



Sevenson Environmental Services  
2749 Lockport Road  
Niagara Falls, NY 14305  
Phone 716.284.0431  
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May 22, 2023

Mr. Mark Krening  
Waste Management, Inc.  
7227 N.E. 55th Avenue  
Portland, OR 97218

**Re:** NW Natural Source Control Groundwater Treatment Facility – Siltronic Pretreatment Plant Purge Water and Decontamination Tank (T-103. #15) Residuals.

Dear Mr. Krening:

On behalf of NW Natural, Sevenson Environmental Services, Inc. (SES) has prepared the attached waste disposal package for Waste Management, Inc. review and acceptance. This profile package, inclusive of analytical testing results, is for the disposal of residual materials consisting of sands, silts, oily solids, and other media that have settled out from contaminated groundwater or sampling decontamination water from site cleanup activities. These solids accumulate within the Purge Water and Decontamination Tank (T-103) that is a plumbed component to the Siltronic Pretreatment Plant.

The Siltronic Pre-Treatment Facility is designed to remove spent trichloroethene (TCE) and its degradation products from the contaminated groundwater before it is plumbed to the Main Groundwater Treatment Plant for the NW Natural Gasco site for processing. Spent TCE and its degradation products are considered by the Oregon DEQ to be RCRA F002 listed hazardous waste constituents. Other contamination within the water discharged to this tank includes Manufactured Gas Plant (MGP)-derived constituents (e.g., petroleum constituents).

Based on the treatment of the spent TCE and its degradation products within the Siltronic Pre-Treatment Facility, the solids within this Purge Water and Decontamination Tank (T-103) are considered to be residues from the treatment of an F002 RCRA listed waste at the time of tank cleanout.

NW Natural is presumptively managing the spent carbon media from the Siltronic Pretreatment Plant as RCRA F002-listed hazardous waste. NW Natural understands the “derived-from” rule to require presumptive management of these residuals as RCRA F002-listed hazardous waste.

Sample data are attached to the profile from testing of the solid material accumulated within the water discharge box (T-103) located at Siltronic pretreatment plant. The sample of material within this box was submitted to Apex Laboratories, LLC on March 17, 2023 for analysis of: free liquids, total metals, leachable metals (toxicity characteristic leaching procedure-TCLP), total petroleum hydrocarbons (TPH), total cyanide, total volatile organic compounds (VOCs) and TCLP VOCs, and semi-volatile organic compounds (SVOCs).

Attached please find the profile for this waste stream (Profile OR344464). Also attached please find the Apex Laboratory analytical report (A3C0669) dated April 4, 2023 documenting the chemistry of the residual treatment materials, and Table 1, a summary of those testing results. The April 2023 analytical results confirm that the residuals in the drop box conform to the description included within previously approved profile OR344464, LDR Form, and Constituents Form.

As indicated on the laboratory testing and as described in the attached profile (OR344464), it is requested that Waste Management Inc. approve disposal of these contaminated treatment residuals as F002 hazardous waste at the Chemical Waste Management (CWM) RCRA Subtitle C permitted landfill in Arlington, Oregon. NW Natural anticipates the generation of similar quantities of accumulated residuals on a frequency of approximately three times per year. Prior to arranging for disposal of future accumulations of residuals from the Purge Water and Decontamination Tank (T-103) under Profile OR34464, sampling and characterization will be completed identical to that described herein in order to confirm the residuals match the profile in-place at that time. These data will be provided for Waste Management's information and use prior to disposal.

In response to the EZ Profile Addendum #D.7, requesting documentation regarding the State-mandated cleanup, NW Natural's Voluntary Agreement with DEQ, no. WMCVC-NWR-94-13, dated August 8, 1994, as amended July 19, 2006 has been previously provided to Waste Management.

Please contact me if you have any questions.

Thank You,



William Byrd  
Sevenson Environmental Services

Cc: Robert Wyatt (NW Natural), Kathryn Williams (NW Natural), Patty Dost (Pearl Legal Group), Ryan Barth (Anchor QEA), Rob Ede (Hahn and Associates), Tim Stone (Anchor QEA), Jen Mott (Anchor QEA), Mike Crystal (Sevenson Environmental Services), Joe Burke (Sevenson Environmental Services), Wesley Thomas (ODEQ), Terence Driscoll (Aponowich, Driscoll & Associates, Inc.)

Enclosures:

Table 1— Purge Water and Decontamination Tank (T-103) #15  
Waste Management Disposal Profile # OR344464  
OR344464 Approval

Apex Laboratory Report #A3C0669

# Table 1: Purge Water Tank T-103

Sample ID					
LAB ID		T103B-031723-15			
		EPA Toxicity Characteristic (TC) Regulatory Threshold Values		A3C0669-01	
		20x EPA TC values in ug/kg*	Actual EPA TC values in ug/L	Results	Qualifier
Diesel (ug/kg dry)				3,150,000	F-17
Oil (ug/kg dry)				1,520,000	J, F-17
Gasoline Range Organics (ug/kg dry)				331,000	
<b>Volatile Organic Compounds by EPA 8260D</b>				<b>ug/kg dry</b>	
Acetone				<699	
Benzene	10,000	500		<b>15.4</b>	
Bromobenzene				<16.7	
Bromochloromethane				<33.5	
Bromodichloromethane				<33.5	
Bromoform				<66.9	
Bromomethane				<669	
2-Butanone (MEK)	4,000,000	200,000		<335	
n-Butylbenzene				<b>49.5</b>	J
sec-Butylbenzene				<33.5	
tert-Butylbenzene				<33.5	
Carbon tetrachloride	10,000	500		<33.5	
Chlorobenzene	2,000,000	100,000		<16.7	
Chloroethane				<335	
Chloroform	120,000	6,000		<33.5	
Chloromethane				<167	
2-Chlorotoluene				<33.5	
4-Chlorotoluene				<33.5	
Dibromochloromethane				<66.9	
1,2-Dibromo-3-chloropropane				<167	
1,2-Dibromoethane (EDB)				<33.5	
Dibromomethane				<33.5	
1,2-Dichlorobenzene				<b>30.1</b>	J
1,3-Dichlorobenzene				<16.7	
1,4-Dichlorobenzene	150,000	7,500		<16.7	
Dichlorodifluoromethane				<66.9	
1,1-Dichloroethane				<16.7	
1,2-Dichloroethane (EDC)	10,000	500		<16.7	
1,1-Dichloroethene	14,000	700		<16.7	
cis-1,2-Dichloroethene				<16.7	
trans-1,2-Dichloroethene				<16.7	
1,2-Dichloropropane				<16.7	
1,3-Dichloropropane				<33.5	
2,2-Dichloropropane				<33.5	
1,1-Dichloropropene				<33.5	
cis-1,3-Dichloropropene				<33.5	
trans-1,3-Dichloropropene				<33.5	
Ethylbenzene				<b>593</b>	
Hexachlorobutadiene	10,000	500		<66.9	
2-Hexanone				<335	
Isopropylbenzene				<b>135</b>	

## Table 1: Purge Water Tank T-103

4-Isopropyltoluene			<b>116</b>	<b>M-02</b>
Methylene chloride			<335	
4-Methyl-2-pentanone (MiBK)			<335	
Methyl tert-butyl ether (MTBE)			<33.5	
Naphthalene			<b>130,000</b>	
n-Propylbenzene			<b>71.6</b>	
Styrene			<33.5	
1,1,1,2-Tetrachloroethane			<16.7	
1,1,2,2-Tetrachloroethane			<33.5	
Tetrachloroethene (PCE)	14,000	700	<16.7	
Toluene			<33.5	
1,2,3-Trichlorobenzene			<167	
1,2,4-Trichlorobenzene			<167	
1,1,1-Trichloroethane			<16.7	
1,1,2-Trichloroethane			<16.7	
Trichloroethene (TCE)	10,000	500	<16.7	
Trichlorofluoromethane			<66.9	
1,2,3-Trichloropropane			<33.5	
1,2,4-Trimethylbenzene			<b>1130</b>	
1,3,5-Trimethylbenzene			<b>390</b>	
Vinyl chloride	4,000	200	<16.7	
m,p-Xylene			<b>475</b>	
o-Xylene			<b>270</b>	
<b>TCLP Volatile Organic Compounds by EPA1311/8260D</b>				
			<b>ug/L</b>	
Acetone			<500	
Benzene	10,000	500	<6.25	
Bromobenzene			<12.5	
Bromochloromethane			<25.0	
Bromodichloromethane			<25.0	
Bromoform			<25.0	
Bromomethane			<250	
2-Butanone (MEK)	4,000,000	200,000	<250	
n-Butylbenzene			<25.0	
sec-Butylbenzene			<25.0	
tert-Butylbenzene			<25.0	
Carbon tetrachloride	10,000	500	<25.0	
Chlorobenzene	2,000,000	100,000	<12.5	
Chloroethane			<250	
Chloroform	120,000	6,000	<25.0	
Chloromethane			<125	
2-Chlorotoluene			<25.0	
4-Chlorotoluene			<25.0	
1,2-Dibromo-3-chloropropane			<125	
Dibromochloromethane			<25.0	
1,2-Dibromoethane (EDB)			<12.5	
Dibromomethane			<25.0	
1,2-Dichlorobenzene			<12.5	
1,3-Dichlorobenzene			<12.5	
1,4-Dichlorobenzene	150,000	7,500	<12.5	
Dichlorodifluoromethane			<25.0	
1,1-Dichloroethane			<12.5	
1,1-Dichloroethene	14,000	700	<12.5	

## Table 1: Purge Water Tank T-103

1,2-Dichloroethane (EDC)	10,000	500	<12.5	
cis-1,2-Dichloroethene			<25.0	
trans-1,2-Dichloroethene			<12.5	
1,2-Dichloropropane			<12.5	
1,3-Dichloropropane			<25.0	
2,2-Dichloropropane			<25.0	
1,1-Dichloropropene			<25.0	
cis-1,3-Dichloropropene			<25.0	
trans-1,3-Dichloropropene			<25.0	
Ethylbenzene			<b>16.5</b>	<b>J</b>
Hexachlorobutaldiene	10,000	500	<125	
2-Hexanone			<250	
Isopropylbenzene			<25.0	
4-Isopropyltoluene			<25.0	
4-Methyl-2-pentanone (MIBK)			<250	
Methyl tert-butyl ether (MTBE)			<25.0	
Methylene chloride			<250	
n-Propylbenzene			<12.5	
Styrene			<25.0	
1,1,1,2-Tetrachloroethane			<12.5	
1,1,2,2-Tetrachloroethane			<12.5	
Naphthalene			<b>2610</b>	<b>Q-54n</b>
Tetrachloroethene (PCE)	14,000	700	<12.5	
Toluene			<25.0	
1,2,3-Trichlorobenzene			<25.0	
1,2,4-Trichlorobenzene			<50.0	
1,1,1-Trichloroethane			<12.5	
1,1,2-Trichloroethane			<12.5	
Trichloroethene (TCE)	10,000	500	<12.5	
Trichlorofluoromethane			<50.0	
1,2,3-Trichloropropane			<25.0	
1,2,4-Trimethylbenzene			<25.0	
1,3,5-Trimethylbenzene			<25.0	
Vinyl chloride	4,000	200	<12.5	
m,p-Xylene			<25.0	
o-Xylene			<12.5	

Semivolatile Organic Compounds by EPA 8270E			ug/kg dry	
Acenaphthene			<b>78,800</b>	<b>Q-42</b>
Acenaphthylene			<5470	R-02
Anthracene			<b>60300</b>	<b>Q-42</b>
Benz(a)anthracene			<b>33600</b>	<b>Q-42</b>
Benzo(a)pyrene			<b>36200</b>	<b>Q-42</b>
Benzo(b)fluoranthene			<b>27900</b>	<b>Q-42</b>
Benzo(k)fluoranthene			<b>10900</b>	<b>M-05, Q-42</b>
Benzo(g,h,i)perylene			<b>26,800</b>	<b>Q-42</b>
Chrysene			<b>41,200</b>	<b>Q-42</b>
Dibenz(a,h)anthracene			<b>2850</b>	<b>J, Q-37, Q-42</b>
Fluoranthene			<b>132,000</b>	<b>Q-42</b>
Fluorene			<b>47,000</b>	<b>Q-42</b>
Indeno(1,2,3-cd)pyrene			<b>21900</b>	<b>Q-42</b>
1-Methlnaphthalene			<b>42,100</b>	<b>Q-42</b>
2-Methlnaphthalene			<b>70,700</b>	<b>Q-42</b>

## Table 1: Purge Water Tank T-103

Naphthalene			100,000	Q-42
Phenanthrene			248,000	Q-42
Pyrene			150,000	Q-42
Carbazole			4820	J, Q-37, Q-42
Dibenzofuran			6,810	Q-42
2-Chlorophenol			<8110	
4-Chloro-3-methylphenol			<16200	
2,4-Dichlorophenol			<8110	
2,4-Dimethylphenol			<8110	
2,4-Dinitrophenol			<40500	
4,6-Dinitro-2-methylphenol			<40500	
2-Methylphenol	4,000,000	200,000	<4050	
3+4-Methylphenol(s)			<4050	
2-Nitrophenol			<16200	
4-Nitrophenol			<32500	
Pentachlorophenol(PCP)	2,000,000	100,000	<16200	
Phenol			<3250	
2,3,4,6-Tetrachlorophenol			<8110	
2,3,5,6-Tetrachlorophenol			<8110	
2,4,5-Trichlorophenol	8,000,000	400,000	<8110	
2,4,6-Trichlorophenol	40,000	2,000	<8110	
Bis(2-ethylhexyl)phthalate			<24300	
Butyl benzyl phthalate			<16200	
Diethylphthalate			<16200	
Dimethylphthalate			<16200	
Di-n-butylphthalate			<16200	
Di-n-octyl phthalate			<16200	
N-Nitrosodimethylamine			<4050	
N-Nitroso-di-n-propylamine			<4050	
N-Nitrosodiphenylamine			<4050	
Bis(2-Chloroethoxy) methane			<4050	
Bis(2-Chloroethyl) ether			<4050	
2,2'- Oxybis (1-Chloropropane)			<4050	
Hexachlorobenzene	2,600	130	<1620	
Hexachlorobutadiene	10,000	500	<4050	
Hexachlorocyclopentadiene			<8110	
Hexachloroethane	60,000	3,000	<4050	
2-Chloronaphthalene			<1620	
1,2,4-Trichlorobenzene			<4050	
4-Bromophenyl phenyl ether			<4050	
4-Chlorophenyl phenyl ether			<4050	
Aniline			<8110	
4-Chloroaniline			<4050	
2-Nitroaniline			<32500	
3-Nitroaniline			<32500	
4-Nitroaniline			<32500	
Nitrobenzene	40,000	2,000	<16200	
2,4-Dinitrotoluene	2,600	130	<16200	
2,6-Dinitrotoluene			<16200	
Benzoic acid			<203000	
Benzyl alcohol			<8110	
Isophorone			<4050	
Azobenzene (1,2-DPH)			<4050	

## Table 1: Purge Water Tank T-103

Bis(2-Ethylhexyl)adipate			<40500	
3,3'-Dichlorobenzidine			<32500	Q-52
1,2-Dinitrobenzene			<40500	
1,3-Dinitrobenzene			<40500	
1,4-Dinitrobenzene			<40500	
Pyridine	100,000	5,000	<8110	
1,2-Dichlorobenzene			<4050	
1,3-Dichlorobenzene			<4050	
1,4-Dichlorobenzene	150,000	7,500	<4050	
<b>TCLP Semivolatile Organic Compounds by EPA 8270D (ug/L)</b>			<b>ug/L</b>	
Acenaphthene			<b>266</b>	<b>B-02</b>
Acenaphthylene			<4.00	R-02
Anthracene			<b>33.6</b>	
Benz(a)anthracene			<1.00	
Benzo(a)pyrene			<1.50	
Benzo(b)fluoranthene			<1.50	
Benzo(k)fluoranthene			<1.50	
Benzo(g,h,i)perylene			<1.00	
Chrysene			<1.00	
Dibenz(a,h)anthracene			<1.00	
Fluoranthene			<b>19.4</b>	
Fluorene			<b>110</b>	
Indeno(1,2,3-cd)pyrene			<1.00	
1-Methlnaphthalene			<b>304</b>	<b>B-02</b>
2-Methlnaphthalene			<b>439</b>	<b>B</b>
Naphthalene			<b>1890</b>	
Phenanthrene			<b>197</b>	
Pyrene			<b>18.4</b>	
Carbazole			<b>89.6</b>	
Dibenzofuran			<b>21.0</b>	
2-Chlorophenol			<5.00	
4-Chloro-3-methylphenol			<10.0	
2,4-Dichlorophenol			<5.00	
2,4-Dimethylphenol			<5.00	
2,4-Dinitrophenol			<25.0	
4,6-Dinitro-2-methylphenol			<25.0	
2-Methylphenol	4,000,000	200,000	<2.50	
3+4-Methylphenol(s)			<2.50	
2-Nitrophenol			<10.0	
4-Nitrophenol			<10.0	
Pentachlorophenol(PCP)	2,000,000	100,000	<10.0	
Phenol			<20.0	
2,3,4,6-Tetrachlorophenol			<5.00	
2,3,5,6-Tetrachlorophenol			<5.00	
2,4,5-Trichlorophenol	8,000,000	400,000	<5.00	
2,4,6-Trichlorophenol	40,000	2,000	<5.00	
Bis(2-ethylhexyl)phthalate			<20.0	
Butyl benzyl phtalate			<20.0	
Diethylphthalate			<20.0	
Dimethylphthalate			<20.0	
Di-n-butylphthalate			<20.0	
Di-n-octyl phthalate			<20.0	
N-Nitrosodimethylamine			<2.50	



## Table 1: Purge Water Tank T-103

N-Nitroso-di-n-propylamine			<2.50	
N-Nitrosodiphenylamine			<5.00	
Bis(2-Chloroethoxy) methane			<2.50	
Bis(2-Chloroethyl) ether			<2.50	
2,2'- Oxybis (1-Chloropropane)			<2.50	
Hexachlorobenzene	2,600	130	<1.00	
Hexachlorobutadiene	10,000	500	<2.50	
Hexachlorocyclopentadiene			<5.00	
Hexachloroethane	60,000	3,000	<2.50	
2-Chloronaphthalene			<1.00	
1,2,4-Trichlorobenzene			<0.500	
4-Bromophenyl phenyl ether			<2.50	
4-Chlorophenyl phenyl ether			<2.50	
Aniline			<5.00	
4-Chloroaniline			<2.50	
2-Nitroaniline			<20.0	
3-Nitroaniline			<20.0	
4-Nitroaniline			<20.0	
Nitrobenzene	40,000	2,000	<10.0	
2,4-Dinitrotoluene	2,600	130	<10.0	
2,6-Dinitrotoluene			<10.0	
Benzoic acid			<125	
Benzyl alcohol			<10.0	
Isophorone			<2.50	
Azobenzene (1,2-DPH)			<2.50	
Bis(2-Ethylhexyl)adipate			<25.0	
3,3'-Dichlorobenzidine				
1,2-Dinitrobenzene			<25.0	
1,3-Dinitrobenzene			<25.0	
1,4-Dinitrobenzene			<25.0	
Pyridine	100,000	5,000	<10.0	
1,2-Dichlorobenzene			<2.50	
1,3-Dichlorobenzene			<2.50	
1,4-Dichlorobenzene	150,000	7,500	<2.50	
<b>Total Metals by EPA 6020B(ICPMS)</b>			<b>ug/kg dry</b>	
Arsenic	100,000	5,000	<b>4730</b>	
Barium	2,000,000	100,000	<b>193000</b>	
Cadmium	20,000	1,000	<126	
Chromium	100,000	5,000	<b>24900</b>	
Lead	100,000	5,000	<b>9400</b>	
Mercury	4,000	200	<50.4	
Selenium	20,000	1,000	<630	
Silver	100,000	5,000	<126	
<b>TCLP Metals by EPA 6020B (ICPMS)</b>			<b>ug/L</b>	
Arsenic	100,000	5,000	<50.0	
Barium	2,000,000	100,000	<2500	
Cadmium	20,000	1,000	<50.0	
Chromium	100,000	5,000	<50.0	
Lead	100,000	5,000	<25.0	
Mercury	4,000	200	<3.75	
Selenium	20,000	1,000	<50.0	
Silver	100,000	5,000	<50.0	
<b>Cyanide - Total (Non-Aqueous Water Leach) by EPA 9013M/9014 (ug/kg dry)</b>				

# Table 1: Purge Water Tank T-103

<b>Total Cyanide (ug/kg dry)</b>	<b>620</b>	
<b>Percent Dry Weight by EPA 8000C</b>		
%Solids	<b>81.3</b>	

**NOTES:**

**\*If laboratory results from the totals test reported in ug/kg exceed the "20x TC Threshold" value, then see results of the TCLP test for direct comparison to actual TC regulatory levels reported in ug/L for regulatory status determination.**

B = Analyte detected in an associated blank at a level above the MRL. (See Notes and Conventions below.)

F-24 = The chromatographic pattern does not resemble the fuel standard used for quantitation. The Diesel result represents carbon range C12 to C24, and the Oil result represents >C24 to C40.

ICV-02 = Estimated Result. Initial Calibration Verification (IVC) failed low.

J = Estimated Result. Result is detected below the lowest point of the calibration curve, but above the specified MDL.

M-05= Estimated results. Peak separation for structural isomers is insufficient for accurate quantification

Q-30 = Recovery for Lab Control Spike (LCS) is below the lower control limit. Data may be biased low.

Q-42 = Matrix Spike and/or Duplicate analysis was performed on this sample. % Recovery or RPD for this analyte is outside laboratory control limits.

Q-52 = Due to erratic or low blank spike recoveries results are considered estimated.

R-02 = The Reporting Limit for this analyte has been raised to account for interference from coeluting organic compounds present in the sample.



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street  
Tigard, OR 97223  
503-718-2323  
ORELAP ID: OR100062

Tuesday, April 4, 2023

Chip Byrd  
Sevenson Environmental Services, Inc.  
2749 Lockport Road  
Niagara Falls, NY 14305

RE: A3C0669 - Gasco - Soil Residuals - 111323

Thank you for using Apex Laboratories. We greatly appreciate your business and strive to provide the highest quality services to the environmental industry.

Enclosed are the results of analyses for work order A3C0669, which was received by the laboratory on 3/17/2023 at 12:40:00PM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: [dthomas@apex-labs.com](mailto:dthomas@apex-labs.com), or by phone at 503-718-2323.

Please note: All samples will be disposed of within 30 days of sample receipt, unless prior arrangements have been made.

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Cooler Receipt Information

(See Cooler Receipt Form for details)

Cooler#1	2.0 degC
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This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.

All other deliverables derived from this data, including Electronic Data Deliverables (EDDs), CLP-like forms, client requested summary sheets, and all other products are considered secondary to this report.

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Apex Laboratories

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

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Darwin Thomas, Business Development Director



**ANALYTICAL REPORT**

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street  
Tigard, OR 97223  
503-718-2323  
ORELAP ID: OR100062

<b>Sevenson Environmental Services, Inc.</b> 2749 Lockport Road Niagara Falls, NY 14305	Project: <b>Gasco - Soil Residuals</b> Project Number: <b>111323</b> Project Manager: <b>Chip Byrd</b>	<b>Report ID:</b> <b>A3C0669 - 04 04 23 1606</b>
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**ANALYTICAL REPORT FOR SAMPLES**

**SAMPLE INFORMATION**

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
T103B-031723-15	A3C0669-01	Soil	03/17/23 00:00	03/17/23 12:40

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street  
Tigard, OR 97223  
503-718-2323  
ORELAP ID: OR100062

<b>Sevenson Environmental Services, Inc.</b> 2749 Lockport Road Niagara Falls, NY 14305	Project: <b>Gasco - Soil Residuals</b> Project Number: <b>111323</b> Project Manager: <b>Chip Byrd</b>	<b>Report ID:</b> <b>A3C0669 - 04 04 23 1606</b>
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**ANALYTICAL SAMPLE RESULTS**

**Diesel and/or Oil Hydrocarbons by NWTPH-Dx**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes	
<b>T103B-031723-15 (A3C0669-01)</b>				<b>Matrix: Soil</b>		<b>Batch: 23C1130</b>			
<b>Diesel</b>	<b>3150000</b>	478000	956000	ug/kg dry	40	03/29/23 20:43	NWTPH-Dx	<b>F-17</b>	
<b>Oil</b>	<b>1520000</b>	956000	1910000	ug/kg dry	40	03/29/23 20:43	NWTPH-Dx	<b>J, F-17</b>	
<i>Surrogate: o-Terphenyl (Surr)</i>		<i>Recovery: %</i>		<i>Limits: 50-150 %</i>		<i>40</i>	<i>03/29/23 20:43</i>	<i>NWTPH-Dx</i>	<i>S-01</i>

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**ANALYTICAL SAMPLE RESULTS**

**Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>T103B-031723-15 (A3C0669-01)</b>				<b>Matrix: Soil</b>			<b>Batch: 23C0784</b>	<b>V-15</b>
<b>Gasoline Range Organics</b>	<b>331000</b>	3350	6690	ug/kg dry	50	03/21/23 13:39	NWTPH-Gx (MS)	
<i>Surrogate: 4-Bromofluorobenzene (Sur)</i>			<i>Recovery: 110 %</i>	<i>Limits: 50-150 %</i>	<i>1</i>	<i>03/21/23 13:39</i>	<i>NWTPH-Gx (MS)</i>	
<i>1,4-Difluorobenzene (Sur)</i>			<i>103 %</i>	<i>50-150 %</i>	<i>1</i>	<i>03/21/23 13:39</i>	<i>NWTPH-Gx (MS)</i>	

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**ANALYTICAL SAMPLE RESULTS**

**Volatile Organic Compounds by EPA 8260D**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>T103B-031723-15 (A3C0669-01)</b>				<b>Matrix: Soil</b>		<b>Batch: 23C0784</b>		<b>V-15</b>
Acetone	ND	669	1340	ug/kg dry	50	03/21/23 13:39	5035A/8260D	
<b>Benzene</b>	<b>15.4</b>	6.69	13.4	ug/kg dry	50	03/21/23 13:39	5035A/8260D	
Bromobenzene	ND	16.7	33.5	ug/kg dry	50	03/21/23 13:39	5035A/8260D	
Bromochloromethane	ND	33.5	66.9	ug/kg dry	50	03/21/23 13:39	5035A/8260D	
Bromodichloromethane	ND	33.5	66.9	ug/kg dry	50	03/21/23 13:39	5035A/8260D	
Bromoform	ND	66.9	134	ug/kg dry	50	03/21/23 13:39	5035A/8260D	
Bromomethane	ND	669	669	ug/kg dry	50	03/21/23 13:39	5035A/8260D	
2-Butanone (MEK)	ND	335	669	ug/kg dry	50	03/21/23 13:39	5035A/8260D	
<b>n-Butylbenzene</b>	<b>49.5</b>	33.5	66.9	ug/kg dry	50	03/21/23 13:39	5035A/8260D	<b>J</b>
sec-Butylbenzene	ND	33.5	66.9	ug/kg dry	50	03/21/23 13:39	5035A/8260D	
tert-Butylbenzene	ND	33.5	66.9	ug/kg dry	50	03/21/23 13:39	5035A/8260D	
Carbon tetrachloride	ND	33.5	66.9	ug/kg dry	50	03/21/23 13:39	5035A/8260D	
Chlorobenzene	ND	16.7	33.5	ug/kg dry	50	03/21/23 13:39	5035A/8260D	
Chloroethane	ND	335	669	ug/kg dry	50	03/21/23 13:39	5035A/8260D	
Chloroform	ND	33.5	66.9	ug/kg dry	50	03/21/23 13:39	5035A/8260D	
Chloromethane	ND	167	335	ug/kg dry	50	03/21/23 13:39	5035A/8260D	
2-Chlorotoluene	ND	33.5	66.9	ug/kg dry	50	03/21/23 13:39	5035A/8260D	
4-Chlorotoluene	ND	33.5	66.9	ug/kg dry	50	03/21/23 13:39	5035A/8260D	
Dibromochloromethane	ND	66.9	134	ug/kg dry	50	03/21/23 13:39	5035A/8260D	
1,2-Dibromo-3-chloropropane	ND	167	335	ug/kg dry	50	03/21/23 13:39	5035A/8260D	
1,2-Dibromoethane (EDB)	ND	33.5	66.9	ug/kg dry	50	03/21/23 13:39	5035A/8260D	
Dibromomethane	ND	33.5	66.9	ug/kg dry	50	03/21/23 13:39	5035A/8260D	
<b>1,2-Dichlorobenzene</b>	<b>30.1</b>	16.7	33.5	ug/kg dry	50	03/21/23 13:39	5035A/8260D	<b>J</b>
1,3-Dichlorobenzene	ND	16.7	33.5	ug/kg dry	50	03/21/23 13:39	5035A/8260D	
1,4-Dichlorobenzene	ND	16.7	33.5	ug/kg dry	50	03/21/23 13:39	5035A/8260D	
Dichlorodifluoromethane	ND	66.9	134	ug/kg dry	50	03/21/23 13:39	5035A/8260D	
1,1-Dichloroethane	ND	16.7	33.5	ug/kg dry	50	03/21/23 13:39	5035A/8260D	
1,2-Dichloroethane (EDC)	ND	16.7	33.5	ug/kg dry	50	03/21/23 13:39	5035A/8260D	
1,1-Dichloroethene	ND	16.7	33.5	ug/kg dry	50	03/21/23 13:39	5035A/8260D	
cis-1,2-Dichloroethene	ND	16.7	33.5	ug/kg dry	50	03/21/23 13:39	5035A/8260D	
trans-1,2-Dichloroethene	ND	16.7	33.5	ug/kg dry	50	03/21/23 13:39	5035A/8260D	
1,2-Dichloropropane	ND	16.7	33.5	ug/kg dry	50	03/21/23 13:39	5035A/8260D	
1,3-Dichloropropane	ND	33.5	66.9	ug/kg dry	50	03/21/23 13:39	5035A/8260D	

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ANALYTICAL REPORT

**Apex Laboratories, LLC**

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<b>Sevenson Environmental Services, Inc.</b> 2749 Lockport Road Niagara Falls, NY 14305	Project: <b>Gasco - Soil Residuals</b> Project Number: <b>111323</b> Project Manager: <b>Chip Byrd</b>	<b>Report ID:</b> <b>A3C0669 - 04 04 23 1606</b>
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**ANALYTICAL SAMPLE RESULTS**

**Volatile Organic Compounds by EPA 8260D**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>T103B-031723-15 (A3C0669-01)</b>				<b>Matrix: Soil</b>		<b>Batch: 23C0784</b>		<b>V-15</b>
2,2-Dichloropropane	ND	33.5	66.9	ug/kg dry	50	03/21/23 13:39	5035A/8260D	
1,1-Dichloropropene	ND	33.5	66.9	ug/kg dry	50	03/21/23 13:39	5035A/8260D	
cis-1,3-Dichloropropene	ND	33.5	66.9	ug/kg dry	50	03/21/23 13:39	5035A/8260D	
trans-1,3-Dichloropropene	ND	33.5	66.9	ug/kg dry	50	03/21/23 13:39	5035A/8260D	
<b>Ethylbenzene</b>	<b>593</b>	16.7	33.5	ug/kg dry	50	03/21/23 13:39	5035A/8260D	
Hexachlorobutadiene	ND	66.9	134	ug/kg dry	50	03/21/23 13:39	5035A/8260D	
2-Hexanone	ND	335	669	ug/kg dry	50	03/21/23 13:39	5035A/8260D	
<b>Isopropylbenzene</b>	<b>135</b>	33.5	66.9	ug/kg dry	50	03/21/23 13:39	5035A/8260D	
<b>4-Isopropyltoluene</b>	<b>116</b>	33.5	66.9	ug/kg dry	50	03/21/23 13:39	5035A/8260D	<b>M-02</b>
Methylene chloride	ND	335	669	ug/kg dry	50	03/21/23 13:39	5035A/8260D	
4-Methyl-2-pentanone (MiBK)	ND	335	669	ug/kg dry	50	03/21/23 13:39	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	33.5	66.9	ug/kg dry	50	03/21/23 13:39	5035A/8260D	
<b>n-Propylbenzene</b>	<b>71.6</b>	16.7	33.5	ug/kg dry	50	03/21/23 13:39	5035A/8260D	
Styrene	ND	33.5	66.9	ug/kg dry	50	03/21/23 13:39	5035A/8260D	
1,1,1,2-Tetrachloroethane	ND	16.7	33.5	ug/kg dry	50	03/21/23 13:39	5035A/8260D	
1,1,2,2-Tetrachloroethane	ND	33.5	66.9	ug/kg dry	50	03/21/23 13:39	5035A/8260D	
Tetrachloroethene (PCE)	ND	16.7	33.5	ug/kg dry	50	03/21/23 13:39	5035A/8260D	
Toluene	ND	33.5	66.9	ug/kg dry	50	03/21/23 13:39	5035A/8260D	
1,2,3-Trichlorobenzene	ND	167	335	ug/kg dry	50	03/21/23 13:39	5035A/8260D	
1,2,4-Trichlorobenzene	ND	167	335	ug/kg dry	50	03/21/23 13:39	5035A/8260D	
1,1,1-Trichloroethane	ND	16.7	33.5	ug/kg dry	50	03/21/23 13:39	5035A/8260D	
1,1,2-Trichloroethane	ND	16.7	33.5	ug/kg dry	50	03/21/23 13:39	5035A/8260D	
Trichloroethene (TCE)	ND	16.7	33.5	ug/kg dry	50	03/21/23 13:39	5035A/8260D	
Trichlorofluoromethane	ND	66.9	134	ug/kg dry	50	03/21/23 13:39	5035A/8260D	
1,2,3-Trichloropropane	ND	33.5	66.9	ug/kg dry	50	03/21/23 13:39	5035A/8260D	
<b>1,2,4-Trimethylbenzene</b>	<b>1130</b>	33.5	66.9	ug/kg dry	50	03/21/23 13:39	5035A/8260D	
<b>1,3,5-Trimethylbenzene</b>	<b>390</b>	33.5	66.9	ug/kg dry	50	03/21/23 13:39	5035A/8260D	
Vinyl chloride	ND	16.7	33.5	ug/kg dry	50	03/21/23 13:39	5035A/8260D	
<b>m,p-Xylene</b>	<b>475</b>	33.5	66.9	ug/kg dry	50	03/21/23 13:39	5035A/8260D	
<b>o-Xylene</b>	<b>270</b>	16.7	33.5	ug/kg dry	50	03/21/23 13:39	5035A/8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 107 %</i>		<i>Limits: 80-120 %</i>		<i>1</i>	<i>03/21/23 13:39</i>	<i>5035A/8260D</i>
<i>Toluene-d8 (Surr)</i>		<i>94 %</i>		<i>80-120 %</i>		<i>1</i>	<i>03/21/23 13:39</i>	<i>5035A/8260D</i>
<i>4-Bromofluorobenzene (Surr)</i>		<i>98 %</i>		<i>79-120 %</i>		<i>1</i>	<i>03/21/23 13:39</i>	<i>5035A/8260D</i>

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ANALYTICAL REPORT

**Apex Laboratories, LLC**

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503-718-2323  
ORELAP ID: OR100062

<b>Sevenson Environmental Services, Inc.</b> 2749 Lockport Road Niagara Falls, NY 14305	Project: <b>Gasco - Soil Residuals</b> Project Number: <b>111323</b> Project Manager: <b>Chip Byrd</b>	<b>Report ID:</b> <b>A3C0669 - 04 04 23 1606</b>
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**ANALYTICAL SAMPLE RESULTS**

**Volatile Organic Compounds by EPA 8260D**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>T103B-031723-15 (A3C0669-01RE1)</b>				<b>Matrix: Soil</b>		<b>Batch: 23C0846</b>		<b>V-15</b>
<b>Naphthalene</b>	<b>130000</b>	1340	2680	ug/kg dry	1000	03/22/23 14:40	5035A/8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 107 %</i>		<i>Limits: 80-120 %</i>		<i>1</i>	<i>03/22/23 14:40</i>	<i>5035A/8260D</i>
<i>Toluene-d8 (Surr)</i>		<i>99 %</i>		<i>80-120 %</i>		<i>1</i>	<i>03/22/23 14:40</i>	<i>5035A/8260D</i>
<i>4-Bromofluorobenzene (Surr)</i>		<i>97 %</i>		<i>79-120 %</i>		<i>1</i>	<i>03/22/23 14:40</i>	<i>5035A/8260D</i>

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**ANALYTICAL SAMPLE RESULTS**

**TCLP Volatile Organic Compounds by EPA 1311/8260D**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>T103B-031723-15 (A3C0669-01)</b>				<b>Matrix: Soil</b>		<b>Batch: 23C1160</b>		
Acetone	ND	500	1000	ug/L	50	03/29/23 17:15	1311/8260D	
Benzene	ND	6.25	12.5	ug/L	50	03/29/23 17:15	1311/8260D	
Bromobenzene	ND	12.5	25.0	ug/L	50	03/29/23 17:15	1311/8260D	
Bromochloromethane	ND	25.0	50.0	ug/L	50	03/29/23 17:15	1311/8260D	
Bromodichloromethane	ND	25.0	50.0	ug/L	50	03/29/23 17:15	1311/8260D	
Bromoform	ND	25.0	50.0	ug/L	50	03/29/23 17:15	1311/8260D	
Bromomethane	ND	250	250	ug/L	50	03/29/23 17:15	1311/8260D	
2-Butanone (MEK)	ND	250	500	ug/L	50	03/29/23 17:15	1311/8260D	
n-Butylbenzene	ND	25.0	50.0	ug/L	50	03/29/23 17:15	1311/8260D	
sec-Butylbenzene	ND	25.0	50.0	ug/L	50	03/29/23 17:15	1311/8260D	
tert-Butylbenzene	ND	25.0	50.0	ug/L	50	03/29/23 17:15	1311/8260D	
Carbon tetrachloride	ND	25.0	50.0	ug/L	50	03/29/23 17:15	1311/8260D	
Chlorobenzene	ND	12.5	25.0	ug/L	50	03/29/23 17:15	1311/8260D	
Chloroethane	ND	250	250	ug/L	50	03/29/23 17:15	1311/8260D	
Chloroform	ND	25.0	50.0	ug/L	50	03/29/23 17:15	1311/8260D	
Chloromethane	ND	125	250	ug/L	50	03/29/23 17:15	1311/8260D	
2-Chlorotoluene	ND	25.0	50.0	ug/L	50	03/29/23 17:15	1311/8260D	
4-Chlorotoluene	ND	25.0	50.0	ug/L	50	03/29/23 17:15	1311/8260D	
1,2-Dibromo-3-chloropropane	ND	125	250	ug/L	50	03/29/23 17:15	1311/8260D	
Dibromochloromethane	ND	25.0	50.0	ug/L	50	03/29/23 17:15	1311/8260D	
1,2-Dibromoethane (EDB)	ND	12.5	25.0	ug/L	50	03/29/23 17:15	1311/8260D	
Dibromomethane	ND	25.0	50.0	ug/L	50	03/29/23 17:15	1311/8260D	
1,2-Dichlorobenzene	ND	12.5	25.0	ug/L	50	03/29/23 17:15	1311/8260D	
1,3-Dichlorobenzene	ND	12.5	25.0	ug/L	50	03/29/23 17:15	1311/8260D	
1,4-Dichlorobenzene	ND	12.5	25.0	ug/L	50	03/29/23 17:15	1311/8260D	
Dichlorodifluoromethane	ND	25.0	50.0	ug/L	50	03/29/23 17:15	1311/8260D	
1,1-Dichloroethane	ND	12.5	25.0	ug/L	50	03/29/23 17:15	1311/8260D	
1,1-Dichloroethene	ND	12.5	25.0	ug/L	50	03/29/23 17:15	1311/8260D	
1,2-Dichloroethane (EDC)	ND	12.5	25.0	ug/L	50	03/29/23 17:15	1311/8260D	
cis-1,2-Dichloroethene	ND	25.0	50.0	ug/L	50	03/29/23 17:15	1311/8260D	
trans-1,2-Dichloroethene	ND	12.5	25.0	ug/L	50	03/29/23 17:15	1311/8260D	
1,2-Dichloropropane	ND	12.5	25.0	ug/L	50	03/29/23 17:15	1311/8260D	
1,3-Dichloropropane	ND	25.0	50.0	ug/L	50	03/29/23 17:15	1311/8260D	

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<b>Sevenson Environmental Services, Inc.</b> 2749 Lockport Road Niagara Falls, NY 14305	Project: <b>Gasco - Soil Residuals</b> Project Number: <b>111323</b> Project Manager: <b>Chip Byrd</b>	<b>Report ID:</b> <b>A3C0669 - 04 04 23 1606</b>
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**ANALYTICAL SAMPLE RESULTS**

**TCLP Volatile Organic Compounds by EPA 1311/8260D**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>T103B-031723-15 (A3C0669-01)</b>				<b>Matrix: Soil</b>		<b>Batch: 23C1160</b>		
2,2-Dichloropropane	ND	25.0	50.0	ug/L	50	03/29/23 17:15	1311/8260D	
1,1-Dichloropropene	ND	25.0	50.0	ug/L	50	03/29/23 17:15	1311/8260D	
cis-1,3-Dichloropropene	ND	25.0	50.0	ug/L	50	03/29/23 17:15	1311/8260D	
trans-1,3-Dichloropropene	ND	25.0	50.0	ug/L	50	03/29/23 17:15	1311/8260D	
<b>Ethylbenzene</b>	<b>16.5</b>	12.5	25.0	ug/L	50	03/29/23 17:15	1311/8260D	<b>J</b>
Hexachlorobutadiene	ND	125	250	ug/L	50	03/29/23 17:15	1311/8260D	
2-Hexanone	ND	250	500	ug/L	50	03/29/23 17:15	1311/8260D	
Isopropylbenzene	ND	25.0	50.0	ug/L	50	03/29/23 17:15	1311/8260D	
4-Isopropyltoluene	ND	25.0	50.0	ug/L	50	03/29/23 17:15	1311/8260D	
4-Methyl-2-pentanone (MIBK)	ND	250	500	ug/L	50	03/29/23 17:15	1311/8260D	
Methyl tert-butyl ether (MTBE)	ND	25.0	50.0	ug/L	50	03/29/23 17:15	1311/8260D	
Methylene chloride	ND	250	500	ug/L	50	03/29/23 17:15	1311/8260D	
n-Propylbenzene	ND	12.5	25.0	ug/L	50	03/29/23 17:15	1311/8260D	
Styrene	ND	25.0	50.0	ug/L	50	03/29/23 17:15	1311/8260D	
1,1,1,2-Tetrachloroethane	ND	12.5	25.0	ug/L	50	03/29/23 17:15	1311/8260D	
1,1,2,2-Tetrachloroethane	ND	12.5	25.0	ug/L	50	03/29/23 17:15	1311/8260D	
<b>Naphthalene</b>	<b>2610</b>	100	100	ug/L	50	03/29/23 17:15	1311/8260D	<b>Q-54n</b>
Tetrachloroethene (PCE)	ND	12.5	25.0	ug/L	50	03/29/23 17:15	1311/8260D	
Toluene	ND	25.0	50.0	ug/L	50	03/29/23 17:15	1311/8260D	
1,2,3-Trichlorobenzene	ND	25.0	50.0	ug/L	50	03/29/23 17:15	1311/8260D	
1,2,4-Trichlorobenzene	ND	50.0	100	ug/L	50	03/29/23 17:15	1311/8260D	
1,1,1-Trichloroethane	ND	12.5	25.0	ug/L	50	03/29/23 17:15	1311/8260D	
1,1,2-Trichloroethane	ND	12.5	25.0	ug/L	50	03/29/23 17:15	1311/8260D	
Trichloroethene (TCE)	ND	12.5	25.0	ug/L	50	03/29/23 17:15	1311/8260D	
Trichlorofluoromethane	ND	50.0	100	ug/L	50	03/29/23 17:15	1311/8260D	
1,2,3-Trichloropropane	ND	25.0	50.0	ug/L	50	03/29/23 17:15	1311/8260D	
1,2,4-Trimethylbenzene	ND	25.0	50.0	ug/L	50	03/29/23 17:15	1311/8260D	
1,3,5-Trimethylbenzene	ND	25.0	50.0	ug/L	50	03/29/23 17:15	1311/8260D	
Vinyl chloride	ND	12.5	25.0	ug/L	50	03/29/23 17:15	1311/8260D	
m,p-Xylene	ND	25.0	50.0	ug/L	50	03/29/23 17:15	1311/8260D	
o-Xylene	ND	12.5	25.0	ug/L	50	03/29/23 17:15	1311/8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 98 %</i>		<i>Limits: 80-120 %</i>		<i>1</i>	<i>03/29/23 17:15</i>	<i>1311/8260D</i>
<i>Toluene-d8 (Surr)</i>		<i>102 %</i>		<i>80-120 %</i>		<i>1</i>	<i>03/29/23 17:15</i>	<i>1311/8260D</i>

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ORELAP ID: OR100062

<b>Sevenson Environmental Services, Inc.</b> 2749 Lockport Road Niagara Falls, NY 14305	Project: <b>Gasco - Soil Residuals</b> Project Number: <b>111323</b> Project Manager: <b>Chip Byrd</b>	<b>Report ID:</b> <b>A3C0669 - 04 04 23 1606</b>
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**ANALYTICAL SAMPLE RESULTS**

**TCLP Volatile Organic Compounds by EPA 1311/8260D**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>T103B-031723-15 (A3C0669-01)</b>				<b>Matrix: Soil</b>		<b>Batch: 23C1160</b>		
<i>Surrogate: 4-Bromofluorobenzene (Surr)</i>			<i>Recovery: 97 %</i>	<i>Limits: 80-120 %</i>	<i>1</i>	<i>03/29/23 17:15</i>	<i>1311/8260D</i>	

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Darwin Thomas, Business Development Director



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**ANALYTICAL SAMPLE RESULTS**

**Semivolatile Organic Compounds by EPA 8270E**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>T103B-031723-15 (A3C0669-01)</b>				<b>Matrix: Soil</b>		<b>Batch: 23C1150</b>		
Acenaphthene	78800	1620	3250	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	Q-42
Acenaphthylene	ND	5470	5470	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	R-02
Anthracene	60300	1620	3250	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	Q-42
Benz(a)anthracene	33600	1620	3250	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	Q-42
Benzo(a)pyrene	36200	2430	4870	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	Q-42
Benzo(b)fluoranthene	27900	2430	4870	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	Q-42
Benzo(k)fluoranthene	10900	2430	4870	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	M-05, Q-42
Benzo(g,h,i)perylene	26800	1620	3250	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	Q-42
Chrysene	41200	1620	3250	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	Q-42
Dibenz(a,h)anthracene	2850	1620	3250	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	J, Q-37, Q-42
Fluoranthene	132000	1620	3250	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	Q-42
Fluorene	47000	1620	3250	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	Q-42
Indeno(1,2,3-cd)pyrene	21900	1620	3250	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	Q-42
1-Methylnaphthalene	42100	3250	6480	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	Q-42
2-Methylnaphthalene	70700	3250	6480	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	Q-42
Naphthalene	100000	3250	6480	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	Q-42
Phenanthrene	248000	1620	3250	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	Q-42
Pyrene	150000	1620	3250	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	Q-42
Carbazole	4820	2430	4870	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	J, Q-37, Q-42
Dibenzofuran	6810	1620	3250	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	Q-42
2-Chlorophenol	ND	8110	16200	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	
4-Chloro-3-methylphenol	ND	16200	32500	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	
2,4-Dichlorophenol	ND	8110	16200	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	
2,4-Dimethylphenol	ND	8110	16200	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	
2,4-Dinitrophenol	ND	40500	81100	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	
4,6-Dinitro-2-methylphenol	ND	40500	81100	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	
2-Methylphenol	ND	4050	8110	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	
3+4-Methylphenol(s)	ND	4050	8110	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	
2-Nitrophenol	ND	16200	32500	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	
4-Nitrophenol	ND	32500	32500	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	
Pentachlorophenol (PCP)	ND	16200	32500	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	
Phenol	ND	3250	6480	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	

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Darwin Thomas, Business Development Director



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<b>Sevenson Environmental Services, Inc.</b> 2749 Lockport Road Niagara Falls, NY 14305	Project: <b>Gasco - Soil Residuals</b> Project Number: <b>111323</b> Project Manager: <b>Chip Byrd</b>	<b>Report ID:</b> <b>A3C0669 - 04 04 23 1606</b>
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**ANALYTICAL SAMPLE RESULTS**

**Semivolatile Organic Compounds by EPA 8270E**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>T103B-031723-15 (A3C0669-01)</b>				<b>Matrix: Soil</b>		<b>Batch: 23C1150</b>		
2,3,4,6-Tetrachlorophenol	ND	8110	16200	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	
2,3,5,6-Tetrachlorophenol	ND	8110	16200	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	
2,4,5-Trichlorophenol	ND	8110	16200	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	
2,4,6-Trichlorophenol	ND	8110	16200	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	
Bis(2-ethylhexyl)phthalate	ND	24300	48700	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	
Butyl benzyl phthalate	ND	16200	32500	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	
Diethylphthalate	ND	16200	32500	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	
Dimethylphthalate	ND	16200	32500	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	
Di-n-butylphthalate	ND	16200	32500	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	
Di-n-octyl phthalate	ND	16200	32500	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	
N-Nitrosodimethylamine	ND	4050	8110	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	
N-Nitroso-di-n-propylamine	ND	4050	8110	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	
N-Nitrosodiphenylamine	ND	4050	8110	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	
Bis(2-Chloroethoxy) methane	ND	4050	8110	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	
Bis(2-Chloroethyl) ether	ND	4050	8110	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	
2,2'-Oxybis(1-Chloropropane)	ND	4050	8110	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	
Hexachlorobenzene	ND	1620	3250	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	
Hexachlorobutadiene	ND	4050	8110	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	
Hexachlorocyclopentadiene	ND	8110	16200	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	
Hexachloroethane	ND	4050	8110	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	
2-Chloronaphthalene	ND	1620	3250	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	
1,2,4-Trichlorobenzene	ND	4050	8110	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	
4-Bromophenyl phenyl ether	ND	4050	8110	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	
4-Chlorophenyl phenyl ether	ND	4050	8110	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	
Aniline	ND	8110	16200	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	
4-Chloroaniline	ND	4050	8110	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	
2-Nitroaniline	ND	32500	64800	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	
3-Nitroaniline	ND	32500	64800	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	
4-Nitroaniline	ND	32500	64800	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	
Nitrobenzene	ND	16200	32500	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	
2,4-Dinitrotoluene	ND	16200	32500	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	
2,6-Dinitrotoluene	ND	16200	32500	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	
Benzoic acid	ND	203000	405000	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	

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**ANALYTICAL SAMPLE RESULTS**

**Semivolatile Organic Compounds by EPA 8270E**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes	
<b>T103B-031723-15 (A3C0669-01)</b>				<b>Matrix: Soil</b>		<b>Batch: 23C1150</b>			
Benzyl alcohol	ND	8110	16200	ug/kg dry	1000	03/29/23 17:11	EPA 8270E		
Isophorone	ND	4050	8110	ug/kg dry	1000	03/29/23 17:11	EPA 8270E		
Azobenzene (1,2-DPH)	ND	4050	8110	ug/kg dry	1000	03/29/23 17:11	EPA 8270E		
Bis(2-Ethylhexyl) adipate	ND	40500	81100	ug/kg dry	1000	03/29/23 17:11	EPA 8270E		
3,3'-Dichlorobenzidine	ND	32500	64800	ug/kg dry	1000	03/29/23 17:11	EPA 8270E	Q-52	
1,2-Dinitrobenzene	ND	40500	81100	ug/kg dry	1000	03/29/23 17:11	EPA 8270E		
1,3-Dinitrobenzene	ND	40500	81100	ug/kg dry	1000	03/29/23 17:11	EPA 8270E		
1,4-Dinitrobenzene	ND	40500	81100	ug/kg dry	1000	03/29/23 17:11	EPA 8270E		
Pyridine	ND	8110	16200	ug/kg dry	1000	03/29/23 17:11	EPA 8270E		
1,2-Dichlorobenzene	ND	4050	8110	ug/kg dry	1000	03/29/23 17:11	EPA 8270E		
1,3-Dichlorobenzene	ND	4050	8110	ug/kg dry	1000	03/29/23 17:11	EPA 8270E		
1,4-Dichlorobenzene	ND	4050	8110	ug/kg dry	1000	03/29/23 17:11	EPA 8270E		
<i>Surrogate: Nitrobenzene-d5 (Surr)</i>		<i>Recovery: 38 %</i>		<i>Limits: 37-122 %</i>		<i>1000</i>	<i>03/29/23 17:11</i>	<i>EPA 8270E</i>	<i>S-05</i>
<i>2-Fluorobiphenyl (Surr)</i>		<i>70 %</i>		<i>44-120 %</i>		<i>1000</i>	<i>03/29/23 17:11</i>	<i>EPA 8270E</i>	<i>S-05</i>
<i>Phenol-d6 (Surr)</i>		<i>%</i>		<i>33-122 %</i>		<i>1000</i>	<i>03/29/23 17:11</i>	<i>EPA 8270E</i>	<i>S-01</i>
<i>p-Terphenyl-d14 (Surr)</i>		<i>74 %</i>		<i>54-127 %</i>		<i>1000</i>	<i>03/29/23 17:11</i>	<i>EPA 8270E</i>	<i>S-05</i>
<i>2-Fluorophenol (Surr)</i>		<i>191 %</i>		<i>35-120 %</i>		<i>1000</i>	<i>03/29/23 17:11</i>	<i>EPA 8270E</i>	<i>S-05</i>
<i>2,4,6-Tribromophenol (Surr)</i>		<i>%</i>		<i>39-132 %</i>		<i>1000</i>	<i>03/29/23 17:11</i>	<i>EPA 8270E</i>	<i>S-01</i>

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**ANALYTICAL SAMPLE RESULTS**

**TCLP Semivolatile Organic Compounds by EPA 1311/8270E**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes	
<b>T103B-031723-15 (A3C0669-01)</b>				<b>Matrix: Soil</b>			<b>Batch: 23C0864</b>		
<b>Naphthalene</b>	<b>1890</b>	10.0	20.0	ug/L	50	03/23/23 14:50	1311/8270E-LL	<b>B</b>	
<b>T103B-031723-15 (A3C0669-01RE1)</b>				<b>Matrix: Soil</b>			<b>Batch: 23C0864</b>		
<b>Acenaphthene</b>	<b>266</b>	1.00	2.00	ug/L	10	03/23/23 16:51	1311/8270E-LL	<b>B-02</b>	
Acenaphthylene	ND	4.00	4.00	ug/L	10	03/23/23 16:51	1311/8270E-LL	R-02	
<b>Anthracene</b>	<b>33.6</b>	1.00	2.00	ug/L	10	03/23/23 16:51	1311/8270E-LL		
Benz(a)anthracene	ND	1.00	2.00	ug/L	10	03/23/23 16:51	1311/8270E-LL		
Benzo(a)pyrene	ND	1.50	3.00	ug/L	10	03/23/23 16:51	1311/8270E-LL		
Benzo(b)fluoranthene	ND	1.50	3.00	ug/L	10	03/23/23 16:51	1311/8270E-LL		
Benzo(k)fluoranthene	ND	1.50	3.00	ug/L	10	03/23/23 16:51	1311/8270E-LL		
Benzo(g,h,i)perylene	ND	1.00	2.00	ug/L	10	03/23/23 16:51	1311/8270E-LL		
Chrysene	ND	1.00	2.00	ug/L	10	03/23/23 16:51	1311/8270E-LL		
Dibenz(a,h)anthracene	ND	1.00	2.00	ug/L	10	03/23/23 16:51	1311/8270E-LL		
<b>Fluoranthene</b>	<b>19.4</b>	1.00	2.00	ug/L	10	03/23/23 16:51	1311/8270E-LL		
<b>Fluorene</b>	<b>110</b>	1.00	2.00	ug/L	10	03/23/23 16:51	1311/8270E-LL		
Indeno(1,2,3-cd)pyrene	ND	1.00	2.00	ug/L	10	03/23/23 16:51	1311/8270E-LL		
<b>1-Methylnaphthalene</b>	<b>304</b>	2.00	4.00	ug/L	10	03/23/23 16:51	1311/8270E-LL	<b>B-02</b>	
<b>2-Methylnaphthalene</b>	<b>439</b>	2.00	4.00	ug/L	10	03/23/23 16:51	1311/8270E-LL	<b>B</b>	
<b>Phenanthrene</b>	<b>197</b>	1.00	2.00	ug/L	10	03/23/23 16:51	1311/8270E-LL		
<b>Pyrene</b>	<b>18.4</b>	1.00	2.00	ug/L	10	03/23/23 16:51	1311/8270E-LL		
<b>Carbazole</b>	<b>89.6</b>	1.50	3.00	ug/L	10	03/23/23 16:51	1311/8270E-LL		
<b>Dibenzofuran</b>	<b>21.0</b>	1.00	2.00	ug/L	10	03/23/23 16:51	1311/8270E-LL		
2-Chlorophenol	ND	5.00	10.0	ug/L	10	03/23/23 16:51	1311/8270E-LL		
4-Chloro-3-methylphenol	ND	10.0	20.0	ug/L	10	03/23/23 16:51	1311/8270E-LL		
2,4-Dichlorophenol	ND	5.00	10.0	ug/L	10	03/23/23 16:51	1311/8270E-LL		
2,4-Dimethylphenol	ND	5.00	10.0	ug/L	10	03/23/23 16:51	1311/8270E-LL		
2,4-Dinitrophenol	ND	25.0	50.0	ug/L	10	03/23/23 16:51	1311/8270E-LL		
4,6-Dinitro-2-methylphenol	ND	25.0	50.0	ug/L	10	03/23/23 16:51	1311/8270E-LL		
2-Methylphenol	ND	2.50	5.00	ug/L	10	03/23/23 16:51	1311/8270E-LL		
3+4-Methylphenol(s)	ND	2.50	5.00	ug/L	10	03/23/23 16:51	1311/8270E-LL		
2-Nitrophenol	ND	10.0	20.0	ug/L	10	03/23/23 16:51	1311/8270E-LL		
4-Nitrophenol	ND	10.0	20.0	ug/L	10	03/23/23 16:51	1311/8270E-LL		
Pentachlorophenol (PCP)	ND	10.0	20.0	ug/L	10	03/23/23 16:51	1311/8270E-LL		

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ORELAP ID: OR100062

<b>Sevenson Environmental Services, Inc.</b> 2749 Lockport Road Niagara Falls, NY 14305	Project: <b>Gasco - Soil Residuals</b> Project Number: <b>111323</b> Project Manager: <b>Chip Byrd</b>	<b>Report ID:</b> <b>A3C0669 - 04 04 23 1606</b>
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**ANALYTICAL SAMPLE RESULTS**

**TCLP Semivolatile Organic Compounds by EPA 1311/8270E**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>T103B-031723-15 (A3C0669-01RE1)</b>				<b>Matrix: Soil</b>		<b>Batch: 23C0864</b>		
Phenol	ND	20.0	40.0	ug/L	10	03/23/23 16:51	1311/8270E-LL	
2,3,4,6-Tetrachlorophenol	ND	5.00	10.0	ug/L	10	03/23/23 16:51	1311/8270E-LL	
2,3,5,6-Tetrachlorophenol	ND	5.00	10.0	ug/L	10	03/23/23 16:51	1311/8270E-LL	
2,4,5-Trichlorophenol	ND	5.00	10.0	ug/L	10	03/23/23 16:51	1311/8270E-LL	
2,4,6-Trichlorophenol	ND	5.00	10.0	ug/L	10	03/23/23 16:51	1311/8270E-LL	
Bis(2-ethylhexyl)phthalate	ND	20.0	40.0	ug/L	10	03/23/23 16:51	1311/8270E-LL	
Butyl benzyl phthalate	ND	20.0	40.0	ug/L	10	03/23/23 16:51	1311/8270E-LL	
Diethylphthalate	ND	20.0	40.0	ug/L	10	03/23/23 16:51	1311/8270E-LL	
Dimethylphthalate	ND	20.0	40.0	ug/L	10	03/23/23 16:51	1311/8270E-LL	
Di-n-butylphthalate	ND	20.0	40.0	ug/L	10	03/23/23 16:51	1311/8270E-LL	
Di-n-octyl phthalate	ND	20.0	40.0	ug/L	10	03/23/23 16:51	1311/8270E-LL	
N-Nitrosodimethylamine	ND	2.50	5.00	ug/L	10	03/23/23 16:51	1311/8270E-LL	
N-Nitroso-di-n-propylamine	ND	2.50	5.00	ug/L	10	03/23/23 16:51	1311/8270E-LL	
N-Nitrosodiphenylamine	ND	5.00	5.00	ug/L	10	03/23/23 16:51	1311/8270E-LL	
Bis(2-Chloroethoxy) methane	ND	2.50	5.00	ug/L	10	03/23/23 16:51	1311/8270E-LL	
Bis(2-Chloroethyl) ether	ND	2.50	5.00	ug/L	10	03/23/23 16:51	1311/8270E-LL	
2,2'-Oxybis(1-Chloropropane)	ND	2.50	5.00	ug/L	10	03/23/23 16:51	1311/8270E-LL	
Hexachlorobenzene	ND	1.00	2.00	ug/L	10	03/23/23 16:51	1311/8270E-LL	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	10	03/23/23 16:51	1311/8270E-LL	
Hexachlorocyclopentadiene	ND	5.00	10.0	ug/L	10	03/23/23 16:51	1311/8270E-LL	
Hexachloroethane	ND	2.50	5.00	ug/L	10	03/23/23 16:51	1311/8270E-LL	
2-Chloronaphthalene	ND	1.00	2.00	ug/L	10	03/23/23 16:51	1311/8270E-LL	
1,2,4-Trichlorobenzene	ND	0.500	5.00	ug/L	10	03/23/23 16:51	1311/8270E-LL	
4-Bromophenyl phenyl ether	ND	2.50	5.00	ug/L	10	03/23/23 16:51	1311/8270E-LL	
4-Chlorophenyl phenyl ether	ND	2.50	5.00	ug/L	10	03/23/23 16:51	1311/8270E-LL	
Aniline	ND	5.00	10.0	ug/L	10	03/23/23 16:51	1311/8270E-LL	
4-Chloroaniline	ND	2.50	5.00	ug/L	10	03/23/23 16:51	1311/8270E-LL	
2-Nitroaniline	ND	20.0	40.0	ug/L	10	03/23/23 16:51	1311/8270E-LL	
3-Nitroaniline	ND	20.0	40.0	ug/L	10	03/23/23 16:51	1311/8270E-LL	
4-Nitroaniline	ND	20.0	40.0	ug/L	10	03/23/23 16:51	1311/8270E-LL	
Nitrobenzene	ND	10.0	20.0	ug/L	10	03/23/23 16:51	1311/8270E-LL	
2,4-Dinitrotoluene	ND	10.0	20.0	ug/L	10	03/23/23 16:51	1311/8270E-LL	
2,6-Dinitrotoluene	ND	10.0	20.0	ug/L	10	03/23/23 16:51	1311/8270E-LL	

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ORELAP ID: OR100062

<b>Sevenson Environmental Services, Inc.</b> 2749 Lockport Road Niagara Falls, NY 14305	Project: <b>Gasco - Soil Residuals</b> Project Number: <b>111323</b> Project Manager: <b>Chip Byrd</b>	<b>Report ID:</b> <b>A3C0669 - 04 04 23 1606</b>
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**ANALYTICAL SAMPLE RESULTS**

**TCLP Semivolatile Organic Compounds by EPA 1311/8270E**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>T103B-031723-15 (A3C0669-01RE1)</b>			<b>Matrix: Soil</b>		<b>Batch: 23C0864</b>			
Benzoic acid	ND	125	250	ug/L	10	03/23/23 16:51	1311/8270E-LL	
Benzyl alcohol	ND	10.0	20.0	ug/L	10	03/23/23 16:51	1311/8270E-LL	
Isophorone	ND	2.50	5.00	ug/L	10	03/23/23 16:51	1311/8270E-LL	
Azobenzene (1,2-DPH)	ND	2.50	5.00	ug/L	10	03/23/23 16:51	1311/8270E-LL	
Bis(2-Ethylhexyl) adipate	ND	25.0	50.0	ug/L	10	03/23/23 16:51	1311/8270E-LL	
1,2-Dinitrobenzene	ND	25.0	50.0	ug/L	10	03/23/23 16:51	1311/8270E-LL	
1,3-Dinitrobenzene	ND	25.0	50.0	ug/L	10	03/23/23 16:51	1311/8270E-LL	
1,4-Dinitrobenzene	ND	25.0	50.0	ug/L	10	03/23/23 16:51	1311/8270E-LL	
Pyridine	ND	10.0	20.0	ug/L	10	03/23/23 16:51	1311/8270E-LL	
1,2-Dichlorobenzene	ND	2.50	5.00	ug/L	10	03/23/23 16:51	1311/8270E-LL	
1,3-Dichlorobenzene	ND	2.50	5.00	ug/L	10	03/23/23 16:51	1311/8270E-LL	
1,4-Dichlorobenzene	ND	2.50	5.00	ug/L	10	03/23/23 16:51	1311/8270E-LL	
<i>Surrogate: Nitrobenzene-d5 (Surr)</i>		<i>Recovery: 73 %</i>		<i>Limits: 44-120 %</i>		<i>10</i>	<i>03/23/23 16:51</i>	<i>1311/8270E-LL</i>
<i>2-Fluorobiphenyl (Surr)</i>		<i>82 %</i>		<i>44-120 %</i>		<i>10</i>	<i>03/23/23 16:51</i>	<i>1311/8270E-LL</i>
<i>Phenol-d6 (Surr)</i>		<i>20 %</i>		<i>10-133 %</i>		<i>10</i>	<i>03/23/23 16:51</i>	<i>1311/8270E-LL</i>
<i>p-Terphenyl-d14 (Surr)</i>		<i>98 %</i>		<i>50-134 %</i>		<i>10</i>	<i>03/23/23 16:51</i>	<i>1311/8270E-LL</i>
<i>2-Fluorophenol (Surr)</i>		<i>42 %</i>		<i>19-120 %</i>		<i>10</i>	<i>03/23/23 16:51</i>	<i>1311/8270E-LL</i>
<i>2,4,6-Tribromophenol (Surr)</i>		<i>88 %</i>		<i>43-140 %</i>		<i>10</i>	<i>03/23/23 16:51</i>	<i>1311/8270E-LL</i>

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<b>Sevenson Environmental Services, Inc.</b> 2749 Lockport Road Niagara Falls, NY 14305	Project: <b>Gasco - Soil Residuals</b> Project Number: <b>111323</b> Project Manager: <b>Chip Byrd</b>	<b>Report ID:</b> <b>A3C0669 - 04 04 23 1606</b>
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**ANALYTICAL SAMPLE RESULTS**

**Total Metals by EPA 6020B (ICPMS)**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>T103B-031723-15 (A3C0669-01)</b>				<b>Matrix: Soil</b>				
Batch: 23C0841								
<b>Arsenic</b>	<b>4730</b>	630	1260	ug/kg dry	10	03/22/23 21:53	EPA 6020B	
<b>Barium</b>	<b>193000</b>	630	1260	ug/kg dry	10	03/22/23 21:53	EPA 6020B	
Cadmium	ND	126	252	ug/kg dry	10	03/22/23 21:53	EPA 6020B	
<b>Chromium</b>	<b>24900</b>	630	1260	ug/kg dry	10	03/22/23 21:53	EPA 6020B	
<b>Lead</b>	<b>9400</b>	126	252	ug/kg dry	10	03/22/23 21:53	EPA 6020B	
Mercury	ND	50.4	101	ug/kg dry	10	03/22/23 21:53	EPA 6020B	
Selenium	ND	630	1260	ug/kg dry	10	03/22/23 21:53	EPA 6020B	
Silver	ND	126	252	ug/kg dry	10	03/22/23 21:53	EPA 6020B	

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**ANALYTICAL SAMPLE RESULTS**

**TCLP Metals by EPA 6020B (ICPMS)**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes	
<b>T103B-031723-15 (A3C0669-01)</b>				<b>Matrix: Soil</b>					
<u>Batch: 23C0832</u>									
Arsenic	ND	50.0	100	ug/L	10	03/21/23 22:48	1311/6020B		
Barium	ND	2500	5000	ug/L	10	03/21/23 22:48	1311/6020B		
Cadmium	ND	50.0	100	ug/L	10	03/21/23 22:48	1311/6020B		
Chromium	ND	50.0	100	ug/L	10	03/21/23 22:48	1311/6020B		
Selenium	ND	50.0	100	ug/L	10	03/21/23 22:48	1311/6020B		
<b>T103B-031723-15 (A3C0669-01RE1)</b>				<b>Matrix: Soil</b>					
<u>Batch: 23C0832</u>									
Lead	ND	25.0	50.0	ug/L	10	03/22/23 15:20	1311/6020B		
Mercury	ND	3.75	7.00	ug/L	10	03/22/23 15:20	1311/6020B		
Silver	ND	50.0	100	ug/L	10	03/22/23 15:20	1311/6020B		

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<u>Sevenson Environmental Services, Inc.</u> 2749 Lockport Road Niagara Falls, NY 14305	Project: <u>Gasco - Soil Residuals</u> Project Number: 111323 Project Manager: Chip Byrd	<b>Report ID:</b> A3C0669 - 04 04 23 1606
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**ANALYTICAL SAMPLE RESULTS**

**Soluble Cyanide by UV Digestion/Gas Diffusion/Amperometric Detection**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>T103B-031723-15 (A3C0669-01RE1)</b>				<b>Matrix: Soil</b>		<b>Batch: 23C0850</b>		
<b>Total Cyanide</b>	<b>620</b>	59.9	120	ug/kg dry	1	03/23/23 11:17	D7511-12	

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<b>Sevenson Environmental Services, Inc.</b> 2749 Lockport Road Niagara Falls, NY 14305	Project: <b>Gasco - Soil Residuals</b> Project Number: <b>111323</b> Project Manager: <b>Chip Byrd</b>	<b>Report ID:</b> <b>A3C0669 - 04 04 23 1606</b>
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**ANALYTICAL SAMPLE RESULTS**

**Percent Dry Weight**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>T103B-031723-15 (A3C0669-01)</b>				<b>Matrix: Soil</b>		<b>Batch: 23C0750</b>		
<b>% Solids</b>	<b>81.3</b>	1.00	1.00	%	1	03/21/23 06:34	EPA 8000D	

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<b>Sevenson Environmental Services, Inc.</b> 2749 Lockport Road Niagara Falls, NY 14305	Project: <b>Gasco - Soil Residuals</b> Project Number: <b>111323</b> Project Manager: <b>Chip Byrd</b>	<b>Report ID:</b> <b>A3C0669 - 04 04 23 1606</b>
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**ANALYTICAL SAMPLE RESULTS**

**TCLP Extraction by EPA 1311**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>T103B-031723-15 (A3C0669-01)</b>				<b>Matrix: Soil</b>		<b>Batch: 23C0771</b>		
TCLP Extraction	PREP			N/A	1	03/20/23 17:37	EPA 1311	
TCLP Extraction	PREP			N/A	1	03/20/23 17:37	EPA 1311	
TCLP ZHE Extraction	0.00			N/A	1	03/28/23 16:16	EPA 1311 ZHE	

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**QUALITY CONTROL (QC) SAMPLE RESULTS**

**Diesel and/or Oil Hydrocarbons by NWTPH-Dx**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 23C1130 - EPA 3546 (Fuels)</b>						<b>Soil</b>						
<b>Blank (23C1130-BLK1)</b>						Prepared: 03/29/23 05:18 Analyzed: 03/29/23 07:57						
<u>NWTPH-Dx</u>												
Diesel	ND	10000	20000	ug/kg wet	1	---	---	---	---	---	---	
Oil	ND	20000	40000	ug/kg wet	1	---	---	---	---	---	---	
<i>Surr: o-Terphenyl (Surr)</i>		<i>Recovery: 88 %</i>		<i>Limits: 50-150 %</i>		<i>Dilution: 1x</i>						
<b>LCS (23C1130-BS1)</b>						Prepared: 03/29/23 05:18 Analyzed: 03/29/23 08:18						
<u>NWTPH-Dx</u>												
Diesel	111000	10000	20000	ug/kg wet	1	125000	---	89	38-132%	---	---	
<i>Surr: o-Terphenyl (Surr)</i>		<i>Recovery: 99 %</i>		<i>Limits: 50-150 %</i>		<i>Dilution: 1x</i>						
<b>Duplicate (23C1130-DUP1)</b>						Prepared: 03/29/23 05:18 Analyzed: 03/29/23 08:58						
<u>QC Source Sample: Non-SDG (A3C1040-01)</u>												
Diesel	ND	10800	21700	ug/kg dry	1	---	ND	---	---	---	30%	
Oil	ND	21700	43400	ug/kg dry	1	---	ND	---	---	---	30%	
<i>Surr: o-Terphenyl (Surr)</i>		<i>Recovery: 87 %</i>		<i>Limits: 50-150 %</i>		<i>Dilution: 1x</i>						
<b>Duplicate (23C1130-DUP2)</b>						Prepared: 03/29/23 12:28 Analyzed: 03/30/23 01:48						
<u>QC Source Sample: Non-SDG (A3C0970-02)</u>												
Diesel	ND	12700	25300	ug/kg dry	1	---	ND	---	---	---	30%	
Oil	<b>33400</b>	25300	50600	ug/kg dry	1	---	26500	---	---	23	30%	J
<i>Surr: o-Terphenyl (Surr)</i>		<i>Recovery: 68 %</i>		<i>Limits: 50-150 %</i>		<i>Dilution: 1x</i>						

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<b>Sevenson Environmental Services, Inc.</b> 2749 Lockport Road Niagara Falls, NY 14305	Project: <b>Gasco - Soil Residuals</b> Project Number: <b>111323</b> Project Manager: <b>Chip Byrd</b>	<b>Report ID:</b> <b>A3C0669 - 04 04 23 1606</b>
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**QUALITY CONTROL (QC) SAMPLE RESULTS**

**Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 23C0784 - EPA 5035A</b>						<b>Soil</b>						
<b>Blank (23C0784-BLK1)</b>			Prepared: 03/21/23 08:12 Analyzed: 03/21/23 10:40									
<u>NWTPH-Gx (MS)</u>												
Gasoline Range Organics	ND	2500	5000	ug/kg wet	50	---	---	---	---	---	---	
<i>Surr: 4-Bromofluorobenzene (Sur)</i>		<i>Recovery: 101 %</i>		<i>Limits: 50-150 %</i>		<i>Dilution: 1x</i>						
<i>1,4-Difluorobenzene (Sur)</i>		<i>103 %</i>		<i>50-150 %</i>		<i>"</i>						
<b>LCS (23C0784-BS2)</b>						Prepared: 03/21/23 08:12 Analyzed: 03/21/23 10:10						
<u>NWTPH-Gx (MS)</u>												
Gasoline Range Organics	25000	2500	5000	ug/kg wet	50	25000	---	100	80-120%	---	---	
<i>Surr: 4-Bromofluorobenzene (Sur)</i>		<i>Recovery: 99 %</i>		<i>Limits: 50-150 %</i>		<i>Dilution: 1x</i>						
<i>1,4-Difluorobenzene (Sur)</i>		<i>103 %</i>		<i>50-150 %</i>		<i>"</i>						
<b>Duplicate (23C0784-DUP1)</b>						Prepared: 03/17/23 17:20 Analyzed: 03/21/23 13:13						
<u>QC Source Sample: Non-SDG (A3C0674-01)</u>												
Gasoline Range Organics	<b>331000</b>	8390	16800	ug/kg dry	100	---	323000	---	---	2	30%	
<i>Surr: 4-Bromofluorobenzene (Sur)</i>		<i>Recovery: 107 %</i>		<i>Limits: 50-150 %</i>		<i>Dilution: 1x</i>						
<i>1,4-Difluorobenzene (Sur)</i>		<i>103 %</i>		<i>50-150 %</i>		<i>"</i>						

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<b>Sevenson Environmental Services, Inc.</b>	Project: <b>Gasco - Soil Residuals</b>	
2749 Lockport Road	Project Number: <b>111323</b>	<b>Report ID:</b>
Niagara Falls, NY 14305	Project Manager: <b>Chip Byrd</b>	<b>A3C0669 - 04 04 23 1606</b>

**QUALITY CONTROL (QC) SAMPLE RESULTS**

**Volatile Organic Compounds by EPA 8260D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 23C0784 - EPA 5035A</b>						<b>Soil</b>						
<b>Blank (23C0784-BLK1)</b>			Prepared: 03/21/23 08:12 Analyzed: 03/21/23 10:40									
<u>5035A/8260D</u>												
Acetone	ND	500	1000	ug/kg wet	50	---	---	---	---	---	---	
Acrylonitrile	ND	50.0	100	ug/kg wet	50	---	---	---	---	---	---	
Benzene	ND	5.00	10.0	ug/kg wet	50	---	---	---	---	---	---	
Bromobenzene	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
Bromochloromethane	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
Bromodichloromethane	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
Bromoform	ND	50.0	100	ug/kg wet	50	---	---	---	---	---	---	
Bromomethane	ND	500	500	ug/kg wet	50	---	---	---	---	---	---	
2-Butanone (MEK)	ND	250	500	ug/kg wet	50	---	---	---	---	---	---	
n-Butylbenzene	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
sec-Butylbenzene	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
tert-Butylbenzene	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
Carbon disulfide	ND	250	500	ug/kg wet	50	---	---	---	---	---	---	
Carbon tetrachloride	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
Chlorobenzene	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
Chloroethane	ND	250	500	ug/kg wet	50	---	---	---	---	---	---	
Chloroform	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
Chloromethane	ND	125	250	ug/kg wet	50	---	---	---	---	---	---	
2-Chlorotoluene	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
4-Chlorotoluene	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
Dibromochloromethane	ND	50.0	100	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	125	250	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
Dibromomethane	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	50.0	100	ug/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethane	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethene	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street  
Tigard, OR 97223  
503-718-2323  
ORELAP ID: OR100062

<b>Sevenson Environmental Services, Inc.</b>	Project: <b>Gasco - Soil Residuals</b>	
2749 Lockport Road	Project Number: <b>111323</b>	<b>Report ID:</b>
Niagara Falls, NY 14305	Project Manager: <b>Chip Byrd</b>	<b>A3C0669 - 04 04 23 1606</b>

**QUALITY CONTROL (QC) SAMPLE RESULTS**

**Volatile Organic Compounds by EPA 8260D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 23C0784 - EPA 5035A</b>						<b>Soil</b>						
<b>Blank (23C0784-BLK1)</b>			Prepared: 03/21/23 08:12 Analyzed: 03/21/23 10:40									
1,2-Dichloropropane	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
1,3-Dichloropropane	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
2,2-Dichloropropane	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
1,1-Dichloropropene	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
Ethylbenzene	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
Hexachlorobutadiene	ND	50.0	100	ug/kg wet	50	---	---	---	---	---	---	
2-Hexanone	ND	250	500	ug/kg wet	50	---	---	---	---	---	---	
Isopropylbenzene	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
4-Isopropyltoluene	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
Methylene chloride	ND	250	500	ug/kg wet	50	---	---	---	---	---	---	
4-Methyl-2-pentanone (MiBK)	ND	250	500	ug/kg wet	50	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
Naphthalene	ND	50.0	100	ug/kg wet	50	---	---	---	---	---	---	
n-Propylbenzene	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
Styrene	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
Toluene	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
1,2,3-Trichlorobenzene	ND	125	250	ug/kg wet	50	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	125	250	ug/kg wet	50	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
1,1,2-Trichloroethane	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
Trichlorofluoromethane	ND	50.0	100	ug/kg wet	50	---	---	---	---	---	---	
1,2,3-Trichloropropane	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
Vinyl chloride	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
m,p-Xylene	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
o-Xylene	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	

Surr: 1,4-Difluorobenzene (Surr)

Recovery: 106 % Limits: 80-120 %

Dilution: 1x

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**ANALYTICAL REPORT**

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street  
Tigard, OR 97223  
503-718-2323  
ORELAP ID: OR100062

<b>Sevenson Environmental Services, Inc.</b> 2749 Lockport Road Niagara Falls, NY 14305	Project: <b>Gasco - Soil Residuals</b> Project Number: <b>111323</b> Project Manager: <b>Chip Byrd</b>	<b>Report ID:</b> <b>A3C0669 - 04 04 23 1606</b>
---	--	---

**QUALITY CONTROL (QC) SAMPLE RESULTS**

**Volatile Organic Compounds by EPA 8260D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 23C0784 - EPA 5035A</b>						<b>Soil</b>						
<b>Blank (23C0784-BLK1)</b>						Prepared: 03/21/23 08:12 Analyzed: 03/21/23 10:40						
<i>Surr: Toluene-d8 (Surr)</i>		<i>Recovery: 98 %</i>		<i>Limits: 80-120 %</i>		<i>Dilution: 1x</i>						
<i>4-Bromofluorobenzene (Surr)</i>		<i>98 %</i>		<i>79-120 %</i>		<i>"</i>						
<b>LCS (23C0784-BS1)</b>						Prepared: 03/21/23 08:12 Analyzed: 03/21/23 09:44						
<b>5035A/8260D</b>												
Acetone	1820	500	1000	ug/kg wet	50	2000	---	91	80-120%	---	---	
Acrylonitrile	1000	50.0	100	ug/kg wet	50	1000	---	100	80-120%	---	---	
Benzene	1060	5.00	10.0	ug/kg wet	50	1000	---	106	80-120%	---	---	
Bromobenzene	966	12.5	25.0	ug/kg wet	50	1000	---	97	80-120%	---	---	
Bromochloromethane	1080	25.0	50.0	ug/kg wet	50	1000	---	108	80-120%	---	---	
Bromodichloromethane	1140	25.0	50.0	ug/kg wet	50	1000	---	114	80-120%	---	---	
Bromoform	1280	50.0	100	ug/kg wet	50	1000	---	<b>128</b>	<b>80-120%</b>	---	---	Q-56
Bromomethane	1630	500	500	ug/kg wet	50	1000	---	<b>163</b>	<b>80-120%</b>	---	---	Q-56
2-Butanone (MEK)	2020	250	500	ug/kg wet	50	2000	---	101	80-120%	---	---	
n-Butylbenzene	900	25.0	50.0	ug/kg wet	50	1000	---	90	80-120%	---	---	
sec-Butylbenzene	943	25.0	50.0	ug/kg wet	50	1000	---	94	80-120%	---	---	
tert-Butylbenzene	852	25.0	50.0	ug/kg wet	50	1000	---	85	80-120%	---	---	
Carbon disulfide	1000	250	500	ug/kg wet	50	1000	---	100	80-120%	---	---	
Carbon tetrachloride	1240	25.0	50.0	ug/kg wet	50	1000	---	<b>124</b>	<b>80-120%</b>	---	---	Q-56
Chlorobenzene	992	12.5	25.0	ug/kg wet	50	1000	---	99	80-120%	---	---	
Chloroethane	1610	250	500	ug/kg wet	50	1000	---	<b>161</b>	<b>80-120%</b>	---	---	Q-56
Chloroform	1110	25.0	50.0	ug/kg wet	50	1000	---	111	80-120%	---	---	
Chloromethane	952	125	250	ug/kg wet	50	1000	---	95	80-120%	---	---	
2-Chlorotoluene	932	25.0	50.0	ug/kg wet	50	1000	---	93	80-120%	---	---	
4-Chlorotoluene	920	25.0	50.0	ug/kg wet	50	1000	---	92	80-120%	---	---	
Dibromochloromethane	1130	50.0	100	ug/kg wet	50	1000	---	113	80-120%	---	---	
1,2-Dibromo-3-chloropropane	855	125	250	ug/kg wet	50	1000	---	86	80-120%	---	---	
1,2-Dibromoethane (EDB)	980	25.0	50.0	ug/kg wet	50	1000	---	98	80-120%	---	---	
Dibromomethane	1080	25.0	50.0	ug/kg wet	50	1000	---	108	80-120%	---	---	
1,2-Dichlorobenzene	972	12.5	25.0	ug/kg wet	50	1000	---	97	80-120%	---	---	
1,3-Dichlorobenzene	972	12.5	25.0	ug/kg wet	50	1000	---	97	80-120%	---	---	
1,4-Dichlorobenzene	976	12.5	25.0	ug/kg wet	50	1000	---	98	80-120%	---	---	
Dichlorodifluoromethane	1080	50.0	100	ug/kg wet	50	1000	---	108	80-120%	---	---	
1,1-Dichloroethane	1080	12.5	25.0	ug/kg wet	50	1000	---	108	80-120%	---	---	

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Darwin Thomas, Business Development Director



**ANALYTICAL REPORT**

**Apex Laboratories, LLC**

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Tigard, OR 97223  
503-718-2323  
ORELAP ID: OR100062

<b>Sevenson Environmental Services, Inc.</b> 2749 Lockport Road Niagara Falls, NY 14305	Project: <b>Gasco - Soil Residuals</b> Project Number: <b>111323</b> Project Manager: <b>Chip Byrd</b>	<b>Report ID:</b> <b>A3C0669 - 04 04 23 1606</b>
---	--	---

**QUALITY CONTROL (QC) SAMPLE RESULTS**

**Volatile Organic Compounds by EPA 8260D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 23C0784 - EPA 5035A</b>						<b>Soil</b>						
<b>LCS (23C0784-BS1)</b>			Prepared: 03/21/23 08:12 Analyzed: 03/21/23 09:44									
1,2-Dichloroethane (EDC)	1080	12.5	25.0	ug/kg wet	50	1000	---	108	80-120%	---	---	
1,1-Dichloroethene	1110	12.5	25.0	ug/kg wet	50	1000	---	111	80-120%	---	---	
cis-1,2-Dichloroethene	1060	12.5	25.0	ug/kg wet	50	1000	---	106	80-120%	---	---	
trans-1,2-Dichloroethene	1050	12.5	25.0	ug/kg wet	50	1000	---	105	80-120%	---	---	
1,2-Dichloropropane	1060	12.5	25.0	ug/kg wet	50	1000	---	106	80-120%	---	---	
1,3-Dichloropropane	994	25.0	50.0	ug/kg wet	50	1000	---	99	80-120%	---	---	
2,2-Dichloropropane	1080	25.0	50.0	ug/kg wet	50	1000	---	108	80-120%	---	---	
1,1-Dichloropropene	1080	25.0	50.0	ug/kg wet	50	1000	---	108	80-120%	---	---	
cis-1,3-Dichloropropene	986	25.0	50.0	ug/kg wet	50	1000	---	99	80-120%	---	---	
trans-1,3-Dichloropropene	1030	25.0	50.0	ug/kg wet	50	1000	---	103	80-120%	---	---	
Ethylbenzene	962	12.5	25.0	ug/kg wet	50	1000	---	96	80-120%	---	---	
Hexachlorobutadiene	956	50.0	100	ug/kg wet	50	1000	---	96	80-120%	---	---	
2-Hexanone	1610	250	500	ug/kg wet	50	2000	---	81	80-120%	---	---	
Isopropylbenzene	932	25.0	50.0	ug/kg wet	50	1000	---	93	80-120%	---	---	
4-Isopropyltoluene	914	25.0	50.0	ug/kg wet	50	1000	---	91	80-120%	---	---	
Methylene chloride	1100	250	500	ug/kg wet	50	1000	---	110	80-120%	---	---	
4-Methyl-2-pentanone (MiBK)	1630	250	500	ug/kg wet	50	2000	---	82	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	952	25.0	50.0	ug/kg wet	50	1000	---	95	80-120%	---	---	
Naphthalene	851	50.0	100	ug/kg wet	50	1000	---	85	80-120%	---	---	
n-Propylbenzene	960	12.5	25.0	ug/kg wet	50	1000	---	96	80-120%	---	---	
Styrene	859	25.0	50.0	ug/kg wet	50	1000	---	86	80-120%	---	---	
1,1,1,2-Tetrachloroethane	1080	12.5	25.0	ug/kg wet	50	1000	---	108	80-120%	---	---	
1,1,2,2-Tetrachloroethane	911	25.0	50.0	ug/kg wet	50	1000	---	91	80-120%	---	---	
Tetrachloroethene (PCE)	1050	12.5	25.0	ug/kg wet	50	1000	---	105	80-120%	---	---	
Toluene	960	25.0	50.0	ug/kg wet	50	1000	---	96	80-120%	---	---	
1,2,3-Trichlorobenzene	922	125	250	ug/kg wet	50	1000	---	92	80-120%	---	---	
1,2,4-Trichlorobenzene	901	125	250	ug/kg wet	50	1000	---	90	80-120%	---	---	
1,1,1-Trichloroethane	1110	12.5	25.0	ug/kg wet	50	1000	---	111	80-120%	---	---	
1,1,2-Trichloroethane	1000	12.5	25.0	ug/kg wet	50	1000	---	100	80-120%	---	---	
Trichloroethene (TCE)	1160	12.5	25.0	ug/kg wet	50	1000	---	116	80-120%	---	---	
Trichlorofluoromethane	1920	50.0	100	ug/kg wet	50	1000	---	<b>192</b>	<b>80-120%</b>	---	---	Q-56
1,2,3-Trichloropropane	940	25.0	50.0	ug/kg wet	50	1000	---	94	80-120%	---	---	
1,2,4-Trimethylbenzene	929	25.0	50.0	ug/kg wet	50	1000	---	93	80-120%	---	---	
1,3,5-Trimethylbenzene	947	25.0	50.0	ug/kg wet	50	1000	---	95	80-120%	---	---	

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ANALYTICAL REPORT

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<b>Sevenson Environmental Services, Inc.</b> 2749 Lockport Road Niagara Falls, NY 14305	Project: <b>Gasco - Soil Residuals</b> Project Number: <b>111323</b> Project Manager: <b>Chip Byrd</b>	<b>Report ID:</b> <b>A3C0669 - 04 04 23 1606</b>
---	--	---

**QUALITY CONTROL (QC) SAMPLE RESULTS**

**Volatile Organic Compounds by EPA 8260D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 23C0784 - EPA 5035A</b>						<b>Soil</b>						
<b>LCS (23C0784-BS1)</b>						Prepared: 03/21/23 08:12 Analyzed: 03/21/23 09:44						
Vinyl chloride	1190	12.5	25.0	ug/kg wet	50	1000	---	119	80-120%	---	---	
m,p-Xylene	1950	25.0	50.0	ug/kg wet	50	2000	---	98	80-120%	---	---	
o-Xylene	900	12.5	25.0	ug/kg wet	50	1000	---	90	80-120%	---	---	
<i>Surr: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 108 %</i>		<i>Limits: 80-120 %</i>		<i>Dilution: 1x</i>						
<i>Toluene-d8 (Surr)</i>		<i>98 %</i>		<i>80-120 %</i>		<i>"</i>						
<i>4-Bromofluorobenzene (Surr)</i>		<i>94 %</i>		<i>79-120 %</i>		<i>"</i>						

**Duplicate (23C0784-DUP1)** Prepared: 03/17/23 17:20 Analyzed: 03/21/23 13:13 **V-15**

**QC Source Sample: Non-SDG (A3C0674-01)**

Acetone	ND	1680	3360	ug/kg dry	100	---	ND	---	---	---	30%	
Acrylonitrile	ND	168	336	ug/kg dry	100	---	ND	---	---	---	30%	
Benzene	<b>240</b>	16.8	33.6	ug/kg dry	100	---	225	---	---	6	30%	
Bromobenzene	ND	41.9	83.9	ug/kg dry	100	---	ND	---	---	---	30%	
Bromochloromethane	ND	83.9	168	ug/kg dry	100	---	ND	---	---	---	30%	
Bromodichloromethane	ND	83.9	168	ug/kg dry	100	---	ND	---	---	---	30%	
Bromoform	ND	168	336	ug/kg dry	100	---	ND	---	---	---	30%	
Bromomethane	ND	1680	1680	ug/kg dry	100	---	ND	---	---	---	30%	
2-Butanone (MEK)	ND	839	1680	ug/kg dry	100	---	ND	---	---	---	30%	
n-Butylbenzene	<b>95.6</b>	83.9	168	ug/kg dry	100	---	85.6	---	---	11	30%	J
sec-Butylbenzene	<b>126</b>	83.9	168	ug/kg dry	100	---	111	---	---	13	30%	J
tert-Butylbenzene	ND	83.9	168	ug/kg dry	100	---	ND	---	---	---	30%	
Carbon disulfide	ND	839	1680	ug/kg dry	100	---	ND	---	---	---	30%	
Carbon tetrachloride	ND	83.9	168	ug/kg dry	100	---	ND	---	---	---	30%	
Chlorobenzene	ND	41.9	83.9	ug/kg dry	100	---	ND	---	---	---	30%	
Chloroethane	ND	839	1680	ug/kg dry	100	---	ND	---	---	---	30%	
Chloroform	ND	83.9	168	ug/kg dry	100	---	ND	---	---	---	30%	
Chloromethane	ND	419	839	ug/kg dry	100	---	ND	---	---	---	30%	
2-Chlorotoluene	ND	83.9	168	ug/kg dry	100	---	ND	---	---	---	30%	
4-Chlorotoluene	ND	83.9	168	ug/kg dry	100	---	ND	---	---	---	30%	
Dibromochloromethane	ND	168	336	ug/kg dry	100	---	ND	---	---	---	30%	
1,2-Dibromo-3-chloropropane	ND	419	839	ug/kg dry	100	---	ND	---	---	---	30%	
1,2-Dibromoethane (EDB)	ND	83.9	168	ug/kg dry	100	---	ND	---	---	---	30%	
Dibromomethane	ND	83.9	168	ug/kg dry	100	---	ND	---	---	---	30%	
1,2-Dichlorobenzene	ND	41.9	83.9	ug/kg dry	100	---	ND	---	---	---	30%	

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ANALYTICAL REPORT

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<b>Sevenson Environmental Services, Inc.</b> 2749 Lockport Road Niagara Falls, NY 14305	Project: <b>Gasco - Soil Residuals</b> Project Number: <b>111323</b> Project Manager: <b>Chip Byrd</b>	<b>Report ID:</b> <b>A3C0669 - 04 04 23 1606</b>
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**QUALITY CONTROL (QC) SAMPLE RESULTS**

**Volatile Organic Compounds by EPA 8260D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes	
<b>Batch 23C0784 - EPA 5035A</b>						<b>Soil</b>							
<b>Duplicate (23C0784-DUP1)</b>			Prepared: 03/17/23 17:20 Analyzed: 03/21/23 13:13						<b>V-15</b>				
<b>QC Source Sample: Non-SDG (A3C0674-01)</b>													
1,3-Dichlorobenzene	ND	41.9	83.9	ug/kg dry	100	---	ND	---	---	---	30%		
1,4-Dichlorobenzene	ND	41.9	83.9	ug/kg dry	100	---	ND	---	---	---	30%		
Dichlorodifluoromethane	ND	168	336	ug/kg dry	100	---	ND	---	---	---	30%		
1,1-Dichloroethane	ND	41.9	83.9	ug/kg dry	100	---	ND	---	---	---	30%		
1,2-Dichloroethane (EDC)	ND	41.9	83.9	ug/kg dry	100	---	ND	---	---	---	30%		
1,1-Dichloroethene	ND	41.9	83.9	ug/kg dry	100	---	ND	---	---	---	30%		
cis-1,2-Dichloroethene	ND	41.9	83.9	ug/kg dry	100	---	ND	---	---	---	30%		
trans-1,2-Dichloroethene	ND	41.9	83.9	ug/kg dry	100	---	ND	---	---	---	30%		
1,2-Dichloropropane	ND	41.9	83.9	ug/kg dry	100	---	ND	---	---	---	30%		
1,3-Dichloropropane	ND	83.9	168	ug/kg dry	100	---	ND	---	---	---	30%		
2,2-Dichloropropane	ND	83.9	168	ug/kg dry	100	---	ND	---	---	---	30%		
1,1-Dichloropropene	ND	83.9	168	ug/kg dry	100	---	ND	---	---	---	30%		
cis-1,3-Dichloropropene	ND	83.9	168	ug/kg dry	100	---	ND	---	---	---	30%		
trans-1,3-Dichloropropene	ND	83.9	168	ug/kg dry	100	---	ND	---	---	---	30%		
Ethylbenzene	<b>569</b>	41.9	83.9	ug/kg dry	100	---	535	---	---	6	30%		
Hexachlorobutadiene	ND	168	336	ug/kg dry	100	---	ND	---	---	---	30%		
2-Hexanone	ND	839	1680	ug/kg dry	100	---	ND	---	---	---	30%		
Isopropylbenzene	<b>159</b>	83.9	168	ug/kg dry	100	---	141	---	---	12	30%	J	
4-Isopropyltoluene	<b>232</b>	83.9	168	ug/kg dry	100	---	213	---	---	8	30%	M-02	
Methylene chloride	ND	839	1680	ug/kg dry	100	---	ND	---	---	---	30%		
4-Methyl-2-pentanone (MiBK)	ND	839	1680	ug/kg dry	100	---	ND	---	---	---	30%		
Methyl tert-butyl ether (MTBE)	ND	83.9	168	ug/kg dry	100	---	ND	---	---	---	30%		
Naphthalene	<b>73000</b>	168	336	ug/kg dry	100	---	71000	---	---	3	30%	E	
n-Propylbenzene	<b>90.6</b>	41.9	83.9	ug/kg dry	100	---	82.2	---	---	10	30%		
Styrene	ND	83.9	168	ug/kg dry	100	---	ND	---	---	---	30%		
1,1,1,2-Tetrachloroethane	ND	41.9	83.9	ug/kg dry	100	---	ND	---	---	---	30%		
1,1,2,2-Tetrachloroethane	ND	83.9	168	ug/kg dry	100	---	ND	---	---	---	30%		
Tetrachloroethene (PCE)	ND	41.9	83.9	ug/kg dry	100	---	ND	---	---	---	30%		
Toluene	ND	83.9	168	ug/kg dry	100	---	ND	---	---	---	30%		
1,2,3-Trichlorobenzene	ND	419	839	ug/kg dry	100	---	ND	---	---	---	30%		
1,2,4-Trichlorobenzene	ND	419	839	ug/kg dry	100	---	ND	---	---	---	30%		
1,1,1-Trichloroethane	ND	41.9	83.9	ug/kg dry	100	---	ND	---	---	---	30%		
1,1,2-Trichloroethane	ND	41.9	83.9	ug/kg dry	100	---	ND	---	---	---	30%		

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ANALYTICAL REPORT

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street  
Tigard, OR 97223  
503-718-2323  
ORELAP ID: OR100062

<b>Sevenson Environmental Services, Inc.</b> 2749 Lockport Road Niagara Falls, NY 14305	Project: <b>Gasco - Soil Residuals</b> Project Number: <b>111323</b> Project Manager: <b>Chip Byrd</b>	<b>Report ID:</b> <b>A3C0669 - 04 04 23 1606</b>
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**QUALITY CONTROL (QC) SAMPLE RESULTS**

**Volatile Organic Compounds by EPA 8260D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes	
<b>Batch 23C0784 - EPA 5035A</b>						<b>Soil</b>							
<b>Duplicate (23C0784-DUP1)</b>			Prepared: 03/17/23 17:20 Analyzed: 03/21/23 13:13						<b>V-15</b>				
<b>QC Source Sample: Non-SDG (A3C0674-01)</b>													
Trichloroethene (TCE)	ND	41.9	83.9	ug/kg dry	100	---	ND	---	---	---	30%		
Trichlorofluoromethane	ND	168	336	ug/kg dry	100	---	ND	---	---	---	30%		
1,2,3-Trichloropropane	ND	83.9	168	ug/kg dry	100	---	ND	---	---	---	30%		
1,2,4-Trimethylbenzene	<b>1660</b>	83.9	168	ug/kg dry	100	---	1510	---	---	9	30%		
1,3,5-Trimethylbenzene	<b>612</b>	83.9	168	ug/kg dry	100	---	562	---	---	9	30%		
Vinyl chloride	ND	41.9	83.9	ug/kg dry	100	---	ND	---	---	---	30%		
m,p-Xylene	<b>332</b>	83.9	168	ug/kg dry	100	---	297	---	---	11	30%		
o-Xylene	<b>379</b>	41.9	83.9	ug/kg dry	100	---	356	---	---	6	30%		
<i>Surr: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 108 %</i>		<i>Limits: 80-120 %</i>		<i>Dilution: 1x</i>							
<i>Toluene-d8 (Surr)</i>		<i>95 %</i>		<i>80-120 %</i>		<i>"</i>							
<i>4-Bromofluorobenzene (Surr)</i>		<i>99 %</i>		<i>79-120 %</i>		<i>"</i>							

<b>Matrix Spike (23C0784-MS1)</b>						Prepared: 03/17/23 15:20 Analyzed: 03/21/23 14:04						<b>V-15</b>
<b>QC Source Sample: T103B-031723-15 (A3C0669-01)</b>												
<b>5035A/8260D</b>												
Acetone	2350	669	1340	ug/kg dry	50	2680	ND	88	36-164%	---	---	
Acrylonitrile	1340	66.9	134	ug/kg dry	50	1340	ND	100	65-134%	---	---	
Benzene	1540	6.69	13.4	ug/kg dry	50	1340	15.4	114	77-121%	---	---	
Bromobenzene	1370	16.7	33.5	ug/kg dry	50	1340	ND	102	78-121%	---	---	
Bromochloromethane	1380	33.5	66.9	ug/kg dry	50	1340	ND	103	78-125%	---	---	
Bromodichloromethane	1610	33.5	66.9	ug/kg dry	50	1340	ND	121	75-127%	---	---	
Bromoform	1840	66.9	134	ug/kg dry	50	1340	ND	<b>138</b>	<b>67-132%</b>	---	---	Q-54k
Bromomethane	1890	669	669	ug/kg dry	50	1340	ND	141	53-143%	---	---	Q-54f
2-Butanone (MEK)	2730	335	669	ug/kg dry	50	2680	ND	102	51-148%	---	---	
n-Butylbenzene	1500	33.5	66.9	ug/kg dry	50	1340	49.5	109	70-128%	---	---	
sec-Butylbenzene	1430	33.5	66.9	ug/kg dry	50	1340	ND	107	73-126%	---	---	
tert-Butylbenzene	1270	33.5	66.9	ug/kg dry	50	1340	ND	95	73-125%	---	---	
Carbon disulfide	1390	335	669	ug/kg dry	50	1340	ND	104	63-132%	---	---	
Carbon tetrachloride	1820	33.5	66.9	ug/kg dry	50	1340	ND	<b>136</b>	<b>70-135%</b>	---	---	Q-54d
Chlorobenzene	1390	16.7	33.5	ug/kg dry	50	1340	ND	104	79-120%	---	---	
Chloroethane	2140	335	669	ug/kg dry	50	1340	ND	<b>160</b>	<b>59-139%</b>	---	---	Q-54e
Chloroform	1530	33.5	66.9	ug/kg dry	50	1340	ND	114	78-123%	---	---	
Chloromethane	1200	167	335	ug/kg dry	50	1340	ND	90	50-136%	---	---	

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Darwin Thomas, Business Development Director





ANALYTICAL REPORT

**Apex Laboratories, LLC**

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Tigard, OR 97223  
503-718-2323  
ORELAP ID: OR100062

<b>Sevenson Environmental Services, Inc.</b>	Project: <b>Gasco - Soil Residuals</b>	
2749 Lockport Road	Project Number: <b>111323</b>	<b>Report ID:</b>
Niagara Falls, NY 14305	Project Manager: <b>Chip Byrd</b>	<b>A3C0669 - 04 04 23 1606</b>

**QUALITY CONTROL (QC) SAMPLE RESULTS**

**Volatile Organic Compounds by EPA 8260D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 23C0784 - EPA 5035A</b>						<b>Soil</b>						
<b>Matrix Spike (23C0784-MS1)</b>						Prepared: 03/17/23 15:20 Analyzed: 03/21/23 14:04						V-15
<b>QC Source Sample: T103B-031723-15 (A3C0669-01)</b>												
2-Chlorotoluene	1350	33.5	66.9	ug/kg dry	50	1340	ND	101	75-122%	---	---	
4-Chlorotoluene	1290	33.5	66.9	ug/kg dry	50	1340	ND	97	72-124%	---	---	
Dibromochloromethane	1640	66.9	134	ug/kg dry	50	1340	ND	122	74-126%	---	---	
1,2-Dibromo-3-chloropropane	1350	167	335	ug/kg dry	50	1340	ND	101	61-132%	---	---	
1,2-Dibromoethane (EDB)	1360	33.5	66.9	ug/kg dry	50	1340	ND	102	78-122%	---	---	
Dibromomethane	1500	33.5	66.9	ug/kg dry	50	1340	ND	112	78-125%	---	---	
1,2-Dichlorobenzene	1370	16.7	33.5	ug/kg dry	50	1340	30.1	100	78-121%	---	---	
1,3-Dichlorobenzene	1350	16.7	33.5	ug/kg dry	50	1340	ND	101	77-121%	---	---	
1,4-Dichlorobenzene	1350	16.7	33.5	ug/kg dry	50	1340	ND	101	75-120%	---	---	
Dichlorodifluoromethane	1460	66.9	134	ug/kg dry	50	1340	ND	109	29-149%	---	---	
1,1-Dichloroethane	1490	16.7	33.5	ug/kg dry	50	1340	ND	112	76-125%	---	---	
1,2-Dichloroethane (EDC)	1400	16.7	33.5	ug/kg dry	50	1340	ND	105	73-128%	---	---	
1,1-Dichloroethene	1580	16.7	33.5	ug/kg dry	50	1340	ND	118	70-131%	---	---	
cis-1,2-Dichloroethene	1480	16.7	33.5	ug/kg dry	50	1340	ND	110	77-123%	---	---	
trans-1,2-Dichloroethene	1500	16.7	33.5	ug/kg dry	50	1340	ND	112	74-125%	---	---	
1,2-Dichloropropane	1490	16.7	33.5	ug/kg dry	50	1340	ND	111	76-123%	---	---	
1,3-Dichloropropane	1350	33.5	66.9	ug/kg dry	50	1340	ND	101	77-121%	---	---	
2,2-Dichloropropane	1540	33.5	66.9	ug/kg dry	50	1340	ND	115	67-133%	---	---	
1,1-Dichloropropene	1570	33.5	66.9	ug/kg dry	50	1340	ND	118	76-125%	---	---	
cis-1,3-Dichloropropene	1350	33.5	66.9	ug/kg dry	50	1340	ND	101	74-126%	---	---	
trans-1,3-Dichloropropene	1390	33.5	66.9	ug/kg dry	50	1340	ND	104	71-130%	---	---	
Ethylbenzene	1910	16.7	33.5	ug/kg dry	50	1340	593	98	76-122%	---	---	
Hexachlorobutadiene	1650	66.9	134	ug/kg dry	50	1340	ND	124	61-135%	---	---	
2-Hexanone	2260	335	669	ug/kg dry	50	2680	ND	84	53-145%	---	---	
Isopropylbenzene	1520	33.5	66.9	ug/kg dry	50	1340	135	103	68-134%	---	---	
4-Isopropyltoluene	1690	33.5	66.9	ug/kg dry	50	1340	116	118	73-127%	---	---	M-02
Methylene chloride	1490	335	669	ug/kg dry	50	1340	ND	111	70-128%	---	---	
4-Methyl-2-pentanone (MiBK)	2260	335	669	ug/kg dry	50	2680	ND	85	65-135%	---	---	
Methyl tert-butyl ether (MTBE)	1340	33.5	66.9	ug/kg dry	50	1340	ND	100	73-125%	---	---	
Naphthalene	49700	66.9	134	ug/kg dry	50	1340	52600	<b>-217</b>	<b>62-129%</b>	---	---	Q-03, E
n-Propylbenzene	1430	16.7	33.5	ug/kg dry	50	1340	71.6	102	73-125%	---	---	
Styrene	1290	33.5	66.9	ug/kg dry	50	1340	ND	96	76-124%	---	---	
1,1,1,2-Tetrachloroethane	1570	16.7	33.5	ug/kg dry	50	1340	ND	117	78-125%	---	---	

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

**Apex Laboratories, LLC**

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<b>Sevenson Environmental Services, Inc.</b> 2749 Lockport Road Niagara Falls, NY 14305	Project: <b>Gasco - Soil Residuals</b> Project Number: <b>111323</b> Project Manager: <b>Chip Byrd</b>	<b>Report ID:</b> <b>A3C0669 - 04 04 23 1606</b>
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**QUALITY CONTROL (QC) SAMPLE RESULTS**

**Volatile Organic Compounds by EPA 8260D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 23C0784 - EPA 5035A</b>						<b>Soil</b>						
<b>Matrix Spike (23C0784-MS1)</b>						Prepared: 03/17/23 15:20 Analyzed: 03/21/23 14:04						V-15
<b>QC Source Sample: T103B-031723-15 (A3C0669-01)</b>												
1,1,2,2-Tetrachloroethane	1130	33.5	66.9	ug/kg dry	50	1340	ND	85	70-124%	---	---	
Tetrachloroethene (PCE)	1430	16.7	33.5	ug/kg dry	50	1340	ND	107	73-128%	---	---	
Toluene	1300	33.5	66.9	ug/kg dry	50	1340	ND	97	77-121%	---	---	
1,2,3-Trichlorobenzene	1290	167	335	ug/kg dry	50	1340	ND	96	66-130%	---	---	
1,2,4-Trichlorobenzene	1440	167	335	ug/kg dry	50	1340	ND	107	67-129%	---	---	
1,1,1-Trichloroethane	1590	16.7	33.5	ug/kg dry	50	1340	ND	119	73-130%	---	---	
1,1,2-Trichloroethane	1380	16.7	33.5	ug/kg dry	50	1340	ND	103	78-121%	---	---	
Trichloroethene (TCE)	1790	16.7	33.5	ug/kg dry	50	1340	ND	<b>134</b>	<b>77-123%</b>	---	---	Q-01
Trichlorofluoromethane	11800	66.9	134	ug/kg dry	50	1340	ND	<b>881</b>	<b>62-140%</b>	---	---	Q-54j
1,2,3-Trichloropropane	1300	33.5	66.9	ug/kg dry	50	1340	ND	97	73-125%	---	---	
1,2,4-Trimethylbenzene	2340	33.5	66.9	ug/kg dry	50	1340	1130	91	75-123%	---	---	
1,3,5-Trimethylbenzene	1670	33.5	66.9	ug/kg dry	50	1340	390	96	73-124%	---	---	
Vinyl chloride	1500	16.7	33.5	ug/kg dry	50	1340	ND	112	56-135%	---	---	
m,p-Xylene	3100	33.5	66.9	ug/kg dry	50	2680	475	98	77-124%	---	---	
o-Xylene	1570	16.7	33.5	ug/kg dry	50	1340	270	97	77-123%	---	---	
<i>Surr: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 110 %</i>		<i>Limits: 80-120 %</i>		<i>Dilution: 1x</i>						
<i>Toluene-d8 (Surr)</i>		<i>94 %</i>		<i>80-120 %</i>		<i>"</i>						
<i>4-Bromofluorobenzene (Surr)</i>		<i>99 %</i>		<i>79-120 %</i>		<i>"</i>						

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<b>Sevenson Environmental Services, Inc.</b> 2749 Lockport Road Niagara Falls, NY 14305	Project: <b>Gasco - Soil Residuals</b> Project Number: <b>111323</b> Project Manager: <b>Chip Byrd</b>	<b>Report ID:</b> <b>A3C0669 - 04 04 23 1606</b>
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**QUALITY CONTROL (QC) SAMPLE RESULTS**

**Volatile Organic Compounds by EPA 8260D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 23C0846 - EPA 5035A</b>						<b>Soil</b>						
<b>Blank (23C0846-BLK1)</b>			Prepared: 03/22/23 08:35 Analyzed: 03/22/23 11:15									
<u>5035A/8260D</u>												
Acetone	ND	500	1000	ug/kg wet	50	---	---	---	---	---	---	
Acrylonitrile	ND	50.0	100	ug/kg wet	50	---	---	---	---	---	---	
Benzene	ND	5.00	10.0	ug/kg wet	50	---	---	---	---	---	---	
Bromobenzene	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
Bromochloromethane	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
Bromodichloromethane	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
Bromoform	ND	50.0	100	ug/kg wet	50	---	---	---	---	---	---	
Bromomethane	ND	500	500	ug/kg wet	50	---	---	---	---	---	---	
2-Butanone (MEK)	ND	250	500	ug/kg wet	50	---	---	---	---	---	---	
n-Butylbenzene	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
sec-Butylbenzene	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
tert-Butylbenzene	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
Carbon disulfide	ND	250	500	ug/kg wet	50	---	---	---	---	---	---	
Carbon tetrachloride	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
Chlorobenzene	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
Chloroethane	ND	250	500	ug/kg wet	50	---	---	---	---	---	---	
Chloroform	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
Chloromethane	ND	125	250	ug/kg wet	50	---	---	---	---	---	---	
2-Chlorotoluene	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
4-Chlorotoluene	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
Dibromochloromethane	ND	50.0	100	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	125	250	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
Dibromomethane	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	50.0	100	ug/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethane	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethene	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	

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503-718-2323  
ORELAP ID: OR100062

<b>Sevenson Environmental Services, Inc.</b> 2749 Lockport Road Niagara Falls, NY 14305	Project: <b>Gasco - Soil Residuals</b> Project Number: <b>111323</b> Project Manager: <b>Chip Byrd</b>	<b>Report ID:</b> <b>A3C0669 - 04 04 23 1606</b>
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**QUALITY CONTROL (QC) SAMPLE RESULTS**

**Volatile Organic Compounds by EPA 8260D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 23C0846 - EPA 5035A</b>						<b>Soil</b>						
<b>Blank (23C0846-BLK1)</b>			Prepared: 03/22/23 08:35 Analyzed: 03/22/23 11:15									
1,2-Dichloropropane	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
1,3-Dichloropropane	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
2,2-Dichloropropane	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
1,1-Dichloropropene	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
Ethylbenzene	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
Hexachlorobutadiene	ND	50.0	100	ug/kg wet	50	---	---	---	---	---	---	
2-Hexanone	ND	250	500	ug/kg wet	50	---	---	---	---	---	---	
Isopropylbenzene	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
4-Isopropyltoluene	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
Methylene chloride	ND	250	500	ug/kg wet	50	---	---	---	---	---	---	
4-Methyl-2-pentanone (MiBK)	ND	500	500	ug/kg wet	50	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
Naphthalene	ND	50.0	100	ug/kg wet	50	---	---	---	---	---	---	
n-Propylbenzene	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
Styrene	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
Toluene	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
1,2,3-Trichlorobenzene	ND	125	250	ug/kg wet	50	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	125	250	ug/kg wet	50	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
1,1,2-Trichloroethane	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
Trichlorofluoromethane	ND	50.0	100	ug/kg wet	50	---	---	---	---	---	---	
1,2,3-Trichloropropane	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
Vinyl chloride	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
m,p-Xylene	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
o-Xylene	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	

Surr: 1,4-Difluorobenzene (Surr)      Recovery: 106 %      Limits: 80-120 %      Dilution: 1x

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ANALYTICAL REPORT

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street  
Tigard, OR 97223  
503-718-2323  
ORELAP ID: OR100062

<b>Sevenson Environmental Services, Inc.</b> 2749 Lockport Road Niagara Falls, NY 14305	Project: <b>Gasco - Soil Residuals</b> Project Number: <b>111323</b> Project Manager: <b>Chip Byrd</b>	<b>Report ID:</b> <b>A3C0669 - 04 04 23 1606</b>
---	--	---

**QUALITY CONTROL (QC) SAMPLE RESULTS**

**Volatile Organic Compounds by EPA 8260D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 23C0846 - EPA 5035A</b>						<b>Soil</b>						
<b>Blank (23C0846-BLK1)</b>						Prepared: 03/22/23 08:35 Analyzed: 03/22/23 11:15						
<i>Surr: Toluene-d8 (Surr)</i>		<i>Recovery: 98 %</i>		<i>Limits: 80-120 %</i>		<i>Dilution: 1x</i>						
<i>4-Bromofluorobenzene (Surr)</i>		<i>98 %</i>		<i>79-120 %</i>		<i>"</i>						
<b>LCS (23C0846-BS1)</b>						Prepared: 03/22/23 08:35 Analyzed: 03/22/23 10:16						
<b>5035A/8260D</b>												
Acetone	1710	500	1000	ug/kg wet	50	2000	---	86	80-120%	---	---	
Acrylonitrile	962	50.0	100	ug/kg wet	50	1000	---	96	80-120%	---	---	
Benzene	1090	5.00	10.0	ug/kg wet	50	1000	---	109	80-120%	---	---	
Bromobenzene	1030	12.5	25.0	ug/kg wet	50	1000	---	103	80-120%	---	---	
Bromochloromethane	1020	25.0	50.0	ug/kg wet	50	1000	---	102	80-120%	---	---	
Bromodichloromethane	1130	25.0	50.0	ug/kg wet	50	1000	---	113	80-120%	---	---	
Bromoform	1280	50.0	100	ug/kg wet	50	1000	---	<b>128</b>	<b>80-120%</b>	---	---	Q-56
Bromomethane	1520	500	500	ug/kg wet	50	1000	---	<b>152</b>	<b>80-120%</b>	---	---	Q-56
2-Butanone (MEK)	1880	250	500	ug/kg wet	50	2000	---	94	80-120%	---	---	
n-Butylbenzene	988	25.0	50.0	ug/kg wet	50	1000	---	99	80-120%	---	---	
sec-Butylbenzene	1020	25.0	50.0	ug/kg wet	50	1000	---	102	80-120%	---	---	
tert-Butylbenzene	942	25.0	50.0	ug/kg wet	50	1000	---	94	80-120%	---	---	
Carbon disulfide	988	250	500	ug/kg wet	50	1000	---	99	80-120%	---	---	
Carbon tetrachloride	1250	25.0	50.0	ug/kg wet	50	1000	---	<b>125</b>	<b>80-120%</b>	---	---	Q-56
Chlorobenzene	1020	12.5	25.0	ug/kg wet	50	1000	---	102	80-120%	---	---	
Chloroethane	1270	250	500	ug/kg wet	50	1000	---	<b>127</b>	<b>80-120%</b>	---	---	Q-56
Chloroform	1100	25.0	50.0	ug/kg wet	50	1000	---	110	80-120%	---	---	
Chloromethane	968	125	250	ug/kg wet	50	1000	---	97	80-120%	---	---	
2-Chlorotoluene	1020	25.0	50.0	ug/kg wet	50	1000	---	102	80-120%	---	---	
4-Chlorotoluene	978	25.0	50.0	ug/kg wet	50	1000	---	98	80-120%	---	---	
Dibromochloromethane	1180	50.0	100	ug/kg wet	50	1000	---	118	80-120%	---	---	
1,2-Dibromo-3-chloropropane	886	125	250	ug/kg wet	50	1000	---	89	80-120%	---	---	
1,2-Dibromoethane (EDB)	1020	25.0	50.0	ug/kg wet	50	1000	---	102	80-120%	---	---	
Dibromomethane	1060	25.0	50.0	ug/kg wet	50	1000	---	106	80-120%	---	---	
1,2-Dichlorobenzene	1030	12.5	25.0	ug/kg wet	50	1000	---	103	80-120%	---	---	
1,3-Dichlorobenzene	1030	12.5	25.0	ug/kg wet	50	1000	---	103	80-120%	---	---	
1,4-Dichlorobenzene	1030	12.5	25.0	ug/kg wet	50	1000	---	103	80-120%	---	---	
Dichlorodifluoromethane	1180	50.0	100	ug/kg wet	50	1000	---	118	80-120%	---	---	
1,1-Dichloroethane	1070	12.5	25.0	ug/kg wet	50	1000	---	107	80-120%	---	---	

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ORELAP ID: OR100062

<b>Sevenson Environmental Services, Inc.</b>	Project: <b>Gasco - Soil Residuals</b>	
2749 Lockport Road	Project Number: <b>111323</b>	<b>Report ID:</b>
Niagara Falls, NY 14305	Project Manager: <b>Chip Byrd</b>	<b>A3C0669 - 04 04 23 1606</b>

**QUALITY CONTROL (QC) SAMPLE RESULTS**

**Volatile Organic Compounds by EPA 8260D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 23C0846 - EPA 5035A</b>						<b>Soil</b>						
<b>LCS (23C0846-BS1)</b>			Prepared: 03/22/23 08:35 Analyzed: 03/22/23 10:16									
1,2-Dichloroethane (EDC)	1060	12.5	25.0	ug/kg wet	50	1000	---	106	80-120%	---	---	
1,1-Dichloroethene	1100	12.5	25.0	ug/kg wet	50	1000	---	110	80-120%	---	---	
cis-1,2-Dichloroethene	1070	12.5	25.0	ug/kg wet	50	1000	---	107	80-120%	---	---	
trans-1,2-Dichloroethene	1060	12.5	25.0	ug/kg wet	50	1000	---	106	80-120%	---	---	
1,2-Dichloropropane	1080	12.5	25.0	ug/kg wet	50	1000	---	108	80-120%	---	---	
1,3-Dichloropropane	1010	25.0	50.0	ug/kg wet	50	1000	---	101	80-120%	---	---	
2,2-Dichloropropane	1100	25.0	50.0	ug/kg wet	50	1000	---	110	80-120%	---	---	
1,1-Dichloropropene	1120	25.0	50.0	ug/kg wet	50	1000	---	112	80-120%	---	---	
cis-1,3-Dichloropropene	1010	25.0	50.0	ug/kg wet	50	1000	---	101	80-120%	---	---	
trans-1,3-Dichloropropene	1050	25.0	50.0	ug/kg wet	50	1000	---	105	80-120%	---	---	
Ethylbenzene	994	12.5	25.0	ug/kg wet	50	1000	---	99	80-120%	---	---	
Hexachlorobutadiene	1050	50.0	100	ug/kg wet	50	1000	---	105	80-120%	---	---	
2-Hexanone	1600	250	500	ug/kg wet	50	2000	---	80	80-120%	---	---	
Isopropylbenzene	1000	25.0	50.0	ug/kg wet	50	1000	---	100	80-120%	---	---	
4-Isopropyltoluene	1000	25.0	50.0	ug/kg wet	50	1000	---	100	80-120%	---	---	
Methylene chloride	1070	250	500	ug/kg wet	50	1000	---	107	80-120%	---	---	
4-Methyl-2-pentanone (MiBK)	1580	500	500	ug/kg wet	50	2000	---	<b>79</b>	<b>80-120%</b>	---	---	Q-55
Methyl tert-butyl ether (MTBE)	972	25.0	50.0	ug/kg wet	50	1000	---	97	80-120%	---	---	
Naphthalene	984	50.0	100	ug/kg wet	50	1000	---	98	80-120%	---	---	
n-Propylbenzene	1020	12.5	25.0	ug/kg wet	50	1000	---	102	80-120%	---	---	
Styrene	904	25.0	50.0	ug/kg wet	50	1000	---	90	80-120%	---	---	
1,1,1,2-Tetrachloroethane	1140	12.5	25.0	ug/kg wet	50	1000	---	114	80-120%	---	---	
1,1,2,2-Tetrachloroethane	914	25.0	50.0	ug/kg wet	50	1000	---	91	80-120%	---	---	
Tetrachloroethene (PCE)	1080	12.5	25.0	ug/kg wet	50	1000	---	108	80-120%	---	---	
Toluene	998	25.0	50.0	ug/kg wet	50	1000	---	100	80-120%	---	---	
1,2,3-Trichlorobenzene	986	125	250	ug/kg wet	50	1000	---	99	80-120%	---	---	
1,2,4-Trichlorobenzene	1030	125	250	ug/kg wet	50	1000	---	103	80-120%	---	---	
1,1,1-Trichloroethane	1140	12.5	25.0	ug/kg wet	50	1000	---	114	80-120%	---	---	
1,1,2-Trichloroethane	1010	12.5	25.0	ug/kg wet	50	1000	---	101	80-120%	---	---	
Trichloroethene (TCE)	1210	12.5	25.0	ug/kg wet	50	1000	---	<b>121</b>	<b>80-120%</b>	---	---	Q-56
Trichlorofluoromethane	1580	50.0	100	ug/kg wet	50	1000	---	<b>158</b>	<b>80-120%</b>	---	---	Q-56
1,2,3-Trichloropropane	1010	25.0	50.0	ug/kg wet	50	1000	---	101	80-120%	---	---	
1,2,4-Trimethylbenzene	994	25.0	50.0	ug/kg wet	50	1000	---	99	80-120%	---	---	
1,3,5-Trimethylbenzene	1010	25.0	50.0	ug/kg wet	50	1000	---	101	80-120%	---	---	

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---	--	---

**QUALITY CONTROL (QC) SAMPLE RESULTS**

**Volatile Organic Compounds by EPA 8260D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 23C0846 - EPA 5035A</b>						<b>Soil</b>						
<b>LCS (23C0846-BS1)</b>			Prepared: 03/22/23 08:35 Analyzed: 03/22/23 10:16									
Vinyl chloride	1160	12.5	25.0	ug/kg wet	50	1000	---	116	80-120%	---	---	
m,p-Xylene	2010	25.0	50.0	ug/kg wet	50	2000	---	100	80-120%	---	---	
o-Xylene	971	12.5	25.0	ug/kg wet	50	1000	---	97	80-120%	---	---	
<i>Surr: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 107 %</i>		<i>Limits: 80-120 %</i>		<i>Dilution: 1x</i>						
<i>Toluene-d8 (Surr)</i>		<i>98 %</i>		<i>80-120 %</i>		<i>"</i>						
<i>4-Bromofluorobenzene (Surr)</i>		<i>98 %</i>		<i>79-120 %</i>		<i>"</i>						

<b>Duplicate (23C0846-DUP1)</b>			Prepared: 03/21/23 11:18 Analyzed: 03/22/23 12:06									
<b>QC Source Sample: Non-SDG (A3C0760-01)</b>												
Acetone	ND	1580	3160	ug/kg dry	50	---	ND	---	---	---	30%	
Acrylonitrile	ND	158	316	ug/kg dry	50	---	ND	---	---	---	30%	
Benzene	ND	15.8	31.6	ug/kg dry	50	---	ND	---	---	---	30%	
Bromobenzene	ND	39.6	79.1	ug/kg dry	50	---	ND	---	---	---	30%	
Bromochloromethane	ND	79.1	158	ug/kg dry	50	---	ND	---	---	---	30%	
Bromodichloromethane	ND	79.1	158	ug/kg dry	50	---	ND	---	---	---	30%	
Bromoform	ND	158	316	ug/kg dry	50	---	ND	---	---	---	30%	
Bromomethane	ND	1580	1580	ug/kg dry	50	---	ND	---	---	---	30%	
2-Butanone (MEK)	ND	791	1580	ug/kg dry	50	---	ND	---	---	---	30%	
n-Butylbenzene	ND	79.1	158	ug/kg dry	50	---	ND	---	---	---	30%	
sec-Butylbenzene	ND	79.1	158	ug/kg dry	50	---	ND	---	---	---	30%	
tert-Butylbenzene	ND	79.1	158	ug/kg dry	50	---	ND	---	---	---	30%	
Carbon disulfide	ND	791	1580	ug/kg dry	50	---	ND	---	---	---	30%	
Carbon tetrachloride	ND	79.1	158	ug/kg dry	50	---	ND	---	---	---	30%	
Chlorobenzene	ND	39.6	79.1	ug/kg dry	50	---	ND	---	---	---	30%	
Chloroethane	ND	791	1580	ug/kg dry	50	---	ND	---	---	---	30%	
Chloroform	ND	79.1	158	ug/kg dry	50	---	ND	---	---	---	30%	
Chloromethane	ND	396	791	ug/kg dry	50	---	ND	---	---	---	30%	
2-Chlorotoluene	ND	79.1	158	ug/kg dry	50	---	ND	---	---	---	30%	
4-Chlorotoluene	ND	79.1	158	ug/kg dry	50	---	ND	---	---	---	30%	
Dibromochloromethane	ND	158	316	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dibromo-3-chloropropane	ND	396	791	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dibromoethane (EDB)	ND	79.1	158	ug/kg dry	50	---	ND	---	---	---	30%	
Dibromomethane	ND	79.1	158	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichlorobenzene	ND	39.6	79.1	ug/kg dry	50	---	ND	---	---	---	30%	

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**QUALITY CONTROL (QC) SAMPLE RESULTS**

**Volatile Organic Compounds by EPA 8260D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 23C0846 - EPA 5035A</b>						<b>Soil</b>						
<b>Duplicate (23C0846-DUP1)</b>			Prepared: 03/21/23 11:18 Analyzed: 03/22/23 12:06									
<b>QC Source Sample: Non-SDG (A3C0760-01)</b>												
1,3-Dichlorobenzene	ND	39.6	79.1	ug/kg dry	50	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	39.6	79.1	ug/kg dry	50	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	158	316	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	39.6	79.1	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	39.6	79.1	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	39.6	79.1	ug/kg dry	50	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	39.6	79.1	ug/kg dry	50	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	39.6	79.1	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	39.6	79.1	ug/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	79.1	158	ug/kg dry	50	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	79.1	158	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	79.1	158	ug/kg dry	50	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	79.1	158	ug/kg dry	50	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	79.1	158	ug/kg dry	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	39.6	79.1	ug/kg dry	50	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	158	316	ug/kg dry	50	---	ND	---	---	---	30%	
2-Hexanone	ND	791	1580	ug/kg dry	50	---	ND	---	---	---	30%	
Isopropylbenzene	ND	79.1	158	ug/kg dry	50	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	79.1	158	ug/kg dry	50	---	ND	---	---	---	30%	
Methylene chloride	ND	791	1580	ug/kg dry	50	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	1580	1580	ug/kg dry	50	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	79.1	158	ug/kg dry	50	---	ND	---	---	---	30%	
Naphthalene	ND	158	316	ug/kg dry	50	---	ND	---	---	---	30%	
n-Propylbenzene	ND	39.6	79.1	ug/kg dry	50	---	ND	---	---	---	30%	
Styrene	ND	79.1	158	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	39.6	79.1	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	79.1	158	ug/kg dry	50	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	39.6	79.1	ug/kg dry	50	---	ND	---	---	---	30%	
Toluene	ND	79.1	158	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	396	791	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	396	791	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	39.6	79.1	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,2-Trichloroethane	ND	39.6	79.1	ug/kg dry	50	---	ND	---	---	---	30%	

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**ANALYTICAL REPORT**

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street  
Tigard, OR 97223  
503-718-2323  
ORELAP ID: OR100062

<b>Sevenson Environmental Services, Inc.</b> 2749 Lockport Road Niagara Falls, NY 14305	Project: <b>Gasco - Soil Residuals</b> Project Number: <b>111323</b> Project Manager: <b>Chip Byrd</b>	<b>Report ID:</b> <b>A3C0669 - 04 04 23 1606</b>
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**QUALITY CONTROL (QC) SAMPLE RESULTS**

**Volatile Organic Compounds by EPA 8260D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 23C0846 - EPA 5035A</b>						<b>Soil</b>						
<b>Duplicate (23C0846-DUP1)</b>			Prepared: 03/21/23 11:18 Analyzed: 03/22/23 12:06									
<b>QC Source Sample: Non-SDG (A3C0760-01)</b>												
Trichloroethene (TCE)	ND	39.6	79.1	ug/kg dry	50	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	158	316	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	79.1	158	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	79.1	158	ug/kg dry	50	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	79.1	158	ug/kg dry	50	---	ND	---	---	---	30%	
Vinyl chloride	ND	39.6	79.1	ug/kg dry	50	---	ND	---	---	---	30%	
m,p-Xylene	ND	79.1	158	ug/kg dry	50	---	ND	---	---	---	30%	
o-Xylene	ND	39.6	79.1	ug/kg dry	50	---	ND	---	---	---	30%	
<i>Surr: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 107 %</i>		<i>Limits: 80-120 %</i>		<i>Dilution: 1x</i>						
<i>Toluene-d8 (Surr)</i>		<i>97 %</i>		<i>80-120 %</i>		<i>"</i>						
<i>4-Bromofluorobenzene (Surr)</i>		<i>98 %</i>		<i>79-120 %</i>		<i>"</i>						

<b>Matrix Spike (23C0846-MS1)</b>						Prepared: 03/21/23 09:00 Analyzed: 03/22/23 12:57						
<b>QC Source Sample: Non-SDG (A3C0783-04)</b>												
<b>5035A/8260D</b>												
Acetone	4700	1290	2580	ug/kg dry	50	5150	ND	91	36-164%	---	---	
Acrylonitrile	2560	129	258	ug/kg dry	50	2570	ND	99	65-134%	---	---	
Benzene	2890	12.9	25.8	ug/kg dry	50	2570	ND	112	77-121%	---	---	
Bromobenzene	2600	32.2	64.4	ug/kg dry	50	2570	ND	101	78-121%	---	---	
Bromochloromethane	2780	64.4	129	ug/kg dry	50	2570	ND	108	78-125%	---	---	
Bromodichloromethane	3010	64.4	129	ug/kg dry	50	2570	ND	117	75-127%	---	---	
Bromoform	3160	129	258	ug/kg dry	50	2570	ND	123	67-132%	---	---	Q-54k
Bromomethane	4200	1290	1290	ug/kg dry	50	2570	ND	<b>163</b>	<b>53-143%</b>	---	---	Q-54b
2-Butanone (MEK)	5210	644	1290	ug/kg dry	50	5150	ND	101	51-148%	---	---	
n-Butylbenzene	2510	64.4	129	ug/kg dry	50	2570	ND	97	70-128%	---	---	
sec-Butylbenzene	2610	64.4	129	ug/kg dry	50	2570	ND	101	73-126%	---	---	
tert-Butylbenzene	2360	64.4	129	ug/kg dry	50	2570	ND	92	73-125%	---	---	
Carbon disulfide	2710	644	1290	ug/kg dry	50	2570	ND	105	63-132%	---	---	
Carbon tetrachloride	3430	64.4	129	ug/kg dry	50	2570	ND	133	70-135%	---	---	Q-54g
Chlorobenzene	2660	32.2	64.4	ug/kg dry	50	2570	ND	103	79-120%	---	---	
Chloroethane	4180	644	1290	ug/kg dry	50	2570	ND	<b>162</b>	<b>59-139%</b>	---	---	Q-54i
Chloroform	2930	64.4	129	ug/kg dry	50	2570	ND	114	78-123%	---	---	
Chloromethane	2750	322	644	ug/kg dry	50	2570	ND	107	50-136%	---	---	

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ANALYTICAL REPORT

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503-718-2323  
ORELAP ID: OR100062

<b>Sevenson Environmental Services, Inc.</b> 2749 Lockport Road Niagara Falls, NY 14305	Project: <b>Gasco - Soil Residuals</b> Project Number: <b>111323</b> Project Manager: <b>Chip Byrd</b>	<b>Report ID:</b> <b>A3C0669 - 04 04 23 1606</b>
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**QUALITY CONTROL (QC) SAMPLE RESULTS**

**Volatile Organic Compounds by EPA 8260D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 23C0846 - EPA 5035A</b>						<b>Soil</b>						
<b>Matrix Spike (23C0846-MS1)</b>			Prepared: 03/21/23 09:00 Analyzed: 03/22/23 12:57									
<b>QC Source Sample: Non-SDG (A3C0783-04)</b>												
2-Chlorotoluene	2540	64.4	129	ug/kg dry	50	2570	ND	99	75-122%	---	---	
4-Chlorotoluene	2510	64.4	129	ug/kg dry	50	2570	ND	98	72-124%	---	---	
Dibromochloromethane	2950	129	258	ug/kg dry	50	2570	ND	115	74-126%	---	---	
1,2-Dibromo-3-chloropropane	2130	322	644	ug/kg dry	50	2570	ND	83	61-132%	---	---	
1,2-Dibromoethane (EDB)	2550	64.4	129	ug/kg dry	50	2570	ND	99	78-122%	---	---	
Dibromomethane	2810	64.4	129	ug/kg dry	50	2570	ND	109	78-125%	---	---	
1,2-Dichlorobenzene	2530	32.2	64.4	ug/kg dry	50	2570	ND	98	78-121%	---	---	
1,3-Dichlorobenzene	2570	32.2	64.4	ug/kg dry	50	2570	ND	100	77-121%	---	---	
1,4-Dichlorobenzene	2560	32.2	64.4	ug/kg dry	50	2570	ND	100	75-120%	---	---	
Dichlorodifluoromethane	3440	129	258	ug/kg dry	50	2570	ND	134	29-149%	---	---	
1,1-Dichloroethane	2860	32.2	64.4	ug/kg dry	50	2570	ND	111	76-125%	---	---	
1,2-Dichloroethane (EDC)	2820	32.2	64.4	ug/kg dry	50	2570	ND	109	73-128%	---	---	
1,1-Dichloroethene	3040	32.2	64.4	ug/kg dry	50	2570	ND	118	70-131%	---	---	
cis-1,2-Dichloroethene	2830	32.2	64.4	ug/kg dry	50	2570	ND	110	77-123%	---	---	
trans-1,2-Dichloroethene	2880	32.2	64.4	ug/kg dry	50	2570	ND	112	74-125%	---	---	
1,2-Dichloropropane	2830	32.2	64.4	ug/kg dry	50	2570	ND	110	76-123%	---	---	
1,3-Dichloropropane	2560	64.4	129	ug/kg dry	50	2570	ND	100	77-121%	---	---	
2,2-Dichloropropane	2880	64.4	129	ug/kg dry	50	2570	ND	112	67-133%	---	---	
1,1-Dichloropropene	2980	64.4	129	ug/kg dry	50	2570	ND	116	76-125%	---	---	
cis-1,3-Dichloropropene	2580	64.4	129	ug/kg dry	50	2570	ND	100	74-126%	---	---	
trans-1,3-Dichloropropene	2650	64.4	129	ug/kg dry	50	2570	ND	103	71-130%	---	---	
Ethylbenzene	2590	32.2	64.4	ug/kg dry	50	2570	ND	100	76-122%	---	---	
Hexachlorobutadiene	2710	129	258	ug/kg dry	50	2570	ND	105	61-135%	---	---	
2-Hexanone	4150	644	1290	ug/kg dry	50	5150	ND	81	53-145%	---	---	
Isopropylbenzene	2600	64.4	129	ug/kg dry	50	2570	ND	101	68-134%	---	---	
4-Isopropyltoluene	2540	64.4	129	ug/kg dry	50	2570	ND	99	73-127%	---	---	
Methylene chloride	2850	644	1290	ug/kg dry	50	2570	ND	111	70-128%	---	---	
4-Methyl-2-pentanone (MiBK)	4290	1290	1290	ug/kg dry	50	5150	ND	83	65-135%	---	---	Q-54m
Methyl tert-butyl ether (MTBE)	2490	64.4	129	ug/kg dry	50	2570	ND	97	73-125%	---	---	
Naphthalene	2330	129	258	ug/kg dry	50	2570	ND	90	62-129%	---	---	
n-Propylbenzene	2610	32.2	64.4	ug/kg dry	50	2570	ND	101	73-125%	---	---	
Styrene	2370	64.4	129	ug/kg dry	50	2570	ND	92	76-124%	---	---	
1,1,1,2-Tetrachloroethane	2860	32.2	64.4	ug/kg dry	50	2570	ND	111	78-125%	---	---	

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

**Apex Laboratories, LLC**

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503-718-2323  
ORELAP ID: OR100062

<b>Sevenson Environmental Services, Inc.</b> 2749 Lockport Road Niagara Falls, NY 14305	Project: <b>Gasco - Soil Residuals</b> Project Number: <b>111323</b> Project Manager: <b>Chip Byrd</b>	<b>Report ID:</b> <b>A3C0669 - 04 04 23 1606</b>
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**QUALITY CONTROL (QC) SAMPLE RESULTS**

**Volatile Organic Compounds by EPA 8260D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 23C0846 - EPA 5035A</b>						<b>Soil</b>						
<b>Matrix Spike (23C0846-MS1)</b>			Prepared: 03/21/23 09:00 Analyzed: 03/22/23 12:57									
<b>QC Source Sample: Non-SDG (A3C0783-04)</b>												
1,1,2,2-Tetrachloroethane	2300	64.4	129	ug/kg dry	50	2570	ND	89	70-124%	---	---	
Tetrachloroethene (PCE)	2840	32.2	64.4	ug/kg dry	50	2570	ND	110	73-128%	---	---	
Toluene	2560	64.4	129	ug/kg dry	50	2570	ND	99	77-121%	---	---	
1,2,3-Trichlorobenzene	2390	322	644	ug/kg dry	50	2570	ND	93	66-130%	---	---	
1,2,4-Trichlorobenzene	2490	322	644	ug/kg dry	50	2570	ND	97	67-129%	---	---	
1,1,1-Trichloroethane	3020	32.2	64.4	ug/kg dry	50	2570	ND	117	73-130%	---	---	
1,1,2-Trichloroethane	2610	32.2	64.4	ug/kg dry	50	2570	ND	101	78-121%	---	---	
Trichloroethene (TCE)	3210	32.2	64.4	ug/kg dry	50	2570	ND	<b>125</b>	<b>77-123%</b>	---	---	Q-54
Trichlorofluoromethane	11000	129	258	ug/kg dry	50	2570	ND	<b>427</b>	<b>62-140%</b>	---	---	Q-54c
1,2,3-Trichloropropane	2450	64.4	129	ug/kg dry	50	2570	ND	95	73-125%	---	---	
1,2,4-Trimethylbenzene	2520	64.4	129	ug/kg dry	50	2570	ND	98	75-123%	---	---	
1,3,5-Trimethylbenzene	2580	64.4	129	ug/kg dry	50	2570	ND	100	73-124%	---	---	
Vinyl chloride	3490	32.2	64.4	ug/kg dry	50	2570	ND	135	56-135%	---	---	
m,p-Xylene	5220	64.4	129	ug/kg dry	50	5150	ND	101	77-124%	---	---	
o-Xylene	2490	32.2	64.4	ug/kg dry	50	2570	ND	97	77-123%	---	---	
<i>Surr: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 108 %</i>		<i>Limits: 80-120 %</i>		<i>Dilution: 1x</i>						
<i>Toluene-d8 (Surr)</i>		<i>97 %</i>		<i>80-120 %</i>		<i>"</i>						
<i>4-Bromofluorobenzene (Surr)</i>		<i>96 %</i>		<i>79-120 %</i>		<i>"</i>						

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

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<b>Sevenson Environmental Services, Inc.</b>	Project: <b>Gasco - Soil Residuals</b>	
2749 Lockport Road	Project Number: <b>111323</b>	<b>Report ID:</b>
Niagara Falls, NY 14305	Project Manager: <b>Chip Byrd</b>	<b>A3C0669 - 04 04 23 1606</b>

**QUALITY CONTROL (QC) SAMPLE RESULTS**

**TCLP Volatile Organic Compounds by EPA 1311/8260D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 23C1160 - EPA 1311/5030B TCLP Volatiles</b>						<b>Water</b>						
<b>Blank (23C1160-BLK1)</b>						Prepared: 03/29/23 11:03 Analyzed: 03/29/23 13:52						<b>TCLPb</b>
<u>1311/8260D</u>												
Acetone	ND	500	1000	ug/L	50	---	---	---	---	---	---	
Benzene	ND	6.25	12.5	ug/L	50	---	---	---	---	---	---	
Bromobenzene	ND	12.5	25.0	ug/L	50	---	---	---	---	---	---	
Bromochloromethane	ND	25.0	50.0	ug/L	50	---	---	---	---	---	---	
Bromodichloromethane	ND	25.0	50.0	ug/L	50	---	---	---	---	---	---	
Bromoform	ND	25.0	50.0	ug/L	50	---	---	---	---	---	---	
Bromomethane	ND	250	250	ug/L	50	---	---	---	---	---	---	
2-Butanone (MEK)	ND	250	500	ug/L	50	---	---	---	---	---	---	
n-Butylbenzene	ND	25.0	50.0	ug/L	50	---	---	---	---	---	---	
sec-Butylbenzene	ND	25.0	50.0	ug/L	50	---	---	---	---	---	---	
tert-Butylbenzene	ND	25.0	50.0	ug/L	50	---	---	---	---	---	---	
Carbon tetrachloride	ND	25.0	50.0	ug/L	50	---	---	---	---	---	---	
Chlorobenzene	ND	12.5	25.0	ug/L	50	---	---	---	---	---	---	
Chloroethane	ND	250	250	ug/L	50	---	---	---	---	---	---	
Chloroform	ND	25.0	50.0	ug/L	50	---	---	---	---	---	---	
Chloromethane	ND	125	250	ug/L	50	---	---	---	---	---	---	
2-Chlorotoluene	ND	25.0	50.0	ug/L	50	---	---	---	---	---	---	
4-Chlorotoluene	ND	25.0	50.0	ug/L	50	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	125	250	ug/L	50	---	---	---	---	---	---	
Dibromochloromethane	ND	25.0	50.0	ug/L	50	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	12.5	25.0	ug/L	50	---	---	---	---	---	---	
Dibromomethane	ND	25.0	50.0	ug/L	50	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	12.5	25.0	ug/L	50	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	12.5	25.0	ug/L	50	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	12.5	25.0	ug/L	50	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	25.0	50.0	ug/L	50	---	---	---	---	---	---	
1,1-Dichloroethane	ND	12.5	25.0	ug/L	50	---	---	---	---	---	---	
1,1-Dichloroethene	ND	12.5	25.0	ug/L	50	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	12.5	25.0	ug/L	50	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	25.0	50.0	ug/L	50	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	12.5	25.0	ug/L	50	---	---	---	---	---	---	
1,2-Dichloropropane	ND	12.5	25.0	ug/L	50	---	---	---	---	---	---	
1,3-Dichloropropane	ND	25.0	50.0	ug/L	50	---	---	---	---	---	---	

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<b>Sevenson Environmental Services, Inc.</b>	Project: <b>Gasco - Soil Residuals</b>	
2749 Lockport Road	Project Number: <b>111323</b>	<b>Report ID:</b>
Niagara Falls, NY 14305	Project Manager: <b>Chip Byrd</b>	<b>A3C0669 - 04 04 23 1606</b>

**QUALITY CONTROL (QC) SAMPLE RESULTS**

**TCLP Volatile Organic Compounds by EPA 1311/8260D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes	
<b>Batch 23C1160 - EPA 1311/5030B TCLP Volatiles</b>						<b>Water</b>							
<b>Blank (23C1160-BLK1)</b>			Prepared: 03/29/23 11:03 Analyzed: 03/29/23 13:52						<b>TCLPb</b>				
2,2-Dichloropropane	ND	25.0	50.0	ug/L	50	---	---	---	---	---	---		
1,1-Dichloropropene	ND	25.0	50.0	ug/L	50	---	---	---	---	---	---		
cis-1,3-Dichloropropene	ND	25.0	50.0	ug/L	50	---	---	---	---	---	---		
trans-1,3-Dichloropropene	ND	25.0	50.0	ug/L	50	---	---	---	---	---	---		
Ethylbenzene	ND	12.5	25.0	ug/L	50	---	---	---	---	---	---		
Hexachlorobutadiene	ND	125	250	ug/L	50	---	---	---	---	---	---		
2-Hexanone	ND	250	500	ug/L	50	---	---	---	---	---	---		
Isopropylbenzene	ND	25.0	50.0	ug/L	50	---	---	---	---	---	---		
4-Isopropyltoluene	ND	25.0	50.0	ug/L	50	---	---	---	---	---	---		
4-Methyl-2-pentanone (MiBK)	ND	250	500	ug/L	50	---	---	---	---	---	---		
Methyl tert-butyl ether (MTBE)	ND	25.0	50.0	ug/L	50	---	---	---	---	---	---		
Methylene chloride	ND	250	500	ug/L	50	---	---	---	---	---	---		
n-Propylbenzene	ND	12.5	25.0	ug/L	50	---	---	---	---	---	---		
Styrene	ND	25.0	50.0	ug/L	50	---	---	---	---	---	---		
1,1,1,2-Tetrachloroethane	ND	12.5	25.0	ug/L	50	---	---	---	---	---	---		
1,1,2,2-Tetrachloroethane	ND	12.5	25.0	ug/L	50	---	---	---	---	---	---		
Naphthalene	ND	100	100	ug/L	50	---	---	---	---	---	---		
Tetrachloroethene (PCE)	ND	12.5	25.0	ug/L	50	---	---	---	---	---	---		
Toluene	ND	25.0	50.0	ug/L	50	---	---	---	---	---	---		
1,2,3-Trichlorobenzene	ND	25.0	50.0	ug/L	50	---	---	---	---	---	---		
1,2,4-Trichlorobenzene	ND	50.0	100	ug/L	50	---	---	---	---	---	---		
1,1,1-Trichloroethane	ND	12.5	25.0	ug/L	50	---	---	---	---	---	---		
1,1,2-Trichloroethane	ND	12.5	25.0	ug/L	50	---	---	---	---	---	---		
Trichloroethene (TCE)	ND	12.5	25.0	ug/L	50	---	---	---	---	---	---		
Trichlorofluoromethane	ND	50.0	100	ug/L	50	---	---	---	---	---	---		
1,2,3-Trichloropropane	ND	25.0	50.0	ug/L	50	---	---	---	---	---	---		
1,2,4-Trimethylbenzene	ND	25.0	50.0	ug/L	50	---	---	---	---	---	---		
1,3,5-Trimethylbenzene	ND	25.0	50.0	ug/L	50	---	---	---	---	---	---		
Vinyl chloride	ND	12.5	25.0	ug/L	50	---	---	---	---	---	---		
m,p-Xylene	ND	25.0	50.0	ug/L	50	---	---	---	---	---	---		
o-Xylene	ND	12.5	25.0	ug/L	50	---	---	---	---	---	---		
<i>Surr: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 98 %</i>		<i>Limits: 80-120 %</i>		<i>Dilution: 1x</i>							
<i>Toluene-d8 (Surr)</i>		<i>102 %</i>		<i>80-120 %</i>		<i>"</i>							
<i>4-Bromofluorobenzene (Surr)</i>		<i>99 %</i>		<i>80-120 %</i>		<i>"</i>							

Apex Laboratories

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ANALYTICAL REPORT

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street  
Tigard, OR 97223  
503-718-2323  
ORELAP ID: OR100062

<b>Sevenson Environmental Services, Inc.</b>	Project: <b>Gasco - Soil Residuals</b>	
2749 Lockport Road	Project Number: <b>111323</b>	<b>Report ID:</b>
Niagara Falls, NY 14305	Project Manager: <b>Chip Byrd</b>	<b>A3C0669 - 04 04 23 1606</b>

**QUALITY CONTROL (QC) SAMPLE RESULTS**

**TCLP Volatile Organic Compounds by EPA 1311/8260D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes	
<b>Batch 23C1160 - EPA 1311/5030B TCLP Volatiles</b>						<b>Water</b>							
<b>Blank (23C1160-BLK2)</b>			Prepared: 03/29/23 11:03 Analyzed: 03/29/23 14:15						<b>TCLPb</b>				
<b>1311/8260D</b>													
Acetone	ND	500	1000	ug/L	50	---	---	---	---	---	---		
Benzene	ND	6.25	12.5	ug/L	50	---	---	---	---	---	---		
Bromobenzene	ND	12.5	25.0	ug/L	50	---	---	---	---	---	---		
Bromochloromethane	ND	25.0	50.0	ug/L	50	---	---	---	---	---	---		
Bromodichloromethane	ND	25.0	50.0	ug/L	50	---	---	---	---	---	---		
Bromoform	ND	25.0	50.0	ug/L	50	---	---	---	---	---	---		
Bromomethane	ND	250	250	ug/L	50	---	---	---	---	---	---		
2-Butanone (MEK)	ND	250	500	ug/L	50	---	---	---	---	---	---		
n-Butylbenzene	ND	25.0	50.0	ug/L	50	---	---	---	---	---	---		
sec-Butylbenzene	ND	25.0	50.0	ug/L	50	---	---	---	---	---	---		
tert-Butylbenzene	ND	25.0	50.0	ug/L	50	---	---	---	---	---	---		
Carbon tetrachloride	ND	25.0	50.0	ug/L	50	---	---	---	---	---	---		
Chlorobenzene	ND	12.5	25.0	ug/L	50	---	---	---	---	---	---		
Chloroethane	ND	250	250	ug/L	50	---	---	---	---	---	---		
Chloroform	ND	25.0	50.0	ug/L	50	---	---	---	---	---	---		
Chloromethane	ND	125	250	ug/L	50	---	---	---	---	---	---		
2-Chlorotoluene	ND	25.0	50.0	ug/L	50	---	---	---	---	---	---		
4-Chlorotoluene	ND	25.0	50.0	ug/L	50	---	---	---	---	---	---		
1,2-Dibromo-3-chloropropane	ND	125	250	ug/L	50	---	---	---	---	---	---		
Dibromochloromethane	ND	25.0	50.0	ug/L	50	---	---	---	---	---	---		
1,2-Dibromoethane (EDB)	ND	12.5	25.0	ug/L	50	---	---	---	---	---	---		
Dibromomethane	ND	25.0	50.0	ug/L	50	---	---	---	---	---	---		
1,2-Dichlorobenzene	ND	12.5	25.0	ug/L	50	---	---	---	---	---	---		
1,3-Dichlorobenzene	ND	12.5	25.0	ug/L	50	---	---	---	---	---	---		
1,4-Dichlorobenzene	ND	12.5	25.0	ug/L	50	---	---	---	---	---	---		
Dichlorodifluoromethane	ND	25.0	50.0	ug/L	50	---	---	---	---	---	---		
1,1-Dichloroethane	ND	12.5	25.0	ug/L	50	---	---	---	---	---	---		
1,1-Dichloroethene	ND	12.5	25.0	ug/L	50	---	---	---	---	---	---		
1,2-Dichloroethane (EDC)	ND	12.5	25.0	ug/L	50	---	---	---	---	---	---		
cis-1,2-Dichloroethene	ND	25.0	50.0	ug/L	50	---	---	---	---	---	---		
trans-1,2-Dichloroethene	ND	12.5	25.0	ug/L	50	---	---	---	---	---	---		
1,2-Dichloropropane	ND	12.5	25.0	ug/L	50	---	---	---	---	---	---		
1,3-Dichloropropane	ND	25.0	50.0	ug/L	50	---	---	---	---	---	---		

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ANALYTICAL REPORT

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street  
Tigard, OR 97223  
503-718-2323  
ORELAP ID: OR100062

<b>Sevenson Environmental Services, Inc.</b> 2749 Lockport Road Niagara Falls, NY 14305	Project: <b>Gasco - Soil Residuals</b> Project Number: <b>111323</b> Project Manager: <b>Chip Byrd</b>	<b>Report ID:</b> <b>A3C0669 - 04 04 23 1606</b>
---	--	---

**QUALITY CONTROL (QC) SAMPLE RESULTS**

**TCLP Volatile Organic Compounds by EPA 1311/8260D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes	
<b>Batch 23C1160 - EPA 1311/5030B TCLP Volatiles</b>						<b>Water</b>							
<b>Blank (23C1160-BLK2)</b>			Prepared: 03/29/23 11:03 Analyzed: 03/29/23 14:15						<b>TCLPb</b>				
2,2-Dichloropropane	ND	25.0	50.0	ug/L	50	---	---	---	---	---	---		
1,1-Dichloropropene	ND	25.0	50.0	ug/L	50	---	---	---	---	---	---		
cis-1,3-Dichloropropene	ND	25.0	50.0	ug/L	50	---	---	---	---	---	---		
trans-1,3-Dichloropropene	ND	25.0	50.0	ug/L	50	---	---	---	---	---	---		
Ethylbenzene	ND	12.5	25.0	ug/L	50	---	---	---	---	---	---		
Hexachlorobutadiene	ND	125	250	ug/L	50	---	---	---	---	---	---		
2-Hexanone	ND	250	500	ug/L	50	---	---	---	---	---	---		
Isopropylbenzene	ND	25.0	50.0	ug/L	50	---	---	---	---	---	---		
4-Isopropyltoluene	ND	25.0	50.0	ug/L	50	---	---	---	---	---	---		
4-Methyl-2-pentanone (MiBK)	ND	250	500	ug/L	50	---	---	---	---	---	---		
Methyl tert-butyl ether (MTBE)	ND	25.0	50.0	ug/L	50	---	---	---	---	---	---		
Methylene chloride	ND	250	500	ug/L	50	---	---	---	---	---	---		
n-Propylbenzene	ND	12.5	25.0	ug/L	50	---	---	---	---	---	---		
Styrene	ND	25.0	50.0	ug/L	50	---	---	---	---	---	---		
1,1,1,2-Tetrachloroethane	ND	12.5	25.0	ug/L	50	---	---	---	---	---	---		
1,1,2,2-Tetrachloroethane	ND	12.5	25.0	ug/L	50	---	---	---	---	---	---		
Naphthalene	ND	100	100	ug/L	50	---	---	---	---	---	---		
Tetrachloroethene (PCE)	ND	12.5	25.0	ug/L	50	---	---	---	---	---	---		
Toluene	ND	25.0	50.0	ug/L	50	---	---	---	---	---	---		
1,2,3-Trichlorobenzene	ND	25.0	50.0	ug/L	50	---	---	---	---	---	---		
1,2,4-Trichlorobenzene	ND	50.0	100	ug/L	50	---	---	---	---	---	---		
1,1,1-Trichloroethane	ND	12.5	25.0	ug/L	50	---	---	---	---	---	---		
1,1,2-Trichloroethane	ND	12.5	25.0	ug/L	50	---	---	---	---	---	---		
Trichloroethene (TCE)	ND	12.5	25.0	ug/L	50	---	---	---	---	---	---		
Trichlorofluoromethane	ND	50.0	100	ug/L	50	---	---	---	---	---	---		
1,2,3-Trichloropropane	ND	25.0	50.0	ug/L	50	---	---	---	---	---	---		
1,2,4-Trimethylbenzene	ND	25.0	50.0	ug/L	50	---	---	---	---	---	---		
1,3,5-Trimethylbenzene	ND	25.0	50.0	ug/L	50	---	---	---	---	---	---		
Vinyl chloride	ND	12.5	25.0	ug/L	50	---	---	---	---	---	---		
m,p-Xylene	ND	25.0	50.0	ug/L	50	---	---	---	---	---	---		
o-Xylene	ND	12.5	25.0	ug/L	50	---	---	---	---	---	---		
<i>Surr: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 100 %</i>		<i>Limits: 80-120 %</i>		<i>Dilution: 1x</i>							
<i>Toluene-d8 (Surr)</i>		<i>102 %</i>		<i>80-120 %</i>		<i>"</i>							
<i>4-Bromofluorobenzene (Surr)</i>		<i>98 %</i>		<i>80-120 %</i>		<i>"</i>							

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ANALYTICAL REPORT

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street  
Tigard, OR 97223  
503-718-2323  
ORELAP ID: OR100062

<b>Sevenson Environmental Services, Inc.</b>	Project: <b>Gasco - Soil Residuals</b>	
2749 Lockport Road	Project Number: <b>111323</b>	<b>Report ID:</b>
Niagara Falls, NY 14305	Project Manager: <b>Chip Byrd</b>	<b>A3C0669 - 04 04 23 1606</b>

**QUALITY CONTROL (QC) SAMPLE RESULTS**

**TCLP Volatile Organic Compounds by EPA 1311/8260D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 23C1160 - EPA 1311/5030B TCLP Volatiles</b>						<b>Water</b>						
<b>LCS (23C1160-BS1)</b>						Prepared: 03/29/23 11:03 Analyzed: 03/29/23 13:07						<b>TCLPb</b>
<b>1311/8260D</b>												
Acetone	2230	500	1000	ug/L	50	2000	---	112	80-120%	---	---	
Benzene	1000	6.25	12.5	ug/L	50	1000	---	100	80-120%	---	---	
Bromobenzene	940	12.5	25.0	ug/L	50	1000	---	94	80-120%	---	---	
Bromochloromethane	1210	25.0	50.0	ug/L	50	1000	---	<b>121</b>	<b>80-120%</b>	---	---	Q-56
Bromodichloromethane	1120	25.0	50.0	ug/L	50	1000	---	112	80-120%	---	---	
Bromoform	1130	25.0	50.0	ug/L	50	1000	---	113	80-120%	---	---	
Bromomethane	1260	250	250	ug/L	50	1000	---	<b>126</b>	<b>80-120%</b>	---	---	Q-56
2-Butanone (MEK)	2250	250	500	ug/L	50	2000	---	113	80-120%	---	---	
n-Butylbenzene	1130	25.0	50.0	ug/L	50	1000	---	113	80-120%	---	---	
sec-Butylbenzene	1180	25.0	50.0	ug/L	50	1000	---	118	80-120%	---	---	
tert-Butylbenzene	1120	25.0	50.0	ug/L	50	1000	---	112	80-120%	---	---	
Carbon tetrachloride	1210	25.0	50.0	ug/L	50	1000	---	<b>121</b>	<b>80-120%</b>	---	---	Q-56
Chlorobenzene	1020	12.5	25.0	ug/L	50	1000	---	102	80-120%	---	---	
Chloroethane	1290	250	250	ug/L	50	1000	---	<b>129</b>	<b>80-120%</b>	---	---	Q-56
Chloroform	1030	25.0	50.0	ug/L	50	1000	---	103	80-120%	---	---	
Chloromethane	1120	125	250	ug/L	50	1000	---	112	80-120%	---	---	
2-Chlorotoluene	996	25.0	50.0	ug/L	50	1000	---	100	80-120%	---	---	
4-Chlorotoluene	1070	25.0	50.0	ug/L	50	1000	---	107	80-120%	---	---	
1,2-Dibromo-3-chloropropane	960	125	250	ug/L	50	1000	---	96	80-120%	---	---	
Dibromochloromethane	1090	25.0	50.0	ug/L	50	1000	---	109	80-120%	---	---	
1,2-Dibromoethane (EDB)	1050	12.5	25.0	ug/L	50	1000	---	105	80-120%	---	---	
Dibromomethane	1040	25.0	50.0	ug/L	50	1000	---	104	80-120%	---	---	
1,2-Dichlorobenzene	1010	12.5	25.0	ug/L	50	1000	---	101	80-120%	---	---	
1,3-Dichlorobenzene	1040	12.5	25.0	ug/L	50	1000	---	104	80-120%	---	---	
1,4-Dichlorobenzene	970	12.5	25.0	ug/L	50	1000	---	97	80-120%	---	---	
Dichlorodifluoromethane	1190	25.0	50.0	ug/L	50	1000	---	119	80-120%	---	---	
1,1-Dichloroethane	1080	12.5	25.0	ug/L	50	1000	---	108	80-120%	---	---	
1,1-Dichloroethene	1130	12.5	25.0	ug/L	50	1000	---	113	80-120%	---	---	
1,2-Dichloroethane (EDC)	1170	12.5	25.0	ug/L	50	1000	---	117	80-120%	---	---	
cis-1,2-Dichloroethene	1020	25.0	50.0	ug/L	50	1000	---	102	80-120%	---	---	
trans-1,2-Dichloroethene	1020	12.5	25.0	ug/L	50	1000	---	102	80-120%	---	---	
1,2-Dichloropropane	999	12.5	25.0	ug/L	50	1000	---	100	80-120%	---	---	
1,3-Dichloropropane	1060	25.0	50.0	ug/L	50	1000	---	106	80-120%	---	---	

Apex Laboratories

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ANALYTICAL REPORT

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street  
Tigard, OR 97223  
503-718-2323  
ORELAP ID: OR100062

<b>Sevenson Environmental Services, Inc.</b> 2749 Lockport Road Niagara Falls, NY 14305	Project: <b>Gasco - Soil Residuals</b> Project Number: <b>111323</b> Project Manager: <b>Chip Byrd</b>	<b>Report ID:</b> <b>A3C0669 - 04 04 23 1606</b>
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**QUALITY CONTROL (QC) SAMPLE RESULTS**

**TCLP Volatile Organic Compounds by EPA 1311/8260D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 23C1160 - EPA 1311/5030B TCLP Volatiles</b>						<b>Water</b>						
<b>LCS (23C1160-BS1)</b>						Prepared: 03/29/23 11:03 Analyzed: 03/29/23 13:07						<b>TCLPb</b>
2,2-Dichloropropane	1260	25.0	50.0	ug/L	50	1000	---	<b>126</b>	<b>80-120%</b>	---	---	Q-56
1,1-Dichloropropene	1070	25.0	50.0	ug/L	50	1000	---	107	80-120%	---	---	
cis-1,3-Dichloropropene	1090	25.0	50.0	ug/L	50	1000	---	109	80-120%	---	---	
trans-1,3-Dichloropropene	1240	25.0	50.0	ug/L	50	1000	---	<b>124</b>	<b>80-120%</b>	---	---	Q-56
Ethylbenzene	1090	12.5	25.0	ug/L	50	1000	---	109	80-120%	---	---	
Hexachlorobutadiene	1090	125	250	ug/L	50	1000	---	109	80-120%	---	---	
2-Hexanone	2200	250	500	ug/L	50	2000	---	110	80-120%	---	---	
Isopropylbenzene	1120	25.0	50.0	ug/L	50	1000	---	112	80-120%	---	---	
4-Isopropyltoluene	1150	25.0	50.0	ug/L	50	1000	---	115	80-120%	---	---	
4-Methyl-2-pentanone (MiBK)	2460	250	500	ug/L	50	2000	---	<b>123</b>	<b>80-120%</b>	---	---	Q-56
Methyl tert-butyl ether (MTBE)	1050	25.0	50.0	ug/L	50	1000	---	105	80-120%	---	---	
Methylene chloride	982	250	500	ug/L	50	1000	---	98	80-120%	---	---	
n-Propylbenzene	1070	12.5	25.0	ug/L	50	1000	---	107	80-120%	---	---	
Styrene	1130	25.0	50.0	ug/L	50	1000	---	113	80-120%	---	---	
1,1,1,2-Tetrachloroethane	1060	12.5	25.0	ug/L	50	1000	---	106	80-120%	---	---	
1,1,2,2-Tetrachloroethane	1080	12.5	25.0	ug/L	50	1000	---	108	80-120%	---	---	
Naphthalene	774	100	100	ug/L	50	1000	---	<b>77</b>	<b>80-120%</b>	---	---	Q-55
Tetrachloroethene (PCE)	1090	12.5	25.0	ug/L	50	1000	---	109	80-120%	---	---	
Toluene	996	25.0	50.0	ug/L	50	1000	---	100	80-120%	---	---	
1,2,3-Trichlorobenzene	1040	25.0	50.0	ug/L	50	1000	---	104	80-120%	---	---	
1,2,4-Trichlorobenzene	936	50.0	100	ug/L	50	1000	---	94	80-120%	---	---	
1,1,1-Trichloroethane	1150	12.5	25.0	ug/L	50	1000	---	115	80-120%	---	---	
1,1,2-Trichloroethane	1050	12.5	25.0	ug/L	50	1000	---	105	80-120%	---	---	
Trichloroethene (TCE)	926	12.5	25.0	ug/L	50	1000	---	93	80-120%	---	---	
Trichlorofluoromethane	1260	50.0	100	ug/L	50	1000	---	<b>126</b>	<b>80-120%</b>	---	---	Q-56
1,2,3-Trichloropropane	1100	25.0	50.0	ug/L	50	1000	---	110	80-120%	---	---	
1,2,4-Trimethylbenzene	1160	25.0	50.0	ug/L	50	1000	---	116	80-120%	---	---	
1,3,5-Trimethylbenzene	1150	25.0	50.0	ug/L	50	1000	---	115	80-120%	---	---	
Vinyl chloride	1030	12.5	25.0	ug/L	50	1000	---	103	80-120%	---	---	
m,p-Xylene	2360	25.0	50.0	ug/L	50	2000	---	118	80-120%	---	---	
o-Xylene	1080	12.5	25.0	ug/L	50	1000	---	108	80-120%	---	---	
<i>Surr: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 94%</i>		<i>Limits: 80-120%</i>		<i>Dilution: 1x</i>						
<i>Toluene-d8 (Surr)</i>		<i>99%</i>		<i>80-120%</i>		<i>"</i>						
<i>4-Bromofluorobenzene (Surr)</i>		<i>92%</i>		<i>80-120%</i>		<i>"</i>						

Apex Laboratories

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street  
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503-718-2323  
ORELAP ID: OR100062

<b>Sevenson Environmental Services, Inc.</b> 2749 Lockport Road Niagara Falls, NY 14305	Project: <b>Gasco - Soil Residuals</b> Project Number: <b>111323</b> Project Manager: <b>Chip Byrd</b>	<b>Report ID:</b> <b>A3C0669 - 04 04 23 1606</b>
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**QUALITY CONTROL (QC) SAMPLE RESULTS**

**TCLP Volatile Organic Compounds by EPA 1311/8260D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 23C1160 - EPA 1311/5030B TCLP Volatiles</b>						<b>Water</b>						
<b>Duplicate (23C1160-DUP1)</b>			Prepared: 03/29/23 11:03 Analyzed: 03/29/23 17:38									
<b>QC Source Sample: T103B-031723-15 (A3C0669-01)</b>												
<b>1311/8260D</b>												
Acetone	ND	500	1000	ug/L	50	---	ND	---	---	---	30%	
Benzene	ND	6.25	12.5	ug/L	50	---	ND	---	---	---	30%	
Bromobenzene	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	
Bromochloromethane	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
Bromodichloromethane	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
Bromoform	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
Bromomethane	ND	250	250	ug/L	50	---	ND	---	---	---	30%	
2-Butanone (MEK)	ND	250	500	ug/L	50	---	ND	---	---	---	30%	
n-Butylbenzene	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
sec-Butylbenzene	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
tert-Butylbenzene	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
Carbon tetrachloride	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
Chlorobenzene	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	
Chloroethane	ND	250	250	ug/L	50	---	ND	---	---	---	30%	
Chloroform	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
Chloromethane	ND	125	250	ug/L	50	---	ND	---	---	---	30%	
2-Chlorotoluene	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
4-Chlorotoluene	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
1,2-Dibromo-3-chloropropane	ND	125	250	ug/L	50	---	ND	---	---	---	30%	
Dibromochloromethane	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
1,2-Dibromoethane (EDB)	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	
Dibromomethane	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
1,2-Dichlorobenzene	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	
1,3-Dichlorobenzene	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	

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ANALYTICAL REPORT

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street  
Tigard, OR 97223  
503-718-2323  
ORELAP ID: OR100062

<b>Sevenson Environmental Services, Inc.</b> 2749 Lockport Road Niagara Falls, NY 14305	Project: <b>Gasco - Soil Residuals</b> Project Number: <b>111323</b> Project Manager: <b>Chip Byrd</b>	<b>Report ID:</b> <b>A3C0669 - 04 04 23 1606</b>
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**QUALITY CONTROL (QC) SAMPLE RESULTS**

**TCLP Volatile Organic Compounds by EPA 1311/8260D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 23C1160 - EPA 1311/5030B TCLP Volatiles</b>						<b>Water</b>						
<b>Duplicate (23C1160-DUP1)</b>			Prepared: 03/29/23 11:03 Analyzed: 03/29/23 17:38									
<b>QC Source Sample: T103B-031723-15 (A3C0669-01)</b>												
1,2-Dichloropropane	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
Ethylbenzene	<b>16.5</b>	12.5	25.0	ug/L	50	---	16.5	---	---	0	30%	J
Hexachlorobutadiene	ND	125	250	ug/L	50	---	ND	---	---	---	30%	
2-Hexanone	ND	250	500	ug/L	50	---	ND	---	---	---	30%	
Isopropylbenzene	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	250	500	ug/L	50	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
Methylene chloride	ND	250	500	ug/L	50	---	ND	---	---	---	30%	
n-Propylbenzene	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	
Styrene	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	
Naphthalene	<b>2700</b>	100	100	ug/L	50	---	2610	---	---	3	30%	Q-54n
Tetrachloroethene (PCE)	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	
Toluene	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	50.0	100	ug/L	50	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	
1,1,2-Trichloroethane	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	
Trichloroethene (TCE)	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	50.0	100	ug/L	50	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
Vinyl chloride	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	
m,p-Xylene	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
o-Xylene	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	

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Darwin Thomas, Business Development Director



**ANALYTICAL REPORT**

**Apex Laboratories, LLC**

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Tigard, OR 97223  
503-718-2323  
ORELAP ID: OR100062

<b>Sevenson Environmental Services, Inc.</b> 2749 Lockport Road Niagara Falls, NY 14305	Project: <b>Gasco - Soil Residuals</b> Project Number: <b>111323</b> Project Manager: <b>Chip Byrd</b>	<b>Report ID:</b> <b>A3C0669 - 04 04 23 1606</b>
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**QUALITY CONTROL (QC) SAMPLE RESULTS**

**TCLP Volatile Organic Compounds by EPA 1311/8260D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 23C1160 - EPA 1311/5030B TCLP Volatiles</b>						<b>Water</b>						
<b>Duplicate (23C1160-DUP1)</b>			Prepared: 03/29/23 11:03 Analyzed: 03/29/23 17:38									
<b>QC Source Sample: T103B-031723-15 (A3C0669-01)</b>												
<i>Surr: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 98 %</i>		<i>Limits: 80-120 %</i>		<i>Dilution: 1x</i>						
<i>Toluene-d8 (Surr)</i>		<i>102 %</i>		<i>80-120 %</i>		<i>"</i>						
<i>4-Bromofluorobenzene (Surr)</i>		<i>97 %</i>		<i>80-120 %</i>		<i>"</i>						
<b>Matrix Spike (23C1160-MS1)</b>						Prepared: 03/29/23 11:03 Analyzed: 03/29/23 18:23						
<b>QC Source Sample: Non-SDG (A3C0674-01)</b>												
<b>1311/8260D</b>												
Acetone	2300	500	1000	ug/L	50	2000	ND	115	39-160%	---	---	
Benzene	1060	6.25	12.5	ug/L	50	1000	ND	106	79-120%	---	---	
Bromobenzene	998	12.5	25.0	ug/L	50	1000	ND	100	80-120%	---	---	
Bromochloromethane	1230	25.0	50.0	ug/L	50	1000	ND	123	78-123%	---	---	Q-54
Bromodichloromethane	1140	25.0	50.0	ug/L	50	1000	ND	114	79-125%	---	---	
Bromoform	1130	25.0	50.0	ug/L	50	1000	ND	113	66-130%	---	---	
Bromomethane	1420	250	250	ug/L	50	1000	ND	<b>142</b>	<b>53-141%</b>	---	---	Q-54h
2-Butanone (MEK)	2450	250	500	ug/L	50	2000	ND	122	56-143%	---	---	
n-Butylbenzene	1280	25.0	50.0	ug/L	50	1000	ND	128	75-128%	---	---	
sec-Butylbenzene	1260	25.0	50.0	ug/L	50	1000	ND	126	77-126%	---	---	
tert-Butylbenzene	1230	25.0	50.0	ug/L	50	1000	ND	123	78-124%	---	---	
Carbon tetrachloride	1300	25.0	50.0	ug/L	50	1000	ND	130	72-136%	---	---	Q-54
Chlorobenzene	1050	12.5	25.0	ug/L	50	1000	ND	105	80-120%	---	---	
Chloroethane	1400	250	250	ug/L	50	1000	ND	<b>140</b>	<b>60-138%</b>	---	---	Q-54l
Chloroform	1070	25.0	50.0	ug/L	50	1000	ND	107	79-124%	---	---	
Chloromethane	1220	125	250	ug/L	50	1000	ND	122	50-139%	---	---	
2-Chlorotoluene	1080	25.0	50.0	ug/L	50	1000	ND	108	79-122%	---	---	
4-Chlorotoluene	1140	25.0	50.0	ug/L	50	1000	ND	114	78-122%	---	---	
1,2-Dibromo-3-chloropropane	1040	125	250	ug/L	50	1000	ND	104	62-128%	---	---	
Dibromochloromethane	1110	25.0	50.0	ug/L	50	1000	ND	111	74-126%	---	---	
1,2-Dibromoethane (EDB)	1070	12.5	25.0	ug/L	50	1000	ND	107	77-121%	---	---	
Dibromomethane	1050	25.0	50.0	ug/L	50	1000	ND	105	79-123%	---	---	
1,2-Dichlorobenzene	1070	12.5	25.0	ug/L	50	1000	ND	107	80-120%	---	---	
1,3-Dichlorobenzene	1080	12.5	25.0	ug/L	50	1000	ND	108	80-120%	---	---	
1,4-Dichlorobenzene	1000	12.5	25.0	ug/L	50	1000	ND	100	79-120%	---	---	
Dichlorodifluoromethane	1260	25.0	50.0	ug/L	50	1000	ND	126	32-152%	---	---	

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

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ORELAP ID: OR100062

<b>Sevenson Environmental Services, Inc.</b> 2749 Lockport Road Niagara Falls, NY 14305	Project: <b>Gasco - Soil Residuals</b> Project Number: <b>111323</b> Project Manager: <b>Chip Byrd</b>	<b>Report ID:</b> <b>A3C0669 - 04 04 23 1606</b>
---	--	---

**QUALITY CONTROL (QC) SAMPLE RESULTS**

**TCLP Volatile Organic Compounds by EPA 1311/8260D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 23C1160 - EPA 1311/5030B TCLP Volatiles</b>						<b>Water</b>						
<b>Matrix Spike (23C1160-MS1)</b>						Prepared: 03/29/23 11:03 Analyzed: 03/29/23 18:23						
<b>QC Source Sample: Non-SDG (A3C0674-01)</b>												
1,1-Dichloroethane	1150	12.5	25.0	ug/L	50	1000	ND	115	77-125%	---	---	
1,1-Dichloroethene	1230	12.5	25.0	ug/L	50	1000	ND	123	71-131%	---	---	
1,2-Dichloroethane (EDC)	1200	12.5	25.0	ug/L	50	1000	ND	120	73-128%	---	---	
cis-1,2-Dichloroethene	1100	25.0	50.0	ug/L	50	1000	ND	110	78-123%	---	---	
trans-1,2-Dichloroethene	1120	12.5	25.0	ug/L	50	1000	ND	112	75-124%	---	---	
1,2-Dichloropropane	1050	12.5	25.0	ug/L	50	1000	ND	105	78-122%	---	---	
1,3-Dichloropropane	1100	25.0	50.0	ug/L	50	1000	ND	110	80-120%	---	---	
2,2-Dichloropropane	1300	25.0	50.0	ug/L	50	1000	ND	130	60-139%	---	---	Q-54h
1,1-Dichloropropene	1200	25.0	50.0	ug/L	50	1000	ND	120	79-125%	---	---	
cis-1,3-Dichloropropene	1160	25.0	50.0	ug/L	50	1000	ND	116	75-124%	---	---	
trans-1,3-Dichloropropene	1270	25.0	50.0	ug/L	50	1000	ND	127	73-127%	---	---	Q-54d
Ethylbenzene	1150	12.5	25.0	ug/L	50	1000	ND	115	79-121%	---	---	
Hexachlorobutadiene	1170	125	250	ug/L	50	1000	ND	117	66-134%	---	---	
2-Hexanone	2390	250	500	ug/L	50	2000	ND	120	57-139%	---	---	
Isopropylbenzene	1210	25.0	50.0	ug/L	50	1000	ND	121	72-131%	---	---	
4-Isopropyltoluene	1260	25.0	50.0	ug/L	50	1000	ND	126	77-127%	---	---	
4-Methyl-2-pentanone (MiBK)	2670	250	500	ug/L	50	2000	ND	<b>134</b>	<b>67-130%</b>	---	---	Q-54a
Methyl tert-butyl ether (MTBE)	1090	25.0	50.0	ug/L	50	1000	ND	109	71-124%	---	---	
Methylene chloride	1050	250	500	ug/L	50	1000	ND	105	74-124%	---	---	
n-Propylbenzene	1150	12.5	25.0	ug/L	50	1000	ND	115	76-126%	---	---	
Styrene	1180	25.0	50.0	ug/L	50	1000	ND	118	78-123%	---	---	
1,1,1,2-Tetrachloroethane	1060	12.5	25.0	ug/L	50	1000	ND	106	78-124%	---	---	
1,1,2,2-Tetrachloroethane	1100	12.5	25.0	ug/L	50	1000	ND	110	71-121%	---	---	
Naphthalene	2030	100	100	ug/L	50	1000	804	123	61-128%	---	---	Q-54n
Tetrachloroethene (PCE)	1150	12.5	25.0	ug/L	50	1000	ND	115	74-129%	---	---	
Toluene	1050	25.0	50.0	ug/L	50	1000	ND	105	80-121%	---	---	
1,2,3-Trichlorobenzene	1180	25.0	50.0	ug/L	50	1000	ND	118	69-129%	---	---	
1,2,4-Trichlorobenzene	1120	50.0	100	ug/L	50	1000	ND	112	69-130%	---	---	
1,1,1-Trichloroethane	1200	12.5	25.0	ug/L	50	1000	ND	120	74-131%	---	---	
1,1,2-Trichloroethane	1040	12.5	25.0	ug/L	50	1000	ND	104	80-120%	---	---	
Trichloroethene (TCE)	998	12.5	25.0	ug/L	50	1000	ND	100	79-123%	---	---	
Trichlorofluoromethane	1330	50.0	100	ug/L	50	1000	ND	133	65-141%	---	---	Q-54h
1,2,3-Trichloropropane	1110	25.0	50.0	ug/L	50	1000	ND	111	73-122%	---	---	

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ANALYTICAL REPORT

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<b>Sevenson Environmental Services, Inc.</b> 2749 Lockport Road Niagara Falls, NY 14305	Project: <b>Gasco - Soil Residuals</b> Project Number: <b>111323</b> Project Manager: <b>Chip Byrd</b>	<b>Report ID:</b> <b>A3C0669 - 04 04 23 1606</b>
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**QUALITY CONTROL (QC) SAMPLE RESULTS**

**TCLP Volatile Organic Compounds by EPA 1311/8260D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 23C1160 - EPA 1311/5030B TCLP Volatiles</b>						<b>Water</b>						
<b>Matrix Spike (23C1160-MS1)</b>						Prepared: 03/29/23 11:03 Analyzed: 03/29/23 18:23						
<b>QC Source Sample: Non-SDG (A3C0674-01)</b>												
1,2,4-Trimethylbenzene	1260	25.0	50.0	ug/L	50	1000	ND	<b>126</b>	<b>76-124%</b>	---	---	Q-01
1,3,5-Trimethylbenzene	1230	25.0	50.0	ug/L	50	1000	ND	123	75-124%	---	---	
Vinyl chloride	1200	12.5	25.0	ug/L	50	1000	ND	120	58-137%	---	---	
m,p-Xylene	2500	25.0	50.0	ug/L	50	2000	ND	<b>125</b>	<b>80-121%</b>	---	---	Q-01
o-Xylene	1170	12.5	25.0	ug/L	50	1000	ND	117	78-122%	---	---	
<i>Surr: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 94 %</i>		<i>Limits: 80-120 %</i>		<i>Dilution: 1x</i>						
<i>Toluene-d8 (Surr)</i>		<i>99 %</i>		<i>80-120 %</i>		<i>"</i>						
<i>4-Bromofluorobenzene (Surr)</i>		<i>94 %</i>		<i>80-120 %</i>		<i>"</i>						

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2749 Lockport Road	Project Number: <b>111323</b>	<b>Report ID:</b>
Niagara Falls, NY 14305	Project Manager: <b>Chip Byrd</b>	<b>A3C0669 - 04 04 23 1606</b>

**QUALITY CONTROL (QC) SAMPLE RESULTS**

**Semivolatile Organic Compounds by EPA 8270E**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 23C1150 - EPA 3546</b>						<b>Soil</b>						
<b>Blank (23C1150-BLK3)</b>			Prepared: 03/29/23 10:18 Analyzed: 03/30/23 18:14									
<u>EPA 8270E</u>												
Acenaphthene	ND	1.33	2.67	ug/kg wet	1	---	---	---	---	---	---	
Acenaphthylene	ND	1.33	2.67	ug/kg wet	1	---	---	---	---	---	---	
Anthracene	ND	1.33	2.67	ug/kg wet	1	---	---	---	---	---	---	
Benz(a)anthracene	ND	1.33	2.67	ug/kg wet	1	---	---	---	---	---	---	
Benzo(a)pyrene	ND	2.00	4.00	ug/kg wet	1	---	---	---	---	---	---	
Benzo(b)fluoranthene	ND	2.00	4.00	ug/kg wet	1	---	---	---	---	---	---	
Benzo(k)fluoranthene	ND	2.00	4.00	ug/kg wet	1	---	---	---	---	---	---	
Benzo(g,h,i)perylene	ND	1.33	2.67	ug/kg wet	1	---	---	---	---	---	---	
Chrysene	ND	1.33	2.67	ug/kg wet	1	---	---	---	---	---	---	
Dibenz(a,h)anthracene	ND	1.33	2.67	ug/kg wet	1	---	---	---	---	---	---	
Fluoranthene	ND	1.33	2.67	ug/kg wet	1	---	---	---	---	---	---	
Fluorene	ND	1.33	2.67	ug/kg wet	1	---	---	---	---	---	---	
Indeno(1,2,3-cd)pyrene	ND	1.33	2.67	ug/kg wet	1	---	---	---	---	---	---	
1-Methylnaphthalene	ND	2.67	5.33	ug/kg wet	1	---	---	---	---	---	---	
2-Methylnaphthalene	ND	2.67	5.33	ug/kg wet	1	---	---	---	---	---	---	
Naphthalene	ND	2.67	5.33	ug/kg wet	1	---	---	---	---	---	---	
Phenanthrene	ND	1.33	2.67	ug/kg wet	1	---	---	---	---	---	---	
Pyrene	ND	1.33	2.67	ug/kg wet	1	---	---	---	---	---	---	
Carbazole	ND	2.00	4.00	ug/kg wet	1	---	---	---	---	---	---	
Dibenzofuran	ND	1.33	2.67	ug/kg wet	1	---	---	---	---	---	---	
2-Chlorophenol	ND	6.67	13.3	ug/kg wet	1	---	---	---	---	---	---	
4-Chloro-3-methylphenol	ND	13.3	26.7	ug/kg wet	1	---	---	---	---	---	---	
2,4-Dichlorophenol	ND	6.67	13.3	ug/kg wet	1	---	---	---	---	---	---	
2,4-Dimethylphenol	ND	6.67	13.3	ug/kg wet	1	---	---	---	---	---	---	
2,4-Dinitrophenol	ND	33.3	66.7	ug/kg wet	1	---	---	---	---	---	---	
4,6-Dinitro-2-methylphenol	ND	33.3	66.7	ug/kg wet	1	---	---	---	---	---	---	
2-Methylphenol	ND	3.33	6.67	ug/kg wet	1	---	---	---	---	---	---	
3+4-Methylphenol(s)	ND	3.33	6.67	ug/kg wet	1	---	---	---	---	---	---	
2-Nitrophenol	ND	13.3	26.7	ug/kg wet	1	---	---	---	---	---	---	
4-Nitrophenol	ND	13.3	26.7	ug/kg wet	1	---	---	---	---	---	---	
Pentachlorophenol (PCP)	ND	13.3	26.7	ug/kg wet	1	---	---	---	---	---	---	
Phenol	ND	2.67	5.33	ug/kg wet	1	---	---	---	---	---	---	
2,3,4,6-Tetrachlorophenol	ND	6.67	13.3	ug/kg wet	1	---	---	---	---	---	---	

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ANALYTICAL REPORT

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street  
Tigard, OR 97223  
503-718-2323  
ORELAP ID: OR100062

<b>Sevenson Environmental Services, Inc.</b> 2749 Lockport Road Niagara Falls, NY 14305	Project: <b>Gasco - Soil Residuals</b> Project Number: <b>111323</b> Project Manager: <b>Chip Byrd</b>	<b>Report ID:</b> <b>A3C0669 - 04 04 23 1606</b>
---	--	---

**QUALITY CONTROL (QC) SAMPLE RESULTS**

**Semivolatile Organic Compounds by EPA 8270E**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 23C1150 - EPA 3546</b>						<b>Soil</b>						
<b>Blank (23C1150-BLK3)</b>			Prepared: 03/29/23 10:18 Analyzed: 03/30/23 18:14									
2,3,5,6-Tetrachlorophenol	ND	6.67	13.3	ug/kg wet	1	---	---	---	---	---	---	
2,4,5-Trichlorophenol	ND	6.67	13.3	ug/kg wet	1	---	---	---	---	---	---	
2,4,6-Trichlorophenol	ND	6.67	13.3	ug/kg wet	1	---	---	---	---	---	---	
Bis(2-ethylhexyl)phthalate	ND	20.0	40.0	ug/kg wet	1	---	---	---	---	---	---	
Butyl benzyl phthalate	ND	13.3	26.7	ug/kg wet	1	---	---	---	---	---	---	
Diethylphthalate	ND	13.3	26.7	ug/kg wet	1	---	---	---	---	---	---	
Dimethylphthalate	ND	13.3	26.7	ug/kg wet	1	---	---	---	---	---	---	
Di-n-butylphthalate	<b>113</b>	13.3	26.7	ug/kg wet	1	---	---	---	---	---	---	B
Di-n-octyl phthalate	ND	13.3	26.7	ug/kg wet	1	---	---	---	---	---	---	
N-Nitrosodimethylamine	ND	3.33	6.67	ug/kg wet	1	---	---	---	---	---	---	
N-Nitroso-di-n-propylamine	ND	3.33	6.67	ug/kg wet	1	---	---	---	---	---	---	
N-Nitrosodiphenylamine	ND	3.33	6.67	ug/kg wet	1	---	---	---	---	---	---	
Bis(2-Chloroethoxy) methane	ND	3.33	6.67	ug/kg wet	1	---	---	---	---	---	---	
Bis(2-Chloroethyl) ether	ND	3.33	6.67	ug/kg wet	1	---	---	---	---	---	---	
2,2'-Oxybis(1-Chloropropane)	ND	3.33	6.67	ug/kg wet	1	---	---	---	---	---	---	
Hexachlorobenzene	ND	1.33	2.67	ug/kg wet	1	---	---	---	---	---	---	
Hexachlorobutadiene	ND	3.33	6.67	ug/kg wet	1	---	---	---	---	---	---	
Hexachlorocyclopentadiene	ND	6.67	13.3	ug/kg wet	1	---	---	---	---	---	---	
Hexachloroethane	ND	3.33	6.67	ug/kg wet	1	---	---	---	---	---	---	
2-Chloronaphthalene	ND	1.33	2.67	ug/kg wet	1	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	3.33	6.67	ug/kg wet	1	---	---	---	---	---	---	
4-Bromophenyl phenyl ether	ND	3.33	6.67	ug/kg wet	1	---	---	---	---	---	---	
4-Chlorophenyl phenyl ether	ND	3.33	6.67	ug/kg wet	1	---	---	---	---	---	---	
Aniline	ND	6.67	13.3	ug/kg wet	1	---	---	---	---	---	---	
4-Chloroaniline	ND	3.33	6.67	ug/kg wet	1	---	---	---	---	---	---	
2-Nitroaniline	ND	26.7	53.3	ug/kg wet	1	---	---	---	---	---	---	
3-Nitroaniline	ND	26.7	53.3	ug/kg wet	1	---	---	---	---	---	---	
4-Nitroaniline	ND	26.7	53.3	ug/kg wet	1	---	---	---	---	---	---	
Nitrobenzene	ND	13.3	26.7	ug/kg wet	1	---	---	---	---	---	---	
2,4-Dinitrotoluene	ND	13.3	26.7	ug/kg wet	1	---	---	---	---	---	---	
2,6-Dinitrotoluene	ND	13.3	26.7	ug/kg wet	1	---	---	---	---	---	---	
Benzoic acid	ND	167	333	ug/kg wet	1	---	---	---	---	---	---	
Benzyl alcohol	ND	6.67	13.3	ug/kg wet	1	---	---	---	---	---	---	
Isophorone	ND	3.33	6.67	ug/kg wet	1	---	---	---	---	---	---	

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ANALYTICAL REPORT

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street  
Tigard, OR 97223  
503-718-2323  
ORELAP ID: OR100062

<b>Sevenson Environmental Services, Inc.</b> 2749 Lockport Road Niagara Falls, NY 14305	Project: <b>Gasco - Soil Residuals</b> Project Number: <b>111323</b> Project Manager: <b>Chip Byrd</b>	<b>Report ID:</b> <b>A3C0669 - 04 04 23 1606</b>
---	--	---

**QUALITY CONTROL (QC) SAMPLE RESULTS**

**Semivolatile Organic Compounds by EPA 8270E**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 23C1150 - EPA 3546</b>						<b>Soil</b>						
<b>Blank (23C1150-BLK3)</b>			Prepared: 03/29/23 10:18 Analyzed: 03/30/23 18:14									
Azobenzene (1,2-DPH)	ND	3.33	6.67	ug/kg wet	1	---	---	---	---	---	---	
Bis(2-Ethylhexyl) adipate	ND	33.3	66.7	ug/kg wet	1	---	---	---	---	---	---	
3,3'-Dichlorobenzidine	ND	26.7	53.3	ug/kg wet	1	---	---	---	---	---	---	Q-52
1,2-Dinitrobenzene	ND	33.3	66.7	ug/kg wet	1	---	---	---	---	---	---	
1,3-Dinitrobenzene	ND	33.3	66.7	ug/kg wet	1	---	---	---	---	---	---	
1,4-Dinitrobenzene	ND	33.3	66.7	ug/kg wet	1	---	---	---	---	---	---	
Pyridine	ND	6.67	13.3	ug/kg wet	1	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	3.33	6.67	ug/kg wet	1	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	3.33	6.67	ug/kg wet	1	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	3.33	6.67	ug/kg wet	1	---	---	---	---	---	---	
<i>Surr: Nitrobenzene-d5 (Surr)</i>		<i>Recovery: 124 %</i>		<i>Limits: 37-122 %</i>		<i>Dilution: 1x</i>		S-06				
<i>2-Fluorobiphenyl (Surr)</i>		<i>93 %</i>		<i>44-120 %</i>		<i>"</i>						
<i>Phenol-d6 (Surr)</i>		<i>120 %</i>		<i>33-122 %</i>		<i>"</i>						
<i>p-Terphenyl-d14 (Surr)</i>		<i>104 %</i>		<i>54-127 %</i>		<i>"</i>						
<i>2-Fluorophenol (Surr)</i>		<i>105 %</i>		<i>35-120 %</i>		<i>"</i>						
<i>2,4,6-Tribromophenol (Surr)</i>		<i>88 %</i>		<i>39-132 %</i>		<i>"</i>						
<b>LCS (23C1150-BS2)</b>						Prepared: 03/29/23 10:18 Analyzed: 03/29/23 16:37						<b>Q-18</b>
<b>EPA 8270E</b>												
Acenaphthene	514	5.32	10.7	ug/kg wet	4	533	---	96	40-123%	---	---	
Acenaphthylene	486	5.32	10.7	ug/kg wet	4	533	---	91	32-132%	---	---	
Anthracene	530	5.32	10.7	ug/kg wet	4	533	---	99	47-123%	---	---	
Benz(a)anthracene	525	5.32	10.7	ug/kg wet	4	533	---	98	49-126%	---	---	
Benzo(a)pyrene	487	8.00	16.0	ug/kg wet	4	533	---	91	45-129%	---	---	
Benzo(b)fluoranthene	481	8.00	16.0	ug/kg wet	4	533	---	90	45-132%	---	---	
Benzo(k)fluoranthene	494	8.00	16.0	ug/kg wet	4	533	---	93	47-132%	---	---	
Benzo(g,h,i)perylene	559	5.32	10.7	ug/kg wet	4	533	---	105	43-134%	---	---	
Chrysene	516	5.32	10.7	ug/kg wet	4	533	---	97	50-124%	---	---	
Dibenz(a,h)anthracene	529	5.32	10.7	ug/kg wet	4	533	---	99	45-134%	---	---	
Fluoranthene	554	5.32	10.7	ug/kg wet	4	533	---	104	50-127%	---	---	
Fluorene	478	5.32	10.7	ug/kg wet	4	533	---	90	43-125%	---	---	
Indeno(1,2,3-cd)pyrene	495	5.32	10.7	ug/kg wet	4	533	---	93	45-133%	---	---	
1-Methylnaphthalene	517	10.7	21.3	ug/kg wet	4	533	---	97	40-120%	---	---	
2-Methylnaphthalene	553	10.7	21.3	ug/kg wet	4	533	---	104	38-122%	---	---	

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ANALYTICAL REPORT

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street  
Tigard, OR 97223  
503-718-2323  
ORELAP ID: OR100062

<b>Sevenson Environmental Services, Inc.</b> 2749 Lockport Road Niagara Falls, NY 14305	Project: <b>Gasco - Soil Residuals</b> Project Number: <b>111323</b> Project Manager: <b>Chip Byrd</b>	<b>Report ID:</b> <b>A3C0669 - 04 04 23 1606</b>
---	--	---

**QUALITY CONTROL (QC) SAMPLE RESULTS**

**Semivolatile Organic Compounds by EPA 8270E**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 23C1150 - EPA 3546</b>						<b>Soil</b>						
<b>LCS (23C1150-BS2)</b>						Prepared: 03/29/23 10:18 Analyzed: 03/29/23 16:37						<b>Q-18</b>
Naphthalene	504	10.7	21.3	ug/kg wet	4	533	---	94	35-123%	---	---	
Phenanthrene	500	5.32	10.7	ug/kg wet	4	533	---	94	50-121%	---	---	
Pyrene	554	5.32	10.7	ug/kg wet	4	533	---	104	47-127%	---	---	
Carbazole	554	8.00	16.0	ug/kg wet	4	533	---	104	50-123%	---	---	
Dibenzofuran	506	5.32	10.7	ug/kg wet	4	533	---	95	44-120%	---	---	
2-Chlorophenol	537	26.7	53.2	ug/kg wet	4	533	---	101	34-121%	---	---	
4-Chloro-3-methylphenol	540	53.2	107	ug/kg wet	4	533	---	101	45-122%	---	---	
2,4-Dichlorophenol	545	26.7	53.2	ug/kg wet	4	533	---	102	40-122%	---	---	
2,4-Dimethylphenol	551	26.7	53.2	ug/kg wet	4	533	---	103	30-127%	---	---	
2,4-Dinitrophenol	447	133	267	ug/kg wet	4	533	---	84	10-137%	---	---	
4,6-Dinitro-2-methylphenol	469	133	267	ug/kg wet	4	533	---	88	29-132%	---	---	
2-Methylphenol	576	13.3	26.7	ug/kg wet	4	533	---	108	32-122%	---	---	Q-41
3+4-Methylphenol(s)	547	13.3	26.7	ug/kg wet	4	533	---	103	34-120%	---	---	
2-Nitrophenol	654	53.2	107	ug/kg wet	4	533	---	123	36-123%	---	---	Q-41
4-Nitrophenol	416	53.2	107	ug/kg wet	4	533	---	78	30-132%	---	---	
Pentachlorophenol (PCP)	458	53.2	107	ug/kg wet	4	533	---	86	25-133%	---	---	
Phenol	510	10.7	21.3	ug/kg wet	4	533	---	96	34-121%	---	---	
2,3,4,6-Tetrachlorophenol	491	26.7	53.2	ug/kg wet	4	533	---	92	44-125%	---	---	
2,3,5,6-Tetrachlorophenol	514	26.7	53.2	ug/kg wet	4	533	---	96	40-120%	---	---	
2,4,5-Trichlorophenol	516	26.7	53.2	ug/kg wet	4	533	---	97	41-124%	---	---	
2,4,6-Trichlorophenol	507	26.7	53.2	ug/kg wet	4	533	---	95	39-126%	---	---	
Bis(2-ethylhexyl)phthalate	513	80.0	160	ug/kg wet	4	533	---	96	51-133%	---	---	
Butyl benzyl phthalate	548	53.2	107	ug/kg wet	4	533	---	103	48-132%	---	---	
Diethylphthalate	498	53.2	107	ug/kg wet	4	533	---	93	50-124%	---	---	
Dimethylphthalate	515	53.2	107	ug/kg wet	4	533	---	97	48-124%	---	---	
Di-n-butylphthalate	698	53.2	107	ug/kg wet	4	533	---	<b>131</b>	<b>51-128%</b>	---	---	Q-29, B
Di-n-octyl phthalate	461	53.2	107	ug/kg wet	4	533	---	86	45-140%	---	---	
N-Nitrosodimethylamine	433	13.3	26.7	ug/kg wet	4	533	---	81	23-120%	---	---	
N-Nitroso-di-n-propylamine	537	13.3	26.7	ug/kg wet	4	533	---	101	36-120%	---	---	
N-Nitrosodiphenylamine	526	13.3	26.7	ug/kg wet	4	533	---	99	38-127%	---	---	
Bis(2-Chloroethoxy) methane	570	13.3	26.7	ug/kg wet	4	533	---	107	36-121%	---	---	
Bis(2-Chloroethyl) ether	589	13.3	26.7	ug/kg wet	4	533	---	110	31-120%	---	---	
2,2'-Oxybis(1-Chloropropane)	476	13.3	26.7	ug/kg wet	4	533	---	89	39-120%	---	---	
Hexachlorobenzene	511	5.32	10.7	ug/kg wet	4	533	---	96	45-122%	---	---	

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ANALYTICAL REPORT

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503-718-2323  
ORELAP ID: OR100062

<b>Sevenson Environmental Services, Inc.</b> 2749 Lockport Road Niagara Falls, NY 14305	Project: <b>Gasco - Soil Residuals</b> Project Number: <b>111323</b> Project Manager: <b>Chip Byrd</b>	<b>Report ID:</b> <b>A3C0669 - 04 04 23 1606</b>
---	--	---

**QUALITY CONTROL (QC) SAMPLE RESULTS**

**Semivolatile Organic Compounds by EPA 8270E**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 23C1150 - EPA 3546</b>						<b>Soil</b>						
<b>LCS (23C1150-BS2)</b>						Prepared: 03/29/23 10:18 Analyzed: 03/29/23 16:37						<b>Q-18</b>
Hexachlorobutadiene	482	13.3	26.7	ug/kg wet	4	533	---	90	32-123%	---	---	
Hexachlorocyclopentadiene	478	26.7	53.2	ug/kg wet	4	533	---	90	10-140%	---	---	
Hexachloroethane	478	13.3	26.7	ug/kg wet	4	533	---	90	28-120%	---	---	
2-Chloronaphthalene	538	5.32	10.7	ug/kg wet	4	533	---	101	41-120%	---	---	
1,2,4-Trichlorobenzene	507	13.3	26.7	ug/kg wet	4	533	---	95	34-120%	---	---	
4-Bromophenyl phenyl ether	535	13.3	26.7	ug/kg wet	4	533	---	100	46-124%	---	---	
4-Chlorophenyl phenyl ether	516	13.3	26.7	ug/kg wet	4	533	---	97	45-121%	---	---	
Aniline	190	26.7	53.2	ug/kg wet	4	533	---	36	10-120%	---	---	
4-Chloroaniline	330	13.3	26.7	ug/kg wet	4	533	---	62	17-120%	---	---	
2-Nitroaniline	497	107	213	ug/kg wet	4	533	---	93	44-127%	---	---	
3-Nitroaniline	438	107	213	ug/kg wet	4	533	---	82	33-120%	---	---	
4-Nitroaniline	542	107	213	ug/kg wet	4	533	---	102	51-125%	---	---	Q-41
Nitrobenzene	536	53.2	107	ug/kg wet	4	533	---	101	34-122%	---	---	
2,4-Dinitrotoluene	510	53.2	107	ug/kg wet	4	533	---	96	48-126%	---	---	
2,6-Dinitrotoluene	538	53.2	107	ug/kg wet	4	533	---	101	46-124%	---	---	
Benzoic acid	718	668	668	ug/kg wet	4	1070	---	67	10-140%	---	---	Q-31
Benzyl alcohol	504	26.7	53.2	ug/kg wet	4	533	---	94	29-122%	---	---	
Isophorone	516	13.3	26.7	ug/kg wet	4	533	---	97	30-122%	---	---	
Azobenzene (1,2-DPH)	518	13.3	26.7	ug/kg wet	4	533	---	97	39-125%	---	---	
Bis(2-Ethylhexyl) adipate	529	133	267	ug/kg wet	4	533	---	99	61-121%	---	---	
3,3'-Dichlorobenzidine	1790	107	213	ug/kg wet	4	1070	---	<b>168</b>	<b>22-121%</b>	---	---	Q-29, Q-31, Q-52
1,2-Dinitrobenzene	530	133	267	ug/kg wet	4	533	---	99	44-120%	---	---	
1,3-Dinitrobenzene	510	133	267	ug/kg wet	4	533	---	96	43-127%	---	---	
1,4-Dinitrobenzene	510	133	267	ug/kg wet	4	533	---	96	37-132%	---	---	
Pyridine	438	26.7	53.2	ug/kg wet	4	533	---	82	10-120%	---	---	
1,2-Dichlorobenzene	486	13.3	26.7	ug/kg wet	4	533	---	91	33-120%	---	---	
1,3-Dichlorobenzene	479	13.3	26.7	ug/kg wet	4	533	---	90	30-120%	---	---	
1,4-Dichlorobenzene	468	13.3	26.7	ug/kg wet	4	533	---	88	31-120%	---	---	
<i>Surr: Nitrobenzene-d5 (Surr)</i>		<i>Recovery: 103 %</i>		<i>Limits: 37-122 %</i>		<i>Dilution: 4x</i>						
<i>2-Fluorobiphenyl (Surr)</i>		<i>103 %</i>		<i>44-120 %</i>		<i>"</i>						
<i>Phenol-d6 (Surr)</i>		<i>96 %</i>		<i>33-122 %</i>		<i>"</i>						
<i>p-Terphenyl-d14 (Surr)</i>		<i>105 %</i>		<i>54-127 %</i>		<i>"</i>						
<i>2-Fluorophenol (Surr)</i>		<i>92 %</i>		<i>35-120 %</i>		<i>"</i>						
<i>2,4,6-Tribromophenol (Surr)</i>		<i>101 %</i>		<i>39-132 %</i>		<i>"</i>						

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

**Apex Laboratories, LLC**

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<b>Sevenson Environmental Services, Inc.</b>	Project: <b>Gasco - Soil Residuals</b>	
2749 Lockport Road	Project Number: <b>111323</b>	<b>Report ID:</b>
Niagara Falls, NY 14305	Project Manager: <b>Chip Byrd</b>	<b>A3C0669 - 04 04 23 1606</b>

**QUALITY CONTROL (QC) SAMPLE RESULTS**

**Semivolatile Organic Compounds by EPA 8270E**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 23C1150 - EPA 3546</b>						<b>Soil</b>						
<b>Duplicate (23C1150-DUP2)</b>						Prepared: 03/29/23 10:18 Analyzed: 03/29/23 17:45						
<b>QC Source Sample: T103B-031723-15 (A3C0669-01)</b>												
<b>EPA 8270E</b>												
Acenaphthene	131000	1630	3280	ug/kg dry	1000	---	78800	---	---	50	30%	Q-17
Acenaphthylene	ND	8590	8590	ug/kg dry	1000	---	ND	---	---	---	30%	R-02
Anthracene	98100	1630	3280	ug/kg dry	1000	---	60300	---	---	48	30%	Q-17
Benz(a)anthracene	56600	1630	3280	ug/kg dry	1000	---	33600	---	---	51	30%	Q-17
Benzo(a)pyrene	61300	2450	4910	ug/kg dry	1000	---	36200	---	---	51	30%	Q-17
Benzo(b)fluoranthene	47600	2450	4910	ug/kg dry	1000	---	27900	---	---	52	30%	Q-17
Benzo(k)fluoranthene	20900	2450	4910	ug/kg dry	1000	---	10900	---	---	63	30%	M-05, Q-17
Benzo(g,h,i)perylene	48800	1630	3280	ug/kg dry	1000	---	26800	---	---	58	30%	Q-17
Chrysene	73600	1630	3280	ug/kg dry	1000	---	41200	---	---	56	30%	Q-17
Dibenz(a,h)anthracene	5250	1630	3280	ug/kg dry	1000	---	2850	---	---	59	30%	Q-17
Fluoranthene	220000	1630	3280	ug/kg dry	1000	---	132000	---	---	50	30%	Q-17
Fluorene	76200	1630	3280	ug/kg dry	1000	---	47000	---	---	47	30%	Q-17
Indeno(1,2,3-cd)pyrene	37700	1630	3280	ug/kg dry	1000	---	21900	---	---	53	30%	Q-17
1-Methylnaphthalene	72600	3280	6540	ug/kg dry	1000	---	42100	---	---	53	30%	Q-17
2-Methylnaphthalene	121000	3280	6540	ug/kg dry	1000	---	70700	---	---	53	30%	Q-17
Naphthalene	177000	3280	6540	ug/kg dry	1000	---	100000	---	---	55	30%	Q-17
Phenanthrene	401000	1630	3280	ug/kg dry	1000	---	248000	---	---	47	30%	Q-17
Pyrene	247000	1630	3280	ug/kg dry	1000	---	150000	---	---	49	30%	Q-17
Carbazole	6960	2450	4910	ug/kg dry	1000	---	4820	---	---	36	30%	Q-17
Dibenzofuran	10500	1630	3280	ug/kg dry	1000	---	6810	---	---	42	30%	Q-17
2-Chlorophenol	ND	8180	16300	ug/kg dry	1000	---	ND	---	---	---	30%	
4-Chloro-3-methylphenol	ND	16300	32800	ug/kg dry	1000	---	ND	---	---	---	30%	
2,4-Dichlorophenol	ND	8180	16300	ug/kg dry	1000	---	ND	---	---	---	30%	
2,4-Dimethylphenol	ND	8180	16300	ug/kg dry	1000	---	ND	---	---	---	30%	
2,4-Dinitrophenol	ND	40900	81800	ug/kg dry	1000	---	ND	---	---	---	30%	
4,6-Dinitro-2-methylphenol	ND	40900	81800	ug/kg dry	1000	---	ND	---	---	---	30%	
2-Methylphenol	ND	4090	8180	ug/kg dry	1000	---	ND	---	---	---	30%	
3+4-Methylphenol(s)	ND	4090	8180	ug/kg dry	1000	---	ND	---	---	---	30%	
2-Nitrophenol	ND	16300	32800	ug/kg dry	1000	---	ND	---	---	---	30%	
4-Nitrophenol	ND	32800	32800	ug/kg dry	1000	---	ND	---	---	---	30%	
Pentachlorophenol (PCP)	ND	16300	32800	ug/kg dry	1000	---	ND	---	---	---	30%	

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**Apex Laboratories, LLC**

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Tigard, OR 97223  
503-718-2323  
ORELAP ID: OR100062

<b>Sevenson Environmental Services, Inc.</b> 2749 Lockport Road Niagara Falls, NY 14305	Project: <b>Gasco - Soil Residuals</b> Project Number: <b>111323</b> Project Manager: <b>Chip Byrd</b>	<b>Report ID:</b> <b>A3C0669 - 04 04 23 1606</b>
---	--	---

**QUALITY CONTROL (QC) SAMPLE RESULTS**

**Semivolatile Organic Compounds by EPA 8270E**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 23C1150 - EPA 3546</b>						<b>Soil</b>						
<b>Duplicate (23C1150-DUP2)</b>			Prepared: 03/29/23 10:18 Analyzed: 03/29/23 17:45									
<b>QC Source Sample: T103B-031723-15 (A3C0669-01)</b>												
Phenol	ND	3280	6540	ug/kg dry	1000	---	ND	---	---	---	30%	
2,3,4,6-Tetrachlorophenol	ND	8180	16300	ug/kg dry	1000	---	ND	---	---	---	30%	
2,3,5,6-Tetrachlorophenol	ND	8180	16300	ug/kg dry	1000	---	ND	---	---	---	30%	
2,4,5-Trichlorophenol	ND	8180	16300	ug/kg dry	1000	---	ND	---	---	---	30%	
2,4,6-Trichlorophenol	ND	8180	16300	ug/kg dry	1000	---	ND	---	---	---	30%	
Bis(2-ethylhexyl)phthalate	ND	24500	49100	ug/kg dry	1000	---	ND	---	---	---	30%	
Butyl benzyl phthalate	ND	16300	32800	ug/kg dry	1000	---	ND	---	---	---	30%	
Diethylphthalate	ND	16300	32800	ug/kg dry	1000	---	ND	---	---	---	30%	
Dimethylphthalate	ND	16300	32800	ug/kg dry	1000	---	ND	---	---	---	30%	
Di-n-butylphthalate	ND	16300	32800	ug/kg dry	1000	---	ND	---	---	---	30%	
Di-n-octyl phthalate	ND	16300	32800	ug/kg dry	1000	---	ND	---	---	---	30%	
N-Nitrosodimethylamine	ND	4090	8180	ug/kg dry	1000	---	ND	---	---	---	30%	
N-Nitroso-di-n-propylamine	ND	4090	8180	ug/kg dry	1000	---	ND	---	---	---	30%	
N-Nitrosodiphenylamine	ND	8180	8180	ug/kg dry	1000	---	ND	---	---	---	30%	
Bis(2-Chloroethoxy) methane	ND	4090	8180	ug/kg dry	1000	---	ND	---	---	---	30%	
Bis(2-Chloroethyl) ether	ND	4090	8180	ug/kg dry	1000	---	ND	---	---	---	30%	
2,2'-Oxybis(1-Chloropropane)	ND	4090	8180	ug/kg dry	1000	---	ND	---	---	---	30%	
Hexachlorobenzene	ND	1630	3280	ug/kg dry	1000	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	4090	8180	ug/kg dry	1000	---	ND	---	---	---	30%	
Hexachlorocyclopentadiene	ND	8180	16300	ug/kg dry	1000	---	ND	---	---	---	30%	
Hexachloroethane	ND	4090	8180	ug/kg dry	1000	---	ND	---	---	---	30%	
2-Chloronaphthalene	ND	1630	3280	ug/kg dry	1000	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	4090	8180	ug/kg dry	1000	---	ND	---	---	---	30%	
4-Bromophenyl phenyl ether	ND	4090	8180	ug/kg dry	1000	---	ND	---	---	---	30%	
4-Chlorophenyl phenyl ether	ND	4090	8180	ug/kg dry	1000	---	ND	---	---	---	30%	
Aniline	ND	8180	16300	ug/kg dry	1000	---	ND	---	---	---	30%	
4-Chloroaniline	ND	4090	8180	ug/kg dry	1000	---	ND	---	---	---	30%	
2-Nitroaniline	ND	32800	65400	ug/kg dry	1000	---	ND	---	---	---	30%	
3-Nitroaniline	ND	32800	65400	ug/kg dry	1000	---	ND	---	---	---	30%	
4-Nitroaniline	ND	32800	65400	ug/kg dry	1000	---	ND	---	---	---	30%	
Nitrobenzene	ND	16300	32800	ug/kg dry	1000	---	ND	---	---	---	30%	
2,4-Dinitrotoluene	ND	16300	32800	ug/kg dry	1000	---	ND	---	---	---	30%	
2,6-Dinitrotoluene	ND	16300	32800	ug/kg dry	1000	---	ND	---	---	---	30%	

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ORELAP ID: OR100062

<b>Sevenson Environmental Services, Inc.</b> 2749 Lockport Road Niagara Falls, NY 14305	Project: <b>Gasco - Soil Residuals</b> Project Number: <b>111323</b> Project Manager: <b>Chip Byrd</b>	<b>Report ID:</b> <b>A3C0669 - 04 04 23 1606</b>
---	--	---

**QUALITY CONTROL (QC) SAMPLE RESULTS**

**Semivolatile Organic Compounds by EPA 8270E**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 23C1150 - EPA 3546</b>						<b>Soil</b>						
<b>Duplicate (23C1150-DUP2)</b>			Prepared: 03/29/23 10:18 Analyzed: 03/29/23 17:45									
<b>QC Source Sample: T103B-031723-15 (A3C0669-01)</b>												
Benzoic acid	ND	205000	409000	ug/kg dry	1000	---	ND	---	---	---	30%	
Benzyl alcohol	ND	8180	16300	ug/kg dry	1000	---	ND	---	---	---	30%	
Isophorone	ND	4090	8180	ug/kg dry	1000	---	ND	---	---	---	30%	
Azobenzene (1,2-DPH)	ND	4090	8180	ug/kg dry	1000	---	ND	---	---	---	30%	
Bis(2-Ethylhexyl) adipate	ND	40900	81800	ug/kg dry	1000	---	ND	---	---	---	30%	
3,3'-Dichlorobenzidine	ND	32800	65400	ug/kg dry	1000	---	ND	---	---	---	30%	Q-52
1,2-Dinitrobenzene	ND	40900	81800	ug/kg dry	1000	---	ND	---	---	---	30%	
1,3-Dinitrobenzene	ND	40900	81800	ug/kg dry	1000	---	ND	---	---	---	30%	
1,4-Dinitrobenzene	ND	40900	81800	ug/kg dry	1000	---	ND	---	---	---	30%	
Pyridine	ND	8180	16300	ug/kg dry	1000	---	ND	---	---	---	30%	
1,2-Dichlorobenzene	ND	4090	8180	ug/kg dry	1000	---	ND	---	---	---	30%	
1,3-Dichlorobenzene	ND	4090	8180	ug/kg dry	1000	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	4090	8180	ug/kg dry	1000	---	ND	---	---	---	30%	
<i>Surr: Nitrobenzene-d5 (Surr)</i>		<i>Recovery: 169 %</i>		<i>Limits: 37-122 %</i>		<i>Dilution: 1000x</i>						
<i>2-Fluorobiphenyl (Surr)</i>		<i>124 %</i>		<i>44-120 %</i>		<i>"</i>						
<i>Phenol-d6 (Surr)</i>		<i>%</i>		<i>33-122 %</i>		<i>"</i>						
<i>p-Terphenyl-d14 (Surr)</i>		<i>129 %</i>		<i>54-127 %</i>		<i>"</i>						
<i>2-Fluorophenol (Surr)</i>		<i>27 %</i>		<i>35-120 %</i>		<i>"</i>						
<i>2,4,6-Tribromophenol (Surr)</i>		<i>%</i>		<i>39-132 %</i>		<i>"</i>						

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**QUALITY CONTROL (QC) SAMPLE RESULTS**

**TCLP Semivolatile Organic Compounds by EPA 1311/8270E**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes	
<b>Batch 23C0864 - EPA 1311/3510C (BNA Extraction)</b>						<b>Soil</b>							
<b>Blank (23C0864-BLK1)</b>			Prepared: 03/22/23 11:27 Analyzed: 03/23/23 12:32										
<u>1311/8270E-LL</u>													
Acenaphthene	0.139	0.100	0.200	ug/L	1	---	---	---	---	---	---	J, B-02	
Acenaphthylene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---		
Anthracene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---		
Benz(a)anthracene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---		
Benzo(a)pyrene	ND	0.150	0.300	ug/L	1	---	---	---	---	---	---		
Benzo(b)fluoranthene	ND	0.150	0.300	ug/L	1	---	---	---	---	---	---		
Benzo(k)fluoranthene	ND	0.150	0.300	ug/L	1	---	---	---	---	---	---		
Benzo(g,h,i)perylene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---		
Chrysene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---		
Dibenz(a,h)anthracene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---		
Fluoranthene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---		
Fluorene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---		
Indeno(1,2,3-cd)pyrene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---		
1-Methylnaphthalene	0.337	0.200	0.400	ug/L	1	---	---	---	---	---	---	J, B-02	
2-Methylnaphthalene	0.580	0.200	0.400	ug/L	1	---	---	---	---	---	---	B	
Naphthalene	2.83	0.200	0.400	ug/L	1	---	---	---	---	---	---	B	
Phenanthrene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---		
Pyrene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---		
Carbazole	ND	0.150	0.300	ug/L	1	---	---	---	---	---	---		
Dibenzofuran	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---		
2-Chlorophenol	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---		
4-Chloro-3-methylphenol	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---		
2,4-Dichlorophenol	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---		
2,4-Dimethylphenol	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---		
2,4-Dinitrophenol	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---		
4,6-Dinitro-2-methylphenol	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---		
2-Methylphenol	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---		
3+4-Methylphenol(s)	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---		
2-Nitrophenol	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---		
4-Nitrophenol	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---		
Pentachlorophenol (PCP)	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---		
Phenol	ND	2.00	4.00	ug/L	1	---	---	---	---	---	---		
2,3,4,6-Tetrachlorophenol	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---		

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<b>Sevenson Environmental Services, Inc.</b> 2749 Lockport Road Niagara Falls, NY 14305	Project: <b>Gasco - Soil Residuals</b> Project Number: <b>111323</b> Project Manager: <b>Chip Byrd</b>	<b>Report ID:</b> <b>A3C0669 - 04 04 23 1606</b>
---	--	---

**QUALITY CONTROL (QC) SAMPLE RESULTS**

**TCLP Semivolatile Organic Compounds by EPA 1311/8270E**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 23C0864 - EPA 1311/3510C (BNA Extraction)</b>						<b>Soil</b>						
<b>Blank (23C0864-BLK1)</b>						Prepared: 03/22/23 11:27 Analyzed: 03/23/23 12:32						<b>TCLPa</b>
2,3,5,6-Tetrachlorophenol	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
2,4,5-Trichlorophenol	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
2,4,6-Trichlorophenol	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Bis(2-ethylhexyl)phthalate	ND	2.00	4.00	ug/L	1	---	---	---	---	---	---	
Butyl benzyl phthalate	ND	2.00	4.00	ug/L	1	---	---	---	---	---	---	
Diethylphthalate	<b>3.44</b>	2.00	4.00	ug/L	1	---	---	---	---	---	---	J, B-02
Dimethylphthalate	ND	2.00	4.00	ug/L	1	---	---	---	---	---	---	
Di-n-butylphthalate	ND	2.00	4.00	ug/L	1	---	---	---	---	---	---	
Di-n-octyl phthalate	ND	2.00	4.00	ug/L	1	---	---	---	---	---	---	
N-Nitrosodimethylamine	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
N-Nitroso-di-n-propylamine	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
N-Nitrosodiphenylamine	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Bis(2-Chloroethoxy) methane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Bis(2-Chloroethyl) ether	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
2,2'-Oxybis(1-Chloropropane)	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Hexachlorobenzene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Hexachlorobutadiene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Hexachlorocyclopentadiene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Hexachloroethane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
2-Chloronaphthalene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	0.0500	0.500	ug/L	1	---	---	---	---	---	---	
4-Bromophenyl phenyl ether	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
4-Chlorophenyl phenyl ether	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Aniline	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
4-Chloroaniline	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
2-Nitroaniline	ND	2.00	4.00	ug/L	1	---	---	---	---	---	---	
3-Nitroaniline	ND	2.00	4.00	ug/L	1	---	---	---	---	---	---	
4-Nitroaniline	ND	2.00	4.00	ug/L	1	---	---	---	---	---	---	
Nitrobenzene	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
2,4-Dinitrotoluene	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
2,6-Dinitrotoluene	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
Benzoic acid	ND	12.5	25.0	ug/L	1	---	---	---	---	---	---	
Benzyl alcohol	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
Isophorone	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	

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ANALYTICAL REPORT

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503-718-2323  
ORELAP ID: OR100062

<b>Sevenson Environmental Services, Inc.</b> 2749 Lockport Road Niagara Falls, NY 14305	Project: <b>Gasco - Soil Residuals</b> Project Number: <b>111323</b> Project Manager: <b>Chip Byrd</b>	<b>Report ID:</b> <b>A3C0669 - 04 04 23 1606</b>
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**QUALITY CONTROL (QC) SAMPLE RESULTS**

**TCLP Semivolatile Organic Compounds by EPA 1311/8270E**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes	
<b>Batch 23C0864 - EPA 1311/3510C (BNA Extraction)</b>						<b>Soil</b>							
<b>Blank (23C0864-BLK1)</b>			Prepared: 03/22/23 11:27 Analyzed: 03/23/23 12:32						<b>TCLPa</b>				
Azobenzene (1,2-DPH)	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---		
Bis(2-Ethylhexyl) adipate	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---		
1,2-Dinitrobenzene	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---		
1,3-Dinitrobenzene	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---		
1,4-Dinitrobenzene	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---		
Pyridine	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---		
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---		
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---		
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---		
<i>Surr: Nitrobenzene-d5 (Surr)</i>		<i>Recovery: 74 %</i>		<i>Limits: 44-120 %</i>		<i>Dilution: 1x</i>							
<i>2-Fluorobiphenyl (Surr)</i>		<i>69 %</i>		<i>44-120 %</i>		<i>"</i>							
<i>Phenol-d6 (Surr)</i>		<i>37 %</i>		<i>10-133 %</i>		<i>"</i>							
<i>p-Terphenyl-d14 (Surr)</i>		<i>96 %</i>		<i>50-134 %</i>		<i>"</i>							
<i>2-Fluorophenol (Surr)</i>		<i>57 %</i>		<i>19-120 %</i>		<i>"</i>							
<i>2,4,6-Tribromophenol (Surr)</i>		<i>87 %</i>		<i>43-140 %</i>		<i>"</i>							
<b>Blank (23C0864-BLK2)</b>			Prepared: 03/22/23 12:49 Analyzed: 03/23/23 13:06						<b>TCLP</b>				
<b>1311/8270E-LL</b>													
Acenaphthene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---		
Acenaphthylene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---		
Anthracene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---		
Benz(a)anthracene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---		
Benzo(a)pyrene	ND	0.150	0.300	ug/L	1	---	---	---	---	---	---		
Benzo(b)fluoranthene	ND	0.150	0.300	ug/L	1	---	---	---	---	---	---		
Benzo(k)fluoranthene	ND	0.150	0.300	ug/L	1	---	---	---	---	---	---		
Benzo(g,h,i)perylene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---		
Chrysene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---		
Dibenz(a,h)anthracene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---		
Fluoranthene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---		
Fluorene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---		
Indeno(1,2,3-cd)pyrene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---		
1-Methylnaphthalene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---		
2-Methylnaphthalene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---		
Naphthalene	<b>0.434</b>	0.200	0.400	ug/L	1	---	---	---	---	---	---	B	

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ANALYTICAL REPORT

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street  
Tigard, OR 97223  
503-718-2323  
ORELAP ID: OR100062

<b>Sevenson Environmental Services, Inc.</b> 2749 Lockport Road Niagara Falls, NY 14305	Project: <b>Gasco - Soil Residuals</b> Project Number: <b>111323</b> Project Manager: <b>Chip Byrd</b>	<b>Report ID:</b> <b>A3C0669 - 04 04 23 1606</b>
---	--	---

**QUALITY CONTROL (QC) SAMPLE RESULTS**

**TCLP Semivolatile Organic Compounds by EPA 1311/8270E**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 23C0864 - EPA 1311/3510C (BNA Extraction)</b>						<b>Soil</b>						
<b>Blank (23C0864-BLK2)</b>						Prepared: 03/22/23 12:49 Analyzed: 03/23/23 13:06						<b>TCLP</b>
Phenanthrene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Pyrene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Carbazole	ND	0.150	0.300	ug/L	1	---	---	---	---	---	---	
Dibenzofuran	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
2-Chlorophenol	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
4-Chloro-3-methylphenol	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
2,4-Dichlorophenol	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
2,4-Dimethylphenol	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
2,4-Dinitrophenol	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
4,6-Dinitro-2-methylphenol	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
2-Methylphenol	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
3+4-Methylphenol(s)	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
2-Nitrophenol	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
4-Nitrophenol	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
Pentachlorophenol (PCP)	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
Phenol	ND	2.00	4.00	ug/L	1	---	---	---	---	---	---	
2,3,4,6-Tetrachlorophenol	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
2,3,5,6-Tetrachlorophenol	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
2,4,5-Trichlorophenol	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
2,4,6-Trichlorophenol	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Bis(2-ethylhexyl)phthalate	ND	2.00	4.00	ug/L	1	---	---	---	---	---	---	
Butyl benzyl phthalate	ND	2.00	4.00	ug/L	1	---	---	---	---	---	---	
Diethylphthalate	ND	2.00	4.00	ug/L	1	---	---	---	---	---	---	
Dimethylphthalate	ND	2.00	4.00	ug/L	1	---	---	---	---	---	---	
Di-n-butylphthalate	ND	2.00	4.00	ug/L	1	---	---	---	---	---	---	
Di-n-octyl phthalate	ND	2.00	4.00	ug/L	1	---	---	---	---	---	---	
N-Nitrosodimethylamine	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
N-Nitroso-di-n-propylamine	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
N-Nitrosodiphenylamine	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Bis(2-Chloroethoxy) methane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Bis(2-Chloroethyl) ether	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
2,2'-Oxybis(1-Chloropropane)	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Hexachlorobenzene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Hexachlorobutadiene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	

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ANALYTICAL REPORT

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street  
Tigard, OR 97223  
503-718-2323  
ORELAP ID: OR100062

<b>Sevenson Environmental Services, Inc.</b> 2749 Lockport Road Niagara Falls, NY 14305	Project: <b>Gasco - Soil Residuals</b> Project Number: <b>111323</b> Project Manager: <b>Chip Byrd</b>	<b>Report ID:</b> <b>A3C0669 - 04 04 23 1606</b>
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**QUALITY CONTROL (QC) SAMPLE RESULTS**

**TCLP Semivolatile Organic Compounds by EPA 1311/8270E**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 23C0864 - EPA 1311/3510C (BNA Extraction)</b>						<b>Soil</b>						
<b>Blank (23C0864-BLK2)</b>						Prepared: 03/22/23 12:49 Analyzed: 03/23/23 13:06						<b>TCLP</b>
Hexachlorocyclopentadiene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Hexachloroethane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
2-Chloronaphthalene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	0.0500	0.500	ug/L	1	---	---	---	---	---	---	
4-Bromophenyl phenyl ether	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
4-Chlorophenyl phenyl ether	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Aniline	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
4-Chloroaniline	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
2-Nitroaniline	ND	2.00	4.00	ug/L	1	---	---	---	---	---	---	
3-Nitroaniline	ND	2.00	4.00	ug/L	1	---	---	---	---	---	---	
4-Nitroaniline	ND	2.00	4.00	ug/L	1	---	---	---	---	---	---	
Nitrobenzene	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
2,4-Dinitrotoluene	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
2,6-Dinitrotoluene	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
Benzoic acid	ND	12.5	25.0	ug/L	1	---	---	---	---	---	---	
Benzyl alcohol	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
Isophorone	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Azobenzene (1,2-DPH)	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Bis(2-Ethylhexyl) adipate	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
1,2-Dinitrobenzene	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
1,3-Dinitrobenzene	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
1,4-Dinitrobenzene	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
Pyridine	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
<i>Surr: Nitrobenzene-d5 (Surr)</i>		<i>Recovery: 71 %</i>		<i>Limits: 44-120 %</i>		<i>Dilution: 1x</i>						
<i>2-Fluorobiphenyl (Surr)</i>		<i>65 %</i>		<i>44-120 %</i>		<i>"</i>						
<i>Phenol-d6 (Surr)</i>		<i>19 %</i>		<i>10-133 %</i>		<i>"</i>						
<i>p-Terphenyl-d14 (Surr)</i>		<i>96 %</i>		<i>50-134 %</i>		<i>"</i>						
<i>2-Fluorophenol (Surr)</i>		<i>35 %</i>		<i>19-120 %</i>		<i>"</i>						
<i>2,4,6-Tribromophenol (Surr)</i>		<i>84 %</i>		<i>43-140 %</i>		<i>"</i>						

<b>LCS (23C0864-BS1)</b>	Prepared: 03/22/23 11:27 Analyzed: 03/23/23 13:41
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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

**Apex Laboratories, LLC**

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Tigard, OR 97223  
503-718-2323  
ORELAP ID: OR100062

<b>Sevenson Environmental Services, Inc.</b>	Project: <b>Gasco - Soil Residuals</b>	
2749 Lockport Road	Project Number: <b>111323</b>	<b>Report ID:</b>
Niagara Falls, NY 14305	Project Manager: <b>Chip Byrd</b>	<b>A3C0669 - 04 04 23 1606</b>

**QUALITY CONTROL (QC) SAMPLE RESULTS**

**TCLP Semivolatile Organic Compounds by EPA 1311/8270E**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 23C0864 - EPA 1311/3510C (BNA Extraction)</b>						<b>Soil</b>						
<b>LCS (23C0864-BS1)</b>						Prepared: 03/22/23 11:27 Analyzed: 03/23/23 13:41						
<u>1311/8270E-LL</u>												
Acenaphthene	23.6	0.400	0.800	ug/L	4	40.0	---	59	47-122%	---	---	B-02
Acenaphthylene	26.7	0.400	0.800	ug/L	4	40.0	---	67	41-130%	---	---	
Anthracene	33.9	0.400	0.800	ug/L	4	40.0	---	85	57-123%	---	---	
Benz(a)anthracene	35.1	0.400	0.800	ug/L	4	40.0	---	88	58-125%	---	---	
Benzo(a)pyrene	37.0	0.600	1.20	ug/L	4	40.0	---	92	54-128%	---	---	
Benzo(b)fluoranthene	38.3	0.600	1.20	ug/L	4	40.0	---	96	53-131%	---	---	
Benzo(k)fluoranthene	36.4	0.600	1.20	ug/L	4	40.0	---	91	57-129%	---	---	
Benzo(g,h,i)perylene	33.8	0.400	0.800	ug/L	4	40.0	---	85	50-134%	---	---	
Chrysene	35.4	0.400	0.800	ug/L	4	40.0	---	89	59-123%	---	---	
Dibenz(a,h)anthracene	36.2	0.400	0.800	ug/L	4	40.0	---	91	51-134%	---	---	
Fluoranthene	38.3	0.400	0.800	ug/L	4	40.0	---	96	57-128%	---	---	
Fluorene	30.1	0.400	0.800	ug/L	4	40.0	---	75	52-124%	---	---	
Indeno(1,2,3-cd)pyrene	35.1	0.400	0.800	ug/L	4	40.0	---	88	52-134%	---	---	
1-Methylnaphthalene	19.4	0.800	1.60	ug/L	4	40.0	---	48	41-120%	---	---	B-02
2-Methylnaphthalene	19.4	0.800	1.60	ug/L	4	40.0	---	49	40-121%	---	---	B
Naphthalene	19.6	0.800	1.60	ug/L	4	40.0	---	49	40-121%	---	---	B
Phenanthrene	32.0	0.400	0.800	ug/L	4	40.0	---	80	59-120%	---	---	
Pyrene	38.7	0.400	0.800	ug/L	4	40.0	---	97	57-126%	---	---	
Carbazole	37.7	0.600	1.20	ug/L	4	40.0	---	94	60-122%	---	---	
Dibenzofuran	27.2	0.400	0.800	ug/L	4	40.0	---	68	53-120%	---	---	
2-Chlorophenol	28.5	2.00	4.00	ug/L	4	40.0	---	71	38-120%	---	---	
4-Chloro-3-methylphenol	33.6	4.00	8.00	ug/L	4	40.0	---	84	52-120%	---	---	
2,4-Dichlorophenol	34.1	2.00	4.00	ug/L	4	40.0	---	85	47-121%	---	---	
2,4-Dimethylphenol	30.6	2.00	4.00	ug/L	4	40.0	---	77	31-124%	---	---	
2,4-Dinitrophenol	53.4	10.0	20.0	ug/L	4	40.0	---	134	23-143%	---	---	Q-41
4,6-Dinitro-2-methylphenol	49.5	10.0	20.0	ug/L	4	40.0	---	124	44-137%	---	---	Q-41
2-Methylphenol	24.7	1.00	2.00	ug/L	4	40.0	---	62	30-120%	---	---	
3+4-Methylphenol(s)	22.0	1.00	2.00	ug/L	4	40.0	---	55	29-120%	---	---	
2-Nitrophenol	38.4	4.00	8.00	ug/L	4	40.0	---	96	47-123%	---	---	Q-41
4-Nitrophenol	10.7	4.00	8.00	ug/L	4	40.0	---	27	10-120%	---	---	
Pentachlorophenol (PCP)	32.0	4.00	8.00	ug/L	4	40.0	---	80	35-138%	---	---	
Phenol	12.2	8.00	8.00	ug/L	4	40.0	---	31	10-120%	---	---	
2,3,4,6-Tetrachlorophenol	37.2	2.00	4.00	ug/L	4	40.0	---	93	50-128%	---	---	

Apex Laboratories

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ANALYTICAL REPORT

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street  
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<b>Sevenson Environmental Services, Inc.</b>	Project: <b>Gasco - Soil Residuals</b>	
2749 Lockport Road	Project Number: <b>111323</b>	<b>Report ID:</b>
Niagara Falls, NY 14305	Project Manager: <b>Chip Byrd</b>	<b>A3C0669 - 04 04 23 1606</b>

**QUALITY CONTROL (QC) SAMPLE RESULTS**

**TCLP Semivolatile Organic Compounds by EPA 1311/8270E**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 23C0864 - EPA 1311/3510C (BNA Extraction)</b>						<b>Soil</b>						
<b>LCS (23C0864-BS1)</b>						Prepared: 03/22/23 11:27 Analyzed: 03/23/23 13:41						
2,3,5,6-Tetrachlorophenol	36.5	2.00	4.00	ug/L	4	40.0	---	91	50-121%	---	---	
2,4,5-Trichlorophenol	37.6	2.00	4.00	ug/L	4	40.0	---	94	53-123%	---	---	
2,4,6-Trichlorophenol	34.9	2.00	4.00	ug/L	4	40.0	---	87	50-125%	---	---	
Bis(2-ethylhexyl)phthalate	33.8	8.00	16.0	ug/L	4	40.0	---	85	55-135%	---	---	
Butyl benzyl phthalate	34.8	8.00	16.0	ug/L	4	40.0	---	87	53-134%	---	---	
Diethylphthalate	35.6	8.00	16.0	ug/L	4	40.0	---	89	56-125%	---	---	B-02
Dimethylphthalate	35.5	8.00	16.0	ug/L	4	40.0	---	89	45-127%	---	---	
Di-n-butylphthalate	38.4	8.00	16.0	ug/L	4	40.0	---	96	59-127%	---	---	
Di-n-octyl phthalate	40.4	8.00	16.0	ug/L	4	40.0	---	101	51-140%	---	---	
N-Nitrosodimethylamine	16.1	1.00	2.00	ug/L	4	40.0	---	40	19-120%	---	---	
N-Nitroso-di-n-propylamine	32.3	1.00	2.00	ug/L	4	40.0	---	81	49-120%	---	---	
N-Nitrosodiphenylamine	31.5	1.00	2.00	ug/L	4	40.0	---	79	51-123%	---	---	
Bis(2-Chloroethoxy) methane	29.7	1.00	2.00	ug/L	4	40.0	---	74	48-120%	---	---	
Bis(2-Chloroethyl) ether	27.7	1.00	2.00	ug/L	4	40.0	---	69	43-120%	---	---	
2,2'-Oxybis(1-Chloropropane)	23.6	1.00	2.00	ug/L	4	40.0	---	59	41-120%	---	---	
Hexachlorobenzene	32.8	0.400	0.800	ug/L	4	40.0	---	82	53-125%	---	---	
Hexachlorobutadiene	11.6	1.00	2.00	ug/L	4	40.0	---	29	22-124%	---	---	
Hexachlorocyclopentadiene	5.16	2.00	4.00	ug/L	4	40.0	---	13	10-127%	---	---	Q-41
Hexachloroethane	10.5	1.00	2.00	ug/L	4	40.0	---	26	21-120%	---	---	
2-Chloronaphthalene	20.3	0.400	0.800	ug/L	4	40.0	---	51	40-120%	---	---	
1,2,4-Trichlorobenzene	14.9	0.200	2.00	ug/L	4	40.0	---	37	29-120%	---	---	
4-Bromophenyl phenyl ether	30.3	1.00	2.00	ug/L	4	40.0	---	76	55-124%	---	---	
4-Chlorophenyl phenyl ether	27.7	1.00	2.00	ug/L	4	40.0	---	69	53-121%	---	---	
Aniline	23.4	2.00	4.00	ug/L	4	40.0	---	58	10-120%	---	---	
4-Chloroaniline	28.3	1.00	2.00	ug/L	4	40.0	---	71	33-120%	---	---	
2-Nitroaniline	36.1	8.00	16.0	ug/L	4	40.0	---	90	55-127%	---	---	
3-Nitroaniline	37.1	8.00	16.0	ug/L	4	40.0	---	93	41-128%	---	---	Q-41
4-Nitroaniline	38.4	8.00	16.0	ug/L	4	40.0	---	96	25-120%	---	---	
Nitrobenzene	28.7	4.00	8.00	ug/L	4	40.0	---	72	45-121%	---	---	
2,4-Dinitrotoluene	38.2	4.00	8.00	ug/L	4	40.0	---	95	57-128%	---	---	
2,6-Dinitrotoluene	34.8	4.00	8.00	ug/L	4	40.0	---	87	57-124%	---	---	
Benzoic acid	ND	50.0	100	ug/L	4	80.0	---		<b>10-120%</b>	---	---	Q-41
Benzyl alcohol	23.2	4.00	8.00	ug/L	4	40.0	---	58	31-120%	---	---	
Isophorone	31.1	1.00	2.00	ug/L	4	40.0	---	78	42-124%	---	---	

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ANALYTICAL REPORT

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street  
Tigard, OR 97223  
503-718-2323  
ORELAP ID: OR100062

<b>Sevenson Environmental Services, Inc.</b> 2749 Lockport Road Niagara Falls, NY 14305	Project: <b>Gasco - Soil Residuals</b> Project Number: <b>111323</b> Project Manager: <b>Chip Byrd</b>	<b>Report ID:</b> <b>A3C0669 - 04 04 23 1606</b>
---	--	---

**QUALITY CONTROL (QC) SAMPLE RESULTS**

**TCLP Semivolatile Organic Compounds by EPA 1311/8270E**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 23C0864 - EPA 1311/3510C (BNA Extraction)</b>						<b>Soil</b>						
<b>LCS (23C0864-BS1)</b>			Prepared: 03/22/23 11:27 Analyzed: 03/23/23 13:41									
Azobenzene (1,2-DPH)	27.1	1.00	2.00	ug/L	4	40.0	---	68	61-120%	---	---	
Bis(2-Ethylhexyl) adipate	34.6	10.0	20.0	ug/L	4	40.0	---	86	63-121%	---	---	
1,2-Dinitrobenzene	36.4	10.0	20.0	ug/L	4	40.0	---	91	59-120%	---	---	
1,3-Dinitrobenzene	36.3	10.0	20.0	ug/L	4	40.0	---	91	49-128%	---	---	
1,4-Dinitrobenzene	39.3	10.0	20.0	ug/L	4	40.0	---	98	54-120%	---	---	
Pyridine	15.3	4.00	8.00	ug/L	4	40.0	---	38	10-120%	---	---	
1,2-Dichlorobenzene	13.8	1.00	2.00	ug/L	4	40.0	---	34	32-120%	---	---	
1,3-Dichlorobenzene	12.8	1.00	2.00	ug/L	4	40.0	---	32	28-120%	---	---	
1,4-Dichlorobenzene	12.9	1.00	2.00	ug/L	4	40.0	---	32	29-120%	---	---	
<i>Surr: Nitrobenzene-d5 (Surr)</i>		<i>Recovery: 76 %</i>		<i>Limits: 44-120 %</i>		<i>Dilution: 4x</i>						
<i>2-Fluorobiphenyl (Surr)</i>		<i>71 %</i>		<i>44-120 %</i>		<i>"</i>						
<i>Phenol-d6 (Surr)</i>		<i>24 %</i>		<i>10-133 %</i>		<i>"</i>						
<i>p-Terphenyl-d14 (Surr)</i>		<i>92 %</i>		<i>50-134 %</i>		<i>"</i>						
<i>2-Fluorophenol (Surr)</i>		<i>40 %</i>		<i>19-120 %</i>		<i>"</i>						
<i>2,4,6-Tribromophenol (Surr)</i>		<i>95 %</i>		<i>43-140 %</i>		<i>"</i>						
<b>LCS Dup (23C0864-BSD1)</b>			Prepared: 03/22/23 11:27 Analyzed: 03/23/23 14:16								<b>Q-19</b>	
<b>1311/8270E-LL</b>												
Acenaphthene	24.1	0.400	0.800	ug/L	4	40.0	---	60	47-122%	2	30%	B-02
Acenaphthylene	27.6	0.400	0.800	ug/L	4	40.0	---	69	41-130%	3	30%	
Anthracene	37.1	0.400	0.800	ug/L	4	40.0	---	93	57-123%	9	30%	
Benz(a)anthracene	39.1	0.400	0.800	ug/L	4	40.0	---	98	58-125%	11	30%	
Benzo(a)pyrene	39.7	0.600	1.20	ug/L	4	40.0	---	99	54-128%	7	30%	
Benzo(b)fluoranthene	41.4	0.600	1.20	ug/L	4	40.0	---	103	53-131%	8	30%	
Benzo(k)fluoranthene	41.3	0.600	1.20	ug/L	4	40.0	---	103	57-129%	12	30%	
Benzo(g,h,i)perylene	35.0	0.400	0.800	ug/L	4	40.0	---	88	50-134%	3	30%	
Chrysene	38.9	0.400	0.800	ug/L	4	40.0	---	97	59-123%	9	30%	
Dibenz(a,h)anthracene	38.3	0.400	0.800	ug/L	4	40.0	---	96	51-134%	6	30%	
Fluoranthene	41.4	0.400	0.800	ug/L	4	40.0	---	104	57-128%	8	30%	
Fluorene	31.8	0.400	0.800	ug/L	4	40.0	---	80	52-124%	6	30%	
Indeno(1,2,3-cd)pyrene	37.6	0.400	0.800	ug/L	4	40.0	---	94	52-134%	7	30%	
1-Methylnaphthalene	20.3	0.800	1.60	ug/L	4	40.0	---	51	41-120%	5	30%	B-02
2-Methylnaphthalene	19.8	0.800	1.60	ug/L	4	40.0	---	50	40-121%	2	30%	B
Naphthalene	20.3	0.800	1.60	ug/L	4	40.0	---	51	40-121%	3	30%	B

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ANALYTICAL REPORT

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street  
Tigard, OR 97223  
503-718-2323  
ORELAP ID: OR100062

<b>Sevenson Environmental Services, Inc.</b>	Project: <b>Gasco - Soil Residuals</b>	
2749 Lockport Road	Project Number: <b>111323</b>	<b>Report ID:</b>
Niagara Falls, NY 14305	Project Manager: <b>Chip Byrd</b>	<b>A3C0669 - 04 04 23 1606</b>

**QUALITY CONTROL (QC) SAMPLE RESULTS**

**TCLP Semivolatile Organic Compounds by EPA 1311/8270E**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 23C0864 - EPA 1311/3510C (BNA Extraction)</b>						<b>Soil</b>						
<b>LCS Dup (23C0864-BSD1)</b>						Prepared: 03/22/23 11:27 Analyzed: 03/23/23 14:16						<b>Q-19</b>
Phenanthrene	34.4	0.400	0.800	ug/L	4	40.0	---	86	59-120%	7	30%	
Pyrene	41.8	0.400	0.800	ug/L	4	40.0	---	104	57-126%	8	30%	
Carbazole	40.1	0.600	1.20	ug/L	4	40.0	---	100	60-122%	6	30%	
Dibenzofuran	28.5	0.400	0.800	ug/L	4	40.0	---	71	53-120%	5	30%	
2-Chlorophenol	29.7	2.00	4.00	ug/L	4	40.0	---	74	38-120%	4	30%	
4-Chloro-3-methylphenol	37.0	4.00	8.00	ug/L	4	40.0	---	93	52-120%	10	30%	
2,4-Dichlorophenol	36.0	2.00	4.00	ug/L	4	40.0	---	90	47-121%	5	30%	
2,4-Dimethylphenol	31.9	2.00	4.00	ug/L	4	40.0	---	80	31-124%	4	30%	
2,4-Dinitrophenol	52.8	10.0	20.0	ug/L	4	40.0	---	132	23-143%	1	30%	Q-41
4,6-Dinitro-2-methylphenol	49.9	10.0	20.0	ug/L	4	40.0	---	125	44-137%	0.8	30%	Q-41
2-Methylphenol	26.1	1.00	2.00	ug/L	4	40.0	---	65	30-120%	5	30%	
3+4-Methylphenol(s)	24.0	1.00	2.00	ug/L	4	40.0	---	60	29-120%	9	30%	
2-Nitrophenol	40.2	4.00	8.00	ug/L	4	40.0	---	100	47-123%	4	30%	Q-41
4-Nitrophenol	11.8	4.00	8.00	ug/L	4	40.0	---	29	10-120%	9	30%	
Pentachlorophenol (PCP)	32.3	4.00	8.00	ug/L	4	40.0	---	81	35-138%	1	30%	
Phenol	13.3	8.00	8.00	ug/L	4	40.0	---	33	10-120%	8	30%	
2,3,4,6-Tetrachlorophenol	39.6	2.00	4.00	ug/L	4	40.0	---	99	50-128%	6	30%	
2,3,5,6-Tetrachlorophenol	39.0	2.00	4.00	ug/L	4	40.0	---	98	50-121%	7	30%	
2,4,5-Trichlorophenol	39.5	2.00	4.00	ug/L	4	40.0	---	99	53-123%	5	30%	
2,4,6-Trichlorophenol	36.6	2.00	4.00	ug/L	4	40.0	---	91	50-125%	5	30%	
Bis(2-ethylhexyl)phthalate	36.3	8.00	16.0	ug/L	4	40.0	---	91	55-135%	7	30%	
Butyl benzyl phthalate	38.1	8.00	16.0	ug/L	4	40.0	---	95	53-134%	9	30%	
Diethylphthalate	38.7	8.00	16.0	ug/L	4	40.0	---	97	56-125%	8	30%	B-02
Dimethylphthalate	38.0	8.00	16.0	ug/L	4	40.0	---	95	45-127%	7	30%	
Di-n-butylphthalate	41.7	8.00	16.0	ug/L	4	40.0	---	104	59-127%	8	30%	
Di-n-octyl phthalate	43.0	8.00	16.0	ug/L	4	40.0	---	107	51-140%	6	30%	
N-Nitrosodimethylamine	16.9	1.00	2.00	ug/L	4	40.0	---	42	19-120%	4	30%	
N-Nitroso-di-n-propylamine	36.1	1.00	2.00	ug/L	4	40.0	---	90	49-120%	11	30%	
N-Nitrosodiphenylamine	34.2	1.00	2.00	ug/L	4	40.0	---	86	51-123%	8	30%	
Bis(2-Chloroethoxy) methane	31.8	1.00	2.00	ug/L	4	40.0	---	79	48-120%	7	30%	
Bis(2-Chloroethyl) ether	29.7	1.00	2.00	ug/L	4	40.0	---	74	43-120%	7	30%	
2,2'-Oxybis(1-Chloropropane)	25.4	1.00	2.00	ug/L	4	40.0	---	63	41-120%	7	30%	
Hexachlorobenzene	36.3	0.400	0.800	ug/L	4	40.0	---	91	53-125%	10	30%	
Hexachlorobutadiene	10.4	1.00	2.00	ug/L	4	40.0	---	26	22-124%	10	30%	

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ANALYTICAL REPORT

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street  
Tigard, OR 97223  
503-718-2323  
ORELAP ID: OR100062

<b>Sevenson Environmental Services, Inc.</b>	Project: <b>Gasco - Soil Residuals</b>	
2749 Lockport Road	Project Number: <b>111323</b>	<b>Report ID:</b>
Niagara Falls, NY 14305	Project Manager: <b>Chip Byrd</b>	<b>A3C0669 - 04 04 23 1606</b>

**QUALITY CONTROL (QC) SAMPLE RESULTS**

**TCLP Semivolatile Organic Compounds by EPA 1311/8270E**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 23C0864 - EPA 1311/3510C (BNA Extraction)</b>						<b>Soil</b>						
<b>LCS Dup (23C0864-BSD1)</b>						Prepared: 03/22/23 11:27 Analyzed: 03/23/23 14:16						<b>Q-19</b>
Hexachlorocyclopentadiene	5.11	2.00	4.00	ug/L	4	40.0	---	13	10-127%	1	30%	Q-41
Hexachloroethane	9.29	1.00	2.00	ug/L	4	40.0	---	23	21-120%	13	30%	
2-Chloronaphthalene	19.9	0.400	0.800	ug/L	4	40.0	---	50	40-120%	2	30%	
1,2,4-Trichlorobenzene	14.1	0.200	2.00	ug/L	4	40.0	---	35	29-120%	6	30%	
4-Bromophenyl phenyl ether	33.2	1.00	2.00	ug/L	4	40.0	---	83	55-124%	9	30%	
4-Chlorophenyl phenyl ether	28.9	1.00	2.00	ug/L	4	40.0	---	72	53-121%	4	30%	
Aniline	25.4	2.00	4.00	ug/L	4	40.0	---	64	10-120%	8	30%	
4-Chloroaniline	30.4	1.00	2.00	ug/L	4	40.0	---	76	33-120%	7	30%	
2-Nitroaniline	38.4	8.00	16.0	ug/L	4	40.0	---	96	55-127%	6	30%	
3-Nitroaniline	39.7	8.00	16.0	ug/L	4	40.0	---	99	41-128%	7	30%	Q-41
4-Nitroaniline	39.7	8.00	16.0	ug/L	4	40.0	---	99	25-120%	3	30%	
Nitrobenzene	30.6	4.00	8.00	ug/L	4	40.0	---	77	45-121%	7	30%	
2,4-Dinitrotoluene	40.9	4.00	8.00	ug/L	4	40.0	---	102	57-128%	7	30%	
2,6-Dinitrotoluene	37.8	4.00	8.00	ug/L	4	40.0	---	94	57-124%	8	30%	
Benzoic acid	52.9	50.0	50.0	ug/L	4	80.0	---	66	10-120%	7	30%	Q-41
Benzyl alcohol	25.8	4.00	8.00	ug/L	4	40.0	---	65	31-120%	11	30%	
Isophorone	34.3	1.00	2.00	ug/L	4	40.0	---	86	42-124%	10	30%	
Azobenzene (1,2-DPH)	28.9	1.00	2.00	ug/L	4	40.0	---	72	61-120%	6	30%	
Bis(2-Ethylhexyl) adipate	38.1	10.0	20.0	ug/L	4	40.0	---	95	63-121%	10	30%	
1,2-Dinitrobenzene	39.1	10.0	20.0	ug/L	4	40.0	---	98	59-120%	7	30%	
1,3-Dinitrobenzene	39.1	10.0	20.0	ug/L	4	40.0	---	98	49-128%	7	30%	
1,4-Dinitrobenzene	42.0	10.0	20.0	ug/L	4	40.0	---	105	54-120%	7	30%	
Pyridine	18.4	4.00	8.00	ug/L	4	40.0	---	46	10-120%	18	30%	
1,2-Dichlorobenzene	13.2	1.00	2.00	ug/L	4	40.0	---	33	32-120%	5	30%	
1,3-Dichlorobenzene	11.8	1.00	2.00	ug/L	4	40.0	---	29	28-120%	8	30%	
1,4-Dichlorobenzene	11.9	1.00	2.00	ug/L	4	40.0	---	30	29-120%	8	30%	
<i>Surr: Nitrobenzene-d5 (Surr)</i>		<i>Recovery: 82 %</i>		<i>Limits: 44-120 %</i>		<i>Dilution: 4x</i>						
<i>2-Fluorobiphenyl (Surr)</i>		<i>74 %</i>		<i>44-120 %</i>		<i>"</i>						
<i>Phenol-d6 (Surr)</i>		<i>26 %</i>		<i>10-133 %</i>		<i>"</i>						
<i>p-Terphenyl-d14 (Surr)</i>		<i>99 %</i>		<i>50-134 %</i>		<i>"</i>						
<i>2-Fluorophenol (Surr)</i>		<i>43 %</i>		<i>19-120 %</i>		<i>"</i>						
<i>2,4,6-Tribromophenol (Surr)</i>		<i>100 %</i>		<i>43-140 %</i>		<i>"</i>						

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ANALYTICAL REPORT

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street  
Tigard, OR 97223  
503-718-2323  
ORELAP ID: OR100062

<b>Sevenson Environmental Services, Inc.</b> 2749 Lockport Road Niagara Falls, NY 14305	Project: <b>Gasco - Soil Residuals</b> Project Number: <b>111323</b> Project Manager: <b>Chip Byrd</b>	<b>Report ID:</b> <b>A3C0669 - 04 04 23 1606</b>
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**QUALITY CONTROL (QC) SAMPLE RESULTS**

**Total Metals by EPA 6020B (ICPMS)**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 23C0841 - EPA 3051A</b>						<b>Soil</b>						
<b>Blank (23C0841-BLK1)</b>			Prepared: 03/22/23 07:16 Analyzed: 03/22/23 21:12									
<u>EPA 6020B</u>												
Arsenic	ND	500	1000	ug/kg wet	10	---	---	---	---	---	---	
Barium	ND	500	1000	ug/kg wet	10	---	---	---	---	---	---	
Cadmium	ND	100	200	ug/kg wet	10	---	---	---	---	---	---	
Chromium	ND	500	1000	ug/kg wet	10	---	---	---	---	---	---	
Lead	ND	100	200	ug/kg wet	10	---	---	---	---	---	---	
Mercury	ND	40.0	80.0	ug/kg wet	10	---	---	---	---	---	---	
Selenium	ND	500	1000	ug/kg wet	10	---	---	---	---	---	---	
Silver	ND	100	200	ug/kg wet	10	---	---	---	---	---	---	
<hr/>												
<b>LCS (23C0841-BS1)</b>			Prepared: 03/22/23 07:16 Analyzed: 03/22/23 21:24									
<u>EPA 6020B</u>												
Arsenic	49600	500	1000	ug/kg wet	10	50000	---	99	80-120%	---	---	
Barium	52800	500	1000	ug/kg wet	10	50000	---	106	80-120%	---	---	
Cadmium	50200	100	200	ug/kg wet	10	50000	---	100	80-120%	---	---	
Chromium	49500	500	1000	ug/kg wet	10	50000	---	99	80-120%	---	---	
Lead	50600	100	200	ug/kg wet	10	50000	---	101	80-120%	---	---	
Mercury	958	40.0	80.0	ug/kg wet	10	1000	---	96	80-120%	---	---	
Selenium	24500	500	1000	ug/kg wet	10	25000	---	98	80-120%	---	---	
Silver	25100	100	200	ug/kg wet	10	25000	---	100	80-120%	---	---	
<hr/>												
<b>Duplicate (23C0841-DUP1)</b>			Prepared: 03/22/23 07:16 Analyzed: 03/22/23 21:33									
<u>QC Source Sample: Non-SDG (A3C0662-01)</u>												
Arsenic	<b>5210</b>	578	1160	ug/kg dry	10	---	3960	---	---	<b>27</b>	<b>20%</b>	Q-05
Barium	<b>81900</b>	578	1160	ug/kg dry	10	---	73700	---	---	11	20%	
Cadmium	<b>235</b>	116	231	ug/kg dry	10	---	348	---	---	<b>39</b>	<b>20%</b>	Q-05
Chromium	<b>37100</b>	578	1160	ug/kg dry	10	---	30500	---	---	20	20%	
Lead	<b>12200</b>	116	231	ug/kg dry	10	---	10600	---	---	14	20%	
Mercury	<b>69.0</b>	46.3	92.5	ug/kg dry	10	---	ND	---	---		<b>20%</b>	J
Selenium	ND	578	1160	ug/kg dry	10	---	ND	---	---	---	20%	
Silver	ND	116	231	ug/kg dry	10	---	ND	---	---	---	20%	
<hr/>												
<b>Matrix Spike (23C0841-MS1)</b>			Prepared: 03/22/23 07:16 Analyzed: 03/22/23 21:38									

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ANALYTICAL REPORT

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ORELAP ID: OR100062

<b>Sevenson Environmental Services, Inc.</b> 2749 Lockport Road Niagara Falls, NY 14305	Project: <b>Gasco - Soil Residuals</b> Project Number: <b>111323</b> Project Manager: <b>Chip Byrd</b>	<b>Report ID:</b> <b>A3C0669 - 04 04 23 1606</b>
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**QUALITY CONTROL (QC) SAMPLE RESULTS**

**Total Metals by EPA 6020B (ICPMS)**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 23C0841 - EPA 3051A</b>						<b>Soil</b>						
<b>Matrix Spike (23C0841-MS1)</b>						Prepared: 03/22/23 07:16 Analyzed: 03/22/23 21:38						
<b>QC Source Sample: Non-SDG (A3C0662-01)</b>												
<b>EPA 6020B</b>												
Arsenic	60800	574	1150	ug/kg dry	10	57400	3960	99	75-125%	---	---	
Barium	134000	574	1150	ug/kg dry	10	57400	73700	105	75-125%	---	---	
Cadmium	55500	115	229	ug/kg dry	10	57400	348	96	75-125%	---	---	
Chromium	87300	574	1150	ug/kg dry	10	57400	30500	99	75-125%	---	---	
Lead	69100	115	229	ug/kg dry	10	57400	10600	102	75-125%	---	---	
Mercury	1120	45.9	91.8	ug/kg dry	10	1150	ND	94	75-125%	---	---	
Selenium	27700	574	1150	ug/kg dry	10	28700	ND	97	75-125%	---	---	
Silver	27500	115	229	ug/kg dry	10	28700	ND	96	75-125%	---	---	

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ANALYTICAL REPORT

**Apex Laboratories, LLC**

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503-718-2323  
ORELAP ID: OR100062

<b>Sevenson Environmental Services, Inc.</b> 2749 Lockport Road Niagara Falls, NY 14305	Project: <b>Gasco - Soil Residuals</b> Project Number: <b>111323</b> Project Manager: <b>Chip Byrd</b>	<b>Report ID:</b> <b>A3C0669 - 04 04 23 1606</b>
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**QUALITY CONTROL (QC) SAMPLE RESULTS**

**TCLP Metals by EPA 6020B (ICPMS)**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 23C0832 - EPA 1311/3015A</b>						<b>Liquid</b>						
<b>Blank (23C0832-BLK1)</b>			Prepared: 03/21/23 16:07 Analyzed: 03/21/23 22:27									
<u>1311/6020B</u>												
Arsenic	ND	50.0	100	ug/L	10	---	---	---	---	---	---	TCLPa
Barium	ND	2500	5000	ug/L	10	---	---	---	---	---	---	TCLPa
Cadmium	ND	50.0	100	ug/L	10	---	---	---	---	---	---	TCLPa
Chromium	ND	50.0	100	ug/L	10	---	---	---	---	---	---	TCLPa
Selenium	ND	50.0	100	ug/L	10	---	---	---	---	---	---	TCLPa
<b>Blank (23C0832-BLK2)</b>			Prepared: 03/21/23 16:07 Analyzed: 03/22/23 15:10									
<u>1311/6020B</u>												
Lead	ND	25.0	50.0	ug/L	10	---	---	---	---	---	---	Q-16, TCLPa
Mercury	ND	3.75	7.00	ug/L	10	---	---	---	---	---	---	Q-16, TCLPa
Silver	ND	50.0	100	ug/L	10	---	---	---	---	---	---	Q-16, TCLPa
<b>LCS (23C0832-BS1)</b>			Prepared: 03/21/23 16:07 Analyzed: 03/21/23 22:43									
<u>1311/6020B</u>												
Arsenic	4710	50.0	100	ug/L	10	5000	---	94	80-120%	---	---	TCLPa
Cadmium	947	50.0	100	ug/L	10	1000	---	95	80-120%	---	---	TCLPa
Chromium	4890	50.0	100	ug/L	10	5000	---	98	80-120%	---	---	TCLPa
Selenium	945	50.0	100	ug/L	10	1000	---	94	80-120%	---	---	TCLPa
<b>LCS (23C0832-BS2)</b>			Prepared: 03/21/23 16:07 Analyzed: 03/22/23 15:15									
<u>1311/6020B</u>												
Barium	10300	2500	5000	ug/L	10	10000	---	103	80-120%	---	---	Q-16, TCLPa
Lead	5360	25.0	50.0	ug/L	10	5000	---	107	80-120%	---	---	Q-16, TCLPa
Mercury	95.5	3.75	7.00	ug/L	10	100	---	96	80-120%	---	---	Q-16, TCLPa
Silver	827	50.0	100	ug/L	10	1000	---	83	80-120%	---	---	Q-16, TCLPa
<b>Duplicate (23C0832-DUP1)</b>			Prepared: 03/21/23 16:07 Analyzed: 03/21/23 22:53									
<u>QC Source Sample: T103B-031723-15 (A3C0669-01)</u>												
<u>1311/6020B</u>												
Arsenic	ND	50.0	100	ug/L	10	---	ND	---	---	---	20%	
Barium	ND	2500	5000	ug/L	10	---	ND	---	---	---	20%	
Cadmium	ND	50.0	100	ug/L	10	---	ND	---	---	---	20%	

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**QUALITY CONTROL (QC) SAMPLE RESULTS**

**TCLP Metals by EPA 6020B (ICPMS)**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 23C0832 - EPA 1311/3015A</b>						<b>Liquid</b>						
<b>Duplicate (23C0832-DUP1)</b>			Prepared: 03/21/23 16:07 Analyzed: 03/21/23 22:53									
<u>QC Source Sample: T103B-031723-15 (A3C0669-01)</u>												
Chromium	ND	50.0	100	ug/L	10	---	ND	---	---	---	20%	
Selenium	ND	50.0	100	ug/L	10	---	ND	---	---	---	20%	
<b>Duplicate (23C0832-DUP2)</b>			Prepared: 03/21/23 16:07 Analyzed: 03/22/23 15:25									
<u>QC Source Sample: T103B-031723-15 (A3C0669-01RE1)</u>												
<u>1311/6020B</u>												
Lead	ND	25.0	50.0	ug/L	10	---	ND	---	---	---	20%	Q-16
Mercury	ND	3.75	7.00	ug/L	10	---	ND	---	---	---	20%	Q-16
Silver	ND	50.0	100	ug/L	10	---	ND	---	---	---	20%	Q-16
<b>Matrix Spike (23C0832-MS1)</b>			Prepared: 03/21/23 16:07 Analyzed: 03/21/23 22:58									
<u>QC Source Sample: T103B-031723-15 (A3C0669-01)</u>												
<u>1311/6020B</u>												
Arsenic	4560	50.0	100	ug/L	10	5000	ND	91	50-150%	---	---	
Cadmium	929	50.0	100	ug/L	10	1000	ND	93	50-150%	---	---	
Chromium	4680	50.0	100	ug/L	10	5000	ND	94	50-150%	---	---	
Selenium	943	50.0	100	ug/L	10	1000	ND	94	50-150%	---	---	
<b>Matrix Spike (23C0832-MS2)</b>			Prepared: 03/21/23 16:07 Analyzed: 03/22/23 15:30									
<u>QC Source Sample: T103B-031723-15 (A3C0669-01RE1)</u>												
<u>1311/6020B</u>												
Barium	11300	2500	5000	ug/L	10	10000	ND	113	50-150%	---	---	Q-16
Lead	5340	25.0	50.0	ug/L	10	5000	ND	107	50-150%	---	---	Q-16
Mercury	95.1	3.75	7.00	ug/L	10	100	ND	95	50-150%	---	---	Q-16
Silver	862	50.0	100	ug/L	10	1000	ND	86	50-150%	---	---	Q-16

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**QUALITY CONTROL (QC) SAMPLE RESULTS**

**Soluble Cyanide by UV Digestion/Gas Diffusion/Amperometric Detection**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 23C0850 - ASTM D7511-12mod (S)</b>						<b>Soil</b>						
<b>Blank (23C0850-BLK2)</b>						Prepared: 03/22/23 09:18 Analyzed: 03/23/23 11:11						
<u>D7511-12</u>												
Total Cyanide	ND	50.0	100	ug/kg wet	1	---	---	---	---	---	---	Q-16
<b>LCS (23C0850-BS2)</b>						Prepared: 03/22/23 09:18 Analyzed: 03/23/23 11:13						
<u>D7511-12</u>												
Total Cyanide	394	50.0	100	ug/kg wet	1	400	---	99	84-116%	---	---	Q-16
<b>Matrix Spike (23C0850-MS2)</b>						Prepared: 03/22/23 09:18 Analyzed: 03/23/23 11:21						
<u>QC Source Sample: T103B-031723-15 (A3C0669-01)</u>												
<u>D7511-12</u>												
Total Cyanide	978	60.4	121	ug/kg dry	1	483	519	95	64-136%	---	---	Q-16
<b>Matrix Spike Dup (23C0850-MSD2)</b>						Prepared: 03/22/23 09:18 Analyzed: 03/23/23 11:23						
<u>QC Source Sample: T103B-031723-15 (A3C0669-01)</u>												
<u>D7511-12</u>												
Total Cyanide	1020	60.0	120	ug/kg dry	1	480	519	105	64-136%	4	47%	Q-16

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**QUALITY CONTROL (QC) SAMPLE RESULTS**

**Percent Dry Weight**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 23C0750 - Total Solids (Dry Weight)</b>						<b>Soil</b>						
<b>Duplicate (23C0750-DUP1)</b>			Prepared: 03/20/23 12:02 Analyzed: 03/21/23 06:34									
<u>QC Source Sample: Non-SDG (A3C0662-01)</u>												
% Solids	84.5	1.00	1.00	%	1	---	87.4	---	---	3	10%	
<b>Duplicate (23C0750-DUP2)</b>			Prepared: 03/20/23 12:02 Analyzed: 03/21/23 06:34									
<u>QC Source Sample: Non-SDG (A3C0662-05)</u>												
% Solids	90.2	1.00	1.00	%	1	---	89.5	---	---	0.8	10%	
<b>Duplicate (23C0750-DUP3)</b>			Prepared: 03/20/23 12:02 Analyzed: 03/21/23 06:34									
<u>QC Source Sample: Non-SDG (A3C0662-08)</u>												
% Solids	91.0	1.00	1.00	%	1	---	92.2	---	---	1	10%	
<b>Duplicate (23C0750-DUP4)</b>			Prepared: 03/20/23 12:02 Analyzed: 03/21/23 06:34									
<u>QC Source Sample: Non-SDG (A3C0667-03)</u>												
% Solids	83.3	1.00	1.00	%	1	---	83.5	---	---	0.3	10%	
<b>Duplicate (23C0750-DUP5)</b>			Prepared: 03/20/23 12:02 Analyzed: 03/21/23 06:34									
<u>QC Source Sample: Non-SDG (A3C0667-04)</u>												
% Solids	87.5	1.00	1.00	%	1	---	89.4	---	---	2	10%	
<b>Duplicate (23C0750-DUP6)</b>			Prepared: 03/20/23 17:58 Analyzed: 03/21/23 06:34									
<u>QC Source Sample: Non-SDG (A3C0712-01)</u>												
% Solids	77.8	1.00	1.00	%	1	---	80.4	---	---	3	10%	
<b>Duplicate (23C0750-DUP7)</b>			Prepared: 03/20/23 17:58 Analyzed: 03/21/23 06:34									
<u>QC Source Sample: Non-SDG (A3C0732-01)</u>												
% Solids	82.1	1.00	1.00	%	1	---	83.6	---	---	2	10%	

No Client related Batch QC samples analyzed for this batch. See notes page for more information.

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**SAMPLE PREPARATION INFORMATION**

**Diesel and/or Oil Hydrocarbons by NWTPH-Dx**

Prep: EPA 3546 (Fuels)					Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
<u>Batch: 23C1130</u>							
A3C0669-01	Soil	NWTPH-Dx	03/17/23 00:00	03/29/23 12:28	10.3g/5mL	10g/5mL	0.97

**Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx**

Prep: EPA 5035A					Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
<u>Batch: 23C0784</u>							
A3C0669-01	Soil	NWTPH-Gx (MS)	03/17/23 00:00	03/17/23 15:20	5.55g/5mL	5g/5mL	0.90

**Volatile Organic Compounds by EPA 8260D**

Prep: EPA 5035A					Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
<u>Batch: 23C0784</u>							
A3C0669-01	Soil	5035A/8260D	03/17/23 00:00	03/17/23 15:20	5.55g/5mL	5g/5mL	0.90
<u>Batch: 23C0846</u>							
A3C0669-01RE1	Soil	5035A/8260D	03/17/23 00:00	03/17/23 15:20	5.55g/5mL	5g/5mL	0.90

**TCLP Volatile Organic Compounds by EPA 1311/8260D**

Prep: EPA 1311/5030B TCLP Volatiles					Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
<u>Batch: 23C1160</u>							
A3C0669-01	Soil	1311/8260D	03/17/23 00:00	03/29/23 11:03	5mL/5mL	5mL/5mL	1.00

**Semivolatile Organic Compounds by EPA 8270E**

Prep: EPA 3546					Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
<u>Batch: 23C1150</u>							
A3C0669-01	Soil	EPA 8270E	03/17/23 00:00	03/29/23 10:19	15.17g/2mL	15g/2mL	0.99

**TCLP Semivolatile Organic Compounds by EPA 1311/8270E**

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**SAMPLE PREPARATION INFORMATION**

TCLP Semivolatile Organic Compounds by EPA 1311/8270E

Prep: EPA 1311/3510C (BNA Extraction)					Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
Batch: 23C0864							
A3C0669-01	Soil	1311/8270E-LL	03/17/23 00:00	03/22/23 11:27	200mL/2mL	200mL/2mL	1.00
A3C0669-01RE1	Soil	1311/8270E-LL	03/17/23 00:00	03/22/23 11:27	200mL/2mL	200mL/2mL	1.00

Total Metals by EPA 6020B (ICPMS)

Prep: EPA 3051A					Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
Batch: 23C0841							
A3C0669-01	Soil	EPA 6020B	03/17/23 00:00	03/22/23 07:16	0.488g/50mL	0.5g/50mL	1.02

TCLP Metals by EPA 6020B (ICPMS)

Prep: EPA 1311/3015A					Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
Batch: 23C0832							
A3C0669-01	Soil	1311/6020B	03/17/23 00:00	03/21/23 16:07	10mL/50mL	10mL/50mL	1.00
A3C0669-01RE1	Soil	1311/6020B	03/17/23 00:00	03/21/23 16:07	10mL/50mL	10mL/50mL	1.00

Soluble Cyanide by UV Digestion/Gas Diffusion/Amperometric Detection

Prep: ASTM D7511-12mod (S)					Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
Batch: 23C0850							
A3C0669-01RE1	Soil	D7511-12	03/17/23 00:00	03/22/23 09:18	2.5681g/50mL	2.5g/50mL	0.97

Percent Dry Weight

Prep: Total Solids (Dry Weight)					Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
Batch: 23C0750							
A3C0669-01	Soil	EPA 8000D	03/17/23 00:00	03/20/23 12:02			NA

TCLP Extraction by EPA 1311

Prep: EPA 1311 (TCLP)					Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor

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**SAMPLE PREPARATION INFORMATION**

TCLP Extraction by EPA 1311

<u>Prep: EPA 1311 (TCLP)</u>					Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
<u>Batch: 23C0771</u>							
A3C0669-01	Soil	EPA 1311	03/17/23 00:00	03/20/23 17:37	100g/2000g	100g/2000g	NA
<u>Prep: EPA 1311 TCLP/ZHE</u>					Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
<u>Batch: 23C1120</u>							
A3C0669-01	Soil	EPA 1311 ZHE	03/17/23 00:00	03/28/23 16:16	24.7g/501.1g	25g/500g	NA

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**QUALIFIER DEFINITIONS**

**Client Sample and Quality Control (QC) Sample Qualifier Definitions:**

**Apex Laboratories**

- B** Analyte detected in an associated blank at a level above the MRL. (See Notes and Conventions below.)
- B-02** Analyte detected in an associated blank at a level between one-half the MRL and the MRL. (See Notes and Conventions below.)
- E** Estimated Value. The result is above the calibration range of the instrument.
- F-17** No fuel pattern detected. The Diesel result represents carbon range C12 to C24, and the Oil result represents >C24 to C40.
- J** Estimated Result. Result detected below the lowest point of the calibration curve, but above the specified MDL.
- M-02** Due to matrix interference, this analyte cannot be accurately quantified. The reported result is estimated.
- M-05** Estimated results. Peak separation for structural isomers is insufficient for accurate quantification.
- Q-01** Spike recovery and/or RPD is outside acceptance limits.
- Q-03** Spike recovery and/or RPD is outside control limits due to the high concentration of analyte present in the sample.
- Q-05** Analyses are not controlled on RPD values from sample and duplicate concentrations that are below 5 times the reporting level.
- Q-16** Reanalysis of an original Batch QC sample.
- Q-17** RPD between original and duplicate sample is outside of established control limits.
- Q-18** Matrix Spike results for this extraction batch are not reported due to the high dilution necessary for analysis of the source sample.
- Q-19** Blank Spike Duplicate (BSD) sample analyzed in place of Matrix Spike/Duplicate samples due to limited sample amount available for analysis.
- Q-29** Recovery for Lab Control Spike (LCS) is above the upper control limit. Data may be biased high.
- Q-31** Estimated Results. Recovery of Continuing Calibration Verification sample below lower control limit for this analyte. Results are likely biased low.
- Q-37** Sample is non-homogenous. Sample results are less than MRL and duplicate results have hits greater than the MRL. See Duplicate results.
- Q-41** Estimated Results. Recovery of Continuing Calibration Verification sample above upper control limit for this analyte. Results are likely biased high.
- Q-42** Matrix Spike and/or Duplicate analysis was performed on this sample. % Recovery or RPD for this analyte is outside laboratory control limits. (Refer to the QC Section of Analytical Report.)
- Q-52** Due to known erratic recoveries, the result and reporting levels for this analyte are reported as Estimated Values. This analyte may not have passed all QC requirements for this method.
- Q-54** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +1%. The results are reported as Estimated Values.
- Q-54a** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +3%. The results are reported as Estimated Values.
- Q-54b** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +32%. The results are reported as Estimated Values.

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**Sevenson Environmental Services, Inc.**

2749 Lockport Road  
Niagara Falls, NY 14305

Project: **Gasco - Soil Residuals**

Project Number: **111323**

Project Manager: **Chip Byrd**

**Report ID:**

**A3C0669 - 04 04 23 1606**

- Q-54c** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +38%. The results are reported as Estimated Values.
- Q-54d** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +4%. The results are reported as Estimated Values.
- Q-54e** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +41%. The results are reported as Estimated Values.
- Q-54f** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +43%. The results are reported as Estimated Values.
- Q-54g** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +5%. The results are reported as Estimated Values.
- Q-54h** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +6%. The results are reported as Estimated Values.
- Q-54i** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +7%. The results are reported as Estimated Values.
- Q-54j** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +72%. The results are reported as Estimated Values.
- Q-54k** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +8%. The results are reported as Estimated Values.
- Q-54l** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +9%. The results are reported as Estimated Values.
- Q-54m** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -1%. The results are reported as Estimated Values.
- Q-54n** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -3%. The results are reported as Estimated Values.
- Q-55** Daily CCV/LCS recovery for this analyte was below the +/-20% criteria listed in EPA 8260, however there is adequate sensitivity to ensure detection at the reporting level.
- Q-56** Daily CCV/LCS recovery for this analyte was above the +/-20% criteria listed in EPA 8260
- R-02** The Reporting Limit for this analyte has been raised to account for interference from coeluting organic compounds present in the sample.
- S-01** Surrogate recovery for this sample is not available due to sample dilution required from high analyte concentration and/or matrix interference.
- S-05** Surrogate recovery is estimated due to sample dilution required for high analyte concentration and/or matrix interference.
- S-06** Surrogate recovery is outside of established control limits.
- TCLP** This batch QC sample was prepared with TCLP or SPLP fluid from preparation batch 23C0744.
- TCLPa** This batch QC sample was prepared with TCLP or SPLP fluid from preparation batch 23C0771.
- TCLPb** This batch QC sample was prepared with TCLP or SPLP fluid from preparation batch 23C1060/ 23C1120.
- V-15** Sample aliquot was subsampled from the sample container. The subsampled aliquot was preserved in the laboratory within 48 hours of sampling.

Apex Laboratories

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Darwin Thomas, Business Development Director



**ANALYTICAL REPORT**

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street  
Tigard, OR 97223  
503-718-2323  
ORELAP ID: OR100062

<b>Sevenson Environmental Services, Inc.</b> 2749 Lockport Road Niagara Falls, NY 14305	Project: <b>Gasco - Soil Residuals</b> Project Number: <b>111323</b> Project Manager: <b>Chip Byrd</b>	<b>Report ID:</b> <b>A3C0669 - 04 04 23 1606</b>
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**REPORTING NOTES AND CONVENTIONS:**

**Abbreviations:**

- DET Analyte DETECTED at or above the detection or reporting limit.
- ND Analyte NOT DETECTED at or above the detection or reporting limit.
- NR Result Not Reported
- RPD Relative Percent Difference. RPDs for Matrix Spikes and Matrix Spike Duplicates are based on concentration, not recovery.

**Detection Limits: Limit of Detection (LOD)**

Limits of Detection (LODs) are normally set at a level of one half the validated Limit of Quantitation (LOQ).  
If no value is listed ('-----'), then the data has not been evaluated below the Reporting Limit.

**Reporting Limits: Limit of Quantitation (LOQ)**

Validated Limits of Quantitation (LOQs) are reported as the Reporting Limits for all analyses where the LOQ, MRL, PQL or CRL are requested. The LOQ represents a level at or above the low point of the calibration curve, that has been validated according to Apex Laboratories' comprehensive LOQ policies and procedures.

**Reporting Conventions:**

- Basis: Results for soil samples are generally reported on a 100% dry weight basis.  
The Result Basis is listed following the units as " dry", " wet", or " " (blank) designation.
- " dry" Sample results and Reporting Limits are reported on a dry weight basis. (i.e. "ug/kg dry")  
See Percent Solids section for details of dry weight analysis.
- " wet" Sample results and Reporting Limits for this analysis are normally dry weight corrected, but have not been modified in this case.
- " " Results without 'wet' or 'dry' designation are not normally dry weight corrected. These results are considered 'As Received'.

**QC Source:**

In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) may be analyzed to demonstrate accuracy and precision of the extraction batch.  
  
Non-Client Batch QC Samples (Duplicates and Matrix Spike/Duplicates) may not be included in this report. Please request a Full QC report if this data is required.

**Miscellaneous Notes:**

- " --- " QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.
- " \*\*\* " Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

**Blanks:**

Standard practice is to evaluate the results from Blank QC Samples down to a level equal to ½ the Reporting Limit (RL).  
-For Blank hits falling between ½ the RL and the RL (J flagged hits), the associated sample and QC data will receive a 'B-02' qualifier.  
-For Blank hits above the RL, the associated sample and QC data will receive a 'B' qualifier, per Apex Laboratories' Blank Policy.  
For further details, please request a copy of this document.

Apex Laboratories

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

Table with 3 columns: Client (Sevenson Environmental Services, Inc.), Project (Gasco - Soil Residuals), and Report ID (A3C0669 - 04 04 23 1606)

REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks (Cont.):

Sample results flagged with a 'B' or 'B-02' qualifier are potentially biased high if the sample results are less than ten times the level found in the blank for inorganic analyses, or less than five times the level found in the blank for organic analyses.

'B' and 'B-02' qualifications are only applied to sample results detected above the Reporting Level.

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

Water samples containing significant amounts of sediment are decanted or separated prior to extraction, and only the water portion analyzed, unless otherwise directed by the client.

Soil and Sediment Samples:

Soil and Sediment samples containing significant amounts of water are decanted prior to extraction, and only the solid portion analyzed, unless otherwise directed by the client.

Sampling and Preservation Notes:

Certain regulatory programs, such as National Pollutant Discharge Elimination System (NPDES), require that activities such as sample filtration (for dissolved metals, orthophosphate, hexavalent chromium, etc.) and testing of short hold analytes (pH, Dissolved Oxygen, etc.) be performed in the field (on-site) within a short time window. In addition, sample matrix spikes are required for some analyses, and sufficient volume must be provided, and billable site specific QC requested, if this is required. All regulatory permits should be reviewed to ensure that these requirements are being met.

Data users should be aware of which regulations pertain to the samples they submit for testing. If related sample collection activities are not approved for a particular regulatory program, results should be considered estimates. Apex Laboratories will qualify these analytes according to the most stringent requirements, however results for samples that are for non-regulatory purposes may be acceptable.

Samples that have been filtered and preserved at Apex Laboratories per client request are listed in the preparation section of the report with the date and time of filtration listed.

Apex Laboratories maintains detailed records on sample receipt, including client label verification, cooler temperature, sample preservation, hold time compliance and field filtration. Data is qualified as necessary, and the lack of qualification indicates compliance with required parameters.

Apex Laboratories

Handwritten signature of Darwin Thomas

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**ANALYTICAL REPORT**

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street  
Tigard, OR 97223  
503-718-2323  
ORELAP ID: OR100062

<b>Sevenson Environmental Services, Inc.</b> 2749 Lockport Road Niagara Falls, NY 14305	Project: <b>Gasco - Soil Residuals</b> Project Number: <b>111323</b> Project Manager: <b>Chip Byrd</b>	<b>Report ID:</b> <b>A3C0669 - 04 04 23 1606</b>
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**LABORATORY ACCREDITATION INFORMATION**

**ORELAP Certification ID: OR100062 (Primary Accreditation) -**  
**EPA ID: OR01039**

All methods and analytes reported from work performed at Apex Laboratories are included on Apex Laboratories' ORELAP Scope of Certification, with the exception of any analyte(s) listed below:

**Apex Laboratories**

Matrix	Analysis	TNI_ID	Analyte	TNI_ID	Accreditation
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All reported analytes are included in Apex Laboratories' current ORELAP scope.

**Secondary Accreditations**

Apex Laboratories also maintains reciprocal accreditation with non-TNI states (Washington DOE), as well as other state specific accreditations not listed here.

**Subcontract Laboratory Accreditations**

Subcontracted data falls outside of Apex Laboratories' Scope of Accreditation. Please see the Subcontract Laboratory report for full details, or contact your Project Manager for more information.

**Field Testing Parameters**

Results for Field Tested data are provided by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.

Apex Laboratories

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

**Apex Laboratories, LLC**

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**APEX LABS**

12232 S.W. Garden Place, Tigard, OR 97223 Ph: 503-718-2323 Fax: 503-718-0333

**CHAIN OF CUSTODY**

Lab # AS0669 of \_\_\_\_\_

COC \_\_\_\_\_

Company: <b>Sevenson Environmental Services, Inc.</b>	Project Mgr: <b>Chip Byrd</b>	Project Name: <b>Gasco - Soil Residuals</b>	Project # <b>111323</b>
Address: 2749 Lockport Road, Niagara Falls, NY 14305	Phone: (716) 583-2754	Fax:	E-mail: <a href="mailto:wbyrd@sevenson.com">wbyrd@sevenson.com</a>
<b>ANALYSIS REQUEST</b>			
SAMPLE ID	DATE	TIME	MATRIX
T103B-031723-15	3/17/2023		S
# OF CONTAINERS			
8260 VOCs	X	X	X
8270D LL Full List	X	X	X
Dry Weight	X	X	X
Metals, RCRA 8	X	X	X
Total Cyanide	X	X	X
NWTPH-DX	X	X	X
NWTPH-GX	X	X	X
VOCs-TCLP	X	X	X
1311/8270 TCLP - Full List - SVOCs	X	X	X
Metals, TPCL	X	X	X
SPECIAL INSTRUCTIONS:			
Normal Turn Around Time (TAT) = 6-10 Business Days			
TAT Requested (circle)	1 DAY	2 DAY	3 DAY 4 DAY
	5 DAY	STD	Other: _____
SAMPLES ARE HELD FOR 30 DAYS			
RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature: <i>William Byrd</i>	Signature: <i>[Signature]</i>	Signature:	Signature:
Date: 3-17-2023	Date: 3/17/23	Date:	Date:
Printed Name: William Byrd	Printed Name: <i>[Name]</i>	Printed Name:	Printed Name:
Time: 12:40	Time: 12:40	Time:	Time:
Company: SES	Company: Apex	Company:	Company:

Apex Laboratories

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

**Apex Laboratories, LLC**

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<b>Sevenson Environmental Services, Inc.</b> 2749 Lockport Road Niagara Falls, NY 14305	Project: <b>Gasco - Soil Residuals</b> Project Number: <b>111323</b> Project Manager: <b>Chip Byrd</b>	<b>Report ID:</b> <b>A3C0669 - 04 04 23 1606</b>
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**APEX LABS COOLER RECEIPT FORM**

Client: Sevenson Environmental Services, Inc. Element WO#: A3C0669

Project/Project #: Gasco -- Soil Residuals / 111323

**Delivery Info:**  
 Date/time received: 3/17/23 @ 1240 By: AJM  
 Delivered by: Apex  Client  ESS  FedEx  UPS  Radio  Morgan  SDS  Evergreen  Other \_\_\_\_\_

**Cooler Inspection** Date/time inspected: 3/17/23 @ 1332 By: AJM  
 Chain of Custody included? Yes  No   
 Signed/dated by client? Yes  No

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	<u>2.0</u>						
Custody seals? (Y/N)	<u>N</u>						
Received on ice? (Y/N)	<u>Y</u>						
Temp. blanks? (Y/N)	<u>Y</u>						
Ice type: (Gel/Real/Other)	<u>Gel</u>						
Condition (In/Out):	<u>In</u>						

Cooler out of temp? (Y/N) Possible reason why: \_\_\_\_\_  
 Green dots applied to out of temperature samples? Yes  No   
 Out of temperature samples form initiated? Yes  No   
**Sample Inspection:** Date/time inspected: 3/17/23 @ 1444 By: AAW  
 All samples intact? Yes  No  Comments: \_\_\_\_\_

Bottle labels/COCs agree? Yes  No  Comments: Cont ID reads T-10313 sample. No time on CoC or container

COC/container discrepancies form initiated? Yes  No   
 Containers/volumes received appropriate for analysis? Yes  No  Comments: \_\_\_\_\_

Do VOA vials have visible headspace? Yes  No  NA   
 Comments: \_\_\_\_\_

Water samples: pH checked: Yes  No  NA  pH appropriate? Yes  No  NA   
 Comments: \_\_\_\_\_

**Additional information:**  
 \_\_\_\_\_  
 \_\_\_\_\_

Labeled by: AAW Witness: TS Cooler Inspected by: AAW  
Form Y-003 R-00

Apex Laboratories

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Darwin Thomas, Business Development Director





Requested Facility: Chemical Waste Management (Hazardous Waste Facility)  Unsure Profile Number: OR344464  
 Multiple Generator Locations (Attach Locations)  Request Certificate of Disposal  Renewal? Original Profile Number: OR344464

**A. GENERATOR INFORMATION (MATERIAL ORIGIN)**

- 1. Generator Name: NW Natural
- 2. Generator Site Address: 7900 N.W. St. Helens Road  
(City, State, ZIP) Portland OR 97210
- 3. County: Multnomah
- 4. Contact Name: Chip Byrd
- 5. Email: wbyrd@sevenson.com
- 6. Phone: (503) 286-1785 7. Fax: \_\_\_\_\_
- 8. Generator EPA ID: OR00000204701  N/A
- 9. State ID: \_\_\_\_\_  N/A

**C. MATERIAL INFORMATION**

- 1. Common Name: Residual Solids  
Describe Process(es) Generating Material:  See Attached  

Residual Solids within a drop box plumbed to the Siltronic F002 groundwater pretreatment plant system. The box receives contaminated groundwater or decontamination water contaminated with MGP-related constituents and spent TCE (F002).
- 2. Material Composition and Contaminants:  See Attached  

1. Sand	20-35 %
2. Absorbent media	20-30 %
3. Oily sludge solids	30-40 %
4. Miscellaneous PPE and plastic	0-10 %

Total comp. must be equal to or greater than 100% ≥100%
- 3. State Waste Codes: \_\_\_\_\_  N/A
- 4. Color: White to dark black
- 5. Physical State at 70°F:  Solid  Liquid  Other: \_\_\_\_\_
- 6. Free Liquid Range Percentage: \_\_\_\_\_ to \_\_\_\_\_  N/A
- 7. pH: 4 to 11  N/A
- 8. Strong Odor:  Yes  No Describe: petroleum odor
- 9. Flash Point:  <140°F  140°-199°F  ≥200°  N/A

**E. ANALYTICAL AND OTHER REPRESENTATIVE INFORMATION**

- 1. Analytical attached  Yes  
Please identify applicable samples and/or lab reports:  

APEX report A2G0251, Laboratory ID#A2G0251-01, Sevenson sample ID# T103B-071122-01. See Table 1 of Charted Lab Results.
- 2. Other information attached (such as MSDS)?  Yes

**G. GENERATOR CERTIFICATION (PLEASE READ AND CERTIFY BY SIGNATURE)**

By signing this EZ Profile™ form, I hereby certify that all information submitted in this and all attached documents contain true and accurate descriptions of this material, and that all relevant information necessary for proper material characterization and to identify known and suspected hazards has been provided. Any analytical data attached was derived from a sample that is representative as defined in 40 CFR 261 - Appendix 1 or by using an equivalent method. All changes occurring in the character of the material (i.e., changes in the process or new analytical) will be identified by the Generator and be disclosed to Waste Management prior to providing the material to Waste Management.

I am an Authorized Agent signing on behalf of the Generator, and I have confirmed with the Generator that information contained in this profile, as well as supporting documents provided, are accurate and complete.

Name (Print): William Byrd Date: 05/16/2022  
Title: WWTP Superintendent  
Company: Sevenson Environmental Services, Inc

**B. BILLING INFORMATION**

SAME AS GENERATOR

- 1. Billing Name: Sevenson Environmental Services
- 2. Billing Address: 2749 Lockport Road  
(City, State, ZIP) Niagara Falls NY 14305
- 3. Contact Name: Sevenson Environmental Services
- 4. Email: wbyrd@sevenson.com
- 5. Phone: (503) 286-1745 6. Fax: \_\_\_\_\_
- 7. WM Hauled?  Yes  No
- 8. P.O. Number: \_\_\_\_\_
- 9. Payment Method:  Credit Account  Cash  Credit Card

**D. REGULATORY INFORMATION**

- 1. EPA Hazardous Waste?  Yes\*  No  
Code: F002
- 2. State Hazardous Waste?  Yes  No  
Code: \_\_\_\_\_
- 3. Is this material non-hazardous due to Treatment, Delisting, or an Exclusion?  Yes\*  No
- 4. Contains Underlying Hazardous Constituents?  Yes\*  No
- 5. From an industry regulated under Benzene NESHAP?  Yes\*  No
- 6. Facility remediation subject to 40 CFR 63 GGGGG?  Yes\*  No
- 7. CERCLA or State-mandated clean-up?  Yes\*  No
- 8. NRC or State-regulated radioactive or NORM waste?  Yes\*  No  
**\*If Yes, see Addendum (page 2) for additional questions and space.**
- 9. Contains PCBs? → If Yes, answer a, b and c.  Yes  No
  - a. Regulated by 40 CFR 761?  Yes  No
  - b. Remediation under 40 CFR 761.61 (a)?  Yes  No
  - c. Were PCB imported into the US?  Yes  No
- 10. Regulated and/or Untreated Medical/Infectious Waste?  Yes  No
- 11. Contains Asbestos?  Yes  No  
→ If Yes:  Non-Friable  Non-Friable - Regulated  Friable

**F. SHIPPING AND DOT INFORMATION**

- 1.  One-Time Event  Repeat Event/Ongoing Business
- 2. Estimated Quantity/Unit of Measure: 60  
 Tons  Yards  Drums  Gallons  Other: \_\_\_\_\_
- 3. Container Type and Size: 20 cubic yard roll-off boxes
- 4. USDOT Proper Shipping Name: \_\_\_\_\_  N/A  
RQ,NA3077,HAZARDOUS WASTE,SOLID,N.O.S,9,III,(F002)

**Certification Signature**



Only complete this Addendum if prompted by responses on EZ Profile™ (page 1) or to provide additional information. Sections and question numbers correspond to EZ Profile™.

Profile Number: OR344464

C. MATERIAL INFORMATION

Describe Process Generating Material (Continued from page 1): If more space is needed, please attach additional pages.

Solids are generated from settling of solid-materials within box, and are considered residuals derived from the treatment of F002 hazardous waste.

Material Composition and Contaminants (Continued from page 1): If more space is needed, please attach additional pages.

Table with 2 columns: Material Composition and Contaminants, and Total composition must be equal to or greater than 100%. Rows 5-9.

D. REGULATORY INFORMATION

Only questions with a "Yes" response in Section D on the EZ Profile™ form (page 1) need to be answered here.

1. EPA Hazardous Waste

a. Please list all USEPA listed and characteristic waste code numbers:

Empty box for listing waste code numbers.

- b. Is the material subject to the Alternative Debris standards (40 CFR 268.45)?
c. Is the material subject to the Alternative Soil standards (40 CFR 268.49)?
d. Is the material exempt from Subpart CC Controls (40 CFR 264.1083)?

2. State Hazardous Waste -> Please list all state waste codes:

3. For material that is Treated, Delisted, or Excluded -> Please indicate the category, below:

- Delisted Hazardous Waste, Excluded Waste under 40 CFR 261.4, Treated Hazardous Waste Debris, Treated Characteristic Hazardous Waste

4. Underlying Hazardous Constituents -> Please list all Underlying Hazardous Constituents:

Empty box for listing hazardous constituents.

5. Industries regulated under Benzene NESHAP include petroleum refineries, chemical manufacturing plants, coke by-product recovery plants, and TSDFs.

- a. Are you a TSDF?
b. Does this material contain benzene?
c. What is your facility's current total annual benzene quantity in Megagrams?
d. Is this waste soil from a remediation?
e. Does the waste contain >10% water/moisture?
f. Has material been treated to remove 99% of the benzene or to achieve <10 ppmw?
g. Is material exempt from controls in accordance with 40 CFR 61.342?
h. Based on your knowledge of your waste and the BWON regulations, do you believe that this waste stream is subject to treatment and control requirements at an off-site TSDF?
6. 40 CFR 63 GGGGG -> Does the material contain <500 ppmw VOHAPs at the point of determination?
7. CERCLA or State-Mandated clean up -> Please submit the Record of Decision or other documentation with process information to assist others in the evaluation for proper disposal.
8. NRC or state regulated radioactive or NORM Waste -> Please identify Isotopes and pCi/g:



# Additional Profile Information

Profile Number: OR344464

### C. MATERIAL INFORMATION

Material Composition and Contaminants (Continued from page 2):

If more space is needed, please attach additional pages.

10.	
11.	
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40.	
Total composition must be equal to or greater than 100%	
	≥100%

### D. REGULATORY INFORMATION

1. EPA Hazardous Waste

a. Please list all USEPA listed and characteristic waste code numbers (Continued from page 2):

2. Form Code:

3. Source Code:



# Hazardous WAM Approval

Requested Management Facility: Chemical Waste Management (Hazardous Waste Facility)

Profile Number: OR344464 Waste Approval Expiration Date: 06/07/2024

### APPROVAL DETAILS

Hazardous Classification: RCRA Hazardous Profile Renewal:  Yes  No

Management Method: Direct Landfill - Haz Meeting Standards

Generator Name: NW Natural

Material Name: Residual Solids

Management Facility Precautions, Special Handling Procedures or Limitation on approval:

#### Generator Conditions

- An EPA form 8700-22 must be used for all hazardous shipments and may be ordered from an authorized vendor or your TSC.
- Approval number must accompany shipment.
- A signed Land Ban Notification/Certification must accompany the first shipment to the disposal facility. A new certification must be provided upon any change in the wastestream.
- For F001-F005, specify parameters on the Phase IV or Soil LDR, whichever is applicable.
- Absorbent materials for landfill must be made of non-biodegradable material, as defined by EPA and applicable State regulations
- Chemical Waste Management has all the necessary permits and licenses for the waste that has been characterized and identified by this approved profile.
- The WM decision is based on specific parameters defined within this waste profile. Waste received that is non-conforming in any way will need to be re-evaluated and managed in accordance with all RCRA and State regulations. If alternative treatment is not available and the waste cannot be managed it will be rejected back to the generator.
- No free liquids
- Must meet applicable OSHA, DOT packaging, labeling, shipping and manifesting requirements per 49 CFR.  
Amended to include updated analytical: Apex Report A0G0314, Apex sample ID A0G0314-04, SES sample ID # T103A-071320-10 Comp  
AMENDED TO INCLUDE UPDATED ANALYTICAL: Apex Lab Report #A1G0411, sample ID. A1G0411-01  
Must be scheduled. Please contact Bob Mulholland (rmulholl@wm.com 541-454-3265) or Tina Weiser (tweiser@wm.com).

WM Authorization Name: Donald Lavrinc Title: Waste Approval Manager

WM Authorization Signature: *Donald Lavrinc* Date: 06/07/2022

Agency Authorization (if Required): \_\_\_\_\_ Date: \_\_\_\_\_