Sevenson Environmental Services, Inc.

Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305
Phone 716.284.0431
Fax 716.284.1796

February 13, 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. #14) 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 November 10, 2022 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 (A2K0502) dated December 2, 2022 documenting the chemistry of the residual treatment materials, and Table 1, a summary of those testing results. The December 2022 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) #14
Waste Management Disposal Profile # OR344464
OR344464 signed.pdf
OR344464 LDR Form

OR344464 Constituents Form
Signed Oregon Profile Radiation Addendum Cert
Apex Laboratory Report #A2K0502

Generator Name NW Natural Profile Number OR344464

Waste Name Purge Water and Decontamination Disposal

Generator's NAICS Code 486210 Code Two;

Does the Generator's Facility manage, store, use, process, or discard any of the following materials in or from your production processes;

Yes[1]	No	Waste Classifications
○	◉	**Nuclear Materials**
○	◉	**Mineral Ore mining/overburden processing or extraction** *Uranium, Radium, Thorium, Plutonium, Cobalt, Strontium, Zirconium, Polonium, Beryllium*
○	◉	**Phosphate Fertilizer Production** *Phosphogypsum, Scale, Residuals, Slag*
○	◉	**Coal and Coal Burning Wastes** *Coal Fly/Bottom Ash*
○	◉	**Petroleum Refining/Production** *Filter Socks, Pipe Scale, Stratum Water, Refinery Process Sediments, Tank Bottoms*
◉	○	**Drinking Water and Wastewater Treatment Wastes** *Filter Socks, Pipe Scale, Stratum Water, Tank Bottoms, Bio-solids, Grit and Screenings, septic*
○	◉	**Other Processing Wastes** *Ceramic, Refractory, Zircon sand, Bauxite to Alumina processing, Titanium, Zirconium, Baghouse Dusts with refractory, "Mag-Thor" metals, Ceramic Insulators, Sand Blasting waste*
○	◉	**Geothermal Wastes** *Filter Socks, Pipe Scale, Stratum Water, Tank Bottoms*
○	◉	**Does the generator perform Metals Casting**
○	◉	**Are any of the Generator's wastes subject to an oil and gas exploration and production (E&P) exemption pursuant to section 3001(b)(2)(A)?**
○	◉	**Have any of the Generator's wastes been tested using isotopic testing, or known to contain radioactivity**
○	◉	**Does the Generator's facility have a Federal or State license to store, dispose or transport radioactive materials? Federal License No:** ☐ **State License No:** ☐

1- Any YES answers may require additional information, please contact your TSC representative at wmpnw2@wm.com

GENERATOR CERTIFICATION (PLEASE READ AND CERTIFY BY SIGNATURE)

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

■ 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 Robert J. Wyatt

Title Director, Legacy Environmental Program

Company NW Natural

Date May 11, 2022

Certification Signature

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

ANALYTICAL REPORT

Friday, December 2, 2022

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

RE: A2K0502 - 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 A2K0502, which was received by the laboratory on 11/11/2022 at 11:45:00AM.

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, 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.

Cooler Receipt Information

(See Cooler Receipt Form for details)

Cooler#1	1.9 degC

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.

Apex Laboratories

Darwin Thomas, Business Development Director

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.

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
T103A-111022-14	**A2K0502-01**	**Soil**	**11/10/22 13:30**	**11/11/22 11:45**

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.

Darwin Thomas, Business Development Director

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

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
T103A-111022-14 (A2K0502-01)				**Matrix: Soil**		**Batch: 22K0863**		
Diesel	**25500000**	255000	510000	ug/kg dry	20	11/23/22 21:23	NWTPH-Dx	**F-24**
Oil	**6980000**	510000	1020000	ug/kg dry	20	11/23/22 21:23	NWTPH-Dx	**F-24**
Surrogate: o-Terphenyl (Surr)			*Recovery: %*	*Limits: 50-150 %*	*20*	*11/23/22 21:23*	*NWTPH-Dx*	*S-01*

Apex Laboratories

Darwin Thomas, Business Development Director

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.

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

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
T103A-111022-14 (A2K0502-01RE1)				**Matrix: Soil**		**Batch: 22K0559**		**V-15**
Gasoline Range Organics	**2100000**	77200	154000	ug/kg dry	1000	11/15/22 16:21	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 109 %*		*Limits: 50-150 %*	*1*	*11/15/22 16:21*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*93 %*	*50-150 %*	*1*	*11/15/22 16:21*	*NWTPH-Gx (MS)*	

Apex Laboratories

Darwin Thomas, Business Development Director

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.

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
T103A-111022-14 (A2K0502-01)				**Matrix: Soil**		**Batch: 22K0504**		**V-15**
Acetone	ND	3090	3090	ug/kg dry	100	11/14/22 22:54	5035A/8260D	Q-30
Acrylonitrile	ND	309	309	ug/kg dry	100	11/14/22 22:54	5035A/8260D	
Benzene	**3330**	15.4	30.9	ug/kg dry	100	11/14/22 22:54	5035A/8260D	
Bromobenzene	ND	38.6	77.2	ug/kg dry	100	11/14/22 22:54	5035A/8260D	
Bromochloromethane	ND	77.2	154	ug/kg dry	100	11/14/22 22:54	5035A/8260D	
Bromodichloromethane	ND	77.2	154	ug/kg dry	100	11/14/22 22:54	5035A/8260D	
Bromoform	ND	154	309	ug/kg dry	100	11/14/22 22:54	5035A/8260D	
Bromomethane	ND	1540	1540	ug/kg dry	100	11/14/22 22:54	5035A/8260D	
2-Butanone (MEK)	ND	1540	1540	ug/kg dry	100	11/14/22 22:54	5035A/8260D	
n-Butylbenzene	**1010**	77.2	154	ug/kg dry	100	11/14/22 22:54	5035A/8260D	**M-02**
sec-Butylbenzene	**1910**	77.2	154	ug/kg dry	100	11/14/22 22:54	5035A/8260D	
tert-Butylbenzene	ND	541	541	ug/kg dry	100	11/14/22 22:54	5035A/8260D	R-02
Carbon disulfide	ND	772	1540	ug/kg dry	100	11/14/22 22:54	5035A/8260D	
Carbon tetrachloride	ND	77.2	154	ug/kg dry	100	11/14/22 22:54	5035A/8260D	
Chlorobenzene	ND	38.6	77.2	ug/kg dry	100	11/14/22 22:54	5035A/8260D	
Chloroethane	ND	772	1540	ug/kg dry	100	11/14/22 22:54	5035A/8260D	
Chloroform	ND	77.2	154	ug/kg dry	100	11/14/22 22:54	5035A/8260D	
Chloromethane	ND	386	772	ug/kg dry	100	11/14/22 22:54	5035A/8260D	
2-Chlorotoluene	ND	77.2	154	ug/kg dry	100	11/14/22 22:54	5035A/8260D	
4-Chlorotoluene	ND	77.2	154	ug/kg dry	100	11/14/22 22:54	5035A/8260D	
Dibromochloromethane	ND	154	309	ug/kg dry	100	11/14/22 22:54	5035A/8260D	
1,2-Dibromo-3-chloropropane	ND	386	772	ug/kg dry	100	11/14/22 22:54	5035A/8260D	
1,2-Dibromoethane (EDB)	ND	77.2	154	ug/kg dry	100	11/14/22 22:54	5035A/8260D	
Dibromomethane	ND	77.2	154	ug/kg dry	100	11/14/22 22:54	5035A/8260D	
1,2-Dichlorobenzene	ND	38.6	77.2	ug/kg dry	100	11/14/22 22:54	5035A/8260D	
1,3-Dichlorobenzene	ND	38.6	77.2	ug/kg dry	100	11/14/22 22:54	5035A/8260D	
1,4-Dichlorobenzene	ND	38.6	77.2	ug/kg dry	100	11/14/22 22:54	5035A/8260D	
Dichlorodifluoromethane	ND	309	309	ug/kg dry	100	11/14/22 22:54	5035A/8260D	ICV-02
1,1-Dichloroethane	ND	38.6	77.2	ug/kg dry	100	11/14/22 22:54	5035A/8260D	
1,2-Dichloroethane (EDC)	ND	38.6	77.2	ug/kg dry	100	11/14/22 22:54	5035A/8260D	
1,1-Dichloroethene	ND	38.6	77.2	ug/kg dry	100	11/14/22 22:54	5035A/8260D	
cis-1,2-Dichloroethene	ND	38.6	77.2	ug/kg dry	100	11/14/22 22:54	5035A/8260D	
trans-1,2-Dichloroethene	ND	38.6	77.2	ug/kg dry	100	11/14/22 22:54	5035A/8260D	

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.

Darwin Thomas, Business Development Director

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
T103A-111022-14 (A2K0502-01)				**Matrix: Soil**		**Batch: 22K0504**		**V-15**
1,2-Dichloropropane	ND	38.6	77.2	ug/kg dry	100	11/14/22 22:54	5035A/8260D	
1,3-Dichloropropane	ND	77.2	154	ug/kg dry	100	11/14/22 22:54	5035A/8260D	
2,2-Dichloropropane	ND	77.2	154	ug/kg dry	100	11/14/22 22:54	5035A/8260D	
1,1-Dichloropropene	ND	77.2	154	ug/kg dry	100	11/14/22 22:54	5035A/8260D	
cis-1,3-Dichloropropene	ND	77.2	154	ug/kg dry	100	11/14/22 22:54	5035A/8260D	
trans-1,3-Dichloropropene	ND	77.2	154	ug/kg dry	100	11/14/22 22:54	5035A/8260D	
Ethylbenzene	**17700**	38.6	77.2	ug/kg dry	100	11/14/22 22:54	5035A/8260D	
Hexachlorobutadiene	ND	154	309	ug/kg dry	100	11/14/22 22:54	5035A/8260D	
2-Hexanone	ND	772	1540	ug/kg dry	100	11/14/22 22:54	5035A/8260D	
Isopropylbenzene	**5920**	77.2	154	ug/kg dry	100	11/14/22 22:54	5035A/8260D	
4-Isopropyltoluene	**2510**	77.2	154	ug/kg dry	100	11/14/22 22:54	5035A/8260D	**M-02**
Methylene chloride	ND	1540	1540	ug/kg dry	100	11/14/22 22:54	5035A/8260D	
4-Methyl-2-pentanone (MiBK)	ND	772	1540	ug/kg dry	100	11/14/22 22:54	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	77.2	154	ug/kg dry	100	11/14/22 22:54	5035A/8260D	
n-Propylbenzene	**2890**	38.6	77.2	ug/kg dry	100	11/14/22 22:54	5035A/8260D	
Styrene	ND	77.2	154	ug/kg dry	100	11/14/22 22:54	5035A/8260D	
1,1,1,2-Tetrachloroethane	ND	38.6	77.2	ug/kg dry	100	11/14/22 22:54	5035A/8260D	
1,1,2,2-Tetrachloroethane	ND	154	154	ug/kg dry	100	11/14/22 22:54	5035A/8260D	
Tetrachloroethene (PCE)	ND	38.6	77.2	ug/kg dry	100	11/14/22 22:54	5035A/8260D	
Toluene	**127**	77.2	154	ug/kg dry	100	11/14/22 22:54	5035A/8260D	**J**
1,2,3-Trichlorobenzene	ND	386	772	ug/kg dry	100	11/14/22 22:54	5035A/8260D	
1,2,4-Trichlorobenzene	ND	386	772	ug/kg dry	100	11/14/22 22:54	5035A/8260D	
1,1,1-Trichloroethane	ND	38.6	77.2	ug/kg dry	100	11/14/22 22:54	5035A/8260D	
1,1,2-Trichloroethane	ND	38.6	77.2	ug/kg dry	100	11/14/22 22:54	5035A/8260D	
Trichloroethene (TCE)	ND	38.6	77.2	ug/kg dry	100	11/14/22 22:54	5035A/8260D	
Trichlorofluoromethane	ND	309	309	ug/kg dry	100	11/14/22 22:54	5035A/8260D	Q-52
1,2,3-Trichloropropane	ND	77.2	154	ug/kg dry	100	11/14/22 22:54	5035A/8260D	
1,2,4-Trimethylbenzene	**16400**	77.2	154	ug/kg dry	100	11/14/22 22:54	5035A/8260D	
1,3,5-Trimethylbenzene	**6160**	77.2	154	ug/kg dry	100	11/14/22 22:54	5035A/8260D	
Vinyl chloride	ND	38.6	77.2	ug/kg dry	100	11/14/22 22:54	5035A/8260D	
m,p-Xylene	**3450**	77.2	154	ug/kg dry	100	11/14/22 22:54	5035A/8260D	
o-Xylene	**5480**	38.6	77.2	ug/kg dry	100	11/14/22 22:54	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery: 100 %*		*Limits: 80-120 %*	*1*	*11/14/22 22:54*	*5035A/8260D*	

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.

Darwin Thomas, Business Development Director

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
T103A-111022-14 (A2K0502-01)				**Matrix: Soil**		**Batch: 22K0504**		**V-15**
Surrogate: Toluene-d8 (Surr)			*Recovery: 95 %*	*Limits: 80-120 %*	*1*	*11/14/22 22:54*	*5035A/8260D*	
4-Bromofluorobenzene (Surr)			*110 %*	*79-120 %*	*1*	*11/14/22 22:54*	*5035A/8260D*	
T103A-111022-14 (A2K0502-01RE2)				**Matrix: Soil**		**Batch: 22K0634**		**V-15**
Naphthalene	**270000**	15400	30900	ug/kg dry	10000	11/16/22 22:29	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)			*Recovery: 103 %*	*Limits: 80-120 %*	*1*	*11/16/22 22:29*	*5035A/8260D*	
Toluene-d8 (Surr)			*99 %*	*80-120 %*	*1*	*11/16/22 22:29*	*5035A/8260D*	
4-Bromofluorobenzene (Surr)			*97 %*	*79-120 %*	*1*	*11/16/22 22:29*	*5035A/8260D*	

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.

Darwin Thomas, Business Development Director

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

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
T103A-111022-14 (A2K0502-01)				**Matrix: Soil**		**Batch: 22K0839**		
Acetone	ND	0.500	1.00	mg/L	50	11/23/22 23:50	1311/8260D	
Bromobenzene	ND	0.0125	0.0250	mg/L	50	11/23/22 23:50	1311/8260D	
Bromochloromethane	ND	0.0250	0.0500	mg/L	50	11/23/22 23:50	1311/8260D	
Bromodichloromethane	ND	0.0250	0.0500	mg/L	50	11/23/22 23:50	1311/8260D	
Bromoform	ND	0.0250	0.0500	mg/L	50	11/23/22 23:50	1311/8260D	
Bromomethane	ND	0.250	0.250	mg/L	50	11/23/22 23:50	1311/8260D	
2-Butanone (MEK)	ND	0.250	0.500	mg/L	50	11/23/22 23:50	1311/8260D	
n-Butylbenzene	ND	0.0250	0.0500	mg/L	50	11/23/22 23:50	1311/8260D	
sec-Butylbenzene	ND	0.0250	0.0500	mg/L	50	11/23/22 23:50	1311/8260D	
tert-Butylbenzene	ND	0.0250	0.0500	mg/L	50	11/23/22 23:50	1311/8260D	
Carbon tetrachloride	ND	0.0250	0.0500	mg/L	50	11/23/22 23:50	1311/8260D	
Chlorobenzene	ND	0.0125	0.0250	mg/L	50	11/23/22 23:50	1311/8260D	
Chloroethane	ND	0.250	0.250	mg/L	50	11/23/22 23:50	1311/8260D	
Chloroform	ND	0.0250	0.0500	mg/L	50	11/23/22 23:50	1311/8260D	
Chloromethane	ND	0.125	0.250	mg/L	50	11/23/22 23:50	1311/8260D	
2-Chlorotoluene	ND	0.0250	0.0500	mg/L	50	11/23/22 23:50	1311/8260D	
4-Chlorotoluene	ND	0.0250	0.0500	mg/L	50	11/23/22 23:50	1311/8260D	
1,2-Dibromo-3-chloropropane	ND	0.125	0.250	mg/L	50	11/23/22 23:50	1311/8260D	
Dibromochloromethane	ND	0.0250	0.0500	mg/L	50	11/23/22 23:50	1311/8260D	
1,2-Dibromoethane (EDB)	ND	0.0125	0.0250	mg/L	50	11/23/22 23:50	1311/8260D	
Dibromomethane	ND	0.0250	0.0500	mg/L	50	11/23/22 23:50	1311/8260D	
1,2-Dichlorobenzene	ND	0.0125	0.0250	mg/L	50	11/23/22 23:50	1311/8260D	
1,3-Dichlorobenzene	ND	0.0125	0.0250	mg/L	50	11/23/22 23:50	1311/8260D	
1,4-Dichlorobenzene	ND	0.0125	0.0250	mg/L	50	11/23/22 23:50	1311/8260D	
Dichlorodifluoromethane	ND	0.0250	0.0500	mg/L	50	11/23/22 23:50	1311/8260D	
1,1-Dichloroethane	ND	0.0125	0.0250	mg/L	50	11/23/22 23:50	1311/8260D	
1,1-Dichloroethene	ND	0.0125	0.0250	mg/L	50	11/23/22 23:50	1311/8260D	
1,2-Dichloroethane (EDC)	ND	0.0125	0.0250	mg/L	50	11/23/22 23:50	1311/8260D	
cis-1,2-Dichloroethene	ND	0.0250	0.0500	mg/L	50	11/23/22 23:50	1311/8260D	
trans-1,2-Dichloroethene	ND	0.0125	0.0250	mg/L	50	11/23/22 23:50	1311/8260D	
1,2-Dichloropropane	ND	0.0125	0.0250	mg/L	50	11/23/22 23:50	1311/8260D	
1,3-Dichloropropane	ND	0.0250	0.0500	mg/L	50	11/23/22 23:50	1311/8260D	
2,2-Dichloropropane	ND	0.0250	0.0500	mg/L	50	11/23/22 23:50	1311/8260D	

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.

Darwin Thomas, Business Development Director

APEX LABORATORIES

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

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
T103A-111022-14 (A2K0502-01)				**Matrix: Soil**		**Batch: 22K0839**		
1,1-Dichloropropene	ND	0.0250	0.0500	mg/L	50	11/23/22 23:50	1311/8260D	
cis-1,3-Dichloropropene	ND	0.0250	0.0500	mg/L	50	11/23/22 23:50	1311/8260D	
trans-1,3-Dichloropropene	ND	0.0250	0.0500	mg/L	50	11/23/22 23:50	1311/8260D	
Ethylbenzene	**0.143**	0.0125	0.0250	mg/L	50	11/23/22 23:50	1311/8260D	
Hexachlorobutadiene	ND	0.125	0.250	mg/L	50	11/23/22 23:50	1311/8260D	
2-Hexanone	ND	0.250	0.500	mg/L	50	11/23/22 23:50	1311/8260D	
Isopropylbenzene	ND	0.0250	0.0500	mg/L	50	11/23/22 23:50	1311/8260D	
4-Isopropyltoluene	ND	0.0250	0.0500	mg/L	50	11/23/22 23:50	1311/8260D	
4-Methyl-2-pentanone (MiBK)	ND	0.250	0.500	mg/L	50	11/23/22 23:50	1311/8260D	
Methyl tert-butyl ether (MTBE)	ND	0.0250	0.0500	mg/L	50	11/23/22 23:50	1311/8260D	
Methylene chloride	ND	0.250	0.500	mg/L	50	11/23/22 23:50	1311/8260D	
n-Propylbenzene	ND	0.0125	0.0250	mg/L	50	11/23/22 23:50	1311/8260D	
Styrene	ND	0.0250	0.0500	mg/L	50	11/23/22 23:50	1311/8260D	
1,1,1,2-Tetrachloroethane	ND	0.0125	0.0250	mg/L	50	11/23/22 23:50	1311/8260D	
1,1,2,2-Tetrachloroethane	ND	0.0125	0.0250	mg/L	50	11/23/22 23:50	1311/8260D	
Naphthalene	**1.66**	0.0500	0.100	mg/L	50	11/23/22 23:50	1311/8260D	
Tetrachloroethene (PCE)	ND	0.0125	0.0250	mg/L	50	11/23/22 23:50	1311/8260D	
Toluene	ND	0.0250	0.0500	mg/L	50	11/23/22 23:50	1311/8260D	
1,2,3-Trichlorobenzene	ND	0.0250	0.0500	mg/L	50	11/23/22 23:50	1311/8260D	
1,2,4-Trichlorobenzene	ND	0.0500	0.100	mg/L	50	11/23/22 23:50	1311/8260D	
1,1,1-Trichloroethane	ND	0.0125	0.0250	mg/L	50	11/23/22 23:50	1311/8260D	
1,1,2-Trichloroethane	ND	0.0125	0.0250	mg/L	50	11/23/22 23:50	1311/8260D	
Trichloroethene (TCE)	ND	0.0125	0.0250	mg/L	50	11/23/22 23:50	1311/8260D	
Trichlorofluoromethane	ND	0.0500	0.100	mg/L	50	11/23/22 23:50	1311/8260D	
1,2,3-Trichloropropane	ND	0.0250	0.0500	mg/L	50	11/23/22 23:50	1311/8260D	
1,2,4-Trimethylbenzene	**0.0410**	0.0250	0.0500	mg/L	50	11/23/22 23:50	1311/8260D	**J**
1,3,5-Trimethylbenzene	ND	0.0250	0.0500	mg/L	50	11/23/22 23:50	1311/8260D	
Vinyl chloride	ND	0.0125	0.0250	mg/L	50	11/23/22 23:50	1311/8260D	
m,p-Xylene	**0.0275**	0.0250	0.0500	mg/L	50	11/23/22 23:50	1311/8260D	**J**
o-Xylene	**0.0390**	0.0125	0.0250	mg/L	50	11/23/22 23:50	1311/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*120 %*	*Limits:* *80-120 %*	*1*	*11/23/22 23:50*	*1311/8260D*	
Toluene-d8 (Surr)			*102 %*	*80-120 %*	*1*	*11/23/22 23:50*	*1311/8260D*	
4-Bromofluorobenzene (Surr)			*100 %*	*80-120 %*	*1*	*11/23/22 23:50*	*1311/8260D*	

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.

Darwin Thomas, Business Development Director

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

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
T103A-111022-14 (A2K0502-01RE1)				**Matrix: Soil**		**Batch: 22K0951**		
Benzene	**0.0460**	0.00625	0.0125	mg/L	50	11/29/22 12:46	1311/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*119 %*	*Limits: 80-120 %*	*1*	*11/29/22 12:46*	*1311/8260D*	
Toluene-d8 (Surr)			*102 %*	*80-120 %*	*1*	*11/29/22 12:46*	*1311/8260D*	
4-Bromofluorobenzene (Surr)			*100 %*	*80-120 %*	*1*	*11/29/22 12:46*	*1311/8260D*	

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.

Darwin Thomas, Business Development Director

APEX LABORATORIES

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
T103A-111022-14 (A2K0502-01)				**Matrix: Soil**		**Batch: 22K0589**		
Acenaphthene	**611000**	4360	8760	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
Acenaphthylene	ND	26200	26200	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	R-02
Anthracene	**280000**	4360	8760	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
Benz(a)anthracene	**133000**	4360	8760	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
Benzo(a)pyrene	**139000**	6560	13100	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
Benzo(b)fluoranthene	**110000**	6560	13100	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
Benzo(k)fluoranthene	**41400**	6560	13100	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	**M-05**
Benzo(g,h,i)perylene	**75100**	4360	8760	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
Chrysene	**174000**	4360	8760	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
Dibenz(a,h)anthracene	**7830**	4360	8760	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	**J**
Fluoranthene	**680000**	4360	8760	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
Fluorene	**325000**	4360	8760	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
Indeno(1,2,3-cd)pyrene	**70100**	4360	8760	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
1-Methylnaphthalene	**477000**	8760	17500	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
2-Methylnaphthalene	**626000**	8760	17500	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
Naphthalene	**313000**	8760	17500	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
Phenanthrene	**1580000**	4360	8760	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
Pyrene	**797000**	4360	8760	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
Carbazole	**57100**	6560	13100	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
Dibenzofuran	**43900**	4360	8760	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
2-Chlorophenol	ND	21900	43600	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
4-Chloro-3-methylphenol	ND	43600	87600	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
2,4-Dichlorophenol	ND	21900	43600	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
2,4-Dimethylphenol	ND	21900	43600	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
2,4-Dinitrophenol	ND	109000	219000	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
4,6-Dinitro-2-methylphenol	ND	109000	219000	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
2-Methylphenol	ND	10900	21900	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
3+4-Methylphenol(s)	ND	10900	21900	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
2-Nitrophenol	ND	43600	87600	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
4-Nitrophenol	ND	87600	87600	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
Pentachlorophenol (PCP)	ND	43600	87600	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
Phenol	ND	8760	17500	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
2,3,4,6-Tetrachlorophenol	ND	21900	43600	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	

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.

Darwin Thomas, Business Development Director

APEX LABORATORIES

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
T103A-111022-14 (A2K0502-01)				**Matrix: Soil**		**Batch: 22K0589**		
2,3,5,6-Tetrachlorophenol	ND	21900	43600	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
2,4,5-Trichlorophenol	ND	21900	43600	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
Nitrobenzene	ND	43600	87600	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
2,4,6-Trichlorophenol	ND	21900	43600	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
Bis(2-ethylhexyl)phthalate	ND	65600	131000	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
Butyl benzyl phthalate	ND	43600	87600	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
Diethylphthalate	ND	43600	87600	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
Dimethylphthalate	ND	43600	87600	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
Di-n-butylphthalate	ND	43600	87600	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
Di-n-octyl phthalate	ND	43600	87600	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
N-Nitrosodimethylamine	ND	10900	21900	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
N-Nitroso-di-n-propylamine	ND	10900	21900	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
N-Nitrosodiphenylamine	ND	39400	39400	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	R-02
Bis(2-Chloroethoxy) methane	ND	10900	21900	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
Bis(2-Chloroethyl) ether	ND	10900	21900	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
2,2'-Oxybis(1-Chloropropane)	ND	10900	21900	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
Hexachlorobenzene	ND	4360	8760	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
Hexachlorobutadiene	ND	10900	21900	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
Hexachlorocyclopentadiene	ND	21900	43600	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
Hexachloroethane	ND	10900	21900	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
2-Chloronaphthalene	ND	4360	8760	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
1,2,4-Trichlorobenzene	ND	10900	21900	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
4-Bromophenyl phenyl ether	ND	10900	21900	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
4-Chlorophenyl phenyl ether	ND	10900	21900	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
Aniline	ND	21900	43600	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
4-Chloroaniline	ND	10900	21900	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
2-Nitroaniline	ND	87600	175000	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
3-Nitroaniline	ND	87600	175000	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
4-Nitroaniline	ND	87600	175000	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
2,4-Dinitrotoluene	ND	43600	87600	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
2,6-Dinitrotoluene	ND	43600	87600	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
Benzoic acid	ND	548000	1090000	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
Benzyl alcohol	ND	21900	43600	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	

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.

Darwin Thomas, Business Development Director

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
T103A-111022-14 (A2K0502-01)				**Matrix: Soil**		**Batch: 22K0589**		
Isophorone	ND	10900	21900	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
Azobenzene (1,2-DPH)	ND	10900	21900	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
Bis(2-Ethylhexyl) adipate	ND	109000	219000	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
3,3'-Dichlorobenzidine	ND	87600	175000	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	Q-52
1,2-Dinitrobenzene	ND	109000	219000	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
1,3-Dinitrobenzene	ND	109000	219000	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
1,4-Dinitrobenzene	ND	109000	219000	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
Pyridine	ND	21900	43600	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
1,2-Dichlorobenzene	ND	10900	21900	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
1,3-Dichlorobenzene	ND	10900	21900	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
1,4-Dichlorobenzene	ND	10900	21900	ug/kg dry	1000	11/15/22 22:23	EPA 8270E	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*209 %*	*Limits: 37-122 %*	*1000*	*11/15/22 22:23*	*EPA 8270E*	*S-05*
2-Fluorobiphenyl (Surr)			*213 %*	*44-120 %*	*1000*	*11/15/22 22:23*	*EPA 8270E*	*S-05*
Phenol-d6 (Surr)			*104 %*	*33-122 %*	*1000*	*11/15/22 22:23*	*EPA 8270E*	*S-05*
p-Terphenyl-d14 (Surr)			*180 %*	*54-127 %*	*1000*	*11/15/22 22:23*	*EPA 8270E*	*S-05*
2-Fluorophenol (Surr)			*82 %*	*35-120 %*	*1000*	*11/15/22 22:23*	*EPA 8270E*	*S-05*
2,4,6-Tribromophenol (Surr)			*%*	*39-132 %*	*1000*	*11/15/22 22:23*	*EPA 8270E*	*S-01*

Apex Laboratories

Darwin Thomas, Business Development Director

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.

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
T103A-111022-14 (A2K0502-01)				**Matrix: Soil**				
Batch: 22K0744								
Arsenic	**5990**	---	1360	ug/kg dry	10	11/18/22 22:46	EPA 6020B	
Barium	**118000**	---	1360	ug/kg dry	10	11/18/22 22:46	EPA 6020B	
Cadmium	**279**	---	271	ug/kg dry	10	11/18/22 22:46	EPA 6020B	
Chromium	**49900**	---	1360	ug/kg dry	10	11/18/22 22:46	EPA 6020B	
Lead	**15700**	---	271	ug/kg dry	10	11/18/22 22:46	EPA 6020B	
Mercury	ND	---	108	ug/kg dry	10	11/18/22 22:46	EPA 6020B	
Selenium	ND	---	1360	ug/kg dry	10	11/18/22 22:46	EPA 6020B	
Silver	ND	---	271	ug/kg dry	10	11/18/22 22:46	EPA 6020B	

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.

Darwin Thomas, Business Development Director

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

ANALYTICAL SAMPLE RESULTS

TCLP Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
T103A-111022-14 (A2K0502-01)				**Matrix: Soil**				
Batch: 22K0697								
Barium	ND	---	5000	ug/L	10	11/18/22 04:53	1311/6020B	
Lead	ND	---	50.0	ug/L	10	11/18/22 04:53	1311/6020B	
Selenium	ND	---	100	ug/L	10	11/18/22 04:53	1311/6020B	
T103A-111022-14 (A2K0502-01RE1)				**Matrix: Soil**				
Batch: 22K0697								
Arsenic	ND	---	100	ug/L	10	11/19/22 00:36	1311/6020B	
Cadmium	ND	---	100	ug/L	10	11/19/22 00:36	1311/6020B	
Chromium	ND	---	100	ug/L	10	11/19/22 00:36	1311/6020B	
Mercury	ND	---	7.00	ug/L	10	11/19/22 00:36	1311/6020B	
Silver	ND	---	100	ug/L	10	11/19/22 00:36	1311/6020B	

Apex Laboratories

Darwin Thomas, Business Development Director

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

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
T103A-111022-14 (A2K0502-01)				**Matrix: Soil**		**Batch: 22K0505**		
Total Cyanide	**3320**	---	1350	ug/kg dry	10	11/14/22 11:59	D7511-12	**Q-42**

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.

Darwin Thomas, Business Development Director

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

ANALYTICAL SAMPLE RESULTS

Percent Dry Weight

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
T103A-111022-14 (A2K0502-01)				**Matrix: Soil**		**Batch: 22K0572**		
% Solids	**74.1**	---	1.00	%	1	11/16/22 05:58	EPA 8000D	

Apex Laboratories

Darwin Thomas, Business Development Director

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.

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

ANALYTICAL SAMPLE RESULTS

TCLP Extraction by EPA 1311

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
T103A-111022-14 (A2K0502-01)				**Matrix: Soil**		**Batch: 22K0613**		
TCLP Extraction	PREP	---		N/A	1	11/16/22 16:30	EPA 1311	
TCLP ZHE Extraction	PREP	---		N/A	1	11/22/22 15:35	EPA 1311 ZHE	

Apex Laboratories

Darwin Thomas, Business Development Director

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.

APEX LABORATORIES

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

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
Batch 22K0863 - EPA 3546 (Fuels)							**Soil**					
Blank (22K0863-BLK1)			Prepared: 11/23/22 06:11		Analyzed: 11/23/22 20:43							
NWTPH-Dx												
Diesel	ND	9090	18200	ug/kg wet	1	---	---	---	---	---	---	
Oil	ND	18200	36400	ug/kg wet	1	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)			*Recovery: 88 %*		*Limits: 50-150 %*		*Dilution: 1x*					
LCS (22K0863-BS1)			Prepared: 11/23/22 06:11		Analyzed: 11/23/22 21:03							
NWTPH-Dx												
Diesel	107000	10000	20000	ug/kg wet	1	125000	---	86	38-132%	---	---	
Surr: o-Terphenyl (Surr)			*Recovery: 95 %*		*Limits: 50-150 %*		*Dilution: 1x*					
Duplicate (22K0863-DUP1)			Prepared: 11/23/22 06:11		Analyzed: 11/23/22 21:43							
QC Source Sample: T103A-111022-14 (A2K0502-01)												
NWTPH-Dx												
Diesel	**20000000**	264000	528000	ug/kg dry	20	---	25500000	---	---	24	30%	F-24
Oil	**5720000**	528000	1060000	ug/kg dry	20	---	6980000	---	---	20	30%	F-24
Surr: o-Terphenyl (Surr)			*Recovery: %*		*Limits: 50-150 %*		*Dilution: 20x*					S-01
Duplicate (22K0863-DUP3)			Prepared: 11/27/22 13:47		Analyzed: 11/27/22 15:55							
QC Source Sample: Non-SDG (A2K0680-01RE1)												
Diesel	**7880000**	79900	160000	ug/kg dry	5	---	6810000	---	---	15	30%	
Oil	**266000**	160000	319000	ug/kg dry	5	---	ND	---	---		**30%**	J
Surr: o-Terphenyl (Surr)			*Recovery: 96 %*		*Limits: 50-150 %*		*Dilution: 5x*					S-05

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.

Darwin Thomas, Business Development Director

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: Gasco - Soil Residuals	
2749 Lockport Road	Project Number: 111323	Report ID:
Niagara Falls, NY 14305	Project Manager: Chip Byrd	A2K0502 - 12 02 22 1315

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
Batch 22K0504 - EPA 5035A								Soil				
Blank (22K0504-BLK1)			Prepared: 11/14/22 12:12		Analyzed: 11/14/22 14:25							
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	1040	2080	ug/kg wet	50	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 102 %*	*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*93 %*	*50-150 %*			*"*					
LCS (22K0504-BS2)			Prepared: 11/14/22 12:12		Analyzed: 11/14/22 13:09							
NWTPH-Gx (MS)												
Gasoline Range Organics	21800	2500	5000	ug/kg wet	50	25000	---	87	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 109 %*	*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*94 %*	*50-150 %*			*"*					
Duplicate (22K0504-DUP1)			Prepared: 11/11/22 09:00		Analyzed: 11/14/22 15:16							
QC Source Sample: Non-SDG (A2K0513-01)												
Gasoline Range Organics	**16600**	6980	14000	ug/kg dry	50	---	16900	---	---	2	30%	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 111 %*	*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*96 %*	*50-150 %*			*"*					

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.

Darwin Thomas, Business Development Director

APEX LABORATORIES

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

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
Batch 22K0559 - EPA 5035A							Soil					
Blank (22K0559-BLK1)			Prepared: 11/15/22 12:00		Analyzed: 11/15/22 14:39							
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	1000	2000	ug/kg wet	50	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 103 %*		*Limits: 50-150 %*		*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*91 %*		*50-150 %*		*"*					
LCS (22K0559-BS2)			Prepared: 11/15/22 12:00		Analyzed: 11/15/22 14:13							
NWTPH-Gx (MS)												
Gasoline Range Organics	21600	2500	5000	ug/kg wet	50	25000	---	87	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 110 %*		*Limits: 50-150 %*		*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*94 %*		*50-150 %*		*"*					
Duplicate (22K0559-DUP1)			Prepared: 11/14/22 14:25		Analyzed: 11/15/22 18:53							V-16
QC Source Sample: Non-SDG (A2K0532-01)												
Gasoline Range Organics	ND	13800	13800	ug/kg dry	50	---	ND	---	---	---	30%	R-06
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 114 %*		*Limits: 50-150 %*		*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*93 %*		*50-150 %*		*"*					
Duplicate (22K0559-DUP2)			Prepared: 11/08/22 13:30		Analyzed: 11/15/22 23:33							
QC Source Sample: Non-SDG (A2K0345-01)												
Gasoline Range Organics	**914000**	40500	80900	ug/kg dry	500	---	955000	---	---	4	30%	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 113 %*		*Limits: 50-150 %*		*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*93 %*		*50-150 %*		*"*					

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.

Darwin Thomas, Business Development Director

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

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

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
Batch 22K0504 - EPA 5035A							**Soil**					
Blank (22K0504-BLK1)			Prepared: 11/14/22 12:12 Analyzed: 11/14/22 14:25									
5035A/8260D												
Acetone	ND	417	417	ug/kg wet	50	---	---	---	---	---	---	Q-30
Acrylonitrile	ND	41.7	41.7	ug/kg wet	50	---	---	---	---	---	---	
Benzene	ND	2.08	4.17	ug/kg wet	50	---	---	---	---	---	---	
Bromobenzene	ND	5.21	10.4	ug/kg wet	50	---	---	---	---	---	---	
Bromochloromethane	ND	10.4	20.8	ug/kg wet	50	---	---	---	---	---	---	
Bromodichloromethane	ND	10.4	20.8	ug/kg wet	50	---	---	---	---	---	---	
Bromoform	ND	20.8	41.7	ug/kg wet	50	---	---	---	---	---	---	
Bromomethane	ND	208	208	ug/kg wet	50	---	---	---	---	---	---	
2-Butanone (MEK)	ND	208	208	ug/kg wet	50	---	---	---	---	---	---	
n-Butylbenzene	ND	10.4	20.8	ug/kg wet	50	---	---	---	---	---	---	
sec-Butylbenzene	ND	10.4	20.8	ug/kg wet	50	---	---	---	---	---	---	
tert-Butylbenzene	ND	10.4	20.8	ug/kg wet	50	---	---	---	---	---	---	
Carbon disulfide	ND	104	208	ug/kg wet	50	---	---	---	---	---	---	
Carbon tetrachloride	ND	10.4	20.8	ug/kg wet	50	---	---	---	---	---	---	
Chlorobenzene	ND	5.21	10.4	ug/kg wet	50	---	---	---	---	---	---	
Chloroethane	ND	104	208	ug/kg wet	50	---	---	---	---	---	---	
Chloroform	ND	10.4	20.8	ug/kg wet	50	---	---	---	---	---	---	
Chloromethane	ND	52.1	104	ug/kg wet	50	---	---	---	---	---	---	
2-Chlorotoluene	ND	10.4	20.8	ug/kg wet	50	---	---	---	---	---	---	
4-Chlorotoluene	ND	10.4	20.8	ug/kg wet	50	---	---	---	---	---	---	
Dibromochloromethane	ND	20.8	41.7	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	52.1	104	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	10.4	20.8	ug/kg wet	50	---	---	---	---	---	---	
Dibromomethane	ND	10.4	20.8	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	5.21	10.4	ug/kg wet	50	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	5.21	10.4	ug/kg wet	50	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	5.21	10.4	ug/kg wet	50	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	41.7	41.7	ug/kg wet	50	---	---	---	---	---	---	ICV-02
1,1-Dichloroethane	ND	5.21	10.4	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	5.21	10.4	ug/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethene	ND	5.21	10.4	ug/kg wet	50	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	5.21	10.4	ug/kg wet	50	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	5.21	10.4	ug/kg wet	50	---	---	---	---	---	---	

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.

Darwin Thomas, Business Development Director

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: Gasco - Soil Residuals	
2749 Lockport Road	Project Number: 111323	Report ID:
Niagara Falls, NY 14305	Project Manager: Chip Byrd	A2K0502 - 12 02 22 1315

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
Batch 22K0504 - EPA 5035A							Soil					
Blank (22K0504-BLK1)			Prepared: 11/14/22 12:12 Analyzed: 11/14/22 14:25									
1,2-Dichloropropane	ND	5.21	10.4	ug/kg wet	50	---	---	---	---	---	---	
1,3-Dichloropropane	ND	10.4	20.8	ug/kg wet	50	---	---	---	---	---	---	
2,2-Dichloropropane	ND	10.4	20.8	ug/kg wet	50	---	---	---	---	---	---	
1,1-Dichloropropene	ND	10.4	20.8	ug/kg wet	50	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	10.4	20.8	ug/kg wet	50	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	10.4	20.8	ug/kg wet	50	---	---	---	---	---	---	
Ethylbenzene	ND	5.21	10.4	ug/kg wet	50	---	---	---	---	---	---	
Hexachlorobutadiene	ND	20.8	41.7	ug/kg wet	50	---	---	---	---	---	---	
2-Hexanone	ND	104	208	ug/kg wet	50	---	---	---	---	---	---	
Isopropylbenzene	ND	10.4	20.8	ug/kg wet	50	---	---	---	---	---	---	
4-Isopropyltoluene	ND	10.4	20.8	ug/kg wet	50	---	---	---	---	---	---	
Methylene chloride	ND	208	208	ug/kg wet	50	---	---	---	---	---	---	
4-Methyl-2-pentanone (MiBK)	ND	104	208	ug/kg wet	50	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	10.4	20.8	ug/kg wet	50	---	---	---	---	---	---	
Naphthalene	ND	20.8	41.7	ug/kg wet	50	---	---	---	---	---	---	
n-Propylbenzene	ND	5.21	10.4	ug/kg wet	50	---	---	---	---	---	---	
Styrene	ND	10.4	20.8	ug/kg wet	50	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	5.21	10.4	ug/kg wet	50	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	10.4	20.8	ug/kg wet	50	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	5.21	10.4	ug/kg wet	50	---	---	---	---	---	---	
Toluene	ND	10.4	20.8	ug/kg wet	50	---	---	---	---	---	---	
1,2,3-Trichlorobenzene	ND	52.1	104	ug/kg wet	50	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	52.1	104	ug/kg wet	50	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	5.21	10.4	ug/kg wet	50	---	---	---	---	---	---	
1,1,2-Trichloroethane	ND	5.21	10.4	ug/kg wet	50	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	5.21	10.4	ug/kg wet	50	---	---	---	---	---	---	
Trichlorofluoromethane	ND	41.7	41.7	ug/kg wet	50	---	---	---	---	---	---	Q-52
1,2,3-Trichloropropane	ND	10.4	20.8	ug/kg wet	50	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	10.4	20.8	ug/kg wet	50	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	10.4	20.8	ug/kg wet	50	---	---	---	---	---	---	
Vinyl chloride	ND	5.21	10.4	ug/kg wet	50	---	---	---	---	---	---	
m,p-Xylene	ND	10.4	20.8	ug/kg wet	50	---	---	---	---	---	---	
o-Xylene	ND	5.21	10.4	ug/kg wet	50	---	---	---	---	---	---	

Surr: 1,4-Difluorobenzene (Surr) *Recovery: 99 %* *Limits: 80-120 %* *Dilution: 1x*

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.

Darwin Thomas, Business Development Director

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

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
Batch 22K0504 - EPA 5035A							**Soil**					
Blank (22K0504-BLK1)				Prepared: 11/14/22 12:12 Analyzed: 11/14/22 14:25								
Surr: Toluene-d8 (Surr)			*Recovery: 98 %*	*Limits: 80-120 %*				*Dilution: 1x*				
4-Bromofluorobenzene (Surr)			*104 %*	*79-120 %*				*"*				
LCS (22K0504-BS1)				Prepared: 11/14/22 12:12 Analyzed: 11/14/22 12:43								
5035A/8260D												
Acetone	1280	1000	1000	ug/kg wet	50	2000	---	**64**	**80-120%**	---	---	Q-30
Acrylonitrile	768	100	100	ug/kg wet	50	1000	---	**77**	**80-120%**	---	---	Q-55
Benzene	969	5.00	10.0	ug/kg wet	50	1000	---	97	80-120%	---	---	
Bromobenzene	984	12.5	25.0	ug/kg wet	50	1000	---	98	80-120%	---	---	
Bromochloromethane	846	25.0	50.0	ug/kg wet	50	1000	---	85	80-120%	---	---	
Bromodichloromethane	924	25.0	50.0	ug/kg wet	50	1000	---	92	80-120%	---	---	
Bromoform	1030	50.0	100	ug/kg wet	50	1000	---	103	80-120%	---	---	
Bromomethane	938	500	500	ug/kg wet	50	1000	---	94	80-120%	---	---	
2-Butanone (MEK)	1500	500	500	ug/kg wet	50	2000	---	**75**	**80-120%**	---	---	Q-55
n-Butylbenzene	994	25.0	50.0	ug/kg wet	50	1000	---	99	80-120%	---	---	
sec-Butylbenzene	1060	25.0	50.0	ug/kg wet	50	1000	---	106	80-120%	---	---	
tert-Butylbenzene	997	25.0	50.0	ug/kg wet	50	1000	---	100	80-120%	---	---	
Carbon disulfide	1120	250	500	ug/kg wet	50	1000	---	112	80-120%	---	---	
Carbon tetrachloride	1080	25.0	50.0	ug/kg wet	50	1000	---	108	80-120%	---	---	
Chlorobenzene	953	12.5	25.0	ug/kg wet	50	1000	---	95	80-120%	---	---	
Chloroethane	870	250	500	ug/kg wet	50	1000	---	87	80-120%	---	---	
Chloroform	955	25.0	50.0	ug/kg wet	50	1000	---	96	80-120%	---	---	
Chloromethane	877	125	250	ug/kg wet	50	1000	---	88	80-120%	---	---	
2-Chlorotoluene	1010	25.0	50.0	ug/kg wet	50	1000	---	101	80-120%	---	---	
4-Chlorotoluene	978	25.0	50.0	ug/kg wet	50	1000	---	98	80-120%	---	---	
Dibromochloromethane	1010	50.0	100	ug/kg wet	50	1000	---	101	80-120%	---	---	
1,2-Dibromo-3-chloropropane	864	125	250	ug/kg wet	50	1000	---	86	80-120%	---	---	
1,2-Dibromoethane (EDB)	1020	25.0	50.0	ug/kg wet	50	1000	---	102	80-120%	---	---	
Dibromomethane	940	25.0	50.0	ug/kg wet	50	1000	---	94	80-120%	---	---	
1,2-Dichlorobenzene	965	12.5	25.0	ug/kg wet	50	1000	---	96	80-120%	---	---	
1,3-Dichlorobenzene	986	12.5	25.0	ug/kg wet	50	1000	---	99	80-120%	---	---	
1,4-Dichlorobenzene	945	12.5	25.0	ug/kg wet	50	1000	---	94	80-120%	---	---	
Dichlorodifluoromethane	1110	100	100	ug/kg wet	50	1000	---	111	80-120%	---	---	ICV-02
1,1-Dichloroethane	930	12.5	25.0	ug/kg wet	50	1000	---	93	80-120%	---	---	

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.

Darwin Thomas, Business Development Director

APEX LABORATORIES

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

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
Batch 22K0504 - EPA 5035A							**Soil**					
LCS (22K0504-BS1)			Prepared: 11/14/22 12:12 Analyzed: 11/14/22 12:43									
1,2-Dichloroethane (EDC)	898	12.5	25.0	ug/kg wet	50	1000	---	90	80-120%	---	---	
1,1-Dichloroethene	1210	12.5	25.0	ug/kg wet	50	1000	---	**121**	**80-120%**	---	---	Q-56
cis-1,2-Dichloroethene	942	12.5	25.0	ug/kg wet	50	1000	---	94	80-120%	---	---	
trans-1,2-Dichloroethene	912	12.5	25.0	ug/kg wet	50	1000	---	91	80-120%	---	---	
1,2-Dichloropropane	920	12.5	25.0	ug/kg wet	50	1000	---	92	80-120%	---	---	
1,3-Dichloropropane	928	25.0	50.0	ug/kg wet	50	1000	---	93	80-120%	---	---	
2,2-Dichloropropane	1060	25.0	50.0	ug/kg wet	50	1000	---	106	80-120%	---	---	
1,1-Dichloropropene	1010	25.0	50.0	ug/kg wet	50	1000	---	101	80-120%	---	---	
cis-1,3-Dichloropropene	1070	25.0	50.0	ug/kg wet	50	1000	---	107	80-120%	---	---	
trans-1,3-Dichloropropene	940	25.0	50.0	ug/kg wet	50	1000	---	94	80-120%	---	---	
Ethylbenzene	998	12.5	25.0	ug/kg wet	50	1000	---	100	80-120%	---	---	
Hexachlorobutadiene	1000	50.0	100	ug/kg wet	50	1000	---	100	80-120%	---	---	
2-Hexanone	1670	250	500	ug/kg wet	50	2000	---	84	80-120%	---	---	
Isopropylbenzene	975	25.0	50.0	ug/kg wet	50	1000	---	98	80-120%	---	---	
4-Isopropyltoluene	958	25.0	50.0	ug/kg wet	50	1000	---	96	80-120%	---	---	
Methylene chloride	794	500	500	ug/kg wet	50	1000	---	**79**	**80-120%**	---	---	Q-55
4-Methyl-2-pentanone (MiBK)	1710	250	500	ug/kg wet	50	2000	---	85	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	1020	25.0	50.0	ug/kg wet	50	1000	---	102	80-120%	---	---	
Naphthalene	920	50.0	100	ug/kg wet	50	1000	---	92	80-120%	---	---	
n-Propylbenzene	938	12.5	25.0	ug/kg wet	50	1000	---	94	80-120%	---	---	
Styrene	910	25.0	50.0	ug/kg wet	50	1000	---	91	80-120%	---	---	
1,1,1,2-Tetrachloroethane	1090	12.5	25.0	ug/kg wet	50	1000	---	109	80-120%	---	---	
1,1,2,2-Tetrachloroethane	842	25.0	50.0	ug/kg wet	50	1000	---	84	80-120%	---	---	
Tetrachloroethene (PCE)	1100	12.5	25.0	ug/kg wet	50	1000	---	110	80-120%	---	---	
Toluene	968	25.0	50.0	ug/kg wet	50	1000	---	97	80-120%	---	---	
1,2,3-Trichlorobenzene	1000	125	250	ug/kg wet	50	1000	---	100	80-120%	---	---	
1,2,4-Trichlorobenzene	1050	125	250	ug/kg wet	50	1000	---	105	80-120%	---	---	
1,1,1-Trichloroethane	1010	12.5	25.0	ug/kg wet	50	1000	---	101	80-120%	---	---	
1,1,2-Trichloroethane	933	12.5	25.0	ug/kg wet	50	1000	---	93	80-120%	---	---	
Trichloroethene (TCE)	1040	12.5	25.0	ug/kg wet	50	1000	---	104	80-120%	---	---	
Trichlorofluoromethane	124	100	100	ug/kg wet	50	1000	---	**12**	**80-120%**	---	---	Q-52
1,2,3-Trichloropropane	882	25.0	50.0	ug/kg wet	50	1000	---	88	80-120%	---	---	
1,2,4-Trimethylbenzene	932	25.0	50.0	ug/kg wet	50	1000	---	93	80-120%	---	---	
1,3,5-Trimethylbenzene	1010	25.0	50.0	ug/kg wet	50	1000	---	101	80-120%	---	---	

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.

Darwin Thomas, Business Development Director

APEX LABORATORIES

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

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
Batch 22K0504 - EPA 5035A							**Soil**					
LCS (22K0504-BS1)			Prepared: 11/14/22 12:12		Analyzed: 11/14/22 12:43							
Vinyl chloride	988	12.5	25.0	ug/kg wet	50	1000	---	99	80-120%	---	---	
m,p-Xylene	1870	25.0	50.0	ug/kg wet	50	2000	---	93	80-120%	---	---	
o-Xylene	954	12.5	25.0	ug/kg wet	50	1000	---	95	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 100 %*		*Limits: 80-120 %*				*Dilution: 1x*			
Toluene-d8 (Surr)			*95 %*		*80-120 %*				*"*			
4-Bromofluorobenzene (Surr)			*103 %*		*79-120 %*				*"*			
Duplicate (22K0504-DUP1)			Prepared: 11/11/22 09:00		Analyzed: 11/14/22 15:16							
QC Source Sample: Non-SDG (A2K0513-01)												
Acetone	ND	2790	2790	ug/kg dry	50	---	ND	---	---	---	30%	Q-30
Acrylonitrile	ND	279	279	ug/kg dry	50	---	ND	---	---	---	30%	
Benzene	**19.6**	14.0	27.9	ug/kg dry	50	---	18.2	---	---	7	30%	J
Bromobenzene	ND	34.9	69.8	ug/kg dry	50	---	ND	---	---	---	30%	
Bromochloromethane	ND	69.8	140	ug/kg dry	50	---	ND	---	---	---	30%	
Bromodichloromethane	ND	69.8	140	ug/kg dry	50	---	ND	---	---	---	30%	
Bromoform	ND	140	279	ug/kg dry	50	---	ND	---	---	---	30%	
Bromomethane	ND	1400	1400	ug/kg dry	50	---	ND	---	---	---	30%	
2-Butanone (MEK)	ND	1400	1400	ug/kg dry	50	---	ND	---	---	---	30%	
n-Butylbenzene	ND	69.8	140	ug/kg dry	50	---	ND	---	---	---	30%	
sec-Butylbenzene	ND	69.8	140	ug/kg dry	50	---	ND	---	---	---	30%	
tert-Butylbenzene	ND	69.8	140	ug/kg dry	50	---	ND	---	---	---	30%	
Carbon disulfide	ND	698	1400	ug/kg dry	50	---	ND	---	---	---	30%	
Carbon tetrachloride	ND	69.8	140	ug/kg dry	50	---	ND	---	---	---	30%	
Chlorobenzene	ND	34.9	69.8	ug/kg dry	50	---	ND	---	---	---	30%	
Chloroethane	ND	698	1400	ug/kg dry	50	---	ND	---	---	---	30%	
Chloroform	ND	69.8	140	ug/kg dry	50	---	ND	---	---	---	30%	
Chloromethane	ND	349	698	ug/kg dry	50	---	ND	---	---	---	30%	
2-Chlorotoluene	ND	69.8	140	ug/kg dry	50	---	ND	---	---	---	30%	
4-Chlorotoluene	ND	69.8	140	ug/kg dry	50	---	ND	---	---	---	30%	
Dibromochloromethane	ND	140	279	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dibromo-3-chloropropane	ND	349	698	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dibromoethane (EDB)	ND	69.8	140	ug/kg dry	50	---	ND	---	---	---	30%	
Dibromomethane	ND	69.8	140	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichlorobenzene	ND	34.9	69.8	ug/kg dry	50	---	ND	---	---	---	30%	

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.

Darwin Thomas, Business Development Director

APEX LABORATORIES

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

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
Batch 22K0504 - EPA 5035A							**Soil**					
Duplicate (22K0504-DUP1)			Prepared: 11/11/22 09:00		Analyzed: 11/14/22 15:16							
QC Source Sample: Non-SDG (A2K0513-01)												
1,3-Dichlorobenzene	ND	34.9	69.8	ug/kg dry	50	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	34.9	69.8	ug/kg dry	50	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	279	279	ug/kg dry	50	---	ND	---	---	---	30%	ICV-02
1,1-Dichloroethane	ND	34.9	69.8	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	34.9	69.8	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	34.9	69.8	ug/kg dry	50	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	34.9	69.8	ug/kg dry	50	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	34.9	69.8	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	34.9	69.8	ug/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	69.8	140	ug/kg dry	50	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	69.8	140	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	69.8	140	ug/kg dry	50	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	69.8	140	ug/kg dry	50	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	69.8	140	ug/kg dry	50	---	ND	---	---	---	30%	
Ethylbenzene	**50.3**	34.9	69.8	ug/kg dry	50	---	51.7	---	---	3	30%	J
Hexachlorobutadiene	ND	140	279	ug/kg dry	50	---	ND	---	---	---	30%	
2-Hexanone	ND	698	1400	ug/kg dry	50	---	ND	---	---	---	30%	
Isopropylbenzene	ND	69.8	140	ug/kg dry	50	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	69.8	140	ug/kg dry	50	---	ND	---	---	---	30%	
Methylene chloride	ND	1400	1400	ug/kg dry	50	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	698	1400	ug/kg dry	50	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	69.8	140	ug/kg dry	50	---	ND	---	---	---	30%	
Naphthalene	**4910**	140	279	ug/kg dry	50	---	4980	---	---	1	30%	
n-Propylbenzene	ND	34.9	69.8	ug/kg dry	50	---	ND	---	---	---	30%	
Styrene	ND	69.8	140	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	34.9	69.8	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	69.8	140	ug/kg dry	50	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	34.9	69.8	ug/kg dry	50	---	ND	---	---	---	30%	
Toluene	ND	69.8	140	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	349	698	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	349	698	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	34.9	69.8	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,2-Trichloroethane	ND	34.9	69.8	ug/kg dry	50	---	ND	---	---	---	30%	

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.

Darwin Thomas, Business Development Director

APEX LABORATORIES

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

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
Batch 22K0504 - EPA 5035A							**Soil**					
Duplicate (22K0504-DUP1)			Prepared: 11/11/22 09:00 Analyzed: 11/14/22 15:16									
QC Source Sample: Non-SDG (A2K0513-01)												
Trichloroethene (TCE)	ND	34.9	69.8	ug/kg dry	50	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	279	279	ug/kg dry	50	---	ND	---	---	---	30%	Q-52
1,2,3-Trichloropropane	ND	69.8	140	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	140	140	ug/kg dry	50	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	69.8	140	ug/kg dry	50	---	ND	---	---	---	30%	
Vinyl chloride	ND	34.9	69.8	ug/kg dry	50	---	ND	---	---	---	30%	
m,p-Xylene	**81.0**	69.8	140	ug/kg dry	50	---	81.0	---	---	0	30%	J
o-Xylene	**44.7**	34.9	69.8	ug/kg dry	50	---	44.7	---	---	0	30%	J
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 101 %*	*Limits: 80-120 %*			*Dilution: 1x*					
Toluene-d8 (Surr)			*94 %*	*80-120 %*			*"*					
4-Bromofluorobenzene (Surr)			*103 %*	*79-120 %*			*"*					
Matrix Spike (22K0504-MS1)			Prepared: 11/10/22 16:11 Analyzed: 11/15/22 01:01									**T-02, V-15**
QC Source Sample: Non-SDG (A2K0467-01)												
5035A/8260D												
Acetone	6720	4760	4760	ug/kg wet	50	9520	ND	71	36-164%	---	---	Q-30
Acrylonitrile	3570	476	476	ug/kg wet	50	4760	ND	75	65-134%	---	---	Q-54l
Benzene	5010	23.8	47.6	ug/kg wet	50	4760	274	100	77-121%	---	---	
Bromobenzene	4940	59.5	119	ug/kg wet	50	4760	ND	104	78-121%	---	---	
Bromochloromethane	4000	119	238	ug/kg wet	50	4760	ND	84	78-125%	---	---	
Bromodichloromethane	4510	119	238	ug/kg wet	50	4760	ND	95	75-127%	---	---	
Bromoform	4870	238	476	ug/kg wet	50	4760	ND	102	67-132%	---	---	
Bromomethane	4320	2380	2380	ug/kg wet	50	4760	ND	91	53-143%	---	---	
2-Butanone (MEK)	6940	2380	2380	ug/kg wet	50	9520	ND	73	51-148%	---	---	Q-54n
n-Butylbenzene	6400	119	238	ug/kg wet	50	4760	ND	**129**	**70-128%**	---	---	
sec-Butylbenzene	5730	119	238	ug/kg wet	50	4760	ND	117	73-126%	---	---	
tert-Butylbenzene	5380	119	238	ug/kg wet	50	4760	ND	109	73-125%	---	---	
Carbon disulfide	6100	1190	2380	ug/kg wet	50	4760	ND	128	63-132%	---	---	
Carbon tetrachloride	6260	119	238	ug/kg wet	50	4760	ND	131	70-135%	---	---	
Chlorobenzene	4540	59.5	119	ug/kg wet	50	4760	ND	93	79-120%	---	---	
Chloroethane	3790	1190	2380	ug/kg wet	50	4760	ND	80	59-139%	---	---	
Chloroform	4650	119	238	ug/kg wet	50	4760	ND	98	78-123%	---	---	
Chloromethane	4530	595	1190	ug/kg wet	50	4760	ND	95	50-136%	---	---	

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.

Darwin Thomas, Business Development Director

APEX LABORATORIES

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

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
Batch 22K0504 - EPA 5035A							**Soil**					
Matrix Spike (22K0504-MS1)			Prepared: 11/10/22 16:11		Analyzed: 11/15/22 01:01							**T-02, V-15**
QC Source Sample: Non-SDG (A2K0467-01)												
2-Chlorotoluene	5050	119	238	ug/kg wet	50	4760	ND	90	75-122%	---	---	
4-Chlorotoluene	4800	119	238	ug/kg wet	50	4760	ND	101	72-124%	---	---	
Dibromochloromethane	5200	238	476	ug/kg wet	50	4760	ND	109	74-126%	---	---	
1,2-Dibromo-3-chloropropane	4930	595	1190	ug/kg wet	50	4760	ND	104	61-132%	---	---	
1,2-Dibromoethane (EDB)	5300	119	238	ug/kg wet	50	4760	ND	111	78-122%	---	---	
Dibromomethane	4460	119	238	ug/kg wet	50	4760	ND	94	78-125%	---	---	
1,2-Dichlorobenzene	4530	59.5	119	ug/kg wet	50	4760	ND	95	78-121%	---	---	
1,3-Dichlorobenzene	4590	59.5	119	ug/kg wet	50	4760	ND	96	77-121%	---	---	
1,4-Dichlorobenzene	4300	59.5	119	ug/kg wet	50	4760	ND	90	75-120%	---	---	
Dichlorodifluoromethane	7100	476	476	ug/kg wet	50	4760	ND	149	29-149%	---	---	ICV-02
1,1-Dichloroethane	4510	59.5	119	ug/kg wet	50	4760	ND	95	76-125%	---	---	
1,2-Dichloroethane (EDC)	4260	59.5	119	ug/kg wet	50	4760	ND	90	73-128%	---	---	
1,1-Dichloroethene	6450	59.5	119	ug/kg wet	50	4760	ND	**135**	**70-131%**	---	---	Q-54
cis-1,2-Dichloroethene	4630	59.5	119	ug/kg wet	50	4760	ND	97	77-123%	---	---	
trans-1,2-Dichloroethene	4460	59.5	119	ug/kg wet	50	4760	ND	94	74-125%	---	---	
1,2-Dichloropropane	4430	59.5	119	ug/kg wet	50	4760	ND	93	76-123%	---	---	
1,3-Dichloropropane	4570	119	238	ug/kg wet	50	4760	ND	96	77-121%	---	---	
2,2-Dichloropropane	4360	119	238	ug/kg wet	50	4760	ND	92	67-133%	---	---	
1,1-Dichloropropene	5250	119	238	ug/kg wet	50	4760	ND	110	76-125%	---	---	
cis-1,3-Dichloropropene	5260	119	238	ug/kg wet	50	4760	ND	111	74-126%	---	---	
trans-1,3-Dichloropropene	4390	119	238	ug/kg wet	50	4760	ND	92	71-130%	---	---	
Ethylbenzene	5280	59.5	119	ug/kg wet	50	4760	479	101	76-122%	---	---	
Hexachlorobutadiene	10000	238	476	ug/kg wet	50	4760	ND	**211**	**61-135%**	---	---	Q-01
2-Hexanone	11800	1190	2380	ug/kg wet	50	9520	ND	106	53-145%	---	---	
Isopropylbenzene	5020	119	238	ug/kg wet	50	4760	ND	103	68-134%	---	---	
4-Isopropyltoluene	5530	119	238	ug/kg wet	50	4760	ND	116	73-127%	---	---	
Methylene chloride	3800	2380	2380	ug/kg wet	50	4760	ND	80	70-128%	---	---	Q-54k
4-Methyl-2-pentanone (MiBK)	14900	1190	2380	ug/kg wet	50	9520	ND	91	65-135%	---	---	
Methyl tert-butyl ether (MTBE)	4940	119	238	ug/kg wet	50	4760	ND	104	73-125%	---	---	
Naphthalene	5620	238	476	ug/kg wet	50	4760	721	103	62-129%	---	---	
n-Propylbenzene	5010	59.5	119	ug/kg wet	50	4760	ND	91	73-125%	---	---	
Styrene	5210	119	238	ug/kg wet	50	4760	ND	102	76-124%	---	---	
1,1,1,2-Tetrachloroethane	5230	59.5	119	ug/kg wet	50	4760	ND	110	78-125%	---	---	

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.

Darwin Thomas, Business Development Director

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

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
Batch 22K0504 - EPA 5035A							**Soil**					
Matrix Spike (22K0504-MS1)			Prepared: 11/10/22 16:11		Analyzed: 11/15/22 01:01							**T-02, V-15**
QC Source Sample: Non-SDG (A2K0467-01)												
1,1,2,2-Tetrachloroethane	21100	20000	20000	ug/kg wet	50	4760	ND	**442**	**70-124%**	---	---	Q-02
Tetrachloroethene (PCE)	6050	59.5	119	ug/kg wet	50	4760	ND	127	73-128%	---	---	
Toluene	6250	119	238	ug/kg wet	50	4760	1370	102	77-121%	---	---	
1,2,3-Trichlorobenzene	5030	595	1190	ug/kg wet	50	4760	ND	106	66-130%	---	---	
1,2,4-Trichlorobenzene	5770	595	1190	ug/kg wet	50	4760	ND	121	67-129%	---	---	
1,1,1-Trichloroethane	5210	59.5	119	ug/kg wet	50	4760	ND	109	73-130%	---	---	
1,1,2-Trichloroethane	7400	59.5	119	ug/kg wet	50	4760	ND	91	78-121%	---	---	
Trichloroethene (TCE)	5580	59.5	119	ug/kg wet	50	4760	ND	117	77-123%	---	---	
Trichlorofluoromethane	1290	476	476	ug/kg wet	50	4760	ND	**27**	**62-140%**	---	---	Q-52
1,2,3-Trichloropropane	ND	5480	5480	ug/kg wet	50	4760	ND		**73-125%**	---	---	Q-02
1,2,4-Trimethylbenzene	6940	119	238	ug/kg wet	50	4760	2460	94	75-123%	---	---	
1,3,5-Trimethylbenzene	5690	119	238	ug/kg wet	50	4760	810	102	73-124%	---	---	
Vinyl chloride	5090	59.5	119	ug/kg wet	50	4760	ND	107	56-135%	---	---	
m,p-Xylene	10900	119	238	ug/kg wet	50	9520	1690	97	77-124%	---	---	
o-Xylene	5990	59.5	119	ug/kg wet	50	4760	1000	105	77-123%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 102 %*		*Limits: 80-120 %*				*Dilution: 1x*			
Toluene-d8 (Surr)			*102 %*		*80-120 %*				*"*			
4-Bromofluorobenzene (Surr)			*107 %*		*79-120 %*				*"*			

Apex Laboratories

Darwin Thomas, Business Development Director

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.

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: Gasco - Soil Residuals	
2749 Lockport Road	Project Number: 111323	Report ID:
Niagara Falls, NY 14305	Project Manager: Chip Byrd	A2K0502 - 12 02 22 1315

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
Batch 22K0559 - EPA 5035A							Soil					
Blank (22K0559-BLK1)			Prepared: 11/15/22 12:00 Analyzed: 11/15/22 14:39									
5035A/8260D												
Acetone	ND	400	400	ug/kg wet	50	---	---	---	---	---	---	Q-30
Acrylonitrile	ND	40.0	40.0	ug/kg wet	50	---	---	---	---	---	---	
Benzene	ND	2.00	4.00	ug/kg wet	50	---	---	---	---	---	---	
Bromobenzene	ND	5.00	10.0	ug/kg wet	50	---	---	---	---	---	---	
Bromochloromethane	ND	10.0	20.0	ug/kg wet	50	---	---	---	---	---	---	
Bromodichloromethane	ND	10.0	20.0	ug/kg wet	50	---	---	---	---	---	---	
Bromoform	ND	20.0	40.0	ug/kg wet	50	---	---	---	---	---	---	
Bromomethane	ND	200	200	ug/kg wet	50	---	---	---	---	---	---	
2-Butanone (MEK)	ND	200	200	ug/kg wet	50	---	---	---	---	---	---	
n-Butylbenzene	ND	10.0	20.0	ug/kg wet	50	---	---	---	---	---	---	
sec-Butylbenzene	ND	10.0	20.0	ug/kg wet	50	---	---	---	---	---	---	
tert-Butylbenzene	ND	10.0	20.0	ug/kg wet	50	---	---	---	---	---	---	
Carbon disulfide	ND	100	200	ug/kg wet	50	---	---	---	---	---	---	
Carbon tetrachloride	ND	10.0	20.0	ug/kg wet	50	---	---	---	---	---	---	
Chlorobenzene	ND	5.00	10.0	ug/kg wet	50	---	---	---	---	---	---	
Chloroethane	ND	100	200	ug/kg wet	50	---	---	---	---	---	---	
Chloroform	ND	10.0	20.0	ug/kg wet	50	---	---	---	---	---	---	
Chloromethane	ND	50.0	100	ug/kg wet	50	---	---	---	---	---	---	
2-Chlorotoluene	ND	10.0	20.0	ug/kg wet	50	---	---	---	---	---	---	
4-Chlorotoluene	ND	10.0	20.0	ug/kg wet	50	---	---	---	---	---	---	
Dibromochloromethane	ND	20.0	40.0	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	50.0	100	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	10.0	20.0	ug/kg wet	50	---	---	---	---	---	---	
Dibromomethane	ND	10.0	20.0	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	5.00	10.0	ug/kg wet	50	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	5.00	10.0	ug/kg wet	50	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	5.00	10.0	ug/kg wet	50	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	40.0	40.0	ug/kg wet	50	---	---	---	---	---	---	ICV-02
1,1-Dichloroethane	ND	5.00	10.0	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	5.00	10.0	ug/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethene	ND	5.00	10.0	ug/kg wet	50	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	5.00	10.0	ug/kg wet	50	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	5.00	10.0	ug/kg wet	50	---	---	---	---	---	---	

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.

Darwin Thomas, Business Development Director

APEX LABORATORIES

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

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
Batch 22K0559 - EPA 5035A							**Soil**					
Blank (22K0559-BLK1)			Prepared: 11/15/22 12:00 Analyzed: 11/15/22 14:39									
1,2-Dichloropropane	ND	5.00	10.0	ug/kg wet	50	---	---	---	---	---	---	
1,3-Dichloropropane	ND	10.0	20.0	ug/kg wet	50	---	---	---	---	---	---	
2,2-Dichloropropane	ND	10.0	20.0	ug/kg wet	50	---	---	---	---	---	---	
1,1-Dichloropropene	ND	10.0	20.0	ug/kg wet	50	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	10.0	20.0	ug/kg wet	50	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	10.0	20.0	ug/kg wet	50	---	---	---	---	---	---	
Ethylbenzene	ND	5.00	10.0	ug/kg wet	50	---	---	---	---	---	---	
Hexachlorobutadiene	ND	20.0	40.0	ug/kg wet	50	---	---	---	---	---	---	
2-Hexanone	ND	100	200	ug/kg wet	50	---	---	---	---	---	---	
Isopropylbenzene	ND	10.0	20.0	ug/kg wet	50	---	---	---	---	---	---	
4-Isopropyltoluene	ND	10.0	20.0	ug/kg wet	50	---	---	---	---	---	---	
Methylene chloride	ND	100	200	ug/kg wet	50	---	---	---	---	---	---	
4-Methyl-2-pentanone (MiBK)	ND	100	200	ug/kg wet	50	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	10.0	20.0	ug/kg wet	50	---	---	---	---	---	---	
Naphthalene	ND	20.0	40.0	ug/kg wet	50	---	---	---	---	---	---	
n-Propylbenzene	ND	5.00	10.0	ug/kg wet	50	---	---	---	---	---	---	
Styrene	ND	10.0	20.0	ug/kg wet	50	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	5.00	10.0	ug/kg wet	50	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	10.0	20.0	ug/kg wet	50	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	5.00	10.0	ug/kg wet	50	---	---	---	---	---	---	
Toluene	ND	10.0	20.0	ug/kg wet	50	---	---	---	---	---	---	
1,2,3-Trichlorobenzene	ND	50.0	100	ug/kg wet	50	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	50.0	100	ug/kg wet	50	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	5.00	10.0	ug/kg wet	50	---	---	---	---	---	---	
1,1,2-Trichloroethane	ND	5.00	10.0	ug/kg wet	50	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	5.00	10.0	ug/kg wet	50	---	---	---	---	---	---	
Trichlorofluoromethane	ND	40.0	40.0	ug/kg wet	50	---	---	---	---	---	---	Q-52
1,2,3-Trichloropropane	ND	10.0	20.0	ug/kg wet	50	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	10.0	20.0	ug/kg wet	50	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	10.0	20.0	ug/kg wet	50	---	---	---	---	---	---	
Vinyl chloride	ND	5.00	10.0	ug/kg wet	50	---	---	---	---	---	---	
m,p-Xylene	**14.8**	10.0	20.0	ug/kg wet	50	---	---	---	---	---	---	B-02, J
o-Xylene	ND	5.00	10.0	ug/kg wet	50	---	---	---	---	---	---	

Surr: 1,4-Difluorobenzene (Surr) *Recovery: 98 %* *Limits: 80-120 %* *Dilution: 1x*

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.

Darwin Thomas, Business Development Director

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

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
Batch 22K0559 - EPA 5035A							**Soil**					
Blank (22K0559-BLK1)				Prepared: 11/15/22 12:00 Analyzed: 11/15/22 14:39								
Surr: Toluene-d8 (Surr)			*Recovery: 98 %*	*Limits: 80-120 %*				*Dilution: 1x*				
4-Bromofluorobenzene (Surr)			*106 %*	*79-120 %*				*"*				
LCS (22K0559-BS1)				Prepared: 11/15/22 12:00 Analyzed: 11/15/22 13:48								**A-01**
5035A/8260D												
Acetone	1260	1000	1000	ug/kg wet	50	2000	---	**63**	**80-120%**	---	---	Q-30
Acrylonitrile	764	100	100	ug/kg wet	50	1000	---	**76**	**80-120%**	---	---	Q-55
Benzene	971	5.00	10.0	ug/kg wet	50	1000	---	97	80-120%	---	---	
Bromobenzene	994	12.5	25.0	ug/kg wet	50	1000	---	99	80-120%	---	---	
Bromochloromethane	832	25.0	50.0	ug/kg wet	50	1000	---	83	80-120%	---	---	
Bromodichloromethane	928	25.0	50.0	ug/kg wet	50	1000	---	93	80-120%	---	---	
Bromoform	1030	50.0	100	ug/kg wet	50	1000	---	103	80-120%	---	---	
Bromomethane	802	500	500	ug/kg wet	50	1000	---	80	80-120%	---	---	
2-Butanone (MEK)	1500	500	500	ug/kg wet	50	2000	---	**75**	**80-120%**	---	---	Q-55
n-Butylbenzene	955	25.0	50.0	ug/kg wet	50	1000	---	96	80-120%	---	---	
sec-Butylbenzene	1040	25.0	50.0	ug/kg wet	50	1000	---	104	80-120%	---	---	
tert-Butylbenzene	1000	25.0	50.0	ug/kg wet	50	1000	---	100	80-120%	---	---	
Carbon disulfide	1110	250	500	ug/kg wet	50	1000	---	111	80-120%	---	---	
Carbon tetrachloride	1090	25.0	50.0	ug/kg wet	50	1000	---	109	80-120%	---	---	
Chlorobenzene	954	12.5	25.0	ug/kg wet	50	1000	---	95	80-120%	---	---	
Chloroethane	843	250	500	ug/kg wet	50	1000	---	84	80-120%	---	---	
Chloroform	964	25.0	50.0	ug/kg wet	50	1000	---	96	80-120%	---	---	
Chloromethane	836	125	250	ug/kg wet	50	1000	---	84	80-120%	---	---	
2-Chlorotoluene	1010	25.0	50.0	ug/kg wet	50	1000	---	101	80-120%	---	---	
4-Chlorotoluene	976	25.0	50.0	ug/kg wet	50	1000	---	98	80-120%	---	---	
Dibromochloromethane	990	50.0	100	ug/kg wet	50	1000	---	99	80-120%	---	---	
1,2-Dibromo-3-chloropropane	826	125	250	ug/kg wet	50	1000	---	83	80-120%	---	---	
1,2-Dibromoethane (EDB)	1000	25.0	50.0	ug/kg wet	50	1000	---	100	80-120%	---	---	
Dibromomethane	930	25.0	50.0	ug/kg wet	50	1000	---	93	80-120%	---	---	
1,2-Dichlorobenzene	957	12.5	25.0	ug/kg wet	50	1000	---	96	80-120%	---	---	
1,3-Dichlorobenzene	982	12.5	25.0	ug/kg wet	50	1000	---	98	80-120%	---	---	
1,4-Dichlorobenzene	936	12.5	25.0	ug/kg wet	50	1000	---	94	80-120%	---	---	
Dichlorodifluoromethane	1110	100	100	ug/kg wet	50	1000	---	111	80-120%	---	---	ICV-02
1,1-Dichloroethane	920	12.5	25.0	ug/kg wet	50	1000	---	92	80-120%	---	---	

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.

Darwin Thomas, Business Development Director

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

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

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
Batch 22K0559 - EPA 5035A							**Soil**					
LCS (22K0559-BS1)			Prepared: 11/15/22 12:00		Analyzed: 11/15/22 13:48							**A-01**
1,2-Dichloroethane (EDC)	891	12.5	25.0	ug/kg wet	50	1000	---	89	80-120%	---	---	
1,1-Dichloroethene	1230	12.5	25.0	ug/kg wet	50	1000	---	**123**	**80-120%**	---	---	Q-56
cis-1,2-Dichloroethene	945	12.5	25.0	ug/kg wet	50	1000	---	94	80-120%	---	---	
trans-1,2-Dichloroethene	896	12.5	25.0	ug/kg wet	50	1000	---	90	80-120%	---	---	
1,2-Dichloropropane	914	12.5	25.0	ug/kg wet	50	1000	---	91	80-120%	---	---	
1,3-Dichloropropane	915	25.0	50.0	ug/kg wet	50	1000	---	92	80-120%	---	---	
2,2-Dichloropropane	1070	25.0	50.0	ug/kg wet	50	1000	---	107	80-120%	---	---	
1,1-Dichloropropene	1040	25.0	50.0	ug/kg wet	50	1000	---	104	80-120%	---	---	
cis-1,3-Dichloropropene	1050	25.0	50.0	ug/kg wet	50	1000	---	105	80-120%	---	---	
trans-1,3-Dichloropropene	898	25.0	50.0	ug/kg wet	50	1000	---	90	80-120%	---	---	
Ethylbenzene	1010	12.5	25.0	ug/kg wet	50	1000	---	101	80-120%	---	---	
Hexachlorobutadiene	958	50.0	100	ug/kg wet	50	1000	---	96	80-120%	---	---	
2-Hexanone	1710	250	500	ug/kg wet	50	2000	---	85	80-120%	---	---	
Isopropylbenzene	990	25.0	50.0	ug/kg wet	50	1000	---	99	80-120%	---	---	
4-Isopropyltoluene	948	25.0	50.0	ug/kg wet	50	1000	---	95	80-120%	---	---	
Methylene chloride	814	250	500	ug/kg wet	50	1000	---	81	80-120%	---	---	
4-Methyl-2-pentanone (MiBK)	1700	250	500	ug/kg wet	50	2000	---	85	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	1050	25.0	50.0	ug/kg wet	50	1000	---	105	80-120%	---	---	
Naphthalene	950	50.0	100	ug/kg wet	50	1000	---	95	80-120%	---	---	
n-Propylbenzene	929	12.5	25.0	ug/kg wet	50	1000	---	93	80-120%	---	---	
Styrene	924	25.0	50.0	ug/kg wet	50	1000	---	92	80-120%	---	---	
1,1,1,2-Tetrachloroethane	1110	12.5	25.0	ug/kg wet	50	1000	---	111	80-120%	---	---	
1,1,2,2-Tetrachloroethane	816	25.0	50.0	ug/kg wet	50	1000	---	82	80-120%	---	---	
Tetrachloroethene (PCE)	1110	12.5	25.0	ug/kg wet	50	1000	---	111	80-120%	---	---	
Toluene	963	25.0	50.0	ug/kg wet	50	1000	---	96	80-120%	---	---	
1,2,3-Trichlorobenzene	978	125	250	ug/kg wet	50	1000	---	98	80-120%	---	---	
1,2,4-Trichlorobenzene	1030	125	250	ug/kg wet	50	1000	---	103	80-120%	---	---	
1,1,1-Trichloroethane	1040	12.5	25.0	ug/kg wet	50	1000	---	104	80-120%	---	---	
1,1,2-Trichloroethane	925	12.5	25.0	ug/kg wet	50	1000	---	92	80-120%	---	---	
Trichloroethene (TCE)	1080	12.5	25.0	ug/kg wet	50	1000	---	108	80-120%	---	---	
Trichlorofluoromethane	151	100	100	ug/kg wet	50	1000	---	**15**	**80-120%**	---	---	Q-52
1,2,3-Trichloropropane	892	25.0	50.0	ug/kg wet	50	1000	---	89	80-120%	---	---	
1,2,4-Trimethylbenzene	928	25.0	50.0	ug/kg wet	50	1000	---	93	80-120%	---	---	
1,3,5-Trimethylbenzene	1010	25.0	50.0	ug/kg wet	50	1000	---	101	80-120%	---	---	

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.

Darwin Thomas, Business Development Director

APEX LABORATORIES

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

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
Batch 22K0559 - EPA 5035A							**Soil**					
LCS (22K0559-BS1)			Prepared: 11/15/22 12:00		Analyzed: 11/15/22 13:48							**A-01**
Vinyl chloride	930	12.5	25.0	ug/kg wet	50	1000	---	93	80-120%	---	---	
m,p-Xylene	1890	25.0	50.0	ug/kg wet	50	2000	---	94	80-120%	---	---	B-02
o-Xylene	970	12.5	25.0	ug/kg wet	50	1000	---	97	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 100 %*		*Limits: 80-120 %*				*Dilution: 1x*			
Toluene-d8 (Surr)			*94 %*		*80-120 %*				*"*			
4-Bromofluorobenzene (Surr)			*106 %*		*79-120 %*				*"*			
Duplicate (22K0559-DUP1)			Prepared: 11/14/22 14:25		Analyzed: 11/15/22 18:53							**V-16**
QC Source Sample: Non-SDG (A2K0532-01)												
Acetone	ND	1380	1380	ug/kg dry	50	---	ND	---	---	---	30%	Q-30
Acrylonitrile	ND	138	138	ug/kg dry	50	---	ND	---	---	---	30%	
Benzene	**67.0**	6.90	13.8	ug/kg dry	50	---	72.5	---	---	8	30%	
Bromobenzene	ND	17.3	34.5	ug/kg dry	50	---	ND	---	---	---	30%	
Bromochloromethane	ND	34.5	69.0	ug/kg dry	50	---	ND	---	---	---	30%	
Bromodichloromethane	ND	34.5	69.0	ug/kg dry	50	---	ND	---	---	---	30%	
Bromoform	ND	69.0	138	ug/kg dry	50	---	ND	---	---	---	30%	
Bromomethane	ND	690	690	ug/kg dry	50	---	ND	---	---	---	30%	
2-Butanone (MEK)	ND	690	690	ug/kg dry	50	---	ND	---	---	---	30%	
n-Butylbenzene	ND	34.5	69.0	ug/kg dry	50	---	ND	---	---	---	30%	
sec-Butylbenzene	ND	34.5	69.0	ug/kg dry	50	---	ND	---	---	---	30%	
tert-Butylbenzene	ND	34.5	69.0	ug/kg dry	50	---	ND	---	---	---	30%	
Carbon disulfide	ND	345	690	ug/kg dry	50	---	ND	---	---	---	30%	
Carbon tetrachloride	ND	34.5	69.0	ug/kg dry	50	---	ND	---	---	---	30%	
Chlorobenzene	ND	17.3	34.5	ug/kg dry	50	---	ND	---	---	---	30%	
Chloroethane	ND	345	690	ug/kg dry	50	---	ND	---	---	---	30%	
Chloroform	ND	34.5	69.0	ug/kg dry	50	---	ND	---	---	---	30%	
Chloromethane	ND	173	345	ug/kg dry	50	---	ND	---	---	---	30%	
2-Chlorotoluene	ND	34.5	69.0	ug/kg dry	50	---	ND	---	---	---	30%	
4-Chlorotoluene	ND	34.5	69.0	ug/kg dry	50	---	ND	---	---	---	30%	
Dibromochloromethane	ND	69.0	138	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dibromo-3-chloropropane	ND	173	345	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dibromoethane (EDB)	ND	34.5	69.0	ug/kg dry	50	---	ND	---	---	---	30%	
Dibromomethane	ND	34.5	69.0	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichlorobenzene	ND	17.3	34.5	ug/kg dry	50	---	ND	---	---	---	30%	

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.

Darwin Thomas, Business Development Director

APEX LABORATORIES

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

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
Batch 22K0559 - EPA 5035A							**Soil**					
Duplicate (22K0559-DUP1)			Prepared: 11/14/22 14:25		Analyzed: 11/15/22 18:53							**V-16**
QC Source Sample: Non-SDG (A2K0532-01)												
1,3-Dichlorobenzene	ND	17.3	34.5	ug/kg dry	50	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	17.3	34.5	ug/kg dry	50	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	138	138	ug/kg dry	50	---	ND	---	---	---	30%	ICV-02
1,1-Dichloroethane	ND	17.3	34.5	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	17.3	34.5	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	17.3	34.5	ug/kg dry	50	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	17.3	34.5	ug/kg dry	50	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	17.3	34.5	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	17.3	34.5	ug/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	34.5	69.0	ug/kg dry	50	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	34.5	69.0	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	34.5	69.0	ug/kg dry	50	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	34.5	69.0	ug/kg dry	50	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	34.5	69.0	ug/kg dry	50	---	ND	---	---	---	30%	
Ethylbenzene	**31.1**	17.3	34.5	ug/kg dry	50	---	34.5	---	---	11	30%	J
Hexachlorobutadiene	ND	69.0	138	ug/kg dry	50	---	ND	---	---	---	30%	
2-Hexanone	ND	345	690	ug/kg dry	50	---	ND	---	---	---	30%	
Isopropylbenzene	ND	34.5	69.0	ug/kg dry	50	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	34.5	69.0	ug/kg dry	50	---	ND	---	---	---	30%	
Methylene chloride	ND	345	690	ug/kg dry	50	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	345	690	ug/kg dry	50	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	34.5	69.0	ug/kg dry	50	---	ND	---	---	---	30%	
Naphthalene	ND	207	207	ug/kg dry	50	---	ND	---	---	---	30%	R-06
n-Propylbenzene	**24.9**	17.3	34.5	ug/kg dry	50	---	29.0	---	---	15	30%	J
Styrene	ND	34.5	69.0	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	17.3	34.5	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	34.5	69.0	ug/kg dry	50	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	17.3	34.5	ug/kg dry	50	---	ND	---	---	---	30%	
Toluene	**105**	34.5	69.0	ug/kg dry	50	---	111	---	---	6	30%	
1,2,3-Trichlorobenzene	ND	173	345	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	173	345	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	17.3	34.5	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,2-Trichloroethane	ND	17.3	34.5	ug/kg dry	50	---	ND	---	---	---	30%	

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.

Darwin Thomas, Business Development Director

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

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
Batch 22K0559 - EPA 5035A							**Soil**					
Duplicate (22K0559-DUP1)			Prepared: 11/14/22 14:25		Analyzed: 11/15/22 18:53							**V-16**
QC Source Sample: Non-SDG (A2K0532-01)												
Trichloroethene (TCE)	ND	17.3	34.5	ug/kg dry	50	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	138	138	ug/kg dry	50	---	ND	---	---	---	30%	Q-52
1,2,3-Trichloropropane	ND	34.5	69.0	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	345	345	ug/kg dry	50	---	ND	---	---	---	30%	R-06
1,3,5-Trimethylbenzene	ND	138	138	ug/kg dry	50	---	ND	---	---	---	30%	R-06
Vinyl chloride	ND	17.3	34.5	ug/kg dry	50	---	ND	---	---	---	30%	
m,p-Xylene	ND	207	207	ug/kg dry	50	---	ND	---	---	---	30%	R-06
o-Xylene	ND	69.0	69.0	ug/kg dry	50	---	ND	---	---	---	30%	R-06
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 100 %*		*Limits: 80-120 %*		*Dilution: 1x*					
Toluene-d8 (Surr)			*93 %*		*80-120 %*		*"*					
4-Bromofluorobenzene (Surr)			*107 %*		*79-120 %*		*"*					
Duplicate (22K0559-DUP2)			Prepared: 11/08/22 13:30		Analyzed: 11/15/22 23:33							
QC Source Sample: Non-SDG (A2K0345-01)												
Acetone	ND	16200	16200	ug/kg dry	500	---	ND	---	---	---	30%	Q-30
Acrylonitrile	ND	1620	1620	ug/kg dry	500	---	ND	---	---	---	30%	
Benzene	ND	80.9	162	ug/kg dry	500	---	ND	---	---	---	30%	
Bromobenzene	ND	202	405	ug/kg dry	500	---	ND	---	---	---	30%	
Bromochloromethane	ND	405	809	ug/kg dry	500	---	ND	---	---	---	30%	
Bromodichloromethane	ND	405	809	ug/kg dry	500	---	ND	---	---	---	30%	
Bromoform	ND	809	1620	ug/kg dry	500	---	ND	---	---	---	30%	
Bromomethane	ND	8090	8090	ug/kg dry	500	---	ND	---	---	---	30%	
2-Butanone (MEK)	ND	8090	8090	ug/kg dry	500	---	ND	---	---	---	30%	
n-Butylbenzene	**1340**	405	809	ug/kg dry	500	---	1540	---	---	14	30%	M-02
sec-Butylbenzene	**688**	405	809	ug/kg dry	500	---	728	---	---	6	30%	J
tert-Butylbenzene	ND	405	809	ug/kg dry	500	---	ND	---	---	---	30%	
Carbon disulfide	ND	4050	8090	ug/kg dry	500	---	ND	---	---	---	30%	
Carbon tetrachloride	ND	405	809	ug/kg dry	500	---	ND	---	---	---	30%	
Chlorobenzene	ND	202	405	ug/kg dry	500	---	ND	---	---	---	30%	
Chloroethane	ND	4050	8090	ug/kg dry	500	---	ND	---	---	---	30%	
Chloroform	ND	405	809	ug/kg dry	500	---	ND	---	---	---	30%	
Chloromethane	ND	2020	4050	ug/kg dry	500	---	ND	---	---	---	30%	
2-Chlorotoluene	ND	405	809	ug/kg dry	500	---	ND	---	---	---	30%	

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.

Darwin Thomas, Business Development Director

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

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

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
Batch 22K0559 - EPA 5035A							**Soil**					
Duplicate (22K0559-DUP2)			Prepared: 11/08/22 13:30 Analyzed: 11/15/22 23:33									
QC Source Sample: Non-SDG (A2K0345-01)												
4-Chlorotoluene	ND	405	809	ug/kg dry	500	---	ND	---	---	---	30%	
Dibromochloromethane	ND	809	1620	ug/kg dry	500	---	ND	---	---	---	30%	
1,2-Dibromo-3-chloropropane	ND	2020	4050	ug/kg dry	500	---	ND	---	---	---	30%	
1,2-Dibromoethane (EDB)	ND	405	809	ug/kg dry	500	---	ND	---	---	---	30%	
Dibromomethane	ND	405	809	ug/kg dry	500	---	ND	---	---	---	30%	
1,2-Dichlorobenzene	ND	202	405	ug/kg dry	500	---	ND	---	---	---	30%	
1,3-Dichlorobenzene	ND	202	405	ug/kg dry	500	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	202	405	ug/kg dry	500	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	1620	1620	ug/kg dry	500	---	ND	---	---	---	30%	ICV-02
1,1-Dichloroethane	ND	202	405	ug/kg dry	500	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	202	405	ug/kg dry	500	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	202	405	ug/kg dry	500	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	202	405	ug/kg dry	500	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	202	405	ug/kg dry	500	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	202	405	ug/kg dry	500	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	405	809	ug/kg dry	500	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	405	809	ug/kg dry	500	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	405	809	ug/kg dry	500	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	405	809	ug/kg dry	500	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	405	809	ug/kg dry	500	---	ND	---	---	---	30%	
Ethylbenzene	**227**	202	405	ug/kg dry	500	---	243	---	---	7	30%	J
Hexachlorobutadiene	ND	809	1620	ug/kg dry	500	---	ND	---	---	---	30%	
2-Hexanone	ND	4050	8090	ug/kg dry	500	---	ND	---	---	---	30%	
Isopropylbenzene	ND	405	809	ug/kg dry	500	---	ND	---	---	---	30%	
4-Isopropyltoluene	**898**	405	809	ug/kg dry	500	---	922	---	---	3	30%	M-02
Methylene chloride	ND	4050	8090	ug/kg dry	500	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	4050	8090	ug/kg dry	500	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	405	809	ug/kg dry	500	---	ND	---	---	---	30%	
Naphthalene	ND	2430	2430	ug/kg dry	500	---	ND	---	---	---	30%	R-02
n-Propylbenzene	**574**	202	405	ug/kg dry	500	---	599	---	---	4	30%	
Styrene	ND	405	809	ug/kg dry	500	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	202	405	ug/kg dry	500	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	1210	1210	ug/kg dry	500	---	ND	---	---	---	30%	R-02

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.

Darwin Thomas, Business Development Director

APEX LABORATORIES

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

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
Batch 22K0559 - EPA 5035A							**Soil**					
Duplicate (22K0559-DUP2)			Prepared: 11/08/22 13:30 Analyzed: 11/15/22 23:33									
QC Source Sample: Non-SDG (A2K0345-01)												
Tetrachloroethene (PCE)	ND	202	405	ug/kg dry	500	---	ND	---	---	---	30%	
Toluene	ND	405	809	ug/kg dry	500	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	2020	4050	ug/kg dry	500	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	2020	4050	ug/kg dry	500	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	202	405	ug/kg dry	500	---	ND	---	---	---	30%	
1,1,2-Trichloroethane	ND	809	809	ug/kg dry	500	---	ND	---	---	---	30%	R-02
Trichloroethene (TCE)	ND	202	405	ug/kg dry	500	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	1620	1620	ug/kg dry	500	---	ND	---	---	---	30%	Q-52
1,2,3-Trichloropropane	ND	405	809	ug/kg dry	500	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	**6090**	405	809	ug/kg dry	500	---	6330	---	---	4	30%	
1,3,5-Trimethylbenzene	**4950**	405	809	ug/kg dry	500	---	5070	---	---	2	30%	
Vinyl chloride	ND	202	405	ug/kg dry	500	---	ND	---	---	---	30%	
m,p-Xylene	**1720**	405	809	ug/kg dry	500	---	1740	---	---	1	30%	B-02
o-Xylene	**3110**	202	405	ug/kg dry	500	---	3270	---	---	5	30%	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 102 %*		*Limits: 80-120 %*		*Dilution: 1x*					
Toluene-d8 (Surr)			*93 %*		*80-120 %*		*"*					
4-Bromofluorobenzene (Surr)			*105 %*		*79-120 %*		*"*					

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.

Darwin Thomas, Business Development Director

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: Gasco - Soil Residuals	
2749 Lockport Road	Project Number: 111323	Report ID:
Niagara Falls, NY 14305	Project Manager: Chip Byrd	A2K0502 - 12 02 22 1315

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
Batch 22K0634 - EPA 5035A							Soil					
Blank (22K0634-BLK1)			Prepared: 11/16/22 10:00 Analyzed: 11/16/22 14:50									
5035A/8260D												
Acetone	ND	200	400	ug/kg wet	50	---	---	---	---	---	---	
Acrylonitrile	ND	20.0	40.0	ug/kg wet	50	---	---	---	---	---	---	
Benzene	ND	2.00	4.00	ug/kg wet	50	---	---	---	---	---	---	
Bromobenzene	ND	5.00	10.0	ug/kg wet	50	---	---	---	---	---	---	
Bromochloromethane	ND	10.0	20.0	ug/kg wet	50	---	---	---	---	---	---	
Bromodichloromethane	ND	10.0	20.0	ug/kg wet	50	---	---	---	---	---	---	
Bromoform	ND	20.0	40.0	ug/kg wet	50	---	---	---	---	---	---	
Bromomethane	ND	200	200	ug/kg wet	50	---	---	---	---	---	---	
2-Butanone (MEK)	ND	100	200	ug/kg wet	50	---	---	---	---	---	---	
n-Butylbenzene	ND	10.0	20.0	ug/kg wet	50	---	---	---	---	---	---	
sec-Butylbenzene	ND	10.0	20.0	ug/kg wet	50	---	---	---	---	---	---	
tert-Butylbenzene	ND	10.0	20.0	ug/kg wet	50	---	---	---	---	---	---	
Carbon disulfide	ND	100	200	ug/kg wet	50	---	---	---	---	---	---	
Carbon tetrachloride	ND	10.0	20.0	ug/kg wet	50	---	---	---	---	---	---	
Chlorobenzene	ND	5.00	10.0	ug/kg wet	50	---	---	---	---	---	---	
Chloroethane	ND	100	200	ug/kg wet	50	---	---	---	---	---	---	
Chloroform	ND	10.0	20.0	ug/kg wet	50	---	---	---	---	---	---	
Chloromethane	ND	50.0	100	ug/kg wet	50	---	---	---	---	---	---	
2-Chlorotoluene	ND	10.0	20.0	ug/kg wet	50	---	---	---	---	---	---	
4-Chlorotoluene	ND	10.0	20.0	ug/kg wet	50	---	---	---	---	---	---	
Dibromochloromethane	ND	20.0	40.0	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	50.0	100	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	10.0	20.0	ug/kg wet	50	---	---	---	---	---	---	
Dibromomethane	ND	10.0	20.0	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	5.00	10.0	ug/kg wet	50	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	5.00	10.0	ug/kg wet	50	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	5.00	10.0	ug/kg wet	50	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	20.0	40.0	ug/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethane	ND	5.00	10.0	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	5.00	10.0	ug/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethene	ND	5.00	10.0	ug/kg wet	50	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	5.00	10.0	ug/kg wet	50	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	5.00	10.0	ug/kg wet	50	---	---	---	---	---	---	

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.

Darwin Thomas, Business Development Director

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: Gasco - Soil Residuals	
2749 Lockport Road	Project Number: 111323	Report ID:
Niagara Falls, NY 14305	Project Manager: Chip Byrd	A2K0502 - 12 02 22 1315

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
Batch 22K0634 - EPA 5035A							Soil					
Blank (22K0634-BLK1)			Prepared: 11/16/22 10:00 Analyzed: 11/16/22 14:50									
1,2-Dichloropropane	ND	5.00	10.0	ug/kg wet	50	---	---	---	---	---	---	
1,3-Dichloropropane	ND	10.0	20.0	ug/kg wet	50	---	---	---	---	---	---	
2,2-Dichloropropane	ND	10.0	20.0	ug/kg wet	50	---	---	---	---	---	---	
1,1-Dichloropropene	ND	10.0	20.0	ug/kg wet	50	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	10.0	20.0	ug/kg wet	50	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	10.0	20.0	ug/kg wet	50	---	---	---	---	---	---	
Ethylbenzene	ND	5.00	10.0	ug/kg wet	50	---	---	---	---	---	---	
Hexachlorobutadiene	ND	20.0	40.0	ug/kg wet	50	---	---	---	---	---	---	
2-Hexanone	ND	200	200	ug/kg wet	50	---	---	---	---	---	---	
Isopropylbenzene	ND	10.0	20.0	ug/kg wet	50	---	---	---	---	---	---	
4-Isopropyltoluene	ND	10.0	20.0	ug/kg wet	50	---	---	---	---	---	---	
Methylene chloride	ND	100	200	ug/kg wet	50	---	---	---	---	---	---	
4-Methyl-2-pentanone (MiBK)	ND	200	200	ug/kg wet	50	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	10.0	20.0	ug/kg wet	50	---	---	---	---	---	---	
Naphthalene	ND	20.0	40.0	ug/kg wet	50	---	---	---	---	---	---	
n-Propylbenzene	ND	5.00	10.0	ug/kg wet	50	---	---	---	---	---	---	
Styrene	ND	10.0	20.0	ug/kg wet	50	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	5.00	10.0	ug/kg wet	50	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	10.0	20.0	ug/kg wet	50	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	5.00	10.0	ug/kg wet	50	---	---	---	---	---	---	
Toluene	ND	10.0	20.0	ug/kg wet	50	---	---	---	---	---	---	
1,2,3-Trichlorobenzene	ND	50.0	100	ug/kg wet	50	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	50.0	100	ug/kg wet	50	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	5.00	10.0	ug/kg wet	50	---	---	---	---	---	---	
1,1,2-Trichloroethane	ND	5.00	10.0	ug/kg wet	50	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	5.00	10.0	ug/kg wet	50	---	---	---	---	---	---	
Trichlorofluoromethane	ND	20.0	40.0	ug/kg wet	50	---	---	---	---	---	---	
1,2,3-Trichloropropane	ND	10.0	20.0	ug/kg wet	50	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	10.0	20.0	ug/kg wet	50	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	10.0	20.0	ug/kg wet	50	---	---	---	---	---	---	
Vinyl chloride	ND	5.00	10.0	ug/kg wet	50	---	---	---	---	---	---	
m,p-Xylene	**11.0**	10.0	20.0	ug/kg wet	50	---	---	---	---	---	---	B-02, J
o-Xylene	ND	5.00	10.0	ug/kg wet	50	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 101 %*		*Limits: 80-120 %*				*Dilution: 1x*			

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.

Darwin Thomas, Business Development Director

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

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

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
Batch 22K0634 - EPA 5035A							**Soil**					
Blank (22K0634-BLK1)				Prepared: 11/16/22 10:00 Analyzed: 11/16/22 14:50								
Surr: Toluene-d8 (Surr)			*Recovery: 104 %*	*Limits: 80-120 %*				*Dilution: 1x*				
4-Bromofluorobenzene (Surr)			*104 %*	*79-120 %*				*"*				
LCS (22K0634-BS1)				Prepared: 11/16/22 10:00 Analyzed: 11/16/22 13:57								
5035A/8260D												
Acetone	1850	500	1000	ug/kg wet	50	2000	---	92	80-120%	---	---	
Acrylonitrile	901	50.0	100	ug/kg wet	50	1000	---	90	80-120%	---	---	
Benzene	938	5.00	10.0	ug/kg wet	50	1000	---	94	80-120%	---	---	
Bromobenzene	966	12.5	25.0	ug/kg wet	50	1000	---	97	80-120%	---	---	
Bromochloromethane	954	25.0	50.0	ug/kg wet	50	1000	---	95	80-120%	---	---	
Bromodichloromethane	1090	25.0	50.0	ug/kg wet	50	1000	---	109	80-120%	---	---	
Bromoform	1340	50.0	100	ug/kg wet	50	1000	---	**134**	**80-120%**	---	---	Q-56
Bromomethane	1560	500	500	ug/kg wet	50	1000	---	**156**	**80-120%**	---	---	Q-56
2-Butanone (MEK)	1620	250	500	ug/kg wet	50	2000	---	81	80-120%	---	---	
n-Butylbenzene	866	25.0	50.0	ug/kg wet	50	1000	---	87	80-120%	---	---	
sec-Butylbenzene	890	25.0	50.0	ug/kg wet	50	1000	---	89	80-120%	---	---	
tert-Butylbenzene	858	25.0	50.0	ug/kg wet	50	1000	---	86	80-120%	---	---	
Carbon disulfide	1160	250	500	ug/kg wet	50	1000	---	116	80-120%	---	---	
Carbon tetrachloride	1230	25.0	50.0	ug/kg wet	50	1000	---	**123**	**80-120%**	---	---	Q-56
Chlorobenzene	958	12.5	25.0	ug/kg wet	50	1000	---	96	80-120%	---	---	
Chloroethane	1740	250	500	ug/kg wet	50	1000	---	**174**	**80-120%**	---	---	Q-56
Chloroform	1020	25.0	50.0	ug/kg wet	50	1000	---	102	80-120%	---	---	
Chloromethane	940	125	250	ug/kg wet	50	1000	---	94	80-120%	---	---	
2-Chlorotoluene	930	25.0	50.0	ug/kg wet	50	1000	---	93	80-120%	---	---	
4-Chlorotoluene	894	25.0	50.0	ug/kg wet	50	1000	---	89	80-120%	---	---	
Dibromochloromethane	1160	50.0	100	ug/kg wet	50	1000	---	116	80-120%	---	---	
1,2-Dibromo-3-chloropropane	912	125	250	ug/kg wet	50	1000	---	91	80-120%	---	---	
1,2-Dibromoethane (EDB)	954	25.0	50.0	ug/kg wet	50	1000	---	95	80-120%	---	---	
Dibromomethane	1050	25.0	50.0	ug/kg wet	50	1000	---	105	80-120%	---	---	
1,2-Dichlorobenzene	965	12.5	25.0	ug/kg wet	50	1000	---	96	80-120%	---	---	
1,3-Dichlorobenzene	989	12.5	25.0	ug/kg wet	50	1000	---	99	80-120%	---	---	
1,4-Dichlorobenzene	952	12.5	25.0	ug/kg wet	50	1000	---	95	80-120%	---	---	
Dichlorodifluoromethane	980	50.0	100	ug/kg wet	50	1000	---	98	80-120%	---	---	ICV-01
1,1-Dichloroethane	1000	12.5	25.0	ug/kg wet	50	1000	---	100	80-120%	---	---	

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.

Darwin Thomas, Business Development Director

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: Gasco - Soil Residuals	
2749 Lockport Road	Project Number: 111323	Report ID:
Niagara Falls, NY 14305	Project Manager: Chip Byrd	A2K0502 - 12 02 22 1315

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
Batch 22K0634 - EPA 5035A							Soil					
LCS (22K0634-BS1)			Prepared: 11/16/22 10:00 Analyzed: 11/16/22 13:57									
1,2-Dichloroethane (EDC)	1040	12.5	25.0	ug/kg wet	50	1000	---	104	80-120%	---	---	
1,1-Dichloroethene	1200	12.5	25.0	ug/kg wet	50	1000	---	120	80-120%	---	---	
cis-1,2-Dichloroethene	991	12.5	25.0	ug/kg wet	50	1000	---	99	80-120%	---	---	
trans-1,2-Dichloroethene	1060	12.5	25.0	ug/kg wet	50	1000	---	106	80-120%	---	---	
1,2-Dichloropropane	966	12.5	25.0	ug/kg wet	50	1000	---	97	80-120%	---	---	
1,3-Dichloropropane	946	25.0	50.0	ug/kg wet	50	1000	---	95	80-120%	---	---	
2,2-Dichloropropane	1080	25.0	50.0	ug/kg wet	50	1000	---	108	80-120%	---	---	
1,1-Dichloropropene	950	25.0	50.0	ug/kg wet	50	1000	---	95	80-120%	---	---	
cis-1,3-Dichloropropene	960	25.0	50.0	ug/kg wet	50	1000	---	96	80-120%	---	---	
trans-1,3-Dichloropropene	1020	25.0	50.0	ug/kg wet	50	1000	---	102	80-120%	---	---	
Ethylbenzene	928	12.5	25.0	ug/kg wet	50	1000	---	93	80-120%	---	---	
Hexachlorobutadiene	1030	50.0	100	ug/kg wet	50	1000	---	103	80-120%	---	---	
2-Hexanone	1520	500	500	ug/kg wet	50	2000	---	**76**	**80-120%**	---	---	Q-55
Isopropylbenzene	918	25.0	50.0	ug/kg wet	50	1000	---	92	80-120%	---	---	
4-Isopropyltoluene	880	25.0	50.0	ug/kg wet	50	1000	---	88	80-120%	---	---	
Methylene chloride	1040	250	500	ug/kg wet	50	1000	---	104	80-120%	---	---	
4-Methyl-2-pentanone (MiBK)	1580	500	500	ug/kg wet	50	2000	---	**79**	**80-120%**	---	---	Q-55
Methyl tert-butyl ether (MTBE)	943	25.0	50.0	ug/kg wet	50	1000	---	94	80-120%	---	---	
Naphthalene	860	50.0	100	ug/kg wet	50	1000	---	86	80-120%	---	---	
n-Propylbenzene	872	12.5	25.0	ug/kg wet	50	1000	---	87	80-120%	---	---	
Styrene	914	25.0	50.0	ug/kg wet	50	1000	---	91	80-120%	---	---	
1,1,1,2-Tetrachloroethane	1130	12.5	25.0	ug/kg wet	50	1000	---	113	80-120%	---	---	
1,1,2,2-Tetrachloroethane	859	25.0	50.0	ug/kg wet	50	1000	---	86	80-120%	---	---	
Tetrachloroethene (PCE)	1040	12.5	25.0	ug/kg wet	50	1000	---	104	80-120%	---	---	
Toluene	932	25.0	50.0	ug/kg wet	50	1000	---	93	80-120%	---	---	
1,2,3-Trichlorobenzene	1000	125	250	ug/kg wet	50	1000	---	100	80-120%	---	---	
1,2,4-Trichlorobenzene	951	125	250	ug/kg wet	50	1000	---	95	80-120%	---	---	
1,1,1-Trichloroethane	1100	12.5	25.0	ug/kg wet	50	1000	---	110	80-120%	---	---	
1,1,2-Trichloroethane	960	12.5	25.0	ug/kg wet	50	1000	---	96	80-120%	---	---	
Trichloroethene (TCE)	1110	12.5	25.0	ug/kg wet	50	1000	---	111	80-120%	---	---	
Trichlorofluoromethane	1490	50.0	100	ug/kg wet	50	1000	---	**149**	**80-120%**	---	---	Q-56
1,2,3-Trichloropropane	976	25.0	50.0	ug/kg wet	50	1000	---	98	80-120%	---	---	
1,2,4-Trimethylbenzene	941	25.0	50.0	ug/kg wet	50	1000	---	94	80-120%	---	---	
1,3,5-Trimethylbenzene	936	25.0	50.0	ug/kg wet	50	1000	---	94	80-120%	---	---	

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.

Darwin Thomas, Business Development Director

APEX LABORATORIES

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

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
Batch 22K0634 - EPA 5035A							**Soil**					
LCS (22K0634-BS1)			Prepared: 11/16/22 10:00		Analyzed: 11/16/22 13:57							
Vinyl chloride	1210	12.5	25.0	ug/kg wet	50	1000	---	**121**	**80-120%**	---	---	Q-56
m,p-Xylene	1850	25.0	50.0	ug/kg wet	50	2000	---	93	80-120%	---	---	B-02
o-Xylene	860	12.5	25.0	ug/kg wet	50	1000	---	86	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 102 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*98 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*97 %*		*79-120 %*			*"*				
Duplicate (22K0634-DUP1)			Prepared: 11/07/22 09:36		Analyzed: 11/16/22 16:12							**TEMP**
QC Source Sample: Non-SDG (A2K0562-01)												
Acetone	ND	710	1420	ug/kg wet	50	---	ND	---	---	---	30%	
Acrylonitrile	ND	71.0	142	ug/kg wet	50	---	ND	---	---	---	30%	
Benzene	ND	7.10	14.2	ug/kg wet	50	---	ND	---	---	---	30%	
Bromobenzene	ND	17.8	35.5	ug/kg wet	50	---	ND	---	---	---	30%	
Bromochloromethane	ND	35.5	71.0	ug/kg wet	50	---	ND	---	---	---	30%	
Bromodichloromethane	ND	35.5	71.0	ug/kg wet	50	---	ND	---	---	---	30%	
Bromoform	ND	71.0	142	ug/kg wet	50	---	ND	---	---	---	30%	
Bromomethane	ND	710	710	ug/kg wet	50	---	ND	---	---	---	30%	
2-Butanone (MEK)	ND	355	710	ug/kg wet	50	---	ND	---	---	---	30%	
n-Butylbenzene	ND	35.5	71.0	ug/kg wet	50	---	ND	---	---	---	30%	
sec-Butylbenzene	ND	35.5	71.0	ug/kg wet	50	---	ND	---	---	---	30%	
tert-Butylbenzene	ND	35.5	71.0	ug/kg wet	50	---	ND	---	---	---	30%	
Carbon disulfide	ND	355	710	ug/kg wet	50	---	ND	---	---	---	30%	
Carbon tetrachloride	ND	35.5	71.0	ug/kg wet	50	---	ND	---	---	---	30%	
Chlorobenzene	ND	17.8	35.5	ug/kg wet	50	---	ND	---	---	---	30%	
Chloroethane	ND	355	710	ug/kg wet	50	---	ND	---	---	---	30%	
Chloroform	ND	35.5	71.0	ug/kg wet	50	---	ND	---	---	---	30%	
Chloromethane	ND	178	355	ug/kg wet	50	---	ND	---	---	---	30%	
2-Chlorotoluene	ND	35.5	71.0	ug/kg wet	50	---	ND	---	---	---	30%	
4-Chlorotoluene	ND	35.5	71.0	ug/kg wet	50	---	ND	---	---	---	30%	
Dibromochloromethane	ND	71.0	142	ug/kg wet	50	---	ND	---	---	---	30%	
1,2-Dibromo-3-chloropropane	ND	178	355	ug/kg wet	50	---	ND	---	---	---	30%	
1,2-Dibromoethane (EDB)	ND	35.5	71.0	ug/kg wet	50	---	ND	---	---	---	30%	
Dibromomethane	ND	35.5	71.0	ug/kg wet	50	---	ND	---	---	---	30%	
1,2-Dichlorobenzene	ND	17.8	35.5	ug/kg wet	50	---	ND	---	---	---	30%	

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.

Darwin Thomas, Business Development Director

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: Gasco - Soil Residuals	
2749 Lockport Road	Project Number: 111323	Report ID:
Niagara Falls, NY 14305	Project Manager: Chip Byrd	A2K0502 - 12 02 22 1315

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
Batch 22K0634 - EPA 5035A							Soil					
Duplicate (22K0634-DUP1)			Prepared: 11/07/22 09:36		Analyzed: 11/16/22 16:12							TEMP
QC Source Sample: Non-SDG (A2K0562-01)												
1,3-Dichlorobenzene	ND	17.8	35.5	ug/kg wet	50	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	17.8	35.5	ug/kg wet	50	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	71.0	142	ug/kg wet	50	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	17.8	35.5	ug/kg wet	50	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	17.8	35.5	ug/kg wet	50	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	17.8	35.5	ug/kg wet	50	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	17.8	35.5	ug/kg wet	50	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	17.8	35.5	ug/kg wet	50	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	17.8	35.5	ug/kg wet	50	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	35.5	71.0	ug/kg wet	50	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	35.5	71.0	ug/kg wet	50	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	35.5	71.0	ug/kg wet	50	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	35.5	71.0	ug/kg wet	50	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	35.5	71.0	ug/kg wet	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	17.8	35.5	ug/kg wet	50	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	71.0	142	ug/kg wet	50	---	ND	---	---	---	30%	
2-Hexanone	ND	710	710	ug/kg wet	50	---	ND	---	---	---	30%	
Isopropylbenzene	ND	35.5	71.0	ug/kg wet	50	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	35.5	71.0	ug/kg wet	50	---	ND	---	---	---	30%	
Methylene chloride	ND	355	710	ug/kg wet	50	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	710	710	ug/kg wet	50	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	35.5	71.0	ug/kg wet	50	---	ND	---	---	---	30%	
Naphthalene	ND	71.0	142	ug/kg wet	50	---	ND	---	---	---	30%	
n-Propylbenzene	ND	17.8	35.5	ug/kg wet	50	---	ND	---	---	---	30%	
Styrene	ND	35.5	71.0	ug/kg wet	50	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	17.8	35.5	ug/kg wet	50	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	35.5	71.0	ug/kg wet	50	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	17.8	35.5	ug/kg wet	50	---	ND	---	---	---	30%	
Toluene	ND	35.5	71.0	ug/kg wet	50	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	178	355	ug/kg wet	50	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	178	355	ug/kg wet	50	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	17.8	35.5	ug/kg wet	50	---	ND	---	---	---	30%	
1,1,2-Trichloroethane	ND	17.8	35.5	ug/kg wet	50	---	ND	---	---	---	30%	

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.

Darwin Thomas, Business Development Director

APEX LABORATORIES

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

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
Batch 22K0634 - EPA 5035A							**Soil**					
Duplicate (22K0634-DUP1)			Prepared: 11/07/22 09:36		Analyzed: 11/16/22 16:12							**TEMP**
QC Source Sample: Non-SDG (A2K0562-01)												
Trichloroethene (TCE)	ND	17.8	35.5	ug/kg wet	50	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	71.0	142	ug/kg wet	50	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	35.5	71.0	ug/kg wet	50	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	35.5	71.0	ug/kg wet	50	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	35.5	71.0	ug/kg wet	50	---	ND	---	---	---	30%	
Vinyl chloride	ND	17.8	35.5	ug/kg wet	50	---	ND	---	---	---	30%	
m,p-Xylene	ND	35.5	71.0	ug/kg wet	50	---	ND	---	---	---	30%	
o-Xylene	ND	17.8	35.5	ug/kg wet	50	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 105 %*		*Limits: 80-120 %*		*Dilution: 1x*					
Toluene-d8 (Surr)			*100 %*		*80-120 %*		*"*					
4-Bromofluorobenzene (Surr)			*98 %*		*79-120 %*		*"*					
Matrix Spike (22K0634-MS1)			Prepared: 11/15/22 16:00		Analyzed: 11/16/22 17:59							**V-15**
QC Source Sample: Non-SDG (A2K0586-03)												
5035A/8260D												
Acetone	3250	759	1520	ug/kg dry	50	3030	ND	107	36-164%	---	---	
Acrylonitrile	1510	75.9	152	ug/kg dry	50	1520	ND	99	65-134%	---	---	
Benzene	1560	7.59	15.2	ug/kg dry	50	1520	ND	103	77-121%	---	---	
Bromobenzene	1450	19.0	38.0	ug/kg dry	50	1520	ND	96	78-121%	---	---	
Bromochloromethane	1600	38.0	75.9	ug/kg dry	50	1520	ND	106	78-125%	---	---	
Bromodichloromethane	1770	38.0	75.9	ug/kg dry	50	1520	ND	117	75-127%	---	---	
Bromoform	2070	75.9	152	ug/kg dry	50	1520	ND	**136**	**67-132%**	---	---	Q-54a
Bromomethane	2810	759	759	ug/kg dry	50	1520	ND	**185**	**53-143%**	---	---	Q-54e
2-Butanone (MEK)	2650	380	759	ug/kg dry	50	3030	ND	87	51-148%	---	---	
n-Butylbenzene	1370	38.0	75.9	ug/kg dry	50	1520	ND	90	70-128%	---	---	
sec-Butylbenzene	1400	38.0	75.9	ug/kg dry	50	1520	ND	92	73-126%	---	---	
tert-Butylbenzene	1300	38.0	75.9	ug/kg dry	50	1520	ND	86	73-125%	---	---	
Carbon disulfide	2440	380	759	ug/kg dry	50	1520	ND	**161**	**63-132%**	---	---	Q-01
Carbon tetrachloride	2080	38.0	75.9	ug/kg dry	50	1520	ND	**137**	**70-135%**	---	---	Q-54d
Chlorobenzene	1530	19.0	38.0	ug/kg dry	50	1520	ND	101	79-120%	---	---	
Chloroethane	2680	380	759	ug/kg dry	50	1520	ND	**177**	**59-139%**	---	---	Q-54f
Chloroform	1680	38.0	75.9	ug/kg dry	50	1520	ND	111	78-123%	---	---	
Chloromethane	1780	190	380	ug/kg dry	50	1520	ND	117	50-136%	---	---	

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.

Darwin Thomas, Business Development Director

APEX LABORATORIES

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

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
Batch 22K0634 - EPA 5035A							**Soil**					
Matrix Spike (22K0634-MS1)			Prepared: 11/15/22 16:00		Analyzed: 11/16/22 17:59							**V-15**
QC Source Sample: Non-SDG (A2K0586-03)												
2-Chlorotoluene	1410	38.0	75.9	ug/kg dry	50	1520	ND	93	75-122%	---	---	
4-Chlorotoluene	1380	38.0	75.9	ug/kg dry	50	1520	ND	91	72-124%	---	---	
Dibromochloromethane	1780	75.9	152	ug/kg dry	50	1520	ND	117	74-126%	---	---	
1,2-Dibromo-3-chloropropane	1370	190	380	ug/kg dry	50	1520	ND	90	61-132%	---	---	
1,2-Dibromoethane (EDB)	1480	38.0	75.9	ug/kg dry	50	1520	ND	98	78-122%	---	---	
Dibromomethane	1700	38.0	75.9	ug/kg dry	50	1520	ND	112	78-125%	---	---	
1,2-Dichlorobenzene	1460	19.0	38.0	ug/kg dry	50	1520	ND	96	78-121%	---	---	
1,3-Dichlorobenzene	1530	19.0	38.0	ug/kg dry	50	1520	ND	101	77-121%	---	---	
1,4-Dichlorobenzene	1480	19.0	38.0	ug/kg dry	50	1520	ND	98	75-120%	---	---	
Dichlorodifluoromethane	2100	75.9	152	ug/kg dry	50	1520	ND	138	29-149%	---	---	ICV-01
1,1-Dichloroethane	1690	19.0	38.0	ug/kg dry	50	1520	ND	111	76-125%	---	---	
1,2-Dichloroethane (EDC)	1680	19.0	38.0	ug/kg dry	50	1520	ND	111	73-128%	---	---	
1,1-Dichloroethene	2510	19.0	38.0	ug/kg dry	50	1520	ND	**165**	**70-131%**	---	---	Q-01
cis-1,2-Dichloroethene	1570	19.0	38.0	ug/kg dry	50	1520	ND	104	77-123%	---	---	
trans-1,2-Dichloroethene	1800	19.0	38.0	ug/kg dry	50	1520	ND	118	74-125%	---	---	
1,2-Dichloropropane	1590	19.0	38.0	ug/kg dry	50	1520	ND	105	76-123%	---	---	
1,3-Dichloropropane	1440	38.0	75.9	ug/kg dry	50	1520	ND	95	77-121%	---	---	
2,2-Dichloropropane	1680	38.0	75.9	ug/kg dry	50	1520	ND	110	67-133%	---	---	
1,1-Dichloropropene	1580	38.0	75.9	ug/kg dry	50	1520	ND	104	76-125%	---	---	
cis-1,3-Dichloropropene	1470	38.0	75.9	ug/kg dry	50	1520	ND	97	74-126%	---	---	
trans-1,3-Dichloropropene	1550	38.0	75.9	ug/kg dry	50	1520	ND	102	71-130%	---	---	
Ethylbenzene	1460	19.0	38.0	ug/kg dry	50	1520	ND	96	76-122%	---	---	
Hexachlorobutadiene	1570	75.9	152	ug/kg dry	50	1520	ND	104	61-135%	---	---	
2-Hexanone	2300	759	759	ug/kg dry	50	3030	ND	76	53-145%	---	---	Q-54m
Isopropylbenzene	1390	38.0	75.9	ug/kg dry	50	1520	ND	92	68-134%	---	---	
4-Isopropyltoluene	1340	38.0	75.9	ug/kg dry	50	1520	ND	88	73-127%	---	---	
Methylene chloride	1690	380	759	ug/kg dry	50	1520	ND	112	70-128%	---	---	
4-Methyl-2-pentanone (MiBK)	2420	759	759	ug/kg dry	50	3030	ND	80	65-135%	---	---	Q-54k
Methyl tert-butyl ether (MTBE)	1550	38.0	75.9	ug/kg dry	50	1520	ND	102	73-125%	---	---	
Naphthalene	1150	75.9	152	ug/kg dry	50	1520	ND	76	62-129%	---	---	
n-Propylbenzene	1380	19.0	38.0	ug/kg dry	50	1520	ND	91	73-125%	---	---	
Styrene	1420	38.0	75.9	ug/kg dry	50	1520	ND	94	76-124%	---	---	
1,1,1,2-Tetrachloroethane	1750	19.0	38.0	ug/kg dry	50	1520	ND	115	78-125%	---	---	

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.

Darwin Thomas, Business Development Director

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

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
Batch 22K0634 - EPA 5035A							**Soil**					
Matrix Spike (22K0634-MS1)			Prepared: 11/15/22 16:00		Analyzed: 11/16/22 17:59							**V-15**
QC Source Sample: Non-SDG (A2K0586-03)												
1,1,2,2-Tetrachloroethane	1330	38.0	75.9	ug/kg dry	50	1520	ND	88	70-124%	---	---	
Tetrachloroethene (PCE)	1680	19.0	38.0	ug/kg dry	50	1520	ND	111	73-128%	---	---	
Toluene	1480	38.0	75.9	ug/kg dry	50	1520	ND	98	77-121%	---	---	
1,2,3-Trichlorobenzene	1410	190	380	ug/kg dry	50	1520	ND	93	66-130%	---	---	
1,2,4-Trichlorobenzene	1330	190	380	ug/kg dry	50	1520	ND	88	67-129%	---	---	
1,1,1-Trichloroethane	1820	19.0	38.0	ug/kg dry	50	1520	ND	120	73-130%	---	---	
1,1,2-Trichloroethane	1510	19.0	38.0	ug/kg dry	50	1520	ND	100	78-121%	---	---	
Trichloroethene (TCE)	1750	19.0	38.0	ug/kg dry	50	1520	ND	116	77-123%	---	---	
Trichlorofluoromethane	2430	75.9	152	ug/kg dry	50	1520	ND	**160**	**62-140%**	---	---	Q-54c
1,2,3-Trichloropropane	1510	38.0	75.9	ug/kg dry	50	1520	ND	100	73-125%	---	---	
1,2,4-Trimethylbenzene	1460	38.0	75.9	ug/kg dry	50	1520	ND	96	75-123%	---	---	
1,3,5-Trimethylbenzene	1460	38.0	75.9	ug/kg dry	50	1520	ND	96	73-124%	---	---	
Vinyl chloride	2300	19.0	38.0	ug/kg dry	50	1520	ND	**152**	**56-135%**	---	---	Q-54
m,p-Xylene	2880	38.0	75.9	ug/kg dry	50	3030	ND	95	77-124%	---	---	B-02
o-Xylene	1300	19.0	38.0	ug/kg dry	50	1520	ND	86	77-123%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 105 %*		*Limits: 80-120 %*				*Dilution: 1x*			
Toluene-d8 (Surr)			*98 %*		*80-120 %*				*"*			
4-Bromofluorobenzene (Surr)			*92 %*		*79-120 %*				*"*			

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.

Darwin Thomas, Business Development Director

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

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

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
Batch 22K0839 - EPA 1311/5030B TCLP Volatiles					**Water**							
Blank (22K0839-BLK1)			Prepared: 11/22/22 10:54		Analyzed: 11/23/22 22:24							**TCLPa**
1311/8260D												
Acetone	ND	0.500	1.00	mg/L	50	---	---	---	---	---	---	
Benzene	ND	0.00625	0.0125	mg/L	50	---	---	---	---	---	---	
Bromobenzene	ND	0.0125	0.0250	mg/L	50	---	---	---	---	---	---	
Bromochloromethane	ND	0.0250	0.0500	mg/L	50	---	---	---	---	---	---	
Bromodichloromethane	ND	0.0250	0.0500	mg/L	50	---	---	---	---	---	---	
Bromoform	ND	0.0250	0.0500	mg/L	50	---	---	---	---	---	---	
Bromomethane	ND	0.250	0.250	mg/L	50	---	---	---	---	---	---	
2-Butanone (MEK)	ND	0.250	0.500	mg/L	50	---	---	---	---	---	---	
n-Butylbenzene	ND	0.0250	0.0500	mg/L	50	---	---	---	---	---	---	
sec-Butylbenzene	ND	0.0250	0.0500	mg/L	50	---	---	---	---	---	---	
tert-Butylbenzene	ND	0.0250	0.0500	mg/L	50	---	---	---	---	---	---	
Carbon tetrachloride	ND	0.0250	0.0500	mg/L	50	---	---	---	---	---	---	
Chlorobenzene	ND	0.0125	0.0250	mg/L	50	---	---	---	---	---	---	
Chloroethane	ND	0.250	0.250	mg/L	50	---	---	---	---	---	---	
Chloroform	ND	0.0250	0.0500	mg/L	50	---	---	---	---	---	---	
Chloromethane	ND	0.125	0.250	mg/L	50	---	---	---	---	---	---	
2-Chlorotoluene	ND	0.0250	0.0500	mg/L	50	---	---	---	---	---	---	
4-Chlorotoluene	ND	0.0250	0.0500	mg/L	50	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	0.125	0.250	mg/L	50	---	---	---	---	---	---	
Dibromochloromethane	ND	0.0250	0.0500	mg/L	50	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	0.0125	0.0250	mg/L	50	---	---	---	---	---	---	
Dibromomethane	ND	0.0250	0.0500	mg/L	50	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	0.0125	0.0250	mg/L	50	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	0.0125	0.0250	mg/L	50	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	0.0125	0.0250	mg/L	50	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	0.0250	0.0500	mg/L	50	---	---	---	---	---	---	
1,1-Dichloroethane	ND	0.0125	0.0250	mg/L	50	---	---	---	---	---	---	
1,1-Dichloroethene	ND	0.0125	0.0250	mg/L	50	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	0.0125	0.0250	mg/L	50	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	0.0250	0.0500	mg/L	50	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	0.0125	0.0250	mg/L	50	---	---	---	---	---	---	
1,2-Dichloropropane	ND	0.0125	0.0250	mg/L	50	---	---	---	---	---	---	
1,3-Dichloropropane	ND	0.0250	0.0500	mg/L	50	---	---	---	---	---	---	

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.

Darwin Thomas, Business Development Director

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

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
Batch 22K0839 - EPA 1311/5030B TCLP Volatiles							**Water**					
Blank (22K0839-BLK1)			Prepared: 11/22/22 10:54 Analyzed: 11/23/22 22:24									**TCLPa**
2,2-Dichloropropane	ND	0.0250	0.0500	mg/L	50	---	---	---	---	---	---	
1,1-Dichloropropene	ND	0.0250	0.0500	mg/L	50	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	0.0250	0.0500	mg/L	50	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	0.0250	0.0500	mg/L	50	---	---	---	---	---	---	
Ethylbenzene	ND	0.0125	0.0250	mg/L	50	---	---	---	---	---	---	
Hexachlorobutadiene	ND	0.125	0.250	mg/L	50	---	---	---	---	---	---	
2-Hexanone	ND	0.250	0.500	mg/L	50	---	---	---	---	---	---	
Isopropylbenzene	ND	0.0250	0.0500	mg/L	50	---	---	---	---	---	---	
4-Isopropyltoluene	ND	0.0250	0.0500	mg/L	50	---	---	---	---	---	---	
4-Methyl-2-pentanone (MiBK)	ND	0.250	0.500	mg/L	50	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	0.0250	0.0500	mg/L	50	---	---	---	---	---	---	
Methylene chloride	ND	0.250	0.500	mg/L	50	---	---	---	---	---	---	
n-Propylbenzene	ND	0.0125	0.0250	mg/L	50	---	---	---	---	---	---	
Styrene	ND	0.0250	0.0500	mg/L	50	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	0.0125	0.0250	mg/L	50	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	0.0125	0.0250	mg/L	50	---	---	---	---	---	---	
Naphthalene	ND	0.0500	0.100	mg/L	50	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	0.0125	0.0250	mg/L	50	---	---	---	---	---	---	
Toluene	ND	0.0250	0.0500	mg/L	50	---	---	---	---	---	---	
1,2,3-Trichlorobenzene	ND	0.0250	0.0500	mg/L	50	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	0.0500	0.100	mg/L	50	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	0.0125	0.0250	mg/L	50	---	---	---	---	---	---	
1,1,2-Trichloroethane	ND	0.0125	0.0250	mg/L	50	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	0.0125	0.0250	mg/L	50	---	---	---	---	---	---	
Trichlorofluoromethane	ND	0.0500	0.100	mg/L	50	---	---	---	---	---	---	
1,2,3-Trichloropropane	ND	0.0250	0.0500	mg/L	50	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	0.0250	0.0500	mg/L	50	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	0.0250	0.0500	mg/L	50	---	---	---	---	---	---	
Vinyl chloride	ND	0.0125	0.0250	mg/L	50	---	---	---	---	---	---	
m,p-Xylene	ND	0.0250	0.0500	mg/L	50	---	---	---	---	---	---	
o-Xylene	ND	0.0125	0.0250	mg/L	50	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 122 %*		*Limits: 80-120 %*			*Dilution: 1x*				S-06
Toluene-d8 (Surr)			*101 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*101 %*		*80-120 %*			*"*				

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.

Darwin Thomas, Business Development Director

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

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

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
Batch 22K0839 - EPA 1311/5030B TCLP Volatiles							**Water**					
Blank (22K0839-BLK2)			Prepared: 11/22/22 10:54	Analyzed: 11/23/22 22:46								**TCLPb**
1311/8260D												
Acetone	ND	0.500	1.00	mg/L	50	---	---	---	---	---	---	
Benzene	ND	0.00625	0.0125	mg/L	50	---	---	---	---	---	---	
Bromobenzene	ND	0.0125	0.0250	mg/L	50	---	---	---	---	---	---	
Bromochloromethane	ND	0.0250	0.0500	mg/L	50	---	---	---	---	---	---	
Bromodichloromethane	ND	0.0250	0.0500	mg/L	50	---	---	---	---	---	---	
Bromoform	ND	0.0250	0.0500	mg/L	50	---	---	---	---	---	---	
Bromomethane	ND	0.250	0.250	mg/L	50	---	---	---	---	---	---	
2-Butanone (MEK)	ND	0.250	0.500	mg/L	50	---	---	---	---	---	---	
n-Butylbenzene	ND	0.0250	0.0500	mg/L	50	---	---	---	---	---	---	
sec-Butylbenzene	ND	0.0250	0.0500	mg/L	50	---	---	---	---	---	---	
tert-Butylbenzene	ND	0.0250	0.0500	mg/L	50	---	---	---	---	---	---	
Carbon tetrachloride	ND	0.0250	0.0500	mg/L	50	---	---	---	---	---	---	
Chlorobenzene	ND	0.0125	0.0250	mg/L	50	---	---	---	---	---	---	
Chloroethane	ND	0.250	0.250	mg/L	50	---	---	---	---	---	---	
Chloroform	ND	0.0250	0.0500	mg/L	50	---	---	---	---	---	---	
Chloromethane	ND	0.125	0.250	mg/L	50	---	---	---	---	---	---	
2-Chlorotoluene	ND	0.0250	0.0500	mg/L	50	---	---	---	---	---	---	
4-Chlorotoluene	ND	0.0250	0.0500	mg/L	50	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	0.125	0.250	mg/L	50	---	---	---	---	---	---	
Dibromochloromethane	ND	0.0250	0.0500	mg/L	50	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	0.0125	0.0250	mg/L	50	---	---	---	---	---	---	
Dibromomethane	ND	0.0250	0.0500	mg/L	50	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	0.0125	0.0250	mg/L	50	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	0.0125	0.0250	mg/L	50	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	0.0125	0.0250	mg/L	50	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	0.0250	0.0500	mg/L	50	---	---	---	---	---	---	
1,1-Dichloroethane	ND	0.0125	0.0250	mg/L	50	---	---	---	---	---	---	
1,1-Dichloroethene	ND	0.0125	0.0250	mg/L	50	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	0.0125	0.0250	mg/L	50	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	0.0250	0.0500	mg/L	50	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	0.0125	0.0250	mg/L	50	---	---	---	---	---	---	
1,2-Dichloropropane	ND	0.0125	0.0250	mg/L	50	---	---	---	---	---	---	
1,3-Dichloropropane	ND	0.0250	0.0500	mg/L	50	---	---	---	---	---	---	

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.

Darwin Thomas, Business Development Director

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

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

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
Batch 22K0839 - EPA 1311/5030B TCLP Volatiles							**Water**					
Blank (22K0839-BLK2)			Prepared: 11/22/22 10:54		Analyzed: 11/23/22 22:46							**TCLPb**
2,2-Dichloropropane	ND	0.0250	0.0500	mg/L	50	---	---	---	---	---	---	
1,1-Dichloropropene	ND	0.0250	0.0500	mg/L	50	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	0.0250	0.0500	mg/L	50	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	0.0250	0.0500	mg/L	50	---	---	---	---	---	---	
Ethylbenzene	ND	0.0125	0.0250	mg/L	50	---	---	---	---	---	---	
Hexachlorobutadiene	ND	0.125	0.250	mg/L	50	---	---	---	---	---	---	
2-Hexanone	ND	0.250	0.500	mg/L	50	---	---	---	---	---	---	
Isopropylbenzene	ND	0.0250	0.0500	mg/L	50	---	---	---	---	---	---	
4-Isopropyltoluene	ND	0.0250	0.0500	mg/L	50	---	---	---	---	---	---	
4-Methyl-2-pentanone (MiBK)	ND	0.250	0.500	mg/L	50	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	0.0250	0.0500	mg/L	50	---	---	---	---	---	---	
Methylene chloride	ND	0.250	0.500	mg/L	50	---	---	---	---	---	---	
n-Propylbenzene	ND	0.0125	0.0250	mg/L	50	---	---	---	---	---	---	
Styrene	ND	0.0250	0.0500	mg/L	50	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	0.0125	0.0250	mg/L	50	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	0.0125	0.0250	mg/L	50	---	---	---	---	---	---	
Naphthalene	ND	0.0500	0.100	mg/L	50	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	0.0125	0.0250	mg/L	50	---	---	---	---	---	---	
Toluene	ND	0.0250	0.0500	mg/L	50	---	---	---	---	---	---	
1,2,3-Trichlorobenzene	ND	0.0250	0.0500	mg/L	50	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	0.0500	0.100	mg/L	50	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	0.0125	0.0250	mg/L	50	---	---	---	---	---	---	
1,1,2-Trichloroethane	ND	0.0125	0.0250	mg/L	50	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	0.0125	0.0250	mg/L	50	---	---	---	---	---	---	
Trichlorofluoromethane	ND	0.0500	0.100	mg/L	50	---	---	---	---	---	---	
1,2,3-Trichloropropane	ND	0.0250	0.0500	mg/L	50	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	0.0250	0.0500	mg/L	50	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	0.0250	0.0500	mg/L	50	---	---	---	---	---	---	
Vinyl chloride	ND	0.0125	0.0250	mg/L	50	---	---	---	---	---	---	
m,p-Xylene	ND	0.0250	0.0500	mg/L	50	---	---	---	---	---	---	
o-Xylene	ND	0.0125	0.0250	mg/L	50	---	---	---	---	---	---	

Surr: 1,4-Difluorobenzene (Surr)	*Recovery: 120 %*	*Limits: 80-120 %*	*Dilution: 1x*
Toluene-d8 (Surr)	*103 %*	*80-120 %*	*"*
4-Bromofluorobenzene (Surr)	*102 %*	*80-120 %*	*"*

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.

Darwin Thomas, Business Development Director

APEX LABORATORIES

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

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
Batch 22K0839 - EPA 1311/5030B TCLP Volatiles							**Water**					
LCS (22K0839-BS1)			Prepared: 11/22/22 10:54 Analyzed: 11/23/22 21:42									**TCLPa**
1311/8260D												
Acetone	1.95	0.500	1.00	mg/L	50	2.00	---	98	80-120%	---	---	
Benzene	1.29	0.00625	0.0125	mg/L	50	1.00	---	**129**	**80-120%**	---	---	Q-56
Bromobenzene	0.982	0.0125	0.0250	mg/L	50	1.00	---	98	80-120%	---	---	
Bromochloromethane	1.21	0.0250	0.0500	mg/L	50	1.00	---	**121**	**80-120%**	---	---	Q-56
Bromodichloromethane	1.09	0.0250	0.0500	mg/L	50	1.00	---	109	80-120%	---	---	
Bromoform	1.01	0.0250	0.0500	mg/L	50	1.00	---	101	80-120%	---	---	
Bromomethane	0.905	0.250	0.250	mg/L	50	1.00	---	90	80-120%	---	---	
2-Butanone (MEK)	2.30	0.250	0.500	mg/L	50	2.00	---	115	80-120%	---	---	
n-Butylbenzene	1.11	0.0250	0.0500	mg/L	50	1.00	---	111	80-120%	---	---	
sec-Butylbenzene	1.21	0.0250	0.0500	mg/L	50	1.00	---	**121**	**80-120%**	---	---	Q-56
tert-Butylbenzene	1.06	0.0250	0.0500	mg/L	50	1.00	---	106	80-120%	---	---	
Carbon tetrachloride	1.17	0.0250	0.0500	mg/L	50	1.00	---	117	80-120%	---	---	
Chlorobenzene	1.03	0.0125	0.0250	mg/L	50	1.00	---	103	80-120%	---	---	
Chloroethane	1.27	0.250	0.250	mg/L	50	1.00	---	**127**	**80-120%**	---	---	Q-56
Chloroform	1.17	0.0250	0.0500	mg/L	50	1.00	---	117	80-120%	---	---	
Chloromethane	1.15	0.125	0.250	mg/L	50	1.00	---	115	80-120%	---	---	
2-Chlorotoluene	1.06	0.0250	0.0500	mg/L	50	1.00	---	106	80-120%	---	---	
4-Chlorotoluene	1.09	0.0250	0.0500	mg/L	50	1.00	---	109	80-120%	---	---	
1,2-Dibromo-3-chloropropane	0.888	0.125	0.250	mg/L	50	1.00	---	89	80-120%	---	---	
Dibromochloromethane	0.959	0.0250	0.0500	mg/L	50	1.00	---	96	80-120%	---	---	
1,2-Dibromoethane (EDB)	1.01	0.0125	0.0250	mg/L	50	1.00	---	101	80-120%	---	---	
Dibromomethane	1.16	0.0250	0.0500	mg/L	50	1.00	---	116	80-120%	---	---	
1,2-Dichlorobenzene	1.03	0.0125	0.0250	mg/L	50	1.00	---	103	80-120%	---	---	
1,3-Dichlorobenzene	1.07	0.0125	0.0250	mg/L	50	1.00	---	107	80-120%	---	---	
1,4-Dichlorobenzene	1.00	0.0125	0.0250	mg/L	50	1.00	---	100	80-120%	---	---	
Dichlorodifluoromethane	1.03	0.0250	0.0500	mg/L	50	1.00	---	103	80-120%	---	---	
1,1-Dichloroethane	1.20	0.0125	0.0250	mg/L	50	1.00	---	120	80-120%	---	---	
1,1-Dichloroethene	1.27	0.0125	0.0250	mg/L	50	1.00	---	**127**	**80-120%**	---	---	Q-56
1,2-Dichloroethane (EDC)	0.976	0.0125	0.0250	mg/L	50	1.00	---	98	80-120%	---	---	
cis-1,2-Dichloroethene	1.13	0.0250	0.0500	mg/L	50	1.00	---	113	80-120%	---	---	
trans-1,2-Dichloroethene	1.22	0.0125	0.0250	mg/L	50	1.00	---	**122**	**80-120%**	---	---	Q-56
1,2-Dichloropropane	1.21	0.0125	0.0250	mg/L	50	1.00	---	**121**	**80-120%**	---	---	Q-56
1,3-Dichloropropane	1.02	0.0250	0.0500	mg/L	50	1.00	---	102	80-120%	---	---	

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.

Darwin Thomas, Business Development Director

APEX LABORATORIES

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

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
Batch 22K0839 - EPA 1311/5030B TCLP Volatiles							**Water**					
LCS (22K0839-BS1)			Prepared: 11/22/22 10:54		Analyzed: 11/23/22 21:42							**TCLPa**
2,2-Dichloropropane	0.974	0.0250	0.0500	mg/L	50	1.00	---	97	80-120%	---	---	
1,1-Dichloropropene	1.28	0.0250	0.0500	mg/L	50	1.00	---	**128**	**80-120%**	---	---	Q-56
cis-1,3-Dichloropropene	0.990	0.0250	0.0500	mg/L	50	1.00	---	99	80-120%	---	---	
trans-1,3-Dichloropropene	0.990	0.0250	0.0500	mg/L	50	1.00	---	99	80-120%	---	---	
Ethylbenzene	1.08	0.0125	0.0250	mg/L	50	1.00	---	108	80-120%	---	---	
Hexachlorobutadiene	0.940	0.125	0.250	mg/L	50	1.00	---	94	80-120%	---	---	
2-Hexanone	1.85	0.250	0.500	mg/L	50	2.00	---	93	80-120%	---	---	
Isopropylbenzene	1.15	0.0250	0.0500	mg/L	50	1.00	---	115	80-120%	---	---	
4-Isopropyltoluene	1.15	0.0250	0.0500	mg/L	50	1.00	---	115	80-120%	---	---	
4-Methyl-2-pentanone (MiBK)	1.92	0.250	0.500	mg/L	50	2.00	---	96	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	1.11	0.0250	0.0500	mg/L	50	1.00	---	111	80-120%	---	---	
Methylene chloride	1.20	0.250	0.500	mg/L	50	1.00	---	120	80-120%	---	---	
n-Propylbenzene	1.11	0.0125	0.0250	mg/L	50	1.00	---	111	80-120%	---	---	
Styrene	1.15	0.0250	0.0500	mg/L	50	1.00	---	115	80-120%	---	---	
1,1,1,2-Tetrachloroethane	1.00	0.0125	0.0250	mg/L	50	1.00	---	100	80-120%	---	---	
1,1,2,2-Tetrachloroethane	1.04	0.0125	0.0250	mg/L	50	1.00	---	104	80-120%	---	---	
Naphthalene	0.882	0.0500	0.100	mg/L	50	1.00	---	88	80-120%	---	---	
Tetrachloroethene (PCE)	1.05	0.0125	0.0250	mg/L	50	1.00	---	105	80-120%	---	---	
Toluene	1.01	0.0250	0.0500	mg/L	50	1.00	---	101	80-120%	---	---	
1,2,3-Trichlorobenzene	1.07	0.0250	0.0500	mg/L	50	1.00	---	107	80-120%	---	---	
1,2,4-Trichlorobenzene	0.944	0.0500	0.100	mg/L	50	1.00	---	94	80-120%	---	---	
1,1,1-Trichloroethane	1.17	0.0125	0.0250	mg/L	50	1.00	---	117	80-120%	---	---	
1,1,2-Trichloroethane	1.03	0.0125	0.0250	mg/L	50	1.00	---	103	80-120%	---	---	
Trichloroethene (TCE)	1.21	0.0125	0.0250	mg/L	50	1.00	---	**121**	**80-120%**	---	---	Q-56
Trichlorofluoromethane	1.26	0.0500	0.100	mg/L	50	1.00	---	**126**	**80-120%**	---	---	Q-56
1,2,3-Trichloropropane	0.958	0.0250	0.0500	mg/L	50	1.00	---	96	80-120%	---	---	
1,2,4-Trimethylbenzene	1.14	0.0250	0.0500	mg/L	50	1.00	---	114	80-120%	---	---	
1,3,5-Trimethylbenzene	1.16	0.0250	0.0500	mg/L	50	1.00	---	116	80-120%	---	---	
Vinyl chloride	1.25	0.0125	0.0250	mg/L	50	1.00	---	**125**	**80-120%**	---	---	Q-56
m,p-Xylene	2.26	0.0250	0.0500	mg/L	50	2.00	---	113	80-120%	---	---	
o-Xylene	1.03	0.0125	0.0250	mg/L	50	1.00	---	103	80-120%	---	---	

Surr: 1,4-Difluorobenzene (Surr) *Recovery: 112 %* *Limits: 80-120 %* *Dilution: 1x*
Toluene-d8 (Surr) *99 %* *80-120 %* *"*
4-Bromofluorobenzene (Surr) *99 %* *80-120 %* *"*

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.

Darwin Thomas, Business Development Director

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

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

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
Batch 22K0839 - EPA 1311/5030B TCLP Volatiles							**Water**					
Duplicate (22K0839-DUP1)			Prepared: 11/22/22 10:54 Analyzed: 11/23/22 23:29									
QC Source Sample: Non-SDG (A2K0507-01)												
Acetone	ND	0.500	1.00	mg/L	50	---	ND	---	---	---	30%	
Benzene	**0.0495**	0.00625	0.0125	mg/L	50	---	0.0480	---	---	3	30%	Q-54j
Bromobenzene	ND	0.0125	0.0250	mg/L	50	---	ND	---	---	---	30%	
Bromochloromethane	ND	0.0250	0.0500	mg/L	50	---	ND	---	---	---	30%	
Bromodichloromethane	ND	0.0250	0.0500	mg/L	50	---	ND	---	---	---	30%	
Bromoform	ND	0.0250	0.0500	mg/L	50	---	ND	---	---	---	30%	
Bromomethane	ND	0.250	0.250	mg/L	50	---	ND	---	---	---	30%	
2-Butanone (MEK)	ND	0.250	0.500	mg/L	50	---	ND	---	---	---	30%	
n-Butylbenzene	ND	0.0250	0.0500	mg/L	50	---	ND	---	---	---	30%	
sec-Butylbenzene	ND	0.0250	0.0500	mg/L	50	---	ND	---	---	---	30%	
tert-Butylbenzene	ND	0.0250	0.0500	mg/L	50	---	ND	---	---	---	30%	
Carbon tetrachloride	ND	0.0250	0.0500	mg/L	50	---	ND	---	---	---	30%	
Chlorobenzene	ND	0.0125	0.0250	mg/L	50	---	ND	---	---	---	30%	
Chloroethane	ND	0.250	0.250	mg/L	50	---	ND	---	---	---	30%	
Chloroform	ND	0.0250	0.0500	mg/L	50	---	ND	---	---	---	30%	
Chloromethane	ND	0.125	0.250	mg/L	50	---	ND	---	---	---	30%	
2-Chlorotoluene	ND	0.0250	0.0500	mg/L	50	---	ND	---	---	---	30%	
4-Chlorotoluene	ND	0.0250	0.0500	mg/L	50	---	ND	---	---	---	30%	
1,2-Dibromo-3-chloropropane	ND	0.125	0.250	mg/L	50	---	ND	---	---	---	30%	
Dibromochloromethane	ND	0.0250	0.0500	mg/L	50	---	ND	---	---	---	30%	
1,2-Dibromoethane (EDB)	ND	0.0125	0.0250	mg/L	50	---	ND	---	---	---	30%	
Dibromomethane	ND	0.0250	0.0500	mg/L	50	---	ND	---	---	---	30%	
1,2-Dichlorobenzene	ND	0.0125	0.0250	mg/L	50	---	ND	---	---	---	30%	
1,3-Dichlorobenzene	ND	0.0125	0.0250	mg/L	50	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	0.0125	0.0250	mg/L	50	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	0.0250	0.0500	mg/L	50	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	0.0125	0.0250	mg/L	50	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	0.0125	0.0250	mg/L	50	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	0.0125	0.0250	mg/L	50	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	0.0250	0.0500	mg/L	50	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	0.0125	0.0250	mg/L	50	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	0.0125	0.0250	mg/L	50	---	ND	---	---	---	30%	

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.

Darwin Thomas, Business Development Director

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

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
Batch 22K0839 - EPA 1311/5030B TCLP Volatiles							**Water**					
Duplicate (22K0839-DUP1)			Prepared: 11/22/22 10:54		Analyzed: 11/23/22 23:29							
QC Source Sample: Non-SDG (A2K0507-01)												
1,3-Dichloropropane	ND	0.0250	0.0500	mg/L	50	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	0.0250	0.0500	mg/L	50	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	0.0250	0.0500	mg/L	50	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	0.0250	0.0500	mg/L	50	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	0.0250	0.0500	mg/L	50	---	ND	---	---	---	30%	
Ethylbenzene	**0.0290**	0.0125	0.0250	mg/L	50	---	0.0305	---	---	5	30%	
Hexachlorobutadiene	ND	0.125	0.250	mg/L	50	---	ND	---	---	---	30%	
2-Hexanone	ND	0.250	0.500	mg/L	50	---	ND	---	---	---	30%	
Isopropylbenzene	ND	0.0250	0.0500	mg/L	50	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	0.0250	0.0500	mg/L	50	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	0.250	0.500	mg/L	50	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	0.0250	0.0500	mg/L	50	---	ND	---	---	---	30%	
Methylene chloride	ND	0.250	0.500	mg/L	50	---	ND	---	---	---	30%	
n-Propylbenzene	ND	0.0125	0.0250	mg/L	50	---	ND	---	---	---	30%	
Styrene	ND	0.0250	0.0500	mg/L	50	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	0.0125	0.0250	mg/L	50	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	0.0125	0.0250	mg/L	50	---	ND	---	---	---	30%	
Naphthalene	**2.55**	0.0500	0.100	mg/L	50	---	2.61	---	---	2	30%	
Tetrachloroethene (PCE)	ND	0.0125	0.0250	mg/L	50	---	ND	---	---	---	30%	
Toluene	**0.0625**	0.0250	0.0500	mg/L	50	---	0.0655	---	---	5	30%	
1,2,3-Trichlorobenzene	ND	0.0250	0.0500	mg/L	50	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	0.0500	0.100	mg/L	50	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	0.0125	0.0250	mg/L	50	---	ND	---	---	---	30%	
1,1,2-Trichloroethane	ND	0.0125	0.0250	mg/L	50	---	ND	---	---	---	30%	
Trichloroethene (TCE)	ND	0.0125	0.0250	mg/L	50	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	0.0500	0.100	mg/L	50	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	0.0250	0.0500	mg/L	50	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	0.0250	0.0500	mg/L	50	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	0.0250	0.0500	mg/L	50	---	ND	---	---	---	30%	
Vinyl chloride	ND	0.0125	0.0250	mg/L	50	---	ND	---	---	---	30%	
m,p-Xylene	**0.0610**	0.0250	0.0500	mg/L	50	---	0.0640	---	---	5	30%	
o-Xylene	**0.0360**	0.0125	0.0250	mg/L	50	---	0.0365	---	---	1	30%	

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

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.

Darwin Thomas, Business Development Director

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: Gasco - Soil Residuals	
2749 Lockport Road	Project Number: 111323	Report ID:
Niagara Falls, NY 14305	Project Manager: Chip Byrd	A2K0502 - 12 02 22 1315

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
Batch 22K0839 - EPA 1311/5030B TCLP Volatiles									Water			
Duplicate (22K0839-DUP1)				Prepared: 11/22/22 10:54 Analyzed: 11/23/22 23:29								
QC Source Sample: Non-SDG (A2K0507-01)												
Surr: Toluene-d8 (Surr)			*Recovery: 102 %*	*Limits: 80-120 %*			*Dilution: 1x*					
4-Bromofluorobenzene (Surr)			*99 %*	*80-120 %*			*"*					
Matrix Spike (22K0839-MS1)				Prepared: 11/22/22 10:54 Analyzed: 11/24/22 00:33								
QC Source Sample: Non-SDG (A2K0507-01)												
1311/8260D												
Acetone	2.05	0.500	1.00	mg/L	50	2.00	ND	102	39-160%	---	---	
Benzene	1.35	0.00625	0.0125	mg/L	50	1.00	0.0480	**130**	**79-120%**	---	---	Q-54j
Bromobenzene	0.974	0.0125	0.0250	mg/L	50	1.00	ND	97	80-120%	---	---	
Bromochloromethane	1.19	0.0250	0.0500	mg/L	50	1.00	ND	119	78-123%	---	---	Q-54
Bromodichloromethane	1.09	0.0250	0.0500	mg/L	50	1.00	ND	109	79-125%	---	---	
Bromoform	0.996	0.0250	0.0500	mg/L	50	1.00	ND	100	66-130%	---	---	
Bromomethane	0.931	0.250	0.250	mg/L	50	1.00	ND	93	53-141%	---	---	
2-Butanone (MEK)	2.18	0.250	0.500	mg/L	50	2.00	ND	109	56-143%	---	---	
n-Butylbenzene	1.17	0.0250	0.0500	mg/L	50	1.00	ND	117	75-128%	---	---	
sec-Butylbenzene	1.19	0.0250	0.0500	mg/L	50	1.00	ND	119	77-126%	---	---	Q-54
tert-Butylbenzene	1.06	0.0250	0.0500	mg/L	50	1.00	ND	106	78-124%	---	---	
Carbon tetrachloride	1.19	0.0250	0.0500	mg/L	50	1.00	ND	119	72-136%	---	---	
Chlorobenzene	1.01	0.0125	0.0250	mg/L	50	1.00	ND	101	80-120%	---	---	
Chloroethane	1.28	0.250	0.250	mg/L	50	1.00	ND	128	60-138%	---	---	Q-54h
Chloroform	1.13	0.0250	0.0500	mg/L	50	1.00	ND	113	79-124%	---	---	
Chloromethane	1.18	0.125	0.250	mg/L	50	1.00	ND	118	50-139%	---	---	
2-Chlorotoluene	1.06	0.0250	0.0500	mg/L	50	1.00	ND	106	79-122%	---	---	
4-Chlorotoluene	1.06	0.0250	0.0500	mg/L	50	1.00	ND	106	78-122%	---	---	
1,2-Dibromo-3-chloropropane	0.887	0.125	0.250	mg/L	50	1.00	ND	89	62-128%	---	---	
Dibromochloromethane	0.953	0.0250	0.0500	mg/L	50	1.00	ND	95	74-126%	---	---	
1,2-Dibromoethane (EDB)	1.01	0.0125	0.0250	mg/L	50	1.00	ND	101	77-121%	---	---	
Dibromomethane	1.15	0.0250	0.0500	mg/L	50	1.00	ND	115	79-123%	---	---	
1,2-Dichlorobenzene	1.02	0.0125	0.0250	mg/L	50	1.00	ND	102	80-120%	---	---	
1,3-Dichlorobenzene	1.05	0.0125	0.0250	mg/L	50	1.00	ND	105	80-120%	---	---	
1,4-Dichlorobenzene	0.985	0.0125	0.0250	mg/L	50	1.00	ND	98	79-120%	---	---	
Dichlorodifluoromethane	1.03	0.0250	0.0500	mg/L	50	1.00	ND	103	32-152%	---	---	
1,1-Dichloroethane	1.18	0.0125	0.0250	mg/L	50	1.00	ND	118	77-125%	---	---	

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.

Darwin Thomas, Business Development Director

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: Gasco - Soil Residuals	
2749 Lockport Road	Project Number: 111323	Report ID:
Niagara Falls, NY 14305	Project Manager: Chip Byrd	A2K0502 - 12 02 22 1315

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
Batch 22K0839 - EPA 1311/5030B TCLP Volatiles							**Water**					
Matrix Spike (22K0839-MS1)			Prepared: 11/22/22 10:54		Analyzed: 11/24/22 00:33							
QC Source Sample: Non-SDG (A2K0507-01)												
1,1-Dichloroethene	1.26	0.0125	0.0250	mg/L	50	1.00	ND	126	71-131%	---	---	Q-54h
1,2-Dichloroethane (EDC)	0.974	0.0125	0.0250	mg/L	50	1.00	ND	97	73-128%	---	---	
cis-1,2-Dichloroethene	1.14	0.0250	0.0500	mg/L	50	1.00	ND	114	78-123%	---	---	
trans-1,2-Dichloroethene	1.20	0.0125	0.0250	mg/L	50	1.00	ND	120	75-124%	---	---	Q-54b
1,2-Dichloropropane	1.20	0.0125	0.0250	mg/L	50	1.00	ND	120	78-122%	---	---	Q-54
1,3-Dichloropropane	0.994	0.0250	0.0500	mg/L	50	1.00	ND	99	80-120%	---	---	
2,2-Dichloropropane	0.922	0.0250	0.0500	mg/L	50	1.00	ND	92	60-139%	---	---	
1,1-Dichloropropene	1.28	0.0250	0.0500	mg/L	50	1.00	ND	**128**	**79-125%**	---	---	Q-54i
cis-1,3-Dichloropropene	0.988	0.0250	0.0500	mg/L	50	1.00	ND	99	75-124%	---	---	
trans-1,3-Dichloropropene	0.976	0.0250	0.0500	mg/L	50	1.00	ND	98	73-127%	---	---	
Ethylbenzene	1.11	0.0125	0.0250	mg/L	50	1.00	0.0305	108	79-121%	---	---	
Hexachlorobutadiene	0.938	0.125	0.250	mg/L	50	1.00	ND	94	66-134%	---	---	
2-Hexanone	1.89	0.250	0.500	mg/L	50	2.00	ND	94	57-139%	---	---	
Isopropylbenzene	1.15	0.0250	0.0500	mg/L	50	1.00	ND	115	72-131%	---	---	
4-Isopropyltoluene	1.13	0.0250	0.0500	mg/L	50	1.00	ND	113	77-127%	---	---	
4-Methyl-2-pentanone (MiBK)	1.98	0.250	0.500	mg/L	50	2.00	ND	99	67-130%	---	---	
Methyl tert-butyl ether (MTBE)	1.12	0.0250	0.0500	mg/L	50	1.00	ND	112	71-124%	---	---	
Methylene chloride	1.20	0.250	0.500	mg/L	50	1.00	ND	120	74-124%	---	---	
n-Propylbenzene	1.10	0.0125	0.0250	mg/L	50	1.00	ND	110	76-126%	---	---	
Styrene	1.13	0.0250	0.0500	mg/L	50	1.00	ND	113	78-123%	---	---	
1,1,1,2-Tetrachloroethane	0.972	0.0125	0.0250	mg/L	50	1.00	ND	97	78-124%	---	---	
1,1,2,2-Tetrachloroethane	1.01	0.0125	0.0250	mg/L	50	1.00	ND	101	71-121%	---	---	
Naphthalene	3.53	0.0500	0.100	mg/L	50	1.00	2.61	92	61-128%	---	---	
Tetrachloroethene (PCE)	1.04	0.0125	0.0250	mg/L	50	1.00	ND	104	74-129%	---	---	
Toluene	1.07	0.0250	0.0500	mg/L	50	1.00	0.0655	100	80-121%	---	---	
1,2,3-Trichlorobenzene	1.12	0.0250	0.0500	mg/L	50	1.00	ND	112	69-129%	---	---	
1,2,4-Trichlorobenzene	0.997	0.0500	0.100	mg/L	50	1.00	ND	100	69-130%	---	---	
1,1,1-Trichloroethane	1.15	0.0125	0.0250	mg/L	50	1.00	ND	115	74-131%	---	---	
1,1,2-Trichloroethane	1.03	0.0125	0.0250	mg/L	50	1.00	ND	103	80-120%	---	---	
Trichloroethene (TCE)	1.22	0.0125	0.0250	mg/L	50	1.00	ND	122	79-123%	---	---	Q-54
Trichlorofluoromethane	1.23	0.0500	0.100	mg/L	50	1.00	ND	123	65-141%	---	---	Q-54g
1,2,3-Trichloropropane	0.932	0.0250	0.0500	mg/L	50	1.00	ND	93	73-122%	---	---	
1,2,4-Trimethylbenzene	1.16	0.0250	0.0500	mg/L	50	1.00	ND	116	76-124%	---	---	

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.

Darwin Thomas, Business Development Director

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

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

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
Batch 22K0839 - EPA 1311/5030B TCLP Volatiles							**Water**					
Matrix Spike (22K0839-MS1)			Prepared: 11/22/22 10:54 Analyzed: 11/24/22 00:33									
QC Source Sample: Non-SDG (A2K0507-01)												
1,3,5-Trimethylbenzene	1.15	0.0250	0.0500	mg/L	50	1.00	ND	115	75-124%	---	---	
Vinyl chloride	1.26	0.0125	0.0250	mg/L	50	1.00	ND	126	58-137%	---	---	
m,p-Xylene	2.34	0.0250	0.0500	mg/L	50	2.00	0.0640	114	80-121%	---	---	
o-Xylene	1.09	0.0125	0.0250	mg/L	50	1.00	0.0365	105	78-122%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 113 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*99 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*97 %*		*80-120 %*			*"*				

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.

Darwin Thomas, Business Development Director

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: Gasco - Soil Residuals	
2749 Lockport Road	Project Number: 111323	Report ID:
Niagara Falls, NY 14305	Project Manager: Chip Byrd	A2K0502 - 12 02 22 1315

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
Batch 22K0951 - EPA 1311/5030B TCLP Volatiles									Water			
Blank (22K0951-BLK1)			Prepared: 11/29/22 09:34	Analyzed: 11/29/22 12:03								**TCLPa**
1311/8260D												
Benzene	ND	0.00625	0.0125	mg/L	50	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 119 %*	*Limits: 80-120 %*			*Dilution: 1x*					
Toluene-d8 (Surr)			*103 %*	*80-120 %*			*"*					
4-Bromofluorobenzene (Surr)			*99 %*	*80-120 %*			*"*					
Blank (22K0951-BLK2)			Prepared: 11/29/22 09:34	Analyzed: 11/29/22 12:25								**TCLPb**
1311/8260D												
Benzene	ND	0.00625	0.0125	mg/L	50	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 118 %*	*Limits: 80-120 %*			*Dilution: 1x*					
Toluene-d8 (Surr)			*103 %*	*80-120 %*			*"*					
4-Bromofluorobenzene (Surr)			*99 %*	*80-120 %*			*"*					
LCS (22K0951-BS1)			Prepared: 11/29/22 09:34	Analyzed: 11/29/22 11:18								**TCLPa**
1311/8260D												
Benzene	1.14	0.00625	0.0125	mg/L	50	1.00	---	114	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 110 %*	*Limits: 80-120 %*			*Dilution: 1x*					
Toluene-d8 (Surr)			*100 %*	*80-120 %*			*"*					
4-Bromofluorobenzene (Surr)			*99 %*	*80-120 %*			*"*					
Duplicate (22K0951-DUP1)			Prepared: 11/29/22 09:34	Analyzed: 11/29/22 13:08								
QC Source Sample: T103A-111022-14 (A2K0502-01RE1)												
1311/8260D												
Benzene	**0.0465**	0.00625	0.0125	mg/L	50	---	0.0460	---	---	1	30%	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 117 %*	*Limits: 80-120 %*			*Dilution: 1x*					
Toluene-d8 (Surr)			*102 %*	*80-120 %*			*"*					
4-Bromofluorobenzene (Surr)			*100 %*	*80-120 %*			*"*					
Matrix Spike (22K0951-MS1)			Prepared: 11/29/22 09:34	Analyzed: 11/29/22 13:50								
QC Source Sample: Non-SDG (A2K0507-01RE1)												
1311/8260D												
Benzene	1.33	0.00625	0.0125	mg/L	50	1.00	0.0820	**125**	**79-120%**	---	---	Q-01

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.

Darwin Thomas, Business Development Director

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

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
Batch 22K0951 - EPA 1311/5030B TCLP Volatiles												**Water**
Matrix Spike (22K0951-MS1)					Prepared: 11/29/22 09:34		Analyzed: 11/29/22 13:50					
QC Source Sample: Non-SDG (A2K0507-01RE1)												
Surr: 1,4-Difluorobenzene (Surr)	*Recovery: 110 %*		*Limits: 80-120 %*		*Dilution: 1x*							
Toluene-d8 (Surr)	*100 %*		*80-120 %*		*"*							
4-Bromofluorobenzene (Surr)	*99 %*		*80-120 %*		*"*							

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.

Darwin Thomas, Business Development Director

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

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
Batch 22K0589 - EPA 3546							**Soil**					
Blank (22K0589-BLK2)			Prepared: 11/15/22 15:06 Analyzed: 11/15/22 21:16									
EPA 8270E												
Acenaphthene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Acenaphthylene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Anthracene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Benz(a)anthracene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Benzo(a)pyrene	ND	1.87	3.75	ug/kg wet	1	---	---	---	---	---	---	
Benzo(b)fluoranthene	ND	1.87	3.75	ug/kg wet	1	---	---	---	---	---	---	
Benzo(k)fluoranthene	ND	1.87	3.75	ug/kg wet	1	---	---	---	---	---	---	
Benzo(g,h,i)perylene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Chrysene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Dibenz(a,h)anthracene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Fluoranthene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Fluorene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Indeno(1,2,3-cd)pyrene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
1-Methylnaphthalene	ND	2.50	5.00	ug/kg wet	1	---	---	---	---	---	---	
2-Methylnaphthalene	ND	2.50	5.00	ug/kg wet	1	---	---	---	---	---	---	
Naphthalene	ND	2.50	5.00	ug/kg wet	1	---	---	---	---	---	---	
Phenanthrene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Pyrene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Carbazole	ND	1.87	3.75	ug/kg wet	1	---	---	---	---	---	---	
Dibenzofuran	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
2-Chlorophenol	ND	6.25	12.5	ug/kg wet	1	---	---	---	---	---	---	
4-Chloro-3-methylphenol	ND	12.5	25.0	ug/kg wet	1	---	---	---	---	---	---	
2,4-Dichlorophenol	ND	6.25	12.5	ug/kg wet	1	---	---	---	---	---	---	
2,4-Dimethylphenol	ND	6.25	12.5	ug/kg wet	1	---	---	---	---	---	---	
2,4-Dinitrophenol	ND	31.2	62.5	ug/kg wet	1	---	---	---	---	---	---	
4,6-Dinitro-2-methylphenol	ND	31.2	62.5	ug/kg wet	1	---	---	---	---	---	---	
2-Methylphenol	ND	3.12	6.25	ug/kg wet	1	---	---	---	---	---	---	
3+4-Methylphenol(s)	ND	3.12	6.25	ug/kg wet	1	---	---	---	---	---	---	
2-Nitrophenol	ND	12.5	25.0	ug/kg wet	1	---	---	---	---	---	---	
4-Nitrophenol	ND	12.5	25.0	ug/kg wet	1	---	---	---	---	---	---	
Pentachlorophenol (PCP)	ND	12.5	25.0	ug/kg wet	1	---	---	---	---	---	---	
Phenol	ND	2.50	5.00	ug/kg wet	1	---	---	---	---	---	---	
2,3,4,6-Tetrachlorophenol	ND	6.25	12.5	ug/kg wet	1	---	---	---	---	---	---	

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.

Darwin Thomas, Business Development Director

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: Gasco - Soil Residuals	
2749 Lockport Road	Project Number: 111323	Report ID:
Niagara Falls, NY 14305	Project Manager: Chip Byrd	A2K0502 - 12 02 22 1315

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
Batch 22K0589 - EPA 3546							Soil					
Blank (22K0589-BLK2)			Prepared: 11/15/22 15:06		Analyzed: 11/15/22 21:16							
2,3,5,6-Tetrachlorophenol	ND	6.25	12.5	ug/kg wet	1	---	---	---	---	---	---	
2,4,5-Trichlorophenol	ND	6.25	12.5	ug/kg wet	1	---	---	---	---	---	---	
Nitrobenzene	ND	12.5	25.0	ug/kg wet	1	---	---	---	---	---	---	
2,4,6-Trichlorophenol	ND	6.25	12.5	ug/kg wet	1	---	---	---	---	---	---	
Bis(2-ethylhexyl)phthalate	ND	18.7	37.5	ug/kg wet	1	---	---	---	---	---	---	
Butyl benzyl phthalate	ND	12.5	25.0	ug/kg wet	1	---	---	---	---	---	---	
Diethylphthalate	ND	12.5	25.0	ug/kg wet	1	---	---	---	---	---	---	
Dimethylphthalate	ND	12.5	25.0	ug/kg wet	1	---	---	---	---	---	---	
Di-n-butylphthalate	**164**	12.5	25.0	ug/kg wet	1	---	---	---	---	---	---	B
Di-n-octyl phthalate	ND	12.5	25.0	ug/kg wet	1	---	---	---	---	---	---	
N-Nitrosodimethylamine	ND	3.12	6.25	ug/kg wet	1	---	---	---	---	---	---	
N-Nitroso-di-n-propylamine	ND	3.12	6.25	ug/kg wet	1	---	---	---	---	---	---	
N-Nitrosodiphenylamine	ND	3.12	6.25	ug/kg wet	1	---	---	---	---	---	---	
Bis(2-Chloroethoxy) methane	ND	3.12	6.25	ug/kg wet	1	---	---	---	---	---	---	
Bis(2-Chloroethyl) ether	ND	3.12	6.25	ug/kg wet	1	---	---	---	---	---	---	
2,2'-Oxybis(1-Chloropropane)	ND	3.12	6.25	ug/kg wet	1	---	---	---	---	---	---	
Hexachlorobenzene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Hexachlorobutadiene	ND	3.12	6.25	ug/kg wet	1	---	---	---	---	---	---	
Hexachlorocyclopentadiene	ND	6.25	12.5	ug/kg wet	1	---	---	---	---	---	---	
Hexachloroethane	ND	3.12	6.25	ug/kg wet	1	---	---	---	---	---	---	
2-Chloronaphthalene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	3.12	6.25	ug/kg wet	1	---	---	---	---	---	---	
4-Bromophenyl phenyl ether	ND	3.12	6.25	ug/kg wet	1	---	---	---	---	---	---	
4-Chlorophenyl phenyl ether	ND	3.12	6.25	ug/kg wet	1	---	---	---	---	---	---	
Aniline	ND	6.25	12.5	ug/kg wet	1	---	---	---	---	---	---	
4-Chloroaniline	ND	3.12	6.25	ug/kg wet	1	---	---	---	---	---	---	
2-Nitroaniline	ND	25.0	50.0	ug/kg wet	1	---	---	---	---	---	---	
3-Nitroaniline	ND	25.0	50.0	ug/kg wet	1	---	---	---	---	---	---	
4-Nitroaniline	ND	25.0	50.0	ug/kg wet	1	---	---	---	---	---	---	
2,4-Dinitrotoluene	ND	12.5	25.0	ug/kg wet	1	---	---	---	---	---	---	
2,6-Dinitrotoluene	ND	12.5	25.0	ug/kg wet	1	---	---	---	---	---	---	
Benzoic acid	ND	157	312	ug/kg wet	1	---	---	---	---	---	---	
Benzyl alcohol	ND	6.25	12.5	ug/kg wet	1	---	---	---	---	---	---	
Isophorone	ND	3.12	6.25	ug/kg wet	1	---	---	---	---	---	---	

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.

Darwin Thomas, Business Development Director

APEX LABORATORIES

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

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
Batch 22K0589 - EPA 3546							**Soil**					
Blank (22K0589-BLK2)			Prepared: 11/15/22 15:06 Analyzed: 11/15/22 21:16									
Azobenzene (1,2-DPH)	ND	3.12	6.25	ug/kg wet	1	---	---	---	---	---	---	
Bis(2-Ethylhexyl) adipate	ND	31.2	62.5	ug/kg wet	1	---	---	---	---	---	---	
3,3'-Dichlorobenzidine	ND	25.0	50.0	ug/kg wet	1	---	---	---	---	---	---	Q-52
1,2-Dinitrobenzene	ND	31.2	62.5	ug/kg wet	1	---	---	---	---	---	---	
1,3-Dinitrobenzene	ND	31.2	62.5	ug/kg wet	1	---	---	---	---	---	---	
1,4-Dinitrobenzene	ND	31.2	62.5	ug/kg wet	1	---	---	---	---	---	---	
Pyridine	ND	6.25	12.5	ug/kg wet	1	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	3.12	6.25	ug/kg wet	1	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	3.12	6.25	ug/kg wet	1	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	3.12	6.25	ug/kg wet	1	---	---	---	---	---	---	
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 98 %*	*Limits: 37-122 %*			*Dilution: 1x*					
2-Fluorobiphenyl (Surr)			*83 %*	*44-120 %*			*"*					
Phenol-d6 (Surr)			*98 %*	*33-122 %*			*"*					
p-Terphenyl-d14 (Surr)			*102 %*	*54-127 %*			*"*					
2-Fluorophenol (Surr)			*92 %*	*35-120 %*			*"*					
2,4,6-Tribromophenol (Surr)			*87 %*	*39-132 %*			*"*					
LCS (22K0589-BS2)			Prepared: 11/15/22 15:06 Analyzed: 11/15/22 21:50									
EPA 8270E												
Acenaphthene	495	2.66	5.34	ug/kg wet	2	533	---	93	40-123%	---	---	
Acenaphthylene	525	2.66	5.34	ug/kg wet	2	533	---	98	32-132%	---	---	
Anthracene	530	2.66	5.34	ug/kg wet	2	533	---	99	47-123%	---	---	
Benz(a)anthracene	537	2.66	5.34	ug/kg wet	2	533	---	101	49-126%	---	---	
Benzo(a)pyrene	538	4.00	8.00	ug/kg wet	2	533	---	101	45-129%	---	---	
Benzo(b)fluoranthene	538	4.00	8.00	ug/kg wet	2	533	---	101	45-132%	---	---	
Benzo(k)fluoranthene	529	4.00	8.00	ug/kg wet	2	533	---	99	47-132%	---	---	
Benzo(g,h,i)perylene	490	2.66	5.34	ug/kg wet	2	533	---	92	43-134%	---	---	
Chrysene	517	2.66	5.34	ug/kg wet	2	533	---	97	50-124%	---	---	
Dibenz(a,h)anthracene	519	2.66	5.34	ug/kg wet	2	533	---	97	45-134%	---	---	
Fluoranthene	530	2.66	5.34	ug/kg wet	2	533	---	99	50-127%	---	---	
Fluorene	513	2.66	5.34	ug/kg wet	2	533	---	96	43-125%	---	---	
Indeno(1,2,3-cd)pyrene	511	2.66	5.34	ug/kg wet	2	533	---	96	45-133%	---	---	
1-Methylnaphthalene	514	5.34	10.7	ug/kg wet	2	533	---	96	40-120%	---	---	
2-Methylnaphthalene	518	5.34	10.7	ug/kg wet	2	533	---	97	38-122%	---	---	

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.

Darwin Thomas, Business Development Director

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

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

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
Batch 22K0589 - EPA 3546							**Soil**					
LCS (22K0589-BS2)			Prepared: 11/15/22 15:06		Analyzed: 11/15/22 21:50							
Naphthalene	504	5.34	10.7	ug/kg wet	2	533	---	95	35-123%	---	---	
Phenanthrene	492	2.66	5.34	ug/kg wet	2	533	---	92	50-121%	---	---	
Pyrene	524	2.66	5.34	ug/kg wet	2	533	---	98	47-127%	---	---	
Carbazole	523	4.00	8.00	ug/kg wet	2	533	---	98	50-123%	---	---	
Dibenzofuran	492	2.66	5.34	ug/kg wet	2	533	---	92	44-120%	---	---	
2-Chlorophenol	540	13.3	26.6	ug/kg wet	2	533	---	101	34-121%	---	---	
4-Chloro-3-methylphenol	570	26.6	53.4	ug/kg wet	2	533	---	107	45-122%	---	---	
2,4-Dichlorophenol	535	13.3	26.6	ug/kg wet	2	533	---	100	40-122%	---	---	
2,4-Dimethylphenol	575	13.3	26.6	ug/kg wet	2	533	---	108	30-127%	---	---	
2,4-Dinitrophenol	408	66.6	133	ug/kg wet	2	533	---	77	10-137%	---	---	
4,6-Dinitro-2-methylphenol	464	66.6	133	ug/kg wet	2	533	---	87	29-132%	---	---	
2-Methylphenol	572	6.66	13.3	ug/kg wet	2	533	---	107	32-122%	---	---	
3+4-Methylphenol(s)	594	6.66	13.3	ug/kg wet	2	533	---	111	34-120%	---	---	
2-Nitrophenol	509	26.6	53.4	ug/kg wet	2	533	---	95	36-123%	---	---	
4-Nitrophenol	483	26.6	53.4	ug/kg wet	2	533	---	91	30-132%	---	---	
Pentachlorophenol (PCP)	449	26.6	53.4	ug/kg wet	2	533	---	84	25-133%	---	---	
Phenol	579	5.34	10.7	ug/kg wet	2	533	---	109	34-121%	---	---	
2,3,4,6-Tetrachlorophenol	530	13.3	26.6	ug/kg wet	2	533	---	99	44-125%	---	---	
2,3,5,6-Tetrachlorophenol	501	13.3	26.6	ug/kg wet	2	533	---	94	40-120%	---	---	
2,4,5-Trichlorophenol	514	13.3	26.6	ug/kg wet	2	533	---	96	41-124%	---	---	
Nitrobenzene	573	26.6	53.4	ug/kg wet	2	533	---	107	34-122%	---	---	Q-41
2,4,6-Trichlorophenol	521	13.3	26.6	ug/kg wet	2	533	---	98	39-126%	---	---	
Bis(2-ethylhexyl)phthalate	575	40.0	80.0	ug/kg wet	2	533	---	108	51-133%	---	---	
Butyl benzyl phthalate	596	26.6	53.4	ug/kg wet	2	533	---	112	48-132%	---	---	
Diethylphthalate	534	26.6	53.4	ug/kg wet	2	533	---	100	50-124%	---	---	
Dimethylphthalate	512	26.6	53.4	ug/kg wet	2	533	---	96	48-124%	---	---	
Di-n-butylphthalate	696	26.6	53.4	ug/kg wet	2	533	---	**130**	**51-128%**	---	---	B, Q-29
Di-n-octyl phthalate	623	26.6	53.4	ug/kg wet	2	533	---	117	45-140%	---	---	
N-Nitrosodimethylamine	510	6.66	13.3	ug/kg wet	2	533	---	96	23-120%	---	---	
N-Nitroso-di-n-propylamine	602	6.66	13.3	ug/kg wet	2	533	---	113	36-120%	---	---	Q-41
N-Nitrosodiphenylamine	547	6.66	13.3	ug/kg wet	2	533	---	103	38-127%	---	---	
Bis(2-Chloroethoxy) methane	530	6.66	13.3	ug/kg wet	2	533	---	99	36-121%	---	---	
Bis(2-Chloroethyl) ether	575	6.66	13.3	ug/kg wet	2	533	---	108	31-120%	---	---	
2,2'-Oxybis(1-Chloropropane)	603	6.66	13.3	ug/kg wet	2	533	---	113	39-120%	---	---	Q-41

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.

Darwin Thomas, Business Development Director

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: Gasco - Soil Residuals	
2749 Lockport Road	Project Number: 111323	Report ID:
Niagara Falls, NY 14305	Project Manager: Chip Byrd	A2K0502 - 12 02 22 1315

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
Batch 22K0589 - EPA 3546							Soil					
LCS (22K0589-BS2)			Prepared: 11/15/22 15:06 Analyzed: 11/15/22 21:50									
Hexachlorobenzene	485	2.66	5.34	ug/kg wet	2	533	---	91	45-122%	---	---	
Hexachlorobutadiene	475	6.66	13.3	ug/kg wet	2	533	---	89	32-123%	---	---	
Hexachlorocyclopentadiene	456	13.3	26.6	ug/kg wet	2	533	---	86	10-140%	---	---	
Hexachloroethane	495	6.66	13.3	ug/kg wet	2	533	---	93	28-120%	---	---	
2-Chloronaphthalene	490	2.66	5.34	ug/kg wet	2	533	---	92	41-120%	---	---	
1,2,4-Trichlorobenzene	497	6.66	13.3	ug/kg wet	2	533	---	93	34-120%	---	---	
4-Bromophenyl phenyl ether	517	6.66	13.3	ug/kg wet	2	533	---	97	46-124%	---	---	
4-Chlorophenyl phenyl ether	497	6.66	13.3	ug/kg wet	2	533	---	93	45-121%	---	---	
Aniline	308	13.3	26.6	ug/kg wet	2	533	---	58	10-120%	---	---	
4-Chloroaniline	260	6.66	13.3	ug/kg wet	2	533	---	49	17-120%	---	---	Q-31
2-Nitroaniline	507	53.4	107	ug/kg wet	2	533	---	95	44-127%	---	---	
3-Nitroaniline	477	53.4	107	ug/kg wet	2	533	---	89	33-120%	---	---	
4-Nitroaniline	450	53.4	107	ug/kg wet	2	533	---	84	51-125%	---	---	
2,4-Dinitrotoluene	537	26.6	53.4	ug/kg wet	2	533	---	101	48-126%	---	---	
2,6-Dinitrotoluene	532	26.6	53.4	ug/kg wet	2	533	---	100	46-124%	---	---	
Benzoic acid	1020	334	666	ug/kg wet	2	1070	---	96	10-140%	---	---	Q-41
Benzyl alcohol	564	13.3	26.6	ug/kg wet	2	533	---	106	29-122%	---	---	
Isophorone	580	6.66	13.3	ug/kg wet	2	533	---	109	30-122%	---	---	
Azobenzene (1,2-DPH)	594	6.66	13.3	ug/kg wet	2	533	---	111	39-125%	---	---	Q-41
Bis(2-Ethylhexyl) adipate	581	66.6	133	ug/kg wet	2	533	---	109	61-121%	---	---	
3,3'-Dichlorobenzidine	2730	53.4	107	ug/kg wet	2	1070	---	**256**	**22-121%**	---	---	Q-29, Q-41
1,2-Dinitrobenzene	519	66.6	133	ug/kg wet	2	533	---	97	44-120%	---	---	
1,3-Dinitrobenzene	494	66.6	133	ug/kg wet	2	533	---	93	43-127%	---	---	
1,4-Dinitrobenzene	513	66.6	133	ug/kg wet	2	533	---	96	37-132%	---	---	
Pyridine	372	13.3	26.6	ug/kg wet	2	533	---	70	10-120%	---	---	
1,2-Dichlorobenzene	475	6.66	13.3	ug/kg wet	2	533	---	89	33-120%	---	---	
1,3-Dichlorobenzene	465	6.66	13.3	ug/kg wet	2	533	---	87	30-120%	---	---	
1,4-Dichlorobenzene	474	6.66	13.3	ug/kg wet	2	533	---	89	31-120%	---	---	

Surr: Nitrobenzene-d5 (Surr)	*Recovery: 106 %*	*Limits: 37-122 %*	*Dilution: 2x*
2-Fluorobiphenyl (Surr)	*90 %*	*44-120 %*	*"*
Phenol-d6 (Surr)	*108 %*	*33-122 %*	*"*
p-Terphenyl-d14 (Surr)	*103 %*	*54-127 %*	*"*
2-Fluorophenol (Surr)	*99 %*	*35-120 %*	*"*
2,4,6-Tribromophenol (Surr)	*102 %*	*39-132 %*	*"*

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.

Darwin Thomas, Business Development Director

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: Gasco - Soil Residuals	
2749 Lockport Road	Project Number: 111323	Report ID:
Niagara Falls, NY 14305	Project Manager: Chip Byrd	A2K0502 - 12 02 22 1315

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
Batch 22K0589 - EPA 3546							**Soil**					
Duplicate (22K0589-DUP2)			Prepared: 11/15/22 15:06 Analyzed: 11/15/22 22:57									
QC Source Sample: T103A-111022-14 (A2K0502-01)												
EPA 8270E												
Acenaphthene	**590000**	4380	8790	ug/kg dry	1000	---	611000	---	---	3	30%	
Acenaphthylene	ND	26300	26300	ug/kg dry	1000	---	ND	---	---	---	30%	R-02
Anthracene	**272000**	4380	8790	ug/kg dry	1000	---	280000	---	---	3	30%	
Benz(a)anthracene	**130000**	4380	8790	ug/kg dry	1000	---	133000	---	---	2	30%	
Benzo(a)pyrene	**134000**	6580	13200	ug/kg dry	1000	---	139000	---	---	4	30%	
Benzo(b)fluoranthene	**109000**	6580	13200	ug/kg dry	1000	---	110000	---	---	0.7	30%	
Benzo(k)fluoranthene	**38900**	6580	13200	ug/kg dry	1000	---	41400	---	---	6	30%	M-05
Benzo(g,h,i)perylene	**71600**	4380	8790	ug/kg dry	1000	---	75100	---	---	5	30%	
Chrysene	**165000**	4380	8790	ug/kg dry	1000	---	174000	---	---	5	30%	
Dibenz(a,h)anthracene	**6880**	4380	8790	ug/kg dry	1000	---	7830	---	---	13	30%	J
Fluoranthene	**641000**	4380	8790	ug/kg dry	1000	---	680000	---	---	6	30%	
Fluorene	**308000**	4380	8790	ug/kg dry	1000	---	325000	---	---	5	30%	
Indeno(1,2,3-cd)pyrene	**67000**	4380	8790	ug/kg dry	1000	---	70100	---	---	4	30%	
1-Methylnaphthalene	**468000**	8790	17500	ug/kg dry	1000	---	477000	---	---	2	30%	
2-Methylnaphthalene	**619000**	8790	17500	ug/kg dry	1000	---	626000	---	---	1	30%	
Naphthalene	**309000**	8790	17500	ug/kg dry	1000	---	313000	---	---	1	30%	
Phenanthrene	**1540000**	4380	8790	ug/kg dry	1000	---	1580000	---	---	3	30%	
Pyrene	**754000**	4380	8790	ug/kg dry	1000	---	797000	---	---	6	30%	
Carbazole	**55000**	6580	13200	ug/kg dry	1000	---	57100	---	---	4	30%	
Dibenzofuran	**43500**	4380	8790	ug/kg dry	1000	---	43900	---	---	0.9	30%	
2-Chlorophenol	ND	22000	43800	ug/kg dry	1000	---	ND	---	---	---	30%	
4-Chloro-3-methylphenol	ND	43800	87900	ug/kg dry	1000	---	ND	---	---	---	30%	
2,4-Dichlorophenol	ND	22000	43800	ug/kg dry	1000	---	ND	---	---	---	30%	
2,4-Dimethylphenol	ND	22000	43800	ug/kg dry	1000	---	ND	---	---	---	30%	
2,4-Dinitrophenol	ND	110000	220000	ug/kg dry	1000	---	ND	---	---	---	30%	
4,6-Dinitro-2-methylphenol	ND	110000	220000	ug/kg dry	1000	---	ND	---	---	---	30%	
2-Methylphenol	ND	11000	22000	ug/kg dry	1000	---	ND	---	---	---	30%	
3+4-Methylphenol(s)	ND	11000	22000	ug/kg dry	1000	---	ND	---	---	---	30%	
2-Nitrophenol	ND	43800	87900	ug/kg dry	1000	---	ND	---	---	---	30%	
4-Nitrophenol	ND	43800	87900	ug/kg dry	1000	---	ND	---	---	---	30%	
Pentachlorophenol (PCP)	ND	43800	87900	ug/kg dry	1000	---	ND	---	---	---	30%	

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.

Darwin Thomas, Business Development Director

APEX LABORATORIES

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

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
Batch 22K0589 - EPA 3546							**Soil**					
Duplicate (22K0589-DUP2)			Prepared: 11/15/22 15:06		Analyzed: 11/15/22 22:57							
QC Source Sample: T103A-111022-14 (A2K0502-01)												
Phenol	ND	8790	17500	ug/kg dry	1000	---	ND	---	---	---	30%	
2,3,4,6-Tetrachlorophenol	ND	22000	43800	ug/kg dry	1000	---	ND	---	---	---	30%	
2,3,5,6-Tetrachlorophenol	ND	22000	43800	ug/kg dry	1000	---	ND	---	---	---	30%	
2,4,5-Trichlorophenol	ND	22000	43800	ug/kg dry	1000	---	ND	---	---	---	30%	
Nitrobenzene	ND	43800	87900	ug/kg dry	1000	---	ND	---	---	---	30%	
2,4,6-Trichlorophenol	ND	22000	43800	ug/kg dry	1000	---	ND	---	---	---	30%	
Bis(2-ethylhexyl)phthalate	ND	65800	132000	ug/kg dry	1000	---	ND	---	---	---	30%	
Butyl benzyl phthalate	ND	43800	87900	ug/kg dry	1000	---	ND	---	---	---	30%	
Diethylphthalate	ND	43800	87900	ug/kg dry	1000	---	ND	---	---	---	30%	
Dimethylphthalate	ND	43800	87900	ug/kg dry	1000	---	ND	---	---	---	30%	
Di-n-butylphthalate	ND	43800	87900	ug/kg dry	1000	---	ND	---	---	---	30%	
Di-n-octyl phthalate	ND	43800	87900	ug/kg dry	1000	---	ND	---	---	---	30%	
N-Nitrosodimethylamine	ND	11000	22000	ug/kg dry	1000	---	ND	---	---	---	30%	
N-Nitroso-di-n-propylamine	ND	11000	22000	ug/kg dry	1000	---	ND	---	---	---	30%	
N-Nitrosodiphenylamine	ND	39500	39500	ug/kg dry	1000	---	ND	---	---	---	30%	R-02
Bis(2-Chloroethoxy) methane	ND	11000	22000	ug/kg dry	1000	---	ND	---	---	---	30%	
Bis(2-Chloroethyl) ether	ND	11000	22000	ug/kg dry	1000	---	ND	---	---	---	30%	
2,2'-Oxybis(1-Chloropropane)	ND	11000	22000	ug/kg dry	1000	---	ND	---	---	---	30%	
Hexachlorobenzene	ND	4380	8790	ug/kg dry	1000	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	11000	22000	ug/kg dry	1000	---	ND	---	---	---	30%	
Hexachlorocyclopentadiene	ND	22000	43800	ug/kg dry	1000	---	ND	---	---	---	30%	
Hexachloroethane	ND	11000	22000	ug/kg dry	1000	---	ND	---	---	---	30%	
2-Chloronaphthalene	ND	4380	8790	ug/kg dry	1000	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	11000	22000	ug/kg dry	1000	---	ND	---	---	---	30%	
4-Bromophenyl phenyl ether	ND	11000	22000	ug/kg dry	1000	---	ND	---	---	---	30%	
4-Chlorophenyl phenyl ether	ND	11000	22000	ug/kg dry	1000	---	ND	---	---	---	30%	
Aniline	ND	22000	43800	ug/kg dry	1000	---	ND	---	---	---	30%	
4-Chloroaniline	ND	11000	22000	ug/kg dry	1000	---	ND	---	---	---	30%	
2-Nitroaniline	ND	87900	175000	ug/kg dry	1000	---	ND	---	---	---	30%	
3-Nitroaniline	ND	87900	175000	ug/kg dry	1000	---	ND	---	---	---	30%	
4-Nitroaniline	ND	87900	175000	ug/kg dry	1000	---	ND	---	---	---	30%	
2,4-Dinitrotoluene	ND	43800	87900	ug/kg dry	1000	---	ND	---	---	---	30%	
2,6-Dinitrotoluene	ND	43800	87900	ug/kg dry	1000	---	ND	---	---	---	30%	

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.

Darwin Thomas, Business Development Director

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

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
Batch 22K0589 - EPA 3546							**Soil**					
Duplicate (22K0589-DUP2)			Prepared: 11/15/22 15:06	Analyzed: 11/15/22 22:57								
QC Source Sample: T103A-111022-14 (A2K0502-01)												
Benzoic acid	ND	550000	1100000	ug/kg dry	1000	---	ND	---	---	---	30%	
Benzyl alcohol	ND	22000	43800	ug/kg dry	1000	---	ND	---	---	---	30%	
Isophorone	ND	11000	22000	ug/kg dry	1000	---	ND	---	---	---	30%	
Azobenzene (1,2-DPH)	ND	11000	22000	ug/kg dry	1000	---	ND	---	---	---	30%	
Bis(2-Ethylhexyl) adipate	ND	110000	220000	ug/kg dry	1000	---	ND	---	---	---	30%	
3,3'-Dichlorobenzidine	ND	87900	175000	ug/kg dry	1000	---	ND	---	---	---	30%	Q-52
1,2-Dinitrobenzene	ND	110000	220000	ug/kg dry	1000	---	ND	---	---	---	30%	
1,3-Dinitrobenzene	ND	110000	220000	ug/kg dry	1000	---	ND	---	---	---	30%	
1,4-Dinitrobenzene	ND	110000	220000	ug/kg dry	1000	---	ND	---	---	---	30%	
Pyridine	ND	22000	43800	ug/kg dry	1000	---	ND	---	---	---	30%	
1,2-Dichlorobenzene	ND	11000	22000	ug/kg dry	1000	---	ND	---	---	---	30%	
1,3-Dichlorobenzene	ND	11000	22000	ug/kg dry	1000	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	11000	22000	ug/kg dry	1000	---	ND	---	---	---	30%	
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 206 %*	*Limits: 37-122 %*			*Dilution: 1000x*					S-05
2-Fluorobiphenyl (Surr)			*255 %*	*44-120 %*			*"*					S-05
Phenol-d6 (Surr)			*67 %*	*33-122 %*			*"*					S-05
p-Terphenyl-d14 (Surr)			*161 %*	*54-127 %*			*"*					S-05
2-Fluorophenol (Surr)			*48 %*	*35-120 %*			*"*					S-05
2,4,6-Tribromophenol (Surr)			*%*	*39-132 %*			*"*					S-01
Matrix Spike (22K0589-MS2)			Prepared: 11/15/22 15:06	Analyzed: 11/16/22 16:54								
QC Source Sample: Non-SDG (A2K0513-01RE1)												
EPA 8270E												
Acenaphthene	1380	10.5	21.1	ug/kg dry	4	1050	130	119	40-123%	---	---	
Acenaphthylene	1040	10.5	21.1	ug/kg dry	4	1050	39.1	95	32-132%	---	---	
Anthracene	1140	10.5	21.1	ug/kg dry	4	1050	85.6	101	47-123%	---	---	
Benz(a)anthracene	1000	10.5	21.1	ug/kg dry	4	1050	41.1	91	49-126%	---	---	
Benzo(a)pyrene	1070	15.8	31.6	ug/kg dry	4	1050	60.2	96	45-129%	---	---	
Benzo(b)fluoranthene	991	15.8	31.6	ug/kg dry	4	1050	46.2	90	45-132%	---	---	
Benzo(k)fluoranthene	848	15.8	31.6	ug/kg dry	4	1050	26.7	78	47-132%	---	---	
Benzo(g,h,i)perylene	949	10.5	21.1	ug/kg dry	4	1050	34.3	87	43-134%	---	---	
Chrysene	1000	10.5	21.1	ug/kg dry	4	1050	47.4	91	50-124%	---	---	
Dibenz(a,h)anthracene	809	10.5	21.1	ug/kg dry	4	1050	ND	77	45-134%	---	---	

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.

Darwin Thomas, Business Development Director

APEX LABORATORIES

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

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
Batch 22K0589 - EPA 3546							**Soil**					
Matrix Spike (22K0589-MS2)			Prepared: 11/15/22 15:06		Analyzed: 11/16/22 16:54							
QC Source Sample: Non-SDG (A2K0513-01RE1)												
Fluoranthene	1460	10.5	21.1	ug/kg dry	4	1050	162	123	50-127%	---	---	
Fluorene	1240	10.5	21.1	ug/kg dry	4	1050	96.4	109	43-125%	---	---	
Indeno(1,2,3-cd)pyrene	914	10.5	21.1	ug/kg dry	4	1050	32.6	84	45-133%	---	---	
1-Methylnaphthalene	1390	21.1	42.1	ug/kg dry	4	1050	111	**121**	**40-120%**	---	---	Q-01
2-Methylnaphthalene	1640	21.1	42.1	ug/kg dry	4	1050	158	**141**	**38-122%**	---	---	Q-01
Naphthalene	3250	21.1	42.1	ug/kg dry	4	1050	478	**263**	**35-123%**	---	---	Q-01
Phenanthrene	2390	10.5	21.1	ug/kg dry	4	1050	501	**180**	**50-121%**	---	---	Q-01
Pyrene	1580	10.5	21.1	ug/kg dry	4	1050	195	**132**	**47-127%**	---	---	Q-01
Carbazole	894	15.8	31.6	ug/kg dry	4	1050	23.3	83	50-123%	---	---	
Dibenzofuran	857	10.5	21.1	ug/kg dry	4	1050	12.1	80	44-120%	---	---	
2-Chlorophenol	874	52.7	105	ug/kg dry	4	1050	ND	83	34-121%	---	---	
4-Chloro-3-methylphenol	877	105	211	ug/kg dry	4	1050	ND	83	45-122%	---	---	
2,4-Dichlorophenol	856	52.7	105	ug/kg dry	4	1050	ND	81	40-122%	---	---	
2,4-Dimethylphenol	981	52.7	105	ug/kg dry	4	1050	ND	93	30-127%	---	---	
2,4-Dinitrophenol	ND	263	527	ug/kg dry	4	1050	ND		**10-137%**	---	---	Q-01
4,6-Dinitro-2-methylphenol	295	263	527	ug/kg dry	4	1050	ND	**28**	**29-132%**	---	---	Q-01, J
2-Methylphenol	925	26.3	52.7	ug/kg dry	4	1050	ND	88	32-122%	---	---	
3+4-Methylphenol(s)	959	26.3	52.7	ug/kg dry	4	1050	ND	91	34-120%	---	---	
2-Nitrophenol	784	105	211	ug/kg dry	4	1050	ND	74	36-123%	---	---	
4-Nitrophenol	665	105	211	ug/kg dry	4	1050	ND	63	30-132%	---	---	
Pentachlorophenol (PCP)	416	105	211	ug/kg dry	4	1050	ND	39	25-133%	---	---	
Phenol	999	21.1	42.1	ug/kg dry	4	1050	24.9	93	34-121%	---	---	
2,3,4,6-Tetrachlorophenol	652	52.7	105	ug/kg dry	4	1050	ND	62	44-125%	---	---	
2,3,5,6-Tetrachlorophenol	538	52.7	105	ug/kg dry	4	1050	ND	51	40-120%	---	---	
2,4,5-Trichlorophenol	799	52.7	105	ug/kg dry	4	1050	ND	76	41-124%	---	---	
Nitrobenzene	860	105	211	ug/kg dry	4	1050	ND	82	34-122%	---	---	
2,4,6-Trichlorophenol	768	52.7	105	ug/kg dry	4	1050	ND	73	39-126%	---	---	
Bis(2-ethylhexyl)phthalate	1230	158	316	ug/kg dry	4	1050	ND	117	51-133%	---	---	
Butyl benzyl phthalate	966	105	211	ug/kg dry	4	1050	ND	92	48-132%	---	---	
Diethylphthalate	835	105	211	ug/kg dry	4	1050	ND	79	50-124%	---	---	
Dimethylphthalate	807	105	211	ug/kg dry	4	1050	ND	77	48-124%	---	---	
Di-n-butylphthalate	933	105	211	ug/kg dry	4	1050	ND	89	51-128%	---	---	B
Di-n-octyl phthalate	1040	105	211	ug/kg dry	4	1050	ND	98	45-140%	---	---	

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.

Darwin Thomas, Business Development Director

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

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
Batch 22K0589 - EPA 3546							**Soil**					
Matrix Spike (22K0589-MS2)			Prepared: 11/15/22 15:06		Analyzed: 11/16/22 16:54							
QC Source Sample: Non-SDG (A2K0513-01RE1)												
N-Nitrosodimethylamine	763	26.3	52.7	ug/kg dry	4	1050	ND	72	23-120%	---	---	
N-Nitroso-di-n-propylamine	942	26.3	52.7	ug/kg dry	4	1050	ND	89	36-120%	---	---	
N-Nitrosodiphenylamine	894	26.3	52.7	ug/kg dry	4	1050	ND	85	38-127%	---	---	
Bis(2-Chloroethoxy) methane	874	26.3	52.7	ug/kg dry	4	1050	ND	83	36-121%	---	---	
Bis(2-Chloroethyl) ether	817	26.3	52.7	ug/kg dry	4	1050	ND	78	31-120%	---	---	
2,2'-Oxybis(1-Chloropropane)	964	26.3	52.7	ug/kg dry	4	1050	ND	91	39-120%	---	---	
Hexachlorobenzene	779	10.5	21.1	ug/kg dry	4	1050	ND	74	45-122%	---	---	
Hexachlorobutadiene	749	26.3	52.7	ug/kg dry	4	1050	ND	71	32-123%	---	---	
Hexachlorocyclopentadiene	161	52.7	105	ug/kg dry	4	1050	ND	15	10-140%	---	---	
Hexachloroethane	749	26.3	52.7	ug/kg dry	4	1050	ND	71	28-120%	---	---	
2-Chloronaphthalene	786	10.5	21.1	ug/kg dry	4	1050	ND	75	41-120%	---	---	
1,2,4-Trichlorobenzene	789	26.3	52.7	ug/kg dry	4	1050	ND	75	34-120%	---	---	
4-Bromophenyl phenyl ether	807	26.3	52.7	ug/kg dry	4	1050	ND	77	46-124%	---	---	
4-Chlorophenyl phenyl ether	815	26.3	52.7	ug/kg dry	4	1050	ND	77	45-121%	---	---	
Aniline	650	52.7	105	ug/kg dry	4	1050	ND	62	10-120%	---	---	
4-Chloroaniline	548	26.3	52.7	ug/kg dry	4	1050	ND	52	17-120%	---	---	
2-Nitroaniline	819	211	421	ug/kg dry	4	1050	ND	78	44-127%	---	---	
3-Nitroaniline	802	211	421	ug/kg dry	4	1050	ND	76	33-120%	---	---	
4-Nitroaniline	898	211	421	ug/kg dry	4	1050	ND	85	51-125%	---	---	
2,4-Dinitrotoluene	821	105	211	ug/kg dry	4	1050	ND	78	48-126%	---	---	
2,6-Dinitrotoluene	805	105	211	ug/kg dry	4	1050	ND	76	46-124%	---	---	
Benzoic acid	ND	1320	2630	ug/kg dry	4	2110	ND		**10-140%**	---	---	Q-01
Benzyl alcohol	858	52.7	105	ug/kg dry	4	1050	ND	81	29-122%	---	---	
Isophorone	928	26.3	52.7	ug/kg dry	4	1050	ND	88	30-122%	---	---	
Azobenzene (1,2-DPH)	949	26.3	52.7	ug/kg dry	4	1050	ND	90	39-125%	---	---	
Bis(2-Ethylhexyl) adipate	984	263	527	ug/kg dry	4	1050	ND	93	61-121%	---	---	
3,3'-Dichlorobenzidine	5710	211	421	ug/kg dry	4	2110	ND	**271**	**22-121%**	---	---	Q-01
1,2-Dinitrobenzene	658	263	527	ug/kg dry	4	1050	ND	62	44-120%	---	---	
1,3-Dinitrobenzene	677	263	527	ug/kg dry	4	1050	ND	64	43-127%	---	---	
1,4-Dinitrobenzene	529	263	527	ug/kg dry	4	1050	ND	50	37-132%	---	---	
Pyridine	702	52.7	105	ug/kg dry	4	1050	ND	67	10-120%	---	---	
1,2-Dichlorobenzene	731	26.3	52.7	ug/kg dry	4	1050	ND	69	33-120%	---	---	
1,3-Dichlorobenzene	722	26.3	52.7	ug/kg dry	4	1050	ND	69	30-120%	---	---	

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.

Darwin Thomas, Business Development Director

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

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
Batch 22K0589 - EPA 3546							**Soil**					
Matrix Spike (22K0589-MS2)				Prepared: 11/15/22 15:06 Analyzed: 11/16/22 16:54								
QC Source Sample: Non-SDG (A2K0513-01RE1)												
1,4-Dichlorobenzene	735	26.3	52.7	ug/kg dry	4	1050	ND	70	31-120%	---	---	
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 79 %*	*Limits: 37-122 %*			*Dilution: 4x*					
2-Fluorobiphenyl (Surr)			*52 %*	*44-120 %*			*"*					
Phenol-d6 (Surr)			*89 %*	*33-122 %*			*"*					
p-Terphenyl-d14 (Surr)			*63 %*	*54-127 %*			*"*					
2-Fluorophenol (Surr)			*83 %*	*35-120 %*			*"*					
2,4,6-Tribromophenol (Surr)			*66 %*	*39-132 %*			*"*					

Apex Laboratories

Darwin Thomas, Business Development Director

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.

APEX LABORATORIES

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

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
Batch 22K0744 - EPA 3051A							**Soil**					
Blank (22K0744-BLK1)			Prepared: 11/18/22 13:17		Analyzed: 11/18/22 22:35							
EPA 6020B												
Arsenic	ND	---	962	ug/kg wet	10	---	---	---	---	---	---	
Barium	ND	---	962	ug/kg wet	10	---	---	---	---	---	---	
Cadmium	ND	---	192	ug/kg wet	10	---	---	---	---	---	---	
Chromium	ND	---	962	ug/kg wet	10	---	---	---	---	---	---	
Lead	ND	---	192	ug/kg wet	10	---	---	---	---	---	---	
Mercury	ND	---	76.9	ug/kg wet	10	---	---	---	---	---	---	
Selenium	ND	---	962	ug/kg wet	10	---	---	---	---	---	---	
Silver	ND	---	192	ug/kg wet	10	---	---	---	---	---	---	
LCS (22K0744-BS1)			Prepared: 11/18/22 13:17		Analyzed: 11/18/22 22:40							
EPA 6020B												
Arsenic	49300	---	1000	ug/kg wet	10	50000	---	99	80-120%	---	---	
Barium	50800	---	1000	ug/kg wet	10	50000	---	102	80-120%	---	---	
Cadmium	50700	---	200	ug/kg wet	10	50000	---	101	80-120%	---	---	
Chromium	47300	---	1000	ug/kg wet	10	50000	---	95	80-120%	---	---	
Lead	52900	---	200	ug/kg wet	10	50000	---	106	80-120%	---	---	
Mercury	982	---	80.0	ug/kg wet	10	1000	---	98	80-120%	---	---	
Selenium	23700	---	1000	ug/kg wet	10	25000	---	95	80-120%	---	---	
Silver	26000	---	200	ug/kg wet	10	25000	---	104	80-120%	---	---	
Duplicate (22K0744-DUP1)			Prepared: 11/18/22 13:17		Analyzed: 11/18/22 23:01							
QC Source Sample: T103A-111022-14 (A2K0502-01)												
EPA 6020B												
Arsenic	**5550**	---	1450	ug/kg dry	10	---	5990	---	---	8	20%	
Barium	**114000**	---	1450	ug/kg dry	10	---	118000	---	---	4	20%	
Cadmium	**354**	---	290	ug/kg dry	10	---	279	---	---	**24**	**20%**	Q-05
Chromium	**41100**	---	1450	ug/kg dry	10	---	49900	---	---	19	20%	
Lead	**18000**	---	290	ug/kg dry	10	---	15700	---	---	14	20%	
Mercury	ND	---	116	ug/kg dry	10	---	ND	---	---	---	20%	
Selenium	ND	---	1450	ug/kg dry	10	---	982	---	---	***	20%	
Silver	**292**	---	290	ug/kg dry	10	---	256	---	---	13	20%	
Matrix Spike (22K0744-MS1)			Prepared: 11/18/22 13:17		Analyzed: 11/18/22 23:07							

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.

Darwin Thomas, Business Development Director

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

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

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
Batch 22K0744 - EPA 3051A							**Soil**					
Matrix Spike (22K0744-MS1)			Prepared: 11/18/22 13:17		Analyzed: 11/18/22 23:07							
QC Source Sample: T103A-111022-14 (A2K0502-01)												
EPA 6020B												
Arsenic	69600	---	1360	ug/kg dry	10	67800	5990	94	75-125%	---	---	
Barium	189000	---	1360	ug/kg dry	10	67800	118000	104	75-125%	---	---	
Cadmium	66800	---	271	ug/kg dry	10	67800	279	98	75-125%	---	---	
Chromium	101000	---	1360	ug/kg dry	10	67800	49900	76	75-125%	---	---	
Lead	81600	---	271	ug/kg dry	10	67800	15700	97	75-125%	---	---	
Mercury	1290	---	108	ug/kg dry	10	1360	ND	95	75-125%	---	---	
Selenium	31200	---	1360	ug/kg dry	10	33900	982	89	75-125%	---	---	
Silver	33800	---	271	ug/kg dry	10	33900	256	99	75-125%	---	---	

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.

Darwin Thomas, Business Development Director

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: Gasco - Soil Residuals	
2749 Lockport Road	Project Number: 111323	Report ID:
Niagara Falls, NY 14305	Project Manager: Chip Byrd	A2K0502 - 12 02 22 1315

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
Batch 22K0697 - EPA 1311/3015A							Soil					
Blank (22K0697-BLK1)			Prepared: 11/17/22 15:28 Analyzed: 11/18/22 04:00									
1311/6020B												
Arsenic	ND	---	100	ug/L	10	---	---	---	---	---	---	TCLP
Barium	ND	---	5000	ug/L	10	---	---	---	---	---	---	TCLP
Cadmium	ND	---	100	ug/L	10	---	---	---	---	---	---	TCLP
Chromium	ND	---	100	ug/L	10	---	---	---	---	---	---	TCLP
Lead	ND	---	50.0	ug/L	10	---	---	---	---	---	---	TCLP
Selenium	ND	---	100	ug/L	10	---	---	---	---	---	---	TCLP
Silver	ND	---	100	ug/L	10	---	---	---	---	---	---	TCLP
Blank (22K0697-BLK2)			Prepared: 11/17/22 15:28 Analyzed: 11/18/22 23:44									
1311/6020B												
Mercury	ND	---	7.00	ug/L	10	---	---	---	---	---	---	Q-16, TCLP
LCS (22K0697-BS1)			Prepared: 11/17/22 15:28 Analyzed: 11/18/22 04:05									
1311/6020B												
Arsenic	5140	---	100	ug/L	10	5000	---	103	80-120%	---	---	TCLP
Barium	11900	---	5000	ug/L	10	10000	---	119	80-120%	---	---	TCLP
Cadmium	962	---	100	ug/L	10	1000	---	96	80-120%	---	---	TCLP
Chromium	4950	---	100	ug/L	10	5000	---	99	80-120%	---	---	TCLP
Lead	5190	---	50.0	ug/L	10	5000	---	104	80-120%	---	---	TCLP
Selenium	967	---	100	ug/L	10	1000	---	97	80-120%	---	---	TCLP
Silver	963	---	100	ug/L	10	1000	---	96	80-120%	---	---	TCLP
LCS (22K0697-BS2)			Prepared: 11/17/22 15:28 Analyzed: 11/18/22 23:49									
1311/6020B												
Mercury	96.2	---	7.00	ug/L	10	100	---	96	80-120%	---	---	Q-16, TCLP
Duplicate (22K0697-DUP1)			Prepared: 11/17/22 15:28 Analyzed: 11/18/22 04:16									
QC Source Sample: Non-SDG (A2J0967-22)												
Barium	ND	---	5000	ug/L	10	---	ND	---	---	---	20%	PRO
Lead	**78.8**	---	50.0	ug/L	10	---	79.5	---	---	0.8	20%	PRO
Selenium	ND	---	100	ug/L	10	---	ND	---	---	---	20%	PRO
Silver	ND	---	100	ug/L	10	---	ND	---	---	---	20%	PRO

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.

Darwin Thomas, Business Development Director

APEX LABORATORIES

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

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
Batch 22K0697 - EPA 1311/3015A							**Soil**					
Duplicate (22K0697-DUP2)			Prepared: 11/17/22 15:28		Analyzed: 11/19/22 00:10							
QC Source Sample: Non-SDG (A2J0967-22RE1)												
Arsenic	ND	---	100	ug/L	10	---	ND	---	---	---	20%	PRO, Q-16
Cadmium	ND	---	100	ug/L	10	---	ND	---	---	---	20%	PRO, Q-16
Chromium	ND	---	100	ug/L	10	---	ND	---	---	---	20%	PRO, Q-16
Mercury	ND	---	7.00	ug/L	10	---	ND	---	---	---	20%	PRO,Q-16
Matrix Spike (22K0697-MS1)			Prepared: 11/17/22 15:28		Analyzed: 11/18/22 04:21							
QC Source Sample: Non-SDG (A2J0967-22)												
1311/6020B												
Arsenic	5090	---	100	ug/L	10	5000	ND	102	50-150%	---	---	PRO
Barium	13600	---	5000	ug/L	10	10000	ND	136	50-150%	---	---	PRO
Cadmium	972	---	100	ug/L	10	1000	ND	97	50-150%	---	---	PRO
Chromium	4860	---	100	ug/L	10	5000	ND	97	50-150%	---	---	PRO
Lead	5320	---	50.0	ug/L	10	5000	79.5	105	50-150%	---	---	PRO
Selenium	950	---	100	ug/L	10	1000	ND	95	50-150%	---	---	PRO
Silver	964	---	100	ug/L	10	1000	ND	96	50-150%	---	---	PRO
Matrix Spike (22K0697-MS2)			Prepared: 11/17/22 15:28		Analyzed: 11/18/22 04:32							
QC Source Sample: Non-SDG (A2K0051-01)												
1311/6020B												
Arsenic	5100	---	100	ug/L	10	5000	ND	102	50-150%	---	---	
Barium	12300	---	5000	ug/L	10	10000	ND	123	50-150%	---	---	
Cadmium	971	---	100	ug/L	10	1000	ND	97	50-150%	---	---	
Chromium	5270	---	100	ug/L	10	5000	316	99	50-150%	---	---	
Lead	5260	---	50.0	ug/L	10	5000	ND	105	50-150%	---	---	
Selenium	969	---	100	ug/L	10	1000	ND	97	50-150%	---	---	
Silver	980	---	100	ug/L	10	1000	ND	98	50-150%	---	---	
Matrix Spike (22K0697-MS3)			Prepared: 11/17/22 15:28		Analyzed: 11/18/22 05:08							
QC Source Sample: Non-SDG (A2K0537-01)												
1311/6020B												
Arsenic	5140	---	100	ug/L	10	5000	ND	103	50-150%	---	---	
Barium	12200	---	5000	ug/L	10	10000	ND	122	50-150%	---	---	

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.

Darwin Thomas, Business Development Director

APEX LABORATORIES

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

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
Batch 22K0697 - EPA 1311/3015A							**Soil**					
Matrix Spike (22K0697-MS3)			Prepared: 11/17/22 15:28		Analyzed: 11/18/22 05:08							
QC Source Sample: Non-SDG (A2K0537-01)												
Cadmium	971	---	100	ug/L	10	1000	ND	97	50-150%	---	---	
Chromium	4970	---	100	ug/L	10	5000	ND	99	50-150%	---	---	
Lead	5330	---	50.0	ug/L	10	5000	ND	107	50-150%	---	---	
Selenium	944	---	100	ug/L	10	1000	ND	94	50-150%	---	---	
Silver	981	---	100	ug/L	10	1000	ND	98	50-150%	---	---	
Matrix Spike (22K0697-MS4)			Prepared: 11/17/22 15:28		Analyzed: 11/19/22 00:15							
QC Source Sample: Non-SDG (A2J0967-22RE1)												
1311/6020B												
Mercury	95.2	---	7.00	ug/L	10	100	ND	95	50-150%	---	---	PRO,Q-16
Matrix Spike (22K0697-MS5)			Prepared: 11/17/22 15:28		Analyzed: 11/19/22 00:26							
QC Source Sample: Non-SDG (A2K0051-01RE1)												
1311/6020B												
Mercury	94.3	---	7.00	ug/L	10	100	ND	94	50-150%	---	---	Q-16
Matrix Spike (22K0697-MS6)			Prepared: 11/17/22 15:28		Analyzed: 11/19/22 00:52							
QC Source Sample: Non-SDG (A2K0537-01RE1)												
1311/6020B												
Mercury	96.2	---	7.00	ug/L	10	100	ND	96	50-150%	---	---	Q-16

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.

Darwin Thomas, Business Development Director

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

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
Batch 22K0505 - ASTM D7511-12mod (S)							**Soil**					
Blank (22K0505-BLK1)			Prepared: 11/14/22 08:35		Analyzed: 11/14/22 11:53							
D7511-12												
Total Cyanide	ND	---	100	ug/kg wet	1	---	---	---	---	---	---	
LCS (22K0505-BS1)			Prepared: 11/14/22 08:35		Analyzed: 11/14/22 11:55							
D7511-12												
Total Cyanide	413	---	100	ug/kg wet	1	400	---	103	84-116%	---	---	
Matrix Spike (22K0505-MS1)			Prepared: 11/14/22 08:35		Analyzed: 11/14/22 12:01							
QC Source Sample: T103A-111022-14 (A2K0502-01)												
D7511-12												
Total Cyanide	3890	---	1350	ug/kg dry	10	540	3320	105	64-136%	---	---	
Matrix Spike Dup (22K0505-MSD1)			Prepared: 11/14/22 08:35		Analyzed: 11/14/22 12:03							
QC Source Sample: T103A-111022-14 (A2K0502-01)												
D7511-12												
Total Cyanide	3450	---	1340	ug/kg dry	10	538	3320	**24**	**64-136%**	12	47%	Q-04

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.

Darwin Thomas, Business Development Director

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

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
Batch 22K0572 - Total Solids (Dry Weight)							**Soil**					
Duplicate (22K0572-DUP1)			Prepared: 11/15/22 18:51		Analyzed: 11/16/22 05:58							**PRO**
QC Source Sample: Non-SDG (A2K0477-02)												
% Solids	**98.7**	---	1.00	%	1	---	98.4	---	---	0.3	10%	
Duplicate (22K0572-DUP2)			Prepared: 11/15/22 18:51		Analyzed: 11/16/22 05:58							
QC Source Sample: Non-SDG (A2K0584-01)												
% Solids	**83.1**	---	1.00	%	1	---	82.5	---	---	0.7	10%	
Duplicate (22K0572-DUP3)			Prepared: 11/15/22 18:51		Analyzed: 11/16/22 05:58							
QC Source Sample: Non-SDG (A2K0593-02)												
% Solids	**77.3**	---	1.00	%	1	---	79.3	---	---	3	10%	
Duplicate (22K0572-DUP4)			Prepared: 11/15/22 20:32		Analyzed: 11/16/22 05:58							
QC Source Sample: Non-SDG (A2K0603-02)												
% Solids	**78.6**	---	1.00	%	1	---	80.7	---	---	3	10%	

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

Apex Laboratories

Darwin Thomas, Business Development Director

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.

APEX LABORATORIES

ANALYTICAL REPORT

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

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

SAMPLE PREPARATION INFORMATION

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Prep: EPA 3546 (Fuels)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 22K0863							
A2K0502-01	Soil	NWTPH-Dx	11/10/22 13:30	11/23/22 06:11	10.59g/5mL	10g/5mL	0.94

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

Prep: EPA 5035A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 22K0559							
A2K0502-01RE1	Soil	NWTPH-Gx (MS)	11/10/22 13:30	11/11/22 14:36	5.65g/5mL	5g/5mL	0.89

Volatile Organic Compounds by EPA 8260D

Prep: EPA 5035A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 22K0504							
A2K0502-01	Soil	5035A/8260D	11/10/22 13:30	11/11/22 14:36	5.65g/5mL	5g/5mL	0.89
Batch: 22K0634							
A2K0502-01RE2	Soil	5035A/8260D	11/10/22 13:30	11/11/22 14:36	5.65g/5mL	5g/5mL	0.89

TCLP Volatile Organic Compounds by EPA 1311/8260D

Prep: EPA 1311/5030B TCLP Volatiles

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 22K0839							
A2K0502-01	Soil	1311/8260D	11/10/22 13:30	11/22/22 16:00	5mL/5mL	5mL/5mL	1.00
Batch: 22K0951							
A2K0502-01RE1	Soil	1311/8260D	11/10/22 13:30	11/29/22 09:35	5mL/5mL	5mL/5mL	1.00

Semivolatile Organic Compounds by EPA 8270E

Prep: EPA 3546

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 22K0589							
A2K0502-01	Soil	EPA 8270E	11/10/22 13:30	11/15/22 15:06	15.43g/5mL	15g/2mL	2.43

Apex Laboratories

Darwin Thomas, Business Development Director

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.

APEX LABORATORIES

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

SAMPLE PREPARATION INFORMATION

Total Metals by EPA 6020B (ICPMS)

Prep: EPA 3051A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 22K0744							
A2K0502-01	Soil	EPA 6020B	11/10/22 13:30	11/18/22 13:17	0.498g/50mL	0.5g/50mL	1.00

TCLP Metals by EPA 6020B (ICPMS)

Prep: EPA 1311/3015A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 22K0697							
A2K0502-01	Soil	1311/6020B	11/10/22 13:30	11/17/22 15:28	10mL/50mL	10mL/50mL	1.00
A2K0502-01RE1	Soil	1311/6020B	11/10/22 13:30	11/17/22 15:28	10mL/50mL	10mL/50mL	1.00

Soluble Cyanide by UV Digestion/Gas Diffusion/Amperometric Detection

Prep: ASTM D7511-12mod (S)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 22K0505							
A2K0502-01	Soil	D7511-12	11/10/22 13:30	11/14/22 08:35	2.5067g/50mL	2.5g/50mL	1.00

Percent Dry Weight

Prep: Total Solids (Dry Weight)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 22K0572							
A2K0502-01	Soil	EPA 8000D	11/10/22 13:30	11/15/22 18:51			NA

TCLP Extraction by EPA 1311

Prep: EPA 1311 (TCLP)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 22K0613							
A2K0502-01	Soil	EPA 1311	11/10/22 13:30	11/16/22 16:30	100g/2000g	100g/2000g	NA

Prep: EPA 1311 TCLP/ZHE

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 22K0837							
A2K0502-01	Soil	EPA 1311 ZHE	11/10/22 13:30	11/22/22 15:35	20.2g/398.1g	25g/500g	NA

Apex Laboratories

Darwin Thomas, Business Development Director

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.

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: Gasco - Soil Residuals	
2749 Lockport Road	Project Number: 111323	Report ID:
Niagara Falls, NY 14305	Project Manager: Chip Byrd	A2K0502 - 12 02 22 1315

QUALIFIER DEFINITIONS

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

Apex Laboratories

A-01	Due to loading error, not all Batch QC samples were analyzed. The batch is accepted based on the recoveries of the Blank Spike (BS).
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.)
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-01	Estimated Result. Initial Calibration Verification (ICV) failed high. There is no effect on non-detect results.
ICV-02	Estimated Result. Initial Calibration Verification (ICV) failed low.
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.
PRO	Sample has undergone sample processing prior to extraction and analysis.
Q-01	Spike recovery and/or RPD is outside acceptance limits.
Q-02	Spike recovery is outside of established control limits due to matrix interference.
Q-04	Spike recovery and/or RPD is outside control limits due to a non-homogeneous sample matrix.
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-29	Recovery for Lab Control Spike (LCS) is above the upper control limit. Data may be biased high.
Q-30	Recovery for Lab Control Spike (LCS) is below the lower control limit. Data may be biased low.
Q-31	Estimated Results. Recovery of Continuing Calibration Verification sample below lower control limit for this analyte. Results are likely biased low.
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 +14%. The results are reported as Estimated Values.

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.

Darwin Thomas, Business Development Director

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

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

Q-54b	Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +2%. The results are reported as Estimated Values.
Q-54c	Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +29%. 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 +3%. 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 +36%. 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 +54%. 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 +6%. 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 +7%. 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 +8%. 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 +9%. 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 -1%. 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 -3%. 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 -4%. 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 -5%. 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.
R-06	Reporting level raised due to possible carryover from a previous 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.
T-02	This Batch QC sample was analyzed outside of the method specified 12 hour analysis window. Results are estimated.
TCLP	This batch QC sample was prepared with TCLP or SPLP fluid from preparation batch 22K0613.
TCLPa	This batch QC sample was prepared with TCLP or SPLP fluid from preparation batch 22K0802.

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.

Darwin Thomas, Business Development Director

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

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

TCLPb	This batch QC sample was prepared with TCLP or SPLP fluid from preparation batch 22K0837.
TEMP	Sample was received outside of recommended temperature. See Case Narrative.
V-15	Sample aliquot was subsampled from the sample container. The subsampled aliquot was preserved in the laboratory within 48 hours of sampling.
V-16	Sample aliquot was subsampled from the sample container in the laboratory. The subsampled aliquot was not preserved within 48 hours of sampling.

Apex Laboratories

Darwin Thomas, Business Development Director

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

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

Darwin Thomas, Business Development Director

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.

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

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

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

Darwin Thomas, Business Development Director

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

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

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 provded by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.

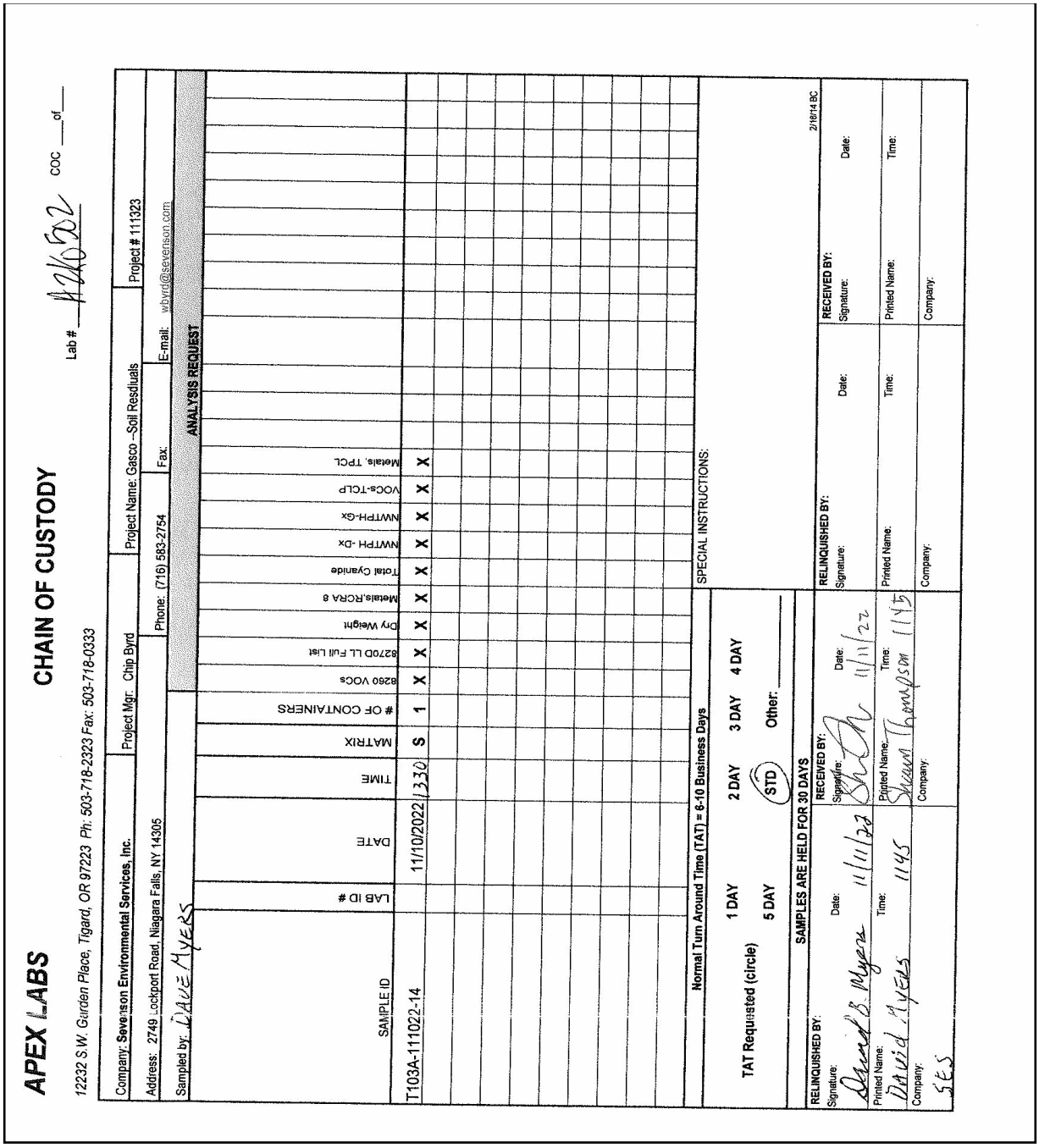
Apex Laboratories

Darwin Thomas, Business Development Director

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**



APEX LABS

CHAIN OF CUSTODY

Lab # A2K0502 COC ___ of ___

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

Company: Sevenson Environmental Services, Inc. | Project Mgr: Chip Byrd | Project Name: Gasco –Soil Residuals | Project # 111323

Address: 2749 Lockport Road, Niagara Falls, NY 14305 | Phone: (716) 583-2754 | Fax: | E-mail: wbyrd@sevenson.com

Sampled by: Dave Myers

ANALYSIS REQUEST

SAMPLE ID	LAB ID #	DATE	TIME	MATRIX	# OF CONTAINERS	8260 VOCs	8270D LL Full List	Dry Weight	Metals,RCRA 8	Total Cyanide	NWTPH -Dx	NWTPH-Gx	VOCs-TCLP	Metals, TPCL
T103A-111022-14		11/10/2022	1330	S	1	X	X	X	X	X	X	X	X	X

Normal Turn Around Time (TAT) = 6-10 Business Days

TAT Requested (circle): 1 DAY 2 DAY 3 DAY 4 DAY 5 DAY STD Other: ____

SPECIAL INSTRUCTIONS:

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY: Signature: David B. Myers Date: 11/11/22 Printed Name: David Myers Time: 1145 Company: SES

RECEIVED BY: Signature: Date: 11/11/22 Printed Name: Shawn Thompson Time: 1145 Company:

RELINQUISHED BY: Signature: Date: Printed Name: Time: Company:

RECEIVED BY: Signature: Date: Printed Name: Time: Company:

2/16/14 BC

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.

Darwin Thomas, Business Development Director

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

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco - Soil Residuals**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A2K0502 - 12 02 22 1315**

APEX LABS COOLER RECEIPT FORM

Client: SEVENSON Element WO#: A2 K0502

Project/Project #: Gasco Soil Residuals # 111323

Delivery Info:

Date/time received: 11/11/22 @ 1145 By: SAT

Delivered by: Apex X Client ___ ESS ___ FedEx ___ UPS ___ Swift ___ Senvoy ___ SDS ___ Other ___

Cooler Inspection Date/time inspected: 11/11/22 @ 1340 By: SAT

Chain of Custody included? Yes X No ___ Custody seals? Yes ___ No X

Signed/dated by client? Yes X No ___

Signed/dated by Apex? Yes X No ___

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	1.9						
Received on ice? (Y/N)	Y						
Temp. blanks? (Y/N)	Y						
Ice type: (Gel/Real/Other)	Real						
Condition (In/Out):	Good						

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: 11/11/22 @ 1410 By: JS

All samples intact? Yes X No ___ Comments: ___

Bottle labels/COCs agree? Yes X No ___ Comments: ___

COC/container discrepancies form initiated? Yes ___ No X

Containers/volumes received appropriate for analysis? Yes X No ___ Comments: ___

Do VOA vials have visible headspace? Yes ___ No ___ NA X

Comments ___

Water samples: pH checked: Yes ___ No ___ NA X pH appropriate? Yes ___ No ___ NA X

Comments: ___

Additional information: ___

Labeled by: JS Witness: ZKM Cooler Inspected by: JS

Form Y-003 R-00

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.

Darwin Thomas, Business Development Director

WASTE MANAGEMENT

EZ Profile™

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

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

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

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

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

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)

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

Certification Signature

EZ Profile™ Addendum

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.

5.	
6.	
7.	
8.	
9.	
Total composition must be equal to or greater than 100%	≥100%

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:
   b. Is the material subject to the Alternative Debris standards (40 CFR 268.45)? ❑ Yes ☑ No
   c. Is the material subject to the Alternative Soil standards (40 CFR 268.49)? → If Yes, complete question 4. ❑ Yes ☑ No
   d. Is the material exempt from Subpart CC Controls (40 CFR 264.1083)? ☑ Yes ❑ No
      → If Yes, please check **one** of the following:
      ❑ Waste meets LDR or treatment exemptions for organics (40 CFR 264.1082(c)(2) or (c)(4))
      ☑ Waste contains VOCs that average <500 ppmw (CFR 264.1082(c)(1)) – will require annual update.
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 → Specify Exclusion: _____
   ❑ Treated Hazardous Waste Debris ❑ Treated Characteristic Hazardous Waste → If checked, complete question 4.
4. Underlying Hazardous Constituents → Please list all Underlying 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? → If yes, please complete Benzene NESHAP questionnaire. If not, continue. ❑ Yes ❑ No
   b. Does this material contain benzene? ❑ Yes ❑ No
      1. If yes, what is the flow weighted average concentration? _____ ppmw
   c. What is your facility's current total annual benzene quantity in Megagrams? ❑ <1 Mg ❑ 1–9.99 Mg ❑ ≥10 Mg
   d. Is this waste soil from a remediation? ❑ Yes ❑ No
      1. If yes, what is the benzene concentration in remediation waste? _____ ppmw
   e. Does the waste contain >10% water/moisture? ❑ Yes ❑ No
   f. Has material been treated to remove 99% of the benzene or to achieve <10 ppmw? ❑ Yes ❑ No
   g. Is material exempt from controls in accordance with 40 CFR 61.342? ❑ Yes ❑ No
      → If yes, specify exemption: _____
   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? ❑ Yes ❑ No
6. 40 CFR 63 GGGGG → Does the material contain <500 ppmw VOHAPs at the point of determination? ❑ Yes ❑ No
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. A "Determination of Acceptability" may be needed for CERCLA wastes not going to a CERCLA approved facility.
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.	
12.	
13.	
14.	
15.	
16.	
17.	
18.	
19.	
20.	
21.	
22.	
23.	
24.	
25.	
26.	
27.	
28.	
29.	
30.	
31.	
32.	
33.	
34.	
35.	
36.	
37.	
38.	
39.	
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: W504

3. Source Code: G23

Identification of Constituents of Concern for Waste Codes F001-F00 F039 and Underlying Hazardous Constituents (UHCs)

Generator Name: NW Natural Manifest Number: _____

Profile Number OR344464

If D001-D043 requires treatment to 268.48 standards, then each underlying hazardous constituent present in the waste at the point of generation, and at a level above the UTS constituent specific treatment standard, must be listed. Write the letter (A, B.1, B.3, B.4, B.6, C or D which corresponds to the letter on form CWM-LC-2005C) beside each constituent present, to properly describe how the constituent(s) must be managed under 40 CFR 268.7. If contaminated soil requires treatment to the 268.49 standards, then each UHC in the waste at the point of generation, and at a level above 10 x the UTS must be listed. Write the letter (A.1 or B.5) which corresponds to the letter on form CWM-LC-2005-E beside each constituent present.

CONSTITUENT	HOW MUST THIS CONSTITUENT BE MANAGED?	WW Mg/l	NWW Mg/kg	CONSTITUENT	HOW MUST THIS CONSTITUENT BE MANAGED?	WW Mg/l	NWW Mg/kg
Acenaphthene		0.059	3.4	n- Butanol (butly alcohol)		5.6	2.6
Acenaphthylene		0.059	3.4	Butyl benzyl phthalate		0.017	28
Acetone		0.28	160	Butylate[2]		0.042	1.4
Acetonitrile		5.6	38[2]	2-sec-Butyl-4,6-dinitrophenol *(Dinoseb)*		0.066	2.5
Acetophenone		0.010	9.7	Carbaryl[2]		0.006	0.14
2-Acetylaminofluorene		0.059	140	Carbenzadim[2]		0.056	1.4
Acrolein		0.29	NA	Carbofuran[2]		0.006	0.14
Acrylamide[2]		19	23	Carbofuran phenol[2]		0.056	1.4
Acrylonitrile		0.24	84	Carbon disulfide (TCLP)		3.8	4.8[1,2]
Aldicarb sulfone[2]		0.056	0.28	Carbon tetrachloride		0.057	6.0
Aldrin		0.021	0.066	Carbosulfan[2]		0.028	1.4
4-Aminobiphenyl		0.13	NA	Chlordane (alpha & gamma)		0.0033	0.26
Aniline		0.81	14	p-Chloroaniline		0.46	16
o-Ansidine		0.010	0.66	Chlorobenzene		0.057	6.0
Anthracene		0.059	3.4	Chlorobenzilate		0.10	NA
Aramite		0.36	NA	2-chloro-1,3-butadiene		0.057	0.28[2]
Barban[2]		0.056	1.4	Chlorodibromomethane		0.057	15
Bendiocarb[2]		0.056	1.4	Chloroethane		0.27	6.0
Benomyl[2]		0.056	1.4	bis-(2-Chloroethoxy) methane		0.036	7.2
Benz (a) anthracene		0.059	3.4	bis-(2-Chloroethyl) ether		0.033	6.0
Benzal chloride[2]		0.055	6.0	2-Chloroethyl vinyl ether[2]		0.062	NA
Benzene		0.14	10	Chloroform		0.046	6.0
Benzo (b) flouranthene[4]		0.11	6.8	bis-(2-Chloroisopropyl) ether		0.055	7.2
Benzo (k) flouranthene[4]		0.11	6.8	p-Chloro-m-cresol		0.018	14
Benzo (g,h,i) perylene		0.0055	1.8	Chloromethane (methyl chloride)		0.19	30
Benzo (a) pyrene		0.061	3.4	2-Chloronaphthalene		0.055	5.6
alpha-BHC		0.00014	0.066	2-Chlorophenol		0.044	5.7
beta-BHC		0.00014	0.066	3-Chloropropylene		0.036	30
delta-BHC		0.023	0.066	Chrysene		0.059	3.4
gamma-BHC (Lindane)		0.0017	0.066	p- Cresidine		0.010	0.66
Bromodichloromethane		0.35	15	o-Cresol		0.11	5.6
Bromomethane (methyl bromide)		0.11	15	m-Cresol		0.77	5.6
4-Bromophenyl phenyl ether		0.055	15	p-Cresol		0.77	5.6

Identification of Constituents of Concern for Waste Codes F001-F005, F039 and Underlying Hazardous Constituents (UHCs)

CONSTITUENT	HOW MUST THIS CONSTITUENT BE MANAGED?	WW Mg/l	NWW Mg/kg	CONSTITUENT	HOW MUST THIS CONSTITUENT BE MANAGED?	WW Mg/l	NWW Mg/kg
m-Cumeyl methylcarbamate[2]		0.056	1.4	1,4-Dioxane		12	170
Cyclohexanone (TCLP)		0.36	0.75[1,2]	Diphenyl amine[4]		0.92	13[2]
o,p'-DDD		0.023	0.087	Diphenylnitrosoamine[4]		0.92	13[2]
p,p'-DDD		0.023	0.087	1,2-Diphenylhydrazine		0.087	NA
o,p'-DDE		0.031	0.087	Disulfoton		0.017	6.2
p,p'-DDE		0.031	0.087	Dithiocarbamates (total)[2,4]		0.028	28
o,p'-DDT		0.0039	0.087	Endosulfan I		0.023	0.066
p,p'-DDT		0.0039	0.087	Endosulfan II		0.029	0.13
Dibenz (a,h) anthracene		0.055	8.2	Endosulfan Sulfate		0.029	0.13
Dibenz (a,e) pyrene		0.061	NA	Endrin		0.0028	0.13
1,2-Dibromo-3-Chloropropane		0.11	15	Endrin aldehyde		0.025	0.13
1,2-Dibromoethane *(Ethylene dibromide)*		0.028	15	EPTC[2]		0.042	1.4
Dibromomethane		0.11	15	Ethyl acetate		0.34	33
m-Dichlorobenzene		0.036	6.0	Ethyl benzene		0.057	10
o-Dichlorobenzene		0.088	6.0	Ethyl cyanide (Propanenitrile)		0.24	360
p-Dichlorobenzene		0.090	6.0	Ethyl ether		0.12	160
Dichlorodifluoromethane		0.23	7.2	Ethyl methacrylate		0.14	160
1,1-Dichloroethane		0.059	6.0	Ethylene oxide		0.12	NA
1,2-Dichloroethane	D	0.21	6.0	bis-(2-Ethylyhexyl) phthalate		0.28	28
1,1-Dichloroethylene	D	0.025	6.0	Famphur		0.017	15
trans-1,2-Dichloroethylene	D	0.054	30	Fluoranthene		0.068	3.4
2,4-Dichlorophenol		0.044	14	Fluorene		0.059	3.4
2,6-Dichlorophenol		0.044	14	Formetanate hydrochloride[2]		0.056	1.4
2,4-Dichlorophenoxyacetic acid *(2,4-D)*		0.72	10	Heptachlor		0.0012	0.066
1,2-Dichloropropane		0.85	18	1,2,3,4,6,7,8-HpCDD		0.000035	0.0025
cis-1,3-Dichloropropylene		0.036	18	1,2,3,4,6,7,8-HpCDF		0.000035	0.0025
trans-1,3-Dichloropropylene		0.036	18	1,2,3,4,7,8,9-HpCDF		0.000035	0.0025
Dieldrin		0.017	0.13	Heptachlor epoxide		0.016	0.066
Diethyl phthalate		0.20	28	Hexachlorobenzene		0.055	10
p-Dimethylaminoazobenzene[2]		0.13[2]	NA	Hexachlorobutadiene		0.055	5.6
2,4-Dimethyleneaniline		0.010	0.66	Hexachlorocyclopentadiene		0.057	2.4
2,4-Dimethyl phenol		0.036	14	Hexachloroethane		0.055	30
Dimethyl phthalate		0.047	28	Hexachloropropylene		0.035	30
Di-n-butyl phthalate		0.057	28	Hexachlorodibenzo-p-dioxins		0.000063	0.001
1,4-Dinitrobenzene		0.32	2.3	Hexachlorodibenzo-furans		0.000063	0.001
4,6-Dinitro-o-cresol		0.28	160	Indeno (1,2,3-c,d) pyrene		0.0055	3.4
2,4-Dinitrophenol		0.12	160	Iodomethane		0.19	65
2,4-Dinitrotoluene		0.32	140	Isobutanol (Isobutyl Alcohol)		5.6	170
2,6-Dinitrotoluene		0.55	28	Isodrin		0.021	0.066
Di-n-octyl phthalate		0.017	28				
Di-n-propylnitrosoamine		0.40	14				

Identification of Constituents of Concern for Waste Codes F001-F005, F039 and Underlying Hazardous Constituents (UHCs)

CONSTITUENT	HOW MUST THIS CONSTITUENT BE MANAGED?	WW Mg/l	NWW Mg/kg	CONSTITUENT	HOW MUST THIS CONSTITUENT BE MANAGED?	WW Mg/l	NWW Mg/kg
Isosafrole		0.081	2.6	1,2,3,4,6,7,8,9-OCDD		.000063	0.005
Kepone		0.0011	0.13	1,2,3,4,6,7,8,9-OCDF		.000063	0.005
Methacrylonitrile		0.24	84	Oxamyl[2]		0.056	0.28
Methanol (TCLP)		5.6	0.75[1,2]	Parathion		0.014	4.6
Methapyrilene		0.081	1.5	PCBs (Total) all isomers or Aroclors		0.10	10
Methiocarb[2]		0.056	1.4	Pebulate[2]		0.042	1.4
Methomyl[2]		0.028	0.14	Pentachlorobenzene		0.055	10
Methoxychlor		0.25	0.18	Pentachlorodibenzo-p-dioxins		.000063	0.001
Methyl ethyl ketone		0.28	36	Pentachlorodibenzo-furans		.000035	0.001
Methyl isobutyl ketone		0.14	33	Pentachloroethane[2]		0.055	6.0
Methyl methacrylate		0.14	160	Pentachloronitrobenzene		0.055	4.8
Methyl methanesulfonate		0.018	NA	Pentachlorophenol		0.089	7.4
Methyl parathion		0.014	4.6	Phenacetin		0.081	16
3-Methylcholanthrene		0.0055	15	Phenathrene		0.059	5.6
4,4-Methylene-bis-(2-chloroaniline)		0.50	30	Phenol		0.039	6.2
Methylene chloride		0.089	30	1,2-Phenylenediamine[2,3]		CMBST	CMBST
Metolcarb[2]		0.056	1.4	1,3-Phenylenediamine		0.010	0.66
Mexacarbate[2]		0.056	1.4	Phorate		0.021	4.6
Molinate[2]		0.042	1.4	Phthalic acid[2]		0.055	28
Naphthalene		0.059	5.6	Phthalic anhydride		0.055	28
2-Naphthylamine		0.52	NA	Physostigmine[2]		0.056	1.4
o-Nitroaniline[2]		0.27	14	Physostigmine salicylate[2]		0.056	1.4
p-Nitroaniline		0.028	28	Promecarb[2]		0.056	1.4
Nitrobenzene		0.068	14	Pronamide		0.093	1.5
5-Nitro-o-toluidine		0.32	28	Propham[2]		0.056	1.4
o-Nitrophenol[2]		0.028	13	Propoxur[2]		0.056	1.4
p-Nitrophenol		0.12	29	Prosulfocarb[2]		0.042	1.4
N-Nitrosodiethylamine		0.40	28	Pyrene		0.067	8.2
N-Nitrosodimethylamine		0.40	2.3[2]	Pyridine		0.014	16
N-Nitroso-di-n-butylamine		0.40	17	Safrole		0.081	22
N-Nitrosomethylethylamine		0.40	2.3	Silvex (2,4,5-TP)		0.72	7.9
N-Nitrosomorpholine		0.40	2.3	1,2,4,5-Tetrachlorobenzene		0.055	14
N-Nitrosopiperidine		0.013	35	Tetrachlorodibenzo-dioxins		.000063	0.001
N-Nitrosopyrrolidine		0.013	35	Tetrachlorodibenzo-furans		.000063	0.001
				1,1,1,2-Tetrachloroethane		0.057	6.0
				1,1,2,2-Tetrachloroethane		0.057	6.0
				Tetrachloroethylene		0.056	6.0
				2,3,4,6-Tetrachlorophenol		0.030	7.4
				Thiodicarb[2]		0.019	1.4

Identification of Constituents of Concern for Waste Codes F001-F005, F039 and Underlying Hazardous Constituents (UHCs)

CONSTITUENT	HOW MUST THIS CONSTITUENT BE MANAGED?	WW Mg/l	NWW Mg/kg	CONSTITUENT	HOW MUST THIS CONSTITUENT BE MANAGED?	WW Mg/l	NWW Mg/kg
Thiophanate-methyl[2]		0.056	1.4	Antimony		1.9	1.15[1]
Toluene		0.080	10	Arsenic		1.4	5.0[1]
Toxaphene		0.0095	2.6	Barium		1.2	21.0[1]
Triallate[2]		0.042	1.4	Beryllium		0.82	1.22[1,6]
Bromoform (Tribromomethane)		0.63	15	Cadmium		0.69	0.11[1]
1,2,4-Trichlorobenzene		0.055	19	Chromium (Total)		2.77	0.60[1]
1,1,1-Trichloroethane		0.054	6.0	Cyanides (Total)		1.2	590
1,1,2-Trichloroethane		0.054	6.0	Cyanides (Amenable)		0.86	30[6]
Trichloroethylene	D	0.054	6.0	Fluoride[3]		35	NA
Trichloromonofluoromethane		0.020	30	Lead		0.69	0.75[1]
2,4,5-Trichlorophenol		0.18	7.4	Mercury (non-waste water from retort)		NA	0.20[1,2]
2,4,6-Trichlorophenol		0.035	7.4	Mercury (All others)		0.15	0.025[1]
2,4,5-T		0.72	7.9	Nickel		3.98	11.0[1]
1,2,3-Trichloropropane		0.85	30	Selenium		0.82	5.7[1,5]
1,1,2-Trichloro-1,2,2-trifluoroethane		0.057	30	Silver		0.43	0.14[1]
Triethylamine[2]		0.081	1.5	Sulfide[3]		14	NA
Tris(2,3-dibromopropyl)phosphate		0.11	0.10[2]	Thallium		1.4	0.20[1]
Vernolate[2]		0.042	1.4	Vanadium[3]		4.3	NA | 1.6[1]
Vinyl chloride	D	0.27	6.0	Zinc[3]		2.61	NA | 4.3[1]
Xylene(sum of o-,m-,and p- isomers)[4]		0.32	30	2-Ethoxyethanol (F005)[7]		INCIN or BIODG	INCIN
				2-Nitropropane (F005)[7]		INCIN or CHOXD	INCIN

❑ No UHC's apply

1. These concentrations are expressed in mg/l and are measured through an analysis of TCLP extract; all others measured through a total waste analysis.
2. These constituents are only applicable as Underlying Hazardous Constituents. They are not constituents requiring treatment in F039 wastes.
3. Not an underlying hazardous constituent requiring treatment in D001-D043 wastes, per 268.2(i). F039 WW standard only.
4. These compounds are regulated by the sum of their concentration instead of as individual constituents.
5. Effective August 24, 1998 in unauthorized states or states with no LDR program, Selenium at 5.7 Mg/L is not considered an underlying hazardous constituent in D001-D043 waste as it is above the characteristic level. This becomes effective in authorized states once that state adopts.
6. These constituents are applicable as Underlying Hazardous Constituents. F039 WW standard applicable.
7. Waste contains this compound as the only listed F001-F005 solvent.

I hereby certify that all information submitted in this and all associated documents is complete and accurate to the best of my knowledge and information.

Name: (Print) William Byrd Title: WWTP Superintendent

Signature: William A Byrd Date: 04/21/2020

LAND DISPOSAL RESTRICTION (LDR) NOTIFICATION AND CERTIFICATION FORM (PHASE IV)

WASTE MANAGEMENT

Generator Name: NW Natural

Profile Number: OR344464 Manifest Number: _____

Ref. #	2. US EPA HAZARDOUS WASTE CODE(s)	3. SUBCATEGORY ENTER THE SUBCATEGORY DESCRIPTION (If not applicable, simply check NONE)		4. HOW MUST THE WASTE BE MANAGED? ENTER LETTER FROM BELOW
		DESCRIPTION	NONE	
1.	F002	N/A	☑	D
2.			☐	
3.			☐	
4.			☐	

1. Is this waste a non-wastewater or wastewater? (See 40 CFR 268.2) Check ONE: ☑ Non-Wastewater ☐ Wastewater
   For hazardous debris meeting the definition of debris and subject to the alternate treatment standards in 268.45, check here: ☐
2. In **column 2**, identify ALL USEPA hazardous waste codes that apply to this waste shipment, as defined by 40 CFR 261.
   - To list additional waste code(s) use Land Disposal Notification/Certification Supplemental Form (CWM-2005-D) and check here: ☐
3. In **column 3**, for each waste code, identify the subcategory if one applies, or check NONE if the waste code has no subcategory.
4. In **column 4**, enter the letter from the list below (A. – D.) that describes how the waste must be managed to comply with the land disposal restriction regulations in 40 CFR 268. Please note that if you enter B.1, B.3, B.6 or D, you are certifying that the waste meets all the Land Disposal Restrictions and may be landfilled without further treatment. If you enter B.4, you are certifying that the waste has been decharacterized, but still requires treatment for UHCs. (States authorized by EPA to manage the LDR program may have regulatory citations different from the 40 CFR citations listed on this form. Where these regulatory citations differ, your form will be deemed to refer to those state citations as well as 40 CFR.)
5. Constituents of concern for waste codes F001-F005 and F039 and underlying hazardous constituents (UHCs) for D001-D043, must be identified unless the treatment facility will monitor for all constituents. **If any of these codes apply, check appropriate box below:**
   - To identify constituents of concern for F001-F005, F039 and UHCs, use the Identification of Constituents of Concern Form (CWM-2007) and check here: ☑
   - If UHCs are applicable, but none are present at the point of generation, check here: ☐
   - If incineration facility will monitor for all constituents of concern (except dioxins), check here: ☐

MANAGEMENT METHODS

A RESTRICTED WASTE REQUIRES TREATMENT
This waste must be treated to the applicable treatment standards set forth in 40 CFR 268.40.

B.1 RESTRICTED WASTE TREATED TO PERFORMANCE STANDARDS
"I certify under penalty of law that I personally have examined and am familiar with the treatment technology and operation of the treatment process used to support this certification. Based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the treatment process had been operated and maintained properly so as to comply with the treatment standards specified in 40 CFR 268.40 without impermissible dilution of the prohibited waste. I am aware there are significant penalties for submitting a false certification including the possibility of fine and imprisonment."

B.3 GOOD FAITH ANALYTICAL CERTIFICATION FOR INCINERATED ORGANICS
"I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification. Based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the non-wastewater organic constituents have been treated by combustion units as specified in 268.42 Table 1. I have been unable to detect the non-wastewater organic constituents despite having used best faith efforts to analyze for such constituents. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

B.4 DECHARACTERIZED WASTE REQUIRES TREATMENT FOR UNDERLYING HAZARDOUS CONSTITUENTS
"I certify under penalty of law that the waste has been treated in accordance with the requirements of 40 CFR 268.40 or 268.49, to remove the hazardous characteristic. This de-characterized waste contains underlying hazardous constituents that require further treatment to meet treatment standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

B.6 RESTRICTED DEBRIS TREATED TO ALTERNATE PERFORMANCE STANDARDS
"I certify under penalty of law that the debris has been treated in accordance with the requirements of 40CFR 268.45. I am aware that there are significant penalties for making a false certification, including the possibility of fine and imprisonment."

C. RESTRICTED WASTE SUBJECT TO A VARIANCE
This waste is subject to a national capacity variance, a treatability variance, or a case-by-case extension. Enter the effective date of prohibition in column (4) above.

D. RESTRICTED WASTE CAN BE LAND DISPOSED WITHOUT FURTHER TREATMENT
"I certify under penalty of law I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR Part 268 Subpart D and LAC 33: V. 2223-2233. I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

I hereby certify that all information submitted in this and all associated documents is complete and accurate to the best of my knowledge and information.

Name: (Print) William Byrd Title: WWTP Superintendent

Signature: William Byrd Date: 04/21/2020

Table 1: Purge Water and Decontamination (T103A) #14

Sample: (Type)			
Sample ID		T103A-111022-14	
LAB ID		A2K0502-01	
	EPA TCLP Level (20 x) in ug/kg dry (Actual TCLP Level in µg/L)	Results	Qualifier
Diesel and/or Oil Hydrocarbons by NWTPH-Dx (ug/kg dry)			
Diesel		**25,500,000**	**F-24**
Oil		**6,980,000**	**F-24**
Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx (ug/kg dry)			
Gasoline Range Organics		**2,100,000**	
Volatile Organic Compounds by EPA 8260B (ug/kg dry)			
Acetone		<3090	Q-30
Acrylonitrile		<309	
Benzene	10,000 (500 µg/L)	**3330**	
Bromobenzene		<38.6	
Bromochloromethane		<77.2	
Bromodichloromethane		<77.2	
Bromoform		<154	
Bromomethane		<1540	
2-Butanone (MEK)		<1540	
n-Butylbenzene		**1010**	**M-02**
sec-Butylbenzene		**1910**	
tert-Butylbenzene		<541	R-02
Carbon disulfide		<772	
Carbon tetrachloride	10,000 (500µg/L)	<77.2	
Chlorobenzene	2,000,000 (100,000 µg/L)	<38.6	
Chloroethane		<772	
Chloroform	120,000 (6,000 µg/L)	<77.2	
Chloromethane		<386	
2-Chlorotoluene		<77.2	
4-Chlorotoluene		<77.2	
Dibromochloromethane		<154	
1,2-Dibromo-3-chloropropane		<386	
1,2-Dibromoethane (EDB)		<77.2	
Dibromomethane		<77.2	
1,2-Dichlorobenzene		<38.6	
1,3-Dichlorobenzene		<38.6	
1,4-Dichlorobenzene	150,000 (7,500 µg/L)	<38.6	
Dichlorodifluoromethane		<309	ICV-02
1,1-Dichloroethane		<38.6	
1,2-Dichloroethane (EDC)	10,000 (500 µg/L)	<38.6	
1,1-Dichloroethene	14,000 (700 µg/L)	<38.6	
cis-1,2-Dichloroethene		<38.6	
trans-1,2-Dichloroethene		<38.6	
1,2-Dichloropropane		<38.6	
1,3-Dichloropropane		<77.2	
2,2-Dichloropropane		<77.2	
1,1-Dichloropropene		<77.2	
cis-1,3-Dichloropropene		<77.2	
trans-1,3-Dichloropropene		<77.2	
Ethylbenzene		**17700**	
Hexachlorobutaldiene	10,000 (500 µg/L)	<154	
2-Hexanone		<772	
Isopropylbenzene		**5920**	
4-Isopropyltoluene		**2510**	**M-02**
Methylene chloride		<1540	
4-Methyl-2-pentanone (MiBK)		<772	
Methyl tert-butyl ether (MTBE)		<77.2	
Naphthalene		**270,000**	
n-Propylbenzene		**2890**	
Stryrene		<77.2	
1,1,1,2-Tetrachloroethane		<38.6	
1,1,2,2-Tetrachloroethane		<154	
Tetrachloroethene (PCE)	14,000 (700 µg/L)	<38.6	
Toluene		**127**	**J**
1,2,3-Trichlorobenzene		<386	
1,2,4-Trichlorobenzene		<386	
1,1,1-Trichloroethane		<38.6	
1,1,2-Trichloroethane		<38.6	
Trichloroethene (TCE)	10,000 (500 µg/L)	<38.6	
Trichlorofluromethane		<309	Q-52
1,2,3-Trichloropropane		<77.2	
1,2,4-Trimethylbenzene		**16400**	
1,3,5-Trimethylbenzene		**6160**	
Vinyl chloride	4,000 (200 µg/L)	<38.6	
m,p-Xylene		**3450**	

Table 1: Purge Water and Decontamination (T103A) #14

o-Xylene		**5480**	
TCLP Volatile Organic Compounds by EPA 1311/8260D (ug/L)			
	EPA TCLP Level (20 x) in ug/kg dry (Actual TCLP Level in µg/L)	**ug/L**	
Acetone		<500	
Benzene	10,000 (500 µg/L)	**46.0**	
Bromobenzene		<12.5	
Bromochloromethane		<<25.0	
Bromodichloromethane		<25.0	
Bromoform		<25.0	
Bromomethane		<250	
2-Butanone (MEK)		<250	
n-Butylbenzene		<25.0	
sec-Butylbenzene		<25.0	
tert-Butylbenzene		<25.0	
Carbon tetrachloride	10,000 (500µg/L)	<25.0	
Chlorobenzene	2,000,000 (100,000 µg/L)	<12.5	
Chloroethane		<250	
Chloroform	120,000 (6,000 µg/L)	<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 µg/L)	<12.5	
Dichlorodifluoromethane		<25.0	
1,1-Dichloroethane		<12.5	
1,1-Dichloroethene	10,000 (500 µg/L)	<12.5	
1,2-Dichloroethane (EDC)	14,000 (700 µg/L)	<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		**143**	
Hexachlorobutaldiene	10,000 (500 µg/L)	<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	
Stryrene		<25.0	
1,1,1,2-Tetrachloroethane		<12.5	
1,1,2,2-Tetrachloroethane		<12.5	
Naphthalene		**1660**	
Tetrachloroethene (PCE)	14,000 (700 µg/L)	<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 µg/L)	<12.5	
Trichlorofluromethane		<50.0	
1,2,3-Trichloropropane		<25.0	
1,2,4-Trimethylbenzene		**41**	**J**
1,3,5-Trimethylbenzene		<25.0	
Vinyl chloride	4,000 (200 µg/L)	<12.5	
m,p-Xylene		**27.5**	**J**
o-Xylene		**39.0**	
Semivolatile Organic Compounds by EPA 8270D (ug/kg dry)			
	EPA TCLP Level (20 x) in ug/kg dry (Actual TCLP Level in µg/L)	**ug/kg dry**	
Acenaphthene		**611000**	
Acenaphthylene		<26200	R-02
Anthracene		**280000**	
Benz(a)anthracene		**133000**	
Benzo(a)pyrene		**139000**	
Benzo(b)fluoranthene		**110000**	

Table 1: Purge Water and Decontamination (T103A) #14

Benzo(k)fluoranthene		**41400**	**M-05**
Benzo(g,h,i)perylene		**75100**	
Chrysene		**174000**	
Dibenz(a,h)anthracene		**7830**	**J**
Fluoranthene		**680000**	
Fluorene		**325000**	
Indeno(1,2,3-cd)pyrene		**70100**	
1-Methlnaphthalene		**477000**	
2-Methlnaphthalene		**626000**	
Naphthalene		**313000**	
Phenanthrene		**1580000**	
Pyrene		**797000**	
Carbazole		**57100**	
Dibenzofuran		**43900**	
2-Chlorophenol		<21900	
4-Chloro-3-methyplenol		<43600	
2,4-Dichlorophenol		<21900	
2,4-Dimethyphenol		<21900	
2,4-Dinitrophenol		<109000	
4,6-Dinitro-2-methylphenol	4,000,000 (200,000µg/L)	<109000	
2-Methylphenol	4,000,000 (200,000µg/L)	<10900	
3+4-Methyphenol(s)		<10900	
2-Niptrophenol		<43600	
4-Nitrophenol		<87600	
Pentachlorophenol(PCP)	2,000,000 (100,000µg/L)	<43600	
Phenol		<8760	
2,3,4,6-Tetrachlorophenol		<21900	
2,3,5,6-Tetrachlorophenol		<21900	
2,4,5-Trichlorophenol	8,000,000 (400,000µg/L)	<21900	
Nitrobenzene		<43600	
2,4,6-Trichlorophenol	40,000 (2,000µg/L)	<21900	
Bis(2-ethylhexyl)phthalate		<65600	
Butyl benzyl phtalate		<43600	
Diethyphthalate		<43600	
Dimethylphthalate		<43600	
Di-n-butylphthalate		<43600	
Di-n-octyl phthalate		<43600	
N-Nitrosodimethylamine		<10900	
N-Nitroso-di-n-propylamine		<10900	
N-Nitrosodiphenylamine		<39400	R-02
Bis(2-Chloroethoxy) methane		<10900	
Bis(2-Chloroethyl) ether		<10900	
2,2'- Oxybis (1-Chloropropane)		<10900	
Hexachlorobenzene	2,600 (130µg/L)	<4360	
Hexachlorobutadiene	10,000 (500µg/L)	<10900	
Hexachlorocyclopentadiene		<21900	
Hexachloroethane	60,000 (3,000µg/L)	<10900	
2-Chloronaphthalene		<4360	
1,2,4-Trichlorobenzene		<10900	
4-Bromophenyl phenyl ether		<10900	
4-Chlorophenyl phenyl ether		<10900	
Aniline		<21900	
4-Chloroaniline		<10900	
2-Nitroaniline		<87600	
3-Nitroaniline		<87600	
4-Nitroaniline		<87600	
2,4-Dinitrotoluene	2,600 (130µg/L)	<43600	
2,6-Dinitrotoluene		<43600	
Benzoic acid		<548000	
Benzyl alchohol		<21900	
Isophorone		<10900	
Azobenzene (1,2-DPH)		<10900	
Bis(2-Ethylhexyl)adipate		<109000	
3,3'-Dichlorobenzidine		<87600	Q-52
1,2-Dinitrobenzene		<109000	
1,3-Dinitrobenzene		<109000	
1,4-Dinitrobenzene	100,000 (5,000µg/L)	<109000	
Pyridine		<21900	
1,2-Dichlorobenzene		<10900	
1,3-Dichlorobenzene		<10900	
1,4-Dichlorobenzene	150,000 (7,500µg/L)	<10900	
Total Metals by EPA 6020 (ICPMS) (ug/kg dry)			
Arsenic	100,000 (5,000µg/L)	**5990**	
Barium	2,000,000 (100,000µg/L)	**118000**	
Cadmium	20,000 (1,000µg/L)	**279**	
Chromium	100,000 (5,000µg/L)	**49900**	
Lead	100,000 (5,000µg/L)	**15700**	
Mercury	4,000 (200µg/L)	<108	
Selenium	20,000 (1,000µg/L)	<1360	

Table 1: Purge Water and Decontamination (T103A) #14

Silver	100,000 (5,000µg/L)	<271	
TCLP Metals by EPA 6020 (ICPMS) (ug/L)			
Arsenic	100,000 (5,000µg/L)	<100	
Barium	2,000,000 (100,000µg/L)	<5000	
Cadmium	20,000 (1,000µg/L)	<100	
Chromium	100,000 (5,000µg/L)	<100	
Lead	100,000 (5,000µg/L)	<50.0	
Mercury	4,000 (200µg/L)	<7.00	
Selenium	20,000 (1,000µg/L)	<100	
Silver	100,000 (5,000µg/L)	<100	
Cyanide - Total (Non-Aqueous Water Leach) by EPA 9013M/9014 (ug/kg dry)			
Total Cyanide (ug/kg dry)		**3320**	**Q-42**
Percent Dry Weight by EPA 8000C			
%Solids		**74.1**	

NOTES:

F-24 = The chromatographic pattern does not resemble the fuel standard used for quantitation.

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

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-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. (Refer to the QC Section of Analytical Report.)

Q-52 = Due to erratic or low blank spike recoveries, results for this analyte are considered Estimated Values.

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

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 R Lavrinc Date: 06/07/2022

Agency Authorization (if Required): Date: