

Apex Laboratories, LLC

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

Friday, December 2, 2022 Chip Byrd Sevenson Environmental Services, Inc. 2749 Lockport Road Niagara Falls, NY 14305

RE: A2J0597 - 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 A2J0597, which was received by the laboratory on 10/19/2022 at 10:19:00AM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: <u>dthomas@apex-labs.com</u>, 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

Cooler #1

(See Cooler Receipt Form for details) 3.0 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This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.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.



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

Sevenson Environmental Services, Inc.	Project:	<u> Gasco Filtercake</u>	
2749 Lockport Road	Project Number: 1	111323	<u>Report ID:</u>
Niagara Falls, NY 14305	Project Manager:	Chip Byrd	A2J0597 - 12 02 22 1255

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION							
Client Sample ID	Laboratory ID Matrix	Date Sampled Date Received					
FC-101722-2000	A2J0597-01 Solid	10/17/22 16:30 10/19/22 10:19					

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Sevenson Environmental Services, Inc.Project:Gasco -- Filtercake2749 Lockport RoadProject Number:111323Report ID:Niagara Falls, NY 14305Project Manager:Chip ByrdA2J0597 - 12 02 22 1255

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-101722-2000 (A2J0597-01)				Matrix: Soli	d	Batch: 22J0894			
Diesel	1350000	39000	78000	ug/kg dry	1	10/25/22 00:04	NWTPH-Dx	F-13	
Oil	ND	78000	156000	ug/kg dry	1	10/25/22 00:04	NWTPH-Dx		
Surrogate: o-Terphenyl (Surr)		Reco	very: 91 %	Limits: 50-150 %	6 I	10/25/22 00:04	NWTPH-Dx		

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Darwin Thomas, Business Development Director



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Sevenson Environmental Services, Inc.

2749 Lockport Road Niagara Falls, NY 14305 Project:Gasco -- FiltercakeProject Number:111323Project Manager:Chip Byrd

<u>Report ID:</u> A2J0597 - 12 02 22 1255

ANALYTICAL SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx									
Analyte	Sample Result	DetectionReportingDateLimitLimitUnitsDilutionAnalyzedMethod Ref.N							
FC-101722-2000 (A2J0597-01RE1)				Matrix: Solid Batch: 22J0853				V-15	
Gasoline Range Organics	52400	16900	33700	ug/kg dry	50	10/21/22 22:16	NWTPH-Gx (MS)		
Surrogate: 4-Bromofluorobenzene (Sur) 1,4-Difluorobenzene (Sur)		Recove	rry: 105 % 101 %	Limits: 50-150 %	-	10/21/22 22:16 10/21/22 22:16	NWTPH-Gx (MS) NWTPH-Gx (MS)		

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custody document. This analytical report must be reproduced in its entirety.

The results in this report apply to the samples analyzed in accordance with the chain of



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Sevenson Environmental Services, I	nc.
2749 Lockport Road	

Niagara Falls, NY 14305

Project:Gasco -- FiltercakeProject Number:111323Project Manager:Chip Byrd

Report ID:	
A2J0597 - 12 02 22 125	5

ANALYTICAL SAMPLE RESULTS

	V	olatile Organ	ic Compound	ds by EPA 82	60D			
Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FC-101722-2000 (A2J0597-01RE1)				Matrix: Soli	olid Batch: 22J		22J0853	V-15
Acetone	ND	3370	6750	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
Acrylonitrile	ND	337	675	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
Benzene	ND	33.7	67.5	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
Bromobenzene	ND	84.3	169	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
Bromochloromethane	ND	169	337	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
Bromodichloromethane	ND	169	337	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
Bromoform	ND	337	675	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
Bromomethane	ND	3370	3370	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
2-Butanone (MEK)	ND	1690	3370	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
n-Butylbenzene	ND	169	337	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
sec-Butylbenzene	ND	169	337	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
tert-Butylbenzene	ND	169	337	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
Carbon disulfide	ND	1690	3370	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
Carbon tetrachloride	ND	169	337	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
Chlorobenzene	ND	84.3	169	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
Chloroethane	ND	1690	3370	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
Chloroform	ND	169	337	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
Chloromethane	ND	843	1690	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
2-Chlorotoluene	ND	169	337	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
4-Chlorotoluene	ND	169	337	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
Dibromochloromethane	ND	337	675	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
1,2-Dibromo-3-chloropropane	ND	843	1690	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
1,2-Dibromoethane (EDB)	ND	169	337	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
Dibromomethane	ND	169	337	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
1,2-Dichlorobenzene	ND	84.3	169	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
1,3-Dichlorobenzene	ND	84.3	169	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
1,4-Dichlorobenzene	ND	84.3	169	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
Dichlorodifluoromethane	ND	337	675	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
1,1-Dichloroethane	ND	84.3	169	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
1,2-Dichloroethane (EDC)	ND	84.3	169	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
1,1-Dichloroethene	ND	84.3	169	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
cis-1,2-Dichloroethene	ND	84.3	169	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
trans-1,2-Dichloroethene	ND	84.3	169	ug/kg dry	50	10/21/22 22:16	5035A/8260D	

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Sevenson Environmental Services,	Inc.
2749 Lockport Road	

Niagara Falls, NY 14305

Project:	Gasco Filtercake
Project Number:	111323
Project Manager:	Chip Byrd

Report ID:
A2J0597 - 12 02 22 1255

ANALYTICAL SAMPLE RESULTS

	V	olatile Organi	ic Compound	ds by EPA 82	60D			
Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FC-101722-2000 (A2J0597-01RE1)				Matrix: Soli	id	Batch:	22J0853	V-15
1,2-Dichloropropane	ND	84.3	169	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
1,3-Dichloropropane	ND	169	337	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
2,2-Dichloropropane	ND	169	337	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
1,1-Dichloropropene	ND	169	337	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
cis-1,3-Dichloropropene	ND	169	337	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
trans-1,3-Dichloropropene	ND	169	337	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
Ethylbenzene	ND	84.3	169	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
Hexachlorobutadiene	ND	337	675	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
2-Hexanone	ND	1690	3370	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
Isopropylbenzene	ND	169	337	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
4-Isopropyltoluene	ND	169	337	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
Methylene chloride	ND	1690	3370	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
4-Methyl-2-pentanone (MiBK)	ND	1690	3370	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	169	337	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
Naphthalene	ND	337	675	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
n-Propylbenzene	ND	84.3	169	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
Styrene	ND	169	337	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
1,1,1,2-Tetrachloroethane	ND	84.3	169	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
1,1,2,2-Tetrachloroethane	ND	169	337	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
Tetrachloroethene (PCE)	ND	84.3	169	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
Toluene	ND	169	337	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
1,2,3-Trichlorobenzene	ND	843	1690	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
1,2,4-Trichlorobenzene	ND	843	1690	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
1,1,1-Trichloroethane	ND	84.3	169	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
1,1,2-Trichloroethane	ND	84.3	169	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
Trichloroethene (TCE)	ND	84.3	169	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
Frichlorofluoromethane	ND	675	675	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
,2,3-Trichloropropane	ND	169	337	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
,2,4-Trimethylbenzene	ND	169	337	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
,3,5-Trimethylbenzene	ND	169	337	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
/inyl chloride	ND	84.3	169	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
n,p-Xylene	ND	169	337	ug/kg dry	50	10/21/22 22:16	5035A/8260D	
p-Xylene	ND	84.3	169	ug/kg dry	50	10/21/22 22:16	5035A/8260D	

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Sevenson Environmental Services, Inc.Project:Gasco -- Filtercake2749 Lockport RoadProject Number:111323Report ID:Niagara Falls, NY 14305Project Manager:Chip ByrdA2J0597 - 12 02 22 1255

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D									
Analyte	Sample Result	Detection Limit	Reporting Limit	U	nits	Dilution	Date Analyzed	Method Ref.	Notes
FC-101722-2000 (A2J0597-01RE1)				Mat	rix: Soli	d	Batch:	22J0853	V-15
Surrogate: 1,4-Difluorobenzene (Surr)		Recove	ery: 104 %	Limits:	80-120 %	6 I	10/21/22 22:16	5035A/8260D	
Toluene-d8 (Surr)			101 %		80-120 %	6 I	10/21/22 22:16	5035A/8260D	
4-Bromofluorobenzene (Surr)			96 %		79-120 %	6 I	10/21/22 22:16	5035A/8260D	

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Darwin Thomas, Business Development Director



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Sevenson Environmental Services, Inc.
2749 Lockport Road

Niagara Falls, NY 14305

Project:	Gasco Filtercake
Project Number:	111323
Project Manager:	Chip Byrd

Report ID:
A2J0597 - 12 02 22 1255

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-101722-2000 (A2J0597-01)				Matrix: Solid	d	Batch:	22J1147	
Benzene	ND	6.25	12.5	ug/L	50	10/28/22 21:58	1311/8260D	
2-Butanone (MEK)	ND	250	500	ug/L	50	10/28/22 21:58	1311/8260D	
Carbon tetrachloride	ND	25.0	50.0	ug/L	50	10/28/22 21:58	1311/8260D	
Chlorobenzene	ND	12.5	25.0	ug/L	50	10/28/22 21:58	1311/8260D	
Chloroform	ND	25.0	50.0	ug/L	50	10/28/22 21:58	1311/8260D	
1,4-Dichlorobenzene	ND	12.5	25.0	ug/L	50	10/28/22 21:58	1311/8260D	
1,1-Dichloroethene	ND	12.5	25.0	ug/L	50	10/28/22 21:58	1311/8260D	
1,2-Dichloroethane (EDC)	ND	12.5	25.0	ug/L	50	10/28/22 21:58	1311/8260D	
Tetrachloroethene (PCE)	ND	12.5	25.0	ug/L	50	10/28/22 21:58	1311/8260D	
Trichloroethene (TCE)	ND	12.5	25.0	ug/L	50	10/28/22 21:58	1311/8260D	
Vinyl chloride	ND	12.5	25.0	ug/L	50	10/28/22 21:58	1311/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		Recove	ry: 112 %	Limits: 80-120 %	6 I	10/28/22 21:58	1311/8260D	
Toluene-d8 (Surr)			102 %	80-120 %	6 I	10/28/22 21:58	1311/8260D	
4-Bromofluorobenzene (Surr)			101 %	80-120 %	6 I	10/28/22 21:58	1311/8260D	

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Sevenson	Environmental	Services,	Inc
2749 Loc	kport Road		

Niagara Falls, NY 14305

Project:	Gasco Filtercake
Project Number:	111323
Project Manager:	Chip Byrd

Report ID:	
A2J0597 - 12 02 22 1255	

ANALYTICAL SAMPLE RESULTS

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FC-101722-2000 (A2J0597-01)				Matrix: Soli	id	Batch:	22J1188	
Acenaphthene	3530	1240	2490	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
Acenaphthylene	ND	1240	2490	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
Anthracene	11300	1240	2490	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
Benz(a)anthracene	8790	1240	2490	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
Benzo(a)pyrene	10400	1870	3730	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
Benzo(b)fluoranthene	8190	1870	3730	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
Benzo(k)fluoranthene	4560	1870	3730	ug/kg dry	200	10/31/22 17:07	EPA 8270E	M-05
Benzo(g,h,i)perylene	6610	1240	2490	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
Chrysene	11600	1240	2490	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
Dibenz(a,h)anthracene	ND	1240	2490	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
Fluoranthene	35100	1240	2490	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
Fluorene	4020	1240	2490	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
Indeno(1,2,3-cd)pyrene	6350	1240	2490	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
1-Methylnaphthalene	ND	2490	4970	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
2-Methylnaphthalene	ND	2490	4970	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
Naphthalene	ND	2490	4970	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
Phenanthrene	43500	1240	2490	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
Pyrene	39900	1240	2490	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
Carbazole	ND	1870	3730	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
Dibenzofuran	ND	1240	2490	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
2-Chlorophenol	ND	6220	12400	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
4-Chloro-3-methylphenol	ND	12400	24900	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
2,4-Dichlorophenol	ND	6220	12400	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
2,4-Dimethylphenol	ND	6220	12400	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
2,4-Dinitrophenol	ND	31100	62200	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
4,6-Dinitro-2-methylphenol	ND	31100	62200	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
2-Methylphenol	ND	3110	6220	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
3+4-Methylphenol(s)	ND	3110	6220	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
2-Nitrophenol	ND	12400	24900	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
4-Nitrophenol	ND	12400	24900	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
Pentachlorophenol (PCP)	ND	12400	24900	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
Phenol	ND	2490	4970	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
2,3,4,6-Tetrachlorophenol	ND	6220	12400	ug/kg dry	200	10/31/22 17:07	EPA 8270E	

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Sevenson Env	ironmental	Services,	Inc.
2749 Lockpor	't Road		

Niagara Falls, NY 14305

Project:	Gasco Filtercake
Project Number:	111323
Project Manager:	Chip Byrd

Report ID:
A2J0597 - 12 02 22 1255

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270E								
Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FC-101722-2000 (A2J0597-01)				Matrix: Soli	id	Batch:	22J1188	
2,3,5,6-Tetrachlorophenol	ND	6220	12400	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
2,4,5-Trichlorophenol	ND	6220	12400	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
Nitrobenzene	ND	12400	24900	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
2,4,6-Trichlorophenol	ND	6220	12400	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
Bis(2-ethylhexyl)phthalate	ND	18700	37300	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
Butyl benzyl phthalate	ND	12400	24900	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
Diethylphthalate	ND	12400	24900	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
Dimethylphthalate	ND	12400	24900	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
Di-n-butylphthalate	ND	12400	24900	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
Di-n-octyl phthalate	ND	12400	24900	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
N-Nitrosodimethylamine	ND	3110	6220	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
N-Nitroso-di-n-propylamine	ND	3110	6220	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
N-Nitrosodiphenylamine	ND	3110	6220	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
Bis(2-Chloroethoxy) methane	ND	3110	6220	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
Bis(2-Chloroethyl) ether	ND	3110	6220	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
2,2'-Oxybis(1-Chloropropane)	ND	3110	6220	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
Hexachlorobenzene	ND	1240	2490	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
Hexachlorobutadiene	ND	3110	6220	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
Hexachlorocyclopentadiene	ND	6220	12400	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
Hexachloroethane	ND	3110	6220	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
2-Chloronaphthalene	ND	1240	2490	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
1,2,4-Trichlorobenzene	ND	3110	6220	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
4-Bromophenyl phenyl ether	ND	3110	6220	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
4-Chlorophenyl phenyl ether	ND	3110	6220	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
Aniline	ND	6220	12400	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
4-Chloroaniline	ND	3110	6220	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
2-Nitroaniline	ND	24900	49700	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
3-Nitroaniline	ND	24900	49700	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
4-Nitroaniline	ND	24900	49700	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
2,4-Dinitrotoluene	ND	12400	24900	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
2,6-Dinitrotoluene	ND	12400	24900	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
Benzoic acid	ND	156000	311000	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
Benzyl alcohol	ND	6220	12400	ug/kg dry	200	10/31/22 17:07	EPA 8270E	

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

Sevenson Environmental Services,	Inc.
2749 Lockport Road	

Niagara Falls, NY 14305

Project:Gasco -- FiltercakeProject Number:111323Project Manager:Chip Byrd

Report ID:	
A2J0597 - 12 02 22 125	5

ANALYTICAL SAMPLE RESULTS

	Sem	nivolatile Org	anic Compo	ounds by EPA 8	3270E			
Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FC-101722-2000 (A2J0597-01)				Matrix: Solic	ł	Batch:	22J1188	
Isophorone	ND	3110	6220	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
Azobenzene (1,2-DPH)	ND	3110	6220	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
Bis(2-Ethylhexyl) adipate	ND	31100	62200	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
3,3'-Dichlorobenzidine	ND	24900	49700	ug/kg dry	200	10/31/22 17:07	EPA 8270E	Q-52
1,2-Dinitrobenzene	ND	31100	62200	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
1,3-Dinitrobenzene	ND	31100	62200	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
1,4-Dinitrobenzene	ND	31100	62200	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
Pyridine	ND	6220	12400	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
1,2-Dichlorobenzene	ND	3110	6220	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
1,3-Dichlorobenzene	ND	3110	6220	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
1,4-Dichlorobenzene	ND	3110	6220	ug/kg dry	200	10/31/22 17:07	EPA 8270E	
Surrogate: Nitrobenzene-d5 (Surr)		Reco	very: 74 %	Limits: 37-122 %	200	10/31/22 17:07	EPA 8270E	S-05
2-Fluorobiphenyl (Surr)			71 %	44-120 %	200	10/31/22 17:07	EPA 8270E	S-05
Phenol-d6 (Surr)			46 %	33-122 %	200	10/31/22 17:07	EPA 8270E	S-05
p-Terphenyl-d14 (Surr)			75 %	54-127 %	200	10/31/22 17:07	EPA 8270E	S-05
2-Fluorophenol (Surr)			44 %	35-120 %	200	10/31/22 17:07	EPA 8270E	S-05
2,4,6-Tribromophenol (Surr)			%	39-132 %	200	10/31/22 17:07	EPA 8270E	S-01

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

Sevenson Environmental Services, Inc.	Project: Gasco	o Filtercake	
2749 Lockport Road	Project Number: 111323	3 <u>Report ID:</u>	
Niagara Falls, NY 14305	Project Manager: Chip B	Byrd A2J0597 - 12 02 22 1255	

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)								
	Sample	Detection	Reporting			Date		
Analyte	Result	Limit	Limit	Units	Dilution	Analyzed	Method Ref.	Notes
FC-101722-2000 (A2J0597-01)	Matrix: Solid							
Batch: 22J1085								
Arsenic	8820	2060	4110	ug/kg dry	10	10/31/22 21:45	EPA 6020B	
Barium	229000	2060	4110	ug/kg dry	10	10/31/22 21:45	EPA 6020B	
Cadmium	ND	411	823	ug/kg dry	10	10/31/22 21:45	EPA 6020B	
Chromium	ND	2060	4110	ug/kg dry	10	10/31/22 21:45	EPA 6020B	
Lead	ND	411	823	ug/kg dry	10	10/31/22 21:45	EPA 6020B	
Mercury	ND	165	329	ug/kg dry	10	10/31/22 21:45	EPA 6020B	
Selenium	ND	2060	4110	ug/kg dry	10	10/31/22 21:45	EPA 6020B	
Silver	ND	411	823	ug/kg dry	10	10/31/22 21:45	EPA 6020B	

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

Sevenson Environmental Services, Inc.	Project:	Gasco Filtercake	
2749 Lockport Road	Project Number: 1	111323	<u>Report ID:</u>
Niagara Falls, NY 14305	Project Manager:	Chip Byrd	A2J0597 - 12 02 22 1255

ANALYTICAL SAMPLE RESULTS

TCLP Metals by EPA 6020B (ICPMS)								
Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FC-101722-2000 (A2J0597-01)				Matrix: So	olid			
Batch: 22J1017								
Arsenic	ND	50.0	100	ug/L	10	10/27/22 04:38	1311/6020B	
Barium	ND	2500	5000	ug/L	10	10/27/22 04:38	1311/6020B	
Cadmium	ND	50.0	100	ug/L	10	10/27/22 04:38	1311/6020B	
Chromium	ND	50.0	100	ug/L	10	10/27/22 04:38	1311/6020B	
Selenium	ND	50.0	100	ug/L	10	10/27/22 04:38	1311/6020B	
Silver	ND	50.0	100	ug/L	10	10/27/22 04:38	1311/6020B	
FC-101722-2000 (A2J0597-01RE2)				Matrix: So	olid			
Batch: 22J1017								
Lead	ND	25.0	50.0	ug/L	10	10/28/22 19:40	1311/6020B	
Mercury	ND	3.75	7.00	ug/L	10	10/28/22 19:40	1311/6020B	

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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	A2J0597 - 12 02 22 1255
-		

ANALYTICAL SAMPLE RESULTS

Soluble Cyanide by UV Digestion/Gas Diffusion/Amperometric Detection								
	Sample	Detection	Reporting			Date		
Analyte	Result	Limit	Limit	Units	Dilution	Analyzed	Method Ref.	Notes
FC-101722-2000 (A2J0597-01RE1)				Matrix: Solid Batch: 22J1021		22J1021		
Total Cyanide	6650	974	1950	ug/kg dry	5	10/26/22 13:41	D7511-12	Q-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	A2J0597 - 12 02 22 1255

ANALYTICAL SAMPLE RESULTS

Percent Dry Weight								
Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FC-101722-2000 (A2J0597-01)				Matrix: Solid		Batch: 22J0822		
% Solids	25.5		1.00	%	1	10/21/22 05:56	EPA 8000D	

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

Sevenson Environmental Services, Inc.	Project:	Gasco Filtercake	
2749 Lockport Road	Project Number:	111323	<u>Report ID:</u>
Niagara Falls, NY 14305	Project Manager:	Chip Byrd	A2J0597 - 12 02 22 1255

ANALYTICAL SAMPLE RESULTS

		TCLP E	Extraction by	EPA 1311										
Analyte	SampleDetectionReportingDateAnalyteResultLimitLimitUnitsDilutionAnalyzedMethod Ref.No													
FC-101722-2000 (A2J0597-01)				Matrix: Solid Batch: 22J0945										
TCLP Extraction TCLP ZHE Extraction	PREP PREP			N/A N/A	1 1	10/24/22 17:13 10/26/22 16:50	EPA 1311 EPA 1311 ZHE							

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

Sevenson Environmental Services, Inc.

2749 Lockport Road Niagara Falls, NY 14305 Project: Gasco -- Filtercake
Project Number: 111323
Project Manager: Chip Byrd

<u>Report ID:</u> A2J0597 - 12 02 22 1255

QUALITY CONTROL (QC) SAMPLE RESULTS

		Di	esel and/o	or Oil Hyd	rocarbor	ns by NW	TPH-Dx					
Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22J0894 - EPA 3546 (I	Fuels)						Sol	id				
Blank (22J0894-BLK1)			Prepared	l: 10/24/22 (6:59 Ana	lyzed: 10/24	/22 22:09					
NWTPH-Dx												
Diesel	ND	9090	18200	ug/kg we	t 1							
Oil	ND	18200	36400	ug/kg we	t 1							
Surr: o-Terphenyl (Surr)		Recov	ery: 102 %	Limits: 50	150 %	Dil	ution: 1x					
LCS (22J0894-BS1)			Prepared	l: 10/24/22 (6:59 Ana	lyzed: 10/24	/22 22:32					
NWTPH-Dx												
Diesel	115000	10000	20000	ug/kg we	t 1	125000		92	38-132%			
Surr: o-Terphenyl (Surr)		Recov	ery: 102 %	Limits: 50	150 %	Dil	ution: 1x					
Duplicate (22J0894-DUP1)			Prepared	l: 10/24/22 (6:59 Ana	lyzed: 10/24	/22 23:18					
QC Source Sample: Non-SDG (A	A2J0559-01)											
Diesel	8970000	196000	391000	ug/kg we	t 20		7810000			14	30%	F-1
Oil	2520000	391000	783000	ug/kg we	t 20		2310000			9	30%	F-1
Oli	2320000	271000		00								

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Sevenson Environmental Services, Inc.

2749 Lockport Road Niagara Falls, NY 14305 Project: Gasco -- Filtercake
Project Number: 111323
Project Manager: Chip Byrd

<u>Report ID:</u> A2J0597 - 12 02 22 1255

QUALITY CONTROL (QC) SAMPLE RESULTS

	Gasolir	ne Range H	lydrocarbo	ons (Ben	zene thro	ugh Naph	thalene)	by NWTP	H-Gx			
Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22J0799 - EPA 5035A							So	il				
Blank (22J0799-BLK1)			Preparec	1: 10/20/22	09:00 Ana	yzed: 10/20	/22 14:10					
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	1670	3330	ug/kg v	vet 50							
Surr: 4-Bromofluorobenzene (Sur)		Reco	overy: 99%	Limits: 5	0-150 %	Dilı	ution: 1x					
1,4-Difluorobenzene (Sur)			98 %	5	0-150 %		"					
LCS (22J0799-BS2)			Preparec	1: 10/20/22	09:00 Ana	yzed: 10/20	/22 13:43					
NWTPH-Gx (MS)												
Gasoline Range Organics	24000	2500	5000	ug/kg v	vet 50	25000		96	80-120%			
Surr: 4-Bromofluorobenzene (Sur)		Reco	very: 98 %	Limits: 5	0-150 %	Dilı	ution: 1x					
1,4-Difluorobenzene (Sur)			101 %	5	0-150 %		"					
Duplicate (22J0799-DUP1)			Preparec	l: 10/15/22	17:00 Ana	yzed: 10/20	/22 16:25					
QC Source Sample: Non-SDG (A2	2J0583-01)											
Gasoline Range Organics	ND	4070	8140	ug/kg d	lry 50		ND				30%	
Surr: 4-Bromofluorobenzene (Sur)		Reco	very: 97%	Limits: 5	0-150 %	Dilı	ution: 1x					
1,4-Difluorobenzene (Sur)			94 %	5	0-150 %		"					
Duplicate (22J0799-DUP2)			Preparec	1: 10/19/22	15:20 Ana	yzed: 10/20	/22 20:55					V-
QC Source Sample: Non-SDG (A2	J0603-01)											
Gasoline Range Organics	ND	6860	13700	ug/kg d	lry 100		ND				30%	
Surr: 4-Bromofluorobenzene (Sur)		Reco	wery: 98 %	Limits: 5	0-150 %	Dilı	ution: 1x					
1,4-Difluorobenzene (Sur)			94 %	5	0-150 %		"					

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

Sevenson Environmental Services, Inc.

2749 Lockport Road Niagara Falls, NY 14305 Project: Gasco -- Filtercake
Project Number: 111323
Project Manager: Chip Byrd

<u>Report ID:</u> A2J0597 - 12 02 22 1255

QUALITY CONTROL (QC) SAMPLE RESULTS

	Gasolir	ie Range H	ydrocarbo	ons (Ben	zene thro	ugh Naph	thalene)	by NWTP	H-Gx			
Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22J0853 - EPA 5035A							So	il				
Blank (22J0853-BLK1)			Prepared	ł: 10/21/22	11:03 Ana	lyzed: 10/21	/22 15:58					
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	1670	3330	ug/kg w	vet 50							
Surr: 4-Bromofluorobenzene (Sur)		Recov	ery: 100 %	Limits: 5	0-150 %	Dili	ution: 1x					
1,4-Difluorobenzene (Sur)			96 %	5	0-150 %		"					
LCS (22J0853-BS2)			Prepared	l: 10/21/22	11:03 Ana	yzed: 10/21	/22 15:31					
NWTPH-Gx (MS)												
Gasoline Range Organics	23500	2500	5000	ug/kg w	vet 50	25000		94	80-120%			
Surr: 4-Bromofluorobenzene (Sur)		Reco	very: 99%	Limits: 5	0-150 %	Dilt	ution: 1x					
1,4-Difluorobenzene (Sur)			109 %	5	0-150 %		"					
Duplicate (22J0853-DUP1)			Preparec	1: 10/20/22	18:09 Ana	lyzed: 10/21	/22 17:46					COMP, V-15
QC Source Sample: Non-SDG (A2	J0657-09)											
Gasoline Range Organics	8040	3660	7310	ug/kg d	ry 50		8210			2	30%	
Surr: 4-Bromofluorobenzene (Sur)		Recov	ery: 100 %	Limits: 5	0-150 %	Dilt	ution: 1x					
1,4-Difluorobenzene (Sur)			96 %	5	0-150 %		"					
Duplicate (22J0853-DUP2)			Preparec	l: 10/18/22	11:45 Ana	lyzed: 10/21	/22 20:28					
QC Source Sample: Non-SDG (A2	J0622-04)											
Gasoline Range Organics	10100	7670	15300	ug/kg d	ry 50		9960			2	30%	
Surr: 4-Bromofluorobenzene (Sur)		Recov	ery: 103 %	Limits: 5	0-150 %	Dilt	ution: 1x					
1,4-Difluorobenzene (Sur)			99 %	5	0-150 %		"					

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

Sevenson Environmental Services, Inc.

2749 Lockport Road

Niagara Falls, NY 14305

Project:Gasco -- FiltercakeProject Number:111323Project Manager:Chip Byrd

<u>Report ID:</u> A2J0597 - 12 02 22 1255

QUALITY CONTROL (QC) SAMPLE RESULTS

		Detection	Reporting			Spike	Source		% REC		RPD	
Analyte	Result	Limit	Limit	Units	Dilution	Amount	Result	% REC	Limits	RPD	Limit	Note
3atch 22J0799 - EPA 5035A							Soi					
Blank (22J0799-BLK1)			Prepared:	10/20/22 0	9:00 Anal	yzed: 10/20/	/22 14:10					
5035A/8260D												
Acetone	ND	333	667	ug/kg we								
Acrylonitrile	ND	33.3	66.7	ug/kg we	et 50							
Benzene	ND	3.33	6.67	ug/kg we	t 50							
Bromobenzene	ND	8.33	16.7	ug/kg we	t 50							
Bromochloromethane	ND	16.7	33.3	ug/kg we	t 50							
Bromodichloromethane	ND	16.7	33.3	ug/kg we	t 50							
Bromoform	ND	33.3	66.7	ug/kg we	t 50							
Bromomethane	ND	333	333	ug/kg we	t 50							
2-Butanone (MEK)	ND	167	333	ug/kg we	t 50							
n-Butylbenzene	ND	16.7	33.3	ug/kg we	t 50							
ec-Butylbenzene	ND	16.7	33.3	ug/kg we	t 50							
ert-Butylbenzene	ND	16.7	33.3	ug/kg we	t 50							
Carbon disulfide	ND	167	333	ug/kg we	t 50							
Carbon tetrachloride	ND	16.7	33.3	ug/kg we	t 50							
Chlorobenzene	ND	8.33	16.7	ug/kg we	t 50							
Chloroethane	ND	167	333	ug/kg we								
Chloroform	ND	16.7	33.3	ug/kg we	t 50							
Chloromethane	ND	83.3	167	ug/kg we	et 50							
2-Chlorotoluene	ND	16.7	33.3	ug/kg we	t 50							
4-Chlorotoluene	ND	16.7	33.3	ug/kg we								
Dibromochloromethane	ND	33.3	66.7	ug/kg we								
,2-Dibromo-3-chloropropane	ND	83.3	167	ug/kg we	et 50							
,2-Dibromoethane (EDB)	ND	16.7	33.3	ug/kg we								
Dibromomethane	ND	16.7	33.3	ug/kg we								
,2-Dichlorobenzene	ND	8.33	16.7	ug/kg we								
,3-Dichlorobenzene	ND	8.33	16.7	ug/kg we								
,4-Dichlorobenzene	ND	8.33	16.7	ug/kg we								
Dichlorodifluoromethane	ND	33.3	66.7	ug/kg we								
,1-Dichloroethane	ND	8.33	16.7	ug/kg we								
,2-Dichloroethane (EDC)	ND	8.33	16.7	ug/kg we								
,1-Dichloroethene	ND	8.33	16.7	ug/kg we								
is-1,2-Dichloroethene	ND	8.33	16.7	ug/kg we								
ans-1,2-Dichloroethene	ND	8.33	16.7	ug/kg we								

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

Sevenson Environmental Services, Inc.

2749 Lockport Road

Niagara Falls, NY 14305

Project: Gasco -- Filtercake
Project Number: 111323
Project Manager: Chip Byrd

<u>Report ID:</u> A2J0597 - 12 02 22 1255

QUALITY CONTROL (QC) SAMPLE RESULTS

			Volatile Org	ganic Con	npounds	by EPA 8	3260D					
Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Note
3atch 22J0799 - EPA 5035A							Soi	I				
Blank (22J0799-BLK1)			Prepared	: 10/20/22 0	9:00 Anal	yzed: 10/20	/22 14:10					
,2-Dichloropropane	ND	8.33	16.7	ug/kg we	t 50							
,3-Dichloropropane	ND	16.7	33.3	ug/kg we	t 50							
2,2-Dichloropropane	ND	16.7	33.3	ug/kg we	t 50							
,1-Dichloropropene	ND	16.7	33.3	ug/kg we	t 50							
is-1,3-Dichloropropene	ND	16.7	33.3	ug/kg we	t 50							
rans-1,3-Dichloropropene	ND	16.7	33.3	ug/kg we	t 50							
Ethylbenzene	ND	8.33	16.7	ug/kg we	t 50							
Iexachlorobutadiene	ND	33.3	66.7	ug/kg we	t 50							
-Hexanone	ND	167	333	ug/kg we	t 50							
sopropylbenzene	ND	16.7	33.3	ug/kg we	t 50							
-Isopropyltoluene	ND	16.7	33.3	ug/kg we	t 50							
Aethylene chloride	ND	167	333	ug/kg we	t 50							
-Methyl-2-pentanone (MiBK)	ND	167	333	ug/kg we	t 50							
Methyl tert-butyl ether (MTBE)	ND	16.7	33.3	ug/kg we	t 50							
Vaphthalene	ND	33.3	66.7	ug/kg we	t 50							
-Propylbenzene	ND	8.33	16.7	ug/kg we	t 50							
Styrene	ND	16.7	33.3	ug/kg we	t 50							
,1,1,2-Tetrachloroethane	ND	8.33	16.7	ug/kg we	t 50							
,1,2,2-Tetrachloroethane	ND	16.7	33.3	ug/kg we								
Fetrachloroethene (PCE)	ND	8.33	16.7	ug/kg we								
Toluene	ND	16.7	33.3	ug/kg we								
,2,3-Trichlorobenzene	ND	83.3	167	ug/kg we	t 50							
,2,4-Trichlorobenzene	ND	83.3	167	ug/kg we								
,1,1-Trichloroethane	ND	8.33	16.7	ug/kg we								
,1,2-Trichloroethane	ND	8.33	16.7	ug/kg we								
Frichloroethene (TCE)	ND	8.33	16.7	ug/kg we								
richlorofluoromethane	ND	33.3	66.7	ug/kg we								
,2,3-Trichloropropane	ND	16.7	33.3	ug/kg we								
,2,4-Trimethylbenzene	ND	16.7	33.3	ug/kg we								
,3,5-Trimethylbenzene	ND	16.7	33.3	ug/kg we								
/inyl chloride	ND	8.33	16.7	ug/kg we								
n,p-Xylene	ND	16.7	33.3	ug/kg we								
-Xylene	ND	8.33	16.7	ug/kg we ug/kg we								
urr: 1,4-Difluorobenzene (Surr)	нD		very: 102 %	Limits: 80-			ution: 1x					

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6700 S.W. Sandburg Street Tigard, OR 97223 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 A2J0597 - 12 02 22 1255 **QUALITY CONTROL (QC) SAMPLE RESULTS** Volatile Organic Compounds by EPA 8260D % REC RPD Detection Reporting Spike Source Analyte Result Units Dilution % REC RPD Limit Limit Amount Result Limits Limit Notes Batch 22J0799 - EPA 5035A Soil Blank (22J0799-BLK1) Prepared: 10/20/22 09:00 Analyzed: 10/20/22 14:10 Surr: Toluene-d8 (Surr) Recovery: 102 % Limits: 80-120 % Dilution: 1x 4-Bromofluorobenzene (Surr) 101 % 79-120 % LCS (22J0799-BS1) Prepared: 10/20/22 09:00 Analyzed: 10/20/22 13:08 5035A/8260D Acetone 2040 500 1000 ug/kg wet 50 2000 ----102 80-120% Acrylonitrile 1030 50.0 100 50 1000 103 80-120% ug/kg wet ---------Benzene 1000 5.00 10.0 ug/kg wet 50 1000 100 80-120% ---25.0 1000 99 990 12.5 50 80-120% Bromobenzene ug/kg wet ----------Bromochloromethane 1070 25.0 50.0 ug/kg wet 50 1000 107 80-120% ---------25.0 50.0 1000 Bromodichloromethane 1110 ug/kg wet 50 ---111 80-120% ------Bromoform 1220 50.0 100 ug/kg wet 50 1000 122 80-120% O-56 Bromomethane 1220 500 500 ug/kg wet 50 1000 122 80-120% Q-56 ---------2-Butanone (MEK) 1940 250 500 ug/kg wet 50 2000 97 80-120% ---994 25.0 50.0 50 1000 99 80-120% n-Butylbenzene ug/kg wet ---------sec-Butylbenzene 1010 25.050.0 ug/kg wet 50 1000 101 80-120% --tert-Butylbenzene 970 25.0 50.0 50 1000 97 80-120% ug/kg wet ---------Carbon disulfide 1060 250 500 ug/kg wet 50 1000 ---106 80-120% ------Carbon tetrachloride 1150 25.0 50.0 ug/kg wet 50 1000 115 80-120% ---------97 Chlorobenzene 973 12.5 25.0ug/kg wet 50 1000 80-120% Chloroethane 1080 250 500 50 1000 108 80-120% ug/kg wet ---------1000 80-120% Chloroform 1040 25.050.0 ug/kg wet 50 104 ------Chloromethane 1040 125 250 50 1000 104 80-120% ug/kg wet ---------2-Chlorotoluene 1000 25.050.0 ug/kg wet 50 1000 ---100 80-120% ____ 4-Chlorotoluene 988 25.0 50.0 ug/kg wet 50 1000 99 80-120% ---------50.0 100 Dibromochloromethane 1130 ug/kg wet 50 1000 113 80-120% --------ug/kg wet 1,2-Dibromo-3-chloropropane 1040 125 250 50 1000 104 80-120% ---1,2-Dibromoethane (EDB) 990 1000 99 25.050.0 ug/kg wet 50 80-120% ---Dibromomethane 1090 25.0 50.0 ug/kg wet 50 1000 109 80-120% ---------1,2-Dichlorobenzene 980 12.5 25.0ug/kg wet 50 1000 ----98 80-120% ------1,3-Dichlorobenzene 1010 12.5 25.0 ug/kg wet 50 1000 101 80-120% ---------1,4-Dichlorobenzene 969 12.5 25.0 50 1000 97 80-120% ug/kg wet ---ICV-01 Dichlorodifluoromethane 1050 50.0 100 ug/kg wet 50 1000 105 80-120% ---------1,1-Dichloroethane 1050 12.5 25.0 1000 105 80-120% ug/kg wet 50 ---------

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

Sevenson Environmental Services, Inc.

2749 Lockport Road

Niagara Falls, NY 14305

Project: Gasco -- Filtercake Project Number: 111323 Project Manager: Chip Byrd

Report ID: A2J0597 - 12 02 22 1255

QUALITY CONTROL (QC) SAMPLE RESULTS

			Volatile Org	ganic Comp	oounds	by EPA 8	260D					
Analyte	Result	Detection Limit	Reporting Limit	Units D	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Note
3atch 22J0799 - EPA 5035A							Soi	I				
LCS (22J0799-BS1)			Prepared	: 10/20/22 09:	00 Anal	yzed: 10/20/	/22 13:08					
,2-Dichloroethane (EDC)	1060	12.5	25.0	ug/kg wet	50	1000		106	80-120%			
,1-Dichloroethene	1090	12.5	25.0	ug/kg wet	50	1000		109	80-120%			
is-1,2-Dichloroethene	1070	12.5	25.0	ug/kg wet	50	1000		107	80-120%			
rans-1,2-Dichloroethene	1050	12.5	25.0	ug/kg wet	50	1000		105	80-120%			
,2-Dichloropropane	1070	12.5	25.0	ug/kg wet	50	1000		107	80-120%			
,3-Dichloropropane	1010	25.0	50.0	ug/kg wet	50	1000		101	80-120%			
,2-Dichloropropane	1110	25.0	50.0	ug/kg wet	50	1000		111	80-120%			
,1-Dichloropropene	1020	25.0	50.0	ug/kg wet	50	1000		102	80-120%			
is-1,3-Dichloropropene	1030	25.0	50.0	ug/kg wet	50	1000		103	80-120%			
rans-1,3-Dichloropropene	1060	25.0	50.0	ug/kg wet	50	1000		106	80-120%			
Ethylbenzene	980	12.5	25.0	ug/kg wet	50	1000		98	80-120%			
Iexachlorobutadiene	1040	50.0	100	ug/kg wet	50	1000		104	80-120%			
-Hexanone	1900	250	500	ug/kg wet	50	2000		95	80-120%			
sopropylbenzene	990	25.0	50.0	ug/kg wet	50	1000		99	80-120%			
-Isopropyltoluene	976	25.0	50.0	ug/kg wet	50	1000		98	80-120%			
Aethylene chloride	1060	250	500	ug/kg wet	50	1000		106	80-120%			
-Methyl-2-pentanone (MiBK)	1860	250	500	ug/kg wet	50	2000		93	80-120%			
Aethyl tert-butyl ether (MTBE)	956	25.0	50.0	ug/kg wet	50	1000		96	80-120%			
Japhthalene	954	50.0	100	ug/kg wet	50	1000		95	80-120%			
-Propylbenzene	984	12.5	25.0	ug/kg wet	50	1000		98	80-120%			
tyrene	978	25.0	50.0	ug/kg wet	50	1000		98	80-120%			
,1,1,2-Tetrachloroethane	1100	12.5	25.0	ug/kg wet	50	1000		110	80-120%			
,1,2,2-Tetrachloroethane	980	25.0	50.0	ug/kg wet	50	1000		98	80-120%			
etrachloroethene (PCE)	1010	12.5	25.0	ug/kg wet	50	1000		101	80-120%			
oluene	971	25.0	50.0	ug/kg wet	50	1000		97	80-120%			
,2,3-Trichlorobenzene	1010	125	250	ug/kg wet	50	1000		101	80-120%			
,2,4-Trichlorobenzene	989	125	250	ug/kg wet	50	1000		99	80-120%			
,1,1-Trichloroethane	1070	12.5	25.0	ug/kg wet	50	1000		107	80-120%			
,1,2-Trichloroethane	1000	12.5	25.0	ug/kg wet	50	1000		100	80-120%			
Trichloroethene (TCE)	1100	12.5	25.0	ug/kg wet	50	1000		110	80-120%			
richlorofluoromethane	1100	50.0	100	ug/kg wet	50	1000		110	80-120%			
,2,3-Trichloropropane	1030	25.0	50.0	ug/kg wet	50	1000		103	80-120%			
,2,4-Trimethylbenzene	1000	25.0	50.0	ug/kg wet	50	1000		100	80-120%			
,3,5-Trimethylbenzene	995	25.0	50.0	ug/kg wet	50	1000		100	80-120%			

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

Sevenson Environmental Services, Inc.

2749 Lockport Road

Niagara Falls, NY 14305

Project: <u>Gasco -- Filtercake</u> Project Number: 111323

Project Manager: Chip Byrd

<u>Report ID:</u> A2J0597 - 12 02 22 1255

QUALITY CONTROL (QC) SAMPLE RESULTS

			Volatile Or	ganic Con	npounds	by EPA 8	3260D					
Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22J0799 - EPA 5035A							So	il				
LCS (22J0799-BS1)			Prepared	l: 10/20/22 0	9:00 Anal	yzed: 10/20	/22 13:08					
Vinyl chloride	1090	12.5	25.0	ug/kg we	t 50	1000		109	80-120%			
n,p-Xylene	1930	25.0	50.0	ug/kg we	t 50	2000		96	80-120%			
o-Xylene	940	12.5	25.0	ug/kg we	t 50	1000		94	80-120%			
Surr: 1,4-Difluorobenzene (Surr)		Reco	very: 104 %	Limits: 80-		Dili	ution: 1x					
Toluene-d8 (Surr)			100 %	80-	120 %		"					
4-Bromofluorobenzene (Surr)			98 %	79-	120 %		"					
Duplicate (22J0799-DUP1)			Prepared	l: 10/15/22 1	7:00 Anal	yzed: 10/20	/22 16:25					
OC Source Sample: Non-SDG (A2	<u>J0583-01)</u>											
Acetone	ND	814	1630	ug/kg dry	50		ND				30%	
Acrylonitrile	ND	81.4	163	ug/kg dry	50		ND				30%	
Benzene	ND	8.14	16.3	ug/kg dry	50		ND				30%	
Bromobenzene	ND	20.4	40.7	ug/kg dry	50		ND				30%	
Bromochloromethane	ND	40.7	81.4	ug/kg dry	50		ND				30%	
Bromodichloromethane	ND	40.7	81.4	ug/kg dry	50		ND				30%	
Bromoform	ND	81.4	163	ug/kg dry	50		ND				30%	
Bromomethane	ND	814	814	ug/kg dry	50		ND				30%	
2-Butanone (MEK)	ND	407	814	ug/kg dry	50		ND				30%	
n-Butylbenzene	ND	40.7	81.4	ug/kg dry	50		ND				30%	
sec-Butylbenzene	ND	40.7	81.4	ug/kg dry	50		ND				30%	
ert-Butylbenzene	ND	40.7	81.4	ug/kg dry			ND				30%	
Carbon disulfide	ND	407	814	ug/kg dry	50		ND				30%	
Carbon tetrachloride	ND	40.7	81.4	ug/kg dry			ND				30%	
Chlorobenzene	ND	20.4	40.7	ug/kg dry	50		ND				30%	
Chloroethane	ND	407	814	ug/kg dry			ND				30%	
Chloroform	ND	40.7	81.4	ug/kg dry			ND				30%	
Chloromethane	ND	204	407	ug/kg dry			ND				30%	
2-Chlorotoluene	ND	40.7	81.4	ug/kg dry			ND				30%	
-Chlorotoluene	ND	40.7	81.4	ug/kg dry			ND				30%	
Dibromochloromethane	ND	81.4	163	ug/kg dry			ND				30%	
,2-Dibromo-3-chloropropane	ND	204	407	ug/kg dry			ND				30%	
,2-Dibromoethane (EDB)	ND	40.7	81.4	ug/kg dry			ND				30%	
Dibromomethane	ND	40.7	81.4	ug/kg dry			ND				30%	
.2-Dichlorobenzene	ND	20.4	40.7	ug/kg dry			ND				30%	

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

Sevenson Environmental Services, Inc.

2749 Lockport Road Niagara Falls, NY 14305 Project:Gasco -- FiltercakeProject Number:111323Project Manager:Chip Byrd

<u>Report ID:</u> A2J0597 - 12 02 22 1255

QUALITY CONTROL (QC) SAMPLE RESULTS

			Volatile Org	ganic Con	npounds	by EPA 8	260D					
Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22J0799 - EPA 5035A							Soi	I				
Duplicate (22J0799-DUP1)			Prepared	: 10/15/22 1	7:00 Anal	yzed: 10/20	/22 16:25					
QC Source Sample: Non-SDG (A2	J0583-01)											
,3-Dichlorobenzene	ND	20.4	40.7	ug/kg dry	50		ND				30%	
,4-Dichlorobenzene	ND	20.4	40.7	ug/kg dry	50		ND				30%	
Dichlorodifluoromethane	ND	81.4	163	ug/kg dry	50		ND				30%	
,1-Dichloroethane	ND	20.4	40.7	ug/kg dry	50		ND				30%	
,2-Dichloroethane (EDC)	ND	20.4	40.7	ug/kg dry	50		ND				30%	
,1-Dichloroethene	ND	20.4	40.7	ug/kg dry	50		ND				30%	
vis-1,2-Dichloroethene	ND	20.4	40.7	ug/kg dry	50		ND				30%	
rans-1,2-Dichloroethene	ND	20.4	40.7	ug/kg dry	50		ND				30%	
,2-Dichloropropane	ND	20.4	40.7	ug/kg dry	50		ND				30%	
,3-Dichloropropane	ND	40.7	81.4	ug/kg dry	50		ND				30%	
2,2-Dichloropropane	ND	40.7	81.4	ug/kg dry	50		ND				30%	
,1-Dichloropropene	ND	40.7	81.4	ug/kg dry	50		ND				30%	
vis-1,3-Dichloropropene	ND	40.7	81.4	ug/kg dry	50		ND				30%	
rans-1,3-Dichloropropene	ND	40.7	81.4	ug/kg dry	50		ND				30%	
Ethylbenzene	ND	20.4	40.7	ug/kg dry	50		ND				30%	
Hexachlorobutadiene	ND	81.4	163	ug/kg dry	50		ND				30%	
2-Hexanone	ND	407	814	ug/kg dry	50		ND				30%	
sopropylbenzene	ND	40.7	81.4	ug/kg dry	50		ND				30%	
-Isopropyltoluene	ND	40.7	81.4	ug/kg dry	50		ND				30%	
Methylene chloride	ND	407	814	ug/kg dry	50		ND				30%	
-Methyl-2-pentanone (MiBK)	ND	407	814	ug/kg dry	50		ND				30%	
Methyl tert-butyl ether (MTBE)	ND	40.7	81.4	ug/kg dry			ND				30%	
Naphthalene	ND	81.4	163	ug/kg dry	50		ND				30%	
n-Propylbenzene	ND	20.4	40.7	ug/kg dry	50		ND				30%	
Styrene	ND	40.7	81.4	ug/kg dry			ND				30%	
,1,1,2-Tetrachloroethane	ND	20.4	40.7	ug/kg dry	50		ND				30%	
,1,2,2-Tetrachloroethane	ND	40.7	81.4	ug/kg dry	50		ND				30%	
Tetrachloroethene (PCE)	ND	20.4	40.7	ug/kg dry	50		ND				30%	
Toluene	ND	40.7	81.4	ug/kg dry	50		ND				30%	
,2,3-Trichlorobenzene	ND	204	407	ug/kg dry			ND				30%	
,2,4-Trichlorobenzene	ND	204	407	ug/kg dry			ND				30%	
,1,1-Trichloroethane	ND	20.4	40.7	ug/kg dry			ND				30%	
,1,2-Trichloroethane	ND	20.4	40.7	ug/kg dry			ND				30%	

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

Sevenson Environmental Services, Inc.

2749 Lockport Road Niagara Falls, NY 14305 Project: Gasco -- Filtercake
Project Number: 111323
Project Manager: Chip Byrd

<u>Report ID:</u> A2J0597 - 12 02 22 1255

QUALITY CONTROL (QC) SAMPLE RESULTS

			Volatile Or	ganic Cor	npounds	by EPA 8	260D					
Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22J0799 - EPA 5035A							Soi					
Duplicate (22J0799-DUP1)			Prepared	l: 10/15/22 1	7:00 Ana	lyzed: 10/20	/22 16:25					
QC Source Sample: Non-SDG (A2	J0583-01)											
Trichloroethene (TCE)	ND	20.4	40.7	ug/kg dry	50		ND				30%	
Trichlorofluoromethane	ND	81.4	163	ug/kg dry	50		ND				30%	
1,2,3-Trichloropropane	ND	40.7	81.4	ug/kg dry	50		ND				30%	
1,2,4-Trimethylbenzene	ND	40.7	81.4	ug/kg dry	50		ND				30%	
1,3,5-Trimethylbenzene	ND	40.7	81.4	ug/kg dry	50		ND				30%	
Vinyl chloride	ND	20.4	40.7	ug/kg dry	50		ND				30%	
m,p-Xylene	ND	40.7	81.4	ug/kg dry	50		ND				30%	
o-Xylene	ND	20.4	40.7	ug/kg dry	50		ND				30%	
Surr: 1,4-Difluorobenzene (Surr)		Recon	very: 101 %	Limits: 80-	120 %	Dilı	ution: 1x					
Toluene-d8 (Surr)			100 %	80-	120 %		"					
4-Bromofluorobenzene (Surr)			102 %	79-	120 %		"					
OC Source Sample: Non-SDG (A2		1270	2510		100						2004	
Acetone	ND	1370	2740	ug/kg dry	/ 100		ND				30%	
Acrylonitrile	ND	137	274	ug/kg dry			ND				30%	
Benzene	37.1	13.7	27.4	ug/kg dry			38.4			4	30%	
Bromobenzene	ND	34.3	68.6	ug/kg dry	/ 100		ND				30%	
Bromochloromethane	ND	68.6	137	ug/kg dry			ND				30%	
Bromodichloromethane	ND	68.6	137	ug/kg dry			ND				30%	
Bromoform	ND	137	274	ug/kg dry			ND				30%	
Bromomethane	ND	1370	1370	ug/kg dry			ND				30%	
2-Butanone (MEK)	ND	686	1370	ug/kg dry			ND				30%	
n-Butylbenzene	ND	68.6	137	ug/kg dry			ND				30%	
sec-Butylbenzene	ND	68.6	137	ug/kg dry			ND				30%	
ert-Butylbenzene	ND	68.6	137	ug/kg dry			ND				30%	
Carbon disulfide	ND	686	1370	ug/kg dry			ND				30%	
Carbon tetrachloride	ND	68.6	137	ug/kg dry			ND				30%	
Chlorobenzene	ND	34.3	68.6	ug/kg dry			ND				30%	
Chloroethane	ND	686	1370	ug/kg dry			ND				30%	
Chloroform	ND	68.6	137	ug/kg dry			ND				30%	
Chloromethane	ND	343	686	ug/kg dry			ND				30%	
2-Chlorotoluene	ND	68.6	137	ug/kg dry	/ 100		ND				30%	

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

Sevenson Environmental Services, Inc.

2749 Lockport Road

Niagara Falls, NY 14305

Project: Gasco -- Filtercake
Project Number: 111323
Project Manager: Chip Byrd

<u>Report ID:</u> A2J0597 - 12 02 22 1255

QUALITY CONTROL (QC) SAMPLE RESULTS

			Volatile Org	Janic Con	npounds	DY EPA 8	5260D					
Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22J0799 - EPA 5035A							Soi	I				
Duplicate (22J0799-DUP2)			Prepared	: 10/19/22 1	5:20 Anal	yzed: 10/20/	/22 20:55					V-1
QC Source Sample: Non-SDG (A2	<u>J0603-01)</u>											
4-Chlorotoluene	ND	68.6	137	ug/kg dry	y 100		ND				30%	
Dibromochloromethane	ND	137	274	ug/kg dry	y 100		ND				30%	
1,2-Dibromo-3-chloropropane	ND	343	686	ug/kg dry			ND				30%	
1,2-Dibromoethane (EDB)	ND	68.6	137	ug/kg dry			ND				30%	
Dibromomethane	ND	68.6	137	ug/kg dry			ND				30%	
1,2-Dichlorobenzene	ND	34.3	68.6	ug/kg dry	y 100		ND				30%	
1,3-Dichlorobenzene	ND	34.3	68.6	ug/kg dry			ND				30%	
1,4-Dichlorobenzene	ND	34.3	68.6	ug/kg dry	y 100		ND				30%	
Dichlorodifluoromethane	ND	137	274	ug/kg dry	y 100		ND				30%	
1,1-Dichloroethane	ND	34.3	68.6	ug/kg dry			ND				30%	
1,2-Dichloroethane (EDC)	ND	34.3	68.6	ug/kg dry	y 100		ND				30%	
1,1-Dichloroethene	ND	34.3	68.6	ug/kg dry			ND				30%	
cis-1,2-Dichloroethene	ND	34.3	68.6	ug/kg dry	y 100		ND				30%	
trans-1,2-Dichloroethene	ND	34.3	68.6	ug/kg dry	y 100		ND				30%	
1,2-Dichloropropane	ND	34.3	68.6	ug/kg dry			ND				30%	
1,3-Dichloropropane	ND	68.6	137	ug/kg dry			ND				30%	
2,2-Dichloropropane	ND	68.6	137	ug/kg dry			ND				30%	
1,1-Dichloropropene	ND	68.6	137	ug/kg dry			ND				30%	
cis-1,3-Dichloropropene	ND	68.6	137	ug/kg dry			ND				30%	
trans-1,3-Dichloropropene	ND	68.6	137	ug/kg dry			ND				30%	
Ethylbenzene	ND	34.3	68.6	ug/kg dry			ND				30%	
Hexachlorobutadiene	ND	137	274	ug/kg dry			ND				30%	
2-Hexanone	ND	686	1370	ug/kg dry			ND				30%	
Isopropylbenzene	ND	68.6	137	ug/kg dry			ND				30%	
4-Isopropyltoluene	ND	68.6	137	ug/kg dry			ND				30%	
Methylene chloride	ND	686	1370	ug/kg dry			ND				30%	
4-Methyl-2-pentanone (MiBK)	ND	686	1370	ug/kg dry			ND				30%	
Methyl tert-butyl ether (MTBE)	ND	68.6	137	ug/kg dry			ND				30%	
Naphthalene	ND	137	274	ug/kg dry			ND				30%	
n-Propylbenzene	79.6	34.3	68.6	ug/kg dry			81.0			2	30%	
Styrene	ND	68.6	137	ug/kg dry			ND				30%	
1,1,1,2-Tetrachloroethane	ND	34.3	68.6	ug/kg dry			ND				30%	
,1,2,2-Tetrachloroethane	ND	68.6	137	ug/kg dry			ND				30%	

Apex Laboratories



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

Sevenson Environmental Services, Inc.

2749 Lockport Road Niagara Falls, NY 14305 Project: <u>Gasco -- Filtercake</u> Project Number: **111323** Project Manager: Chip Byrd

<u>Report ID:</u> A2J0597 - 12 02 22 1255

QUALITY CONTROL (QC) SAMPLE RESULTS

		\V	olatile Or	ganic Cor	npounds	by EPA 8	3260D					
Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22J0799 - EPA 5035A							Soi	il				
Duplicate (22J0799-DUP2)			Prepared	l: 10/19/22 1	5:20 Ana	lyzed: 10/20	/22 20:55					V-15
QC Source Sample: Non-SDG (A2	<u>J0603-01)</u>											
Tetrachloroethene (PCE)	ND	34.3	68.6	ug/kg dr	y 100		ND				30%	
Toluene	ND	68.6	137	ug/kg dr	y 100		ND				30%	
1,2,3-Trichlorobenzene	ND	343	686	ug/kg dr	y 100		ND				30%	
1,2,4-Trichlorobenzene	ND	343	686	ug/kg dr	y 100		ND				30%	
1,1,1-Trichloroethane	ND	34.3	68.6	ug/kg dr	y 100		ND				30%	
1,1,2-Trichloroethane	ND	34.3	68.6	ug/kg dr	y 100		ND				30%	
Trichloroethene (TCE)	ND	34.3	68.6	ug/kg dr	y 100		ND				30%	
Trichlorofluoromethane	ND	137	274	ug/kg dr	y 100		ND				30%	
1,2,3-Trichloropropane	ND	68.6	137	ug/kg dr	y 100		ND				30%	
1,2,4-Trimethylbenzene	ND	68.6	137	ug/kg dr	y 100		ND				30%	
1,3,5-Trimethylbenzene	ND	68.6	137	ug/kg dry	y 100		ND				30%	
Vinyl chloride	ND	34.3	68.6	ug/kg dr	y 100		ND				30%	
m,p-Xylene	ND	68.6	137	ug/kg dry			ND				30%	
o-Xylene	ND	34.3	68.6	ug/kg dr	y 100		ND				30%	
Surr: 1,4-Difluorobenzene (Surr)		Recove	ery: 100 %	Limits: 80-	120 %	Dili	ution: 1x					
Toluene-d8 (Surr)			100 %	80-	120 %		"					
4-Bromofluorobenzene (Surr)			101 %	79-	120 %		"					
Matrix Spike (22J0799-MS1)			Prepared	l: 10/19/22 1	6:25 Ana	lyzed: 10/21	/22 00:04					V-16
QC Source Sample: Non-SDG (A2	J0608-04)					-						
5035A/8260D												
Acetone	36400	9520	19000	ug/kg we	t 200	38100	ND	96	36-164%			
Acrylonitrile	19200		1900	ug/kg we		19000	ND	93	65-134%			
Benzene	22500	95.2	190	ug/kg we		19000	4030	97	77-121%			
Bromobenzene	19200	238	476	ug/kg we		19000	ND	101	78-121%			
Bromochloromethane	17900		952	ug/kg we		19000	ND	94	78-125%			
Bromodichloromethane	19700		952	ug/kg we		19000	ND	104	75-127%			
Bromoform	22000		1900	ug/kg we		19000	ND	115	67-132%			Q-54
Bromomethane	24800		9520	ug/kg we		19000	ND	130	53-143%			Q-54
2-Butanone (MEK)	37100		9520	ug/kg we		38100	ND	97	51-148%			
n-Butylbenzene	57000		9520	ug/kg we		19000	33800	122	70-128%			
sec-Butylbenzene	49300		952	ug/kg we		19000	27200	116	73-126%			
tert-Butylbenzene	21000		952 952	ug/kg we		19000	27200 ND	110	73-125%			

Apex Laboratories



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

Sevenson Environmental Services, Inc.

2749 Lockport Road Niagara Falls, NY 14305 Project: <u>Gasco -- Filtercake</u> Project Number: **111323** Project Manager: Chip Byrd

<u>Report ID:</u> A2J0597 - 12 02 22 1255

QUALITY CONTROL (QC) SAMPLE RESULTS

			Volatile Org	ganic Con	pounds	DY EPA 8	5260D					
Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22J0799 - EPA 5035A							So	il				
Matrix Spike (22J0799-MS1)			Prepared	: 10/19/22 1	6:25 Ana	lyzed: 10/21	/22 00:04					V-16
QC Source Sample: Non-SDG (A2	2 <u>J0608-04)</u>											
Carbon disulfide	22400	4760	9520	ug/kg we	t 200	19000	ND	118	63-132%			
Carbon tetrachloride	23200	476	952	ug/kg we	t 200	19000	ND	122	70-135%			
Chlorobenzene	18800	238	476	ug/kg we	t 200	19000	ND	99	79-120%			
Chloroethane	23000	4760	9520	ug/kg we	t 200	19000	ND	121	59-139%			
Chloroform	19200	476	952	ug/kg we	t 200	19000	ND	101	78-123%			
Chloromethane	18200	2380	4760	ug/kg we	t 200	19000	ND	95	50-136%			
2-Chlorotoluene	21300	476	952	ug/kg we	t 200	19000	ND	106	75-122%			
4-Chlorotoluene	19200	476	952	ug/kg we	t 200	19000	ND	101	72-124%			
Dibromochloromethane	20700	952	1900	ug/kg we	t 200	19000	ND	109	74-126%			
1,2-Dibromo-3-chloropropane	21500	2380	4760	ug/kg we	t 200	19000	ND	113	61-132%			
1,2-Dibromoethane (EDB)	19300	476	952	ug/kg we	t 200	19000	ND	101	78-122%			
Dibromomethane	19800	476	952	ug/kg we	t 200	19000	ND	104	78-125%			
1,2-Dichlorobenzene	22100	238	476	ug/kg we	t 200	19000	3110	100	78-121%			
1,3-Dichlorobenzene	19500	238	476	ug/kg we	t 200	19000	ND	103	77-121%			
1,4-Dichlorobenzene	18700	238	476	ug/kg we	t 200	19000	ND	98	75-120%			
Dichlorodifluoromethane	22700	952	1900	ug/kg we	t 200	19000	ND	119	29-149%			ICV-
1,1-Dichloroethane	18800	238	476	ug/kg we	t 200	19000	ND	99	76-125%			
1,2-Dichloroethane (EDC)	19700	238	476	ug/kg we	t 200	19000	ND	103	73-128%			
1,1-Dichloroethene	22900	238	476	ug/kg we	t 200	19000	ND	120	70-131%			
cis-1,2-Dichloroethene	19400	238	476	ug/kg we	t 200	19000	ND	102	77-123%			
trans-1,2-Dichloroethene	19500	238	476	ug/kg we		19000	ND	102	74-125%			
1,2-Dichloropropane	19000	238	476	ug/kg we	t 200	19000	ND	100	76-123%			
1,3-Dichloropropane	18800	476	952	ug/kg we	t 200	19000	ND	99	77-121%			
2,2-Dichloropropane	18100	476	952	ug/kg we	t 200	19000	ND	95	67-133%			
1,1-Dichloropropene	20000	476	952	ug/kg we		19000	ND	105	76-125%			
cis-1,3-Dichloropropene	18300	476	952	ug/kg we	t 200	19000	ND	96	74-126%			
trans-1,3-Dichloropropene	18600	476	952	ug/kg we		19000	ND	97	71-130%			
Ethylbenzene	106000	238	476	ug/kg we		19000	88500	94	76-122%			
Hexachlorobutadiene	33500	952	1900	ug/kg we		19000	ND	176	61-135%			Q-
2-Hexanone	35100	4760	9520	ug/kg we		38100	ND	92	53-145%			
Isopropylbenzene	33300	476	952	ug/kg we		19000	12400	110	68-134%			
4-Isopropyltoluene	32900	476	952	ug/kg we		19000	8800	127	73-127%			
Methylene chloride	19600	4760	9520	ug/kg we		19000	ND	103	70-128%			

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

Sevenson Environmental Services, Inc.

2749 Lockport Road Niagara Falls, NY 14305 Project: <u>Gasco -- Filtercake</u> Project Number: **111323** Project Manager: Chip Byrd

<u>Report ID:</u> A2J0597 - 12 02 22 1255

QUALITY CONTROL (QC) SAMPLE RESULTS

			Volatile Or	ganic Con	npounds	by EPA 8	3260D					
Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22J0799 - EPA 5035A							Soi	il				
Matrix Spike (22J0799-MS1)			Prepared	l: 10/19/22 1	6:25 Ana	lyzed: 10/21	/22 00:04					V-16
QC Source Sample: Non-SDG (A2	<u> J0608-04)</u>											
4-Methyl-2-pentanone (MiBK)	38600	4760	9520	ug/kg we	t 200	38100	ND	86	65-135%			
Methyl tert-butyl ether (MTBE)	18200	476	952	ug/kg we	t 200	19000	ND	95	73-125%			
Naphthalene	161000	952	1900	ug/kg we	t 200	19000	139000	113	62-129%			
n-Propylbenzene	81400	238	476	ug/kg we	t 200	19000	62100	102	73-125%			
Styrene	20800	476	952	ug/kg we	t 200	19000	ND	106	76-124%			
1,1,1,2-Tetrachloroethane	20800	238	476	ug/kg we	t 200	19000	ND	109	78-125%			
1,1,2,2-Tetrachloroethane	17000	10500	10500	ug/kg we	t 200	19000	ND	90	70-124%			
Tetrachloroethene (PCE)	21100	238	476	ug/kg we	t 200	19000	ND	111	73-128%			
Toluene	201000	476	952	ug/kg we	t 200	19000	188000	72	77-121%			E, Q-0
1,2,3-Trichlorobenzene	23400	2380	4760	ug/kg we	t 200	19000	ND	123	66-130%			
1,2,4-Trichlorobenzene	23000	2380	4760	ug/kg we	t 200	19000	ND	121	67-129%			
1,1,1-Trichloroethane	21100	238	476	ug/kg we	t 200	19000	ND	111	73-130%			
1,1,2-Trichloroethane	19200	238	476	ug/kg we	t 200	19000	ND	96	78-121%			
Trichloroethene (TCE)	21500	238	476	ug/kg we	t 200	19000	ND	113	77-123%			
Trichlorofluoromethane	19100	952	1900	ug/kg we	t 200	19000	ND	100	62-140%			
1,2,3-Trichloropropane	20900	476	952	ug/kg we	t 200	19000	ND	103	73-125%			
1,2,4-Trimethylbenzene	465000	476	952	ug/kg we	t 200	19000	452000	68	75-123%			E, Q-0
1,3,5-Trimethylbenzene	133000	476	952	ug/kg we	t 200	19000	111000	115	73-124%			
Vinyl chloride	22100	238	476	ug/kg we	t 200	19000	ND	116	56-135%			
m,p-Xylene	419000	476	952	ug/kg we	t 200	38100	384000	92	77-124%			
o-Xylene	177000	238	476	ug/kg we	t 200	19000	162000	79	77-123%			
Surr: 1,4-Difluorobenzene (Surr)		Recov	ery: 101 %	Limits: 80-	120 %	Dili	ution: 1x					
Toluene-d8 (Surr)			98 %	80-	120 %		"					
4-Bromofluorobenzene (Surr)			100 %	79-	120 %		"					

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

Sevenson Environmental Services, Inc.

2749 Lockport Road

Niagara Falls, NY 14305

Project: Gasco -- Filtercake
Project Number: 111323
Project Manager: Chip Byrd

<u>Report ID:</u> A2J0597 - 12 02 22 1255

QUALITY CONTROL (QC) SAMPLE RESULTS

<u> </u>			Volatile Org									
Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
3atch 22J0853 - EPA 5035A							Soi	I				
3lank (22J0853-BLK1)			Prepared:	: 10/21/22 1	1:03 Anal	yzed: 10/21/	/22 15:58					
5035A/8260D												
Acetone	ND	333	667	ug/kg we	et 50							
Acrylonitrile	ND	33.3	66.7	ug/kg we	et 50							
Benzene	ND	3.33	6.67	ug/kg we								
Bromobenzene	ND	8.33	16.7	ug/kg we	et 50							
Bromochloromethane	ND	16.7	33.3	ug/kg we								
Bromodichloromethane	ND	16.7	33.3	ug/kg we	et 50							
Bromoform	ND	33.3	66.7	ug/kg we	et 50							
Bromomethane	ND	333	333	ug/kg we	et 50							
2-Butanone (MEK)	ND	167	333	ug/kg we								
n-Butylbenzene	ND	16.7	33.3	ug/kg we								
ec-Butylbenzene	ND	16.7	33.3	ug/kg we								
ert-Butylbenzene	ND	16.7	33.3	ug/kg we								
Carbon disulfide	ND	167	333	ug/kg we								
Carbon tetrachloride	ND	16.7	33.3	ug/kg we								
Chlorobenzene	ND	8.33	16.7	ug/kg we								
Chloroethane	ND	167	333	ug/kg we								
Chloroform	ND	16.7	33.3	ug/kg we								
Chloromethane	ND	83.3	167	ug/kg we								
2-Chlorotoluene	ND	16.7	33.3	ug/kg we								
-Chlorotoluene	ND	16.7	33.3	ug/kg we								
Dibromochloromethane	ND	33.3	66.7	ug/kg we								
,2-Dibromo-3-chloropropane	ND	83.3	167	ug/kg we								
,2-Dibromoethane (EDB)	ND	16.7	33.3	ug/kg we								
Dibromomethane	ND	16.7	33.3	ug/kg we								
,2-Dichlorobenzene	ND	8.33	16.7	ug/kg we								
,3-Dichlorobenzene	ND	8.33	16.7	ug/kg we								
,4-Dichlorobenzene	ND	8.33	16.7	ug/kg we								
Dichlorodifluoromethane	ND	33.3	66.7	ug/kg we								
,1-Dichloroethane	ND	8.33	16.7	ug/kg we								
,2-Dichloroethane (EDC)	ND	8.33	16.7	ug/kg we								
,1-Dichloroethene	ND ND	8.33	16.7	ug/kg we								
is-1,2-Dichloroethene	ND ND	8.33 8.33	16.7	ug/kg we								
ans-1,2-Dichloroethene	ND ND	8.33 8.33	16.7	ug/kg we								

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

Sevenson Environmental Services, Inc.

2749 Lockport Road

Niagara Falls, NY 14305

Project: Gasco -- Filtercake
Project Number: 111323
Project Manager: Chip Byrd

<u>Report ID:</u> A2J0597 - 12 02 22 1255

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	Note
3atch 22J0853 - EPA 5035A							Soi	I				
Blank (22J0853-BLK1)			Prepared	l: 10/21/22 11	:03 Anal	yzed: 10/21/	/22 15:58					
,2-Dichloropropane	ND	8.33	16.7	ug/kg wet	50							
,3-Dichloropropane	ND	16.7	33.3	ug/kg wet	50							
2,2-Dichloropropane	ND	16.7	33.3	ug/kg wet	50							
,1-Dichloropropene	ND	16.7	33.3	ug/kg wet	50							
sis-1,3-Dichloropropene	ND	16.7	33.3	ug/kg wet	50							
rans-1,3-Dichloropropene	ND	16.7	33.3	ug/kg wet	50							
Ethylbenzene	ND	8.33	16.7	ug/kg wet	50							
Hexachlorobutadiene	ND	33.3	66.7	ug/kg wet	50							
2-Hexanone	ND	167	333	ug/kg wet	50							
sopropylbenzene	ND	16.7	33.3	ug/kg wet	50							
-Isopropyltoluene	ND	16.7	33.3	ug/kg wet								
Methylene chloride	ND	167	333	ug/kg wet	50							
-Methyl-2-pentanone (MiBK)	ND	167	333	ug/kg wet								
Methyl tert-butyl ether (MTBE)	ND	16.7	33.3	ug/kg wet	50							
Naphthalene	ND	33.3	66.7	ug/kg wet								
n-Propylbenzene	ND	8.33	16.7	ug/kg wet	50							
Styrene	ND	16.7	33.3	ug/kg wet	50							
,1,1,2-Tetrachloroethane	ND	8.33	16.7	ug/kg wet								
,1,2,2-Tetrachloroethane	ND	16.7	33.3	ug/kg wet								
Fetrachloroethene (PCE)	ND	8.33	16.7	ug/kg wet								
Toluene	ND	16.7	33.3	ug/kg wet								
,2,3-Trichlorobenzene	ND	83.3	167	ug/kg wet								
,2,4-Trichlorobenzene	ND	83.3	167	ug/kg wet								
,1,1-Trichloroethane	ND	8.33	16.7	ug/kg wet								
,1,2-Trichloroethane	ND	8.33	16.7	ug/kg wet								
Frichloroethene (TCE)	ND	8.33	16.7	ug/kg wet								
Frichlorofluoromethane	ND	66.7	66.7	ug/kg wet								
,2,3-Trichloropropane	ND	16.7	33.3	ug/kg wet								
,2,4-Trimethylbenzene	ND	16.7	33.3	ug/kg wet								
,3,5-Trimethylbenzene	ND	16.7	33.3	ug/kg wet								
/inyl chloride	ND	8.33	16.7	ug/kg wet								
1,p-Xylene	ND	16.7	33.3	ug/kg wet								
-Xylene	ND	8.33	16.7	ug/kg wet								
urr: 1,4-Difluorobenzene (Surr)	110		very: 103 %	Limits: 80-1			tion: 1x					

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6700 S.W. Sandburg Street Tigard, OR 97223 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 A2J0597 - 12 02 22 1255 **QUALITY CONTROL (QC) SAMPLE RESULTS** Volatile Organic Compounds by EPA 8260D Detection % REC RPD Reporting Spike Source Analyte Result Limit Units Dilution % REC RPD Limit Amount Result Limits Limit Notes Batch 22J0853 - EPA 5035A Soil Blank (22J0853-BLK1) Prepared: 10/21/22 11:03 Analyzed: 10/21/22 15:58 Surr: Toluene-d8 (Surr) Recovery: 101 % Limits: 80-120 % Dilution: 1x 4-Bromofluorobenzene (Surr) 102 % 79-120 % Prepared: 10/21/22 11:03 Analyzed: 10/21/22 15:02 LCS (22J0853-BS1) 5035A/8260D Acetone 1840 500 1000 ug/kg wet 50 2000 92 80-120% ---Acrylonitrile 947 50.0 100 50 1000 95 80-120% ug/kg wet ---------Benzene 951 5.00 10.0 ug/kg wet 50 1000 95 80-120% ---25.0 1000 Bromobenzene 958 12.5 50 96 80-120% ug/kg wet ---------Bromochloromethane 982 25.0 50.0 ug/kg wet 50 1000 98 80-120% ---------1050 25.0 50.0 1000 Bromodichloromethane ug/kg wet 50 ---105 80-120% ------Bromoform 1150 50.0 100 ug/kg wet 50 1000 115 80-120% Bromomethane 1180 500 500 ug/kg wet 50 1000 118 80-120% ---------2-Butanone (MEK) 1760 250 500 ug/kg wet 50 2000 88 80-120% --n-Butylbenzene 996 25.0 50.0 1000 100 80-120% ug/kg wet 50 ---------sec-Butylbenzene 990 25.050.0 ug/kg wet 50 1000 99 80-120% tert-Butylbenzene 945 25.0 50.0 50 1000 94 80-120% ug/kg wet ---------Carbon disulfide 980 250 500 ug/kg wet 50 1000 ---98 80-120% ------Carbon tetrachloride 1110 25.0 50.0 ug/kg wet 50 1000 111 80-120% ---------Chlorobenzene 946 12.5 25.0ug/kg wet 50 1000 95 80-120% Chloroethane 1040 250 500 50 1000 104 80-120% ug/kg wet ---------1000 80-120% Chloroform 990 25.050.0 ug/kg wet 50 99 ------Chloromethane 958 125 250 50 1000 96 80-120% ug/kg wet ---------2-Chlorotoluene 988 25.050.0 ug/kg wet 50 1000 ----99 80-120% ____ 4-Chlorotoluene 973 25.0 50.0 ug/kg wet 50 1000 97 80-120% ---------50.0 100 Dibromochloromethane 1080 ug/kg wet 50 1000 108 80-120% ---------1,2-Dibromo-3-chloropropane 930 125 250 ug/kg wet 50 1000 93 80-120% ---1,2-Dibromoethane (EDB) 969 25.0 1000 97 50.0 ug/kg wet 50 80-120% Dibromomethane 1040 25.0 50.0 ug/kg wet 50 1000 104 80-120% ---------1,2-Dichlorobenzene 957 12.5 25.0ug/kg wet 50 1000 ----96 80-120% ____ ---1,3-Dichlorobenzene 978 12.5 25.0 ug/kg wet 50 1000 98 80-120% ---------1,4-Dichlorobenzene 938 12.5 25.0 50 1000 94 80-120% ug/kg wet ------ICV-01 Dichlorodifluoromethane 982 50.0 100 ug/kg wet 50 1000 98 80-120% ---------1,1-Dichloroethane 1000 12.5 25.0 1000 100 80-120% ug/kg wet 50 ---------

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

Sevenson Environmental Services, Inc.

2749 Lockport Road Niagara Falls, NY 14305

Project: Gasco -- Filtercake Project Number: 111323 Project Manager: Chip Byrd

Report ID: A2J0597 - 12 02 22 1255

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 22J0853 - EPA 5035A							Soi	I						
LCS (22J0853-BS1)			Prepared	: 10/21/22 1	1:03 Anal	yzed: 10/21/	/22 15:02							
,2-Dichloroethane (EDC)	1000	12.5	25.0	ug/kg we	t 50	1000		100	80-120%					
1,1-Dichloroethene	994	12.5	25.0	ug/kg we		1000		99	80-120%					
cis-1,2-Dichloroethene	1010	12.5	25.0	ug/kg we	t 50	1000		101	80-120%					
rans-1,2-Dichloroethene	999	12.5	25.0	ug/kg we	t 50	1000		100	80-120%					
,2-Dichloropropane	1000	12.5	25.0	ug/kg we	t 50	1000		100	80-120%					
,3-Dichloropropane	969	25.0	50.0	ug/kg we		1000		97	80-120%					
2,2-Dichloropropane	1090	25.0	50.0	ug/kg we		1000		109	80-120%					
I,1-Dichloropropene	977	25.0	50.0	ug/kg we		1000		98	80-120%					
cis-1,3-Dichloropropene	994	25.0	50.0	ug/kg we	t 50	1000		99	80-120%					
rans-1,3-Dichloropropene	1010	25.0	50.0	ug/kg we		1000		101	80-120%					
Ethylbenzene	944	12.5	25.0	ug/kg we		1000		94	80-120%					
Iexachlorobutadiene	1020	50.0	100	ug/kg we		1000		102	80-120%					
2-Hexanone	1720	250	500	ug/kg we	t 50	2000		86	80-120%					
sopropylbenzene	968	25.0	50.0	ug/kg we	t 50	1000		97	80-120%					
4-Isopropyltoluene	975	25.0	50.0	ug/kg we	t 50	1000		98	80-120%					
Methylene chloride	990	250	500	ug/kg we	t 50	1000		99	80-120%					
4-Methyl-2-pentanone (MiBK)	1740	250	500	ug/kg we		2000		87	80-120%					
Methyl tert-butyl ether (MTBE)	944	25.0	50.0	ug/kg we		1000		94	80-120%					
Naphthalene	937	50.0	100	ug/kg we		1000		94	80-120%					
n-Propylbenzene	960	12.5	25.0	ug/kg we		1000		96	80-120%					
Styrene	961	25.0	50.0	ug/kg we		1000		96	80-120%					
1,1,2-Tetrachloroethane	1050	12.5	25.0	ug/kg we	t 50	1000		105	80-120%					
1,1,2,2-Tetrachloroethane	896	25.0	50.0	ug/kg we		1000		90	80-120%					
Fetrachloroethene (PCE)	988	12.5	25.0	ug/kg we		1000		99	80-120%					
Foluene	938	25.0	50.0	ug/kg we		1000		94	80-120%					
,2,3-Trichlorobenzene	998	125	250	ug/kg we		1000		100	80-120%					
,2,4-Trichlorobenzene	974	125	250	ug/kg we		1000		97	80-120%					
,1,1-Trichloroethane	1020	12.5	25.0	ug/kg we		1000		102	80-120%					
,1,2-Trichloroethane	948	12.5	25.0	ug/kg we		1000		95	80-120%					
Frichloroethene (TCE)	1050	12.5	25.0	ug/kg we		1000		105	80-120%					
Frichlorofluoromethane	790	100	100	ug/kg we		1000		79	80-120%			(
,2,3-Trichloropropane	970	25.0	50.0	ug/kg we		1000		97	80-120%					
,2,4-Trimethylbenzene	994	25.0	50.0	ug/kg we		1000		99	80-120%					
1,3,5-Trimethylbenzene	979	25.0	50.0	ug/kg we		1000		98	80-120%					

Apex Laboratories



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

Sevenson Environmental Services, Inc.

2749 Lockport Road Niagara Falls, NY 14305 Project:Gasco -- FiltercakeProject Number:111323

Project Manager: Chip Byrd

<u>Report ID:</u> A2J0597 - 12 02 22 1255

QUALITY CONTROL (QC) SAMPLE RESULTS

			Volatile Or	ganic Cor	npounds	by EPA 8	260D					
Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22J0853 - EPA 5035A							Soi	il				
LCS (22J0853-BS1)			Prepared	l: 10/21/22 1	1:03 Ana	lyzed: 10/21	/22 15:02					
Vinyl chloride	996	12.5	25.0	ug/kg we	t 50	1000		100	80-120%			
n,p-Xylene	1890	25.0	50.0	ug/kg we	t 50	2000		94	80-120%			
o-Xylene	921	12.5	25.0	ug/kg we	t 50	1000		92	80-120%			
Surr: 1,4-Difluorobenzene (Surr)		Recon	very: 103 %	Limits: 80-	120 %	Dilı	ution: 1x					
Toluene-d8 (Surr)			100 %	80-	120 %		"					
4-Bromofluorobenzene (Surr)			99 %	79-	120 %		"					
Duplicate (22J0853-DUP1)			Prepared	l: 10/20/22 1	8:09 Ana	lyzed: 10/21	/22 17:46					COMP, V-15
OC Source Sample: Non-SDG (A2	<u>J0657-09)</u>											
Acetone	ND	731	1460	ug/kg dr	y 50		ND				30%	
Acrylonitrile	ND	73.1	146	ug/kg dr	y 50		ND				30%	
Benzene	10.2	7.31	14.6	ug/kg dr	y 50		11.0			7	30%	
Bromobenzene	ND	18.3	36.6	ug/kg dr	y 50		ND				30%	
Bromochloromethane	ND	36.6	73.1	ug/kg dr	y 50		ND				30%	
Bromodichloromethane	ND	36.6	73.1	ug/kg dr	y 50		ND				30%	
Bromoform	ND	73.1	146	ug/kg dr			ND				30%	
Bromomethane	ND	731	731	ug/kg dr	y 50		ND				30%	
2-Butanone (MEK)	ND	366	731	ug/kg dr	y 50		ND				30%	
n-Butylbenzene	ND	36.6	73.1	ug/kg dr	y 50		ND				30%	
sec-Butylbenzene	ND	36.6	73.1	ug/kg dr			ND				30%	
ert-Butylbenzene	ND	36.6	73.1	ug/kg dr	y 50		ND				30%	
Carbon disulfide	ND	366	731	ug/kg dr	y 50		ND				30%	
Carbon tetrachloride	ND	36.6	73.1	ug/kg dr	y 50		ND				30%	
Chlorobenzene	ND	18.3	36.6	ug/kg dr	y 50		ND				30%	
Chloroethane	ND	366	731	ug/kg dr			ND				30%	
Chloroform	ND	36.6	73.1	ug/kg dr			ND				30%	
Chloromethane	ND	183	366	ug/kg dr			ND				30%	
2-Chlorotoluene	ND	36.6	73.1	ug/kg dr			ND				30%	
4-Chlorotoluene	ND	36.6	73.1	ug/kg dry			ND				30%	
Dibromochloromethane	ND	73.1	146	ug/kg dr			ND				30%	
1,2-Dibromo-3-chloropropane	ND	183	366	ug/kg dr			ND				30%	
1,2-Dibromoethane (EDB)	ND	36.6	73.1	ug/kg dr			ND				30%	
Dibromomethane	ND	36.6	73.1	ug/kg dr	, ,		ND				30%	
1,2-Dichlorobenzene	ND	18.3	36.6	ug/kg dr			ND				30%	

Apex Laboratories



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

Sevenson Environmental Services, Inc.

2749 Lockport Road Niagara Falls, NY 14305 Project: <u>Gasco -- Filtercake</u> Project Number: **111323** Project Manager: Chip Byrd

<u>Report ID:</u> A2J0597 - 12 02 22 1255

QUALITY CONTROL (QC) SAMPLE RESULTS

			Volatile Org	ganic Cor	npounds	by EPA 8	3260D					
Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22J0853 - EPA 5035A							Soi	I				
Duplicate (22J0853-DUP1)			Prepared	: 10/20/22 1	8:09 Ana	lyzed: 10/21	/22 17:46					COMP, V-15
QC Source Sample: Non-SDG (A2	<u> J0657-09)</u>											
1,3-Dichlorobenzene	ND	18.3	36.6	ug/kg dry	y 50		ND				30%	
1,4-Dichlorobenzene	ND	18.3	36.6	ug/kg dry	y 50		ND				30%	
Dichlorodifluoromethane	ND	73.1	146	ug/kg dry	y 50		ND				30%	
1,1-Dichloroethane	ND	18.3	36.6	ug/kg dry	y 50		ND				30%	
1,2-Dichloroethane (EDC)	ND	18.3	36.6	ug/kg dry	y 50		ND				30%	
1,1-Dichloroethene	ND	18.3	36.6	ug/kg dry	y 50		ND				30%	
cis-1,2-Dichloroethene	ND	18.3	36.6	ug/kg dry	y 50		ND				30%	
trans-1,2-Dichloroethene	ND	18.3	36.6	ug/kg dry	y 50		ND				30%	
1,2-Dichloropropane	ND	18.3	36.6	ug/kg dry	y 50		ND				30%	
1,3-Dichloropropane	ND	36.6	73.1	ug/kg dry	y 50		ND				30%	
2,2-Dichloropropane	ND	36.6	73.1	ug/kg dry	y 50		ND				30%	
1,1-Dichloropropene	ND	36.6	73.1	ug/kg dry	y 50		ND				30%	
cis-1,3-Dichloropropene	ND	36.6	73.1	ug/kg dry	y 50		ND				30%	
trans-1,3-Dichloropropene	ND	36.6	73.1	ug/kg dry	y 50		ND				30%	
Ethylbenzene	24.1	18.3	36.6	ug/kg dry	y 50		24.9			3	30%	
Hexachlorobutadiene	ND	73.1	146	ug/kg dry	y 50		ND				30%	
2-Hexanone	ND	366	731	ug/kg dry	y 50		ND				30%	
Isopropylbenzene	ND	36.6	73.1	ug/kg dry	y 50		ND				30%	
4-Isopropyltoluene	ND	36.6	73.1	ug/kg dry	y 50		ND				30%	
Methylene chloride	ND	366	731	ug/kg dry			ND				30%	
4-Methyl-2-pentanone (MiBK)	ND	366	731	ug/kg dry	y 50		ND				30%	
Methyl tert-butyl ether (MTBE)	ND	36.6	73.1	ug/kg dry	y 50		ND				30%	
Naphthalene	2040	73.1	146	ug/kg dry	y 50		2040			0.3	30%	
n-Propylbenzene	ND	18.3	36.6	ug/kg dry	y 50		ND				30%	
Styrene	ND	36.6	73.1	ug/kg dry	y 50		ND				30%	
1,1,1,2-Tetrachloroethane	ND	18.3	36.6	ug/kg dry			ND				30%	
1,1,2,2-Tetrachloroethane	ND	36.6	73.1	ug/kg dry			ND				30%	
Tetrachloroethene (PCE)	ND	18.3	36.6	ug/kg dry			ND				30%	
Toluene	ND	36.6	73.1	ug/kg dry			ND				30%	
1,2,3-Trichlorobenzene	ND	183	366	ug/kg dry			ND				30%	
1,2,4-Trichlorobenzene	ND	183	366	ug/kg dry			ND				30%	
1,1,1-Trichloroethane	ND	18.3	36.6	ug/kg dry			ND				30%	
1,1,2-Trichloroethane	ND	18.3	36.6	ug/kg dry			ND				30%	

Apex Laboratories



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

Sevenson Environmental Services, Inc.

2749 Lockport Road Niagara Falls, NY 14305 Project: <u>Gasco -- Filtercake</u> Project Number: **111323** Project Manager: Chip Byrd

<u>Report ID:</u> A2J0597 - 12 02 22 1255

QUALITY CONTROL (QC) SAMPLE RESULTS

			Volatile Or	ganic Cor	npounds	by EPA 8	260D					
Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22J0853 - EPA 5035A							Soi	I				
Duplicate (22J0853-DUP1)			Preparec	d: 10/20/22 1	8:09 Ana	lyzed: 10/21	/22 17:46					COMP, V-15
QC Source Sample: Non-SDG (A2	J0657-09)											
Trichloroethene (TCE)	ND	18.3	36.6	ug/kg dr	y 50		ND				30%	
Trichlorofluoromethane	ND	146	146	ug/kg dr	y 50		ND				30%	
1,2,3-Trichloropropane	ND	36.6	73.1	ug/kg dr	y 50		ND				30%	
1,2,4-Trimethylbenzene	106	36.6	73.1	ug/kg dr	y 50		108			2	30%	
1,3,5-Trimethylbenzene	44.6	36.6	73.1	ug/kg dr	y 50		44.6			0	30%	
Vinyl chloride	ND	18.3	36.6	ug/kg dr	y 50		ND				30%	
m,p-Xylene	135	36.6	73.1	ug/kg dr			143			6	30%	
o-Xylene	51.9	18.3	36.6	ug/kg dr	y 50		56.3			8	30%	
Surr: 1,4-Difluorobenzene (Surr)		Reco	very: 102 %	Limits: 80-	-120 %	Dilı	ution: 1x					
Toluene-d8 (Surr)			100 %	80-	120 %		"					
4-Bromofluorobenzene (Surr)			99 %	79-	120 %		"					
Duplicate (22J0853-DUP2) QC Source Sample: Non-SDG (A2)						lyzed: 10/21/						
Acetone	ND	1530	3070	ug/kg dr			ND				30%	
Acrylonitrile	ND	153	307	ug/kg dr			ND				30%	
Benzene	ND	15.3	30.7	ug/kg dr			ND				30%	
Bromobenzene	ND	38.4	76.7	ug/kg dr	•		ND				30%	
Bromochloromethane	ND	76.7	153	ug/kg dr			ND				30%	
Bromodichloromethane	ND	76.7	153	ug/kg dr			ND				30%	
Bromoform	ND	153	307	ug/kg dr			ND				30%	
Bromomethane	ND	1530	1530	ug/kg dr			ND				30%	
2-Butanone (MEK)	ND	767	1530	ug/kg dr			ND				30%	
n-Butylbenzene	ND	76.7	153	ug/kg dr			ND				30%	
sec-Butylbenzene	ND	76.7	153	ug/kg dr			ND				30%	
tert-Butylbenzene	ND	76.7	153	ug/kg dr	•		ND				30%	
Carbon disulfide	ND	767	1530	ug/kg dr			ND				30%	
Carbon tetrachloride	ND	76.7	153	ug/kg dr			ND				30%	
Chlorobenzene	ND	38.4	76.7	ug/kg dr			ND				30%	
Chloroethane	ND	767	1530	ug/kg dr			ND				30%	
Chloroform	ND	76.7	153	ug/kg dr			ND				30%	
Chloromethane	ND	384	767	ug/kg dr			ND				30%	
2-Chlorotoluene	ND	76.7	153	ug/kg dr	y 50		ND				30%	

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

Sevenson Environmental Services, Inc.

2749 Lockport Road Niagara Falls, NY 14305 Project: <u>Gasco -- Filtercake</u> Project Number: **111323** Project Manager: Chip Byrd

<u>Report ID:</u> A2J0597 - 12 02 22 1255

QUALITY CONTROL (QC) SAMPLE RESULTS

			Volatile Org	ganic Con	npounds	by EPA 8	260D					
Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
3atch 22J0853 - EPA 5035A							Soi	1				
Duplicate (22J0853-DUP2)			Prepared	: 10/18/22 1	1:45 Anal	yzed: 10/21	/22 20:28					
QC Source Sample: Non-SDG (A2	<u> J0622-04)</u>											
-Chlorotoluene	ND	76.7	153	ug/kg dry	y 50		ND				30%	
Dibromochloromethane	ND	153	307	ug/kg dry	y 50		ND				30%	
,2-Dibromo-3-chloropropane	ND	384	767	ug/kg dry	y 50		ND				30%	
,2-Dibromoethane (EDB)	ND	76.7	153	ug/kg dry	y 50		ND				30%	
Dibromomethane	ND	76.7	153	ug/kg dry	y 50		ND				30%	
,2-Dichlorobenzene	ND	38.4	76.7	ug/kg dry	y 50		ND				30%	
,3-Dichlorobenzene	ND	38.4	76.7	ug/kg dry	y 50		ND				30%	
,4-Dichlorobenzene	ND	38.4	76.7	ug/kg dry	y 50		ND				30%	
Dichlorodifluoromethane	ND	153	307	ug/kg dry	y 50		ND				30%	
,1-Dichloroethane	ND	38.4	76.7	ug/kg dry	y 50		ND				30%	
,2-Dichloroethane (EDC)	ND	38.4	76.7	ug/kg dry	y 50		ND				30%	
,1-Dichloroethene	ND	38.4	76.7	ug/kg dry	y 50		ND				30%	
is-1,2-Dichloroethene	ND	38.4	76.7	ug/kg dry	y 50		ND				30%	
rans-1,2-Dichloroethene	ND	38.4	76.7	ug/kg dry	y 50		ND				30%	
,2-Dichloropropane	ND	38.4	76.7	ug/kg dry	y 50		ND				30%	
,3-Dichloropropane	ND	76.7	153	ug/kg dry	y 50		ND				30%	
2,2-Dichloropropane	ND	76.7	153	ug/kg dry			ND				30%	
,1-Dichloropropene	ND	76.7	153	ug/kg dry	y 50		ND				30%	
is-1,3-Dichloropropene	ND	76.7	153	ug/kg dry	y 50		ND				30%	
rans-1,3-Dichloropropene	ND	76.7	153	ug/kg dry	y 50		ND				30%	
Ethylbenzene	ND	38.4	76.7	ug/kg dry	y 50		ND				30%	
Iexachlorobutadiene	ND	153	307	ug/kg dry	y 50		ND				30%	
-Hexanone	ND	767	1530	ug/kg dry	y 50		ND				30%	
sopropylbenzene	ND	76.7	153	ug/kg dry	y 50		ND				30%	
-Isopropyltoluene	232	76.7	153	ug/kg dry			230			0.7	30%	
Aethylene chloride	ND	767	1530	ug/kg dry			ND				30%	
-Methyl-2-pentanone (MiBK)	ND	767	1530	ug/kg dry			ND				30%	
Aethyl tert-butyl ether (MTBE)	ND	76.7	153	ug/kg dry			ND				30%	
Vaphthalene	ND	153	307	ug/kg dry			ND				30%	
-Propylbenzene	ND	38.4	76.7	ug/kg dry			ND				30%	
Styrene	ND	76.7	153	ug/kg dry			ND				30%	
,1,1,2-Tetrachloroethane	ND	38.4	76.7	ug/kg dry			ND				30%	
,1,2,2-Tetrachloroethane	ND	76.7	153	ug/kg dry			ND				30%	

Apex Laboratories



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

Sevenson Environmental Services, Inc.

2749 Lockport Road Niagara Falls, NY 14305 Project:Gasco -- FiltercakeProject Number:111323Project Manager:Chip Byrd

<u>Report ID:</u> A2J0597 - 12 02 22 1255

QUALITY CONTROL (QC) SAMPLE RESULTS

			Volatile Or	ganic Cor	npounds	by EPA 8	3260D					
Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22J0853 - EPA 5035A							Soi	il				
Duplicate (22J0853-DUP2)			Preparec	1: 10/18/22 1	1:45 Ana	yzed: 10/21	/22 20:28					
QC Source Sample: Non-SDG (A2	<u>J0622-04)</u>											
Tetrachloroethene (PCE)	ND	38.4	76.7	ug/kg dry	50		ND				30%	
Toluene	118	76.7	153	ug/kg dry	50		120			1	30%	
1,2,3-Trichlorobenzene	ND	384	767	ug/kg dry	50		ND				30%	
1,2,4-Trichlorobenzene	ND	384	767	ug/kg dry	50		ND				30%	
1,1,1-Trichloroethane	ND	38.4	76.7	ug/kg dry	50		ND				30%	
1,1,2-Trichloroethane	ND	38.4	76.7	ug/kg dry			ND				30%	
Trichloroethene (TCE)	ND	38.4	76.7	ug/kg dry	50		ND				30%	
Trichlorofluoromethane	ND	307	307	ug/kg dry			ND				30%	
1,2,3-Trichloropropane	ND	76.7	153	ug/kg dry	50		ND				30%	
1,2,4-Trimethylbenzene	ND	76.7	153	ug/kg dry	50		ND				30%	
1,3,5-Trimethylbenzene	ND	76.7	153	ug/kg dry	50		ND				30%	
Vinyl chloride	ND	38.4	76.7	ug/kg dry	50		ND				30%	
m,p-Xylene	ND	76.7	153	ug/kg dry			ND				30%	
o-Xylene	ND	38.4	76.7	ug/kg dry	50		ND				30%	
Surr: 1,4-Difluorobenzene (Surr)		Reco	very: 103 %	Limits: 80-		Dilı	ution: 1x					
Toluene-d8 (Surr)			102 %		120 %		"					
4-Bromofluorobenzene (Surr)			99 %	79-	120 %		"					
Matrix Spike (22J0853-MS1)			Prepared	l: 10/19/22 0	7:55 Ana	yzed: 10/22	/22 00:59					
QC Source Sample: Non-SDG (A2	J0616-02)					-						
5035A/8260D												
Acetone	12900	3590	7170	ug/kg dry	200	14300	ND	90	36-164%			
Acrylonitrile	6510	359	717	ug/kg dry		7170	ND	91	65-134%			
Benzene	6740	35.9	71.7	ug/kg dry		7170	ND	94	77-121%			
Bromobenzene	7070	89.6	179	ug/kg dry		7170	ND	99	78-121%			
Bromochloromethane	6510	179	359	ug/kg dry		7170	ND	91	78-125%			
Bromodichloromethane	7230	179	359	ug/kg dry		7170	ND	101	75-127%			
Bromoform	8160	359	717	ug/kg dry		7170	ND	114	67-132%			
Bromomethane	9230	3590	3590	ug/kg dry		7170	ND	129	53-143%			
2-Butanone (MEK)	12000	1790	3590	ug/kg dry		14300	ND	84	51-148%			
n-Butylbenzene	13500	179	359	ug/kg dry		7170	6760	95	70-128%			
			359	ug/kg dry		7170	3910	96	73-126%			
sec-Butylbenzene	10800	179	119	$\Pi \sigma / \kappa \sigma \sigma r$	/ ////	/ /0	3910	90				

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

Sevenson Environmental Services, Inc.

2749 Lockport Road Niagara Falls, NY 14305 Project: <u>Gasco -- Filtercake</u> Project Number: **111323** Project Manager: Chip Byrd

<u>Report ID:</u> A2J0597 - 12 02 22 1255

QUALITY CONTROL (QC) SAMPLE RESULTS

			Volatile Org	ganic Con	npounds	by EPA 8	3260D					
Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22J0853 - EPA 5035A							Soi	il				
Matrix Spike (22J0853-MS1)			Prepared	l: 10/19/22 0	7:55 Ana	lyzed: 10/22	/22 00:59					
QC Source Sample: Non-SDG (A2	2 <u>J0616-02)</u>											
Carbon disulfide	7780	1790	3590	ug/kg dry	200	7170	ND	109	63-132%			
Carbon tetrachloride	8510	179	359	ug/kg dry	200	7170	ND	119	70-135%			
Chlorobenzene	6950	89.6	179	ug/kg dry	200	7170	ND	97	79-120%			
Chloroethane	10100	1790	3590	ug/kg dry	200	7170	ND	141	59-139%			Q-0
Chloroform	7140	179	359	ug/kg dry	200	7170	ND	100	78-123%			
Chloromethane	6510	896	1790	ug/kg dry	200	7170	ND	91	50-136%			
2-Chlorotoluene	7220	179	359	ug/kg dry	200	7170	ND	101	75-122%			
4-Chlorotoluene	6820	179	359	ug/kg dry	200	7170	ND	95	72-124%			
Dibromochloromethane	7690	359	717	ug/kg dry	200	7170	ND	107	74-126%			
1,2-Dibromo-3-chloropropane	7620	896	1790	ug/kg dry	200	7170	ND	106	61-132%			
1,2-Dibromoethane (EDB)	6970	179	359	ug/kg dry	200	7170	ND	97	78-122%			
Dibromomethane	7270	179	359	ug/kg dry	200	7170	ND	101	78-125%			
1,2-Dichlorobenzene	6710	89.6	179	ug/kg dry	200	7170	ND	94	78-121%			
1,3-Dichlorobenzene	6870	89.6	179	ug/kg dry	200	7170	ND	96	77-121%			
1,4-Dichlorobenzene	6660	89.6	179	ug/kg dry	200	7170	ND	93	75-120%			
Dichlorodifluoromethane	8120	359	717	ug/kg dry	200	7170	ND	113	29-149%			ICV-0
1,1-Dichloroethane	6940	89.6	179	ug/kg dry	200	7170	ND	97	76-125%			
1,2-Dichloroethane (EDC)	7270	89.6	179	ug/kg dry	200	7170	ND	101	73-128%			
1,1-Dichloroethene	8220	89.6	179	ug/kg dry	200	7170	ND	115	70-131%			
cis-1,2-Dichloroethene	7200	89.6	179	ug/kg dry	200	7170	ND	100	77-123%			
trans-1,2-Dichloroethene	7220	89.6	179	ug/kg dry	200	7170	ND	101	74-125%			
1,2-Dichloropropane	6810	89.6	179	ug/kg dry	200	7170	ND	95	76-123%			
1,3-Dichloropropane	6820	179	359	ug/kg dry	200	7170	ND	95	77-121%			
2,2-Dichloropropane	6770	179	359	ug/kg dry	200	7170	ND	94	67-133%			
1,1-Dichloropropene	7280	179	359	ug/kg dry	200	7170	ND	102	76-125%			
cis-1,3-Dichloropropene	6720	179	359	ug/kg dry		7170	ND	94	74-126%			
trans-1,3-Dichloropropene	6820	179	359	ug/kg dry		7170	ND	95	71-130%			
Ethylbenzene	7780	89.6	179	ug/kg dry		7170	835	97	76-122%			
Hexachlorobutadiene	7920	359	717	ug/kg dry		7170	ND	110	61-135%			
2-Hexanone	12300	1790	3590	ug/kg dry		14300	ND	86	53-145%			
Isopropylbenzene	8440	179	359	ug/kg dry		7170	1290	100	68-134%			
4-Isopropyltoluene	10400	179	359	ug/kg dry		7170	3860	92	73-127%			
Methylene chloride	6730	1790	3590	ug/kg dry		7170	ND	94	70-128%			

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

Sevenson Environmental Services, Inc.

2749 Lockport Road

Niagara Falls, NY 14305

Project: Gasco -- Filtercake
Project Number: 111323
Project Manager: Chip Byrd

<u>Report ID:</u> A2J0597 - 12 02 22 1255

QUALITY CONTROL (QC) SAMPLE RESULTS

			Volatile Or	ganic Con	npounds	by EPA 8	3260D					
Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22J0853 - EPA 5035A							Soi	il				
Matrix Spike (22J0853-MS1)			Prepared	l: 10/19/22 0	7:55 Ana	lyzed: 10/22	/22 00:59					
QC Source Sample: Non-SDG (A2	<u>J0616-02)</u>											
4-Methyl-2-pentanone (MiBK)	12600	1790	3590	ug/kg dry	200	14300	ND	88	65-135%			
Methyl tert-butyl ether (MTBE)	6700	179	359	ug/kg dry	200	7170	ND	93	73-125%			
Naphthalene	28500	359	717	ug/kg dry	200	7170	21700	94	62-129%			
n-Propylbenzene	9930	89.6	179	ug/kg dry	200	7170	3100	95	73-125%			
Styrene	7050	179	359	ug/kg dry	200	7170	ND	98	76-124%			
1,1,1,2-Tetrachloroethane	7630	89.6	179	ug/kg dry	200	7170	ND	106	78-125%			
1,1,2,2-Tetrachloroethane	6610	179	359	ug/kg dry	200	7170	ND	92	70-124%			
Tetrachloroethene (PCE)	7580	89.6	179	ug/kg dry	200	7170	ND	106	73-128%			
Toluene	6870	179	359	ug/kg dry	200	7170	ND	96	77-121%			
1,2,3-Trichlorobenzene	7500	896	1790	ug/kg dry	200	7170	ND	105	66-130%			
1,2,4-Trichlorobenzene	7190	896	1790	ug/kg dry	200	7170	ND	100	67-129%			
1,1,1-Trichloroethane	7750	89.6	179	ug/kg dry	200	7170	ND	108	73-130%			
1,1,2-Trichloroethane	7360	89.6	179	ug/kg dry	200	7170	ND	95	78-121%			
Trichloroethene (TCE)	7950	89.6	179	ug/kg dry	200	7170	ND	111	77-123%			
Trichlorofluoromethane	7670	717	717	ug/kg dry	200	7170	ND	107	62-140%			Q-5
1,2,3-Trichloropropane	7320	179	359	ug/kg dry	200	7170	ND	99	73-125%			
1,2,4-Trimethylbenzene	9290	179	359	ug/kg dry	200	7170	2320	97	75-123%			
1,3,5-Trimethylbenzene	13200	179	359	ug/kg dry	200	7170	6310	97	73-124%			
Vinyl chloride	8110	89.6	179	ug/kg dry	200	7170	ND	113	56-135%			
m,p-Xylene	16100	179	359	ug/kg dry	200	14300	2140	97	77-124%			
o-Xylene	6920	89.6	179	ug/kg dry	200	7170	ND	97	77-123%			
Surr: 1,4-Difluorobenzene (Surr)		Recov	very: 101 %	Limits: 80-	120 %	Dilı	ution: 1x					
Toluene-d8 (Surr)			98 %	80-	120 %		"					
4-Bromofluorobenzene (Surr)			101 %	79-	120 %		"					

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

Sevenson Environmental Services, Inc.

2749 Lockport Road Niagara Falls, NY 14305 Project: <u>Gasco -- Filtercake</u> Project Number: **111323** Project Manager: Chip Byrd

<u>Report ID:</u> A2J0597 - 12 02 22 1255

QUALITY CONTROL (QC) SAMPLE RESULTS Regulated TCLP Volatile Organic Compounds by EPA 1311/8260D Detection % REC RPD Reporting Spike Source Result Limit Units Dilution % REC RPD Analyte Limit Amount Result Limits Limit Notes Batch 22J1147 - EPA 1311/5030B TCLP Volatiles Water Blank (22J1147-BLK1) Prepared: 10/28/22 09:59 Analyzed: 10/28/22 21:37 TCLPa 1311/8260D ND 6.25 12.5 50 Benzene ug/L ND 250 500 50 2-Butanone (MEK) ug/L ---------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 50 ug/L ---1.4-Dichlorobenzene ND 12.5 25.050 ug/L ---------------____ 1,1-Dichloroethene ND 12.5 25.0 50 ug/L ---ND 12.5 25.0 1,2-Dichloroethane (EDC) ug/L 50 ---------------Tetrachloroethene (PCE) ND 12.5 25.0 ug/L 50 Trichloroethene (TCE) ND 12.5 25.0 50 ug/L ___ -------------_ _ _ Vinyl chloride ND 12.5 25.0 50 ug/L --------------------Surr: 1,4-Difluorobenzene (Surr) Recovery: 111 % Limits: 80-120 % Dilution: 1x Toluene-d8 (Surr) 101 % 80-120 % " 4-Bromofluorobenzene (Surr) 100 % 80-120 % LCS (22J1147-BS1) Prepared: 10/28/22 09:59 Analyzed: 10/28/22 20:54 TCLPa 1311/8260D Benzene 1260 6.25 12.5 ug/L 50 1000 126 80-120% 2430 250 500 50 2000 122 80-120% 2-Butanone (MEK) ug/L ---------

Carbon tetrachloride 1220 25.0 50.0 ug/L 50 1000 ---122 80-120% ------Chlorobenzene 1050 12.5 25.0 ug/L 50 1000 ----105 80-120% ------Chloroform 1140 25.050.0 ug/L 50 1000 114 80-120% 1,4-Dichlorobenzene 1040 12.5 25.0 ug/L 50 1000 104 80-120% ---------1,1-Dichloroethene 1310 12.5 25.0 ug/L 50 1000 131 80-120% ---------1,2-Dichloroethane (EDC) 1030 12.5 25.0 ug/L 50 1000 103 80-120% ------1040 1000 Tetrachloroethene (PCE) 12.5 25.0 ug/L 50 ---104 80-120% ---Trichloroethene (TCE) 1160 12.5 25.0 ug/L 50 1000 ---116 80-120% ------Vinyl chloride 1250 12.5 25.0ug/L 50 1000 ----125 80-120% ----____ 107 % Surr: 1,4-Difluorobenzene (Surr) Recovery: Limits: 80-120 % Dilution: 1x Toluene-d8 (Surr) 100 % 80-120 % 4-Bromofluorobenzene (Surr) 98 % 80-120 %

Duplicate (22J1147-DUP1)

Prepared: 10/28/22 09:59 Analyzed: 10/28/22 22:19

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

Q-56

Q-56

Q-56

O-56

Q-56



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

Sevenson Environmental Services, Inc.

2749 Lockport Road Niagara Falls, NY 14305

Project: Gasco -- Filtercake Project Number: 111323 Project Manager: Chip Byrd

Report ID: A2J0597 - 12 02 22 1255

QUALITY CONTROL (QC) SAMPLE RESULTS

	I	Regulated 1	CLP Vola	tile Orgar	nic Comp	ounds by	EPA 131	1/8260D				
Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22J1147 - EPA 1311/503	0B TCLP	Volatiles					Wa	ter				
Duplicate (22J1147-DUP1)			Preparec	1: 10/28/22	09:59 Ana	yzed: 10/28/	/22 22:19					
QC Source Sample: FC-101722-20	00 (A2J059	<u> 7-01)</u>										
<u>1311/8260D</u>												
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)		Recov	ery: 112 %	Limits: 80	0-120 %	Dilı	ution: 1x					
Toluene-d8 (Surr)			102 %	80)-120 %		"					
4-Bromofluorobenzene (Surr)			100 %	80)-120 %		"					
Matrix Spike (22J1147-MS1)			Preparec	1: 10/28/22	09:59 Ana	yzed: 10/28	/22 23:02					
QC Source Sample: Non-SDG (A2	<u>J0599-01)</u>											
<u>1311/8260D</u>				_								
Benzene	1190	6.25	12.5	ug/L	50	1000	ND	119	79-120%			Q-54
2-Butanone (MEK)	2290	250	500	ug/L	50	2000	ND	114	56-143%			Q-54
Carbon tetrachloride	1180	25.0	50.0	ug/L	50	1000	ND	118	72-136%			Q-54
Chlorobenzene	1020	12.5	25.0	ug/L	50	1000	ND	102	80-120%			
Chloroform	1180	25.0	50.0	ug/L	50	1000	92.0	109	79-124%			
1,4-Dichlorobenzene	1020	12.5	25.0	ug/L	50	1000	ND	102	79-120%			
1,1-Dichloroethene	1230	12.5	25.0	ug/L	50	1000	ND	123	71-131%			Q-5
1,2-Dichloroethane (EDC)	999	12.5	25.0	ug/L	50	1000	ND	100	73-128%			
Tetrachloroethene (PCE)	1040	12.5	25.0	ug/L	50	1000	ND	104	74-129%			
Trichloroethene (TCE)	1090	12.5	25.0	ug/L	50	1000	ND	109	79-123%			
Vinyl chloride	1210	12.5	25.0	ug/L	50	1000	ND	121	58-137%			Q-54
Surr: 1,4-Difluorobenzene (Surr)		Recov	ery: 105 %	Limits: 80	0-120 %	Dilı	ution: 1x					
Toluene-d8 (Surr)			101 %	80)-120 %		"					

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

Sevenson Environmental Services, Inc.

2749 Lockport Road Niagara Falls, NY 14305 Project:Gasco -- FiltercakeProject Number:111323Project Manager:Chip Byrd

<u>Report ID:</u> A2J0597 - 12 02 22 1255

QUALITY CONTROL (QC) SAMPLE RESULTS

	F	Regulated	TCLP Volat	ile Orga	nic Comp	ounds by	EPA 1311	/8260D			
Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD Limit	Notes
Batch 22J1147 - EPA 1311/5030	OB TCLP	Volatiles					Wate	er			
Matrix Spike (22J1147-MS1)			Prepared	: 10/28/22	09:59 Anal	yzed: 10/28/	/22 23:02				
QC Source Sample: Non-SDG (A2	<u>J0599-01)</u>										
Surr: 4-Bromofluorobenzene (Surr)		Reco	overy: 97%	Limits: 8	0-120 %	Dilı	ution: 1x				

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

Sevenson Environmental Services, Inc.

2749 Lockport Road

Niagara Falls, NY 14305

Project: Gasco -- Filtercake
Project Number: 111323
Project Manager: Chip Byrd

<u>Report ID:</u> A2J0597 - 12 02 22 1255

QUALITY CONTROL (QC) SAMPLE RESULTS

L		38	emivolatile (-iyanit (Surboau	as by EP	~ 021VE					
Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Note
Batch 22J1188 - EPA 3546							Sol	id				
Blank (22J1188-BLK1)			Prepared	: 10/31/22 ()5:43 Anal	yzed: 10/31/	/22 15:55					
<u>EPA 8270E</u>												
Acenaphthene	ND	1.25	2.50	ug/kg we	et 1							
Acenaphthylene	ND	1.25	2.50	ug/kg we	et 1							
Anthracene	ND	1.25	2.50	ug/kg we	et 1							
Benz(a)anthracene	ND	1.25	2.50	ug/kg we	et 1							
Benzo(a)pyrene	ND	1.87	3.75	ug/kg we	et 1							
Benzo(b)fluoranthene	ND	1.87	3.75	ug/kg we								
Benzo(k)fluoranthene	ND	1.87	3.75	ug/kg we								
Benzo(g,h,i)perylene	ND	1.25	2.50	ug/kg we	et 1							
Chrysene	ND	1.25	2.50	ug/kg we	et 1							
Dibenz(a,h)anthracene	ND	1.25	2.50	ug/kg we								
Fluoranthene	ND	1.25	2.50	ug/kg we								
Fluorene	ND	1.25	2.50	ug/kg we								
Indeno(1,2,3-cd)pyrene	ND	1.25	2.50	ug/kg we								
l-Methylnaphthalene	ND	2.50	5.00	ug/kg we								
2-Methylnaphthalene	ND	2.50	5.00	ug/kg we	et 1							
Naphthalene	ND	2.50	5.00	ug/kg we								
Phenanthrene	ND	1.25	2.50	ug/kg we								
Pyrene	ND	1.25	2.50	ug/kg we								
Carbazole	ND	1.87	3.75	ug/kg we								
Dibenzofuran	ND	1.25	2.50	ug/kg we								
2-Chlorophenol	ND	6.25	12.5	ug/kg we								
4-Chloro-3-methylphenol	ND	12.5	25.0	ug/kg we								
2,4-Dichlorophenol	ND	6.25	12.5	ug/kg we								
2,4-Dimethylphenol	ND	6.25	12.5	ug/kg we								
2,4-Dinitrophenol	ND	31.2	62.5	ug/kg we								
4,6-Dinitro-2-methylphenol	ND	31.2	62.5	ug/kg we								
2-Methylphenol	ND	3.12	6.25	ug/kg we								
8+4-Methylphenol(s)	ND	3.12	6.25	ug/kg we								
-Nitrophenol	ND	12.5	25.0	ug/kg we								
-Nitrophenol	ND	12.5	25.0	ug/kg we								
Pentachlorophenol (PCP)	ND	12.5	25.0	ug/kg we								
Phenol	ND	2.50	5.00	ug/kg we								
,3,4,6-Tetrachlorophenol	ND	6.25	12.5	ug/kg we								

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Sevenson Environmental Services, Inc.

2749 Lockport Road

Niagara Falls, NY 14305

Project: Gasco -- Filtercake
Project Number: 111323
Project Manager: Chip Byrd

<u>Report ID:</u> A2J0597 - 12 02 22 1255

QUALITY CONTROL (QC) SAMPLE RESULTS

		Se	mivolatile	Organic (Compour	ds by EP	A 8270E					
Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22J1188 - EPA 3546							Sol	id				
Blank (22J1188-BLK1)			Prepared	l: 10/31/22 ()5:43 Ana	lyzed: 10/31	/22 15:55					
2,3,5,6-Tetrachlorophenol	ND	6.25	12.5	ug/kg we	et 1							
2,4,5-Trichlorophenol	ND	6.25	12.5	ug/kg we	et 1							
Nitrobenzene	ND	12.5	25.0	ug/kg we	et 1							
2,4,6-Trichlorophenol	ND	6.25	12.5	ug/kg we	et 1							
Bis(2-ethylhexyl)phthalate	ND	18.7	37.5	ug/kg we	et 1							
Butyl benzyl phthalate	ND	12.5	25.0	ug/kg we	et 1							
Diethylphthalate	ND	12.5	25.0	ug/kg we	et 1							
Dimethylphthalate	ND	12.5	25.0	ug/kg we								
Di-n-butylphthalate	266	12.5	25.0	ug/kg we	et 1							
Di-n-octyl phthalate	ND	12.5	25.0	ug/kg we	et 1							
N-Nitrosodimethylamine	ND	3.12	6.25	ug/kg we	et 1							
N-Nitroso-di-n-propylamine	ND	3.12	6.25	ug/kg we	et 1							
N-Nitrosodiphenylamine	ND	3.12	6.25	ug/kg we	et 1							
Bis(2-Chloroethoxy) methane	ND	3.12	6.25	ug/kg we								
Bis(2-Chloroethyl) ether	ND	3.12	6.25	ug/kg we	et 1							
2,2'-Oxybis(1-Chloropropane)	ND	3.12	6.25	ug/kg we	et 1							
Hexachlorobenzene	ND	1.25	2.50	ug/kg we								
Hexachlorobutadiene	ND	3.12	6.25	ug/kg we								
Hexachlorocyclopentadiene	ND	6.25	12.5	ug/kg we								
Hexachloroethane	ND	3.12	6.25	ug/kg we								
2-Chloronaphthalene	ND	1.25	2.50	ug/kg we	et 1							
1,2,4-Trichlorobenzene	ND	3.12	6.25	ug/kg we								
4-Bromophenyl phenyl ether	ND	3.12	6.25	ug/kg we								
4-Chlorophenyl phenyl ether	ND	3.12	6.25	ug/kg we								
Aniline	ND	6.25	12.5	ug/kg we								
4-Chloroaniline	ND	3.12	6.25	ug/kg we								
2-Nitroaniline	ND	25.0	50.0	ug/kg we								
3-Nitroaniline	ND	25.0	50.0	ug/kg we								
4-Nitroaniline	ND	25.0	50.0	ug/kg we								
2,4-Dinitrotoluene	ND	12.5	25.0	ug/kg we								
2,6-Dinitrotoluene	ND	12.5	25.0	ug/kg we								
Benzoic acid	ND	12.9	312	ug/kg we								
Benzyl alcohol	ND	6.25	12.5	ug/kg we								
Isophorone	ND	3.12	6.25	ug/kg we								

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

Sevenson Environmental Services, Inc.

2749 Lockport Road Niagara Falls, NY 14305 Project: Gasco -- Filtercake
Project Number: 111323
Project Manager: Chip Byrd

<u>Report ID:</u> A2J0597 - 12 02 22 1255

QUALITY CONTROL (QC) SAMPLE RESULTS

		Se	mivolatile	Organic C	ompoun	ds by EP	A 8270E					
Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22J1188 - EPA 3546							So	lid				
Blank (22J1188-BLK1)			Prepared	l: 10/31/22 0	5:43 Anal	yzed: 10/31	/22 15:55					
Azobenzene (1,2-DPH)	ND	3.12	6.25	ug/kg we	t 1							
Bis(2-Ethylhexyl) adipate	ND	31.2	62.5	ug/kg we	t 1							
3,3'-Dichlorobenzidine	ND	25.0	50.0	ug/kg we	t 1							Q-5
1,2-Dinitrobenzene	ND	31.2	62.5	ug/kg we	t 1							
1,3-Dinitrobenzene	ND	31.2	62.5	ug/kg we	t 1							
1,4-Dinitrobenzene	ND	31.2	62.5	ug/kg we	t 1							
Pyridine	ND	6.25	12.5	ug/kg we	t 1							
1,2-Dichlorobenzene	ND	3.12	6.25	ug/kg we	t 1							
1,3-Dichlorobenzene	ND	3.12	6.25	ug/kg we	t 1							
1,4-Dichlorobenzene	ND	3.12	6.25	ug/kg we	t 1							
Surr: Nitrobenzene-d5 (Surr)		Reco	overy: 91%	Limits: 37-	122 %	Dilı	ution: 1x					Q-41
2-Fluorobiphenyl (Surr)			84 %	44-	120 %		"					X ···
Phenol-d6 (Surr)			91 %	33-	122 %		"					
p-Terphenyl-d14 (Surr)			100 %	54-	127 %		"					
2-Fluorophenol (Surr)			86 %	35-	120 %		"					
2,4,6-Tribromophenol (Surr)			78 %	39-	132 %		"					
LCS (22J1188-BS1)			Prepared	l: 10/31/22 0	5:43 Anal	yzed: 10/31	/22 16:31					Q-18
EPA 8270E			1									
Acenaphthene	527	5.32	10.7	ug/kg we	t 4	533		99	40-123%			
Acenaphthylene	548	5.32	10.7	ug/kg we	t 4	533		103	32-132%			
Anthracene	557	5.32	10.7	ug/kg we	t 4	533		104	47-123%			
Benz(a)anthracene	542	5.32	10.7	ug/kg we	t 4	533		102	49-126%			
Benzo(a)pyrene	582	8.00	16.0	ug/kg we		533		109	45-129%			
Benzo(b)fluoranthene	588	8.00	16.0	ug/kg we		533		110	45-132%			
Benzo(k)fluoranthene	573	8.00	16.0	ug/kg we		533		108	47-132%			
Benzo(g,h,i)perylene	581	5.32	10.7	ug/kg we		533		109	43-134%			
Chrysene	538	5.32	10.7	ug/kg we		533		101	50-124%			
Dibenz(a,h)anthracene	531	5.32	10.7	ug/kg we		533		100	45-134%			
Fluoranthene	573	5.32	10.7	ug/kg we		533		107	50-127%			
Fluorene	542	5.32	10.7	ug/kg we		533		102	43-125%			
Indeno(1,2,3-cd)pyrene	540	5.32	10.7	ug/kg we		533		101	45-133%			
1-Methylnaphthalene	531	10.7	21.3	ug/kg we		533		100	40-120%			
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Apex Laboratories



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

Sevenson Environmental Services, Inc.

2749 Lockport Road Niagara Falls, NY 14305 Project:Gasco -- FiltercakeProject Number:111323Project Manager:Chip Byrd

<u>Report ID:</u> A2J0597 - 12 02 22 1255

QUALITY CONTROL (QC) SAMPLE RESULTS

		Se	mivolatile	Organic C	ompour	ds by EP	A 8270E					
Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22J1188 - EPA 3546							Sol	lid				
LCS (22J1188-BS1)			Prepared	l: 10/31/22 0	5:43 Ana	lyzed: 10/31	/22 16:31					Q-18
Naphthalene	517	10.7	21.3	ug/kg we	t 4	533		97	35-123%			
Phenanthrene	529	5.32	10.7	ug/kg we	t 4	533		99	50-121%			
Pyrene	571	5.32	10.7	ug/kg we	t 4	533		107	47-127%			
Dibenzofuran	535	5.32	10.7	ug/kg we	t 4	533		100	44-120%			
2-Chlorophenol	525	26.7	53.2	ug/kg we	t 4	533		98	34-121%			
4-Chloro-3-methylphenol	521	53.2	107	ug/kg we	t 4	533		98	45-122%			
2,4-Dichlorophenol	516	26.7	53.2	ug/kg we	t 4	533		97	40-122%			
2,4-Dimethylphenol	565	26.7	53.2	ug/kg we	t 4	533		106	30-127%			
2,4-Dinitrophenol	492	133	267	ug/kg we	t 4	533		92	10-137%			
4,6-Dinitro-2-methylphenol	564	133	267	ug/kg we	t 4	533		106	29-132%			
2-Methylphenol	567	13.3	26.7	ug/kg we	t 4	533		106	32-122%			
3+4-Methylphenol(s)	572	13.3	26.7	ug/kg we	t 4	533		107	34-120%			Q-
2-Nitrophenol	592	53.2	107	ug/kg we	t 4	533		111	36-123%			Q-
4-Nitrophenol	493	53.2	107	ug/kg we	t 4	533		93	30-132%			
Pentachlorophenol (PCP)	510	53.2	107	ug/kg we	t 4	533		96	25-133%			
Phenol	540	10.7	21.3	ug/kg we	t 4	533		101	34-121%			
2,3,4,6-Tetrachlorophenol	551	26.7	53.2	ug/kg we	t 4	533		103	44-125%			
2,3,5,6-Tetrachlorophenol	551	26.7	53.2	ug/kg we	t 4	533		103	40-120%			
2,4,5-Trichlorophenol	530	26.7	53.2	ug/kg we	t 4	533		99	41-124%			
Nitrobenzene	547	53.2	107	ug/kg we	t 4	533		103	34-122%			
2,4,6-Trichlorophenol	522	26.7	53.2	ug/kg we	t 4	533		98	39-126%			
Bis(2-ethylhexyl)phthalate	520	80.0	160	ug/kg we		533		97	51-133%			
Butyl benzyl phthalate	536	53.2	107	ug/kg we		533		101	48-132%			
Diethylphthalate	571	53.2	107	ug/kg we		533		107	50-124%			
Dimethylphthalate	547	53.2	107	ug/kg we		533		102	48-124%			
Di-n-butylphthalate	819	53.2	107	ug/kg we		533		154	51-128%			Q-29,
Di-n-octyl phthalate	537	53.2	107	ug/kg we		533		101	45-140%			
N-Nitrosodimethylamine	438	13.3	26.7	ug/kg we		533		82	23-120%			
N-Nitroso-di-n-propylamine	554	13.3	26.7	ug/kg we		533		104	36-120%			
N-Nitrosodiphenylamine	560	13.3	26.7	ug/kg we		533		105	38-127%			
Bis(2-Chloroethoxy) methane	536	13.3	26.7	ug/kg we		533		101	36-121%			
Bis(2-Chloroethyl) ether	493	13.3	26.7	ug/kg we		533		92	31-120%			
2,2'-Oxybis(1-Chloropropane)	514	13.3	26.7	ug/kg we		533		96	39-120%			
Hexachlorobenzene	527	5.32	10.7	ug/kg we		533		99	45-122%			

Apex Laboratories



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

Sevenson Environmental Services, Inc.

2749 Lockport Road Niagara Falls, NY 14305 Project:Gasco -- FiltercakeProject Number:111323Project Manager:Chip Byrd

<u>Report ID:</u> A2J0597 - 12 02 22 1255

QUALITY CONTROL (QC) SAMPLE RESULTS

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22J1188 - EPA 3546							So	id				
LCS (22J1188-BS1)			Prepareo	d: 10/31/22 0	5:43 Ana	yzed: 10/31	/22 16:31					Q-18
Hexachlorobutadiene	501	13.3	26.7	ug/kg we	t 4	533		94	32-123%			
Hexachlorocyclopentadiene	592	26.7	53.2	ug/kg we	t 4	533		111	10-140%			
Hexachloroethane	476	13.3	26.7	ug/kg we	t 4	533		89	28-120%			
2-Chloronaphthalene	544	5.32	10.7	ug/kg we	t 4	533		102	41-120%			
1,2,4-Trichlorobenzene	520	13.3	26.7	ug/kg we	t 4	533		97	34-120%			
4-Bromophenyl phenyl ether	541	13.3	26.7	ug/kg we	t 4	533		101	46-124%			
4-Chlorophenyl phenyl ether	535	13.3	26.7	ug/kg we	t 4	533		100	45-121%			
Aniline	423	26.7	53.2	ug/kg we	t 4	533		79	10-120%			
4-Chloroaniline	362	13.3	26.7	ug/kg we	t 4	533		68	17-120%			
2-Nitroaniline	533	107	213	ug/kg we	t 4	533		100	44-127%			
3-Nitroaniline	555	107	213	ug/kg we	t 4	533		104	33-120%			Q-
4-Nitroaniline	714	107	213	ug/kg we	t 4	533		134	51-125%			Q-29, Q-
2,4-Dinitrotoluene	547	53.2	107	ug/kg we	t 4	533		103	48-126%			
2,6-Dinitrotoluene	559	53.2	107	ug/kg we	t 4	533		105	46-124%			
Benzoic acid	795	668	668	ug/kg we	t 4	1070		75	10-140%			
Benzyl alcohol	504	26.7	53.2	ug/kg we	t 4	533		94	29-122%			
Isophorone	520	13.3	26.7	ug/kg we	t 4	533		98	30-122%			
Azobenzene (1,2-DPH)	542	13.3	26.7	ug/kg we	t 4	533		102	39-125%			
Bis(2-Ethylhexyl) adipate	532	133	267	ug/kg we		533		100	61-121%			
3,3'-Dichlorobenzidine	2010	107	213	ug/kg we	t 4	1070		189	22-121%			Q-
1,2-Dinitrobenzene	540	133	267	ug/kg we	t 4	533		101	44-120%			
1,3-Dinitrobenzene	544	133	267	ug/kg we	t 4	533		102	43-127%			
1,4-Dinitrobenzene	546	133	267	ug/kg we		533		102	37-132%			
Pyridine	414	26.7	53.2	ug/kg we		533		78	10-120%			
1,2-Dichlorobenzene	496	13.3	26.7	ug/kg we		533		93	33-120%			
1,3-Dichlorobenzene	483	13.3	26.7	ug/kg we		533		91	30-120%			
1,4-Dichlorobenzene	481	13.3	26.7	ug/kg we		533		90	31-120%			
Surr: Nitrobenzene-d5 (Surr)		Recove	ery: 101 %	Limits: 37-	-122 %	Dilı	ution: 4x					Q-41
2-Fluorobiphenyl (Surr)			98 %	44-	120 %		"					
Phenol-d6 (Surr)			98 %	33-	122 %		"					
p-Terphenyl-d14 (Surr)			101 %	54-	127 %		"					
2-Fluorophenol (Surr)			86 %	35-	120 %		"					
2,4,6-Tribromophenol (Surr)			96 %	39-	132 %		"					

Apex Laboratories



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

Sevenson Environmental Services, Inc.

2749 Lockport Road Niagara Falls, NY 14305 Project: Gasco -- Filtercake
Project Number: 111323
Project Manager: Chip Byrd

<u>Report ID:</u> A2J0597 - 12 02 22 1255

QUALITY CONTROL (QC) SAMPLE RESULTS

		Se	mivolatile (Organic C	ompour	ias by EP	A 8270E					
Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22J1188 - EPA 3546							So	lid				
LCS (22J1188-BS2)			Prepared	: 10/31/22 0	5:43 Ana	lyzed: 11/01	/22 16:58					Q-16
EPA 8270E												
Carbazole	534	8.00	16.0	ug/kg we	t 4	533		100	50-123%			
Duplicate (22J1188-DUP1)			Prepared	: 10/31/22 0	5:43 Ana	lyzed: 10/31	/22 17:43					
QC Source Sample: FC-101722-2	000 (A2J059	7-01 <u>)</u>										
<u>EPA 8270E</u>												
Acenaphthene	3470	1210	2430	ug/kg dr	y 200		3530			2	30%	
Acenaphthylene	ND	1210	2430	ug/kg dr	y 200		ND				30%	
Anthracene	10500	1210	2430	ug/kg dr	y 200		11300			7	30%	
Benz(a)anthracene	8500	1210	2430	ug/kg dr	y 200		8790			3	30%	
Benzo(a)pyrene	10200	1820	3630	ug/kg dr	y 200		10400			1	30%	
Benzo(b)fluoranthene	8600	1820	3630	ug/kg dr	y 200		8190			5	30%	
Benzo(k)fluoranthene	4220	1820	3630	ug/kg dr	y 200		4560			8	30%	M-0
Benzo(g,h,i)perylene	6640	1210	2430	ug/kg dr	y 200		6610			0.4	30%	
Chrysene	11600	1210	2430	ug/kg dr	y 200		11600			0.6	30%	
Dibenz(a,h)anthracene	ND	1210	2430	ug/kg dr	y 200		ND				30%	
Fluoranthene	34600	1210	2430	ug/kg dr	y 200		35100			1	30%	
Fluorene	3800	1210	2430	ug/kg dr	y 200		4020			6	30%	
Indeno(1,2,3-cd)pyrene	6550	1210	2430	ug/kg dr	y 200		6350			3	30%	
1-Methylnaphthalene	ND	2430	4840	ug/kg dr	y 200		ND				30%	
2-Methylnaphthalene	ND	2430	4840	ug/kg dr	y 200		ND				30%	
Naphthalene	ND	2430	4840	ug/kg dr	y 200		ND				30%	
Phenanthrene	42800	1210	2430	ug/kg dr	y 200		43500			2	30%	
Pyrene	39800	1210	2430	ug/kg dr	y 200		39900			0.2	30%	
Carbazole	ND	1820	3630	ug/kg dr	y 200		ND				30%	
Dibenzofuran	ND	1210	2430	ug/kg dr	y 200		ND				30%	
2-Chlorophenol	ND	6060	12100	ug/kg dr	y 200		ND				30%	
4-Chloro-3-methylphenol	ND	12100	24300	ug/kg dr	y 200		ND				30%	
2,4-Dichlorophenol	ND	6060	12100	ug/kg dr	y 200		ND				30%	
2,4-Dimethylphenol	ND	6060	12100	ug/kg dr	y 200		ND				30%	
2,4-Dinitrophenol	ND	30300	60600	ug/kg dr	y 200		ND				30%	
4,6-Dinitro-2-methylphenol	ND	30300	60600	ug/kg dr	y 200		ND				30%	
2-Methylphenol	ND	3030	6060	ug/kg dr	y 200		ND				30%	
3+4-Methylphenol(s)	ND	3030	6060	ug/kg dr	y 200		ND				30%	

Apex Laboratories



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

Sevenson Environmental Services, Inc.

2749 Lockport Road Niagara Falls, NY 14305 Project:Gasco -- FiltercakeProject Number:111323Project Manager:Chip Byrd

<u>Report ID:</u> A2J0597 - 12 02 22 1255

QUALITY CONTROL (QC) SAMPLE RESULTS

		Se	mivolatile (Organic C	ompoun	ds by EP	A 8270E					
Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22J1188 - EPA 3546							Sol	id				
Duplicate (22J1188-DUP1)			Prepared	: 10/31/22 0	5:43 Anal	yzed: 10/31	/22 17:43					
QC Source Sample: FC-101722-20	000 (A2J059	<u>7-01)</u>										
2-Nitrophenol	ND	12100	24300	ug/kg dry	200		ND				30%	
I-Nitrophenol	ND	12100	24300	ug/kg dry			ND				30%	
Pentachlorophenol (PCP)	ND	12100	24300	ug/kg dry	200		ND				30%	
Phenol	ND	2430	4840	ug/kg dry	200		ND				30%	
2,3,4,6-Tetrachlorophenol	ND	6060	12100	ug/kg dry	200		ND				30%	
2,3,5,6-Tetrachlorophenol	ND	6060	12100	ug/kg dry	200		ND				30%	
2,4,5-Trichlorophenol	ND	6060	12100	ug/kg dry	200		ND				30%	
Nitrobenzene	ND	12100	24300	ug/kg dry	200		ND				30%	
2,4,6-Trichlorophenol	ND	6060	12100	ug/kg dry	200		ND				30%	
Bis(2-ethylhexyl)phthalate	ND	18200	36300	ug/kg dry	200		ND				30%	
Butyl benzyl phthalate	ND	12100	24300	ug/kg dry	200		ND				30%	
Diethylphthalate	ND	12100	24300	ug/kg dry	200		ND				30%	
Dimethylphthalate	ND	12100	24300	ug/kg dry	200		ND				30%	
Di-n-butylphthalate	ND	12100	24300	ug/kg dry	200		ND				30%	
Di-n-octyl phthalate	ND	12100	24300	ug/kg dry	200		ND				30%	
N-Nitrosodimethylamine	ND	3030	6060	ug/kg dry	200		ND				30%	
N-Nitroso-di-n-propylamine	ND	3030	6060	ug/kg dry	200		ND				30%	
N-Nitrosodiphenylamine	ND	3030	6060	ug/kg dry	200		ND				30%	
Bis(2-Chloroethoxy) methane	ND	3030	6060	ug/kg dry	200		ND				30%	
Bis(2-Chloroethyl) ether	ND	3030	6060	ug/kg dry	200		ND				30%	
2,2'-Oxybis(1-Chloropropane)	ND	3030	6060	ug/kg dry	200		ND				30%	
Hexachlorobenzene	ND	1210	2430	ug/kg dry	200		ND				30%	
Hexachlorobutadiene	ND	3030	6060	ug/kg dry	200		ND				30%	
Hexachlorocyclopentadiene	ND	6060	12100	ug/kg dry	200		ND				30%	
Hexachloroethane	ND	3030	6060	ug/kg dry	200		ND				30%	
2-Chloronaphthalene	ND	1210	2430	ug/kg dry			ND				30%	
,2,4-Trichlorobenzene	ND	3030	6060	ug/kg dry			ND				30%	
-Bromophenyl phenyl ether	ND	3030	6060	ug/kg dry			ND				30%	
-Chlorophenyl phenyl ether	ND	3030	6060	ug/kg dry			ND				30%	
Aniline	ND	6060	12100	ug/kg dry			ND				30%	
I-Chloroaniline	ND	3030	6060	ug/kg dry			ND				30%	
2-Nitroaniline	ND	24300	48400	ug/kg dry			ND				30%	
3-Nitroaniline	ND	24300	48400	ug/kg dry			ND				30%	

Apex Laboratories



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

Sevenson Environmental Services, Inc.

2749 Lockport Road Niagara Falls, NY 14305 Project:Gasco -- FiltercakeProject Number:111323Project Manager:Chip Byrd

<u>Report ID:</u> A2J0597 - 12 02 22 1255

QUALITY CONTROL (QC) SAMPLE RESULTS

		Sei	nivolatile	Organic C	compour	ds by EP	A 8270E						
Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Not	es
Batch 22J1188 - EPA 3546							Sol	id					
Duplicate (22J1188-DUP1)			Prepared	: 10/31/22 0	5:43 Ana	lyzed: 10/31	/22 17:43						
QC Source Sample: FC-101722-2	000 (A2J059	<u>97-01)</u>											
4-Nitroaniline	ND	24300	48400	ug/kg dr	y 200		ND				30%		
2,4-Dinitrotoluene	ND	12100	24300	ug/kg dr	y 200		ND				30%		
2,6-Dinitrotoluene	ND	12100	24300	ug/kg dr	y 200		ND				30%		
Benzoic acid	ND	152000	303000	ug/kg dr	y 200		ND				30%		
Benzyl alcohol	ND	6060	12100	ug/kg dr	y 200		ND				30%		
Isophorone	ND	3030	6060	ug/kg dr	y 200		ND				30%		
Azobenzene (1,2-DPH)	ND	3030	6060	ug/kg dr	y 200		ND				30%		
Bis(2-Ethylhexyl) adipate	ND	30300	60600	ug/kg dr	y 200		ND				30%		
3,3'-Dichlorobenzidine	ND	24300	48400	ug/kg dr	y 200		ND				30%		Q-5
1,2-Dinitrobenzene	ND	30300	60600	ug/kg dr	y 200		ND				30%		
1,3-Dinitrobenzene	ND	30300	60600	ug/kg dr	y 200		ND				30%		
1,4-Dinitrobenzene	ND	30300	60600	ug/kg dr	y 200		ND				30%		
Pyridine	ND	6060	12100	ug/kg dr	y 200		ND				30%		
1,2-Dichlorobenzene	ND	3030	6060	ug/kg dr	y 200		ND				30%		
1,3-Dichlorobenzene	ND	3030	6060	ug/kg dr	y 200		ND				30%		
1,4-Dichlorobenzene	ND	3030	6060	ug/kg dr	y 200		ND				30%		
Surr: Nitrobenzene-d5 (Surr)		Reco	very: 62 %	Limits: 37-	-122 %	Dilt	ution: 200x					S-05	
2-Fluorobiphenyl (Surr)			77 %	44-	120 %		"					S-05	
Phenol-d6 (Surr)			36 %	33-	122 %		"					S-05	
p-Terphenyl-d14 (Surr)			73 %	54-	127 %		"					S-05	
2-Fluorophenol (Surr)			42 %	35-	120 %		"					S-05	
2,4,6-Tribromophenol (Surr)			244 %	39-	132 %		"					S-05	

Apex Laboratories



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

Sevenson Environmental Services, Inc.

2749 Lockport Road Niagara Falls, NY 14305 Project:Gasco -- FiltercakeProject Number:111323Project Manager:Chip Byrd

<u>Report ID:</u> A2J0597 - 12 02 22 1255

QUALITY CONTROL (QC) SAMPLE RESULTS

			iotai M	etais by l	EPA 6020	B (ICPMS	5)					
Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22J1085 - EPA 3051A							Sol	d				
Blank (22J1085-BLK2)			Prepared	: 10/27/22 0	7:21 Anal	yzed: 10/31	/22 21:03					
EPA 6020B												
Arsenic	ND	481	962	ug/kg we	t 10							
Barium	ND	481	962	ug/kg we	t 10							
Cadmium	ND	96.2	192	ug/kg we	t 10							
Chromium	ND	481	962	ug/kg we	t 10							
Lead	ND	96.2	192	ug/kg we	t 10							
Mercury	ND	38.5	76.9	ug/kg we	t 10							
Selenium	ND	481	962	ug/kg we	t 10							
Silver	ND	96.2	192	ug/kg we	t 10							
LCS (22J1085-BS1)			Prepared	: 10/27/22 0	7:21 Anal	yzed: 10/31	/22 21:08					
EPA 6020B												
Arsenic	53100	500	1000	ug/kg we	t 10	50000		106	80-120%			
Barium	53000	500	1000	ug/kg we	t 10	50000		106	80-120%			
Cadmium	50700	100	200	ug/kg we	t 10	50000		101	80-120%			
Chromium	50200	500	1000	ug/kg we	t 10	50000		100	80-120%			
Lead	50500	100	200	ug/kg we	t 10	50000		101	80-120%			
Mercury	961	40.0	80.0	ug/kg we	t 10	1000		96	80-120%			
Selenium	22500	500	1000	ug/kg we	t 10	25000		90	80-120%			
Silver	26400	100	200	ug/kg we	t 10	25000		106	80-120%			
Duplicate (22J1085-DUP2)			Prepared	: 10/27/22 0	7:21 Anal	yzed: 10/31	/22 21:19					
QC Source Sample: Non-SDG (A	2J0588-01)											
Arsenic	ND	13600	27200	ug/kg we	t 250		ND				20%	
Barium	120000	13600	27200	ug/kg we			139000			14	20%	
Cadmium	ND	2720	5430	ug/kg we	t 250		ND				20%	
Chromium	1240000	13600	27200	ug/kg we			1300000			4	20%	
Lead	195000	2720	5430	ug/kg we			205000			5	20%	
Mercury	4930	1090	2170	ug/kg we			5260			6	20%	
Selenium	ND	13600	27200	ug/kg we			ND				20%	
Silver	20300	2720	5430	ug/kg we			21000			3	20%	

Matrix Spike (22J1085-MS1)

Prepared: 10/27/22 07:21 Analyzed: 10/31/22 21:24

Apex Laboratories



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

Sevenson Environmental Services, Inc.

2749 Lockport Road Niagara Falls, NY 14305 Project: Gasco -- Filtercake
Project Number: 111323

Project Manager: Chip Byrd

<u>Report ID:</u> A2J0597 - 12 02 22 1255

QUALITY CONTROL (QC) SAMPLE RESULTS

			Total M	letals by E	PA 6020	DB (ICPM	S)					
Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22J1085 - EPA 3051A							Sol	id				
Matrix Spike (22J1085-MS1)			Prepared	: 10/27/22 07	7:21 Ana	lyzed: 10/31	1/22 21:24					
QC Source Sample: Non-SDG (A2	J0588-01)											
<u>EPA 6020B</u>												
Arsenic	70100	13300	26600	ug/kg wet	250	53200	ND	132	75-125%			Q-11
Barium	172000	13300	26600	ug/kg wet	250	53200	139000	63	75-125%			Q-11
Cadmium	56600	2660	5320	ug/kg wet	250	53200	ND	106	75-125%			
Chromium	1350000	13300	26600	ug/kg wet	250	53200	1300000	111	75-125%			
Lead	219000	2660	5320	ug/kg wet	250	53200	205000	27	75-125%			Q-65
Mercury	5010	1060	2130	ug/kg wet	250	1060	5260	-23	75-125%			Q-65
Selenium	27500	13300	26600	ug/kg wet	250	26600	ND	104	75-125%			
Silver	44300	2660	5320	ug/kg wet	250	26600	21000	88	75-125%			

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

Sevenson Environmental Services, Inc.

2749 Lockport Road

Niagara Falls, NY 14305

Project: Gasco -- Filtercake Project Number: 111323 Project Manager: Chip Byrd

Report ID: A2J0597 - 12 02 22 1255

QUALITY CONTROL (QC) SAMPLE RESULTS

			TCLP N	letals by	EPA 602	0B (ICPM	S)					
Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22J1017 - EPA 1311/30	15A						Sol	id				
Blank (22J1017-BLK1)			Prepared	: 10/26/22	08:17 Ana	lyzed: 10/27	/22 04:10					
1311/6020B												
Arsenic	ND	50.0	100	ug/L	10							TCLI
Barium	ND	2500	5000	ug/L	10							TCLI
Cadmium	ND	50.0	100	ug/L	10							TCLI
Chromium	ND	50.0	100	ug/L	10							TCLI
Selenium	ND	50.0	100	ug/L	10							TCLI
Silver	ND	50.0	100	ug/L	10							TCLI
Blank (22J1017-BLK3)			Prepared	: 10/26/22	08:17 Ana	lyzed: 10/28	/22 19:32					
<u>1311/6020B</u>												
Lead	ND	25.0	50.0	ug/L	10							Q-16, TCLI
Mercury	ND	3.75	7.00	ug/L	10							Q-16, TCLI
LCS (22J1017-BS1)			Prepared	: 10/26/22	08:17 Ana	lyzed: 10/27	/22 04:32					
<u>1311/6020B</u>												
Arsenic	5070	50.0	100	ug/L	10	5000		101	80-120%			TCLI
Barium	10600	2500	5000	ug/L	10	10000		106	80-120%			TCLI
Cadmium	1020	50.0	100	ug/L	10	1000		102	80-120%			TCLI
Chromium	4840	50.0	100	ug/L	10	5000		97	80-120%			TCLI
Selenium	999	50.0	100	ug/L	10	1000		100	80-120%			TCLI
Silver	1050	50.0	100	ug/L	10	1000		105	80-120%			Q-41, TCLI
LCS (22J1017-BS3)			Prepared	: 10/26/22	08:17 Ana	lyzed: 10/28	/22 19:36					
<u>1311/6020B</u>												
Lead	5230	25.0	50.0	ug/L	10	5000		105	80-120%			Q-16, TCLI
Mercury	96.5	3.75	7.00	ug/L	10	100		96	80-120%			Q-16, TCLI
Duplicate (22J1017-DUP1)			Prepared	: 10/26/22	08:17 Ana	lyzed: 10/27	/22 04:43					
QC Source Sample: FC-101722-2	2000 (A2J059)	7 <u>-01)</u>										
<u>1311/6020B</u>		50.0	100		10						2004	
Arsenic	ND	50.0	100	ug/L	10		ND				20%	
Barium	ND	2500	5000	ug/L	10		ND				20%	
Cadmium	ND	50.0	100	ug/L	10		ND				20%	

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

Sevenson Environmental Services, Inc.

2749 Lockport Road Niagara Falls, NY 14305 Project: Gasco -- Filtercake
Project Number: 111323
Project Manager: Chip Byrd

<u>Report ID:</u> A2J0597 - 12 02 22 1255

QUALITY CONTROL (QC) SAMPLE RESULTS

			TCLP N	letals by	EPA 602	0B (ICPM	S)					
Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22J1017 - EPA 1311/301	5A						So	lid				
Duplicate (22J1017-DUP1)			Prepared	: 10/26/22	08:17 Ana	lyzed: 10/27	//22 04:43					
QC Source Sample: FC-101722-20	00 (A2J059	<u>7-01)</u>										
Chromium	ND	50.0	100	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%	
Duplicate (22J1017-DUP3)			Prepared	: 10/26/22	08:17 Ana	lyzed: 10/28	3/22 19:45					
QC Source Sample: FC-101722-20	00 (A2J059	7-01RE2)										
<u>1311/6020B</u>												
Lead	ND	25.0	50.0	ug/L	10		ND				20%	Q-1
Mercury	ND	3.75	7.00	ug/L	10		ND				20%	Q-1
Matrix Spike (22J1017-MS1)			Prepared	: 10/26/22	08:17 Ana	lyzed: 10/27	//22 04:49					
QC Source Sample: FC-101722-20	00 (A2J059	<u>7-01)</u>										
<u>1311/6020B</u>												
Arsenic	4860	50.0	100	ug/L	10	5000	ND	97	50-150%			
Barium	10500	2500	5000	ug/L	10	10000	ND	105	50-150%			
Cadmium	978	50.0	100	ug/L	10	1000	ND	98	50-150%			
Chromium	4650	50.0	100	ug/L	10	5000	ND	93	50-150%			
Selenium	1020	50.0	100	ug/L	10	1000	ND	102	50-150%			
Silver	1010	50.0	100	ug/L	10	1000	ND	101	50-150%			Q-4
Matrix Spike (22J1017-MS3)			Prepared	: 10/26/22	08:17 Ana	lyzed: 10/28	3/22 19:49					
QC Source Sample: FC-101722-20	00 (A2J059	7-01RE2)										
<u>1311/6020B</u>												
Lead	5290	25.0	50.0	ug/L	10	5000	ND	106	50-150%			Q-1
Mercury	97.4	3.75	7.00	ug/L	10	100	ND	97	50-150%			Q-1

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

Sevenson Environmental Services, Inc.

2749 Lockport Road Niagara Falls, NY 14305 Project: Gasco -- Filtercake
Project Number: 111323
Project Manager: Chip Byrd

<u>Report ID:</u> A2J0597 - 12 02 22 1255

QUALITY CONTROL (QC) SAMPLE RESULTS

	Solu	uble Cyanio	de by UV Di	igestion/	Gas Diffu	ision/Amp	erometr	ic Detection	on			
Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22J1021 - ASTM D751	1-12mod (S)					Soi	I				
Blank (22J1021-BLK1)			Prepared	: 10/26/22)9:54 Ana	lyzed: 10/26	/22 12:39					
<u>D7511-12</u> Total Cyanide	ND	50.0	100	ug/kg w	et 1							
LCS (22J1021-BS1)			Prepared	: 10/26/22)9:54 Ana	lyzed: 10/26	/22 12:41					
D7511-12												
Total Cyanide	409	50.0	100	ug/kg w	et 1	400		102	84-116%			
Matrix Spike (22J1021-MS2))		Prepared	: 10/26/22)9:54 Ana	lyzed: 10/26	/22 13:43					
QC Source Sample: FC-101722-	2000 (A2J059	97-01RE1)										
<u>D7511-12</u> Total Cyanide	6750	969	1940	ug/kg dı	y 5	1550	6650	6	64-136%			Q-01, Q-1
Matrix Spike Dup (22J1021-	MSD2)		Prepared	: 10/26/22)9:54 Ana	lyzed: 10/26	/22 13:45					
OC Source Sample: FC-101722-	2000 (A2J059	97-01RE1)										
<u>D7511-12</u>												
Total Cyanide	8000	967	1930	ug/kg dı	у 5	1550	6650	87	64-136%	17	47%	Q-1

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

Sevenson Environmental Services, Inc.

2749 Lockport Road Niagara Falls, NY 14305 Project:Gasco -- FiltercakeProject Number:111323Project Manager:Chip Byrd

<u>Report ID:</u> A2J0597 - 12 02 22 1255

QUALITY CONTROL (QC) SAMPLE RESULTS

				Percen	t Dry Weig	ght						
Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22J0822 - Total Solids (Dry Weigh	nt)					Soil					
Duplicate (22J0822-DUP1)			Prepared	: 10/20/22	12:54 Anal	yzed: 10/21	22 05:56					
QC Source Sample: Non-SDG (A2	2J0590-01)											
% Solids	82.1		1.00	%	1		81.4			0.9	10%	
Duplicate (22J0822-DUP2)			Prepared	: 10/20/22	12:54 Anal	yzed: 10/21/	22 05:56					
QC Source Sample: Non-SDG (A2	2J0590-02)											
% Solids	70.2		1.00	%	1		70.3			0.1	10%	
Duplicate (22J0822-DUP3)			Prepared	: 10/20/22	12:54 Anal	yzed: 10/21	22 05:56					
QC Source Sample: FC-101722-20	000 (A2J059	<u>07-01)</u>										
EPA 8000D												
% Solids	24.9		1.00	%	1		25.5			3	10%	
Duplicate (22J0822-DUP4)			Prepared	: 10/20/22	12:54 Anal	yzed: 10/21	22 05:56					
QC Source Sample: Non-SDG (A2	<u>2J0598-01)</u>											
% Solids	82.3		1.00	%	1		83.3			1	10%	
Duplicate (22J0822-DUP5)			Prepared	: 10/20/22	12:54 Anal	yzed: 10/21/	/22 05:56					
QC Source Sample: Non-SDG (A2	2J0598-02)											
% Solids	93.0		1.00	%	1		93.2			0.3	10%	
Duplicate (22J0822-DUP6)			Prepared	: 10/20/22	19:17 Anal	yzed: 10/21/	22 05:56					
QC Source Sample: Non-SDG (A2	2J0658-01)											
% Solids	89.8		1.00	%	1		89.2			0.7	10%	

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

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<u>Sevenson Environmental Services, In</u> 2749 Lockport Road Niagara Falls, NY 14305	Pi	Project: <u>Gasco</u> - roject Number: 111323 oject Manager: Chip B		<u>Report ID:</u> A2J0597 - 12 02 22		
	SAMPLE	PREPARATION	INFORMATION			
	Diesel and	/or Oil Hydrocarbor	is by NWTPH-Dx			
Prep: EPA 3546 (Fuels)				Sample	Default	RL Prep
Lab Number Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
Batch: 22J0894 A2J0597-01 Solid	NWTPH-Dx	10/17/22 16:30	10/24/22 06:59	10.04g/5mL	10g/5mL	1.00
G	asoline Range Hydrocart	oons (Benzene thro	ugh Naphthalene) b	y NWTPH-Gx		
Prep: EPA 5035A				Sample	Default	RL Prep
Lab Number Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
Batch: 22J0853 A2J0597-01RE1 Solid	NWTPH-Gx (MS)	10/17/22 16:30	10/19/22 14:30	5.11g/5mL	5g/5mL	0.98
	Volatile C	Organic Compounds	by EPA 8260D			
<u>Prep: EPA 5035A</u>			-	Sample	Default	RL Prep
Lab Number Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
Batch: 22J0853 A2J0597-01RE1 Solid	5035A/8260D	10/17/22 16:30	10/19/22 14:30	5.11g/5mL	5g/5mL	0.98
	Regulated TCLP Vol	atile Organic Comp	ounds by EPA 1311	/8260D		
Prep: EPA 1311/5030B TCLP Volati	les			Sample	Default	RL Prep
Lab Number Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
Batch: 22J1147 A2J0597-01 Solid	1311/8260D	10/17/22 16:30	10/28/22 09:59	5mL/5mL	5mL/5mL	1.00
	Semivolatile	e Organic Compour	nds by EPA 8270E			
Prep: EPA 3546			-	Sample	Default	RL Prep
Lab Number Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
Batch: 22J1188 A2J0597-01 Solid	EPA 8270E	10/17/22 16:30	10/31/22 05:43	12.59g/2mL	15g/2mL	1.19
	Total	Metals by EPA 602	0B (ICPMS)			
Prep: EPA 3051A			· · ·	Sample	Default	RL Prep
Lab Number Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
Batch: 22J1085 A2J0597-01 Solid	EPA 6020B	10/17/22 16:30	10/27/22 07:21	0.476g/50mL	0.5g/50mL	1.05

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

						ORELAP ID: OK	100002
Sevenson Environmen	tal Services, Inc.		·	- Filtercake			
2749 Lockport Road			Project Number: 111323			<u>Report ID:</u>	<u>.</u>
Niagara Falls, NY 143	305	P	roject Manager: Chip B	yrd		A2J0597 - 12 02 22	1255
		SAMPLE	E PREPARATION I	NFORMATION			
		Tota	I Metals by EPA 602	0B (ICPMS)			
<u>Prep: EPA 3051A</u>			-		Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
		TCL	P Metals by EPA 602	OB (ICPMS)			
Prep: EPA 1311/3015	<u>A</u>				Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
Batch: 22J1017	C -1:4	1311/6020B	10/17/22 16:20	10/26/22 08:17	10I /50I	10I /50I	1.00
A2J0597-01 A2J0597-01RE2	Solid Solid	1311/6020B	10/17/22 16:30 10/17/22 16:30	10/26/22 08:17 10/26/22 08:17	10mL/50mL 10mL/50mL	10mL/50mL 10mL/50mL	1.00 1.00
	Sol	uble Cyanide by U\	/ Digestion/Gas Diffu	usion/Amperometric	Detection		
Prep: ASTM D7511-12	2mod (S)				Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
Batch: 22J1021	~					/	
A2J0597-01RE1	Solid	D7511-12	10/17/22 16:30	10/26/22 09:54	2.5139g/50mL	2.5g/50mL	0.99
			Percent Dry We	ight			
Prep: Total Solids (Dr	<u>y Weight)</u>				Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
Batch: 22J0822	0.111						2.1
A2J0597-01	Solid	EPA 8000D	10/17/22 16:30	10/20/22 12:54			NA
		T	CLP Extraction by E	PA 1311			
Prep: EPA 1311 (TCL	P)				Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
Batch: 22J0945							
A2J0597-01	Solid	EPA 1311	10/17/22 16:30	10/24/22 17:13	100g/2000g	100g/2000g	NA
Prep: EPA 1311 TCLF	<u>P/ZHE</u>				Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
Batch: 22J1097							
A2J0597-01	Solid	EPA 1311 ZHE	10/17/22 16:30	10/26/22 16:50	20.5g/400.1g	25g/500g	NA

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

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

<u>Sevenson Environmental Services, Inc.</u> 2749 Lockport Road Niagara Falls, NY 14305 Project: Gasco -- Filtercake
Project Number: 111323
Project Manager: Chip Byrd

<u>Report ID:</u> A2J0597 - 12 02 22 1255

QUALIFIER DEFINITIONS

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

Apex Laboratories

В	Analyte detected in an associated blank at a level above the MRL. (See Notes and Conventions below.)
COMP	Sample is a composite of discrete samples. See prep information for details.
Е	Estimated Value. The result is above the calibration range of the instrument.
F-13	The chromatographic pattern does not resemble the fuel standard used for quantitation
F-19	Results are Estimated due to the presence of multiple fuel products.
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.
Q-01	Spike recovery and/or RPD is outside acceptance limits.
Q-03	Spike recovery and/or RPD is outside control limits due to the high concentration of analyte present in the sample.
Q-11	Spike recovery is estimated due to sample dilution required for high analyte concentration and/or matrix interference.
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-41	Estimated Results. Recovery of Continuing Calibration Verification sample above upper control limit for this analyte. Results are likely biased high.
Q-42	Matrix Spike and/or Duplicate analysis was performed on this sample. % Recovery or RPD for this analyte is outside laboratory control limits. (Refer to the QC Section of Analytical Report.)
Q-52	Due to known erratic recoveries, the result and reporting levels for this analyte are reported as Estimated Values. This analyte may not have passed all QC requirements for this method.
Q-54	Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +11%. 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 +2%. 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 +5%. 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 -1%. The results are reported as Estimated Values.

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

<u>Sevenson Environmental Services, Inc.</u> 2749 Lockport Road Niagara Falls, NY 14305		Project: Project Number: Project Manager:		<u>Report ID:</u> A2J0597 - 12 02 22 1255	
Q-55	Daily CCV/LCS recovery for this analyte wa detection at the reporting level.	s below the +/-20% crite	eria listed in EPA 8260, howev	er there is adequate sensitivity to ensure	
Q-56	Daily CCV/LCS recovery for this analyte was above the +/-20% criteria listed in EPA 8260				
Q-65	Spike recovery is estimated due to the high analyte concentration of the source sample.				
S-01	Surrogate recovery for this sample is not available due to sample dilution required from high analyte concentration and/or matrix interference.				
S-05	Surrogate recovery is estimated due to sample dilution required for high analyte concentration and/or matrix interference.				
TCLP	This batch QC sample was prepared with TCLP or SPLP fluid from preparation batch 22J0945.				
TCLPa	This batch QC sample was prepared with TCLP or SPLP fluid from preparation batch 22J1097.				
V-15	Sample aliquot was subsampled from the sam sampling.	pple container. The subs	ampled aliquot was preserved	in the laboratory within 48 hours of	
V-16	Sample aliquot was subsampled from the sam sampling.	pple container in the labo	pratory. The subsampled aliqu	ot was not preserved within 48 hours of	

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

Sevenson Environmental Services, Inc.

2749 Lockport Road Niagara Falls, NY 14305 Project: <u>Gasco -- Filtercake</u> Project Number: 111323

Project Manager: Chip Byrd

<u>Report ID:</u> A2J0597 - 12 02 22 1255

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.

- <u>" dry"</u> 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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6700 S.W. Sandburg Street Tigard, OR 97223 503-718-2323 ORELAP ID: OR100062

Sevenson Environmental Services, Inc.

2749 Lockport Road Niagara Falls, NY 14305 Project:Gasco -- FiltercakeProject Number:111323

Project Manager: Chip Byrd

<u>Report ID:</u> A2J0597 - 12 02 22 1255

REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks (Cont.):

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

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

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

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

Soil and Sediment Samples:

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

Sampling and Preservation Notes:

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

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

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

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

Apex Laboratories



Apex Laboratories, LLC

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

<u>Sevenson Environmental Services, Inc.</u> 2749 Lockport Road Niagara Falls, NY 14305 Project: Gasco -- Filtercake
Project Number: 111323
Project Manager: Chip Byrd

<u>Report ID:</u> A2J0597 - 12 02 22 1255

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 <u>exception</u> 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

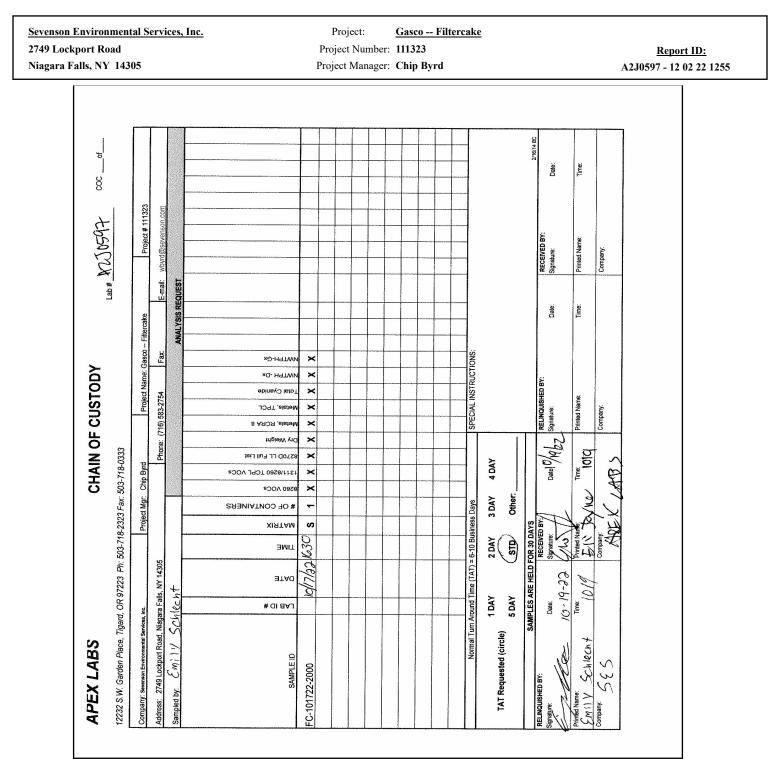
Results for Field Tested data are provded by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.

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Sevenson Environm	nental Services, Inc.	Project: Gasco Fi	ltercake		
2749 Lockport Road		Project Number: 111323		Report ID:	
Niagara Falls, NY 14305		Project Manager: Chip Byrd		A2J0597 - 12 02 22 1255	
Niagara Falls, NY	Client: $SAVENSOM EVA Project/Project #: GUS(D)Delivery Info:Date/time received: 10/44/2.2Delivered by: Apex ClientCooler Inspection Date/timeChain of Custody included? YSigned/dated by client? YSigned/dated by Apex? YSigned/dated by Apex? YCooler Temperature (°C) 3.Received on ice? (Y/N) YTemp. blanks? (Y/N) YIce type: (Gel/Real/Other) 5eCooler out of temp? (YN) PossibGreen dots applied to out of tempOut of temperature samples formSample Inspection: Date/time$	APEX LABS COOLER RECEIL APEX LABS COOLER RECEIL AND WENTER SUMMER SUMER SUMMER SUMME	PT FORM Element WO#: A2 J0597 J yift_Senvoy_SDS_Other_ D By: EST seals? Yes_ No_ ler #4 Cooler #5 Cooler #6 Cooler		
	COC/container discrepancies for Containers/volumes received appr Do VOA vials have visible heads Comments	X_NoComments: n initiated? Yes No ropriate for analysis? Yes pace? Yes No NA NoNA Mappropriate? Witness: ↓ 55	Comments: YesNoNAX Cooler Inspected by:		

Apex Laboratories