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

ANALYTICAL REPORT

Tuesday, January 17, 2023

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

RE: A3A0116 - Gasco -- Filtercake - 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 A3A0116, which was received by the laboratory on 1/3/2023 at 10:18:00AM.

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)

Default Cooler	0.8 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This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.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

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ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco -- Filtercake**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A3A0116 - 01 17 23 0613**

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
FC-122022-2033	A3A0116-01	Solid	12/20/22 03:00	01/03/23 10:18

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2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A3A0116 - 01 17 23 0613**

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
FC-122022-2033 (A3A0116-01)				**Matrix: Solid**		**Batch: 23A0045**		**H-02**
Diesel	**4440000**	119000	239000	ug/kg dry	2	01/05/23 07:35	NWTPH-Dx	**F-13**
Oil	ND	239000	478000	ug/kg dry	2	01/05/23 07:35	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 103 %*		*Limits: 50-150 %*	*2*	*01/05/23 07:35*	*NWTPH-Dx*	*S-05*

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ANALYTICAL SAMPLE RESULTS

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

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FC-122022-2033 (A3A0116-01)				**Matrix: Solid**		**Batch: 23A0025**		**V-16**
Gasoline Range Organics	**108000**	28800	57600	ug/kg dry	50	01/03/23 14:12	NWTPH-Gx (MS)	**F-09**
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 104 %*		*Limits: 50-150 %*	*1*	*01/03/23 14:12*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*99 %*	*50-150 %*	*1*	*01/03/23 14:12*	*NWTPH-Gx (MS)*	

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ANALYTICAL REPORT

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2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A3A0116 - 01 17 23 0613**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FC-122022-2033 (A3A0116-01)				**Matrix: Solid**		**Batch: 23A0025**		**V-16**
Acetone	ND	5760	11500	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
Acrylonitrile	ND	576	1150	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
Benzene	ND	57.6	115	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
Bromobenzene	ND	144	288	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
Bromochloromethane	ND	288	576	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
Bromodichloromethane	ND	288	576	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
Bromoform	ND	576	1150	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
Bromomethane	ND	5760	5760	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
2-Butanone (MEK)	ND	2880	5760	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
n-Butylbenzene	ND	288	576	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
sec-Butylbenzene	ND	288	576	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
tert-Butylbenzene	ND	288	576	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
Carbon disulfide	ND	2880	5760	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
Carbon tetrachloride	ND	288	576	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
Chlorobenzene	ND	144	288	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
Chloroethane	ND	2880	5760	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
Chloroform	ND	288	576	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
Chloromethane	ND	2880	2880	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
2-Chlorotoluene	ND	288	576	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
4-Chlorotoluene	ND	288	576	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
Dibromochloromethane	ND	576	1150	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
1,2-Dibromo-3-chloropropane	ND	1440	2880	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
1,2-Dibromoethane (EDB)	ND	288	576	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
Dibromomethane	ND	288	576	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
1,2-Dichlorobenzene	ND	144	288	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
1,3-Dichlorobenzene	ND	144	288	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
1,4-Dichlorobenzene	ND	144	288	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
Dichlorodifluoromethane	ND	576	1150	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
1,1-Dichloroethane	ND	144	288	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
1,2-Dichloroethane (EDC)	ND	144	288	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
1,1-Dichloroethene	ND	144	288	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
cis-1,2-Dichloroethene	ND	144	288	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
trans-1,2-Dichloroethene	ND	144	288	ug/kg dry	50	01/03/23 14:12	5035A/8260D	

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ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: Gasco -- Filtercake	
2749 Lockport Road	Project Number: 111323	Report ID:
Niagara Falls, NY 14305	Project Manager: Chip Byrd	A3A0116 - 01 17 23 0613

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FC-122022-2033 (A3A0116-01)				**Matrix: Solid**		**Batch: 23A0025**		**V-16**
1,2-Dichloropropane	ND	144	288	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
1,3-Dichloropropane	ND	288	576	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
2,2-Dichloropropane	ND	288	576	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
1,1-Dichloropropene	ND	288	576	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
cis-1,3-Dichloropropene	ND	288	576	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
trans-1,3-Dichloropropene	ND	288	576	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
Ethylbenzene	ND	144	288	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
Hexachlorobutadiene	ND	576	1150	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
2-Hexanone	ND	5760	5760	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
Isopropylbenzene	ND	288	576	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
4-Isopropyltoluene	ND	288	576	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
Methylene chloride	ND	2880	5760	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
4-Methyl-2-pentanone (MiBK)	ND	5760	5760	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	288	576	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
Naphthalene	ND	576	1150	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
n-Propylbenzene	ND	144	288	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
Styrene	ND	288	576	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
1,1,1,2-Tetrachloroethane	ND	144	288	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
1,1,2,2-Tetrachloroethane	ND	288	576	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
Tetrachloroethene (PCE)	ND	144	288	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
Toluene	ND	288	576	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
1,2,3-Trichlorobenzene	ND	1440	2880	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
1,2,4-Trichlorobenzene	ND	1440	2880	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
1,1,1-Trichloroethane	ND	144	288	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
1,1,2-Trichloroethane	ND	144	288	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
Trichloroethene (TCE)	ND	144	288	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
Trichlorofluoromethane	ND	1150	1150	ug/kg dry	50	01/03/23 14:12	5035A/8260D	Q-30
1,2,3-Trichloropropane	ND	288	576	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
1,2,4-Trimethylbenzene	ND	288	576	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
1,3,5-Trimethylbenzene	ND	288	576	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
Vinyl chloride	ND	144	288	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
m,p-Xylene	ND	288	576	ug/kg dry	50	01/03/23 14:12	5035A/8260D	
o-Xylene	ND	144	288	ug/kg dry	50	01/03/23 14:12	5035A/8260D	

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ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco -- Filtercake**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A3A0116 - 01 17 23 0613**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FC-122022-2033 (A3A0116-01)				**Matrix: Solid**		**Batch: 23A0025**		**V-16**
Surrogate: 1,4-Difluorobenzene (Surr)			*Recovery: 104 %*	*Limits: 80-120 %*	*1*	*01/03/23 14:12*	*5035A/8260D*	
Toluene-d8 (Surr)			*94 %*	*80-120 %*	*1*	*01/03/23 14:12*	*5035A/8260D*	
4-Bromofluorobenzene (Surr)			*96 %*	*79-120 %*	*1*	*01/03/23 14:12*	*5035A/8260D*	

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2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A3A0116 - 01 17 23 0613**

ANALYTICAL SAMPLE RESULTS

Regulated TCLP Volatile Organic Compounds by EPA 1311/8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FC-122022-2033 (A3A0116-01)				**Matrix: Solid**		**Batch: 23A0067**		
Benzene	ND	6.25	12.5	ug/L	50	01/04/23 14:15	1311/8260D	
2-Butanone (MEK)	ND	250	500	ug/L	50	01/04/23 14:15	1311/8260D	
Carbon tetrachloride	ND	25.0	50.0	ug/L	50	01/04/23 14:15	1311/8260D	
Chlorobenzene	ND	12.5	25.0	ug/L	50	01/04/23 14:15	1311/8260D	
Chloroform	ND	25.0	50.0	ug/L	50	01/04/23 14:15	1311/8260D	
1,4-Dichlorobenzene	ND	12.5	25.0	ug/L	50	01/04/23 14:15	1311/8260D	
1,1-Dichloroethene	ND	12.5	25.0	ug/L	50	01/04/23 14:15	1311/8260D	
1,2-Dichloroethane (EDC)	ND	12.5	25.0	ug/L	50	01/04/23 14:15	1311/8260D	
Tetrachloroethene (PCE)	ND	12.5	25.0	ug/L	50	01/04/23 14:15	1311/8260D	
Trichloroethene (TCE)	ND	12.5	25.0	ug/L	50	01/04/23 14:15	1311/8260D	
Vinyl chloride	ND	12.5	25.0	ug/L	50	01/04/23 14:15	1311/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*106 %*	*Limits:* *80-120 %*	*1*	*01/04/23 14:15*	*1311/8260D*	
Toluene-d8 (Surr)			*102 %*	*80-120 %*	*1*	*01/04/23 14:15*	*1311/8260D*	
4-Bromofluorobenzene (Surr)			*96 %*	*80-120 %*	*1*	*01/04/23 14:15*	*1311/8260D*	

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2749 Lockport Road	Project Number: 111323	Report ID:
Niagara Falls, NY 14305	Project Manager: Chip Byrd	A3A0116 - 01 17 23 0613

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FC-122022-2033 (A3A0116-01)				**Matrix: Solid**		**Batch: 23A0040**		
Acenaphthene	**43000**	2370	4750	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
Acenaphthylene	ND	6220	6220	ug/kg dry	200	01/03/23 19:22	EPA 8270E	R-02
Anthracene	**54000**	2370	4750	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
Benz(a)anthracene	**35400**	2370	4750	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
Benzo(a)pyrene	**42500**	3560	7110	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
Benzo(b)fluoranthene	**31900**	3560	7110	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
Benzo(k)fluoranthene	**13700**	3560	7110	ug/kg dry	200	01/03/23 19:22	EPA 8270E	**M-05**
Benzo(g,h,i)perylene	**24200**	2370	4750	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
Chrysene	**46200**	2370	4750	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
Dibenz(a,h)anthracene	**2390**	2370	4750	ug/kg dry	200	01/03/23 19:22	EPA 8270E	**J**
Fluoranthene	**171000**	2370	4750	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
Fluorene	**34500**	2370	4750	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
Indeno(1,2,3-cd)pyrene	**22600**	2370	4750	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
1-Methylnaphthalene	**7280**	4750	9480	ug/kg dry	200	01/03/23 19:22	EPA 8270E	**J**
2-Methylnaphthalene	ND	4750	9480	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
Naphthalene	ND	4750	9480	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
Phenanthrene	**276000**	2370	4750	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
Pyrene	**200000**	2370	4750	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
Carbazole	ND	3560	7110	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
Dibenzofuran	**3160**	2370	4750	ug/kg dry	200	01/03/23 19:22	EPA 8270E	**J**
2-Chlorophenol	ND	11900	23700	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
4-Chloro-3-methylphenol	ND	23700	47500	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
2,4-Dichlorophenol	ND	11900	23700	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
2,4-Dimethylphenol	ND	11900	23700	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
2,4-Dinitrophenol	ND	59200	119000	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
4,6-Dinitro-2-methylphenol	ND	59200	119000	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
2-Methylphenol	ND	5920	11900	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
3+4-Methylphenol(s)	ND	5920	11900	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
2-Nitrophenol	ND	23700	47500	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
4-Nitrophenol	ND	23700	47500	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
Pentachlorophenol (PCP)	ND	23700	47500	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
Phenol	ND	4750	9480	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
2,3,4,6-Tetrachlorophenol	ND	11900	23700	ug/kg dry	200	01/03/23 19:22	EPA 8270E	

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ANALYTICAL REPORT

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2749 Lockport Road	Project Number: 111323	Report ID:
Niagara Falls, NY 14305	Project Manager: Chip Byrd	A3A0116 - 01 17 23 0613

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FC-122022-2033 (A3A0116-01)				**Matrix: Solid**		**Batch: 23A0040**		
2,3,5,6-Tetrachlorophenol	ND	11900	23700	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
2,4,5-Trichlorophenol	ND	11900	23700	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
Nitrobenzene	ND	23700	47500	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
2,4,6-Trichlorophenol	ND	11900	23700	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
Bis(2-ethylhexyl)phthalate	ND	35600	71100	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
Butyl benzyl phthalate	ND	23700	47500	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
Diethylphthalate	ND	23700	47500	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
Dimethylphthalate	ND	23700	47500	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
Di-n-butylphthalate	ND	23700	47500	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
Di-n-octyl phthalate	ND	23700	47500	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
N-Nitrosodimethylamine	ND	5920	11900	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
N-Nitroso-di-n-propylamine	ND	5920	11900	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
N-Nitrosodiphenylamine	ND	11900	11900	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
Bis(2-Chloroethoxy) methane	ND	5920	11900	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
Bis(2-Chloroethyl) ether	ND	5920	11900	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
2,2'-Oxybis(1-Chloropropane)	ND	5920	11900	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
Hexachlorobenzene	ND	2370	4750	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
Hexachlorobutadiene	ND	5920	11900	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
Hexachlorocyclopentadiene	ND	11900	23700	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
Hexachloroethane	ND	5920	11900	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
2-Chloronaphthalene	ND	2370	4750	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
1,2,4-Trichlorobenzene	ND	5920	11900	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
4-Bromophenyl phenyl ether	ND	5920	11900	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
4-Chlorophenyl phenyl ether	ND	5920	11900	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
Aniline	ND	11900	23700	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
4-Chloroaniline	ND	5920	11900	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
2-Nitroaniline	ND	47500	94800	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
3-Nitroaniline	ND	47500	94800	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
4-Nitroaniline	ND	47500	94800	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
2,4-Dinitrotoluene	ND	23700	47500	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
2,6-Dinitrotoluene	ND	23700	47500	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
Benzoic acid	ND	297000	592000	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
Benzyl alcohol	ND	11900	23700	ug/kg dry	200	01/03/23 19:22	EPA 8270E	

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ORELAP ID: OR100062

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco -- Filtercake**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A3A0116 - 01 17 23 0613**

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FC-122022-2033 (A3A0116-01)				**Matrix: Solid**		**Batch: 23A0040**		
Isophorone	ND	5920	11900	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
Azobenzene (1,2-DPH)	ND	5920	11900	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
Bis(2-Ethylhexyl) adipate	ND	59200	119000	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
3,3'-Dichlorobenzidine	ND	47500	94800	ug/kg dry	200	01/03/23 19:22	EPA 8270E	Q-52
1,2-Dinitrobenzene	ND	59200	119000	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
1,3-Dinitrobenzene	ND	59200	119000	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
1,4-Dinitrobenzene	ND	59200	119000	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
Pyridine	ND	11900	23700	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
1,2-Dichlorobenzene	ND	5920	11900	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
1,3-Dichlorobenzene	ND	5920	11900	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
1,4-Dichlorobenzene	ND	5920	11900	ug/kg dry	200	01/03/23 19:22	EPA 8270E	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*48 %*	*Limits: 37-122 %*	*200*	*01/03/23 19:22*	*EPA 8270E*	*S-05*
2-Fluorobiphenyl (Surr)			*64 %*	*44-120 %*	*200*	*01/03/23 19:22*	*EPA 8270E*	*S-05*
Phenol-d6 (Surr)			*40 %*	*33-122 %*	*200*	*01/03/23 19:22*	*EPA 8270E*	*S-05*
p-Terphenyl-d14 (Surr)			*83 %*	*54-127 %*	*200*	*01/03/23 19:22*	*EPA 8270E*	*S-05*
2-Fluorophenol (Surr)			*46 %*	*35-120 %*	*200*	*01/03/23 19:22*	*EPA 8270E*	*S-05*
2,4,6-Tribromophenol (Surr)			*128 %*	*39-132 %*	*200*	*01/03/23 19:22*	*EPA 8270E*	*S-05*

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ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco -- Filtercake**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A3A0116 - 01 17 23 0613**

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FC-122022-2033 (A3A0116-01)				**Matrix: Solid**				
Batch: 23A0217								
Arsenic	**9630**	3190	6370	ug/kg dry	10	01/09/23 18:32	EPA 6020B	
Barium	**225000**	3190	6370	ug/kg dry	10	01/09/23 18:32	EPA 6020B	
Cadmium	ND	637	1270	ug/kg dry	10	01/09/23 18:32	EPA 6020B	
Chromium	ND	3190	6370	ug/kg dry	10	01/09/23 18:32	EPA 6020B	
Lead	ND	637	1270	ug/kg dry	10	01/09/23 18:32	EPA 6020B	
Mercury	ND	255	510	ug/kg dry	10	01/09/23 18:32	EPA 6020B	
Selenium	ND	3190	6370	ug/kg dry	10	01/09/23 18:32	EPA 6020B	
Silver	ND	637	1270	ug/kg dry	10	01/09/23 18:32	EPA 6020B	

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ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco -- Filtercake**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A3A0116 - 01 17 23 0613**

ANALYTICAL SAMPLE RESULTS

TCLP Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FC-122022-2033 (A3A0116-01)				**Matrix: Solid**				
Batch: 23A0100								
Arsenic	ND	50.0	100	ug/L	10	01/05/23 18:03	1311/6020B	
Barium	ND	2500	5000	ug/L	10	01/05/23 18:03	1311/6020B	
Cadmium	ND	50.0	100	ug/L	10	01/05/23 18:03	1311/6020B	
Chromium	ND	50.0	100	ug/L	10	01/05/23 18:03	1311/6020B	
Lead	ND	25.0	50.0	ug/L	10	01/05/23 18:03	1311/6020B	
Mercury	ND	3.75	7.00	ug/L	10	01/05/23 18:03	1311/6020B	
Selenium	ND	50.0	100	ug/L	10	01/05/23 18:03	1311/6020B	
Silver	ND	50.0	100	ug/L	10	01/05/23 18:03	1311/6020B	

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2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A3A0116 - 01 17 23 0613**

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
FC-122022-2033 (A3A0116-01)				**Matrix: Solid**		**Batch: 23A0013**		
Total Cyanide	**7320**	597	1190	ug/kg dry	2	01/04/23 18:26	D7511-12	**H-05**

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2749 Lockport Road	Project Number: **111323**	**Report ID:**
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ANALYTICAL SAMPLE RESULTS

Percent Dry Weight

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FC-122022-2033 (A3A0116-01)				**Matrix: Solid**		**Batch: 23A0032**		
% Solids	**16.3**	---	1.00	%	1	01/04/23 05:20	EPA 8000D	

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ANALYTICAL REPORT

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2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A3A0116 - 01 17 23 0613**

ANALYTICAL SAMPLE RESULTS

TCLP Extraction by EPA 1311 (ZHE)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FC-122022-2033 (A3A0116-01)				**Matrix: Solid**		**Batch: 23A0041**		
TCLP ZHE Extraction	0.00	---		N/A	1	01/03/23 14:58	EPA 1311 ZHE	
TCLP Extraction	PREP	---		N/A	1	01/04/23 14:00	EPA 1311	

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ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: Gasco -- Filtercake	
2749 Lockport Road	Project Number: 111323	Report ID:
Niagara Falls, NY 14305	Project Manager: Chip Byrd	A3A0116 - 01 17 23 0613

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 23A0045 - EPA 3546 (Fuels)									Solid			
Blank (23A0045-BLK1)			Prepared: 01/04/23 05:48		Analyzed: 01/05/23 06:54							
NWTPH-Dx												
Diesel	ND	10000	20000	ug/kg wet	1	---	---	---	---	---	---	
Oil	ND	20000	40000	ug/kg wet	1	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)		*Recovery: 112 %*	*Limits: 50-150 %*		*Dilution: 1x*							
LCS (23A0045-BS1)			Prepared: 01/04/23 05:48		Analyzed: 01/05/23 07:15							
NWTPH-Dx												
Diesel	124000	10000	20000	ug/kg wet	1	125000	---	99	38-132%	---	---	
Surr: o-Terphenyl (Surr)		*Recovery: 115 %*	*Limits: 50-150 %*		*Dilution: 1x*							
Duplicate (23A0045-DUP1)			Prepared: 01/04/23 05:48		Analyzed: 01/05/23 07:55							H-02
QC Source Sample: FC-122022-2033 (A3A0116-01)												
NWTPH-Dx												
Diesel	**5230000**	123000	245000	ug/kg dry	2	---	4440000	---	---	16	30%	F-13
Oil	ND	245000	490000	ug/kg dry	2	---	ND	---	---	---	30%	
Surr: o-Terphenyl (Surr)		*Recovery: 102 %*	*Limits: 50-150 %*		*Dilution: 2x*							S-05

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ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco -- Filtercake**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A3A0116 - 01 17 23 0613**

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 23A0025 - EPA 5035A									Soil			
Blank (23A0025-BLK1)			Prepared: 01/03/23 10:00 Analyzed: 01/03/23 13:46									
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	2500	5000	ug/kg wet	50	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 103 %*	*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*97 %*	*50-150 %*			*"*					
LCS (23A0025-BS2)			Prepared: 01/03/23 10:00 Analyzed: 01/03/23 13:21									
NWTPH-Gx (MS)												
Gasoline Range Organics	22600	2500	5000	ug/kg wet	50	25000	---	90	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 102 %*	*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*95 %*	*50-150 %*			*"*					
Duplicate (23A0025-DUP1)			Prepared: 01/03/23 10:00 Analyzed: 01/03/23 16:45									
QC Source Sample: Non-SDG (A3A0112-03)												
Gasoline Range Organics	ND	3040	6090	ug/kg dry	50	---	ND	---	---	---	30%	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 103 %*	*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*97 %*	*50-150 %*			*"*					

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ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: Gasco -- Filtercake	
2749 Lockport Road	Project Number: 111323	Report ID:
Niagara Falls, NY 14305	Project Manager: Chip Byrd	A3A0116 - 01 17 23 0613

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 23A0025 - EPA 5035A							Soil					
Blank (23A0025-BLK1)			Prepared: 01/03/23 10:00 Analyzed: 01/03/23 13:46									
5035A/8260D												
Acetone	ND	500	1000	ug/kg wet	50	---	---	---	---	---	---	
Acrylonitrile	ND	50.0	100	ug/kg wet	50	---	---	---	---	---	---	
Benzene	ND	5.00	10.0	ug/kg wet	50	---	---	---	---	---	---	
Bromobenzene	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
Bromochloromethane	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
Bromodichloromethane	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
Bromoform	ND	50.0	100	ug/kg wet	50	---	---	---	---	---	---	
Bromomethane	ND	500	500	ug/kg wet	50	---	---	---	---	---	---	
2-Butanone (MEK)	ND	250	500	ug/kg wet	50	---	---	---	---	---	---	
n-Butylbenzene	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
sec-Butylbenzene	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
tert-Butylbenzene	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
Carbon disulfide	ND	250	500	ug/kg wet	50	---	---	---	---	---	---	
Carbon tetrachloride	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
Chlorobenzene	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
Chloroethane	ND	250	500	ug/kg wet	50	---	---	---	---	---	---	
Chloroform	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
Chloromethane	ND	250	250	ug/kg wet	50	---	---	---	---	---	---	
2-Chlorotoluene	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
4-Chlorotoluene	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
Dibromochloromethane	ND	50.0	100	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	125	250	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
Dibromomethane	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	50.0	100	ug/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethane	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethene	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	

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2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A3A0116 - 01 17 23 0613**

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 23A0025 - EPA 5035A							**Soil**					
Blank (23A0025-BLK1)			Prepared: 01/03/23 10:00 Analyzed: 01/03/23 13:46									
1,2-Dichloropropane	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
1,3-Dichloropropane	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
2,2-Dichloropropane	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
1,1-Dichloropropene	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
Ethylbenzene	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
Hexachlorobutadiene	ND	50.0	100	ug/kg wet	50	---	---	---	---	---	---	
2-Hexanone	ND	500	500	ug/kg wet	50	---	---	---	---	---	---	
Isopropylbenzene	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
4-Isopropyltoluene	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
Methylene chloride	ND	250	500	ug/kg wet	50	---	---	---	---	---	---	
4-Methyl-2-pentanone (MiBK)	ND	500	500	ug/kg wet	50	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
Naphthalene	ND	50.0	100	ug/kg wet	50	---	---	---	---	---	---	
n-Propylbenzene	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
Styrene	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
Toluene	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
1,2,3-Trichlorobenzene	ND	125	250	ug/kg wet	50	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	125	250	ug/kg wet	50	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
1,1,2-Trichloroethane	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
Trichlorofluoromethane	ND	100	100	ug/kg wet	50	---	---	---	---	---	---	Q-30
1,2,3-Trichloropropane	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
Vinyl chloride	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
m,p-Xylene	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
o-Xylene	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 103 %*	*Limits: 80-120 %*			*Dilution: 1x*					

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Darwin Thomas, Business Development Director

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503-718-2323
ORELAP ID: **OR100062**

Sevenson Environmental Services, Inc.	Project: **Gasco -- Filtercake**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A3A0116 - 01 17 23 0613**

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 23A0025 - EPA 5035A							**Soil**					
Blank (23A0025-BLK1)				Prepared: 01/03/23 10:00 Analyzed: 01/03/23 13:46								
Surr: Toluene-d8 (Surr)			*Recovery: 94 %*	*Limits: 80-120 %*			*Dilution: 1x*					
4-Bromofluorobenzene (Surr)			*100 %*	*79-120 %*			*"*					
LCS (23A0025-BS1)				Prepared: 01/03/23 10:00 Analyzed: 01/03/23 12:55								
5035A/8260D												
Acetone	1670	500	1000	ug/kg wet	50	2000	---	84	80-120%	---	---	
Acrylonitrile	908	50.0	100	ug/kg wet	50	1000	---	91	80-120%	---	---	
Benzene	996	5.00	10.0	ug/kg wet	50	1000	---	100	80-120%	---	---	
Bromobenzene	1020	12.5	25.0	ug/kg wet	50	1000	---	102	80-120%	---	---	
Bromochloromethane	938	25.0	50.0	ug/kg wet	50	1000	---	94	80-120%	---	---	
Bromodichloromethane	996	25.0	50.0	ug/kg wet	50	1000	---	100	80-120%	---	---	
Bromoform	1180	50.0	100	ug/kg wet	50	1000	---	118	80-120%	---	---	
Bromomethane	1260	500	500	ug/kg wet	50	1000	---	**126**	**80-120%**	---	---	ICV-01, Q-56
2-Butanone (MEK)	1770	250	500	ug/kg wet	50	2000	---	88	80-120%	---	---	
n-Butylbenzene	934	25.0	50.0	ug/kg wet	50	1000	---	93	80-120%	---	---	
sec-Butylbenzene	1020	25.0	50.0	ug/kg wet	50	1000	---	102	80-120%	---	---	
tert-Butylbenzene	930	25.0	50.0	ug/kg wet	50	1000	---	93	80-120%	---	---	
Carbon disulfide	938	250	500	ug/kg wet	50	1000	---	94	80-120%	---	---	
Carbon tetrachloride	1260	25.0	50.0	ug/kg wet	50	1000	---	**126**	**80-120%**	---	---	Q-56
Chlorobenzene	1030	12.5	25.0	ug/kg wet	50	1000	---	103	80-120%	---	---	
Chloroethane	1420	250	500	ug/kg wet	50	1000	---	**142**	**80-120%**	---	---	Q-56
Chloroform	1030	25.0	50.0	ug/kg wet	50	1000	---	103	80-120%	---	---	
Chloromethane	763	250	250	ug/kg wet	50	1000	---	**76**	**80-120%**	---	---	Q-55
2-Chlorotoluene	1000	25.0	50.0	ug/kg wet	50	1000	---	100	80-120%	---	---	
4-Chlorotoluene	930	25.0	50.0	ug/kg wet	50	1000	---	93	80-120%	---	---	
Dibromochloromethane	970	50.0	100	ug/kg wet	50	1000	---	97	80-120%	---	---	
1,2-Dibromo-3-chloropropane	890	125	250	ug/kg wet	50	1000	---	89	80-120%	---	---	
1,2-Dibromoethane (EDB)	968	25.0	50.0	ug/kg wet	50	1000	---	97	80-120%	---	---	
Dibromomethane	1070	25.0	50.0	ug/kg wet	50	1000	---	107	80-120%	---	---	
1,2-Dichlorobenzene	969	12.5	25.0	ug/kg wet	50	1000	---	97	80-120%	---	---	
1,3-Dichlorobenzene	993	12.5	25.0	ug/kg wet	50	1000	---	99	80-120%	---	---	
1,4-Dichlorobenzene	954	12.5	25.0	ug/kg wet	50	1000	---	95	80-120%	---	---	
Dichlorodifluoromethane	1270	50.0	100	ug/kg wet	50	1000	---	**127**	**80-120%**	---	---	Q-56
1,1-Dichloroethane	988	12.5	25.0	ug/kg wet	50	1000	---	99	80-120%	---	---	

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Darwin Thomas, Business Development Director

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ORELAP ID: OR100062

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco -- Filtercake**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A3A0116 - 01 17 23 0613**

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 23A0025 - EPA 5035A							**Soil**					
LCS (23A0025-BS1)			Prepared: 01/03/23 10:00 Analyzed: 01/03/23 12:55									
1,2-Dichloroethane (EDC)	1000	12.5	25.0	ug/kg wet	50	1000	---	100	80-120%	---	---	
1,1-Dichloroethene	1040	12.5	25.0	ug/kg wet	50	1000	---	104	80-120%	---	---	
cis-1,2-Dichloroethene	940	12.5	25.0	ug/kg wet	50	1000	---	94	80-120%	---	---	
trans-1,2-Dichloroethene	990	12.5	25.0	ug/kg wet	50	1000	---	99	80-120%	---	---	
1,2-Dichloropropane	948	12.5	25.0	ug/kg wet	50	1000	---	95	80-120%	---	---	
1,3-Dichloropropane	924	25.0	50.0	ug/kg wet	50	1000	---	92	80-120%	---	---	
2,2-Dichloropropane	1620	25.0	50.0	ug/kg wet	50	1000	---	**162**	**80-120%**	---	---	Q-56
1,1-Dichloropropene	1040	25.0	50.0	ug/kg wet	50	1000	---	104	80-120%	---	---	
cis-1,3-Dichloropropene	1000	25.0	50.0	ug/kg wet	50	1000	---	100	80-120%	---	---	
trans-1,3-Dichloropropene	1010	25.0	50.0	ug/kg wet	50	1000	---	101	80-120%	---	---	
Ethylbenzene	984	12.5	25.0	ug/kg wet	50	1000	---	98	80-120%	---	---	
Hexachlorobutadiene	1040	50.0	100	ug/kg wet	50	1000	---	104	80-120%	---	---	
2-Hexanone	1550	500	500	ug/kg wet	50	2000	---	**77**	**80-120%**	---	---	Q-55
Isopropylbenzene	1060	25.0	50.0	ug/kg wet	50	1000	---	106	80-120%	---	---	
4-Isopropyltoluene	1020	25.0	50.0	ug/kg wet	50	1000	---	102	80-120%	---	---	
Methylene chloride	1060	250	500	ug/kg wet	50	1000	---	106	80-120%	---	---	
4-Methyl-2-pentanone (MiBK)	1550	500	500	ug/kg wet	50	2000	---	**78**	**80-120%**	---	---	Q-55
Methyl tert-butyl ether (MTBE)	974	25.0	50.0	ug/kg wet	50	1000	---	97	80-120%	---	---	
Naphthalene	832	50.0	100	ug/kg wet	50	1000	---	83	80-120%	---	---	
n-Propylbenzene	958	12.5	25.0	ug/kg wet	50	1000	---	96	80-120%	---	---	
Styrene	1040	25.0	50.0	ug/kg wet	50	1000	---	104	80-120%	---	---	
1,1,1,2-Tetrachloroethane	1030	12.5	25.0	ug/kg wet	50	1000	---	103	80-120%	---	---	
1,1,2,2-Tetrachloroethane	870	25.0	50.0	ug/kg wet	50	1000	---	87	80-120%	---	---	
Tetrachloroethene (PCE)	1100	12.5	25.0	ug/kg wet	50	1000	---	110	80-120%	---	---	
Toluene	955	25.0	50.0	ug/kg wet	50	1000	---	96	80-120%	---	---	
1,2,3-Trichlorobenzene	934	125	250	ug/kg wet	50	1000	---	93	80-120%	---	---	
1,2,4-Trichlorobenzene	914	125	250	ug/kg wet	50	1000	---	91	80-120%	---	---	
1,1,1-Trichloroethane	1110	12.5	25.0	ug/kg wet	50	1000	---	111	80-120%	---	---	
1,1,2-Trichloroethane	953	12.5	25.0	ug/kg wet	50	1000	---	95	80-120%	---	---	
Trichloroethene (TCE)	1130	12.5	25.0	ug/kg wet	50	1000	---	113	80-120%	---	---	
Trichlorofluoromethane	587	100	100	ug/kg wet	50	1000	---	**59**	**80-120%**	---	---	Q-30
1,2,3-Trichloropropane	888	25.0	50.0	ug/kg wet	50	1000	---	89	80-120%	---	---	
1,2,4-Trimethylbenzene	988	25.0	50.0	ug/kg wet	50	1000	---	99	80-120%	---	---	
1,3,5-Trimethylbenzene	1010	25.0	50.0	ug/kg wet	50	1000	---	101	80-120%	---	---	

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Darwin Thomas, Business Development Director

APEX LABORATORIES

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco -- Filtercake**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A3A0116 - 01 17 23 0613**

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 23A0025 - EPA 5035A							**Soil**					
LCS (23A0025-BS1)			Prepared: 01/03/23 10:00 Analyzed: 01/03/23 12:55									
Vinyl chloride	1050	12.5	25.0	ug/kg wet	50	1000	---	105	80-120%	---	---	
m,p-Xylene	2030	25.0	50.0	ug/kg wet	50	2000	---	101	80-120%	---	---	
o-Xylene	976	12.5	25.0	ug/kg wet	50	1000	---	98	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 101 %*		*Limits: 80-120 %*				*Dilution: 1x*			
Toluene-d8 (Surr)			*93 %*		*80-120 %*				*"*			
4-Bromofluorobenzene (Surr)			*101 %*		*79-120 %*				*"*			
Duplicate (23A0025-DUP1)			Prepared: 01/03/23 10:00 Analyzed: 01/03/23 16:45									
QC Source Sample: Non-SDG (A3A0112-03)												
Acetone	ND	609	1220	ug/kg dry	50	---	ND	---	---	---	30%	
Acrylonitrile	ND	60.9	122	ug/kg dry	50	---	ND	---	---	---	30%	
Benzene	ND	6.09	12.2	ug/kg dry	50	---	ND	---	---	---	30%	
Bromobenzene	ND	15.2	30.4	ug/kg dry	50	---	ND	---	---	---	30%	
Bromochloromethane	ND	30.4	60.9	ug/kg dry	50	---	ND	---	---	---	30%	
Bromodichloromethane	ND	30.4	60.9	ug/kg dry	50	---	ND	---	---	---	30%	
Bromoform	ND	60.9	122	ug/kg dry	50	---	ND	---	---	---	30%	
Bromomethane	ND	609	609	ug/kg dry	50	---	ND	---	---	---	30%	
2-Butanone (MEK)	ND	304	609	ug/kg dry	50	---	ND	---	---	---	30%	
n-Butylbenzene	ND	30.4	60.9	ug/kg dry	50	---	ND	---	---	---	30%	
sec-Butylbenzene	ND	30.4	60.9	ug/kg dry	50	---	ND	---	---	---	30%	
tert-Butylbenzene	ND	30.4	60.9	ug/kg dry	50	---	ND	---	---	---	30%	
Carbon disulfide	ND	304	609	ug/kg dry	50	---	ND	---	---	---	30%	
Carbon tetrachloride	ND	30.4	60.9	ug/kg dry	50	---	ND	---	---	---	30%	
Chlorobenzene	ND	15.2	30.4	ug/kg dry	50	---	ND	---	---	---	30%	
Chloroethane	ND	304	609	ug/kg dry	50	---	ND	---	---	---	30%	
Chloroform	ND	30.4	60.9	ug/kg dry	50	---	ND	---	---	---	30%	
Chloromethane	ND	304	304	ug/kg dry	50	---	ND	---	---	---	30%	
2-Chlorotoluene	ND	30.4	60.9	ug/kg dry	50	---	ND	---	---	---	30%	
4-Chlorotoluene	ND	30.4	60.9	ug/kg dry	50	---	ND	---	---	---	30%	
Dibromochloromethane	ND	60.9	122	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dibromo-3-chloropropane	ND	152	304	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dibromoethane (EDB)	ND	30.4	60.9	ug/kg dry	50	---	ND	---	---	---	30%	
Dibromomethane	ND	30.4	60.9	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichlorobenzene	ND	15.2	30.4	ug/kg dry	50	---	ND	---	---	---	30%	

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Sevenson Environmental Services, Inc.	Project: **Gasco -- Filtercake**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A3A0116 - 01 17 23 0613**

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 23A0025 - EPA 5035A							**Soil**					
Duplicate (23A0025-DUP1)			Prepared: 01/03/23 10:00 Analyzed: 01/03/23 16:45									
QC Source Sample: Non-SDG (A3A0112-03)												
1,3-Dichlorobenzene	ND	15.2	30.4	ug/kg dry	50	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	15.2	30.4	ug/kg dry	50	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	60.9	122	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	15.2	30.4	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	15.2	30.4	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	15.2	30.4	ug/kg dry	50	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	15.2	30.4	ug/kg dry	50	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	15.2	30.4	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	15.2	30.4	ug/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	30.4	60.9	ug/kg dry	50	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	30.4	60.9	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	30.4	60.9	ug/kg dry	50	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	30.4	60.9	ug/kg dry	50	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	30.4	60.9	ug/kg dry	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	15.2	30.4	ug/kg dry	50	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	60.9	122	ug/kg dry	50	---	ND	---	---	---	30%	
2-Hexanone	ND	609	609	ug/kg dry	50	---	ND	---	---	---	30%	
Isopropylbenzene	ND	30.4	60.9	ug/kg dry	50	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	30.4	60.9	ug/kg dry	50	---	ND	---	---	---	30%	
Methylene chloride	ND	304	609	ug/kg dry	50	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	609	609	ug/kg dry	50	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	30.4	60.9	ug/kg dry	50	---	ND	---	---	---	30%	
Naphthalene	ND	60.9	122	ug/kg dry	50	---	ND	---	---	---	30%	
n-Propylbenzene	ND	15.2	30.4	ug/kg dry	50	---	ND	---	---	---	30%	
Styrene	ND	30.4	60.9	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	15.2	30.4	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	30.4	60.9	ug/kg dry	50	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	15.2	30.4	ug/kg dry	50	---	ND	---	---	---	30%	
Toluene	ND	30.4	60.9	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	152	304	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	152	304	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	15.2	30.4	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,2-Trichloroethane	ND	15.2	30.4	ug/kg dry	50	---	ND	---	---	---	30%	

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco -- Filtercake**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A3A0116 - 01 17 23 0613**

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 23A0025 - EPA 5035A							**Soil**					
Duplicate (23A0025-DUP1)			Prepared: 01/03/23 10:00 Analyzed: 01/03/23 16:45									
QC Source Sample: Non-SDG (A3A0112-03)												
Trichloroethene (TCE)	ND	15.2	30.4	ug/kg dry	50	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	122	122	ug/kg dry	50	---	ND	---	---	---	30%	Q-30
1,2,3-Trichloropropane	ND	30.4	60.9	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	30.4	60.9	ug/kg dry	50	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	30.4	60.9	ug/kg dry	50	---	ND	---	---	---	30%	
Vinyl chloride	ND	15.2	30.4	ug/kg dry	50	---	ND	---	---	---	30%	
m,p-Xylene	ND	30.4	60.9	ug/kg dry	50	---	ND	---	---	---	30%	
o-Xylene	ND	15.2	30.4	ug/kg dry	50	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 102 %*	*Limits: 80-120 %*			*Dilution: 1x*					
Toluene-d8 (Surr)			*95 %*	*80-120 %*			*"*					
4-Bromofluorobenzene (Surr)			*100 %*	*79-120 %*			*"*					
Matrix Spike (23A0025-MS1)			Prepared: 01/03/23 10:00 Analyzed: 01/03/23 19:18									
QC Source Sample: Non-SDG (A3A0112-04)												
5035A/8260D												
Acetone	3940	1100	2200	ug/kg dry	100	4410	ND	89	36-164%	---	---	
Acrylonitrile	1990	110	220	ug/kg dry	100	2200	ND	90	65-134%	---	---	
Benzene	2210	11.0	22.0	ug/kg dry	100	2200	46.3	98	77-121%	---	---	
Bromobenzene	2290	27.6	55.1	ug/kg dry	100	2200	ND	104	78-121%	---	---	
Bromochloromethane	2010	55.1	110	ug/kg dry	100	2200	ND	91	78-125%	---	---	
Bromodichloromethane	2160	55.1	110	ug/kg dry	100	2200	ND	98	75-127%	---	---	
Bromoform	2510	110	220	ug/kg dry	100	2200	ND	114	67-132%	---	---	
Bromomethane	2680	1100	1100	ug/kg dry	100	2200	ND	122	53-143%	---	---	ICV-01, Q-54c
2-Butanone (MEK)	4020	551	1100	ug/kg dry	100	4410	ND	91	51-148%	---	---	
n-Butylbenzene	3640	55.1	110	ug/kg dry	100	2200	1340	104	70-128%	---	---	
sec-Butylbenzene	3560	55.1	110	ug/kg dry	100	2200	1250	105	73-126%	---	---	
tert-Butylbenzene	2230	55.1	110	ug/kg dry	100	2200	ND	101	73-125%	---	---	
Carbon disulfide	2030	551	1100	ug/kg dry	100	2200	ND	92	63-132%	---	---	
Carbon tetrachloride	2500	55.1	110	ug/kg dry	100	2200	ND	113	70-135%	---	---	Q-54c
Chlorobenzene	2180	27.6	55.1	ug/kg dry	100	2200	ND	99	79-120%	---	---	
Chloroethane	2990	551	1100	ug/kg dry	100	2200	ND	136	59-139%	---	---	Q-54
Chloroform	2300	55.1	110	ug/kg dry	100	2200	ND	104	78-123%	---	---	

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503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: Gasco -- Filtercake	
2749 Lockport Road	Project Number: 111323	Report ID:
Niagara Falls, NY 14305	Project Manager: Chip Byrd	A3A0116 - 01 17 23 0613

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 23A0025 - EPA 5035A							**Soil**					
Matrix Spike (23A0025-MS1)			Prepared: 01/03/23 10:00 Analyzed: 01/03/23 19:18									
QC Source Sample: Non-SDG (A3A0112-04)												
Chloromethane	1600	551	551	ug/kg dry	100	2200	ND	73	50-136%	---	---	Q-54g
2-Chlorotoluene	2300	55.1	110	ug/kg dry	100	2200	ND	104	75-122%	---	---	
4-Chlorotoluene	2090	55.1	110	ug/kg dry	100	2200	ND	95	72-124%	---	---	
Dibromochloromethane	2270	110	220	ug/kg dry	100	2200	ND	103	74-126%	---	---	
1,2-Dibromo-3-chloropropane	2360	276	551	ug/kg dry	100	2200	ND	107	61-132%	---	---	
1,2-Dibromoethane (EDB)	2340	55.1	110	ug/kg dry	100	2200	ND	106	78-122%	---	---	
Dibromomethane	2350	55.1	110	ug/kg dry	100	2200	ND	106	78-125%	---	---	
1,2-Dichlorobenzene	2150	27.6	55.1	ug/kg dry	100	2200	ND	97	78-121%	---	---	
1,3-Dichlorobenzene	2160	27.6	55.1	ug/kg dry	100	2200	ND	98	77-121%	---	---	
1,4-Dichlorobenzene	2050	27.6	55.1	ug/kg dry	100	2200	ND	93	75-120%	---	---	
Dichlorodifluoromethane	2980	110	220	ug/kg dry	100	2200	ND	135	29-149%	---	---	Q-54d
1,1-Dichloroethane	2110	27.6	55.1	ug/kg dry	100	2200	ND	96	76-125%	---	---	
1,2-Dichloroethane (EDC)	2180	27.6	55.1	ug/kg dry	100	2200	ND	99	73-128%	---	---	
1,1-Dichloroethene	2280	27.6	55.1	ug/kg dry	100	2200	ND	103	70-131%	---	---	
cis-1,2-Dichloroethene	2060	27.6	55.1	ug/kg dry	100	2200	ND	93	77-123%	---	---	
trans-1,2-Dichloroethene	2080	27.6	55.1	ug/kg dry	100	2200	ND	95	74-125%	---	---	
1,2-Dichloropropane	2070	27.6	55.1	ug/kg dry	100	2200	ND	94	76-123%	---	---	
1,3-Dichloropropane	2160	55.1	110	ug/kg dry	100	2200	ND	98	77-121%	---	---	
2,2-Dichloropropane	3350	55.1	110	ug/kg dry	100	2200	ND	**152**	**67-133%**	---	---	Q-54b
1,1-Dichloropropene	2290	55.1	110	ug/kg dry	100	2200	ND	104	76-125%	---	---	
cis-1,3-Dichloropropene	2340	55.1	110	ug/kg dry	100	2200	ND	106	74-126%	---	---	
trans-1,3-Dichloropropene	2300	55.1	110	ug/kg dry	100	2200	ND	105	71-130%	---	---	
Ethylbenzene	3090	27.6	55.1	ug/kg dry	100	2200	968	96	76-122%	---	---	
Hexachlorobutadiene	3690	110	220	ug/kg dry	100	2200	ND	**167**	**61-135%**	---	---	Q-01
2-Hexanone	4060	1100	1100	ug/kg dry	100	4410	ND	92	53-145%	---	---	Q-54f
Isopropylbenzene	3060	55.1	110	ug/kg dry	100	2200	691	107	68-134%	---	---	
4-Isopropyltoluene	3410	55.1	110	ug/kg dry	100	2200	993	110	73-127%	---	---	
Methylene chloride	2220	551	1100	ug/kg dry	100	2200	ND	101	70-128%	---	---	
4-Methyl-2-pentanone (MiBK)	5040	1100	1100	ug/kg dry	100	4410	ND	114	65-135%	---	---	Q-54e
Methyl tert-butyl ether (MTBE)	2120	55.1	110	ug/kg dry	100	2200	ND	96	73-125%	---	---	
Naphthalene	3180	110	220	ug/kg dry	100	2200	866	105	62-129%	---	---	
n-Propylbenzene	3740	27.6	55.1	ug/kg dry	100	2200	1580	98	73-125%	---	---	
Styrene	2350	55.1	110	ug/kg dry	100	2200	ND	106	76-124%	---	---	

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ORELAP ID: **OR100062**

Sevenson Environmental Services, Inc.	Project: **Gasco -- Filtercake**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A3A0116 - 01 17 23 0613**

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 23A0025 - EPA 5035A							**Soil**					
Matrix Spike (23A0025-MS1)			Prepared: 01/03/23 10:00		Analyzed: 01/03/23 19:18							
QC Source Sample: Non-SDG (A3A0112-04)												
1,1,1,2-Tetrachloroethane	2240	27.6	55.1	ug/kg dry	100	2200	ND	102	78-125%	---	---	
1,1,2,2-Tetrachloroethane	3120	55.1	110	ug/kg dry	100	2200	ND	117	70-124%	---	---	
Tetrachloroethene (PCE)	2660	27.6	55.1	ug/kg dry	100	2200	ND	121	73-128%	---	---	
Toluene	3030	55.1	110	ug/kg dry	100	2200	886	97	77-121%	---	---	
1,2,3-Trichlorobenzene	2330	276	551	ug/kg dry	100	2200	ND	106	66-130%	---	---	
1,2,4-Trichlorobenzene	2270	276	551	ug/kg dry	100	2200	ND	103	67-129%	---	---	
1,1,1-Trichloroethane	2460	27.6	55.1	ug/kg dry	100	2200	ND	112	73-130%	---	---	
1,1,2-Trichloroethane	2840	27.6	55.1	ug/kg dry	100	2200	ND	**124**	**78-121%**	---	---	Q-01
Trichloroethene (TCE)	2540	27.6	55.1	ug/kg dry	100	2200	ND	115	77-123%	---	---	
Trichlorofluoromethane	3800	220	220	ug/kg dry	100	2200	ND	**172**	**62-140%**	---	---	Q-30
1,2,3-Trichloropropane	2460	55.1	110	ug/kg dry	100	2200	ND	112	73-125%	---	---	
1,2,4-Trimethylbenzene	11600	55.1	110	ug/kg dry	100	2200	9580	90	75-123%	---	---	
1,3,5-Trimethylbenzene	4930	55.1	110	ug/kg dry	100	2200	2680	102	73-124%	---	---	
Vinyl chloride	2140	27.6	55.1	ug/kg dry	100	2200	ND	97	56-135%	---	---	
m,p-Xylene	8490	55.1	110	ug/kg dry	100	4410	4280	95	77-124%	---	---	
o-Xylene	4170	27.6	55.1	ug/kg dry	100	2200	1980	99	77-123%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 104 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*99 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*107 %*		*79-120 %*			*"*				

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco -- Filtercake**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A3A0116 - 01 17 23 0613**

QUALITY CONTROL (QC) SAMPLE RESULTS

Regulated 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 23A0067 - EPA 1311/5030B TCLP Volatiles							**Water**					
Blank (23A0067-BLK1)			Prepared: 01/04/23 11:35 Analyzed: 01/04/23 13:53									**TCLP**
1311/8260D												
Benzene	ND	6.25	12.5	ug/L	50	---	---	---	---	---	---	
2-Butanone (MEK)	ND	250	500	ug/L	50	---	---	---	---	---	---	
Carbon tetrachloride	ND	25.0	50.0	ug/L	50	---	---	---	---	---	---	
Chlorobenzene	ND	12.5	25.0	ug/L	50	---	---	---	---	---	---	
Chloroform	ND	25.0	50.0	ug/L	50	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	12.5	25.0	ug/L	50	---	---	---	---	---	---	
1,1-Dichloroethene	ND	12.5	25.0	ug/L	50	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	12.5	25.0	ug/L	50	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	12.5	25.0	ug/L	50	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	12.5	25.0	ug/L	50	---	---	---	---	---	---	
Vinyl chloride	ND	12.5	25.0	ug/L	50	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 105 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*102 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*95 %*		*80-120 %*			*"*				
LCS (23A0067-BS1)			Prepared: 01/04/23 11:35 Analyzed: 01/04/23 12:54									**TCLP**
1311/8260D												
Benzene	1080	6.25	12.5	ug/L	50	1000	---	108	80-120%	---	---	
2-Butanone (MEK)	2300	250	500	ug/L	50	2000	---	115	80-120%	---	---	
Carbon tetrachloride	1140	25.0	50.0	ug/L	50	1000	---	114	80-120%	---	---	
Chlorobenzene	1030	12.5	25.0	ug/L	50	1000	---	103	80-120%	---	---	
Chloroform	1080	25.0	50.0	ug/L	50	1000	---	108	80-120%	---	---	
1,4-Dichlorobenzene	1020	12.5	25.0	ug/L	50	1000	---	102	80-120%	---	---	
1,1-Dichloroethene	1240	12.5	25.0	ug/L	50	1000	---	**124**	**80-120%**	---	---	Q-56
1,2-Dichloroethane (EDC)	1110	12.5	25.0	ug/L	50	1000	---	111	80-120%	---	---	
Tetrachloroethene (PCE)	1020	12.5	25.0	ug/L	50	1000	---	102	80-120%	---	---	
Trichloroethene (TCE)	1010	12.5	25.0	ug/L	50	1000	---	101	80-120%	---	---	
Vinyl chloride	1270	12.5	25.0	ug/L	50	1000	---	**127**	**80-120%**	---	---	Q-56
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 104 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*100 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*93 %*		*80-120 %*			*"*				
Duplicate (23A0067-DUP1)			Prepared: 01/04/23 11:35 Analyzed: 01/04/23 14:37									

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ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: Gasco -- Filtercake	
2749 Lockport Road	Project Number: 111323	Report ID:
Niagara Falls, NY 14305	Project Manager: Chip Byrd	A3A0116 - 01 17 23 0613

QUALITY CONTROL (QC) SAMPLE RESULTS

Regulated 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 23A0067 - EPA 1311/5030B TCLP Volatiles							**Water**					
Duplicate (23A0067-DUP1)			Prepared: 01/04/23 11:35 Analyzed: 01/04/23 14:37									
QC Source Sample: FC-122022-2033 (A3A0116-01)												
1311/8260D												
Benzene	ND	6.25	12.5	ug/L	50	---	ND	---	---	---	30%	
2-Butanone (MEK)	ND	250	500	ug/L	50	---	ND	---	---	---	30%	
Carbon tetrachloride	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
Chlorobenzene	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	
Chloroform	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	
Trichloroethene (TCE)	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	
Vinyl chloride	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 105 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*102 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*94 %*		*80-120 %*			*"*				
Matrix Spike (23A0067-MS1)			Prepared: 01/04/23 11:35 Analyzed: 01/04/23 16:06									
QC Source Sample: Non-SDG (A3A0129-01)												
1311/8260D												
Benzene	1300	6.25	12.5	ug/L	50	1000	118	119	79-120%	---	---	
2-Butanone (MEK)	2440	250	500	ug/L	50	2000	ND	122	56-143%	---	---	
Carbon tetrachloride	1260	25.0	50.0	ug/L	50	1000	ND	126	72-136%	---	---	
Chlorobenzene	1090	12.5	25.0	ug/L	50	1000	ND	109	80-120%	---	---	
Chloroform	1180	25.0	50.0	ug/L	50	1000	ND	118	79-124%	---	---	
1,4-Dichlorobenzene	1060	12.5	25.0	ug/L	50	1000	ND	106	79-120%	---	---	
1,1-Dichloroethene	1410	12.5	25.0	ug/L	50	1000	ND	**141**	**71-131%**	---	---	Q-54a
1,2-Dichloroethane (EDC)	1190	12.5	25.0	ug/L	50	1000	ND	119	73-128%	---	---	
Tetrachloroethene (PCE)	1070	12.5	25.0	ug/L	50	1000	ND	107	74-129%	---	---	
Trichloroethene (TCE)	1070	12.5	25.0	ug/L	50	1000	ND	107	79-123%	---	---	
Vinyl chloride	1480	12.5	25.0	ug/L	50	1000	ND	**148**	**58-137%**	---	---	Q-54d
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 104 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*101 %*		*80-120 %*			*"*				

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ORELAP ID: **OR100062**

Sevenson Environmental Services, Inc.	Project: **Gasco -- Filtercake**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A3A0116 - 01 17 23 0613**

QUALITY CONTROL (QC) SAMPLE RESULTS

Regulated 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 23A0067 - EPA 1311/5030B TCLP Volatiles												**Water**
Matrix Spike (23A0067-MS1)					Prepared: 01/04/23 11:35		Analyzed: 01/04/23 16:06					
QC Source Sample: Non-SDG (A3A0129-01)												
Surr: 4-Bromofluorobenzene (Surr)					*Recovery: 91 %*		*Limits: 80-120 %*					*Dilution: 1x*

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ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco -- Filtercake**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A3A0116 - 01 17 23 0613**

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 23A0040 - EPA 3546							**Solid**					
Blank (23A0040-BLK1)			Prepared: 01/03/23 14:46 Analyzed: 01/03/23 18:14									
EPA 8270E												
Acenaphthene	ND	1.33	2.67	ug/kg wet	1	---	---	---	---	---	---	
Acenaphthylene	ND	1.33	2.67	ug/kg wet	1	---	---	---	---	---	---	
Anthracene	ND	1.33	2.67	ug/kg wet	1	---	---	---	---	---	---	
Benz(a)anthracene	ND	1.33	2.67	ug/kg wet	1	---	---	---	---	---	---	
Benzo(a)pyrene	ND	2.00	4.00	ug/kg wet	1	---	---	---	---	---	---	
Benzo(b)fluoranthene	ND	2.00	4.00	ug/kg wet	1	---	---	---	---	---	---	
Benzo(k)fluoranthene	ND	2.00	4.00	ug/kg wet	1	---	---	---	---	---	---	
Benzo(g,h,i)perylene	ND	1.33	2.67	ug/kg wet	1	---	---	---	---	---	---	
Chrysene	ND	1.33	2.67	ug/kg wet	1	---	---	---	---	---	---	
Dibenz(a,h)anthracene	ND	1.33	2.67	ug/kg wet	1	---	---	---	---	---	---	
Fluoranthene	ND	1.33	2.67	ug/kg wet	1	---	---	---	---	---	---	
Fluorene	ND	1.33	2.67	ug/kg wet	1	---	---	---	---	---	---	
Indeno(1,2,3-cd)pyrene	ND	1.33	2.67	ug/kg wet	1	---	---	---	---	---	---	
1-Methylnaphthalene	ND	2.67	5.33	ug/kg wet	1	---	---	---	---	---	---	
2-Methylnaphthalene	ND	2.67	5.33	ug/kg wet	1	---	---	---	---	---	---	
Naphthalene	ND	2.67	5.33	ug/kg wet	1	---	---	---	---	---	---	
Phenanthrene	ND	1.33	2.67	ug/kg wet	1	---	---	---	---	---	---	
Pyrene	ND	1.33	2.67	ug/kg wet	1	---	---	---	---	---	---	
Carbazole	ND	2.00	4.00	ug/kg wet	1	---	---	---	---	---	---	
Dibenzofuran	ND	1.33	2.67	ug/kg wet	1	---	---	---	---	---	---	
2-Chlorophenol	ND	6.67	13.3	ug/kg wet	1	---	---	---	---	---	---	
4-Chloro-3-methylphenol	ND	13.3	26.7	ug/kg wet	1	---	---	---	---	---	---	
2,4-Dichlorophenol	ND	6.67	13.3	ug/kg wet	1	---	---	---	---	---	---	
2,4-Dimethylphenol	ND	6.67	13.3	ug/kg wet	1	---	---	---	---	---	---	
2,4-Dinitrophenol	ND	33.3	66.7	ug/kg wet	1	---	---	---	---	---	---	
4,6-Dinitro-2-methylphenol	ND	33.3	66.7	ug/kg wet	1	---	---	---	---	---	---	
2-Methylphenol	ND	3.33	6.67	ug/kg wet	1	---	---	---	---	---	---	
3+4-Methylphenol(s)	ND	3.33	6.67	ug/kg wet	1	---	---	---	---	---	---	
2-Nitrophenol	ND	13.3	26.7	ug/kg wet	1	---	---	---	---	---	---	
4-Nitrophenol	ND	13.3	26.7	ug/kg wet	1	---	---	---	---	---	---	
Pentachlorophenol (PCP)	ND	13.3	26.7	ug/kg wet	1	---	---	---	---	---	---	
Phenol	ND	2.67	5.33	ug/kg wet	1	---	---	---	---	---	---	
2,3,4,6-Tetrachlorophenol	ND	6.67	13.3	ug/kg wet	1	---	---	---	---	---	---	

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Darwin Thomas, Business Development Director

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503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: Gasco -- Filtercake	
2749 Lockport Road	Project Number: 111323	Report ID:
Niagara Falls, NY 14305	Project Manager: Chip Byrd	A3A0116 - 01 17 23 0613

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 23A0040 - EPA 3546							**Solid**					
Blank (23A0040-BLK1)			Prepared: 01/03/23 14:46 Analyzed: 01/03/23 18:14									
2,3,5,6-Tetrachlorophenol	ND	6.67	13.3	ug/kg wet	1	---	---	---	---	---	---	
2,4,5-Trichlorophenol	ND	6.67	13.3	ug/kg wet	1	---	---	---	---	---	---	
Nitrobenzene	ND	13.3	26.7	ug/kg wet	1	---	---	---	---	---	---	
2,4,6-Trichlorophenol	ND	6.67	13.3	ug/kg wet	1	---	---	---	---	---	---	
Bis(2-ethylhexyl)phthalate	ND	20.0	40.0	ug/kg wet	1	---	---	---	---	---	---	
Butyl benzyl phthalate	ND	13.3	26.7	ug/kg wet	1	---	---	---	---	---	---	
Diethylphthalate	ND	13.3	26.7	ug/kg wet	1	---	---	---	---	---	---	
Dimethylphthalate	ND	13.3	26.7	ug/kg wet	1	---	---	---	---	---	---	
Di-n-butylphthalate	ND	13.3	26.7	ug/kg wet	1	---	---	---	---	---	---	
Di-n-octyl phthalate	ND	13.3	26.7	ug/kg wet	1	---	---	---	---	---	---	
N-Nitrosodimethylamine	ND	3.33	6.67	ug/kg wet	1	---	---	---	---	---	---	
N-Nitroso-di-n-propylamine	ND	3.33	6.67	ug/kg wet	1	---	---	---	---	---	---	
N-Nitrosodiphenylamine	ND	3.33	6.67	ug/kg wet	1	---	---	---	---	---	---	
Bis(2-Chloroethoxy) methane	ND	3.33	6.67	ug/kg wet	1	---	---	---	---	---	---	
Bis(2-Chloroethyl) ether	ND	3.33	6.67	ug/kg wet	1	---	---	---	---	---	---	
2,2'-Oxybis(1-Chloropropane)	ND	3.33	6.67	ug/kg wet	1	---	---	---	---	---	---	
Hexachlorobenzene	ND	1.33	2.67	ug/kg wet	1	---	---	---	---	---	---	
Hexachlorobutadiene	ND	3.33	6.67	ug/kg wet	1	---	---	---	---	---	---	
Hexachlorocyclopentadiene	ND	6.67	13.3	ug/kg wet	1	---	---	---	---	---	---	
Hexachloroethane	ND	3.33	6.67	ug/kg wet	1	---	---	---	---	---	---	
2-Chloronaphthalene	ND	1.33	2.67	ug/kg wet	1	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	3.33	6.67	ug/kg wet	1	---	---	---	---	---	---	
4-Bromophenyl phenyl ether	ND	3.33	6.67	ug/kg wet	1	---	---	---	---	---	---	
4-Chlorophenyl phenyl ether	ND	3.33	6.67	ug/kg wet	1	---	---	---	---	---	---	
Aniline	ND	6.67	13.3	ug/kg wet	1	---	---	---	---	---	---	
4-Chloroaniline	ND	3.33	6.67	ug/kg wet	1	---	---	---	---	---	---	
2-Nitroaniline	ND	26.7	53.3	ug/kg wet	1	---	---	---	---	---	---	
3-Nitroaniline	ND	26.7	53.3	ug/kg wet	1	---	---	---	---	---	---	
4-Nitroaniline	ND	26.7	53.3	ug/kg wet	1	---	---	---	---	---	---	
2,4-Dinitrotoluene	ND	13.3	26.7	ug/kg wet	1	---	---	---	---	---	---	
2,6-Dinitrotoluene	ND	13.3	26.7	ug/kg wet	1	---	---	---	---	---	---	
Benzoic acid	ND	167	333	ug/kg wet	1	---	---	---	---	---	---	
Benzyl alcohol	ND	6.67	13.3	ug/kg wet	1	---	---	---	---	---	---	
Isophorone	ND	3.33	6.67	ug/kg wet	1	---	---	---	---	---	---	

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Darwin Thomas, Business Development Director

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503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: Gasco -- Filtercake	
2749 Lockport Road	Project Number: 111323	Report ID:
Niagara Falls, NY 14305	Project Manager: Chip Byrd	A3A0116 - 01 17 23 0613

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 23A0040 - EPA 3546							**Solid**					
Blank (23A0040-BLK1)			Prepared: 01/03/23 14:46 Analyzed: 01/03/23 18:14									
Azobenzene (1,2-DPH)	ND	3.33	6.67	ug/kg wet	1	---	---	---	---	---	---	
Bis(2-Ethylhexyl) adipate	ND	33.3	66.7	ug/kg wet	1	---	---	---	---	---	---	
3,3'-Dichlorobenzidine	ND	26.7	53.3	ug/kg wet	1	---	---	---	---	---	---	Q-52
1,2-Dinitrobenzene	ND	33.3	66.7	ug/kg wet	1	---	---	---	---	---	---	
1,3-Dinitrobenzene	ND	33.3	66.7	ug/kg wet	1	---	---	---	---	---	---	
1,4-Dinitrobenzene	ND	33.3	66.7	ug/kg wet	1	---	---	---	---	---	---	
Pyridine	ND	6.67	13.3	ug/kg wet	1	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	3.33	6.67	ug/kg wet	1	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	3.33	6.67	ug/kg wet	1	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	3.33	6.67	ug/kg wet	1	---	---	---	---	---	---	
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 83 %*	*Limits: 37-122 %*			*Dilution: 1x*					
2-Fluorobiphenyl (Surr)			*92 %*	*44-120 %*			*"*					
Phenol-d6 (Surr)			*86 %*	*33-122 %*			*"*					
p-Terphenyl-d14 (Surr)			*102 %*	*54-127 %*			*"*					
2-Fluorophenol (Surr)			*84 %*	*35-120 %*			*"*					
2,4,6-Tribromophenol (Surr)			*92 %*	*39-132 %*			*"*					Q-41
LCS (23A0040-BS1)			Prepared: 01/03/23 14:46 Analyzed: 01/03/23 18:48									**Q-18**
EPA 8270E												
Acenaphthene	505	2.66	5.34	ug/kg wet	2	533	---	95	40-123%	---	---	
Acenaphthylene	527	2.66	5.34	ug/kg wet	2	533	---	99	32-132%	---	---	
Anthracene	547	2.66	5.34	ug/kg wet	2	533	---	103	47-123%	---	---	
Benz(a)anthracene	542	2.66	5.34	ug/kg wet	2	533	---	102	49-126%	---	---	
Benzo(a)pyrene	536	4.00	8.00	ug/kg wet	2	533	---	101	45-129%	---	---	
Benzo(b)fluoranthene	540	4.00	8.00	ug/kg wet	2	533	---	101	45-132%	---	---	
Benzo(k)fluoranthene	535	4.00	8.00	ug/kg wet	2	533	---	100	47-132%	---	---	
Benzo(g,h,i)perylene	538	2.66	5.34	ug/kg wet	2	533	---	101	43-134%	---	---	
Chrysene	522	2.66	5.34	ug/kg wet	2	533	---	98	50-124%	---	---	
Dibenz(a,h)anthracene	533	2.66	5.34	ug/kg wet	2	533	---	100	45-134%	---	---	
Fluoranthene	567	2.66	5.34	ug/kg wet	2	533	---	106	50-127%	---	---	
Fluorene	525	2.66	5.34	ug/kg wet	2	533	---	98	43-125%	---	---	
Indeno(1,2,3-cd)pyrene	551	2.66	5.34	ug/kg wet	2	533	---	103	45-133%	---	---	
1-Methylnaphthalene	518	5.34	10.7	ug/kg wet	2	533	---	97	40-120%	---	---	
2-Methylnaphthalene	531	5.34	10.7	ug/kg wet	2	533	---	100	38-122%	---	---	

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Darwin Thomas, Business Development Director

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ORELAP ID: **OR100062**

Sevenson Environmental Services, Inc.	Project: **Gasco -- Filtercake**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A3A0116 - 01 17 23 0613**

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 23A0040 - EPA 3546							**Solid**					
LCS (23A0040-BS1)			Prepared: 01/03/23 14:46		Analyzed: 01/03/23 18:48							**Q-18**
Naphthalene	514	5.34	10.7	ug/kg wet	2	533	---	96	35-123%	---	---	
Phenanthrene	508	2.66	5.34	ug/kg wet	2	533	---	95	50-121%	---	---	
Pyrene	554	2.66	5.34	ug/kg wet	2	533	---	104	47-127%	---	---	
Carbazole	549	4.00	8.00	ug/kg wet	2	533	---	103	50-123%	---	---	
Dibenzofuran	514	2.66	5.34	ug/kg wet	2	533	---	96	44-120%	---	---	
2-Chlorophenol	506	13.3	26.6	ug/kg wet	2	533	---	95	34-121%	---	---	
4-Chloro-3-methylphenol	558	26.6	53.4	ug/kg wet	2	533	---	105	45-122%	---	---	
2,4-Dichlorophenol	581	13.3	26.6	ug/kg wet	2	533	---	109	40-122%	---	---	
2,4-Dimethylphenol	586	13.3	26.6	ug/kg wet	2	533	---	110	30-127%	---	---	
2,4-Dinitrophenol	506	66.6	133	ug/kg wet	2	533	---	95	10-137%	---	---	
4,6-Dinitro-2-methylphenol	559	66.6	133	ug/kg wet	2	533	---	105	29-132%	---	---	
2-Methylphenol	529	6.66	13.3	ug/kg wet	2	533	---	99	32-122%	---	---	
3+4-Methylphenol(s)	540	6.66	13.3	ug/kg wet	2	533	---	101	34-120%	---	---	
2-Nitrophenol	516	26.6	53.4	ug/kg wet	2	533	---	97	36-123%	---	---	
4-Nitrophenol	417	26.6	53.4	ug/kg wet	2	533	---	78	30-132%	---	---	
Pentachlorophenol (PCP)	514	26.6	53.4	ug/kg wet	2	533	---	96	25-133%	---	---	
Phenol	491	5.34	10.7	ug/kg wet	2	533	---	92	34-121%	---	---	
2,3,4,6-Tetrachlorophenol	592	13.3	26.6	ug/kg wet	2	533	---	111	44-125%	---	---	
2,3,5,6-Tetrachlorophenol	557	13.3	26.6	ug/kg wet	2	533	---	104	40-120%	---	---	
2,4,5-Trichlorophenol	557	13.3	26.6	ug/kg wet	2	533	---	104	41-124%	---	---	
Nitrobenzene	479	26.6	53.4	ug/kg wet	2	533	---	90	34-122%	---	---	
2,4,6-Trichlorophenol	551	13.3	26.6	ug/kg wet	2	533	---	103	39-126%	---	---	
Bis(2-ethylhexyl)phthalate	511	40.0	80.0	ug/kg wet	2	533	---	96	51-133%	---	---	
Butyl benzyl phthalate	537	26.6	53.4	ug/kg wet	2	533	---	101	48-132%	---	---	
Diethylphthalate	538	26.6	53.4	ug/kg wet	2	533	---	101	50-124%	---	---	
Dimethylphthalate	531	26.6	53.4	ug/kg wet	2	533	---	100	48-124%	---	---	
Di-n-butylphthalate	562	26.6	53.4	ug/kg wet	2	533	---	105	51-128%	---	---	
Di-n-octyl phthalate	542	26.6	53.4	ug/kg wet	2	533	---	102	45-140%	---	---	
N-Nitrosodimethylamine	402	6.66	13.3	ug/kg wet	2	533	---	75	23-120%	---	---	
N-Nitroso-di-n-propylamine	504	6.66	13.3	ug/kg wet	2	533	---	94	36-120%	---	---	
N-Nitrosodiphenylamine	553	6.66	13.3	ug/kg wet	2	533	---	104	38-127%	---	---	
Bis(2-Chloroethoxy) methane	475	6.66	13.3	ug/kg wet	2	533	---	89	36-121%	---	---	
Bis(2-Chloroethyl) ether	465	6.66	13.3	ug/kg wet	2	533	---	87	31-120%	---	---	
2,2'-Oxybis(1-Chloropropane)	420	6.66	13.3	ug/kg wet	2	533	---	79	39-120%	---	---	

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Darwin Thomas, Business Development Director

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco -- Filtercake**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A3A0116 - 01 17 23 0613**

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 23A0040 - EPA 3546							**Solid**					
LCS (23A0040-BS1)			Prepared: 01/03/23 14:46		Analyzed: 01/03/23 18:48							**Q-18**
Hexachlorobenzene	577	2.66	5.34	ug/kg wet	2	533	---	108	45-122%	---	---	
Hexachlorobutadiene	571	6.66	13.3	ug/kg wet	2	533	---	107	32-123%	---	---	
Hexachlorocyclopentadiene	553	13.3	26.6	ug/kg wet	2	533	---	104	10-140%	---	---	
Hexachloroethane	469	6.66	13.3	ug/kg wet	2	533	---	88	28-120%	---	---	
2-Chloronaphthalene	499	2.66	5.34	ug/kg wet	2	533	---	94	41-120%	---	---	
1,2,4-Trichlorobenzene	561	6.66	13.3	ug/kg wet	2	533	---	105	34-120%	---	---	
4-Bromophenyl phenyl ether	584	6.66	13.3	ug/kg wet	2	533	---	109	46-124%	---	---	
4-Chlorophenyl phenyl ether	547	6.66	13.3	ug/kg wet	2	533	---	103	45-121%	---	---	
Aniline	228	13.3	26.6	ug/kg wet	2	533	---	43	10-120%	---	---	Q-31
4-Chloroaniline	223	6.66	13.3	ug/kg wet	2	533	---	42	17-120%	---	---	Q-31
2-Nitroaniline	483	53.4	107	ug/kg wet	2	533	---	91	44-127%	---	---	
3-Nitroaniline	456	53.4	107	ug/kg wet	2	533	---	85	33-120%	---	---	
4-Nitroaniline	483	53.4	107	ug/kg wet	2	533	---	91	51-125%	---	---	
2,4-Dinitrotoluene	545	26.6	53.4	ug/kg wet	2	533	---	102	48-126%	---	---	
2,6-Dinitrotoluene	541	26.6	53.4	ug/kg wet	2	533	---	101	46-124%	---	---	
Benzoic acid	846	334	666	ug/kg wet	2	1070	---	79	10-140%	---	---	Q-31
Benzyl alcohol	501	13.3	26.6	ug/kg wet	2	533	---	94	29-122%	---	---	
Isophorone	519	6.66	13.3	ug/kg wet	2	533	---	97	30-122%	---	---	
Azobenzene (1,2-DPH)	475	6.66	13.3	ug/kg wet	2	533	---	89	39-125%	---	---	
Bis(2-Ethylhexyl) adipate	507	66.6	133	ug/kg wet	2	533	---	95	61-121%	---	---	
3,3'-Dichlorobenzidine	3060	53.4	107	ug/kg wet	2	1070	---	**287**	**22-121%**	---	---	Q-41, Q-29
1,2-Dinitrobenzene	508	66.6	133	ug/kg wet	2	533	---	95	44-120%	---	---	
1,3-Dinitrobenzene	495	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	375	13.3	26.6	ug/kg wet	2	533	---	70	10-120%	---	---	
1,2-Dichlorobenzene	485	6.66	13.3	ug/kg wet	2	533	---	91	33-120%	---	---	
1,3-Dichlorobenzene	483	6.66	13.3	ug/kg wet	2	533	---	91	30-120%	---	---	
1,4-Dichlorobenzene	481	6.66	13.3	ug/kg wet	2	533	---	90	31-120%	---	---	
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 87 %*		*Limits: 37-122 %*			*Dilution: 2x*				
2-Fluorobiphenyl (Surr)			*95 %*		*44-120 %*			*"*				
Phenol-d6 (Surr)			*91 %*		*33-122 %*			*"*				
p-Terphenyl-d14 (Surr)			*106 %*		*54-127 %*			*"*				
2-Fluorophenol (Surr)			*86 %*		*35-120 %*			*"*				
2,4,6-Tribromophenol (Surr)			*119 %*		*39-132 %*			*"*				Q-41

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ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: Gasco -- Filtercake	
2749 Lockport Road	Project Number: 111323	Report ID:
Niagara Falls, NY 14305	Project Manager: Chip Byrd	A3A0116 - 01 17 23 0613

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 23A0040 - EPA 3546							**Solid**					
Duplicate (23A0040-DUP1)				Prepared: 01/03/23 14:46 Analyzed: 01/03/23 19:56								
QC Source Sample: FC-122022-2033 (A3A0116-01)												
EPA 8270E												
Acenaphthene	**47400**	2340	4700	ug/kg dry	200	---	43000	---	---	10	30%	
Acenaphthylene	ND	4700	4700	ug/kg dry	200	---	ND	---	---	---	30%	
Anthracene	**54300**	2340	4700	ug/kg dry	200	---	54000	---	---	0.6	30%	
Benz(a)anthracene	**35600**	2340	4700	ug/kg dry	200	---	35400	---	---	0.5	30%	
Benzo(a)pyrene	**41600**	3520	7040	ug/kg dry	200	---	42500	---	---	2	30%	
Benzo(b)fluoranthene	**34300**	3520	7040	ug/kg dry	200	---	31900	---	---	7	30%	
Benzo(k)fluoranthene	**13700**	3520	7040	ug/kg dry	200	---	13700	---	---	0.2	30%	M-05
Benzo(g,h,i)perylene	**25600**	2340	4700	ug/kg dry	200	---	24200	---	---	6	30%	
Chrysene	**47700**	2340	4700	ug/kg dry	200	---	46200	---	---	3	30%	
Dibenz(a,h)anthracene	**2590**	2340	4700	ug/kg dry	200	---	2390	---	---	8	30%	J
Fluoranthene	**170000**	2340	4700	ug/kg dry	200	---	171000	---	---	0.6	30%	
Fluorene	**36600**	2340	4700	ug/kg dry	200	---	34500	---	---	6	30%	
Indeno(1,2,3-cd)pyrene	**23700**	2340	4700	ug/kg dry	200	---	22600	---	---	5	30%	
1-Methylnaphthalene	**8610**	4700	9380	ug/kg dry	200	---	7280	---	---	17	30%	J
2-Methylnaphthalene	ND	4700	9380	ug/kg dry	200	---	ND	---	---	---	30%	
Naphthalene	ND	4700	9380	ug/kg dry	200	---	ND	---	---	---	30%	
Phenanthrene	**288000**	2340	4700	ug/kg dry	200	---	276000	---	---	4	30%	
Pyrene	**199000**	2340	4700	ug/kg dry	200	---	200000	---	---	0.3	30%	
Carbazole	ND	3520	7040	ug/kg dry	200	---	ND	---	---	---	30%	
Dibenzofuran	**3310**	2340	4700	ug/kg dry	200	---	3160	---	---	5	30%	J
2-Chlorophenol	ND	11700	23400	ug/kg dry	200	---	ND	---	---	---	30%	
4-Chloro-3-methylphenol	ND	23400	47000	ug/kg dry	200	---	ND	---	---	---	30%	
2,4-Dichlorophenol	ND	11700	23400	ug/kg dry	200	---	ND	---	---	---	30%	
2,4-Dimethylphenol	ND	11700	23400	ug/kg dry	200	---	ND	---	---	---	30%	
2,4-Dinitrophenol	ND	58600	117000	ug/kg dry	200	---	ND	---	---	---	30%	
4,6-Dinitro-2-methylphenol	ND	58600	117000	ug/kg dry	200	---	ND	---	---	---	30%	
2-Methylphenol	ND	5860	11700	ug/kg dry	200	---	ND	---	---	---	30%	
3+4-Methylphenol(s)	ND	5860	11700	ug/kg dry	200	---	ND	---	---	---	30%	
2-Nitrophenol	ND	23400	47000	ug/kg dry	200	---	ND	---	---	---	30%	
4-Nitrophenol	ND	23400	47000	ug/kg dry	200	---	ND	---	---	---	30%	
Pentachlorophenol (PCP)	ND	23400	47000	ug/kg dry	200	---	ND	---	---	---	30%	

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ORELAP ID: **OR100062**

Sevenson Environmental Services, Inc.	Project: **Gasco -- Filtercake**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A3A0116 - 01 17 23 0613**

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 23A0040 - EPA 3546							**Solid**					
Duplicate (23A0040-DUP1)				Prepared: 01/03/23 14:46		Analyzed: 01/03/23 19:56						
QC Source Sample: FC-122022-2033 (A3A0116-01)												
Phenol	ND	4700	9380	ug/kg dry	200	---	ND	---	---	---	30%	
2,3,4,6-Tetrachlorophenol	ND	11700	23400	ug/kg dry	200	---	ND	---	---	---	30%	
2,3,5,6-Tetrachlorophenol	ND	11700	23400	ug/kg dry	200	---	ND	---	---	---	30%	
2,4,5-Trichlorophenol	ND	11700	23400	ug/kg dry	200	---	ND	---	---	---	30%	
Nitrobenzene	ND	23400	47000	ug/kg dry	200	---	ND	---	---	---	30%	
2,4,6-Trichlorophenol	ND	11700	23400	ug/kg dry	200	---	ND	---	---	---	30%	
Bis(2-ethylhexyl)phthalate	ND	35200	70400	ug/kg dry	200	---	ND	---	---	---	30%	
Butyl benzyl phthalate	ND	23400	47000	ug/kg dry	200	---	ND	---	---	---	30%	
Diethylphthalate	ND	23400	47000	ug/kg dry	200	---	ND	---	---	---	30%	
Dimethylphthalate	ND	23400	47000	ug/kg dry	200	---	ND	---	---	---	30%	
Di-n-butylphthalate	ND	23400	47000	ug/kg dry	200	---	ND	---	---	---	30%	
Di-n-octyl phthalate	ND	23400	47000	ug/kg dry	200	---	ND	---	---	---	30%	
N-Nitrosodimethylamine	ND	5860	11700	ug/kg dry	200	---	ND	---	---	---	30%	
N-Nitroso-di-n-propylamine	ND	5860	11700	ug/kg dry	200	---	ND	---	---	---	30%	
N-Nitrosodiphenylamine	ND	11700	11700	ug/kg dry	200	---	ND	---	---	---	30%	
Bis(2-Chloroethoxy) methane	ND	5860	11700	ug/kg dry	200	---	ND	---	---	---	30%	
Bis(2-Chloroethyl) ether	ND	5860	11700	ug/kg dry	200	---	ND	---	---	---	30%	
2,2'-Oxybis(1-Chloropropane)	ND	5860	11700	ug/kg dry	200	---	ND	---	---	---	30%	
Hexachlorobenzene	ND	2340	4700	ug/kg dry	200	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	5860	11700	ug/kg dry	200	---	ND	---	---	---	30%	
Hexachlorocyclopentadiene	ND	11700	23400	ug/kg dry	200	---	ND	---	---	---	30%	
Hexachloroethane	ND	5860	11700	ug/kg dry	200	---	ND	---	---	---	30%	
2-Chloronaphthalene	ND	2340	4700	ug/kg dry	200	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	5860	11700	ug/kg dry	200	---	ND	---	---	---	30%	
4-Bromophenyl phenyl ether	ND	5860	11700	ug/kg dry	200	---	ND	---	---	---	30%	
4-Chlorophenyl phenyl ether	ND	5860	11700	ug/kg dry	200	---	ND	---	---	---	30%	
Aniline	ND	11700	23400	ug/kg dry	200	---	ND	---	---	---	30%	
4-Chloroaniline	ND	5860	11700	ug/kg dry	200	---	ND	---	---	---	30%	
2-Nitroaniline	ND	47000	93800	ug/kg dry	200	---	ND	---	---	---	30%	
3-Nitroaniline	ND	47000	93800	ug/kg dry	200	---	ND	---	---	---	30%	
4-Nitroaniline	ND	47000	93800	ug/kg dry	200	---	ND	---	---	---	30%	
2,4-Dinitrotoluene	ND	23400	47000	ug/kg dry	200	---	ND	---	---	---	30%	
2,6-Dinitrotoluene	ND	23400	47000	ug/kg dry	200	---	ND	---	---	---	30%	

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ORELAP ID: **OR100062**

Sevenson Environmental Services, Inc.	Project: **Gasco -- Filtercake**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A3A0116 - 01 17 23 0613**

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 23A0040 - EPA 3546							**Solid**					
Duplicate (23A0040-DUP1)			Prepared: 01/03/23 14:46		Analyzed: 01/03/23 19:56							
QC Source Sample: FC-122022-2033 (A3A0116-01)												
Benzoic acid	ND	294000	586000	ug/kg dry	200	---	ND	---	---	---	30%	
Benzyl alcohol	ND	11700	23400	ug/kg dry	200	---	ND	---	---	---	30%	
Isophorone	ND	5860	11700	ug/kg dry	200	---	ND	---	---	---	30%	
Azobenzene (1,2-DPH)	ND	5860	11700	ug/kg dry	200	---	ND	---	---	---	30%	
Bis(2-Ethylhexyl) adipate	ND	58600	117000	ug/kg dry	200	---	ND	---	---	---	30%	
3,3'-Dichlorobenzidine	ND	47000	93800	ug/kg dry	200	---	ND	---	---	---	30%	Q-52
1,2-Dinitrobenzene	ND	58600	117000	ug/kg dry	200	---	ND	---	---	---	30%	
1,3-Dinitrobenzene	ND	58600	117000	ug/kg dry	200	---	ND	---	---	---	30%	
1,4-Dinitrobenzene	ND	58600	117000	ug/kg dry	200	---	ND	---	---	---	30%	
Pyridine	ND	11700	23400	ug/kg dry	200	---	ND	---	---	---	30%	
1,2-Dichlorobenzene	ND	5860	11700	ug/kg dry	200	---	ND	---	---	---	30%	
1,3-Dichlorobenzene	ND	5860	11700	ug/kg dry	200	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	5860	11700	ug/kg dry	200	---	ND	---	---	---	30%	
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 51 %*		*Limits: 37-122 %*		*Dilution: 200x*					S-05
2-Fluorobiphenyl (Surr)			*74 %*		*44-120 %*		*"*					S-05
Phenol-d6 (Surr)			*34 %*		*33-122 %*		*"*					S-05
p-Terphenyl-d14 (Surr)			*89 %*		*54-127 %*		*"*					S-05
2-Fluorophenol (Surr)			*34 %*		*35-120 %*		*"*					S-05
2,4,6-Tribromophenol (Surr)			*121 %*		*39-132 %*		*"*					S-05

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Sevenson Environmental Services, Inc.	Project: **Gasco -- Filtercake**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A3A0116 - 01 17 23 0613**

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 23A0217 - EPA 3051A							**Solid**					
Blank (23A0217-BLK1)			Prepared: 01/09/23 08:02 Analyzed: 01/09/23 18:22									
EPA 6020B												
Arsenic	ND	500	1000	ug/kg wet	10	---	---	---	---	---	---	
Barium	ND	500	1000	ug/kg wet	10	---	---	---	---	---	---	
Cadmium	ND	100	200	ug/kg wet	10	---	---	---	---	---	---	
Chromium	ND	500	1000	ug/kg wet	10	---	---	---	---	---	---	
Lead	ND	100	200	ug/kg wet	10	---	---	---	---	---	---	
Mercury	ND	40.0	80.0	ug/kg wet	10	---	---	---	---	---	---	
Selenium	ND	500	1000	ug/kg wet	10	---	---	---	---	---	---	
Silver	ND	100	200	ug/kg wet	10	---	---	---	---	---	---	
LCS (23A0217-BS1)			Prepared: 01/09/23 08:02 Analyzed: 01/09/23 18:27									
EPA 6020B												
Arsenic	48900	500	1000	ug/kg wet	10	50000	---	98	80-120%	---	---	
Barium	50600	500	1000	ug/kg wet	10	50000	---	101	80-120%	---	---	
Cadmium	48600	100	200	ug/kg wet	10	50000	---	97	80-120%	---	---	
Chromium	49400	500	1000	ug/kg wet	10	50000	---	99	80-120%	---	---	
Lead	49400	100	200	ug/kg wet	10	50000	---	99	80-120%	---	---	
Mercury	963	40.0	80.0	ug/kg wet	10	1000	---	96	80-120%	---	---	
Selenium	23000	500	1000	ug/kg wet	10	25000	---	92	80-120%	---	---	
Silver	25700	100	200	ug/kg wet	10	25000	---	103	80-120%	---	---	
Duplicate (23A0217-DUP1)			Prepared: 01/09/23 08:02 Analyzed: 01/09/23 18:37									
QC Source Sample: FC-122022-2033 (A3A0116-01)												
EPA 6020B												
Arsenic	**9270**	3000	6010	ug/kg dry	10	---	9630	---	---	4	20%	
Barium	**224000**	3000	6010	ug/kg dry	10	---	225000	---	---	0.1	20%	
Cadmium	ND	601	1200	ug/kg dry	10	---	ND	---	---	---	20%	
Chromium	ND	3000	6010	ug/kg dry	10	---	ND	---	---	---	20%	
Lead	ND	601	1200	ug/kg dry	10	---	ND	---	---	---	20%	
Mercury	ND	240	481	ug/kg dry	10	---	ND	---	---	---	20%	
Selenium	ND	3000	6010	ug/kg dry	10	---	ND	---	---	---	20%	
Silver	ND	601	1200	ug/kg dry	10	---	ND	---	---	---	20%	
Matrix Spike (23A0217-MS1)			Prepared: 01/09/23 08:02 Analyzed: 01/09/23 18:42									

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Sevenson Environmental Services, Inc.	Project: **Gasco -- Filtercake**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A3A0116 - 01 17 23 0613**

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 23A0217 - EPA 3051A							**Solid**					
Matrix Spike (23A0217-MS1)			Prepared: 01/09/23 08:02		Analyzed: 01/09/23 18:42							
QC Source Sample: FC-122022-2033 (A3A0116-01)												
EPA 6020B												
Arsenic	311000	3130	6270	ug/kg dry	10	313000	9630	96	75-125%	---	---	
Barium	516000	3130	6270	ug/kg dry	10	313000	225000	93	75-125%	---	---	
Cadmium	297000	627	1250	ug/kg dry	10	313000	ND	95	75-125%	---	---	
Chromium	300000	3130	6270	ug/kg dry	10	313000	ND	96	75-125%	---	---	
Lead	308000	627	1250	ug/kg dry	10	313000	ND	98	75-125%	---	---	
Mercury	6020	251	501	ug/kg dry	10	6270	ND	96	75-125%	---	---	
Selenium	140000	3130	6270	ug/kg dry	10	157000	ND	89	75-125%	---	---	
Silver	157000	627	1250	ug/kg dry	10	157000	ND	100	75-125%	---	---	

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ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco -- Filtercake**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A3A0116 - 01 17 23 0613**

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 23A0100 - EPA 1311/3015A							**Solid**					
Blank (23A0100-BLK1)			Prepared: 01/05/23 10:26 Analyzed: 01/05/23 17:53									
1311/6020B												
Arsenic	ND	50.0	100	ug/L	10	---	---	---	---	---	---	TCLPa
Barium	ND	2500	5000	ug/L	10	---	---	---	---	---	---	TCLPa
Cadmium	ND	50.0	100	ug/L	10	---	---	---	---	---	---	TCLPa
Chromium	ND	50.0	100	ug/L	10	---	---	---	---	---	---	TCLPa
Lead	ND	25.0	50.0	ug/L	10	---	---	---	---	---	---	TCLPa
Mercury	ND	3.75	7.00	ug/L	10	---	---	---	---	---	---	TCLPa
Selenium	ND	50.0	100	ug/L	10	---	---	---	---	---	---	TCLPa
Silver	ND	50.0	100	ug/L	10	---	---	---	---	---	---	TCLPa
LCS (23A0100-BS1)			Prepared: 01/05/23 10:26 Analyzed: 01/05/23 17:58									
1311/6020B												
Arsenic	4930	50.0	100	ug/L	10	5000	---	99	80-120%	---	---	TCLPa
Barium	10300	2500	5000	ug/L	10	10000	---	103	80-120%	---	---	TCLPa
Cadmium	939	50.0	100	ug/L	10	1000	---	94	80-120%	---	---	TCLPa
Chromium	4750	50.0	100	ug/L	10	5000	---	95	80-120%	---	---	TCLPa
Lead	4920	25.0	50.0	ug/L	10	5000	---	98	80-120%	---	---	TCLPa
Mercury	94.5	3.75	7.00	ug/L	10	100	---	94	80-120%	---	---	TCLPa
Selenium	971	50.0	100	ug/L	10	1000	---	97	80-120%	---	---	TCLPa
Silver	997	50.0	100	ug/L	10	1000	---	100	80-120%	---	---	TCLPa
Duplicate (23A0100-DUP1)			Prepared: 01/05/23 10:26 Analyzed: 01/05/23 18:07									
QC Source Sample: FC-122022-2033 (A3A0116-01)												
1311/6020B												
Arsenic	ND	50.0	100	ug/L	10	---	ND	---	---	---	20%	
Barium	ND	2500	5000	ug/L	10	---	ND	---	---	---	20%	
Cadmium	ND	50.0	100	ug/L	10	---	ND	---	---	---	20%	
Chromium	ND	50.0	100	ug/L	10	---	ND	---	---	---	20%	
Lead	ND	25.0	50.0	ug/L	10	---	ND	---	---	---	20%	
Mercury	ND	3.75	7.00	ug/L	10	---	ND	---	---	---	20%	
Selenium	ND	50.0	100	ug/L	10	---	ND	---	---	---	20%	
Silver	ND	50.0	100	ug/L	10	---	ND	---	---	---	20%	
Matrix Spike (23A0100-MS1)			Prepared: 01/05/23 10:26 Analyzed: 01/05/23 18:12									

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ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: Gasco -- Filtercake	
2749 Lockport Road	Project Number: 111323	Report ID:
Niagara Falls, NY 14305	Project Manager: Chip Byrd	A3A0116 - 01 17 23 0613

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 23A0100 - EPA 1311/3015A								Solid				
Matrix Spike (23A0100-MS1)			Prepared: 01/05/23 10:26 Analyzed: 01/05/23 18:12									
QC Source Sample: FC-122022-2033 (A3A0116-01)												
1311/6020B												
Arsenic	5120	50.0	100	ug/L	10	5000	ND	102	50-150%	---	---	
Barium	10500	2500	5000	ug/L	10	10000	ND	105	50-150%	---	---	
Cadmium	977	50.0	100	ug/L	10	1000	ND	98	50-150%	---	---	
Chromium	4970	50.0	100	ug/L	10	5000	ND	99	50-150%	---	---	
Lead	5030	25.0	50.0	ug/L	10	5000	ND	101	50-150%	---	---	
Mercury	98.7	3.75	7.00	ug/L	10	100	ND	99	50-150%	---	---	
Selenium	965	50.0	100	ug/L	10	1000	ND	97	50-150%	---	---	
Silver	1020	50.0	100	ug/L	10	1000	ND	102	50-150%	---	---	
Matrix Spike (23A0100-MS2)			Prepared: 01/05/23 10:26 Analyzed: 01/05/23 18:22									
QC Source Sample: Non-SDG (A3A0118-01)												
1311/6020B												
Arsenic	5010	50.0	100	ug/L	10	5000	ND	100	50-150%	---	---	
Barium	10500	2500	5000	ug/L	10	10000	ND	105	50-150%	---	---	
Cadmium	965	50.0	100	ug/L	10	1000	ND	96	50-150%	---	---	
Chromium	4800	50.0	100	ug/L	10	5000	ND	96	50-150%	---	---	
Lead	5030	25.0	50.0	ug/L	10	5000	ND	101	50-150%	---	---	
Mercury	97.4	3.75	7.00	ug/L	10	100	ND	97	50-150%	---	---	
Selenium	965	50.0	100	ug/L	10	1000	ND	96	50-150%	---	---	
Silver	1030	50.0	100	ug/L	10	1000	ND	103	50-150%	---	---	

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ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: Gasco -- Filtercake	
2749 Lockport Road	Project Number: 111323	Report ID:
Niagara Falls, NY 14305	Project Manager: Chip Byrd	A3A0116 - 01 17 23 0613

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 23A0013 - ASTM D7511-12mod (S)							Soil					
Blank (23A0013-BLK1)			Prepared: 01/03/23 08:55		Analyzed: 01/04/23 17:34							
D7511-12												
Total Cyanide	ND	50.0	100	ug/kg wet	1	---	---	---	---	---	---	
LCS (23A0013-BS1)			Prepared: 01/03/23 08:55		Analyzed: 01/04/23 17:36							
D7511-12												
Total Cyanide	413	50.0	100	ug/kg wet	1	400	---	103	84-116%	---	---	
Matrix Spike (23A0013-MS1)			Prepared: 01/03/23 08:55		Analyzed: 01/04/23 17:42							PRO
QC Source Sample: Non-SDG (A2L0851-02)												
D7511-12												
Total Cyanide	313	48.5	97.0	ug/kg dry	1	388	150	**42**	**64-136%**	---	---	Q-01
Matrix Spike (23A0013-MS3)			Prepared: 01/03/23 13:38		Analyzed: 01/05/23 11:23							
QC Source Sample: Non-SDG (A3A0129-01RE1)												
D7511-12												
Total Cyanide	595	55.1	110	ug/kg dry	1	441	194	91	64-136%	---	---	Q-16
Matrix Spike Dup (23A0013-MSD1)			Prepared: 01/03/23 08:55		Analyzed: 01/04/23 17:44							PRO
QC Source Sample: Non-SDG (A2L0851-02)												
Total Cyanide	401	48.7	97.4	ug/kg dry	1	390	150	64	64-136%	25	47%	
Matrix Spike Dup (23A0013-MSD3)			Prepared: 01/03/23 13:38		Analyzed: 01/05/23 11:25							
QC Source Sample: Non-SDG (A3A0129-01RE1)												
Total Cyanide	583	55.2	110	ug/kg dry	1	442	194	88	64-136%	2	47%	Q-16

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Darwin Thomas, Business Development Director

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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 -- Filtercake**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A3A0116 - 01 17 23 0613**

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 23A0032 - Total Solids (Dry Weight)							**Soil**					
Duplicate (23A0032-DUP1)			Prepared: 01/03/23 13:15		Analyzed: 01/04/23 05:20							**PRO**
QC Source Sample: Non-SDG (A2L0990-02)												
% Solids	**91.7**	---	1.00	%	1	---	91.7	---	---	0.005	10%	
Duplicate (23A0032-DUP2)			Prepared: 01/03/23 13:15		Analyzed: 01/04/23 05:20							**PRO**
QC Source Sample: Non-SDG (A2L0990-04)												
% Solids	**92.5**	---	1.00	%	1	---	92.5	---	---	0.02	10%	
Duplicate (23A0032-DUP3)			Prepared: 01/03/23 13:15		Analyzed: 01/04/23 05:20							
QC Source Sample: Non-SDG (A3A0112-01)												
% Solids	**81.0**	---	1.00	%	1	---	76.9	---	---	5	10%	
Duplicate (23A0032-DUP4)			Prepared: 01/03/23 17:08		Analyzed: 01/04/23 05:20							
QC Source Sample: Non-SDG (A3A0138-01)												
% Solids	**78.9**	---	1.00	%	1	---	78.1	---	---	1	10%	

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

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ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: Gasco -- Filtercake	
2749 Lockport Road	Project Number: 111323	Report ID:
Niagara Falls, NY 14305	Project Manager: Chip Byrd	A3A0116 - 01 17 23 0613

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: 23A0045							
A3A0116-01	Solid	NWTPH-Dx	12/20/22 03:00	01/04/23 05:48	10.28g/5mL	10g/5mL	0.97

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: 23A0025							
A3A0116-01	Solid	NWTPH-Gx (MS)	12/20/22 03:00	01/03/23 12:10	4.82g/5mL	5g/5mL	1.04

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: 23A0025							
A3A0116-01	Solid	5035A/8260D	12/20/22 03:00	01/03/23 12:10	4.82g/5mL	5g/5mL	1.04

Regulated 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: 23A0067							
A3A0116-01	Solid	1311/8260D	12/20/22 03:00	01/04/23 11:36	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: 23A0040							
A3A0116-01	Solid	EPA 8270E	12/20/22 03:00	01/03/23 14:46	10.36g/2mL	15g/2mL	1.45

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: 23A0217							
A3A0116-01	Solid	EPA 6020B	12/20/22 03:00	01/09/23 08:02	0.482g/50mL	0.5g/50mL	1.04

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ANALYTICAL REPORT

Sevenson Environmental Services, Inc.	Project: **Gasco -- Filtercake**	
2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A3A0116 - 01 17 23 0613**

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

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: 23A0100							
A3A0116-01	Solid	1311/6020B	12/20/22 03:00	01/05/23 10:26	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: 23A0013							
A3A0116-01	Solid	D7511-12	12/20/22 03:00	01/03/23 13:38	2.5701g/50mL	2.5g/50mL	0.97

Percent Dry Weight

Prep: Total Solids (Dry Weight)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23A0032							
A3A0116-01	Solid	EPA 8000D	12/20/22 03:00	01/03/23 13:15			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: 23A0056							
A3A0116-01	Solid	EPA 1311	12/20/22 03:00	01/04/23 14:00	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: 23A0041							
A3A0116-01	Solid	EPA 1311 ZHE	12/20/22 03:00	01/03/23 14:58	20g/398g	25g/500g	NA

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2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A3A0116 - 01 17 23 0613**

QUALIFIER DEFINITIONS

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

Apex Laboratories

F-09	Results in the Gasoline Range are impacted by the overlap of a heavier fuel hydrocarbon product.
F-13	The chromatographic pattern does not resemble the fuel standard used for quantitation
H-02	This sample was extracted outside of the recommended holding time.
H-05	Sample received without adequate lead time to perform analysis within hold time.
ICV-01	Estimated Result. Initial Calibration Verification (ICV) failed high. There is no effect on non-detect results.
J	Estimated Result. Result detected below the lowest point of the calibration curve, but above the specified MDL.
M-05	Estimated results. Peak separation for structural isomers is insufficient for accurate quantification.
PRO	Sample has undergone sample processing prior to extraction and analysis.
Q-01	Spike recovery and/or RPD is outside acceptance limits.
Q-16	Reanalysis of an original Batch QC sample.
Q-18	Matrix Spike results for this extraction batch are not reported due to the high dilution necessary for analysis of the source sample.
Q-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-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 +22%. 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 +4%. The results are reported as Estimated Values.
Q-54b	Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +42%. 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 +6%. 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 +7%. 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 -2%. The results are reported as Estimated Values.

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Q-54f	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-54g	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-55	Daily CCV/LCS recovery for this analyte was below the +/-20% criteria listed in EPA 8260, however there is adequate sensitivity to ensure detection at the reporting level.
Q-56	Daily CCV/LCS recovery for this analyte was above the +/-20% criteria listed in EPA 8260
R-02	The Reporting Limit for this analyte has been raised to account for interference from coeluting organic compounds present in the sample.
S-05	Surrogate recovery is estimated due to sample dilution required for high analyte concentration and/or matrix interference.
TCLP	This batch QC sample was prepared with TCLP or SPLP fluid from preparation batch 23A0041.
TCLPa	This batch QC sample was prepared with TCLP or SPLP fluid from preparation batch 23A0056.
V-16	Sample aliquot was subsampled from the sample container in the laboratory. The subsampled aliquot was not preserved within 48 hours of sampling.

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REPORTING NOTES AND CONVENTIONS:

Abbreviations:

DET Analyte DETECTED at or above the detection or reporting limit.

ND Analyte NOT DETECTED at or above the detection or reporting limit.

NR Result Not Reported

RPD Relative Percent Difference. RPDs for Matrix Spikes and Matrix Spike Duplicates are based on concentration, not recovery.

Detection Limits: Limit of Detection (LOD)

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

Reporting Limits: Limit of Quantitation (LOQ)

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

Reporting Conventions:

Basis: Results for soil samples are generally reported on a 100% dry weight basis.
The Result Basis is listed following the units as " dry", " wet", or " " (blank) designation.

" dry" Sample results and Reporting Limits are reported on a dry weight basis. (i.e. "ug/kg dry")
See Percent Solids section for details of dry weight analysis.

" wet" Sample results and Reporting Limits for this analysis are normally dry weight corrected, but have not been modified in this case.

" " Results without 'wet' or 'dry' designation are not normally dry weight corrected. These results are considered 'As Received'.

QC Source:

In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) may be analyzed to demonstrate accuracy and precision of the extraction batch.

Non-Client Batch QC Samples (Duplicates and Matrix Spike/Duplicates) may not be included in this report. Please request a Full QC report if this data is required.

Miscellaneous Notes:

" --- " QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.

" *** " Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

Blanks:

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

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2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A3A0116 - 01 17 23 0613**

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.

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ANALYTICAL REPORT

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2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A3A0116 - 01 17 23 0613**

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.

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ANALYTICAL REPORT

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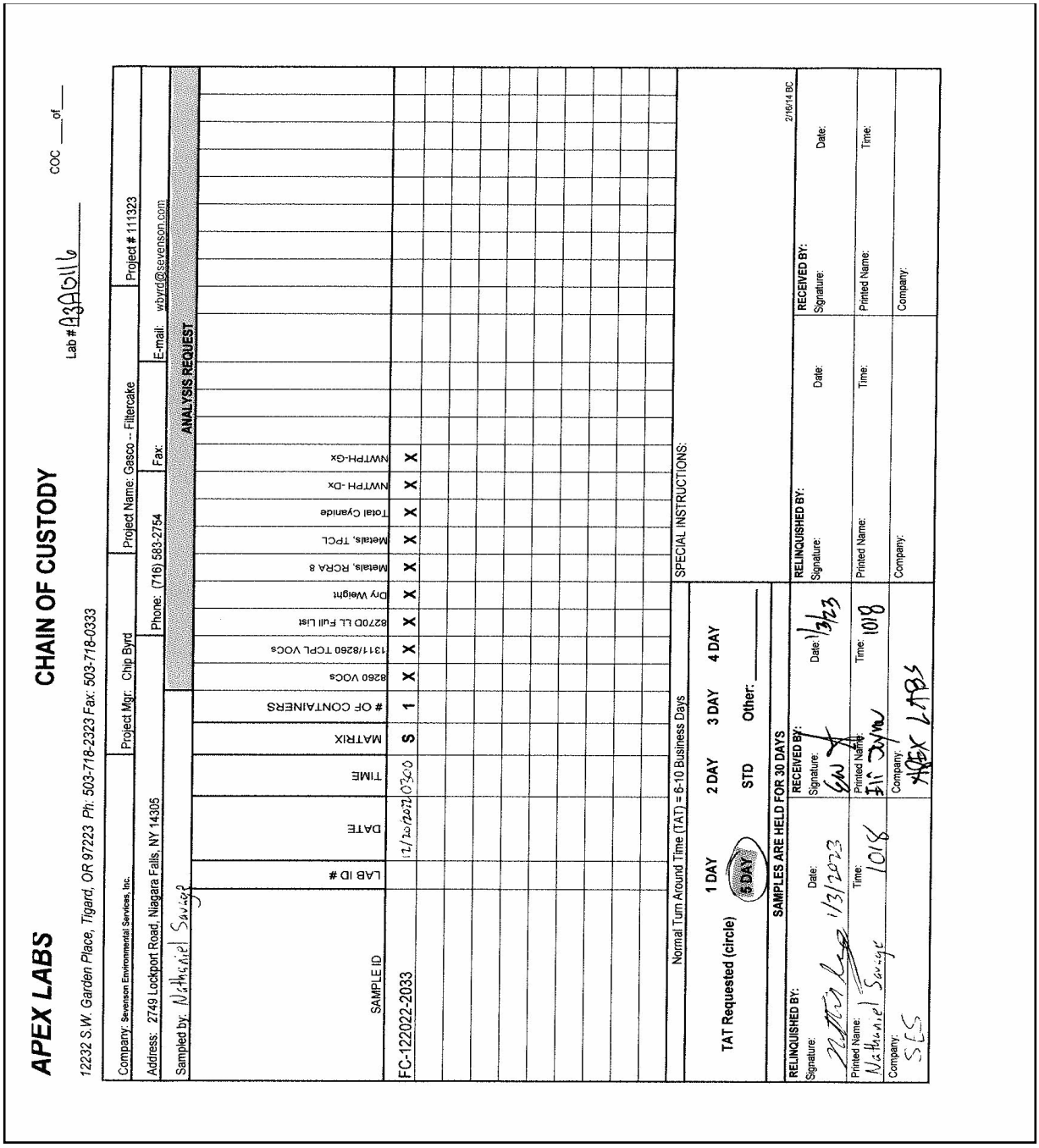

APEX LABS

CHAIN OF CUSTODY

COC ___ of ___

Lab # A3A0116

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 -- Filtercake | Project # 111323

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

Sampled by: Nathaniel Savage

ANALYSIS REQUEST

SAMPLE ID	LAB ID #	DATE	TIME	MATRIX	# OF CONTAINERS	8260 VOCs	8131/8260 TCPL VOCs	8270D LL Full List	Dry Weight	Metals, RCRA 8	Metals, TPCL	Total Cyanide	NWTPH -Dx	NWTPH-Gx
FC-122022-2033		12/20/2022	0730	S	1	X	X	X	X	X	X	X	X	X

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

SPECIAL INSTRUCTIONS:

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

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY:	Date:	Time:	RECEIVED BY:	Date:	Time:
Signature:	1/3/2023		Signature:	1/3/23	
Printed Name: Nathaniel Savage		1018	Printed Name: Eli Zayna		1018
Company: SES			Company: APEX LABS		

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

2/16/14 BC

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2749 Lockport Road	Project Number: **111323**	**Report ID:**
Niagara Falls, NY 14305	Project Manager: **Chip Byrd**	**A3A0116 - 01 17 23 0613**

APEX LABS COOLER RECEIPT FORM

Client: Sevenson Environmental Services, Inc. Element WO#: A3 A0116

Project/Project #: Gasco -- Filtercake 111323

Delivery Info:
Date/time received: 1/3/23 @ 1018 By: EST
Delivered by: Apex X Client ESS FedEx UPS Radio Morgan SDS Evergreen Other

Cooler Inspection Date/time inspected: 1/3/23 @ 1122 By: EST
Chain of Custody included? Yes X No
Signed/dated by client? Yes X No

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	0.8						
Custody seals? (Y/N)	N						
Received on ice? (Y/N)	Y						
Temp. blanks? (Y/N)	Y						
Ice type: (Gel/Real/Other)	Gel						
Condition (In/Out):	In						

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: 1/3/23 @ 1130 By: AAW
All samples intact? Yes X No Comments:
Bottle labels/COCs agree? Yes X No X AAW 1/3/23 Comments: Containers missing prefix FC-122022-
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 X AAW 1/3/23 NA X
Comments
Water samples: pH checked: Yes No NA X pH appropriate? Yes No NA X
Comments:
Additional information:
Labeled by: AAW Witness: AAW Cooler Inspected by: AAW

Form Y-003 R-00

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