ALS Project No. P2106057

ALS Contact:

Company Name & Address (Reporting Information): Freshwater Accountable

Project Name:

Project Number:

Project Manager: Lea Harper + Sue Anderson

P.O. # / Billing Information:

Phone:

Fax:

Email Address for Result Reporting:

Sampler (Print & Sign):

Analysis Method

Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Canister ID (Bar code # - AC, SC, etc.)	Flow Controller ID (Bar code # - FC #)	Canister Start Pressure "Hg	Canister End Pressure "Hg/psig	Sample Volume	Analysis Method		Comments e.g. Actual Preservative or specific instructions
	1	11-13-21	14:30	AS00337	FCR00462	-28.9	-8.5	6L			
	2	11-13-21	14:00	AS00489	None			6L			
					Grab Sample						

Report Tier Levels - please select

Tier I - Results (Default if not specified) _____
Tier II (Results + QC Summaries) _____
Tier III (Results + QC & Calibration Summaries) _____
Tier IV (Data Validation Package) 10% Surcharge _____

EDD required Yes / No
Type: _____ Units: _____

Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Yuri Gorby	11-14-21	2:00PM			
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
				11-17-21	1600

Cooler / Blank Temperature ____ °C

ALS Environmental
Sample Acceptance Check Form

Client: Rensselaer Polytechnic Institute Work order: P2106057
Project:
Sample(s) received on: 11/17/21 Date opened: 11/17/21 by: ADAVID

Note: This form is used for all samples received by ALS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP.

		Yes	No	N/A
1	Were **sample containers** properly marked with client sample ID?	☒	☐	☐
2	Did **sample containers** arrive in good condition?	☒	☐	☐
3	Were **chain-of-custody** papers used and filled out?	☒	☐	☐
4	Did **sample container labels** and/or tags agree with custody papers?	☒	☐	☐
5	Was **sample volume** received adequate for analysis?	☒	☐	☐
6	Are samples within specified holding times?	☒	☐	☐
7	Was proper **temperature** (thermal preservation) of cooler at receipt adhered to?	☐	☐	☒
8	Were **custody seals** on outside of cooler/Box/Container?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
9	Do containers have appropriate **preservation**, according to method/SOP or Client specified information?	☐	☐	☒
	Is there a client indication that the submitted samples are **pH** preserved?	☐	☐	☒
	Were **VOA vials** checked for presence/absence of air bubbles?	☐	☐	☒
	Does the client/method/SOP require that the analyst check the sample pH and if necessary alter it?	☐	☐	☒
10	**Tubes:** Are the tubes capped and intact?	☐	☐	☒
11	**Badges:** Are the badges properly capped and intact?	☐	☐	☒
	Are dual bed badges separated and individually capped and intact?	☐	☐	☒

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P2106057-001.02	6.0 L Silonite Can					
P2106057-002.02	6.0 L Silonite Can					

Explain any discrepancies: (include lab sample ID numbers): _____

RSK - MEEPP, HCL (pH<2); RSK - CO2, (pH 5-8); Sulfur (pH>4)

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Freshwater Accountability Project**

ALS Project ID: P2106057

Methane

Test Code: EPA TO-3 Modified
Instrument ID: HP5890 II/GC8/FID
Analyst: Gilbert Gutierrez
Sampling Media: 6.0 L Silonite Canister(s)
Test Notes:

Date(s) Collected: 11/13/21
Date Received: 11/17/21
Date Analyzed: 11/19/21

Client Sample ID	ALS Sample ID	Container Dilution Factor	Injection Volume ml(s)	**Result ppmV**	MRL ppmV	Data Qualifier
AS00337	P2106057-001	1.70	1.0	**4.8**	0.85	
AS00489	P2106057-002	1.23	1.0	**10**	0.62	
Method Blank	P211119-MB	1.00	1.0	ND	0.50	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Client: **Freshwater Accountability Project**

Client Sample ID: **Duplicate Lab Control Sample**

ALS Project ID: P2106057

ALS Sample ID: P211119-DLCS

Test Code: EPA TO-3 Modified

Instrument ID: HP5890 II/GC8/FID

Analyst: Gilbert Gutierrez

Sampling Media: 6.0 L Silonite Canister

Test Notes:

Date Collected: NA

Date Received: NA

Date Analyzed: 11/19/21

Volume(s) Analyzed: NA ml(s)

Compound	Spike Amount LCS / DLCS ppmV	Result LCS ppmV	Result DLCS ppmV	**% Recovery LCS**	**% Recovery DLCS**	ALS Acceptance Limits	RPD	RPD Limit	Data Qualifier
Methane	1,000	1,020	1,030	**102**	**103**	87-111	1	5	

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Freshwater Accountability Project**
Client Sample ID: **AS00337**

ALS Project ID: P2106057
ALS Sample ID: P2106057-001

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13
Analyst: Jessie Macaluso
Sample Type: 6.0 L Silonite Canister
Test Notes:
Container ID: AS00337

Date Collected: 11/13/21
Date Received: 11/17/21
Date Analyzed: 11/30/21
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -3.74 Final Pressure (psig): 3.92

Canister Dilution Factor: 1.70

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	**23**	0.88	**13**	0.51	
75-71-8	Dichlorodifluoromethane (CFC 12)	**1.8**	0.90	**0.37**	0.18	
74-87-3	Chloromethane	**1.2**	0.87	**0.60**	0.42	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.92	ND	0.13	
75-01-4	Vinyl Chloride	ND	0.88	ND	0.35	
106-99-0	1,3-Butadiene	**2.1**	0.88	**0.95**	0.40	
74-83-9	Bromomethane	ND	0.87	ND	0.22	
75-00-3	Chloroethane	ND	0.87	ND	0.33	
64-17-5	Ethanol	**330**	8.5	**170**	4.5	
75-05-8	Acetonitrile	**4.6**	1.7	**2.7**	1.0	
107-02-8	Acrolein	**3.5**	1.7	**1.5**	0.74	
67-64-1	Acetone	**26**	8.8	**11**	3.7	
75-69-4	Trichlorofluoromethane (CFC 11)	**0.98**	0.88	**0.17**	0.16	
67-63-0	2-Propanol (Isopropyl Alcohol)	**7.5**	1.7	**3.1**	0.69	
107-13-1	Acrylonitrile	ND	1.7	ND	0.78	
75-35-4	1,1-Dichloroethene	ND	0.92	ND	0.23	
75-09-2	Methylene Chloride	**2.7**	0.88	**0.77**	0.25	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.90	ND	0.29	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	0.92	ND	0.12	
75-15-0	Carbon Disulfide	ND	1.9	ND	0.60	
156-60-5	trans-1,2-Dichloroethene	ND	0.90	ND	0.23	
75-34-3	1,1-Dichloroethane	ND	0.90	ND	0.22	
1634-04-4	Methyl tert-Butyl Ether	ND	0.90	ND	0.25	
108-05-4	Vinyl Acetate	ND	8.5	ND	2.4	
78-93-3	2-Butanone (MEK)	**3.8**	1.7	**1.3**	0.58	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Freshwater Accountability Project**
Client Sample ID: **AS00337**

ALS Project ID: P2106057
ALS Sample ID: P2106057-001

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13
Analyst: Jessie Macaluso
Sample Type: 6.0 L Silonite Canister
Test Notes:
Container ID: AS00337

Date Collected: 11/13/21
Date Received: 11/17/21
Date Analyzed: 11/30/21
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -3.74 Final Pressure (psig): 3.92

Canister Dilution Factor: 1.70

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.88	ND	0.22	
141-78-6	Ethyl Acetate	**5.4**	3.6	**1.5**	0.99	
110-54-3	n-Hexane	**11**	0.90	**3.2**	0.26	
67-66-3	Chloroform	ND	0.92	ND	0.19	
109-99-9	Tetrahydrofuran (THF)	ND	1.7	ND	0.58	
107-06-2	1,2-Dichloroethane	ND	0.90	ND	0.22	
71-55-6	1,1,1-Trichloroethane	ND	0.88	ND	0.16	
71-43-2	Benzene	**5.4**	0.85	**1.7**	0.27	
56-23-5	Carbon Tetrachloride	ND	0.85	ND	0.14	
110-82-7	Cyclohexane	**3.1**	1.9	**0.90**	0.54	
78-87-5	1,2-Dichloropropane	ND	0.85	ND	0.18	
75-27-4	Bromodichloromethane	ND	0.90	ND	0.13	
79-01-6	Trichloroethene	ND	0.88	ND	0.16	
123-91-1	1,4-Dioxane	ND	0.88	ND	0.25	
80-62-6	Methyl Methacrylate	ND	1.9	ND	0.46	
142-82-5	n-Heptane	**1.6**	0.90	**0.39**	0.22	
10061-01-5	cis-1,3-Dichloropropene	ND	0.85	ND	0.19	
108-10-1	4-Methyl-2-pentanone	ND	1.9	ND	0.46	
10061-02-6	trans-1,3-Dichloropropene	ND	0.87	ND	0.19	
79-00-5	1,1,2-Trichloroethane	ND	0.88	ND	0.16	
108-88-3	Toluene	**7.7**	0.88	**2.0**	0.23	
591-78-6	2-Hexanone	ND	1.9	ND	0.46	
124-48-1	Dibromochloromethane	ND	0.90	ND	0.11	
106-93-4	1,2-Dibromoethane	ND	0.88	ND	0.12	
123-86-4	n-Butyl Acetate	ND	1.9	ND	0.39	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Freshwater Accountability Project**
Client Sample ID: **AS00337**

ALS Project ID: P2106057
ALS Sample ID: P2106057-001

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13
Analyst: Jessie Macaluso
Sample Type: 6.0 L Silonite Canister
Test Notes:
Container ID: AS00337

Date Collected: 11/13/21
Date Received: 11/17/21
Date Analyzed: 11/30/21
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -3.74 Final Pressure (psig): 3.92

Canister Dilution Factor: 1.70

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	0.90	ND	0.19	
127-18-4	Tetrachloroethene	ND	0.88	ND	0.13	
108-90-7	Chlorobenzene	ND	0.88	ND	0.19	
100-41-4	Ethylbenzene	ND	0.88	ND	0.20	
179601-23-1	m,p-Xylenes	ND	1.9	ND	0.43	
75-25-2	Bromoform	ND	0.88	ND	0.086	
100-42-5	Styrene	ND	0.85	ND	0.20	
95-47-6	o-Xylene	ND	0.88	ND	0.20	
111-84-2	n-Nonane	ND	0.88	ND	0.17	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.88	ND	0.13	
98-82-8	Cumene	ND	0.88	ND	0.18	
80-56-8	alpha-Pinene	ND	0.92	ND	0.16	
103-65-1	n-Propylbenzene	ND	0.90	ND	0.18	
622-96-8	4-Ethyltoluene	ND	0.90	ND	0.18	
108-67-8	1,3,5-Trimethylbenzene	ND	0.88	ND	0.18	
95-63-6	1,2,4-Trimethylbenzene	ND	0.88	ND	0.18	
100-44-7	Benzyl Chloride	ND	1.9	ND	0.36	
541-73-1	1,3-Dichlorobenzene	ND	0.88	ND	0.15	
106-46-7	1,4-Dichlorobenzene	ND	0.88	ND	0.15	
95-50-1	1,2-Dichlorobenzene	ND	0.90	ND	0.15	
5989-27-5	d-Limonene	ND	0.85	ND	0.15	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.7	ND	0.18	
120-82-1	1,2,4-Trichlorobenzene	ND	1.9	ND	0.25	
91-20-3	Naphthalene	ND	0.88	ND	0.17	
87-68-3	Hexachlorobutadiene	ND	0.88	ND	0.083	**V**

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
V = The continuing calibration verification standard was outside (biased low) the specified limits for this compound.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Freshwater Accountability Project**
Client Sample ID: **AS00489**

ALS Project ID: P2106057
ALS Sample ID: P2106057-002

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13
Analyst: Jessie Macaluso
Sample Type: 6.0 L Silonite Canister
Test Notes:
Container ID: AS00489

Date Collected: 11/13/21
Date Received: 11/17/21
Date Analyzed: 11/30/21
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): 0.20 Final Pressure (psig): 3.70

Canister Dilution Factor: 1.23

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	**36**	0.64	**21**	0.37	
75-71-8	Dichlorodifluoromethane (CFC 12)	**1.7**	0.65	**0.35**	0.13	
74-87-3	Chloromethane	**1.2**	0.63	**0.56**	0.30	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.66	ND	0.095	
75-01-4	Vinyl Chloride	ND	0.64	ND	0.25	
106-99-0	1,3-Butadiene	**1.6**	0.64	**0.74**	0.29	
74-83-9	Bromomethane	ND	0.63	ND	0.16	
75-00-3	Chloroethane	ND	0.63	ND	0.24	
64-17-5	Ethanol	**210**	6.2	**110**	3.3	
75-05-8	Acetonitrile	**4.0**	1.2	**2.4**	0.73	
107-02-8	Acrolein	**2.6**	1.2	**1.1**	0.54	
67-64-1	Acetone	**26**	6.4	**11**	2.7	
75-69-4	Trichlorofluoromethane (CFC 11)	**1.0**	0.64	**0.18**	0.11	
67-63-0	2-Propanol (Isopropyl Alcohol)	**1.6**	1.2	**0.65**	0.50	
107-13-1	Acrylonitrile	ND	1.2	ND	0.57	
75-35-4	1,1-Dichloroethene	ND	0.66	ND	0.17	
75-09-2	Methylene Chloride	**2.8**	0.64	**0.79**	0.18	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.65	ND	0.21	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	0.66	ND	0.087	
75-15-0	Carbon Disulfide	ND	1.4	ND	0.43	
156-60-5	trans-1,2-Dichloroethene	ND	0.65	ND	0.16	
75-34-3	1,1-Dichloroethane	ND	0.65	ND	0.16	
1634-04-4	Methyl tert-Butyl Ether	ND	0.65	ND	0.18	
108-05-4	Vinyl Acetate	ND	6.2	ND	1.7	
78-93-3	2-Butanone (MEK)	**3.1**	1.2	**1.0**	0.42	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Freshwater Accountability Project**
Client Sample ID: **AS00489**

ALS Project ID: P2106057
ALS Sample ID: P2106057-002

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13
Analyst: Jessie Macaluso
Sample Type: 6.0 L Silonite Canister
Test Notes:
Container ID: AS00489

Date Collected: 11/13/21
Date Received: 11/17/21
Date Analyzed: 11/30/21
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): 0.20 Final Pressure (psig): 3.70

Canister Dilution Factor: 1.23

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.64	ND	0.16	
141-78-6	Ethyl Acetate	ND	2.6	ND	0.72	
110-54-3	n-Hexane	**30**	0.65	**8.6**	0.19	
67-66-3	Chloroform	ND	0.66	ND	0.14	
109-99-9	Tetrahydrofuran (THF)	ND	1.2	ND	0.42	
107-06-2	1,2-Dichloroethane	ND	0.65	ND	0.16	
71-55-6	1,1,1-Trichloroethane	ND	0.64	ND	0.12	
71-43-2	Benzene	**11**	0.62	**3.4**	0.19	
56-23-5	Carbon Tetrachloride	ND	0.62	ND	0.098	
110-82-7	Cyclohexane	**5.6**	1.4	**1.6**	0.39	
78-87-5	1,2-Dichloropropane	ND	0.62	ND	0.13	
75-27-4	Bromodichloromethane	ND	0.65	ND	0.097	
79-01-6	Trichloroethene	ND	0.64	ND	0.12	
123-91-1	1,4-Dioxane	ND	0.64	ND	0.18	
80-62-6	Methyl Methacrylate	ND	1.4	ND	0.33	
142-82-5	n-Heptane	**20**	0.65	**4.8**	0.16	
10061-01-5	cis-1,3-Dichloropropene	ND	0.62	ND	0.14	
108-10-1	4-Methyl-2-pentanone	ND	1.4	ND	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	0.63	ND	0.14	
79-00-5	1,1,2-Trichloroethane	ND	0.64	ND	0.12	
108-88-3	Toluene	**72**	0.64	**19**	0.17	
591-78-6	2-Hexanone	ND	1.4	ND	0.33	
124-48-1	Dibromochloromethane	ND	0.65	ND	0.077	
106-93-4	1,2-Dibromoethane	ND	0.64	ND	0.083	
123-86-4	n-Butyl Acetate	**1.6**	1.4	**0.34**	0.28	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Freshwater Accountability Project**
Client Sample ID: **AS00489**

ALS Project ID: P2106057
ALS Sample ID: P2106057-002

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13
Analyst: Jessie Macaluso
Sample Type: 6.0 L Silonite Canister
Test Notes:
Container ID: AS00489

Date Collected: 11/13/21
Date Received: 11/17/21
Date Analyzed: 11/30/21
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): 0.20 Final Pressure (psig): 3.70

Canister Dilution Factor: 1.23

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	**8.4**	0.65	**1.8**	0.14	
127-18-4	Tetrachloroethene	ND	0.64	ND	0.094	
108-90-7	Chlorobenzene	ND	0.64	ND	0.14	
100-41-4	Ethylbenzene	**17**	0.64	**3.9**	0.15	
179601-23-1	m,p-Xylenes	**67**	1.4	**15**	0.31	
75-25-2	Bromoform	ND	0.64	ND	0.062	
100-42-5	Styrene	**0.95**	0.62	**0.22**	0.14	
95-47-6	o-Xylene	**24**	0.64	**5.6**	0.15	
111-84-2	n-Nonane	**4.5**	0.64	**0.86**	0.12	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.64	ND	0.093	
98-82-8	Cumene	**4.4**	0.64	**0.90**	0.13	
80-56-8	alpha-Pinene	**1.4**	0.66	**0.25**	0.12	
103-65-1	n-Propylbenzene	**5.4**	0.65	**1.1**	0.13	
622-96-8	4-Ethyltoluene	**7.6**	0.65	**1.6**	0.13	
108-67-8	1,3,5-Trimethylbenzene	**8.3**	0.64	**1.7**	0.13	
95-63-6	1,2,4-Trimethylbenzene	**33**	0.64	**6.8**	0.13	
100-44-7	Benzyl Chloride	ND	1.4	ND	0.26	
541-73-1	1,3-Dichlorobenzene	ND	0.64	ND	0.11	
106-46-7	1,4-Dichlorobenzene	ND	0.64	ND	0.11	
95-50-1	1,2-Dichlorobenzene	ND	0.65	ND	0.11	
5989-27-5	d-Limonene	**3.1**	0.62	**0.55**	0.11	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.2	ND	0.13	
120-82-1	1,2,4-Trichlorobenzene	ND	1.4	ND	0.18	
91-20-3	Naphthalene	**2.5**	0.64	**0.48**	0.12	
87-68-3	Hexachlorobutadiene	ND	0.64	ND	0.060	**V**

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
V = The continuing calibration verification standard was outside (biased low) the specified limits for this compound.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Freshwater Accountability Project**
Client Sample ID: **Method Blank**

ALS Project ID: P2106057
ALS Sample ID: P211130-MB

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13
Analyst: Jessie Macaluso
Sample Type: 6.0 L Silonite Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 11/30/21
Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	0.52	ND	0.30	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	0.53	ND	0.11	
74-87-3	Chloromethane	ND	0.51	ND	0.25	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.54	ND	0.077	
75-01-4	Vinyl Chloride	ND	0.52	ND	0.20	
106-99-0	1,3-Butadiene	ND	0.52	ND	0.24	
74-83-9	Bromomethane	ND	0.51	ND	0.13	
75-00-3	Chloroethane	ND	0.51	ND	0.19	
64-17-5	Ethanol	ND	5.0	ND	2.7	
75-05-8	Acetonitrile	ND	1.0	ND	0.60	
107-02-8	Acrolein	ND	1.0	ND	0.44	
67-64-1	Acetone	ND	5.2	ND	2.2	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	0.52	ND	0.093	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	1.0	ND	0.41	
107-13-1	Acrylonitrile	ND	1.0	ND	0.46	
75-35-4	1,1-Dichloroethene	ND	0.54	ND	0.14	
75-09-2	Methylene Chloride	ND	0.52	ND	0.15	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.53	ND	0.17	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	0.54	ND	0.070	
75-15-0	Carbon Disulfide	ND	1.1	ND	0.35	
156-60-5	trans-1,2-Dichloroethene	ND	0.53	ND	0.13	
75-34-3	1,1-Dichloroethane	ND	0.53	ND	0.13	
1634-04-4	Methyl tert-Butyl Ether	ND	0.53	ND	0.15	
108-05-4	Vinyl Acetate	ND	5.0	ND	1.4	
78-93-3	2-Butanone (MEK)	ND	1.0	ND	0.34	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Freshwater Accountability Project**

Client Sample ID: **Method Blank**

ALS Project ID: P2106057
ALS Sample ID: P211130-MB

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13
Analyst: Jessie Macaluso
Sample Type: 6.0 L Silonite Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 11/30/21
Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.52	ND	0.13	
141-78-6	Ethyl Acetate	ND	2.1	ND	0.58	
110-54-3	n-Hexane	ND	0.53	ND	0.15	
67-66-3	Chloroform	ND	0.54	ND	0.11	
109-99-9	Tetrahydrofuran (THF)	ND	1.0	ND	0.34	
107-06-2	1,2-Dichloroethane	ND	0.53	ND	0.13	
71-55-6	1,1,1-Trichloroethane	ND	0.52	ND	0.095	
71-43-2	Benzene	ND	0.50	ND	0.16	
56-23-5	Carbon Tetrachloride	ND	0.50	ND	0.080	
110-82-7	Cyclohexane	ND	1.1	ND	0.32	
78-87-5	1,2-Dichloropropane	ND	0.50	ND	0.11	
75-27-4	Bromodichloromethane	ND	0.53	ND	0.079	
79-01-6	Trichloroethene	ND	0.52	ND	0.097	
123-91-1	1,4-Dioxane	ND	0.52	ND	0.14	
80-62-6	Methyl Methacrylate	ND	1.1	ND	0.27	
142-82-5	n-Heptane	ND	0.53	ND	0.13	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ND	0.11	
108-10-1	4-Methyl-2-pentanone	ND	1.1	ND	0.27	
10061-02-6	trans-1,3-Dichloropropene	ND	0.51	ND	0.11	
79-00-5	1,1,2-Trichloroethane	ND	0.52	ND	0.095	
108-88-3	Toluene	ND	0.52	ND	0.14	
591-78-6	2-Hexanone	ND	1.1	ND	0.27	
124-48-1	Dibromochloromethane	ND	0.53	ND	0.062	
106-93-4	1,2-Dibromoethane	ND	0.52	ND	0.068	
123-86-4	n-Butyl Acetate	ND	1.1	ND	0.23	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Freshwater Accountability Project**
Client Sample ID: **Method Blank**

ALS Project ID: P2106057
ALS Sample ID: P211130-MB

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13
Analyst: Jessie Macaluso
Sample Type: 6.0 L Silonite Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 11/30/21
Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	0.53	ND	0.11	
127-18-4	Tetrachloroethene	ND	0.52	ND	0.077	
108-90-7	Chlorobenzene	ND	0.52	ND	0.11	
100-41-4	Ethylbenzene	ND	0.52	ND	0.12	
179601-23-1	m,p-Xylenes	ND	1.1	ND	0.25	
75-25-2	Bromoform	ND	0.52	ND	0.050	
100-42-5	Styrene	ND	0.50	ND	0.12	
95-47-6	o-Xylene	ND	0.52	ND	0.12	
111-84-2	n-Nonane	ND	0.52	ND	0.099	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.52	ND	0.076	
98-82-8	Cumene	ND	0.52	ND	0.11	
80-56-8	alpha-Pinene	ND	0.54	ND	0.097	
103-65-1	n-Propylbenzene	ND	0.53	ND	0.11	
622-96-8	4-Ethyltoluene	ND	0.53	ND	0.11	
108-67-8	1,3,5-Trimethylbenzene	ND	0.52	ND	0.11	
95-63-6	1,2,4-Trimethylbenzene	ND	0.52	ND	0.11	
100-44-7	Benzyl Chloride	ND	1.1	ND	0.21	
541-73-1	1,3-Dichlorobenzene	ND	0.52	ND	0.087	
106-46-7	1,4-Dichlorobenzene	ND	0.52	ND	0.087	
95-50-1	1,2-Dichlorobenzene	ND	0.53	ND	0.088	
5989-27-5	d-Limonene	ND	0.50	ND	0.090	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.0	ND	0.10	
120-82-1	1,2,4-Trichlorobenzene	ND	1.1	ND	0.15	
91-20-3	Naphthalene	ND	0.52	ND	0.099	
87-68-3	Hexachlorobutadiene	ND	0.52	ND	0.049	**V**

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
V = The continuing calibration verification standard was outside (biased low) the specified limits for this compound.

ALS ENVIRONMENTAL

SURROGATE SPIKE RECOVERY RESULTS

Client: **Freshwater Accountability Project**

ALS Project ID: P2106057

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13
Analyst: Jessie Macaluso
Sample Type: 6.0 L Silonite Canister(s)
Test Notes:

Date(s) Collected: 11/13/21
Date(s) Received: 11/17/21
Date(s) Analyzed: 11/30/21

Client Sample ID	ALS Sample ID	1,2-Dichloroethane-d4 Percent Recovered	Toluene-d8 Percent Recovered	Bromofluorobenzene Percent Recovered	Acceptance Limits	Data Qualifier
Method Blank	P211130-MB	**81**	**96**	**87**	70-130	
Lab Control Sample	P211130-LCS	**87**	**88**	**89**	70-130	
Duplicate Lab Control Sample	P211130-DLCS	**85**	**93**	**87**	70-130	
AS00337	P2106057-001	**77**	**96**	**87**	70-130	
AS00489	P2106057-002	**81**	**95**	**99**	70-130	

Surrogate percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly from the on-column percent recovery.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Client: **Freshwater Accountability Project**
Client Sample ID: **Duplicate Lab Control Sample**

ALS Project ID: P2106057
ALS Sample ID: P211130-DLCS

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13
Analyst: Jessie Macaluso
Sample Type: 6.0 L Silonite Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 11/30/21
Volume(s) Analyzed: 0.125 Liter(s)

CAS #	Compound	Spike Amount LCS / DLCS µg/m³	Result LCS µg/m³	Result DLCS µg/m³	% Recovery LCS	% Recovery DLCS	ALS Acceptance Limits	RPD	RPD Limit	Data Qualifier
115-07-1	Propene	206	190	178	**92**	**86**	56-128	7	25	
75-71-8	Dichlorodifluoromethane (CFC 12)	208	165	155	**79**	**75**	71-112	5	25	
74-87-3	Chloromethane	206	239	222	**116**	**108**	53-126	7	25	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	208	175	172	**84**	**83**	62-121	1	25	
75-01-4	Vinyl Chloride	208	234	221	**113**	**106**	63-123	6	25	
106-99-0	1,3-Butadiene	206	211	210	**102**	**102**	63-135	0	25	
74-83-9	Bromomethane	206	180	179	**87**	**87**	71-112	0	25	
75-00-3	Chloroethane	206	173	174	**84**	**84**	66-117	0	25	
64-17-5	Ethanol	832	827	804	**99**	**97**	57-117	2	25	
75-05-8	Acetonitrile	202	166	164	**82**	**81**	59-131	1	25	
107-02-8	Acrolein	416	391	383	**94**	**92**	71-123	2	25	
67-64-1	Acetone	1,020	1020	975	**100**	**96**	60-117	4	25	
75-69-4	Trichlorofluoromethane (CFC 11)	202	153	148	**76**	**73**	71-114	4	25	
67-63-0	2-Propanol (Isopropyl Alcohol)	400	401	388	**100**	**97**	61-124	3	25	
107-13-1	Acrylonitrile	402	385	371	**96**	**92**	65-130	4	25	
75-35-4	1,1-Dichloroethene	210	183	183	**87**	**87**	74-114	0	25	
75-09-2	Methylene Chloride	208	178	171	**86**	**82**	75-112	5	25	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	204	203	185	**100**	**91**	57-127	9	25	
76-13-1	Trichlorotrifluoroethane (CFC 113)	216	169	163	**78**	**75**	73-114	4	25	
75-15-0	Carbon Disulfide	414	335	314	**81**	**76**	70-113	6	25	
156-60-5	trans-1,2-Dichloroethene	208	181	171	**87**	**82**	76-119	6	25	
75-34-3	1,1-Dichloroethane	214	180	171	**84**	**80**	70-114	5	25	
1634-04-4	Methyl tert-Butyl Ether	206	176	172	**85**	**83**	72-118	2	25	
108-05-4	Vinyl Acetate	942	986	876	**105**	**93**	56-137	12	25	
78-93-3	2-Butanone (MEK)	408	378	346	**93**	**85**	74-121	9	25	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Client: **Freshwater Accountability Project**
Client Sample ID: **Duplicate Lab Control Sample**

ALS Project ID: P2106057
ALS Sample ID: P211130-DLCS

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13
Analyst: Jessie Macaluso
Sample Type: 6.0 L Silonite Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 11/30/21
Volume(s) Analyzed: 0.125 Liter(s)

CAS #	Compound	Spike Amount LCS / DLCS µg/m³	Result LCS µg/m³	Result DLCS µg/m³	% Recovery LCS	% Recovery DLCS	ALS Acceptance Limits	RPD	RPD Limit	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	206	181	175	**88**	**85**	73-117	3	25	
141-78-6	Ethyl Acetate	580	646	591	**111**	**102**	59-161	8	25	
110-54-3	n-Hexane	208	231	210	**111**	**101**	55-130	9	25	
67-66-3	Chloroform	210	174	167	**83**	**80**	71-114	4	25	
109-99-9	Tetrahydrofuran (THF)	404	352	340	**87**	**84**	73-114	4	25	
107-06-2	1,2-Dichloroethane	210	171	162	**81**	**77**	71-119	5	25	
71-55-6	1,1,1-Trichloroethane	208	165	160	**79**	**77**	73-119	3	25	
71-43-2	Benzene	208	193	188	**93**	**90**	72-113	3	25	
56-23-5	Carbon Tetrachloride	202	162	158	**80**	**78**	67-123	3	25	
110-82-7	Cyclohexane	412	408	396	**99**	**96**	70-119	3	25	
78-87-5	1,2-Dichloropropane	206	198	191	**96**	**93**	70-118	3	25	
75-27-4	Bromodichloromethane	208	183	175	**88**	**84**	74-119	5	25	
79-01-6	Trichloroethene	204	194	190	**95**	**93**	74-115	2	25	
123-91-1	1,4-Dioxane	206	194	188	**94**	**91**	77-124	3	25	
80-62-6	Methyl Methacrylate	410	405	390	**99**	**95**	78-126	4	25	
142-82-5	n-Heptane	206	202	194	**98**	**94**	70-119	4	25	
10061-01-5	cis-1,3-Dichloropropene	208	200	192	**96**	**92**	81-126	4	25	
108-10-1	4-Methyl-2-pentanone	412	446	419	**108**	**102**	73-129	6	25	
10061-02-6	trans-1,3-Dichloropropene	200	187	179	**94**	**90**	80-127	4	25	
79-00-5	1,1,2-Trichloroethane	208	190	184	**91**	**88**	78-117	3	25	
108-88-3	Toluene	206	160	164	**78**	**80**	70-118	3	25	
591-78-6	2-Hexanone	406	363	361	**89**	**89**	74-132	0	25	
124-48-1	Dibromochloromethane	210	163	169	**78**	**80**	69-137	3	25	
106-93-4	1,2-Dibromoethane	208	169	172	**81**	**83**	76-128	2	25	
123-86-4	n-Butyl Acetate	406	377	365	**93**	**90**	75-134	3	25	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Client: **Freshwater Accountability Project**
Client Sample ID: **Duplicate Lab Control Sample**

ALS Project ID: P2106057
ALS Sample ID: P211130-DLCS

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13
Analyst: Jessie Macaluso
Sample Type: 6.0 L Silonite Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 11/30/21
Volume(s) Analyzed: 0.125 Liter(s)

CAS #	Compound	Spike Amount LCS / DLCS µg/m³	Result LCS µg/m³	Result DLCS µg/m³	% Recovery LCS	% Recovery DLCS	ALS Acceptance Limits	RPD	RPD Limit	Data Qualifier
111-65-9	n-Octane	208	189	192	**91**	**92**	68-120	1	25	
127-18-4	Tetrachloroethene	212	151	152	**71**	**72**	63-130	1	25	
108-90-7	Chlorobenzene	206	164	169	**80**	**82**	70-118	2	25	
100-41-4	Ethylbenzene	206	161	166	**78**	**81**	71-123	4	25	
179601-23-1	m,p-Xylenes	416	325	330	**78**	**79**	67-127	1	25	
75-25-2	Bromoform	210	153	157	**73**	**75**	65-149	3	25	
100-42-5	Styrene	202	172	176	**85**	**87**	76-132	2	25	
95-47-6	o-Xylene	208	162	165	**78**	**79**	69-124	1	25	
111-84-2	n-Nonane	208	202	202	**97**	**97**	64-127	0	25	
79-34-5	1,1,2,2-Tetrachloroethane	208	180	181	**87**	**87**	69-128	0	25	
98-82-8	Cumene	206	163	163	**79**	**79**	69-125	0	25	
80-56-8	alpha-Pinene	210	172	171	**82**	**81**	68-129	1	25	
103-65-1	n-Propylbenzene	208	154	155	**74**	**75**	70-127	1	25	
622-96-8	4-Ethyltoluene	208	162	166	**78**	**80**	69-127	3	25	
108-67-8	1,3,5-Trimethylbenzene	208	160	167	**77**	**80**	66-129	4	25	
95-63-6	1,2,4-Trimethylbenzene	206	159	156	**77**	**76**	63-142	1	25	
100-44-7	Benzyl Chloride	416	312	309	**75**	**74**	73-145	1	25	
541-73-1	1,3-Dichlorobenzene	208	158	155	**76**	**75**	67-136	1	25	
106-46-7	1,4-Dichlorobenzene	210	159	156	**76**	**74**	63-134	3	25	
95-50-1	1,2-Dichlorobenzene	210	159	156	**76**	**74**	64-139	3	25	
5989-27-5	d-Limonene	206	164	165	**80**	**80**	63-137	0	25	
96-12-8	1,2-Dibromo-3-chloropropane	404	302	293	**75**	**73**	72-145	3	25	
120-82-1	1,2,4-Trichlorobenzene	420	279	264	**66**	**63**	62-154	5	25	
91-20-3	Naphthalene	210	139	140	**66**	**67**	62-156	2	25	
87-68-3	Hexachlorobutadiene	212	134	113	**63**	**53**	55-142	17	25	**L**

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.
L = Laboratory control sample recovery outside the specified limits, results may be biased low.

Background of the Guernsey Power Station.

- 150 acres located in a floodplain and above an abandoned coal mine
- Subsurface stabilized by injection of coal ash
    - Injection wells drilled every 25 feet
    - Ash blended and then injected until full resulting in aerial dispersal
    - Injection coincided with

Recent construction of the Guernsey Power Station has fundamentally altered groundwater level and quality in the surrounding area.

Homeowners

Gas samples (2) were collected indoors on Nobember 13, 2021

'Mobile Gas Detector video

Summa Grab Sample video

24 hour Summa Canister sampling video

List of contaminants that exceed listed MRL's

	24 Hour	24 Hour	Grab Sample	Grab Sample	
Compound	ug/m3	ppb	ug/m3	ppb	
Methane	4.8 ppm		10 ppm		
Ethanol	330	170 ppb	210	110	
M,p-Xylenes	ND	ND	67	15	
o-Xylene	ND	ND	24	5.6	
Propene	23	13 ppb	36	21	
Ethyle Benzene	ND	ND	17	3.9	
n-Nonane	ND	ND	4.5	0.86	
n-Hexane	11	3.2			
Toluene	7.7	2.0	72	19	
n-Octane			8.4	1.8	
2-Propanol (Isopropyl Alcohol)	7.5	3.1	1.6	0.65	
1,3,5-Trimethylbenzene	ND	ND	8.3	1.7	
4-Ethyltoluene	ND	ND	7.6	1.6	
n-Propylbenzene	ND	ND	5.4	1.1	
Alpha-Pinene	ND	ND	1.4	0.25	
Cumene	ND	ND	4.4	0.9	
Styrene	ND	ND	0.95	0.22	
Benzene	5.4	1.7	11	3.4	
Ethyl Acetate	5.4	1.5			
Cyclohexane	3.1	0.9	5.6	1.6	
Dichlorodifluoromethane (CFC 12)	1.8	0.37	1.7	0.35	
n-Heptane	1.6	0.39	20	4.8	
Acetone	26	11	26	11	
Acetonitrile	4.6	2.7	4.0	2.4	
2-Butanone	3.8	1.3	3.1	1.0	
Acrolein	3.5	1.5	2.6	1.1	
Methylene Chloride	2.7	0.77	2.8	0.79	
1,3-Butadiene	2.1	0.95	1.6	0.74	
n-Butyl Acetate	ND	ND	1.6	0.34	
Chloromethane	1.2	0.6	1.2	0.56	
Trichlorofluoromethane (CFC 11)	0.98	0.17	1.0	0.18	

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in

Case No(s). 16-2443-EL-BGN, 18-0090-EL-BGA, 20-0033-EL-BGA, 21-0182-EL-BGA

Summary: Public Comment of Lea Harper Managing Director, FreshWater Accountability Project, via website, electronically filed by Docketing Staff on behalf of Docketing