

GWC



THE STATE OF NEW HAMPSHIRE  
DEPARTMENT OF TRANSPORTATION

36



William Cass, P.E.  
Commissioner

David Rodrigue, P.E.  
Assistant Commissioner  
Andre Briere, Colonel, USAF (RET)  
Deputy Commissioner

His Excellency, Governor Christopher T. Sununu  
and the Honorable Council  
State House  
Concord, New Hampshire 03301

Bureau of Highway Maintenance  
August 6, 2024

**REQUESTED ACTION**

Authorize the Department of Transportation to **retroactively** pay NRC East Enviro/US Ecology (Vendor No.161724) of PO Box 74007491, Chicago, IL, in the amount of \$730, for analysis of contaminated soil at a Lyman, NH site effective upon Governor and Executive Council approval.

Funds to support this request are available in the following accounts for FY 2025:

	<u>FY 2025</u>
01-96-96-960515-3007	
Highway Maintenance Bureau	
406-500882 DOT Environmental Expense	\$730

**EXPLANATION**

This item is **retroactive** because District 1 was not made aware of this invoice until recently. This work was set up by a previous employee and current staff was unaware the invoice was pending. A review of the invoice shows it was emailed to a person that does not exist at the Department. The past due invoice has only now been received and confirmed to be legitimate for payment. The Bureau of Highway Maintenance District 1 utilized NRC East Enviro/US Ecology for mandatory contaminated soil analysis to be able to remove said soil for disposal.

Sincerely,

William J. Cass, P.E.  
Commissioner

Attachments



Please Remit Payment To:  
 US Ecology US Holding Company LLC  
 PO Box 74007491  
 Chicago IL 60674-7491

NRC Accepts VISA, American Express and MasterCard.  
 Call to make payment via credit card, ACH or wire

Please e-mail arNRCne@usecology.com with any  
 questions regarding this invoice

**NRC East Environmental Services, Inc.**

Response. Service. Experience.  
 19 National Drive, Franklin, MA 02038  
 www.nrcc.com  
 Ph: 1-800-966-1102

**Invoice 784727**

<b>Bill to:</b>	NHDOT 7 Hazen Drive PO Box 483 Concord NH 03301	<b>Job:</b>	185855 Shed Mountain Meadows Road Lyman NH 03585
<b>Attn:</b>			
<b>Date:</b>	3/27/2023	<b>Contract:</b>	Haz Waste Contract II #8002865
<b>Payment Terms:</b>	30 NET	<b>email to:</b>	<a href="mailto:Amy.W.Rock@dot.nh.gov">Amy.W.Rock@dot.nh.gov</a>
<b>Customer Code:</b>			

**Important Remarks:** Respond to request for transportation and disposal of ditching soil stockpile

DESCRIPTION	QUANTITY	UOM	UNIT PRICE	EXTENDED PRICE
<b>Transportation and Disposal Services - Monday, November 28, 2022</b>				
Foreman	5	Hour	\$60.00	\$300.00
Pickup	1 1/2	Day	\$100.00	\$100.00
VOC Analysis EPA 8260	1	Each	\$120.00	\$120.00
TPH Analysis	1	Each	\$100.00	\$100.00
Metals Analysis EPA 6010	1	Each	\$110.00	\$110.00

THANK YOU FOR YOUR BUSINESS

<b>INVOICE SUBTOTAL</b>	<b>\$730.00</b>
<b>ESIC Fee Waived</b>	<b>\$0.00</b>
<b>SALES TAX EXEMPT</b>	<b>\$0.00</b>
<b>INVOICE TOTAL</b>	<b>\$730.00</b>

\*Past due invoices are subject to 1.5% finance charge per month. The customer agrees to pay all costs of collection, including reasonable attorney's fees\*



NRC East Environmental (a US Ecology Company)  
Transport and Disposal of Lyman, NH Ditching Soil Stockpile

This proposal was developed based upon client provided information, and is made pursuant to the agreement between NRC and the State of New Hampshire under the Hazardous Waste Part II - Petroleum Clean-UP, Service Contract (Contract #8002865)

Remove pile of contaminated soil				
Description	Units Base	Rate	Units	Estimated Cost
Site Mobilization and Demobilization Fee (II-M1)	Each	\$1,500.00	1	\$1,500.00
Foreman (II-L-1)	Hour	\$60.00	5	\$300.00
Operator/Driver (II-L-6)	Hour	\$60.00	18	\$1,080.00
Pickup (II-E-10)	1/2 Day	\$100.00	1	\$100.00
Roll-Off Truck (II-E-2)	1/2 Day	\$300.00	4	\$1,200.00
Roll-Off Container, 20 yd (II-E-22)	1/2 Day	\$15.00	4	\$60.00
Roll-Off Liner (II-E-21)	Each	\$50.00	4	\$200.00
Oily Solid Bulk Disposal (II-D-7c)	Tons	\$50.00	83	\$4,150.00
VOC Analysis EPA 8260 (II-A-3)	Each	\$120.00	1	\$120.00
TPH Analysis (II-A-11)	Each	\$100.00	1	\$100.00
Metals Analysis EPA 6010 (II-A-15)	Each	\$110.00	1	\$110.00
Rush Surcharge	Each	\$100.00	3	\$300.00
Total				\$7,720.00

The above is an estimate of what NRC thinks it will take to complete the project, billing will be based on actual time, materials, and disposal.

Approved by:

Fogg, Daniel J. D. Fogg 11/28/2022  
Print Signature Date

**Fogg, Daniel**

---

**From:** Fritz Hostrop <Fritz.Hostrop@usecology.com>  
**Sent:** Wednesday, November 16, 2022 12:54 PM  
**To:** Fogg, Daniel  
**Subject:** Quote for T&D of Ditching Soil Stockpile  
**Attachments:** USE Proposal 222.48.072.pdf

**EXTERNAL: Do not open attachments or click on links unless you recognize and trust the sender.**

---

Hi Dan,

Please find attached our quote for T&D of the ditching soil stockpile at your Lyman facility.

Based on your estimate of 55-cubic yards, we are estimating 83 tons for disposal.

I have profiled the material into ESMI in Loudon, NH and our roll-off trucks should be able to make two runs in one day, so we are planning on 3-4 runs depending on how heavy the pile runs.

Given that we are over 50 tons, we will need to grab one soil sample beforehand from the stockpile and will rush the analysis so we can get rid of the pile before the end of the month.

Please let me know if you have any questions.

Thanks for your help with loading.

Best,

**Fritz Hostrop**  
**Senior Project Manager**  
60 West Road  
Portsmouth, NH 03801  
e [fritz.hostrop@usecology.com](mailto:fritz.hostrop@usecology.com)  
c 603.395.7198  
Emergency Response: 800.899.4672



A Republic Services Company





New England Testing Laboratory, Inc.  
(401) 353-3420

## REPORT OF ANALYTICAL RESULTS

**NETLAB Work Order Number: 2L05007**  
**Client Project: 185855 - NHDOT Lyman**

Report Date: 13-December-2022

Prepared for:

Fritz Hostrop  
US Ecology  
60 West Road  
Portsmouth, NH 03801

Richard Warila, Laboratory Director  
New England Testing Laboratory, Inc.  
59 Greenhill Street  
West Warwick, RI 02893  
rich.warila@newenglandtesting.com

**Samples Submitted :**

The samples listed below were submitted to New England Testing Laboratory on 12/05/22. The group of samples appearing in this report was assigned an internal identification number (case number) for laboratory information management purposes. The client's designations for the individual samples, along with our case numbers, are used to identify the samples in this report. This report of analytical results pertains only to the sample(s) provided to us by the client which are indicated on the custody record. The case number for this sample submission is 2L05007. Custody records are included in this report.

<b>Lab ID</b>	<b>Sample</b>	<b>Matrix</b>	<b>Date Sampled</b>	<b>Date Received</b>
2L05007-01	Stockpile	Soil	11/28/2022	12/05/2022

NETLAB Case Number: 2L05007

## ***Request for Analysis***

At the client's request, the analyses presented in the following table were performed on the samples submitted.

### **Stockpile (Lab Number: 2L05007-01)**

<b>Analysis</b>	<b>Method</b>
Arsenic	EPA 6010C
Barium	EPA 6010C
Cadmium	EPA 6010C
Chromium	EPA 6010C
Lead	EPA 6010C
Mercury	EPA 7471B
Selenium	EPA 6010C
Silver	EPA 6010C
Total Petroleum Hydrocarbons	EPA-8100-mod
Volatile Organic Compounds	EPA 8260C

### ***Method References***

*Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, USEPA*

**Case Narrative**

**Sample Receipt:**

The samples associated with this work order were received in appropriately cooled and preserved containers. The chain of custody was adequately completed and corresponded to the samples submitted.

Exceptions: None

**Analysis:**

All samples were prepared and analyzed within method specified holding times and according to NETLAB's documented standard operating procedures. The results for the associated calibration, method blank and laboratory control sample (LCS) were within method specified quality control requirements and allowances. Results for all soil samples, unless otherwise indicated, are reported on a dry weight basis.

Exceptions: None

## Results: Volatile Organic Compounds

Sample: Stockpile  
 Lab Number: 2L05007-01 (Soil)

Analyte	Result	Qual	Reporting Limit	Units	Date Prepared	Date Analyzed
Acetone	ND		304	ug/kg	12/12/22	12/12/22
Benzene	ND		43	ug/kg	12/12/22	12/12/22
Bromobenzene	ND		43	ug/kg	12/12/22	12/12/22
Bromochloromethane	ND		43	ug/kg	12/12/22	12/12/22
Bromodichloromethane	ND		43	ug/kg	12/12/22	12/12/22
Bromoform	ND		43	ug/kg	12/12/22	12/12/22
Bromomethane	ND		43	ug/kg	12/12/22	12/12/22
2-Butanone	ND		217	ug/kg	12/12/22	12/12/22
tert-Butyl alcohol	ND		217	ug/kg	12/12/22	12/12/22
sec-Butylbenzene	ND		43	ug/kg	12/12/22	12/12/22
n-Butylbenzene	ND		43	ug/kg	12/12/22	12/12/22
tert-Butylbenzene	ND		43	ug/kg	12/12/22	12/12/22
Methyl t-butyl ether (MTBE)	ND		43	ug/kg	12/12/22	12/12/22
Carbon Disulfide	ND		43	ug/kg	12/12/22	12/12/22
Carbon Tetrachloride	ND		43	ug/kg	12/12/22	12/12/22
Chlorobenzene	ND		43	ug/kg	12/12/22	12/12/22
Chloroethene	ND		43	ug/kg	12/12/22	12/12/22
Chloroform	ND		43	ug/kg	12/12/22	12/12/22
Chloromethane	ND		43	ug/kg	12/12/22	12/12/22
4-Chlorotoluene	ND		43	ug/kg	12/12/22	12/12/22
2-Chlorotoluene	ND		43	ug/kg	12/12/22	12/12/22
1,2-Dibromo-3-chloropropane (DBCP)	ND		43	ug/kg	12/12/22	12/12/22
Dibromochloromethane	ND		43	ug/kg	12/12/22	12/12/22
1,2-Dibromoethane (EDB)	ND		43	ug/kg	12/12/22	12/12/22
Dibromomethane	ND		43	ug/kg	12/12/22	12/12/22
1,2-Dichlorobenzene	ND		43	ug/kg	12/12/22	12/12/22
1,3-Dichlorobenzene	ND		43	ug/kg	12/12/22	12/12/22
1,4-Dichlorobenzene	ND		43	ug/kg	12/12/22	12/12/22
1,1-Dichloroethane	ND		43	ug/kg	12/12/22	12/12/22
1,2-Dichloroethane	ND		43	ug/kg	12/12/22	12/12/22
trans-1,2-Dichloroethene	ND		43	ug/kg	12/12/22	12/12/22
cis-1,2-Dichloroethane	ND		43	ug/kg	12/12/22	12/12/22
1,1-Dichloroethene	ND		43	ug/kg	12/12/22	12/12/22
1,2-Dichloropropane	ND		43	ug/kg	12/12/22	12/12/22
2,2-Dichloropropane	ND		43	ug/kg	12/12/22	12/12/22
cis-1,3-Dichloropropene	ND		43	ug/kg	12/12/22	12/12/22
trans-1,3-Dichloropropene	ND		43	ug/kg	12/12/22	12/12/22
1,1-Dichloropropene	ND		43	ug/kg	12/12/22	12/12/22
1,3-Dichloropropene (cis + trans)	ND		67	ug/kg	12/12/22	12/12/22
Diethyl ether	ND		217	ug/kg	12/12/22	12/12/22
1,4-Dioxane	ND		4340	ug/kg	12/12/22	12/12/22
Ethylbenzene	ND		43	ug/kg	12/12/22	12/12/22
Hexachlorobutadiene	ND		43	ug/kg	12/12/22	12/12/22
2-Hexanone	ND		217	ug/kg	12/12/22	12/12/22
Isopropylbenzene	ND		43	ug/kg	12/12/22	12/12/22
p-Isopropyltoluene	ND		43	ug/kg	12/12/22	12/12/22
Methylene Chloride	ND		130	ug/kg	12/12/22	12/12/22
4-Methyl-2-pentanone	ND		217	ug/kg	12/12/22	12/12/22

## Results: Volatile Organic Compounds (Continued)

Sample: Stockpile (Continued)

Lab Number: 2105007-01 (Soil)

Analyte	Result	Qual	Reporting Limit	Units	Date Prepared	Date Analyzed
Naphthalene	ND		43	ug/kg	12/12/22	12/12/22
n-Propylbenzene	ND		43	ug/kg	12/12/22	12/12/22
Styrene	ND		43	ug/kg	12/12/22	12/12/22
1,1,1,2-Tetrachloroethane	ND		43	ug/kg	12/12/22	12/12/22
Tetrachloroethene	ND		43	ug/kg	12/12/22	12/12/22
Tetrahydrofuran	ND		217	ug/kg	12/12/22	12/12/22
Toluene	ND		43	ug/kg	12/12/22	12/12/22
1,2,4-Trichlorobenzene	ND		43	ug/kg	12/12/22	12/12/22
1,2,3-Trichlorobenzene	ND		43	ug/kg	12/12/22	12/12/22
1,1,2-Trichloroethane	ND		43	ug/kg	12/12/22	12/12/22
1,1,1-Trichloroethane	ND		43	ug/kg	12/12/22	12/12/22
Trichloroethene	ND		43	ug/kg	12/12/22	12/12/22
1,2,3-Trichloropropane	ND		43	ug/kg	12/12/22	12/12/22
1,3,5-Trimethylbenzene	ND		43	ug/kg	12/12/22	12/12/22
1,2,4-Trimethylbenzene	ND		43	ug/kg	12/12/22	12/12/22
Vinyl Chloride	ND		43	ug/kg	12/12/22	12/12/22
o-Xylene	ND		43	ug/kg	12/12/22	12/12/22
m,p-Xylene	ND		87	ug/kg	12/12/22	12/12/22
Total xylenes	ND		43	ug/kg	12/12/22	12/12/22
1,1,2,2-Tetrachloroethane	ND		43	ug/kg	12/12/22	12/12/22
tert-Amyl methyl ether	ND		43	ug/kg	12/12/22	12/12/22
1,3-Dichloropropane	ND		43	ug/kg	12/12/22	12/12/22
Ethyl tert-butyl ether	ND		43	ug/kg	12/12/22	12/12/22
Diisopropyl ether	ND		43	ug/kg	12/12/22	12/12/22
Trichlorofluoromethane	ND		43	ug/kg	12/12/22	12/12/22
Dichlorodifluoromethane	ND		43	ug/kg	12/12/22	12/12/22
<hr/>						
Surrogate(s)	Recovery%		Limits			
4-Bromofluorobenzene	95.7%		70-130		12/12/22	12/12/22
1,2-Dichloroethane-d4	95.4%		70-130		12/12/22	12/12/22
Toluene-d8	101%		70-130		12/12/22	12/12/22

**Results: Total Petroleum Hydrocarbons**

**Sample: Stockpile**  
**Lab Number: 2L05007-01 (Sol)**

Analyte	Result	Qual	Reporting Limit	Units	Date Prepared	Date Analyzed
Total Petroleum Hydrocarbons	383		60	mg/kg	12/06/22	12/07/22
Surrogate(s)	Recovery%		Limits			
<i>Chitrooctadecane</i>	<i>99.4%</i>		<i>50-130</i>		12/06/22	12/07/22

**Quality Control**

**Total Metals**

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	%REC	RPD	RPD Limit
<b>Batch: B210230 - Metals Digestion Solts</b>										
Blank (B210230-BLK1) Prepared: 12/06/22 Analyzed: 12/09/22										
Lead	ND		0.50	mg/kg						
Selenium	ND		1.00	mg/kg						
Chromium	ND		0.50	mg/kg						
Cadmium	ND		0.50	mg/kg						
Barium	ND		0.33	mg/kg						
Arsenic	ND		1.00	mg/kg						
Silver	ND		1.00	mg/kg						
<b>LCS (B210230-6S1)</b>										
Selenium	17.6		1.00	mg/kg	20.0		88.1	85-115		
Barium	96.3		0.33	mg/kg	100		96.3	85-115		
Cadmium	92.7		0.50	mg/kg	100		92.7	85-115		
Silver	44.6		1.00	mg/kg	40.0		111	85-115		
Chromium	97.5		0.50	mg/kg	100		97.5	85-115		
Lead	91.2		0.50	mg/kg	100		91.2	85-115		
Arsenic	19.0		1.00	mg/kg	20.0		94.8	85-115		
<b>Batch: B210374 - Metals Cold-Vapor Mercury</b>										
Blank (B210374-BLK1) Prepared & Analyzed: 12/08/22										
Mercury	ND		0.140	mg/kg						
<b>LCS (B210374-6S1)</b>										
Mercury	0.530		0.140	mg/kg	0.500		106	93-114		

**Quality Control**  
(Continued)

**Volatile Organic Compounds**

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch: B2L0550 - Purge-Trap</b>					Prepared & Analyzed: 12/12/22					
<b>Blank (B2L0550-BLK1)</b>										
Acetone	ND		7	ug/kg						
Benzene	ND		1	ug/kg						
Bromobenzene	ND		1	ug/kg						
Bromochloromethane	ND		1	ug/kg						
Bromodichloromethane	ND		1	ug/kg						
Bromoform	ND		1	ug/kg						
Bromomethane	ND		1	ug/kg						
2-Butanone	ND		5	ug/kg						
tert-Butyl alcohol	ND		5	ug/kg						
sec-Butylbenzene	ND		1	ug/kg						
n-Butylbenzene	ND		1	ug/kg						
tert-Butylbenzene	ND		1	ug/kg						
Methyl t-butyl ether (MTBE)	ND		1	ug/kg						
Carbon Disulfide	ND		1	ug/kg						
Carbon Tetrachloride	ND		1	ug/kg						
Chlorobenzene	ND		1	ug/kg						
Chloroethane	ND		1	ug/kg						
Chloroform	ND		1	ug/kg						
Chloromethane	ND		1	ug/kg						
4-Chlorotoluene	ND		1	ug/kg						
2-Chlorotoluene	ND		1	ug/kg						
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	ug/kg						
Dibromochloromethane	ND		1	ug/kg						
1,2-Dibromoethane (EDB)	ND		1	ug/kg						
Dibromomethane	ND		1	ug/kg						
1,2-Dichlorobenzene	ND		1	ug/kg						
1,3-Dichlorobenzene	ND		1	ug/kg						
1,4-Dichlorobenzene	ND		1	ug/kg						
1,1-Dichloroethane	ND		1	ug/kg						
1,2-Dichloroethane	ND		1	ug/kg						
trans-1,2-Dichloroethene	ND		1	ug/kg						
cis-1,2-Dichloroethene	ND		1	ug/kg						
1,1-Dichloroethene	ND		1	ug/kg						
1,2-Dichloropropane	ND		1	ug/kg						
2,2-Dichloropropane	ND		1	ug/kg						
cis-1,3-Dichloropropene	ND		1	ug/kg						
trans-1,3-Dichloropropene	ND		1	ug/kg						
1,1-Dichloropropene	ND		1	ug/kg						
1,3-Dichloropropene (cis + trans)	ND		2	ug/kg						
Diethyl ether	ND		5	ug/kg						
1,4-Dioxane	ND		100	ug/kg						
Ethylbenzene	ND		1	ug/kg						
Hexachlorobutadiene	ND		1	ug/kg						
2-Hexanone	ND		5	ug/kg						
Isopropylbenzene	ND		1	ug/kg						
p-Isopropyltoluene	ND		1	ug/kg						
Methylene Chloride	ND		3	ug/kg						
4-Methyl-2-pentanone	ND		5	ug/kg						
Naphthalene	ND		1	ug/kg						
n-Propylbenzene	ND		1	ug/kg						
Styrene	ND		1	ug/kg						
1,1,1,2-Tetrachloroethane	ND		1	ug/kg						
Tetrachloroethene	ND		1	ug/kg						
Tetrahydrofuran	ND		5	ug/kg						
Toluene	ND		1	ug/kg						
1,2,4-Trichlorobenzene	ND		1	ug/kg						
1,2,3-Trichlorobenzene	ND		1	ug/kg						

**Quality Control  
(Continued)**

**Volatile Organic Compounds (Continued)**

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch: B2L0550 - Purge-Trap (Continued)</b>										
Blank (B2L0550-BLK1)					Prepared & Analyzed: 12/12/22					
1,1,2-Trichloroethane	ND		1	ug/kg						
1,1,1-Trichloroethane	ND		1	ug/kg						
Trichloroethene	ND		1	ug/kg						
1,2,3-Trichloropropane	ND		1	ug/kg						
1,3,5-Trimethylbenzene	ND		1	ug/kg						
1,2,4-Trimethylbenzene	ND		1	ug/kg						
Vinyl Chloride	ND		1	ug/kg						
o-Xylene	ND		1	ug/kg						
m,p-Xylene	ND		2	ug/kg						
Total xylenes	ND		1	ug/kg						
1,1,2,2-Tetrachloroethane	ND		1	ug/kg						
tert-Amyl methyl ether	ND		1	ug/kg						
1,3-Dichloropropane	ND		1	ug/kg						
Ethyl tert-butyl ether	ND		1	ug/kg						
Dialopropyl ether	ND		1	ug/kg						
Trichlorofluoromethane	ND		1	ug/kg						
Dichlorodifluoromethane	ND		1	ug/kg						
<i>Surrogate: 4-Bromofluorobenzene</i>			49.1	ug/l	50.0		98.2	70-130		
<i>Surrogate: 1,2-Dichloroethane-d4</i>			45.7	ug/l	50.0		91.5	70-130		
<i>Surrogate: Toluene-d8</i>			52.3	ug/l	50.0		101	70-130		
<b>LCS (B2L0550-BS1)</b>										
					Prepared & Analyzed: 12/12/22					
Acetone	56			ug/l	50.0		112	70-130		
Benzene	45			ug/l	50.0		89.2	70-130		
Bromobenzene	47			ug/l	50.0		94.3	70-130		
Bromochloromethane	46			ug/l	50.0		92.3	70-130		
Bromodichloromethane	46			ug/l	50.0		91.2	70-130		
Bromoform	46			ug/l	50.0		92.4	70-130		
Bromomethane	33			ug/l	50.0		66.1	70-130		
2-Butanone	54			ug/l	50.0		108	70-130		
tert-Butyl alcohol	60			ug/l	50.0		120	70-130		
sec-Butylbenzene	48			ug/l	50.0		95.3	70-130		
n-Butylbenzene	49			ug/l	50.0		97.5	70-130		
tert-Butylbenzene	46			ug/l	50.0		92.5	70-130		
Methyl t-butyl ether (MTBE)	52			ug/l	50.0		104	70-130		
Carbon Disulfide	42			ug/l	50.0		83.4	70-130		
Carbon Tetrachloride	46			ug/l	50.0		92.3	70-130		
Chlorobenzene	45			ug/l	50.0		89.5	70-130		
Chloroethane	47			ug/l	50.0		94.0	70-130		
Chloroform	43			ug/l	50.0		86.0	70-130		
Chloromethane	33			ug/l	50.0		65.5	70-130		
4-Chlorotoluene	45			ug/l	50.0		89.8	70-130		
2-Chlorotoluene	45			ug/l	50.0		89.8	70-130		
1,2-Dibromo-3-chloropropane (DBCP)	46			ug/l	50.0		92.4	70-130		
Dibromochloromethane	49			ug/l	50.0		98.9	70-130		
1,2-Dibromoethane (EDB)	51			ug/l	50.0		102	70-130		
Dibromomethane	45			ug/l	50.0		89.2	70-130		
1,2-Dichlorobenzene	48			ug/l	50.0		95.4	70-130		
1,3-Dichlorobenzene	46			ug/l	50.0		92.3	70-130		
1,4-Dichlorobenzene	47			ug/l	50.0		93.5	70-130		
1,1-Dichloroethane	41			ug/l	50.0		82.8	70-130		
1,2-Dichloroethane	46			ug/l	50.0		91.1	70-130		
trans-1,2-Dichloroethene	45			ug/l	50.0		89.1	70-130		
cis-1,2-Dichloroethene	45			ug/l	50.0		90.2	70-130		
1,1-Dichloroethene	40			ug/l	50.0		80.8	70-130		
1,2-Dichloropropane	48			ug/l	50.0		95.7	70-130		
2,2-Dichloropropane	46			ug/l	50.0		92.3	70-130		

**Quality Control  
(Continued)**

**Volatile Organic Compounds (Continued)**

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch: B2L0550 - Purge-Trap (Continued)</b>										
<b>LCS (B2L0530-BS1)</b>					Prepared & Analyzed: 12/12/22					
cis-1,3-Dichloropropene	49			ug/l	50.0		97.3	70-130		
trans-1,3-Dichloropropene	48			ug/l	50.0		96.9	70-130		
1,1-Dichloropropene	44			ug/l	50.0		88.9	70-130		
Diethyl ether	50			ug/l	50.0		99.6	70-130		
1,4-Dioxane	302			ug/l	250		121	70-130		
Ethylbenzene	45			ug/l	50.0		90.9	70-130		
Hexachlorobutadiene	49			ug/l	50.0		97.6	70-130		
2-Heptanone	59			ug/l	50.0		118	70-130		
Isopropylbenzene	46			ug/l	50.0		92.1	70-130		
p-Isopropyltoluene	47			ug/l	50.0		94.4	70-130		
Methylene Chloride	45			ug/l	50.0		89.7	70-130		
4-Methyl-2-pentanone	60			ug/l	50.0		120	70-130		
Naphthalene	48			ug/l	50.0		95.9	70-130		
n-Propylbenzene	46			ug/l	50.0		92.2	70-130		
Styrene	46			ug/l	50.0		91.2	70-130		
1,1,1,2-Tetrachloroethane	46			ug/l	50.0		92.8	70-130		
Tetrachloroethene	48			ug/l	50.0		95.9	70-130		
Tetrahydrofuran	54			ug/l	50.0		109	70-130		
Toluene	47			ug/l	50.0		94.7	70-130		
1,2,4-Trichlorobenzene	51			ug/l	50.0		102	70-130		
1,2,3-Trichlorobenzene	48			ug/l	50.0		96.7	70-130		
1,1,2-Trichloroethane	49			ug/l	50.0		97.4	70-130		
1,1,1-Trichloroethane	43			ug/l	50.0		85.1	70-130		
Trichloroethene	41			ug/l	50.0		81.3	70-130		
1,2,3-Trichloropropane	45			ug/l	50.0		90.9	70-130		
1,3,5-Trimethylbenzene	46			ug/l	50.0		91.7	70-130		
1,2,4-Trimethylbenzene	46			ug/l	50.0		92.9	70-130		
Vinyl Chloride	41			ug/l	50.0		82.2	70-130		
o-Xylene	48			ug/l	50.0		95.7	70-130		
m,p-Xylene	91			ug/l	100		90.8	70-130		
1,1,1,2-Tetrachloroethane	49			ug/l	50.0		98.9	70-130		
tert-Amyl methyl ether	56			ug/l	50.0		113	70-130		
1,3-Dichloropropane	50			ug/l	50.0		99.5	70-130		
Ethyl tert-butyl ether	55			ug/l	50.0		111	70-130		
Diisopropyl ether	56			ug/l	50.0		111	70-130		
Trichlorofluoromethane	48			ug/l	50.0		97.0	70-130		
Dichlorodifluoromethane	27			ug/l	50.0		53.3	70-130		
<hr/>										
Surrogate: 4-Bromofluorobenzene			47.8	ug/l	50.0		95.6	70-130		
Surrogate: 1,2-Dichloroethane-d4			50.5	ug/l	50.0		101	70-130		
Surrogate: Toluene-d8			52.1	ug/l	50.0		104	70-130		

**Quality Control**  
(Continued)

**Volatile Organic Compounds (Continued)**

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch: B2L0550 - Purge-Trap (Continued)</b>										
<b>LCS Dup (B2L0550-BSD1)</b>					Prepared & Analyzed: 12/12/22					
Acetone	55			ug/l	50.0		110	70-130	1.53	200
Benzene	43			ug/l	50.0		86.9	70-130	2.64	200
Bromobenzene	47			ug/l	50.0		94.2	70-130	0.106	200
Bromochloromethane	45			ug/l	50.0		90.6	70-130	1.08	200
Bromodichloromethane	45			ug/l	50.0		89.2	70-130	2.26	200
Bromoform	48			ug/l	50.0		95.6	70-130	3.36	200
Bromomethane	39			ug/l	50.0		77.3	70-130	15.6	200
2-Butanone	52			ug/l	50.0		104	70-130	4.05	200
tert-Butyl alcohol	56			ug/l	50.0		113	70-130	5.99	200
sec-Butylbenzene	49			ug/l	50.0		98.2	70-130	3.04	200
n-Butylbenzene	50			ug/l	50.0		100	70-130	2.91	200
tert-Butylbenzene	49			ug/l	50.0		97.1	70-130	4.79	200
Methyl t-butyl ether (MTBE)	52			ug/l	50.0		103	70-130	0.561	200
Carbon Disulfide	40			ug/l	50.0		80.2	70-130	3.94	200
Carbon Tetrachloride	43			ug/l	50.0		85.4	70-130	7.76	200
Chlorobenzene	46			ug/l	50.0		91.5	70-130	2.21	200
Chloroethane	44			ug/l	50.0		88.9	70-130	5.64	200
Chloroform	43			ug/l	50.0		85.4	70-130	0.700	200
Chloromethane	36			ug/l	50.0		71.7	70-130	9.00	200
4-Chlorotoluene	47			ug/l	50.0		93.4	70-130	3.93	200
2-Chlorotoluene	47			ug/l	50.0		93.4	70-130	3.93	200
1,2-Dibromo-3-chloropropane (DBCP)	50			ug/l	50.0		99.8	70-130	7.62	200
Dibromochloromethane	48			ug/l	50.0		95.6	70-130	3.37	200
1,2-Dibromoethane (EDB)	48			ug/l	50.0		96.2	70-130	6.24	200
Dibromomethane	46			ug/l	50.0		91.5	70-130	2.57	200
1,2-Dichlorobenzene	49			ug/l	50.0		97.6	70-130	2.32	200
1,3-Dichlorobenzene	48			ug/l	50.0		96.3	70-130	4.24	200
1,4-Dichlorobenzene	47			ug/l	50.0		94.4	70-130	0.958	200
1,1-Dichloroethane	41			ug/l	50.0		81.6	70-130	1.36	200
1,2-Dichloroethane	43			ug/l	50.0		85.7	70-130	6.06	200
trans-1,2-Dichloroethene	40			ug/l	50.0		80.4	70-130	10.3	200
cis-1,2-Dichloroethene	41			ug/l	50.0		81.3	70-130	10.4	200
1,1-Dichloroethene	37			ug/l	50.0		74.9	70-130	7.58	200
1,2-Dichloropropane	45			ug/l	50.0		89.9	70-130	6.23	200
2,2-Dichloropropane	43			ug/l	50.0		85.4	70-130	7.76	200
cis-1,3-Dichloropropene	46			ug/l	50.0		91.6	70-130	6.08	200
trans-1,3-Dichloropropene	46			ug/l	50.0		91.4	70-130	5.78	200
1,1-Dichloropropene	42			ug/l	50.0		83.4	70-130	6.38	200
Diethyl ether	46			ug/l	50.0		91.1	70-130	8.85	200
1,4-Dioxane	296			ug/l	250		118	70-130	1.97	200
Ethylbenzene	46			ug/l	50.0		92.3	70-130	1.46	200
Hexachlorobutadiene	48			ug/l	50.0		96.4	70-130	1.18	200
2-Hexanone	62			ug/l	50.0		123	70-130	4.29	200
Isopropylbenzene	47			ug/l	50.0		94.8	70-130	2.95	200
p-Isopropyltoluene	49			ug/l	50.0		98.2	70-130	3.99	200
Methylene Chloride	44			ug/l	50.0		88.1	70-130	1.87	200
4-Methyl-2-pentanone	58			ug/l	50.0		117	70-130	2.50	200
Naphthalene	51			ug/l	50.0		103	70-130	6.85	200
n-Propylbenzene	48			ug/l	50.0		95.6	70-130	3.62	200
Styrene	47			ug/l	50.0		94.7	70-130	3.74	200
1,1,1,2-Tetrachloroethane	48			ug/l	50.0		96.4	70-130	3.78	200
Tetrachloroethene	44			ug/l	50.0		87.4	70-130	9.30	200
Tetrahydrofuran	54			ug/l	50.0		109	70-130	0.147	200
Toluene	46			ug/l	50.0		91.1	70-130	3.83	200
1,2,4-Trichlorobenzene	51			ug/l	50.0		102	70-130	0.197	200
1,2,3-Trichlorobenzene	50			ug/l	50.0		100	70-130	3.87	200
1,1,2-Trichloroethane	45			ug/l	50.0		89.8	70-130	2.44	200

**Quality Control**  
(Continued)

**Volatile Organic Compounds (Continued)**

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch: B2L0550 - Purge-Trap (Continued)</b>										
<b>LCS Dup (B2L0550-BSD1)</b>					Prepared & Analyzed: 12/12/22					
1,1,1-Trichloroethane	42			ug/l	50.0		83.6	70-130	1.73	200
Trichloroethene	43			ug/l	50.0		85.2	70-130	4.66	200
1,2,3-Trichloropropane	48			ug/l	50.0		95.2	70-130	4.64	200
1,3,5-Trimethylbenzene	47			ug/l	50.0		93.9	70-130	2.28	200
1,2,4-Trimethylbenzene	48			ug/l	50.0		96.7	70-130	4.01	200
Vinyl Chloride	40			ug/l	50.0		80.2	70-130	2.51	200
o-Xylene	48			ug/l	50.0		97.0	70-130	1.35	200
m,p-Xylene	93			ug/l	100		93.3	70-130	2.75	200
1,1,2,2-Tetrachloroethane	50			ug/l	50.0		101	70-130	1.60	200
tert-Butyl methyl ether	54			ug/l	50.0		108	70-130	4.58	200
1,3-Dichloropropane	46			ug/l	50.0		92.0	70-130	7.85	200
Ethyl tert-butyl ether	54			ug/l	50.0		107	70-130	3.30	200
Diisopropyl ether	54			ug/l	50.0		107	70-130	3.59	200
Trichlorofluoromethane	45			ug/l	50.0		90.0	70-130	7.42	200
Dichlorodifluoromethane	26			ug/l	50.0		52.6	70-130	1.44	200
<hr/>										
Surrogate: 4-bromofluorobenzene			50.3	ug/l	50.0		101	70-130		
Surrogate: 1,2-Dichloroethane-d4			43.8	ug/l	50.0		87.7	70-130		
Surrogate: Toluene-d8			48.9	ug/l	50.0		97.8	70-130		

**Quality Control  
(Continued)**

**Total Petroleum Hydrocarbons**

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch: B210218 - EPA 3546</b>										
Blank (B210218-BLK1) <span style="float:right">Prepared: 12/06/22 Analyzed: 12/07/22</span>										
Total Petroleum Hydrocarbons	ND		26	mg/kg						
Surrogate: Chlorooctadecane			5.82	mg/kg	8.12		71.6	50-130		
<b>LCS (B210218-BS1)</b> <span style="float:right">Prepared: 12/06/22 Analyzed: 12/07/22</span>										
Total Petroleum Hydrocarbons	347		26	mg/kg	632		54.9	44.7-125		
Surrogate: Chlorooctadecane			5.95	mg/kg	7.90		75.5	50-130		
<b>LCS Dup (B210218-BSD1)</b> <span style="float:right">Prepared: 12/06/22 Analyzed: 12/07/22</span>										
Total Petroleum Hydrocarbons	368		27	mg/kg	661		55.6	44.7-125	5.87	200
Surrogate: Chlorooctadecane			6.14	mg/kg	8.27		74.2	50-130		

\_\_\_\_\_

## Notes and Definitions

<b>Item</b>	<b>Definition</b>
Wet	Sample results reported on a wet weight basis.
ND	Analyte NOT DETECTED at or above the reporting limit.

