

### 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: A2J0599 - Gasco -- Filter Bags - 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 A2J0599, 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: <a href="mailto:dthomas@apex-labs.com">dthomas@apex-labs.com</a>, or by phone at 503-718-2323.

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

Cooler Receipt Information

(See Cooler Receipt Form for details)

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This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.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

2749 Lockport Road

Niagara Falls, NY 14305

Project: Gasco Project Number: 111323

Gasco -- Filter Bags

Project Manager: Chip Byrd

Report ID: A2J0599 - 12 02 22 1304

# ANALYTICAL REPORT FOR SAMPLES

	SAMPLE INFORMAT	ION	
Client Sample ID	Laboratory ID Mat	rix Date Sampled	Date Received
BF-101822-145	A2J0599-01 Soli	d 10/18/22 16:00	10/19/22 10:19

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Project: Gasco -- Filter Bags

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

Report ID: A2J0599 - 12 02 22 1304

# 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			
BF-101822-145 (A2J0599-01)				Matrix: Solid Batch: 22J0894							
Diesel	2120000	9890	19800	ug/kg	1	10/25/22 00:50	NWTPH-Dx				
Oil	1420000	19800	39600	ug/kg	1	10/25/22 00:50	NWTPH-Dx				
Surrogate: o-Terphenyl (Surr)		Reco	very: 60 %	Limits: 50-150 %	6 1	10/25/22 00:50	NWTPH-Dx				

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Sevenson Environmental Services, Inc. Project: Gasco -- Filter Bags

 2749 Lockport Road
 Project Number:
 111323
 Report ID:

 Niagara Falls, NY 14305
 Project Manager:
 Chip Byrd
 A2J0599 - 12 02 22 1304

# ANALYTICAL SAMPLE RESULTS

Gasol	Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx										
Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes			
BF-101822-145 (A2J0599-01RE1)				Matrix: Solid Batch: 22J0853							
Gasoline Range Organics	201000	45500	91000	ug/kg dry	50	10/21/22 22:44	NWTPH-Gx (MS)				
Surrogate: 4-Bromofluorobenzene (Sur) 1,4-Difluorobenzene (Sur)		Recove	ry: 106 % 98 %	Limits: 50-150 % 50-150 %		10/21/22 22:44 10/21/22 22:44	NWTPH-Gx (MS) NWTPH-Gx (MS)				

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Project Number: 111323
Project Manager: Chip Byrd

Report ID: A2J0599 - 12 02 22 1304

# 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
BF-101822-145 (A2J0599-01RE1)				Matrix: Sol	id	Batch:	22J0853	V-15
Acetone	ND	9100	18200	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
Acrylonitrile	ND	910	1820	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
Benzene	ND	91.0	182	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
Bromobenzene	ND	228	455	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
Bromochloromethane	ND	455	910	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
Bromodichloromethane	12000	455	910	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
Bromoform	1270	910	1820	ug/kg dry	50	10/21/22 22:44	5035A/8260D	J
Bromomethane	ND	9100	9100	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
2-Butanone (MEK)	ND	4550	9100	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
n-Butylbenzene	ND	455	910	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
sec-Butylbenzene	ND	455	910	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
tert-Butylbenzene	ND	455	910	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
Carbon disulfide	ND	4550	9100	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
Carbon tetrachloride	ND	455	910	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
Chlorobenzene	ND	228	455	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
Chloroethane	ND	4550	9100	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
Chloroform	37000	455	910	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
Chloromethane	ND	2280	4550	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
2-Chlorotoluene	ND	455	910	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
4-Chlorotoluene	ND	455	910	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
Dibromochloromethane	3920	910	1820	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
1,2-Dibromo-3-chloropropane	ND	2280	4550	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
1,2-Dibromoethane (EDB)	ND	455	910	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
Dibromomethane	ND	455	910	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
1,2-Dichlorobenzene	ND	228	455	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
1,3-Dichlorobenzene	ND	228	455	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
1,4-Dichlorobenzene	ND	228	455	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
Dichlorodifluoromethane	ND	910	1820	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
1,1-Dichloroethane	ND	228	455	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
1,2-Dichloroethane (EDC)	ND	228	455	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
1,1-Dichloroethene	ND	228	455	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
cis-1,2-Dichloroethene	ND	228	455	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
trans-1,2-Dichloroethene	ND	228	455	ug/kg dry	50	10/21/22 22:44	5035A/8260D	

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<u>Sevenson Environmental Services, Inc.</u> Project: <u>Gasco -- Filter Bags</u>

2749 Lockport RoadProject Number:111323Report ID:Niagara Falls, NY 14305Project Manager:Chip ByrdA2J0599 - 12 02 22 1304

# ANALYTICAL SAMPLE RESULTS

	Sample	Detection	Reporting			Date		
Analyte	Result	Limit	Limit	Units	Dilution	Analyzed	Method Ref.	Note
BF-101822-145 (A2J0599-01RE1)				Matrix: Soli	id	Batch:	22J0853	V-15
1,2-Dichloropropane	ND	228	455	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
1,3-Dichloropropane	ND	455	910	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
2,2-Dichloropropane	ND	455	910	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
1,1-Dichloropropene	ND	455	910	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
cis-1,3-Dichloropropene	ND	455	910	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
trans-1,3-Dichloropropene	ND	455	910	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
Ethylbenzene	ND	228	455	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
Hexachlorobutadiene	ND	910	1820	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
2-Hexanone	ND	4550	9100	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
Isopropylbenzene	ND	455	910	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
4-Isopropyltoluene	ND	455	910	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
Methylene chloride	ND	4550	9100	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
4-Methyl-2-pentanone (MiBK)	ND	4550	9100	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	455	910	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
Naphthalene	9800	910	1820	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
n-Propylbenzene	ND	228	455	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
Styrene	ND	455	910	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
1,1,1,2-Tetrachloroethane	ND	228	455	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
1,1,2,2-Tetrachloroethane	ND	455	910	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
Tetrachloroethene (PCE)	ND	228	455	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
Toluene	ND	455	910	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
1,2,3-Trichlorobenzene	ND	2280	4550	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
1,2,4-Trichlorobenzene	ND	2280	4550	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
1,1,1-Trichloroethane	ND	228	455	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
1,1,2-Trichloroethane	ND	228	455	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
Trichloroethene (TCE)	ND	228	455	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
Frichlorofluoromethane	ND	1820	1820	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
,2,3-Trichloropropane	ND	455	910	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
,2,4-Trimethylbenzene	ND	455	910	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
,3,5-Trimethylbenzene	ND	455	910	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
Vinyl chloride	ND	228	455	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
n,p-Xylene	ND	455	910	ug/kg dry	50	10/21/22 22:44	5035A/8260D	
-Xylene	ND	228	455	ug/kg dry ug/kg dry	50	10/21/22 22:44	5035A/8260D	

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2749 Lockport Road Niagara Falls, NY 14305 Project: Gasco -- Filter Bags

Project Number: 111323
Project Manager: Chip Byrd

Report ID: A2J0599 - 12 02 22 1304

# ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D										
Analyte	Sample Result	Detection Limit	Reporting Limit	Units		Dilution	Date Analyzed	Method Ref.	Notes	
BF-101822-145 (A2J0599-01RE1)				Matrix: Solid Batch: 22J0853				22J0853	V-15	
Surrogate: 1,4-Difluorobenzene (Surr)		Recov	ery: 103 %	Limits: 80-	120 %	1	10/21/22 22:44	5035A/8260D		
Toluene-d8 (Surr)			100 %	80-	120 %	1	10/21/22 22:44	5035A/8260D		
4-Bromofluorobenzene (Surr)			97 %	79-	120 %	1	10/21/22 22:44	5035A/8260D		

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Sevenson Environmental Services, Inc.

Project: Gasco -- Filter Bags
Project Number: 111323

Report ID:

2749 Lockport Road Niagara Falls, NY 14305

Project Manager: Chip Byrd A2J0599 - 12 02 22 1304

# ANALYTICAL SAMPLE RESULTS

	Regulated 10	SEP VOIATILE (	organic Coi	mpounds by EP	-A 1311/δ	126UD		
Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
BF-101822-145 (A2J0599-01)					t	Batch: 22J1147		
Benzene	ND	6.25	12.5	ug/L	50	10/28/22 22:40	1311/8260D	
2-Butanone (MEK)	ND	250	500	ug/L	50	10/28/22 22:40	1311/8260D	
Carbon tetrachloride	ND	25.0	50.0	ug/L	50	10/28/22 22:40	1311/8260D	
Chlorobenzene	ND	12.5	25.0	ug/L	50	10/28/22 22:40	1311/8260D	
Chloroform	92.0	25.0	50.0	ug/L	50	10/28/22 22:40	1311/8260D	
1,4-Dichlorobenzene	ND	12.5	25.0	ug/L	50	10/28/22 22:40	1311/8260D	
1,1-Dichloroethene	ND	12.5	25.0	ug/L	50	10/28/22 22:40	1311/8260D	
1,2-Dichloroethane (EDC)	ND	12.5	25.0	ug/L	50	10/28/22 22:40	1311/8260D	
Tetrachloroethene (PCE)	ND	12.5	25.0	ug/L	50	10/28/22 22:40	1311/8260D	
Trichloroethene (TCE)	ND	12.5	25.0	ug/L	50	10/28/22 22:40	1311/8260D	
Vinyl chloride	ND	12.5	25.0	ug/L	50	10/28/22 22:40	1311/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		Recove	ery: 111 %	Limits: 80-120 %	1	10/28/22 22:40	1311/8260D	-
Toluene-d8 (Surr)			102 %	80-120 %	1	10/28/22 22:40	1311/8260D	
4-Bromofluorobenzene (Surr)			100 %	80-120 %	1	10/28/22 22:40	1311/8260D	

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Report ID: A2J0599 - 12 02 22 1304

# ANALYTICAL SAMPLE RESULTS

Gasco -- Filter Bags

Project:

	Sample	Detection	Reporting			Date		
Analyte	Result	Limit	Limit	Units	Dilution	Analyzed	Method Ref.	Note
BF-101822-145 (A2J0599-01)				Matrix: Sol	id	Batch:	22J1188	
Acenaphthene	ND	4040	8110	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
Acenaphthylene	ND	4040	8110	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
Anthracene	ND	4040	8110	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
Benz(a)anthracene	ND	8110	8110	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
Benzo(a)pyrene	ND	6080	12200	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
Benzo(b)fluoranthene	ND	8110	12200	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
Benzo(k)fluoranthene	ND	6080	12200	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
Benzo(g,h,i)perylene	ND	4040	8110	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
Chrysene	ND	8110	8110	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
Dibenz(a,h)anthracene	ND	4040	8110	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
Fluoranthene	28500	4040	8110	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
Fluorene	40300	4040	8110	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
Indeno(1,2,3-cd)pyrene	ND	4040	8110	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
l-Methylnaphthalene	ND	8110	16200	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
2-Methylnaphthalene	ND	8110	16200	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
Naphthalene	10800	8110	16200	ug/kg dry	200	10/31/22 18:19	EPA 8270E	J
Phenanthrene	57400	4040	8110	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
Pyrene	ND	4040	8110	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
Dibenzofuran	6610	4040	8110	ug/kg dry	200	10/31/22 18:19	EPA 8270E	J
2-Chlorophenol	ND	20300	40400	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
4-Chloro-3-methylphenol	ND	40400	81100	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
2,4-Dichlorophenol	ND	20300	40400	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
2,4-Dimethylphenol	ND	20300	40400	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
2,4-Dinitrophenol	ND	101000	203000	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
4,6-Dinitro-2-methylphenol	ND	101000	203000	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
2-Methylphenol	ND	10100	20300	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
3+4-Methylphenol(s)	ND	10100	20300	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
2-Nitrophenol	ND	40400	81100	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
l-Nitrophenol	ND	40400	81100	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
Pentachlorophenol (PCP)	ND	40400	81100	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
Phenol	ND	8110	16200	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
2,3,4,6-Tetrachlorophenol	ND	20300	40400	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
2,3,5,6-Tetrachlorophenol	ND	20300	40400	ug/kg dry	200	10/31/22 18:19	EPA 8270E	

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Sevenson Environmental Services, Inc. Project: Gasco -- Filter Bags

2749 Lockport RoadProject Number:111323Report ID:Niagara Falls, NY 14305Project Manager:Chip ByrdA2J0599 - 12 02 22 1304

# ANALYTICAL SAMPLE RESULTS

	Sem	nivolatile Orga	anic Compoi	ınds by EPA	8270E			
	Sample	Detection	Reporting	<del></del>	_ <del></del>	Date	<del></del>	
Analyte	Result	Limit	Limit	Units	Dilution	Analyzed	Method Ref.	Notes
BF-101822-145 (A2J0599-01)				Matrix: Soli	id	Batch:	22J1188	
2,4,5-Trichlorophenol	ND	20300	40400	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
Nitrobenzene	ND	40400	81100	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
2,4,6-Trichlorophenol	ND	20300	40400	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
Bis(2-ethylhexyl)phthalate	ND	60800	122000	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
Butyl benzyl phthalate	ND	40400	81100	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
Diethylphthalate	ND	40400	81100	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
Dimethylphthalate	ND	40400	81100	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
Di-n-butylphthalate	ND	40400	81100	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
Di-n-octyl phthalate	ND	40400	81100	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
N-Nitrosodimethylamine	ND	10100	20300	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
N-Nitroso-di-n-propylamine	ND	10100	20300	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
N-Nitrosodiphenylamine	ND	10100	20300	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
Bis(2-Chloroethoxy) methane	ND	10100	20300	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
Bis(2-Chloroethyl) ether	ND	10100	20300	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
2,2'-Oxybis(1-Chloropropane)	ND	10100	20300	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
Hexachlorobenzene	ND	4040	8110	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
Hexachlorobutadiene	ND	10100	20300	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
Hexachlorocyclopentadiene	ND	20300	40400	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
Hexachloroethane	ND	10100	20300	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
2-Chloronaphthalene	ND	4040	8110	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
1,2,4-Trichlorobenzene	ND	10100	20300	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
4-Bromophenyl phenyl ether	ND	10100	20300	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
4-Chlorophenyl phenyl ether	ND	10100	20300	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
Aniline	ND	20300	40400	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
4-Chloroaniline	ND	10100	20300	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
2-Nitroaniline	ND	81100	162000	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
3-Nitroaniline	ND	81100	162000	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
4-Nitroaniline	ND	81100	162000	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
2,4-Dinitrotoluene	ND	40400	81100	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
2,6-Dinitrotoluene	ND	40400	81100	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
Benzoic acid	ND	507000	1010000	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
Benzyl alcohol	ND	20300	40400	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
Isophorone	ND	20300	20300	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
				C G J				

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# Apex Laboratories, LLC

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 -- Filter Bags

Project Number: 111323
Project Manager: Chip Byrd

Report ID: A2J0599 - 12 02 22 1304

# ANALYTICAL SAMPLE RESULTS

	Sen	nivolatile Organ	ic Comp	ounds by EPA 8	270E			
Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
BF-101822-145 (A2J0599-01)				Matrix: Solid	l	Batch:	22J1188	
Azobenzene (1,2-DPH)	ND	10100	20300	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
Bis(2-Ethylhexyl) adipate	ND	101000	203000	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
3,3'-Dichlorobenzidine	ND	81100	162000	ug/kg dry	200	10/31/22 18:19	EPA 8270E	Q-52
1,2-Dinitrobenzene	ND	101000	203000	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
1,3-Dinitrobenzene	ND	101000	203000	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
1,4-Dinitrobenzene	ND	101000	203000	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
Pyridine	ND	20300	40400	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
1,2-Dichlorobenzene	ND	10100	20300	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
1,3-Dichlorobenzene	ND	10100	20300	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
1,4-Dichlorobenzene	ND	10100	20300	ug/kg dry	200	10/31/22 18:19	EPA 8270E	
Surrogate: Nitrobenzene-d5 (Surr)		Recovery	: 68 %	Limits: 37-122 %	200	10/31/22 18:19	EPA 8270E	S-05
2-Fluorobiphenyl (Surr)			51 %	44-120 %	200	10/31/22 18:19	EPA 8270E	S-05
Phenol-d6 (Surr)			5 %	33-122 %	200	10/31/22 18:19	EPA 8270E	S-05
p-Terphenyl-d14 (Surr)			58 %	54-127 %	200	10/31/22 18:19	EPA 8270E	S-05
2-Fluorophenol (Surr)			6 %	35-120 %	200	10/31/22 18:19	EPA 8270E	S-05
2,4,6-Tribromophenol (Surr)			%	39-132 %	200	10/31/22 18:19	EPA 8270E	S-01
BF-101822-145 (A2J0599-01RE1)				Matrix: Solid		Batch:	22J1188	
Carbazole	57300	6080	12200	ug/kg dry	200	11/01/22 14:37	EPA 8270E	

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# **Apex Laboratories, LLC**

6700 S.W. Sandburg Street Tigard, OR 97223 503-718-2323

ORELAP ID: OR100062

Sevenson Environmental Services, Inc.

Project: <u>Gasco -- Filter Bags</u>

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

Report ID: A2J0599 - 12 02 22 1304

# ANALYTICAL SAMPLE RESULTS

	Total Metals by EPA 6020B (ICPMS)											
	Sample	Detection	Reporting			Date						
Analyte	Result	Limit	Limit	Units	Dilution	Analyzed	Method Ref.	Notes				
BF-101822-145 (A2J0599-01)		Matrix: Solid										
Batch: 22J1085												
Arsenic	116000	5390	10800	ug/kg dry	10	10/31/22 22:01	EPA 6020B					
Barium	165000	5390	10800	ug/kg dry	10	10/31/22 22:01	EPA 6020B					
Cadmium	ND	1080	2160	ug/kg dry	10	10/31/22 22:01	EPA 6020B					
Chromium	244000	5390	10800	ug/kg dry	10	10/31/22 22:01	EPA 6020B					
Lead	9990	1080	2160	ug/kg dry	10	10/31/22 22:01	EPA 6020B					
Mercury	ND	431	862	ug/kg dry	10	10/31/22 22:01	EPA 6020B					
Selenium	ND	5390	10800	ug/kg dry	10	10/31/22 22:01	EPA 6020B					
Silver	ND	1080	2160	ug/kg dry	10	10/31/22 22:01	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 -- Filter Bags 2749 Lockport Road Project Number: 111323 Niagara Falls, NY 14305 Project Manager: Chip Byrd

Report ID: A2J0599 - 12 02 22 1304

# ANALYTICAL SAMPLE RESULTS

	TCLP Metals by EPA 6020B (ICPMS)											
Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes				
BF-101822-145 (A2J0599-01)		Matrix: Solid										
Batch: 22J1016												
Arsenic	ND	50.0	100	ug/L	10	10/26/22 20:08	1311/6020B					
Barium	ND	2500	5000	ug/L	10	10/26/22 20:08	1311/6020B					
Cadmium	ND	50.0	100	ug/L	10	10/26/22 20:08	1311/6020B					
Chromium	ND	50.0	100	ug/L	10	10/26/22 20:08	1311/6020B					
Lead	ND	25.0	50.0	ug/L	10	10/26/22 20:08	1311/6020B					
Mercury	ND	3.75	7.00	ug/L	10	10/26/22 20:08	1311/6020B					
Selenium	ND	50.0	100	ug/L	10	10/26/22 20:08	1311/6020B					
Silver	ND	50.0	100	ug/L	10	10/26/22 20:08	1311/6020B					

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6700 S.W. Sandburg Street Tigard, OR 97223 503-718-2323

ORELAP ID: OR100062

Sevenson Environmental Services, Inc.

2749 Lockport RoadProject Number: 111323Niagara Falls, NY 14305Project Manager: Chip Byrd

Report ID: A2J0599 - 12 02 22 1304

# ANALYTICAL SAMPLE RESULTS

Gasco -- Filter Bags

Project:

Soluble Cyanide by UV Digestion/Gas Diffusion/Amperometric Detection													
Sample Detection Reporting Date													
Analyte	Result	Limit	Limit	Units	Dilution	Analyzed	Method Ref.	Notes					
BF-101822-145 (A2J0599-01)				Matrix: So	lid	Batch:	22J1021						
Total Cyanide	16300	2510	5020	ug/kg dry	5	10/26/22 12:51	D7511-12						

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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 -- Filter Bags

Project Number: 111323
Project Manager: Chip Byrd

Report ID: A2J0599 - 12 02 22 1304

# ANALYTICAL SAMPLE RESULTS

	Percent Dry Weight												
Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes					
BF-101822-145 (A2J0599-01)				Matrix: So	olid	Batch:	22J0822						
% Solids	9.64	1.00	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.

2749 Lockport Road Niagara Falls, NY 14305 Project: Gasco -- Filter Bags

Project Number: 111323
Project Manager: Chip Byrd

Report ID: A2J0599 - 12 02 22 1304

# ANALYTICAL SAMPLE RESULTS

TCLP Extraction by EPA 1311													
Sample Detection Reporting Date Analyte Result Limit Limit Units Dilution Analyzed Method Ref. Notes													
BF-101822-145 (A2J0599-01)				Matrix: So	olid	Batch:	22J0915						
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.

Project: Ga

Gasco -- Filter Bags

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

Report ID: A2J0599 - 12 02 22 1304

# QUALITY CONTROL (QC) SAMPLE RESULTS

		Di	esel and/o	r Oil Hyd	rocarbon	s by NW	ГРН-Dx					
Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22J0894 - EPA 3546 (F	uels)						Sol	id				
Blank (22J0894-BLK1)			Prepared	: 10/24/22 (	06:59 Ana	lyzed: 10/24	/22 22:09					
NWTPH-Dx												
Diesel	ND	9090	18200	ug/kg	1							
Oil	ND	18200	36400	ug/kg	1							
Surr: o-Terphenyl (Surr)		Recov	ery: 102 %	Limits: 50	-150 %	Dilı	ution: 1x					
LCS (22J0894-BS1)			Prepared	: 10/24/22 (	06:59 Ana	lyzed: 10/24	/22 22:32					
NWTPH-Dx												
Diesel	115000	10000	20000	ug/kg	1	125000		92	38-132%			
Surr: o-Terphenyl (Surr)		Recov	ery: 102 %	Limits: 50	-150 %	Dilt	ution: 1x					
Duplicate (22J0894-DUP1)			Prepared	: 10/24/22 (	)6:59 Anal	lyzed: 10/24	/22 23:18					
QC Source Sample: Non-SDG (A	2J0559-01)											
Diesel	8970000	196000	391000	ug/kg	20		7810000			14	30%	F-1
Oil	2520000	391000	783000	ug/kg	20		2310000			9	30%	F-1

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6700 S.W. Sandburg Street Tigard, OR 97223 503-718-2323

ORELAP ID: OR100062

Sevenson Environmental Services, Inc.

Project:

Gasco -- Filter Bags

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

Report ID: A2J0599 - 12 02 22 1304

# QUALITY CONTROL (QC) SAMPLE RESULTS

	Gasolin	e Range H	yurocarbo	nis (beni	zene unfol	ign Naph	inalene)	DYNWIP	п-Сх			
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				
Blank (22J0799-BLK1)			Prepared	d: 10/20/22	09:00 Ana	yzed: 10/20	/22 14:10					
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	1670	3330	ug/kg w	vet 50							
Surr: 4-Bromofluorobenzene (Sur)		Reco	very: 99 %	Limits: 5	0-150 %	Dilı	tion: 1x					
1,4-Difluorobenzene (Sur)			98 %	5(	0-150 %		"					
LCS (22J0799-BS2)			Prepared	d: 10/20/22	09:00 Ana	yzed: 10/20	/22 13:43					
NWTPH-Gx (MS)												
Gasoline Range Organics	24000	2500	5000	ug/kg w	vet 50	25000		96	80-120%			
Surr: 4-Bromofluorobenzene (Sur)		Reco	very: 98 %	Limits: 5	0-150 %	Dilı	tion: 1x					
1,4-Difluorobenzene (Sur)			101 %	50	0-150 %		"					
Duplicate (22J0799-DUP1)			Prepared	d: 10/15/22	17:00 Ana	yzed: 10/20	/22 16:25					
QC Source Sample: Non-SDG (A2	J0583-01)											
Gasoline Range Organics	ND	4070	8140	ug/kg d	ry 50		ND				30%	
Surr: 4-Bromofluorobenzene (Sur)		Reco	very: 97 %	Limits: 5	0-150 %	Dilı	ution: 1x					
1,4-Difluorobenzene (Sur)			94 %	50	0-150 %		"					
Duplicate (22J0799-DUP2)			Prepared	d: 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	ry 100		ND				30%	
Surr: 4-Bromofluorobenzene (Sur)		Reco	very: 98 %	Limits: 5	0-150 %	Dilı	ition: 1x					
1,4-Difluorobenzene (Sur)			94 %	50	0-150 %		"					

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# **Apex Laboratories, LLC**

6700 S.W. Sandburg Street Tigard, OR 97223 503-718-2323

ORELAP ID: OR100062

Sevenson Environmental Services, Inc. Project: Gasco -- Filter Bags

2749 Lockport RoadProject Number:111323Report ID:Niagara Falls, NY 14305Project Manager:Chip ByrdA2J0599 - 12 02 22 1304

# QUALITY CONTROL (QC) SAMPLE RESULTS

	Gasolin	ne Range H	ydrocarbo	ons (Ben	zene throu	ıgh 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							Soi	il				
Blank (22J0853-BLK1)			Prepare	d: 10/21/22	11:03 Anal	yzed: 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 %	Dilı	ution: 1x					
1,4-Difluorobenzene (Sur)			96 %	5	0-150 %		"					
LCS (22J0853-BS2)			Prepare	d: 10/21/22	11:03 Anal	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 %	Dilı	ution: 1x					
1,4-Difluorobenzene (Sur)			109 %	5	0-150 %		"					
Duplicate (22J0853-DUP1)			Prepared	d: 10/20/22	18:09 Anal	yzed: 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	lry 50		8210			2	30%	
Surr: 4-Bromofluorobenzene (Sur)		Recov	ery: 100 %	Limits: 5	0-150 %	Dilı	ution: 1x					
1,4-Difluorobenzene (Sur)			96 %	5	0-150 %		"					
Duplicate (22J0853-DUP2)			Prepare	d: 10/18/22	11:45 Anal	yzed: 10/21/	/22 20:28					
QC Source Sample: Non-SDG (A2	J0622-04)											
Gasoline Range Organics	10100	7670	15300	ug/kg d	lry 50		9960			2	30%	
Surr: 4-Bromofluorobenzene (Sur)		Recov	ery: 103 %	Limits: 5	0-150 %	Dilı	ution: 1x					
1,4-Difluorobenzene (Sur)			99 %	5	0-150 %		"					

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# **Apex Laboratories, LLC**

6700 S.W. Sandburg Street Tigard, OR 97223 503-718-2323

ORELAP ID: OR100062

<u>Sevenson Environmental Services, Inc.</u> Project: <u>Gasco -- Filter Bags</u>

 2749 Lockport Road
 Project Number: 111323
 Report ID:

 Niagara Falls, NY 14305
 Project Manager: Chip Byrd
 A2J0599 - 12 02 22 1304

# QUALITY CONTROL (QC) SAMPLE RESULTS

			Volatile Orç	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	1				
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	t 50							
Acrylonitrile	ND	33.3	66.7	ug/kg we	t 50							
Benzene	ND	3.33	6.67	ug/kg we	t 50							
Bromobenzene	ND	8.33	16.7	ug/kg we								
Bromochloromethane	ND	16.7	33.3	ug/kg we								
Bromodichloromethane	ND	16.7	33.3	ug/kg we	t 50							
Bromoform	ND	33.3	66.7	ug/kg we								
Bromomethane	ND	333	333	ug/kg we								
2-Butanone (MEK)	ND	167	333	ug/kg we	t 50							
n-Butylbenzene	ND	16.7	33.3	ug/kg we	t 50							
sec-Butylbenzene	ND	16.7	33.3	ug/kg we	t 50							
tert-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								
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								
4-Chlorotoluene	ND	16.7	33.3	ug/kg we								
Dibromochloromethane	ND	33.3	66.7	ug/kg we								
1,2-Dibromo-3-chloropropane	ND	83.3	167	ug/kg we								
1,2-Dibromoethane (EDB)	ND	16.7	33.3	ug/kg we								
Dibromomethane	ND	16.7	33.3	ug/kg we								
1,2-Dichlorobenzene	ND	8.33	16.7	ug/kg we								
1,3-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								
1,1-Dichloroethane	ND	8.33	16.7	ug/kg we								
1,2-Dichloroethane (EDC)	ND	8.33	16.7	ug/kg we								
1,1-Dichloroethene	ND	8.33	16.7	ug/kg we								
cis-1,2-Dichloroethene	ND	8.33	16.7	ug/kg we								
rans-1,2-Dichloroethene	ND	8.33	16.7	ug/kg we								

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### Apex Laboratories, LLC

6700 S.W. Sandburg Street Tigard, OR 97223 503-718-2323

ORELAP ID: OR100062

Sevenson Environmental Services, Inc. Project: Gasco -- Filter Bags

2749 Lockport RoadProject Number:111323Report ID:Niagara Falls, NY 14305Project Manager:Chip ByrdA2J0599 - 12 02 22 1304

## 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 ND 8.33 16.7 50 1,2-Dichloropropane ug/kg wet ND 16.7 33.3 ug/kg wet 50 1,3-Dichloropropane 2,2-Dichloropropane ND 16.7 33.3 ug/kg wet 50 1,1-Dichloropropene ND 16.7 33.3 ug/kg wet 50 ND 16.7 33.3 50 cis-1,3-Dichloropropene ug/kg wet trans-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 50 333 2-Hexanone ND 167 ug/kg wet 50 Isopropylbenzene ND 16.7 33.3 ug/kg wet 50 ND 4-Isopropyltoluene 16.7 33.3 50 ug/kg wet 333 Methylene chloride ND 167 ug/kg wet 50 ND 333 4-Methyl-2-pentanone (MiBK) 167 ug/kg wet 50 ---Methyl tert-butyl ether (MTBE) ND 16.7 33.3 ug/kg wet 50 ND 33.3 66.7 Naphthalene ug/kg wet 50 n-Propylbenzene ND 8.33 16.7 ug/kg wet 50 ND 16.7 33.3 Styrene ug/kg wet 50 1,1,1,2-Tetrachloroethane ND 8.33 16.7 50 ug/kg wet 1.1.2.2-Tetrachloroethane ND 16.7 33.3 ug/kg wet 50 ------Tetrachloroethene (PCE) ND 8.33 16.7 ug/kg wet 50 Toluene ND 16.7 33.3 ug/kg wet 50 1,2,3-Trichlorobenzene ND 83.3 167 ug/kg wet 50 1,2,4-Trichlorobenzene ND 83.3 167 50 ug/kg wet 1,1,1-Trichloroethane ND 8.33 16.7 50 ug/kg wet 16.7 ND 1,1,2-Trichloroethane 8.33 50 ug/kg wet ---Trichloroethene (TCE) ND 8.33 16.7 ug/kg wet 50 Trichlorofluoromethane ND 33.3 66.7 50 ug/kg wet 1,2,3-Trichloropropane ND 16.7 33.3 ug/kg wet 50 1,2,4-Trimethylbenzene ND 16.7 33.3 50 ug/kg wet 1,3,5-Trimethylbenzene ND 16.7 33.3 ug/kg wet 50 Vinyl chloride ND 8.33 16.7 ug/kg wet 50 m,p-Xylene ND 16.7 33.3 ug/kg wet 50 o-Xylene ND 8.33 16.7 ug/kg wet 50

Limits: 80-120 %

Recovery: 102 %

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Surr: 1,4-Difluorobenzene (Surr)

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.

Dilution: 1x

Daum lum



# **Apex Laboratories, LLC**

6700 S.W. Sandburg Street Tigard, OR 97223 503-718-2323

ORELAP ID: OR100062

Sevenson Environmental Services, Inc. Project: Gasco -- Filter Bags

 2749 Lockport Road
 Project Number:
 111323
 Report ID:

 Niagara Falls, NY 14305
 Project Manager:
 Chip Byrd
 A2J0599 - 12 02 22 1304

# 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	I				
Blank (22J0799-BLK1)			Prepared	d: 10/20/22 0	9:00 Ana	lyzed: 10/20	/22 14:10					
Surr: Toluene-d8 (Surr)		Reco	very: 102 %	Limits: 80-	120 %	Dilt	ution: 1x					
4-Bromofluorobenzene (Surr)			101 %	79-	120 %		"					
LCS (22J0799-BS1)			Prepared	d: 10/20/22 0	9:00 Ana	lyzed: 10/20	/22 13:08					
5035A/8260D												
Acetone	2040	500	1000	ug/kg we	t 50	2000		102	80-120%			
Acrylonitrile	1030	50.0	100	ug/kg we	t 50	1000		103	80-120%			
Benzene	1000	5.00	10.0	ug/kg we	t 50	1000		100	80-120%			
Bromobenzene	990	12.5	25.0	ug/kg we	t 50	1000		99	80-120%			
Bromochloromethane	1070	25.0	50.0	ug/kg we	t 50	1000		107	80-120%			
Bromodichloromethane	1110	25.0	50.0	ug/kg we	t 50	1000		111	80-120%			
Bromoform	1220	50.0	100	ug/kg we	t 50	1000		122	80-120%			Q-
Bromomethane	1220	500	500	ug/kg we	t 50	1000		122	80-120%			Q-
2-Butanone (MEK)	1940	250	500	ug/kg we	t 50	2000		97	80-120%			
n-Butylbenzene	994	25.0	50.0	ug/kg we	t 50	1000		99	80-120%			
sec-Butylbenzene	1010	25.0	50.0	ug/kg we	t 50	1000		101	80-120%			
tert-Butylbenzene	970	25.0	50.0	ug/kg we	t 50	1000		97	80-120%			
Carbon disulfide	1060	250	500	ug/kg we	t 50	1000		106	80-120%			
Carbon tetrachloride	1150	25.0	50.0	ug/kg we	t 50	1000		115	80-120%			
Chlorobenzene	973	12.5	25.0	ug/kg we	t 50	1000		97	80-120%			
Chloroethane	1080	250	500	ug/kg we	t 50	1000		108	80-120%			
Chloroform	1040	25.0	50.0	ug/kg we	t 50	1000		104	80-120%			
Chloromethane	1040	125	250	ug/kg we	t 50	1000		104	80-120%			
2-Chlorotoluene	1000	25.0	50.0	ug/kg we	t 50	1000		100	80-120%			
4-Chlorotoluene	988	25.0	50.0	ug/kg we	t 50	1000		99	80-120%			
Dibromochloromethane	1130	50.0	100	ug/kg we	t 50	1000		113	80-120%			
1,2-Dibromo-3-chloropropane	1040	125	250	ug/kg we	t 50	1000		104	80-120%			
1,2-Dibromoethane (EDB)	990	25.0	50.0	ug/kg we	t 50	1000		99	80-120%			
Dibromomethane	1090	25.0	50.0	ug/kg we		1000		109	80-120%			
1,2-Dichlorobenzene	980	12.5	25.0	ug/kg we		1000		98	80-120%			
1,3-Dichlorobenzene	1010	12.5	25.0	ug/kg we		1000		101	80-120%			
1,4-Dichlorobenzene	969	12.5	25.0	ug/kg we		1000		97	80-120%			
Dichlorodifluoromethane	1050	50.0	100	ug/kg we		1000		105	80-120%			ICV-
,1-Dichloroethane	1050	12.5	25.0	ug/kg we		1000		105	80-120%			

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### Apex Laboratories, LLC

6700 S.W. Sandburg Street Tigard, OR 97223 503-718-2323

ORELAP ID: OR100062

Sevenson Environmental Services, Inc. Project: Gasco -- Filter Bags

2749 Lockport RoadProject Number:111323Report ID:Niagara Falls, NY 14305Project Manager:Chip ByrdA2J0599 - 12 02 22 1304

## QUALITY CONTROL (QC) SAMPLE RESULTS

#### Volatile Organic Compounds by EPA 8260D Detection % REC RPD Reporting Spike Source Analyte Result Limit Units Dilution Result % REC RPD Limit Amount Limits Limit Notes Batch 22J0799 - EPA 5035A Soil LCS (22J0799-BS1) Prepared: 10/20/22 09:00 Analyzed: 10/20/22 13:08 1,2-Dichloroethane (EDC) 1060 12.5 25.0 ug/kg wet 50 1000 106 80-120% 1,1-Dichloroethene 1090 12.5 25.0 ug/kg wet 50 1000 109 80-120% ---------1000 cis-1,2-Dichloroethene 1070 12.5 25.0 ug/kg wet 50 107 80-120% trans-1,2-Dichloroethene 1050 12.5 25.0 ug/kg wet 50 1000 105 80-120% 1000 107 1070 12.5 25.0 50 80-120% 1,2-Dichloropropane ug/kg wet 1,3-Dichloropropane 1010 25.0 50.0 ug/kg wet 50 1000 101 80-120% 80-120% 2,2-Dichloropropane 1110 25.0 50.0 ug/kg wet 50 1000 111 1000 1,1-Dichloropropene 1020 25.0 50.0 ug/kg wet 50 102 80-120% 1030 25.0 50.0 1000 103 cis-1,3-Dichloropropene ug/kg wet 50 80-120% trans-1,3-Dichloropropene 1060 25.0 50.0 ug/kg wet 50 1000 106 80-120% Ethylbenzene 1000 98 980 12.5 25.0 ug/kg wet 50 80-120% 50.0 100 Hexachlorobutadiene 1040 ug/kg wet 50 1000 104 80-120% 1900 250 500 2000 95 2-Hexanone ug/kg wet 50 ---80-120% ---Isopropylbenzene 990 25.0 50.0 ug/kg wet 50 1000 99 80-120% 976 25.0 50.0 50 1000 98 80-120% 4-Isopropyltoluene ug/kg wet Methylene chloride 1060 250 500 ug/kg wet 50 1000 106 80-120% 1860 250 500 2000 93 4-Methyl-2-pentanone (MiBK) ug/kg wet 50 80-120% Methyl tert-butyl ether (MTBE) 956 25.0 50.0 50 1000 96 80-120% ug/kg wet Naphthalene 954 50.0 100 50 1000 95 80-120% ug/kg wet -----n-Propylbenzene 984 12.5 25.0 ug/kg wet 50 1000 98 80-120% 978 25.0 50.0 50 1000 98 80-120% Styrene ug/kg wet 1,1,1,2-Tetrachloroethane 1100 12.5 25.0 ug/kg wet 50 1000 110 80-120% 1,1,2,2-Tetrachloroethane 980 25.0 50.0 ug/kg wet 50 1000 98 80-120% Tetrachloroethene (PCE) 1010 12.5 25.0 ug/kg wet 50 1000 101 80-120% Toluene 971 25.0 50.0 1000 97 ug/kg wet 50 80-120% ------1,2,3-Trichlorobenzene 1010 125 250 ug/kg wet 50 1000 101 80-120% 1,2,4-Trichlorobenzene 989 125 250 50 1000 99 80-120% ug/kg wet ---1,1,1-Trichloroethane 1070 12.5 25.0 ug/kg wet 50 1000 107 80-120% 1.1.2-Trichloroethane 1000 12.5 25.0 50 1000 100 80-120% ug/kg wet Trichloroethene (TCE) 1100 12.5 25.0 ug/kg wet 50 1000 110 80-120% Trichlorofluoromethane 1100 50.0 100 50 1000 110 80-120% ug/kg wet ---1,2,3-Trichloropropane 1030 25.0 50.0 ug/kg wet 50 1000 103 80-120% 1,2,4-Trimethylbenzene 1000 25.0 50.0 ug/kg wet 50 1000 100 80-120% 1,3,5-Trimethylbenzene 995 25.0 50.0 ug/kg wet 50 1000 100 80-120%

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# **Apex Laboratories, LLC**

6700 S.W. Sandburg Street Tigard, OR 97223 503-718-2323

ORELAP ID: OR100062

Sevenson Environmental Services, Inc. Project: Gasco -- Filter Bags

2749 Lockport RoadProject Number:111323Report ID:Niagara Falls, NY 14305Project Manager:Chip ByrdA2J0599 - 12 02 22 1304

# QUALITY CONTROL (QC) SAMPLE RESULTS

			Volatile Or	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							So	il				
LCS (22J0799-BS1)			Prepared	: 10/20/22 0	9:00 Anal	yzed: 10/20	/22 13:08					
Vinyl chloride	1090	12.5	25.0	ug/kg wet	t 50	1000		109	80-120%			
n,p-Xylene	1930	25.0	50.0	ug/kg wet	t 50	2000		96	80-120%			
o-Xylene	940	12.5	25.0	ug/kg wet	t 50	1000		94	80-120%			
Surr: 1,4-Difluorobenzene (Surr)		Reco	very: 104 %	Limits: 80-	120 %	Dilı	tion: 1x					
Toluene-d8 (Surr)			100 %	80-	120 %		"					
4-Bromofluorobenzene (Surr)			98 %	79	120 %		"					
Ouplicate (22J0799-DUP1)			Prepared	: 10/15/22 1	7:00 Anal	yzed: 10/20	/22 16:25					
OC Source Sample: Non-SDG (A2	J0583-01)											
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%	
-Butanone (MEK)	ND	407	814	ug/kg dry	50		ND				30%	
-Butylbenzene	ND	40.7	81.4	ug/kg dry	50		ND				30%	
ec-Butylbenzene	ND	40.7	81.4	ug/kg dry	50		ND				30%	
ert-Butylbenzene	ND	40.7	81.4	ug/kg dry	50		ND				30%	
Carbon disulfide	ND	407	814	ug/kg dry			ND				30%	
Carbon tetrachloride	ND	40.7	81.4	ug/kg dry	50		ND				30%	
Chlorobenzene	ND	20.4	40.7	ug/kg dry	50		ND				30%	
Chloroethane	ND	407	814	ug/kg dry	50		ND				30%	
Chloroform	ND	40.7	81.4	ug/kg dry	50		ND				30%	
Chloromethane	ND	204	407	ug/kg dry			ND				30%	
-Chlorotoluene	ND	40.7	81.4	ug/kg dry	50		ND				30%	
-Chlorotoluene	ND	40.7	81.4	ug/kg dry	50		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	50		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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# **Apex Laboratories, LLC**

6700 S.W. Sandburg Street Tigard, OR 97223 503-718-2323

ORELAP ID: OR100062

Sevenson Environmental Services, Inc. Project: Gasco -- Filter Bags

2749 Lockport RoadProject Number:111323Report ID:Niagara Falls, NY 14305Project Manager:Chip ByrdA2J0599 - 12 02 22 1304

# QUALITY CONTROL (QC) SAMPLE RESULTS

			Volatile Orç	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	l				
Duplicate (22J0799-DUP1)			Prepared	: 10/15/22 1	7:00 Anal	lyzed: 10/20	/22 16:25					
QC Source Sample: Non-SDG (A2	J0583-01)											
1,3-Dichlorobenzene	ND	20.4	40.7	ug/kg dry	y 50		ND				30%	
1,4-Dichlorobenzene	ND	20.4	40.7	ug/kg dry	y 50		ND				30%	
Dichlorodifluoromethane	ND	81.4	163	ug/kg dry	y 50		ND				30%	
,1-Dichloroethane	ND	20.4	40.7	ug/kg dry	y 50		ND				30%	
,2-Dichloroethane (EDC)	ND	20.4	40.7	ug/kg dry	y 50		ND				30%	
,1-Dichloroethene	ND	20.4	40.7	ug/kg dry	y 50		ND				30%	
ris-1,2-Dichloroethene	ND	20.4	40.7	ug/kg dry	y 50		ND				30%	
rans-1,2-Dichloroethene	ND	20.4	40.7	ug/kg dry	y 50		ND				30%	
,2-Dichloropropane	ND	20.4	40.7	ug/kg dry	y 50		ND				30%	
,3-Dichloropropane	ND	40.7	81.4	ug/kg dry	y 50		ND				30%	
,2-Dichloropropane	ND	40.7	81.4	ug/kg dry	y 50		ND				30%	
,1-Dichloropropene	ND	40.7	81.4	ug/kg dry	y 50		ND				30%	
is-1,3-Dichloropropene	ND	40.7	81.4	ug/kg dry	y 50		ND				30%	
rans-1,3-Dichloropropene	ND	40.7	81.4	ug/kg dry	y 50		ND				30%	
Ethylbenzene	ND	20.4	40.7	ug/kg dry	y 50		ND				30%	
Iexachlorobutadiene	ND	81.4	163	ug/kg dry	y 50		ND				30%	
2-Hexanone	ND	407	814	ug/kg dry	y 50		ND				30%	
sopropylbenzene	ND	40.7	81.4	ug/kg dry	y 50		ND				30%	
l-Isopropyltoluene	ND	40.7	81.4	ug/kg dry	y 50		ND				30%	
Methylene chloride	ND	407	814	ug/kg dry			ND				30%	
l-Methyl-2-pentanone (MiBK)	ND	407	814	ug/kg dry	y 50		ND				30%	
Methyl tert-butyl ether (MTBE)	ND	40.7	81.4	ug/kg dry			ND				30%	
Vaphthalene	ND	81.4	163	ug/kg dry	y 50		ND				30%	
-Propylbenzene	ND	20.4	40.7	ug/kg dry	y 50		ND				30%	
styrene	ND	40.7	81.4	ug/kg dry	y 50		ND				30%	
,1,1,2-Tetrachloroethane	ND	20.4	40.7	ug/kg dry	y 50		ND				30%	
,1,2,2-Tetrachloroethane	ND	40.7	81.4	ug/kg dry	y 50		ND				30%	
etrachloroethene (PCE)	ND	20.4	40.7	ug/kg dry	y 50		ND				30%	
oluene	ND	40.7	81.4	ug/kg dry	y 50		ND				30%	
,2,3-Trichlorobenzene	ND	204	407	ug/kg dry	y 50		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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# **Apex Laboratories, LLC**

6700 S.W. Sandburg Street Tigard, OR 97223 503-718-2323

ORELAP ID: OR100062

Sevenson Environmental Services, Inc. Project: Gasco -- Filter Bags

2749 Lockport RoadProject Number:111323Report ID:Niagara Falls, NY 14305Project Manager:Chip ByrdA2J0599 - 12 02 22 1304

# 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 22J0799 - EPA 5035A							Soi	I						
Duplicate (22J0799-DUP1)			Prepared	d: 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%			
n,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)		Recov	very: 101 %	Limits: 80-	120 %	Dilı	ution: 1x							
Toluene-d8 (Surr)			100 %		120 %		"							
4-Bromofluorobenzene (Surr)			102 %		120 %		"							
QC Source Sample: Non-SDG (A2														
Acetone	ND	1370	2740	ug/kg dry	100		ND				30%			
Acrylonitrile	ND	137	274	ug/kg dry	100		ND				30%			
Benzene	37.1	13.7	27.4	ug/kg dry	100		38.4			4	30%			
Bromobenzene	ND	34.3	68.6	ug/kg dry	100		ND				30%			
Bromochloromethane	ND	68.6	137	ug/kg dry	100		ND				30%			
Bromodichloromethane	ND	68.6	137	ug/kg dry	100		ND				30%			
Bromoform	ND	137	274	ug/kg dry	100		ND				30%			
Bromomethane	ND	1370	1370	ug/kg dry	100		ND				30%			
2-Butanone (MEK)	ND	686	1370	ug/kg dry	100		ND				30%			
n-Butylbenzene	ND	68.6	137	ug/kg dry	100		ND				30%			
sec-Butylbenzene	ND	68.6	137	ug/kg dry	100		ND				30%			
ert-Butylbenzene	ND	68.6	137	ug/kg dry	100		ND				30%			
Carbon disulfide	ND	686	1370	ug/kg dry	100		ND				30%			
Carbon tetrachloride	ND	68.6	137	ug/kg dry	100		ND				30%			
Chlorobenzene	ND	34.3	68.6	ug/kg dry	100		ND				30%			
Chloroethane	ND	686	1370	ug/kg dry	100		ND				30%			
Chloroform	ND	68.6	137	ug/kg dry	100		ND				30%			
Chloromethane	ND	343	686	ug/kg dry	100		ND				30%			
2-Chlorotoluene	ND	68.6	137	ug/kg dry	100		ND				30%			

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### Apex Laboratories, LLC

6700 S.W. Sandburg Street Tigard, OR 97223 503-718-2323

ORELAP ID: OR100062

Sevenson Environmental Services, Inc. Project: Gasco -- Filter Bags

2749 Lockport RoadProject Number:111323Report ID:Niagara Falls, NY 14305Project Manager:Chip ByrdA2J0599 - 12 02 22 1304

## 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 22J0799 - EPA 5035A Soil Duplicate (22J0799-DUP2) Prepared: 10/19/22 15:20 Analyzed: 10/20/22 20:55 V-15 QC Source Sample: Non-SDG (A2J0603-01) 4-Chlorotoluene ND 68.6 137 100 ND 30% ug/kg dry ND 274 100 Dibromochloromethane 137 ug/kg dry ND 30% 1,2-Dibromo-3-chloropropane ND 343 686 ug/kg dry 100 ND 30% 1,2-Dibromoethane (EDB) ND 68.6 137 ug/kg dry 100 ND 30% Dibromomethane ND 68.6 137 ug/kg dry 100 ND 30% ---ND 1,2-Dichlorobenzene 34.3 68.6 ug/kg dry 100 ND 30% 1,3-Dichlorobenzene ND 34.3 68.6100 ND 30% ug/kg dry ND ND 30% 1,4-Dichlorobenzene 34.3 68.6 ug/kg dry 100 Dichlorodifluoromethane ND 137 274 ug/kg dry 100 ND 30% 1,1-Dichloroethane ND 34.3 68.6 ug/kg dry 100 ND 30% 1,2-Dichloroethane (EDC) ND 34.3 68.6 ug/kg dry 100 ND 30% 1,1-Dichloroethene ND 34.3 68.6 100 ND 30% ug/kg dry cis-1,2-Dichloroethene ND 34.3 68.6ug/kg dry 100 ND 30% ND 34.3 100 30% trans-1,2-Dichloroethene 68.6 ug/kg dry ND 1,2-Dichloropropane ND 34.3 68.6 ug/kg dry 100 ND 30% 1,3-Dichloropropane ND 68.6 137 ug/kg dry 100 ND \_\_\_ 30% 2,2-Dichloropropane ND 68.6 137 ug/kg dry 100 ND 30% ND 137 100 30% 1,1-Dichloropropene 68.6 ND ug/kg dry ---ND 137 cis-1,3-Dichloropropene 68.6 ug/kg dry 100 ND 30% 137 trans-1,3-Dichloropropene ND 68.6 100 ND 30% ug/kg dry ND 34.3 68.6 Ethylbenzene ug/kg dry 100 ND 30% Hexachlorobutadiene ND 137 274 ug/kg dry 100 ND ---30% 2-Hexanone ND 686 1370 ug/kg dry 100 ND 30% ND ND 30% Isopropylbenzene 68.6 137 ug/kg dry 100 ND 68.6 137 30% 4-Isopropyltoluene ug/kg dry 100 ND ND 686 1370 100 ND 30% Methylene chloride ug/kg dry 4-Methyl-2-pentanone (MiBK) ND 686 1370 100 ND 30% ug/kg dry Methyl tert-butyl ether (MTBE) ND 68.6 137 ug/kg dry 100 ND 30% Naphthalene ND 137 274 ug/kg dry 100 ND 30% 79.6 34.3 68.6 100 2 30% n-Propylbenzene ug/kg dry 81.0 Styrene ND 68.6 137 100 ND 30% ug/kg dry ND 34.3 68.6 100 ND 30% 1.1.1.2-Tetrachloroethane ug/kg dry 1,1,2,2-Tetrachloroethane ND 68.6 137 ug/kg dry 100 ND 30%

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# **Apex Laboratories, LLC**

6700 S.W. Sandburg Street Tigard, OR 97223 503-718-2323

ORELAP ID: OR100062

<u>Sevenson Environmental Services, Inc.</u> Project: <u>Gasco -- Filter Bags</u>

 2749 Lockport Road
 Project Number:
 111323
 Report ID:

 Niagara Falls, NY 14305
 Project Manager:
 Chip Byrd
 A2J0599 - 12 02 22 1304

# QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D  Detection Reporting Spike Source % REC RPD													
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					
Duplicate (22J0799-DUP2)			Prepared	1: 10/19/22 1	5:20 Ana	lyzed: 10/20	/22 20:55					V-15	
QC Source Sample: Non-SDG (A2	J0603-01)												
Tetrachloroethene (PCE)	ND	34.3	68.6	ug/kg dry	100		ND				30%		
Toluene	ND	68.6	137	ug/kg dry	100		ND				30%		
1,2,3-Trichlorobenzene	ND	343	686	ug/kg dry	100		ND				30%		
1,2,4-Trichlorobenzene	ND	343	686	ug/kg dry	100		ND				30%		
1,1,1-Trichloroethane	ND	34.3	68.6	ug/kg dry	100		ND				30%		
1,1,2-Trichloroethane	ND	34.3	68.6	ug/kg dry	y 100		ND				30%		
Trichloroethene (TCE)	ND	34.3	68.6	ug/kg dry	100		ND				30%		
Trichlorofluoromethane	ND	137	274	ug/kg dry	y 100		ND				30%		
1,2,3-Trichloropropane	ND	68.6	137	ug/kg dry	y 100		ND				30%		
1,2,4-Trimethylbenzene	ND	68.6	137	ug/kg dry	100		ND				30%		
1,3,5-Trimethylbenzene	ND	68.6	137	ug/kg dry	100		ND				30%		
Vinyl chloride	ND	34.3	68.6	ug/kg dry	100		ND				30%		
m,p-Xylene	ND	68.6	137	ug/kg dry	100		ND				30%		
o-Xylene	ND	34.3	68.6	ug/kg dry	100		ND				30%		
Surr: 1,4-Difluorobenzene (Surr)		Recov	very: 100 %	Limits: 80-	120 %	Dilı	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	952	1900	ug/kg we	t 200	19000	ND	93	65-134%				
Benzene	22500	95.2	190	ug/kg we	t 200	19000	4030	97	77-121%				
Bromobenzene	19200	238	476	ug/kg we	t 200	19000	ND	101	78-121%				
Bromochloromethane	17900	476	952	ug/kg we	t 200	19000	ND	94	78-125%				
Bromodichloromethane	19700	476	952	ug/kg we	t 200	19000	ND	104	75-127%				
Bromoform	22000	952	1900	ug/kg we		19000	ND	115	67-132%			Q-54	
Bromomethane	24800	9520	9520	ug/kg we		19000	ND	130	53-143%			Q-54	
2-Butanone (MEK)	37100	4760	9520	ug/kg we		38100	ND	97	51-148%				
n-Butylbenzene	57000	476	952	ug/kg we		19000	33800	122	70-128%				
sec-Butylbenzene	49300	476	952	ug/kg we		19000	27200	116	73-126%				
tert-Butylbenzene	21000	476	952	ug/kg we		19000	ND	110	73-125%				

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### Apex Laboratories, LLC

6700 S.W. Sandburg Street Tigard, OR 97223 503-718-2323

ORELAP ID: OR100062

Sevenson Environmental Services, Inc. Project: Gasco -- Filter Bags

2749 Lockport RoadProject Number:111323Report ID:Niagara Falls, NY 14305Project Manager:Chip ByrdA2J0599 - 12 02 22 1304

## QUALITY CONTROL (QC) SAMPLE RESULTS

#### Volatile Organic Compounds by EPA 8260D Detection % REC RPD Reporting Spike Source Analyte Result Units Dilution % REC RPD Limit Limit Amount Result Limits Limit Notes Batch 22J0799 - EPA 5035A Soil Matrix Spike (22J0799-MS1) Prepared: 10/19/22 16:25 Analyzed: 10/21/22 00:04 V-16 QC Source Sample: Non-SDG (A2J0608-04) Carbon disulfide 22400 4760 9520 ug/kg wet 200 19000 ND 118 63-132% 476 23200 952 19000 Carbon tetrachloride ug/kg wet 200 ND 122 70-135% Chlorobenzene 18800 238 476 ug/kg wet 200 19000 ND 99 79-120% Chloroethane 23000 4760 9520 ug/kg wet 200 19000 ND 121 59-139% Chloroform 19200 476 952 200 19000 ND 101 78-123% ug/kg wet 4760 19000 ND 95 Chloromethane 18200 2380 ug/kg wet 200 50-136% 2-Chlorotoluene 21300 476 952 ug/kg wet 200 19000 ND 106 75-122% 476 952 19000 ND 101 4-Chlorotoluene 19200 ug/kg wet 200 72-124% Dibromochloromethane 20700 952 1900 ug/kg wet 200 19000 ND 109 74-126% 1,2-Dibromo-3-chloropropane 21500 2380 4760 ug/kg wet 200 19000 ND 113 61-132% 1,2-Dibromoethane (EDB) 19300 476 952 ug/kg wet 200 19000 ND 101 78-122% 952 19800 476 200 19000 ND 104 78-125% Dibromomethane ug/kg wet 19000 1,2-Dichlorobenzene 22100 238 476 ug/kg wet 200 3110 100 78-121% 19500 238 476 200 19000 ND 103 77-121% 1,3-Dichlorobenzene ug/kg wet 1,4-Dichlorobenzene 18700 238 476 ug/kg wet 200 19000 ND 98 75-120% ICV-01 Dichlorodifluoromethane 22700 952 1900 ug/kg wet 200 19000 ND 119 29-149% \_\_\_ 1,1-Dichloroethane 18800 238 476 ug/kg wet 200 19000 ND 99 76-125% 238 476 200 19000 ND 103 73-128% 1,2-Dichloroethane (EDC) 19700 ug/kg wet 19000 ND 70-131% 1,1-Dichloroethene 22900 238 476 ug/kg wet 200 120 238 476 cis-1,2-Dichloroethene 19400 ug/kg wet 200 19000 ND 102 77-123% trans-1,2-Dichloroethene 19000 ND 102 74-125% 19500 238 476 ug/kg wet 200 1,2-Dichloropropane 19000 238 476 ug/kg wet 200 19000 ND 100 76-123% 1,3-Dichloropropane 18800 476 952 ug/kg wet 200 19000 ND 99 77-121% 476 952 19000 ND 95 67-133% 2,2-Dichloropropane 18100 ug/kg wet 200 476 952 ND 105 76-125% 1,1-Dichloropropene 20000 ug/kg wet 200 19000 952 18300 476 200 19000 ND 96 74-126% cis-1,3-Dichloropropene ug/kg wet trans-1,3-Dichloropropene 476 952 200 19000 ND 97 71-130% 18600 ug/kg wet Ethylbenzene 94 76-122% 106000 238 476 ug/kg wet 200 19000 88500 Hexachlorobutadiene 33500 952 1900 ug/kg wet 200 19000 ND 176 61-135% Q-01 2-Hexanone 4760 9520 200 38100 ND 92 35100 ug/kg wet 53-145% Isopropylbenzene 33300 476 952 ug/kg wet 200 19000 12400 110 68-134% 476 952 8800 4-Isopropyltoluene 32900 200 19000 127 73-127% ug/kg wet Methylene chloride 19600 4760 9520 ug/kg wet 200 19000 ND 103 70-128%

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### Apex Laboratories, LLC

6700 S.W. Sandburg Street Tigard, OR 97223 503-718-2323

ORELAP ID: OR100062

Sevenson Environmental Services, Inc. Project: Gasco -- Filter Bags

2749 Lockport RoadProject Number: 111323Report ID:Niagara Falls, NY 14305Project Manager: Chip ByrdA2J0599 - 12 02 22 1304

## **QUALITY CONTROL (QC) SAMPLE RESULTS**

#### Volatile Organic Compounds by EPA 8260D Detection % REC RPD Reporting Spike Source Analyte Result Units Dilution % REC RPD Limit Limit Amount Result Limits Limit Notes Batch 22J0799 - EPA 5035A Soil Matrix Spike (22J0799-MS1) Prepared: 10/19/22 16:25 Analyzed: 10/21/22 00:04 V-16 QC Source Sample: Non-SDG (A2J0608-04) 4-Methyl-2-pentanone (MiBK) 38600 4760 9520 ug/kg wet 200 38100 ND 86 65-135% 476 Methyl tert-butyl ether (MTBE) 952 19000 ND 95 18200 ug/kg wet 200 73-125% Naphthalene 161000 952 1900 ug/kg wet 200 19000 139000 113 62-129% n-Propylbenzene 81400 238 476 ug/kg wet 200 19000 62100 102 73-125% 20800 476 952 ug/kg wet 200 19000 ND 106 76-124% Styrene 1,1,1,2-Tetrachloroethane 238 19000 78-125% 20800 476 ug/kg wet 200 ND 109 10500 1,1,2,2-Tetrachloroethane 17000 10500 ug/kg wet 200 19000 ND 90 70-124% Tetrachloroethene (PCE) 476 19000 73-128% 21100 238 ug/kg wet 200 ND 111 E, Q-03 Toluene 201000 476 952 ug/kg wet 200 19000 188000 72 77-121% 1,2,3-Trichlorobenzene 23400 2380 4760 ug/kg wet 200 19000 ND 123 66-130% 1,2,4-Trichlorobenzene 23000 2380 4760 ug/kg wet 200 19000 ND 121 67-129% 1,1,1-Trichloroethane 238 476 200 19000 ND 73-130% 21100 ug/kg wet 111 19000 1,1,2-Trichloroethane 19200 238 476 ug/kg wet 200 ND 96 78-121% Trichloroethene (TCE) 238 476 200 19000 ND 113 77-123% 21500 ug/kg wet 952 1900 Trichlorofluoromethane 19100 ug/kg wet 200 19000 ND 100 62-140% 1,2,3-Trichloropropane 20900 476 952 ug/kg wet 200 19000 ND 103 73-125% \_\_\_ 1,2,4-Trimethylbenzene 465000 476 952 ug/kg wet 200 19000 452000 68 75-123% E, Q-03 476 952 200 19000 1,3,5-Trimethylbenzene 133000 ug/kg wet 111000 115 73-124% Vinyl chloride 238 476 19000 ND 56-135% 22100 ug/kg wet 200 116 Е 476 952 m,p-Xylene 419000 ug/kg wet 200 38100 384000 92 77-124% 177000 238 19000 162000 77-123% o-Xylene ug/kg wet 200 Surr: 1,4-Difluorobenzene (Surr) Recovery: 101 % Limits: 80-120 % Dilution: 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. Project: Gasco -- Filter Bags

2749 Lockport RoadProject Number:111323Report ID:Niagara Falls, NY 14305Project Manager:Chip ByrdA2J0599 - 12 02 22 1304

## QUALITY CONTROL (QC) SAMPLE RESULTS

#### Volatile Organic Compounds by EPA 8260D Detection % REC RPD Reporting Spike Source Analyte Result Units Dilution % REC RPD Limit 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 5035A/8260D ND 333 ug/kg wet 50 Acetone ND 33.3 66.7 50 Acrylonitrile ug/kg wet Benzene ND 3.33 6.67 ug/kg wet 50 Bromobenzene ND 8.33 16.7 ug/kg wet 50 Bromochloromethane ND 16.7 33.3 50 ug/kg wet ND Bromodichloromethane 16.7 33.3 ug/kg wet 50 Bromoform ND 33.3 ug/kg wet 50 66.7 333 333 Bromomethane ND ug/kg wet 50 2-Butanone (MEK) ND 167 333 ug/kg wet 50 n-Butylbenzene ND 16.7 33.3 50 ug/kg wet sec-Butylbenzene ND 16.7 33.3 ug/kg wet 50 ND 33.3 tert-Butylbenzene 16.7 50 ug/kg wet ---Carbon disulfide ND 167 333 ug/kg wet 50 Carbon tetrachloride ND 33.3 50 16.7 ug/kg wet Chlorobenzene ND 8.33 16.7 ug/kg wet 50 Chloroethane ND 167 333 ug/kg wet 50 ---Chloroform ND 16.7 33.3 ug/kg wet 50 ND 83.3 167 Chloromethane ug/kg wet 50 2-Chlorotoluene ND 16.7 33.3 ug/kg wet 50 4-Chlorotoluene ND 16.7 33.3 ug/kg wet 50 Dibromochloromethane ND 33.3 66.7 ug/kg wet 50 1,2-Dibromo-3-chloropropane ND 83.3 167 ug/kg wet 50 1,2-Dibromoethane (EDB) ND 16.7 33.3 ug/kg wet 50 Dibromomethane ND 16.7 33.3 ug/kg wet 50 1,2-Dichlorobenzene ND 8.33 16.7 ug/kg wet 50 1,3-Dichlorobenzene ND 8.33 16.7 ug/kg wet 50 1,4-Dichlorobenzene ND 8.33 16.7 ug/kg wet 50 Dichlorodifluoromethane ND 33.3 66.7 ug/kg wet 50 ---ND 8.33 1,1-Dichloroethane 16.7 ug/kg wet 50 ug/kg wet 1,2-Dichloroethane (EDC) ND 8.33 16.7 50 1,1-Dichloroethene ND 50 8.33 16.7 ug/kg wet cis-1,2-Dichloroethene ND 8.33 16.7 ug/kg wet 50 ND 8.33 16.7 trans-1,2-Dichloroethene ug/kg wet 50

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ORELAP ID: OR100062

Sevenson Environmental Services, Inc. Project: Gasco -- Filter Bags

2749 Lockport RoadProject Number:111323Report ID:Niagara Falls, NY 14305Project Manager:Chip ByrdA2J0599 - 12 02 22 1304

### 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 22J0853 - EPA 5035A Soil Blank (22J0853-BLK1) Prepared: 10/21/22 11:03 Analyzed: 10/21/22 15:58 ND 8.33 16.7 50 1,2-Dichloropropane ug/kg wet ND 16.7 33.3 ug/kg wet 50 1,3-Dichloropropane 2,2-Dichloropropane ND 16.7 33.3 ug/kg wet 50 1,1-Dichloropropene ND 16.7 33.3 ug/kg wet 50 ND 16.7 33.3 50 cis-1,3-Dichloropropene ug/kg wet trans-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 50 333 2-Hexanone ND 167 ug/kg wet 50 Isopropylbenzene ND 16.7 33.3 ug/kg wet 50 ND 4-Isopropyltoluene 16.7 33.3 50 ug/kg wet 333 Methylene chloride ND 167 ug/kg wet 50 ND 333 4-Methyl-2-pentanone (MiBK) 167 ug/kg wet 50 ---Methyl tert-butyl ether (MTBE) ND 16.7 33.3 ug/kg wet 50 ND 33.3 66.7 Naphthalene ug/kg wet 50 n-Propylbenzene ND 8.33 16.7 ug/kg wet 50 ND 16.7 33.3 Styrene ug/kg wet 50 1,1,1,2-Tetrachloroethane ND 8.33 16.7 50 ug/kg wet 1.1.2.2-Tetrachloroethane ND 16.7 33.3 ug/kg wet 50 ------Tetrachloroethene (PCE) ND 8.33 16.7 ug/kg wet 50 Toluene ND 16.7 33.3 ug/kg wet 50 1,2,3-Trichlorobenzene ND 83.3 167 ug/kg wet 50 1,2,4-Trichlorobenzene ND 83.3 167 50 ug/kg wet 1,1,1-Trichloroethane ND 8.33 16.7 50 ug/kg wet 16.7 ND 1,1,2-Trichloroethane 8.33 50 ug/kg wet ---Trichloroethene (TCE) ND 8.33 16.7 ug/kg wet 50 Trichlorofluoromethane ND 66.7 66.7 50 ug/kg wet 1,2,3-Trichloropropane ND 16.7 33.3 ug/kg wet 50 1,2,4-Trimethylbenzene ND 16.7 33.3 50 ug/kg wet 1,3,5-Trimethylbenzene ND 16.7 33.3 ug/kg wet 50 Vinyl chloride ND 8.33 16.7 ug/kg wet 50 m,p-Xylene ND 16.7 33.3 ug/kg wet 50 o-Xylene ND 8.33 16.7 ug/kg wet 50

Limits: 80-120 %

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Surr: 1,4-Difluorobenzene (Surr)

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Dilution: 1x

Danie Ilum

Recovery: 103 %



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6700 S.W. Sandburg Street Tigard, OR 97223 503-718-2323

ORELAP ID: OR100062

Sevenson Environmental Services, Inc. Project: Gasco -- Filter Bags

2749 Lockport RoadProject Number:111323Report ID:Niagara Falls, NY 14305Project Manager:Chip ByrdA2J0599 - 12 02 22 1304

# 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				
Blank (22J0853-BLK1)			Prepared	d: 10/21/22 1	1:03 Anal	lyzed: 10/21/	/22 15:58					
Surr: Toluene-d8 (Surr)	Recovery: 101 % Limits: 80-120		120 %	Dilı	ution: 1x							
4-Bromofluorobenzene (Surr)			102 %	79-	120 %		"					
LCS (22J0853-BS1)			Prepared	d: 10/21/22 1	1:03 Anal	lyzed: 10/21/	/22 15:02					
5035A/8260D												
Acetone	1840	500	1000	ug/kg we	t 50	2000		92	80-120%			
Acrylonitrile	947	50.0	100	ug/kg we	t 50	1000		95	80-120%			
Benzene	951	5.00	10.0	ug/kg we	t 50	1000		95	80-120%			
Bromobenzene	958	12.5	25.0	ug/kg we	t 50	1000		96	80-120%			
Bromochloromethane	982	25.0	50.0	ug/kg we	t 50	1000		98	80-120%			
Bromodichloromethane	1050	25.0	50.0	ug/kg we	t 50	1000		105	80-120%			
Bromoform	1150	50.0	100	ug/kg we	t 50	1000		115	80-120%			
Bromomethane	1180	500	500	ug/kg we	t 50	1000		118	80-120%			
2-Butanone (MEK)	1760	250	500	ug/kg we	t 50	2000		88	80-120%			
n-Butylbenzene	996	25.0	50.0	ug/kg we	t 50	1000		100	80-120%			
sec-Butylbenzene	990	25.0	50.0	ug/kg we	t 50	1000		99	80-120%			
tert-Butylbenzene	945	25.0	50.0	ug/kg we	t 50	1000		94	80-120%			
Carbon disulfide	980	250	500	ug/kg we	t 50	1000		98	80-120%			
Carbon tetrachloride	1110	25.0	50.0	ug/kg we	t 50	1000		111	80-120%			
Chlorobenzene	946	12.5	25.0	ug/kg we	t 50	1000		95	80-120%			
Chloroethane	1040	250	500	ug/kg we	t 50	1000		104	80-120%			
Chloroform	990	25.0	50.0	ug/kg we	t 50	1000		99	80-120%			
Chloromethane	958	125	250	ug/kg we	t 50	1000		96	80-120%			
2-Chlorotoluene	988	25.0	50.0	ug/kg we	t 50	1000		99	80-120%			
4-Chlorotoluene	973	25.0	50.0	ug/kg we	t 50	1000		97	80-120%			
Dibromochloromethane	1080	50.0	100	ug/kg we	t 50	1000		108	80-120%			
1,2-Dibromo-3-chloropropane	930	125	250	ug/kg we	t 50	1000		93	80-120%			
1,2-Dibromoethane (EDB)	969	25.0	50.0	ug/kg we	t 50	1000		97	80-120%			
Dibromomethane	1040	25.0	50.0	ug/kg we	t 50	1000		104	80-120%			
1,2-Dichlorobenzene	957	12.5	25.0	ug/kg we		1000		96	80-120%			
1,3-Dichlorobenzene	978	12.5	25.0	ug/kg we		1000		98	80-120%			
1,4-Dichlorobenzene	938	12.5	25.0	ug/kg we		1000		94	80-120%			
Dichlorodifluoromethane	982	50.0	100	ug/kg we	t 50	1000		98	80-120%			IC'
1,1-Dichloroethane	1000	12.5	25.0	ug/kg we		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. Project: Gasco -- Filter Bags

2749 Lockport RoadProject Number:111323Report ID:Niagara Falls, NY 14305Project Manager:Chip ByrdA2J0599 - 12 02 22 1304

## QUALITY CONTROL (QC) SAMPLE RESULTS

#### Volatile Organic Compounds by EPA 8260D Detection % REC RPD Reporting Spike Source Analyte Result Limit Units Dilution Result % REC RPD Limit Amount Limits Limit Notes Batch 22J0853 - EPA 5035A Soil LCS (22J0853-BS1) Prepared: 10/21/22 11:03 Analyzed: 10/21/22 15:02 1,2-Dichloroethane (EDC) 1000 12.5 25.0 ug/kg wet 50 1000 100 80-120% 1,1-Dichloroethene 994 12.5 25.0 ug/kg wet 50 1000 99 80-120% ---------1000 cis-1,2-Dichloroethene 1010 12.5 25.0 ug/kg wet 50 101 80-120% trans-1,2-Dichloroethene 999 12.5 25.0 ug/kg wet 50 1000 100 80-120% 1000 1000 12.5 25.0 50 100 80-120% 1,2-Dichloropropane ug/kg wet 97 1,3-Dichloropropane 969 25.0 50.0 ug/kg wet 50 1000 80-120% 80-120% 2,2-Dichloropropane 1090 25.0 50.0 ug/kg wet 50 1000 109 1000 1,1-Dichloropropene 977 25.0 50.0 ug/kg wet 50 98 80-120% 994 25.0 50.0 1000 99 cis-1,3-Dichloropropene ug/kg wet 50 80-120% trans-1,3-Dichloropropene 1010 25.0 50.0 ug/kg wet 50 1000 101 80-120% Ethylbenzene 1000 944 12.5 25.0 50 94 80-120% ug/kg wet 50.0 100 Hexachlorobutadiene 1020 ug/kg wet 50 1000 102 80-120% 1720 250 500 2000 86 2-Hexanone ug/kg wet 50 80-120% ---Isopropylbenzene 968 25.0 50.0 ug/kg wet 50 1000 97 80-120% 975 50.0 50 1000 98 80-120% 4-Isopropyltoluene 25.0 ug/kg wet Methylene chloride 990 250 500 ug/kg wet 50 1000 99 80-120% 1740 250 500 2000 87 4-Methyl-2-pentanone (MiBK) ug/kg wet 50 80-120% Methyl tert-butyl ether (MTBE) 944 25.0 50.0 50 1000 94 80-120% ug/kg wet Naphthalene 937 50.0 100 50 1000 94 80-120% ug/kg wet --n-Propylbenzene 960 12.5 25.0 ug/kg wet 50 1000 96 80-120% 961 25.0 50.0 50 1000 96 80-120% Styrene ug/kg wet 1,1,1,2-Tetrachloroethane 1050 12.5 25.0 ug/kg wet 50 1000 105 80-120% 1,1,2,2-Tetrachloroethane 896 25.0 50.0 ug/kg wet 50 1000 90 80-120% Tetrachloroethene (PCE) 988 12.5 25.0 ug/kg wet 50 1000 99 80-120% Toluene 938 25.0 50.0 1000 94 ug/kg wet 50 80-120% ------1,2,3-Trichlorobenzene 998 125 250 ug/kg wet 50 1000 100 80-120% 1,2,4-Trichlorobenzene 974 125 250 50 1000 97 80-120% ug/kg wet 1,1,1-Trichloroethane 1020 12.5 25.0 ug/kg wet 50 1000 102 80-120% 1.1.2-Trichloroethane 948 12.5 25.0 50 1000 95 80-120% ug/kg wet Trichloroethene (TCE) 1050 12.5 25.0 ug/kg wet 50 1000 105 80-120% Trichlorofluoromethane 790 100 100 50 1000 **79** 80-120% Q-55 ug/kg wet 1,2,3-Trichloropropane 970 25.0 50.0 ug/kg wet 50 1000 97 80-120% 1,2,4-Trimethylbenzene 994 25.0 50.0 ug/kg wet 50 1000 99 80-120% 1,3,5-Trimethylbenzene 979 25.0 50.0 ug/kg wet 50 1000 98 80-120%

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# **Apex Laboratories, LLC**

6700 S.W. Sandburg Street Tigard, OR 97223 503-718-2323

ORELAP ID: OR100062

Sevenson Environmental Services, Inc. Project: Gasco -- Filter Bags

2749 Lockport RoadProject Number:111323Report ID:Niagara Falls, NY 14305Project Manager:Chip ByrdA2J0599 - 12 02 22 1304

# 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							So	il				
LCS (22J0853-BS1)			Prepared	1: 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)		Recovery: 103 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		100 %		80-120 %		"						
4-Bromofluorobenzene (Surr)			99 %	79-	120 %		"					
Duplicate (22J0853-DUP1)			Prepared	d: 10/20/22 1	8:09 Ana	lyzed: 10/21	/22 17:46					COMP, V-1
OC Source Sample: Non-SDG (A2	J0657-09)											
Acetone	ND	731	1460	ug/kg dry	50		ND				30%	
Acrylonitrile	ND	73.1	146	ug/kg dry	50		ND				30%	
Benzene	10.2	7.31	14.6	ug/kg dry	50		11.0			7	30%	
Bromobenzene	ND	18.3	36.6	ug/kg dry	7 50		ND				30%	
Bromochloromethane	ND	36.6	73.1	ug/kg dry	7 50		ND				30%	
Bromodichloromethane	ND	36.6	73.1	ug/kg dry	7 50		ND				30%	
Bromoform	ND	73.1	146	ug/kg dry	7 50		ND				30%	
Bromomethane	ND	731	731	ug/kg dry	7 50		ND				30%	
2-Butanone (MEK)	ND	366	731	ug/kg dry	7 50		ND				30%	
n-Butylbenzene	ND	36.6	73.1	ug/kg dry	7 50		ND				30%	
ec-Butylbenzene	ND	36.6	73.1	ug/kg dry	50		ND				30%	
ert-Butylbenzene	ND	36.6	73.1	ug/kg dry	50		ND				30%	
Carbon disulfide	ND	366	731	ug/kg dry	50		ND				30%	
Carbon tetrachloride	ND	36.6	73.1	ug/kg dry	50		ND				30%	
Chlorobenzene	ND	18.3	36.6	ug/kg dry	50		ND				30%	
Chloroethane	ND	366	731	ug/kg dry	50		ND				30%	
Chloroform	ND	36.6	73.1	ug/kg dry	50		ND				30%	
Chloromethane	ND	183	366	ug/kg dry	50		ND				30%	
2-Chlorotoluene	ND	36.6	73.1	ug/kg dry	50		ND				30%	
1-Chlorotoluene	ND	36.6	73.1	ug/kg dry	7 50		ND				30%	
Dibromochloromethane	ND	73.1	146	ug/kg dry	7 50		ND				30%	
,2-Dibromo-3-chloropropane	ND	183	366	ug/kg dry	7 50		ND				30%	
,2-Dibromoethane (EDB)	ND	36.6	73.1	ug/kg dry	7 50		ND				30%	
Dibromomethane	ND	36.6	73.1	ug/kg dry			ND				30%	
,2-Dichlorobenzene	ND	18.3	36.6	ug/kg dry			ND				30%	

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### Apex Laboratories, LLC

6700 S.W. Sandburg Street Tigard, OR 97223 503-718-2323

ORELAP ID: OR100062

Sevenson Environmental Services, Inc. Project: Gasco -- Filter Bags

2749 Lockport RoadProject Number:111323Report ID:Niagara Falls, NY 14305Project Manager:Chip ByrdA2J0599 - 12 02 22 1304

### 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 22J0853 - EPA 5035A Soil Duplicate (22J0853-DUP1) Prepared: 10/20/22 18:09 Analyzed: 10/21/22 17:46 COMP, V-15 QC Source Sample: Non-SDG (A2J0657-09) 1,3-Dichlorobenzene ND 18.3 36.6 ug/kg dry 50 ND 30% ND 18.3 1,4-Dichlorobenzene 36.6 ug/kg dry 50 ND 30% Dichlorodifluoromethane ND 73.1 146 ug/kg dry 50 ND 30% 1,1-Dichloroethane ND 18.3 36.6 ug/kg dry 50 ND 30% 1,2-Dichloroethane (EDC) ND 18.3 36.6 ug/kg dry 50 ND 30% ---ND 1,1-Dichloroethene 18.3 36.6 ug/kg dry 50 ND 30% cis-1,2-Dichloroethene ND 18.3 36.6 50 ND 30% ug/kg dry trans-1,2-Dichloroethene ND 30% 18.3 36.6 ug/kg dry 50 ND 1,2-Dichloropropane ND 18.3 36.6 ug/kg dry 50 ND 30% 1,3-Dichloropropane ND 36.6 73.1 ug/kg dry 50 ND 30% 2,2-Dichloropropane ND 36.6 73.1 ug/kg dry 50 ND 30% ND 36.6 73.1 30% 1,1-Dichloropropene ug/kg dry 50 ND cis-1,3-Dichloropropene ND 36.6 73.1 ug/kg dry 50 ND 30% ND 36.6 73.1 30% trans-1,3-Dichloropropene ug/kg dry 50 ND Ethylbenzene 24.1 18.3 36.6 ug/kg dry 50 24.9 3 30% Hexachlorobutadiene ND 73.1 146 ug/kg dry 50 ND \_\_\_ 30% 2-Hexanone ND 366 731 ug/kg dry 50 ND 30% ND 73.1 30% Isopropylbenzene 36.6 50 ND ug/kg dry 4-Isopropyltoluene ND 36.6 73.1 ug/kg dry 50 ND 30% 731 30% Methylene chloride ND 366 50 ND ug/kg dry 4-Methyl-2-pentanone (MiBK) ND 366 731 ug/kg dry 50 ND 30% Methyl tert-butyl ether (MTBE) ND 36.6 73.1 ug/kg dry 50 ND ------30% Naphthalene 2040 73.1 146 ug/kg dry 50 2040 0.3 30% ND 36.6 30% n-Propylbenzene 18.3 ug/kg dry 50 ND ND 36.6 73.1 30% Styrene ug/kg dry 50 ND ND 18.3 36.6 ND 30% 1.1.1.2-Tetrachloroethane ug/kg dry 50 1,1,2,2-Tetrachloroethane ND 36.6 73.1 ND 30% ug/kg dry 50 Tetrachloroethene (PCE) ND 18.3 36.6 ug/kg dry 50 ND 30% ND 36.6 73.1 ug/kg dry 50 ND 30% ND 183 366 30% 1.2.3-Trichlorobenzene ug/kg dry 50 ND 1,2,4-Trichlorobenzene ND 183 366 ug/kg dry 50 ND 30% 18.3 36.6 1,1,1-Trichloroethane ND 50 ND 30% ug/kg dry 1,1,2-Trichloroethane ND 18.3 36.6 ug/kg dry 50 ND 30%

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> Project: <u>Gasco -- Filter Bags</u>

2749 Lockport RoadProject Number:111323Report ID:Niagara Falls, NY 14305Project Manager:Chip ByrdA2J0599 - 12 02 22 1304

# 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	I				
Duplicate (22J0853-DUP1)			Prepared	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	y 50		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)		Recon	very: 102 %	Limits: 80-	120 %	Dilı	ution: 1x					
Toluene-d8 (Surr)			100 %	80-	120 %		"					
4-Bromofluorobenzene (Surr)			99 %	79-	120 %		"					
QC Source Sample: Non-SDG (A2		1530	3070	na/ka de	, 50		ND				200/	
Acetone	ND	1530	3070	ug/kg dr	y 50		ND				30%	
Acrylonitrile	ND	153	307	ug/kg dr			ND				30%	
Benzene	ND	15.3	30.7	ug/kg dr	y 50		ND				30%	
Bromobenzene	ND	38.4	76.7	ug/kg dr	y 50		ND				30%	
Bromochloromethane	ND	76.7	153	ug/kg dr	y 50		ND				30%	
Bromodichloromethane	ND	76.7	153	ug/kg dr	y 50		ND				30%	
Bromoform	ND	153	307	ug/kg dr	y 50		ND				30%	
Bromomethane	ND	1530	1530	ug/kg dr	y 50		ND				30%	
2-Butanone (MEK)	ND	767	1530	ug/kg dr	y 50		ND				30%	
n-Butylbenzene	ND	76.7	153	ug/kg dr	y 50		ND				30%	
sec-Butylbenzene	ND	76.7	153	ug/kg dr			ND				30%	
tert-Butylbenzene	ND	76.7	153	ug/kg dr	y 50		ND				30%	
Carbon disulfide	ND	767	1530	ug/kg dr	y 50		ND				30%	
Carbon tetrachloride	ND	76.7	153	ug/kg dr	y 50		ND				30%	
Chlorobenzene	ND	38.4	76.7	ug/kg dr	y 50		ND				30%	
Chloroethane	ND	767	1530	ug/kg dr	y 50		ND				30%	
Chloroform	ND	76.7	153	ug/kg dr	y 50		ND				30%	
Chloromethane	ND	384	767	ug/kg dr	y 50		ND				30%	
2-Chlorotoluene	ND	76.7	153	ug/kg dr	y 50		ND				30%	

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# **Apex Laboratories, LLC**

6700 S.W. Sandburg Street Tigard, OR 97223 503-718-2323

ORELAP ID: OR100062

Sevenson Environmental Services, Inc. Project: Gasco -- Filter Bags

2749 Lockport RoadProject Number:111323Report ID:Niagara Falls, NY 14305Project Manager:Chip ByrdA2J0599 - 12 02 22 1304

# 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	l				
Ouplicate (22J0853-DUP2)			Prepared	: 10/18/22 1	1:45 Anal	yzed: 10/21	/22 20:28					
QC Source Sample: Non-SDG (A2	2J0622-04)											
l-Chlorotoluene	ND	76.7	153	ug/kg dry	7 50		ND				30%	
Dibromochloromethane	ND	153	307	ug/kg dry	7 50		ND				30%	
,2-Dibromo-3-chloropropane	ND	384	767	ug/kg dry	7 50		ND				30%	
,2-Dibromoethane (EDB)	ND	76.7	153	ug/kg dry	7 50		ND				30%	
Dibromomethane	ND	76.7	153	ug/kg dry	7 50		ND				30%	
,2-Dichlorobenzene	ND	38.4	76.7	ug/kg dry	50		ND				30%	
,3-Dichlorobenzene	ND	38.4	76.7	ug/kg dry	7 50		ND				30%	
,4-Dichlorobenzene	ND	38.4	76.7	ug/kg dry			ND				30%	
Dichlorodifluoromethane	ND	153	307	ug/kg dry	50		ND				30%	
,1-Dichloroethane	ND	38.4	76.7	ug/kg dry	7 50		ND				30%	
,2-Dichloroethane (EDC)	ND	38.4	76.7	ug/kg dry	7 50		ND				30%	
,1-Dichloroethene	ND	38.4	76.7	ug/kg dry	7 50		ND				30%	
is-1,2-Dichloroethene	ND	38.4	76.7	ug/kg dry	7 50		ND				30%	
ans-1,2-Dichloroethene	ND	38.4	76.7	ug/kg dry	7 50		ND				30%	
,2-Dichloropropane	ND	38.4	76.7	ug/kg dry	7 50		ND				30%	
,3-Dichloropropane	ND	76.7	153	ug/kg dry	7 50		ND				30%	
,2-Dichloropropane	ND	76.7	153	ug/kg dry	7 50		ND				30%	
,1-Dichloropropene	ND	76.7	153	ug/kg dry			ND				30%	
is-1,3-Dichloropropene	ND	76.7	153	ug/kg dry	7 50		ND				30%	
rans-1,3-Dichloropropene	ND	76.7	153	ug/kg dry			ND				30%	
Ethylbenzene	ND	38.4	76.7	ug/kg dry			ND				30%	
Hexachlorobutadiene	ND	153	307	ug/kg dry			ND				30%	
-Hexanone	ND	767	1530	ug/kg dry			ND				30%	
sopropylbenzene	ND	76.7	153	ug/kg dry	7 50		ND				30%	
-Isopropyltoluene	232	76.7	153	ug/kg dry	7 50		230			0.7	30%	
Methylene chloride	ND	767	1530	ug/kg dry			ND				30%	
-Methyl-2-pentanone (MiBK)	ND	767	1530	ug/kg dry			ND				30%	
Methyl tert-butyl ether (MTBE)	ND	76.7	153	ug/kg dry	7 50		ND				30%	
laphthalene	ND	153	307	ug/kg dry			ND				30%	
-Propylbenzene	ND	38.4	76.7	ug/kg dry			ND				30%	
tyrene	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%	

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# **Apex Laboratories, LLC**

6700 S.W. Sandburg Street Tigard, OR 97223 503-718-2323

ORELAP ID: OR100062

<u>Sevenson Environmental Services, Inc.</u> Project: <u>Gasco -- Filter Bags</u>

 2749 Lockport Road
 Project Number: 111323
 Report ID:

 Niagara Falls, NY 14305
 Project Manager: Chip Byrd
 A2J0599 - 12 02 22 1304

# 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							So	il				
Ouplicate (22J0853-DUP2)			Prepared	1: 10/18/22 1	1:45 Anal	yzed: 10/21	/22 20:28					
QC Source Sample: Non-SDG (A2	J0622-04)											
Tetrachloroethene (PCE)	ND	38.4	76.7	ug/kg dry	y 50		ND				30%	
Toluene	118	76.7	153	ug/kg dry	y 50		120			1	30%	
,2,3-Trichlorobenzene	ND	384	767	ug/kg dry	y 50		ND				30%	
,2,4-Trichlorobenzene	ND	384	767	ug/kg dry	y 50		ND				30%	
,1,1-Trichloroethane	ND	38.4	76.7	ug/kg dry	y 50		ND				30%	
,1,2-Trichloroethane	ND	38.4	76.7	ug/kg dry	y 50		ND				30%	
Trichloroethene (TCE)	ND	38.4	76.7	ug/kg dry	y 50		ND				30%	
Frichlorofluoromethane	ND	307	307	ug/kg dry	y 50		ND				30%	
,2,3-Trichloropropane	ND	76.7	153	ug/kg dry	y 50		ND				30%	
,2,4-Trimethylbenzene	ND	76.7	153	ug/kg dry	y 50		ND				30%	
,3,5-Trimethylbenzene	ND	76.7	153	ug/kg dry	y 50		ND				30%	
Vinyl chloride	ND	38.4	76.7	ug/kg dry	y 50		ND				30%	
n,p-Xylene	ND	76.7	153	ug/kg dry	y 50		ND				30%	
o-Xylene	ND	38.4	76.7	ug/kg dry	y 50		ND				30%	
Surr: 1,4-Difluorobenzene (Surr)		Recor	very: 103 %	Limits: 80-	-120 %	Dilı	ution: 1x					
Toluene-d8 (Surr)			102 %	80-	120 %		"					
4-Bromofluorobenzene (Surr)			99 %	79-	120 %		"					
Matrix Spike (22J0853-MS1)			Prepared	l: 10/19/22 0	7:55 Anal	yzed: 10/22	/22 00:59					
QC Source Sample: Non-SDG (A2	J0616-02)											
5035A/8260D												
Acetone	12900	3590	7170	ug/kg dry	y 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%			
ec-Butylbenzene	10800	179	359	ug/kg dry		7170	3910	96	73-126%			
ec-Butylbenzene	10000	1//	337	ug/Kg ui v	y 200	/1/0	3910	90	/3-12070			

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#### Apex Laboratories, LLC

6700 S.W. Sandburg Street Tigard, OR 97223 503-718-2323

ORELAP ID: OR100062

Sevenson Environmental Services, Inc. Project: Gasco -- Filter Bags

2749 Lockport RoadProject Number:111323Report ID:Niagara Falls, NY 14305Project Manager:Chip ByrdA2J0599 - 12 02 22 1304

#### QUALITY CONTROL (QC) SAMPLE RESULTS

#### Volatile Organic Compounds by EPA 8260D Detection % REC RPD Reporting Spike Source Analyte Result Units Dilution % REC RPD Limit Limit Amount Result Limits Limit Notes Batch 22J0853 - EPA 5035A Soil Matrix Spike (22J0853-MS1) Prepared: 10/19/22 07:55 Analyzed: 10/22/22 00:59 QC Source Sample: Non-SDG (A2J0616-02) ug/kg dry Carbon disulfide 7780 1790 3590 200 7170 ND 109 63-132% 8510 179 359 7170 Carbon tetrachloride ug/kg dry 200 ND 119 70-135% Chlorobenzene 6950 89.6 179 ug/kg dry 200 7170 ND 97 79-120% O-01 Chloroethane 10100 1790 3590 ug/kg dry 200 7170 ND 141 59-139% Chloroform 7140 179 359 ug/kg dry 200 7170 ND 100 78-123% 1790 91 Chloromethane 6510 896 ug/kg dry 200 7170 ND 50-136% 2-Chlorotoluene 7220 179 359 200 7170 ND 101 75-122% ug/kg dry 179 359 ND 95 4-Chlorotoluene 6820 ug/kg dry 200 7170 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% 179 359 7170 ND 101 78-125% Dibromomethane 7270 ug/kg dry 200 1,2-Dichlorobenzene 6710 89.6 179 ug/kg dry 200 7170 ND 94 78-121% 89.6 179 200 7170 ND 96 77-121% 1,3-Dichlorobenzene 6870 ug/kg dry 179 1,4-Dichlorobenzene 6660 89.6 ug/kg dry 200 7170 ND 93 75-120% ICV-01 Dichlorodifluoromethane 8120 359 717 ug/kg dry 200 7170 ND 113 29-149% \_\_\_ 1,1-Dichloroethane 6940 89.6 179 ug/kg dry 200 7170 ND 97 76-125% 89.6 179 200 7170 ND 101 1,2-Dichloroethane (EDC) 7270 73-128% ug/kg dry 179 7170 ND 70-131% 1,1-Dichloroethene 8220 89.6 ug/kg dry 200 115 179 cis-1,2-Dichloroethene 89.6 200 7170 ND 100 77-123% 7200 ug/kg dry trans-1,2-Dichloroethene 179 7170 ND 101 74-125% 7220 89.6 ug/kg dry 200 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% 179 359 7170 ND 94 67-133% 2,2-Dichloropropane 6770 200 ug/kg dry 179 359 7170 ND 102 76-125% 1,1-Dichloropropene 7280 ug/kg dry 200 6720 179 359 200 7170 ND 94 74-126% cis-1,3-Dichloropropene ug/kg dry trans-1,3-Dichloropropene 6820 179 359 200 7170 ND 95 71-130% ug/kg dry Ethylbenzene 97 76-122% 7780 89.6 179 ug/kg dry 200 7170 835 Hexachlorobutadiene 7920 359 717 ug/kg dry 200 7170 ND 110 61-135% 2-Hexanone 12300 1790 3590 200 14300 ND 86 ug/kg dry 53-145% Isopropylbenzene 8440 179 359 200 7170 1290 100 68-134% ug/kg dry 179 359 3860 92 4-Isopropyltoluene 10400 200 7170 73-127% ug/kg dry Methylene chloride 6730 1790 3590 ug/kg dry 200 7170 ND 94 70-128%

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#### Apex Laboratories, LLC

6700 S.W. Sandburg Street Tigard, OR 97223 503-718-2323

ORELAP ID: OR100062

Sevenson Environmental Services, Inc. Project: Gasco -- Filter Bags

2749 Lockport RoadProject Number: 111323Report ID:Niagara Falls, NY 14305Project Manager: Chip ByrdA2J0599 - 12 02 22 1304

# QUALITY CONTROL (QC) SAMPLE RESULTS

#### Volatile Organic Compounds by EPA 8260D Detection % REC RPD Reporting Spike Source Analyte Result Units Dilution % REC RPD Limit Limit Amount Result Limits Limit Notes Batch 22J0853 - EPA 5035A Soil Matrix Spike (22J0853-MS1) Prepared: 10/19/22 07:55 Analyzed: 10/22/22 00:59 QC Source Sample: Non-SDG (A2J0616-02) 4-Methyl-2-pentanone (MiBK) 12600 1790 3590 ug/kg dry 200 14300 ND 88 65-135% 179 Methyl tert-butyl ether (MTBE) 359 7170 6700 ug/kg dry 200 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% 7050 179 359 ug/kg dry 200 7170 ND 98 76-124% Styrene 1,1,1,2-Tetrachloroethane 179 78-125% 7630 89.6 ug/kg dry 200 7170 ND 106 359 1,1,2,2-Tetrachloroethane 6610 179 ug/kg dry 200 7170 ND 92 70-124% 179 Tetrachloroethene (PCE) 7580 89.6 7170 73-128% ug/kg dry 200 ND 106 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% 179 1,1,1-Trichloroethane 89.6 7170 ND 108 73-130% 7750 ug/kg dry 200 7170 1,1,2-Trichloroethane 7360 89.6 179 ug/kg dry 200 ND 95 78-121% Trichloroethene (TCE) 7950 89.6 179 200 7170 ND 111 77-123% ug/kg dry Q-54d Trichlorofluoromethane 7670 717 717 ug/kg dry 200 7170 ND 107 62-140% 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 179 200 7170 97 13200 359 6310 73-124% ug/kg dry 89.6 Vinyl chloride 179 7170 ND 56-135% 8110 ug/kg dry 200 113 179 359 m,p-Xylene 16100 200 14300 2140 97 77-124% ug/kg dry 6920 89.6 179 7170 ND 97 77-123% o-Xylene ug/kg dry 200 Surr: 1,4-Difluorobenzene (Surr) Recovery: 101 % Limits: 80-120 % Dilution: 1x Toluene-d8 (Surr) 98 % 80-120 % 4-Bromofluorobenzene (Surr) 101 % 79-120 %

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# **Apex Laboratories, LLC**

6700 S.W. Sandburg Street Tigard, OR 97223 503-718-2323

ORELAP ID: OR100062

Sevenson Environmental Services, Inc. Project: Gasco -- Filter Bags

2749 Lockport RoadProject Number:111323Report ID:Niagara Falls, NY 14305Project Manager:Chip ByrdA2J0599 - 12 02 22 1304

# 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 22J1147 - EPA 1311/503	OB TCLP	Volatiles					Wa	ter				
Blank (22J1147-BLK1)			Prepared	1: 10/28/22	09:59 Ana	yzed: 10/28	/22 21:37					TCLPa
1311/8260D												
Benzene	ND	6.25	12.5	ug/L	50							
2-Butanone (MEK)	ND	250	500	ug/L	50							
Carbon tetrachloride	ND	25.0	50.0	ug/L	50							
Chlorobenzene	ND	12.5	25.0	ug/L	50							
Chloroform	ND	25.0	50.0	ug/L	50							
1,4-Dichlorobenzene	ND	12.5	25.0	ug/L	50							
1,1-Dichloroethene	ND	12.5	25.0	ug/L	50							
1,2-Dichloroethane (EDC)	ND	12.5	25.0	ug/L	50							
Tetrachloroethene (PCE)	ND	12.5	25.0	ug/L	50							
Trichloroethene (TCE)	ND	12.5	25.0	ug/L	50							
Vinyl chloride	ND	12.5	25.0	ug/L	50							
Surr: 1,4-Difluorobenzene (Surr)		Reco	very: 111 %	Limits: 80	0-120 %	Dilı	ıtion: 1x					
Toluene-d8 (Surr)			101 %		-120 %		"					
4-Bromofluorobenzene (Surr)			100 %		)-120 %		"					
LCS (22J1147-BS1)			Prepared	l: 10/28/22	09:59 Anal	lyzed: 10/28	/22 20:54					TCLPa
1311/8260D												
Benzene	1260	6.25	12.5	ug/L	50	1000		126	80-120%			Q-:
2-Butanone (MEK)	2430	250	500	ug/L	50	2000		122	80-120%			Q-:
Carbon tetrachloride	1220	25.0	50.0	ug/L	50	1000		122	80-120%			Q-
Chlorobenzene	1050	12.5	25.0	ug/L	50	1000		105	80-120%			
Chloroform	1140	25.0	50.0	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%			Q-
1,2-Dichloroethane (EDC)	1030	12.5	25.0	ug/L	50	1000		103	80-120%			`
Tetrachloroethene (PCE)	1040	12.5	25.0	ug/L	50	1000		104	80-120%			
Trichloroethene (TCE)	1160	12.5	25.0	ug/L	50	1000		116	80-120%			
Vinyl chloride	1250	12.5	25.0	ug/L	50	1000		125	80-120%			Q-
Surr: 1,4-Difluorobenzene (Surr)	1230		very: 107 %	Limits: 80			ution: 1x	123	30-120 /0			~
Toluene-d8 (Surr)		Neco	100 %		)-120 % )-120 %	טווו	uion. 1x					
4-Bromofluorobenzene (Surr)			98 %		1-120 % 1-120 %		,,					

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

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Duplicate (22J1147-DUP1)

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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# **Apex Laboratories, LLC**

6700 S.W. Sandburg Street Tigard, OR 97223 503-718-2323

ORELAP ID: OR100062

Sevenson Environmental Services, Inc. Project: Gasco -- Filter Bags

2749 Lockport RoadProject Number:111323Report ID:Niagara Falls, NY 14305Project Manager:Chip ByrdA2J0599 - 12 02 22 1304

# QUALITY CONTROL (QC) SAMPLE RESULTS

Analyte	Result	Detection	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
		Limit	LIIIII	Uillts	Dilution	Amount			LIIIIIIS	KLD	Liiiiit	notes
Batch 22J1147 - EPA 1311/503	OB TCLP	Volatiles	_				Wa	ter				
Duplicate (22J1147-DUP1)			Prepared	1: 10/28/22	09:59 Ana	lyzed: 10/28	/22 22:19					
QC Source Sample: Non-SDG (A2												
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)		Reco	very: 112 %	Limits: 80	0-120 %	Dilı	ution: 1x					
Toluene-d8 (Surr)			102 %	80	0-120 %		"					
4-Bromofluorobenzene (Surr)			100 %	80	0-120 %		"					
M-4-2- C-21- (2211147 MC1)			ъ.	1.10/20/22	00.50	1 10/20	/22 22 22					
Matrix Spike (22J1147-MS1)	- / A TO TO	. 04)	Prepared	1: 10/28/22	09:59 Ana	lyzed: 10/28	/22 23:02					
QC Source Sample: BF-101822-14 1311/8260D	5 (A2J0599	<u>01)</u>										
Benzene	1190	6.25	12.5	,,,,/I	50	1000	ND	119	79-120%			O-54
		250	500	ug/L								Q-5- Q-54
2-Butanone (MEK) Carbon tetrachloride	2290			ug/L	50	2000	ND	114	56-143%			Q-32 Q-54
	1180	25.0	50.0	ug/L	50	1000	ND	118	72-136%			Q-32
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%			0.1
1,1-Dichloroethene	1230	12.5	25.0	ug/L	50	1000	ND	123	71-131%			Q-:
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	very: 105 %	Limits: 80	0-120 %	Dilı	ution: 1x					
Toluene-d8 (Surr)			101 %	80	0-120 %		"					
4-Bromofluorobenzene (Surr)			97 %	0/	0-120 %		"					

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#### Apex Laboratories, LLC

6700 S.W. Sandburg Street Tigard, OR 97223 503-718-2323

ORELAP ID: OR100062

Sevenson Environmental Services, Inc. Project: Gasco -- Filter Bags

2749 Lockport RoadProject Number:111323Report ID:Niagara Falls, NY 14305Project Manager:Chip ByrdA2J0599 - 12 02 22 1304

#### QUALITY CONTROL (QC) SAMPLE RESULTS

#### Semivolatile Organic Compounds by EPA 8270E Detection Spike % REC RPD Reporting Source Dilution Analyte Result Limit Units Result % REC RPD Limit Amount Limits Limit Notes Batch 22J1188 - EPA 3546 Solid Blank (22J1188-BLK1) Prepared: 10/31/22 05:43 Analyzed: 10/31/22 15:55 EPA 8270E Acenaphthene ND 1.25 2.50 ug/kg wet ND 1.25 2.50 Acenaphthylene ug/kg wet 1 Anthracene ND 1.25 2.50 ug/kg wet 1.25 ND 2.50 Benz(a)anthracene ug/kg wet 1 ND 1.87 3.75 Benzo(a)pyrene ug/kg wet 1 1.87 ND Benzo(b)fluoranthene 3.75 ug/kg wet 1 ------Benzo(k)fluoranthene ND 1.87 3.75 ug/kg wet 1.25 2.50 ND Benzo(g,h,i)perylene ug/kg wet 1 Chrysene ND 1.25 2.50 ug/kg wet 1 Dibenz(a,h)anthracene ND 1.25 2.50 ug/kg wet 1 Fluoranthene ND 1.25 2.50 ug/kg wet 1 1.25 ND 2.50 Fluorene 1 ug/kg wet ---Indeno(1,2,3-cd)pyrene ND 1.25 2.50 ug/kg wet 1 ND 2.50 5.00 1-Methylnaphthalene ug/kg wet 1 2-Methylnaphthalene ND 2.50 5.00 ug/kg wet Naphthalene ND 2.50 5.00 ug/kg wet 1 ------Phenanthrene ND 1.25 2.50 ug/kg wet ND 1.25 2.50 Pyrene ug/kg wet 1 ---Carbazole ND 1.87 3.75 ug/kg wet 1 Dibenzofuran ND 1.25 2.50 ug/kg wet 1 2-Chlorophenol ND 6.25 12.5 ug/kg wet 4-Chloro-3-methylphenol ND 12.5 25.0 ug/kg wet 1 6.25 2,4-Dichlorophenol ND 12.5 ug/kg wet 2,4-Dimethylphenol ND 6.25 12.5 ug/kg wet 1 31.2 62.5 2,4-Dinitrophenol ND ug/kg wet 1 4,6-Dinitro-2-methylphenol ND 31.2 62.5 ug/kg wet 1 2-Methylphenol ND 3.12 6.25 ug/kg wet 1 3+4-Methylphenol(s) ND 3.12 6.25 ug/kg wet 1 ------2-Nitrophenol ND 12.5 25.0 ug/kg wet 1 12.5 4-Nitrophenol ND 25.0 ug/kg wet 1 ug/kg wet Pentachlorophenol (PCP) ND 12.5 25.0 1 Phenol ND 2.50 5.00 ug/kg wet 1 ND 6.25 12.5 2,3,4,6-Tetrachlorophenol ug/kg wet 1

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#### Apex Laboratories, LLC

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ORELAP ID: OR100062

Sevenson Environmental Services, Inc. Project: Gasco -- Filter Bags

2749 Lockport RoadProject Number:111323Report ID:Niagara Falls, NY 14305Project Manager:Chip ByrdA2J0599 - 12 02 22 1304

# QUALITY CONTROL (QC) SAMPLE RESULTS Semivolatile Organic Compounds by EPA 8270E

#### Detection % REC RPD Reporting Spike Source Analyte Result Units Dilution Result % REC RPD Limit Limit Amount Limits Limit Notes Batch 22J1188 - EPA 3546 Solid Blank (22J1188-BLK1) Prepared: 10/31/22 05:43 Analyzed: 10/31/22 15:55 2,3,5,6-Tetrachlorophenol ND 6.25 12.5 ug/kg wet 2,4,5-Trichlorophenol ND 6.25 12.5 ug/kg wet 1 ------Nitrobenzene ND 12.5 25.0 ug/kg wet 1 2,4,6-Trichlorophenol ND 6.25 12.5 ug/kg wet 1 Bis(2-ethylhexyl)phthalate ND 18.7 37.5 ug/kg wet 1 Butyl benzyl phthalate ND 12.5 25.0 ug/kg wet 1 Diethylphthalate ND 12.5 25.0 ug/kg wet 1 ND Dimethylphthalate 12.5 25.0 ug/kg wet 1 В 12.5 25.0 Di-n-butylphthalate 266 ug/kg wet 1 Di-n-octyl phthalate ND 12.5 25.0 ug/kg wet 1 N-Nitrosodimethylamine ND 3.12 6.25 ug/kg wet 1 3.12 6.25 N-Nitroso-di-n-propylamine ND ug/kg wet 1 ND 3.12 N-Nitrosodiphenylamine 6.25 ug/kg wet 1 ---Bis(2-Chloroethoxy) methane ND 3.12 6.25 ug/kg wet 1 Bis(2-Chloroethyl) ether ND 3.12 6.25 ug/kg wet 1 2,2'-Oxybis(1-Chloropropane) ND 3.12 6.25 ug/kg wet 1.25 2.50 Hexachlorobenzene ND ug/kg wet 1 Hexachlorobutadiene ND 3.12 6.25 ug/kg wet 1 6.25 ND 12.5 Hexachlorocyclopentadiene ug/kg wet 1 ---------Hexachloroethane ND 3.12 6.25 ug/kg wet ND 1.25 2.50 2-Chloronaphthalene ug/kg wet 1 ---1,2,4-Trichlorobenzene ND 3.12 6.25 ug/kg wet 4-Bromophenyl phenyl ether ND 3.12 6.25 ug/kg wet 1 4-Chlorophenyl phenyl ether ND 3.12 6.25 ug/kg wet ND 6.25 Aniline 12.5 ug/kg wet 1 ------4-Chloroaniline ND 3.12 6.25 ug/kg wet 1

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2-Nitroaniline

3-Nitroaniline

4-Nitroaniline

Benzoic acid

Isophorone

Benzyl alcohol

2,4-Dinitrotoluene

2,6-Dinitrotoluene

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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ND

ND

ND

ND

ND

ND

ND

ND

25.0

25.0

25.0

12.5

12.5

157

6.25

3.12

50.0

50.0

50.0

25.0

25.0

312

12.5

6.25

ug/kg wet

1

1

1

1

1



# **Apex Laboratories, LLC**

6700 S.W. Sandburg Street Tigard, OR 97223 503-718-2323

ORELAP ID: OR100062

<u>Sevenson Environmental Services, Inc.</u> Project: <u>Gasco -- Filter Bags</u>

 2749 Lockport Road
 Project Number: 111323
 Report ID:

 Niagara Falls, NY 14305
 Project Manager: Chip Byrd
 A2J0599 - 12 02 22 1304

# QUALITY CONTROL (QC) SAMPLE RESULTS

		Se	mivolatile	Organic (	Compoun	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	1: 10/31/22 (	)5:43 Ana	lyzed: 10/31	/22 15:55					
Azobenzene (1,2-DPH)	ND	3.12	6.25	ug/kg we	et 1							
Bis(2-Ethylhexyl) adipate	ND	31.2	62.5	ug/kg we	et 1							
3,3'-Dichlorobenzidine	ND	25.0	50.0	ug/kg we	et 1							Q-:
1,2-Dinitrobenzene	ND	31.2	62.5	ug/kg we	et 1							
1,3-Dinitrobenzene	ND	31.2	62.5	ug/kg we	et 1							
1,4-Dinitrobenzene	ND	31.2	62.5	ug/kg we	et 1							
Pyridine	ND	6.25	12.5	ug/kg we	et 1							
1,2-Dichlorobenzene	ND	3.12	6.25	ug/kg we	et 1							
1,3-Dichlorobenzene	ND	3.12	6.25	ug/kg we								
1,4-Dichlorobenzene	ND	3.12	6.25	ug/kg we	et 1							
Surr: Nitrobenzene-d5 (Surr)		Reco	overy: 91 %	Limits: 37	-122 %	Dili	ution: 1x					Q-41
2-Fluorobiphenyl (Surr)			84 %	44	-120 %		"					
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	1: 10/31/22 (	)5:43 Anal	lyzed: 10/31	/22 16:31					Q-18
EPA 8270E												
Acenaphthene	527	5.32	10.7	ug/kg we	et 4	533		99	40-123%			
Acenaphthylene	548	5.32	10.7	ug/kg we	et 4	533		103	32-132%			
Anthracene	557	5.32	10.7	ug/kg we	et 4	533		104	47-123%			
Benz(a)anthracene	542	5.32	10.7	ug/kg we	et 4	533		102	49-126%			
Benzo(a)pyrene	582	8.00	16.0	ug/kg we	et 4	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%			
2-Methylnaphthalene	524	10.7	21.3	ug/kg we		533		98	38-122%			

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# **Apex Laboratories, LLC**

6700 S.W. Sandburg Street Tigard, OR 97223 503-718-2323

ORELAP ID: OR100062

Sevenson Environmental Services, Inc. Project: Gasco -- Filter Bags

2749 Lockport RoadProject Number:111323Report ID:Niagara Falls, NY 14305Project Manager:Chip ByrdA2J0599 - 12 02 22 1304

# QUALITY CONTROL (QC) SAMPLE RESULTS

# Semivolatile Organic Compounds by EPA 8270E

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22J1188 - EPA 3546							So	lid				
LCS (22J1188-BS1)			Prepared	: 10/31/22 0	5:43 Ana	yzed: 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-41
2-Nitrophenol	592	53.2	107	ug/kg we	t 4	533		111	36-123%			Q-41
4-Nitrophenol	493	53.2	107	ug/kg we		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	t 4	533		97	51-133%			
Butyl benzyl phthalate	536	53.2	107	ug/kg we	t 4	533		101	48-132%			
Diethylphthalate	571	53.2	107	ug/kg we	t 4	533		107	50-124%			
Dimethylphthalate	547	53.2	107	ug/kg we	t 4	533		102	48-124%			
Di-n-butylphthalate	819	53.2	107	ug/kg we	t 4	533		154	51-128%			Q-29, B
Di-n-octyl phthalate	537	53.2	107	ug/kg we	t 4	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	t 4	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%			

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# **Apex Laboratories, LLC**

6700 S.W. Sandburg Street Tigard, OR 97223 503-718-2323

ORELAP ID: OR100062

Sevenson Environmental Services, Inc. Project: Gasco -- Filter Bags

 2749 Lockport Road
 Project Number: 111323
 Report ID:

 Niagara Falls, NY 14305
 Project Manager: Chip Byrd
 A2J0599 - 12 02 22 1304

# QUALITY CONTROL (QC) SAMPLE RESULTS Semivolatile Organic Compounds by EPA 8270E

#### Reporting Detection Spike Source % REC **RPD** % REC Limits RPD Analyte Result Ĺimit Units Dilution Amount Result Limit Notes Limit

Batch 22J1188 - EPA 3546							Sc	olid			
LCS (22J1188-BS1)			Prepare	d: 10/31/22 05:4	43 An	alyzed: 10/31/	22 16:31				Q-18
Hexachlorobutadiene	501	13.3	26.7	ug/kg wet	4	533		94	32-123%	 	
Hexachlorocyclopentadiene	592	26.7	53.2	ug/kg wet	4	533		111	10-140%	 	
Hexachloroethane	476	13.3	26.7	ug/kg wet	4	533		89	28-120%	 	
2-Chloronaphthalene	544	5.32	10.7	ug/kg wet	4	533		102	41-120%	 	
1,2,4-Trichlorobenzene	520	13.3	26.7	ug/kg wet	4	533		97	34-120%	 	
4-Bromophenyl phenyl ether	541	13.3	26.7	ug/kg wet	4	533		101	46-124%	 	
4-Chlorophenyl phenyl ether	535	13.3	26.7	ug/kg wet	4	533		100	45-121%	 	
Aniline	423	26.7	53.2	ug/kg wet	4	533		79	10-120%	 	
4-Chloroaniline	362	13.3	26.7	ug/kg wet	4	533		68	17-120%	 	
2-Nitroaniline	533	107	213	ug/kg wet	4	533		100	44-127%	 	
3-Nitroaniline	555	107	213	ug/kg wet	4	533		104	33-120%	 	Q-41
4-Nitroaniline	714	107	213	ug/kg wet	4	533		134	51-125%	 	Q-29, Q-41
2,4-Dinitrotoluene	547	53.2	107	ug/kg wet	4	533		103	48-126%	 	
2,6-Dinitrotoluene	559	53.2	107	ug/kg wet	4	533		105	46-124%	 	
Benzoic acid	795	668	668	ug/kg wet	4	1070		75	10-140%	 	
Benzyl alcohol	504	26.7	53.2	ug/kg wet	4	533		94	29-122%	 	
Isophorone	520	13.3	26.7	ug/kg wet	4	533		98	30-122%	 	
Azobenzene (1,2-DPH)	542	13.3	26.7	ug/kg wet	4	533		102	39-125%	 	
Bis(2-Ethylhexyl) adipate	532	133	267	ug/kg wet	4	533		100	61-121%	 	
3,3'-Dichlorobenzidine	2010	107	213	ug/kg wet	4	1070		189	22-121%	 	Q-29
1,2-Dinitrobenzene	540	133	267	ug/kg wet	4	533		101	44-120%	 	
1,3-Dinitrobenzene	544	133	267	ug/kg wet	4	533		102	43-127%	 	
1,4-Dinitrobenzene	546	133	267	ug/kg wet	4	533		102	37-132%	 	
Pyridine	414	26.7	53.2	ug/kg wet	4	533		78	10-120%	 	
1,2-Dichlorobenzene	496	13.3	26.7	ug/kg wet	4	533		93	33-120%	 	
1,3-Dichlorobenzene	483	13.3	26.7	ug/kg wet	4	533		91	30-120%	 	
1,4-Dichlorobenzene	481	13.3	26.7	ug/kg wet	4	533		90	31-120%	 	
Surr: Nitrobenzene-d5 (Surr)		Recovery	v: 101 %	Limits: 37-12	2 %	Dilu	tion: 4x				Q-41
2-Fluorobiphenyl (Surr)			98 %	44-12	0 %		"				
Phenol-d6 (Surr)			98 %	33-12	2 %		"				
p-Terphenyl-d14 (Surr)			101 %	54-12	7 %		"				
2-Fluorophenol (Surr)			86 %	35-12	0 %		"				
2,4,6-Tribromophenol (Surr)			96 %	39-13.	2 %		"				

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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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# **Apex Laboratories, LLC**

6700 S.W. Sandburg Street Tigard, OR 97223 503-718-2323

ORELAP ID: OR100062

Sevenson Environmental Services, Inc. Project: Gasco -- Filter Bags

2749 Lockport RoadProject Number:111323Report ID:Niagara Falls, NY 14305Project Manager:Chip ByrdA2J0599 - 12 02 22 1304

# 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	id				
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: Non-SDG (A2	2J0597-01)											
Acenaphthene	3470	1210	2430	ug/kg dry	200		3530			2	30%	
Acenaphthylene	ND	1210	2430	ug/kg dry	200		ND				30%	
Anthracene	10500	1210	2430	ug/kg dry	200		11300			7	30%	
Benz(a)anthracene	8500	1210	2430	ug/kg dry	200		8790			3	30%	
Benzo(a)pyrene	10200	1820	3630	ug/kg dry	200		10400			1	30%	
Benzo(b)fluoranthene	8600	1820	3630	ug/kg dry	200		8190			5	30%	
Benzo(k)fluoranthene	4220	1820	3630	ug/kg dry	200		4560			8	30%	M-0
Benzo(g,h,i)perylene	6640	1210	2430	ug/kg dry	200		6610			0.4	30%	
Chrysene	11600	1210	2430	ug/kg dry	200		11600			0.6	30%	
Dibenz(a,h)anthracene	ND	1210	2430	ug/kg dry	200		ND				30%	
Fluoranthene	34600	1210	2430	ug/kg dry	200		35100			1	30%	
Fluorene	3800	1210	2430	ug/kg dry	200		4020			6	30%	
Indeno(1,2,3-cd)pyrene	6550	1210	2430	ug/kg dry	200		6350			3	30%	
1-Methylnaphthalene	ND	2430	4840	ug/kg dry	200		ND				30%	
2-Methylnaphthalene	ND	2430	4840	ug/kg dry	200		ND				30%	
Naphthalene	ND	2430	4840	ug/kg dry	200		ND				30%	
Phenanthrene	42800	1210	2430	ug/kg dry	200		43500			2	30%	
Pyrene	39800	1210	2430	ug/kg dry	200		39900			0.2	30%	
Carbazole	ND	1820	3630	ug/kg dry	200		ND				30%	
Dibenzofuran	ND	1210	2430	ug/kg dry	200		ND				30%	
2-Chlorophenol	ND	6060	12100	ug/kg dry	200		ND				30%	
4-Chloro-3-methylphenol	ND	12100	24300	ug/kg dry	200		ND				30%	
2,4-Dichlorophenol	ND	6060	12100	ug/kg dry	200		ND				30%	
2,4-Dimethylphenol	ND	6060	12100	ug/kg dry	200		ND				30%	
2,4-Dinitrophenol	ND	30300	60600	ug/kg dry	200		ND				30%	
4,6-Dinitro-2-methylphenol	ND	30300	60600	ug/kg dry	200		ND				30%	
2-Methylphenol	ND	3030	6060	ug/kg dry	200		ND				30%	
3+4-Methylphenol(s)	ND	3030	6060	ug/kg dry	200		ND				30%	
2-Nitrophenol	ND	12100	24300	ug/kg dry	200		ND				30%	

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#### Apex Laboratories, LLC

6700 S.W. Sandburg Street Tigard, OR 97223 503-718-2323

ORELAP ID: OR100062

Sevenson Environmental Services, Inc. Project: Gasco -- Filter Bags

2749 Lockport RoadProject Number:111323Report ID:Niagara Falls, NY 14305Project Manager:Chip ByrdA2J0599 - 12 02 22 1304

#### QUALITY CONTROL (QC) SAMPLE RESULTS

#### Semivolatile Organic Compounds by EPA 8270E Detection % REC RPD Reporting Spike Source Analyte Result Units Dilution % REC RPD Limit Limit Amount Result Limits Limit Notes Batch 22J1188 - EPA 3546 Solid Duplicate (22J1188-DUP1) Prepared: 10/31/22 05:43 Analyzed: 10/31/22 17:43 QC Source Sample: Non-SDG (A2J0597-01) 4-Nitrophenol ND 12100 24300 ug/kg dry 200 ND 30% ND 12100 24300 200 Pentachlorophenol (PCP) ug/kg dry 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% ------ND 6060 2,4,5-Trichlorophenol 12100 ug/kg dry 200 ND 30% Nitrobenzene ND 12100 24300 ug/kg dry 200 ND 30% ND 200 ND 30% 2,4,6-Trichlorophenol 6060 12100 ug/kg dry 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% ND 12100 24300 200 ND 30% Dimethylphthalate ug/kg dry Di-n-butylphthalate ND 12100 24300 ug/kg dry 200 ND 30% ND 12100 24300 200 30% Di-n-octyl phthalate ug/kg dry ND 3030 N-Nitrosodimethylamine ND 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% ND 3030 6060 200 30% Bis(2-Chloroethoxy) methane ND ug/kg dry ---ND Bis(2-Chloroethyl) ether 3030 6060 ug/kg dry 200 ND 30% 3030 2,2'-Oxybis(1-Chloropropane) ND 6060 200 ND 30% ug/kg dry ND 1210 Hexachlorobenzene 2430 ug/kg dry 200 ND 30% 3030 6060 Hexachlorobutadiene ND ug/kg dry 200 ND \_\_\_ ---30% Hexachlorocyclopentadiene ND 6060 12100 ug/kg dry 200 ND 30% ND ND 30% Hexachloroethane 3030 6060 ug/kg dry 200 ND 1210 2430 30% 2-Chloronaphthalene ug/kg dry 200 ND ---1,2,4-Trichlorobenzene ND 3030 6060 200 ND 30% ug/kg dry ---4-Bromophenyl phenyl ether ND 3030 6060 200 ND 30% ug/kg dry ND 3030 4-Chlorophenyl phenyl ether 6060 ug/kg dry 200 ND ---30% Aniline ND 6060 12100 ug/kg dry 200 ND 30% 4-Chloroaniline ND 3030 6060 200 ND 30% ug/kg dry ---2-Nitroaniline ND 24300 48400 ug/kg dry 200 ND 30% ND 24300 48400 3-Nitroaniline 200 ND 30% ug/kg dry ---4-Nitroaniline ND 24300 48400 ug/kg dry 200 ND 30%

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#### Apex Laboratories, LLC

6700 S.W. Sandburg Street Tigard, OR 97223 503-718-2323

ORELAP ID: OR100062

Sevenson Environmental Services, Inc. Project: Gasco -- Filter Bags

2749 Lockport RoadProject Number:111323Report ID:Niagara Falls, NY 14305Project Manager:Chip ByrdA2J0599 - 12 02 22 1304

#### QUALITY CONTROL (QC) SAMPLE RESULTS

#### Semivolatile Organic Compounds by EPA 8270E Detection Spike % REC RPD Reporting Source Analyte Result Limit Units Dilution Result % REC RPD Limit Amount Limits Limit Notes Batch 22J1188 - EPA 3546 Solid Duplicate (22J1188-DUP1) Prepared: 10/31/22 05:43 Analyzed: 10/31/22 17:43 QC Source Sample: Non-SDG (A2J0597-01) 2,4-Dinitrotoluene ND 12100 24300 ug/kg dry 200 ND 30% ND 12100 24300 200 2,6-Dinitrotoluene ug/kg dry ND 30% Benzoic acid ND 152000 303000 ug/kg dry 200 ND 30% Benzyl alcohol ND 6060 12100 ug/kg dry 200 ND 30% Isophorone ND 3030 6060 ug/kg dry 200 ND 30% Azobenzene (1,2-DPH) ND 3030 6060 ug/kg dry 200 ND 30% Bis(2-Ethylhexyl) adipate ND 30300 60600 ug/kg dry 200 ND 30% Q-52 3,3'-Dichlorobenzidine ND 48400 200 ND 30% 24300 ug/kg dry 1,2-Dinitrobenzene ND 30300 60600 ug/kg dry 200 ND 30% 1,3-Dinitrobenzene ND 30300 60600 ug/kg dry 200 ND 30% 1,4-Dinitrobenzene ND 30300 60600 ug/kg dry 200 ND 30% ND 6060 12100 200 ND 30% Pyridine ug/kg dry ND 3030 30% 1,2-Dichlorobenzene 6060 ug/kg dry 200 ND 3030 30% 1,3-Dichlorobenzene ND 6060 200 ND ug/kg dry 3030 6060 1,4-Dichlorobenzene ND ug/kg dry 200 ND 30% Surr: Nitrobenzene-d5 (Surr) Recovery: 62 % Limits: 37-122 % Dilution: 200x S-05 77% 2-Fluorobiphenyl (Surr) 44-120 % S-05 Phenol-d6 (Surr) 33-122 % 36 % S-05 p-Terphenyl-d14 (Surr) 54-127 % 73 % S-05 2-Fluorophenol (Surr) 42 % 35-120 % S-05

39-132 %

244 %

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2,4,6-Tribromophenol (Surr)

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.

S-05



# **Apex Laboratories, LLC**

6700 S.W. Sandburg Street Tigard, OR 97223 503-718-2323

ORELAP ID: OR100062

<u>Sevenson Environmental Services, Inc.</u> Project: <u>Gasco -- Filter Bags</u>

 2749 Lockport Road
 Project Number: 111323
 Report ID:

 Niagara Falls, NY 14305
 Project Manager: Chip Byrd
 A2J0599 - 12 02 22 1304

# QUALITY CONTROL (QC) SAMPLE RESULTS

			iotai M	ietais by	EFA DUZL	B (ICPMS	<b>)</b>					
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				
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		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		25000		90	80-120%			
Silver	26400	100	200	ug/kg we		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 (AZ	2J0588-01)					·					·	
Arsenic	ND	13600	27200	ug/kg we	t 250		ND				20%	
Barium	120000	13600	27200	ug/kg we	t 250		139000			14	20%	
Cadmium	ND	2720	5430	ug/kg we			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%	
				40/4								
Matrix Spike (22J1085-MS1)			Prepared	: 10/27/22 0	1/:21 Anal	yzed: 10/31	/22 21:24					

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6700 S.W. Sandburg Street Tigard, OR 97223 503-718-2323

ORELAP ID: OR100062

Sevenson Environmental Services, Inc.

Project: Ga

Gasco -- Filter Bags

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

Report ID: A2J0599 - 12 02 22 1304

# QUALITY CONTROL (QC) SAMPLE RESULTS

#### Total Metals by EPA 6020B (ICPMS) Detection Reporting Spike Source % REC **RPD** Dilution Analyte Result Limit Units Result % REC Limits RPD Limit Amount Limit Notes Batch 22J1085 - EPA 3051A Solid Matrix Spike (22J1085-MS1) Prepared: 10/27/22 07:21 Analyzed: 10/31/22 21:24 QC Source Sample: Non-SDG (A2J0588-01) EPA 6020B Q-11 13300 26600 70100 ug/kg wet 250 ND 132 75-125% Arsenic 53200 Barium 172000 13300 26600 ug/kg wet 250 53200 139000 75-125% Q-11 63 Cadmium 5320 56600 2660 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 75-125% Q-65 ug/kg wet 250 53200 20500027 5010 1060 2130 ug/kg wet 250 1060 5260 -23 75-125% Q-65 Mercury Selenium 27500 13300 26600 ug/kg wet 26600 ND 104 75-125% 250 ---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. Project: Gasco -- Filter Bags

2749 Lockport RoadProject Number:111323Report ID:Niagara Falls, NY 14305Project Manager:Chip ByrdA2J0599 - 12 02 22 1304

# QUALITY CONTROL (QC) SAMPLE RESULTS

			TCLP N	letals by	EPA 602	OB (ICPM	S)					
Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22J1016 - EPA 1311/30	15A						So	lid				
Blank (22J1016-BLK1)			Prepared	: 10/26/22	08:11 Anal	yzed: 10/26	/22 19:29					
1311/6020B												
Arsenic	ND	50.0	100	ug/L	10							TC
Barium	ND	2500	5000	ug/L	10							TC
Cadmium	ND	50.0	100	ug/L	10							TC
Chromium	ND	50.0	100	ug/L	10							TC
Lead	ND	25.0	50.0	ug/L	10							TC
Mercury	ND	3.75	7.00	ug/L	10							TCI
Selenium	ND	50.0	100	ug/L	10							TCI
Silver	ND	50.0	100	ug/L	10							TCl
LCS (22J1016-BS1)			Prepared	: 10/26/22	08:11 Anal	yzed: 10/26	/22 19:35					
1311/6020B												
Arsenic	4970	50.0	100	ug/L	10	5000		99	80-120%			TCl
Barium	9860	2500	5000	ug/L	10	10000		99	80-120%			TCl
Cadmium	977	50.0	100	ug/L	10	1000		98	80-120%			TC
Chromium	4710	50.0	100	ug/L	10	5000		94	80-120%			TC
Lead	4590	25.0	50.0	ug/L	10	5000		92	80-120%			TC
Mercury	90.7	3.75	7.00	ug/L	10	100		91	80-120%			TC
Selenium	990	50.0	100	ug/L	10	1000		99	80-120%			TC
Silver	996	50.0	100	ug/L	10	1000		100	80-120%			TC
Duplicate (22J1016-DUP1)			Prepared	: 10/26/22	08:11 Anal	yzed: 10/26	/22 20:30					
QC Source Sample: Non-SDG (A	2J0639-01)											
Arsenic	ND	50.0	100	ug/L	10		ND				20%	
Barium	ND	2500	5000	ug/L	10		ND				20%	
Cadmium	ND	50.0	100	ug/L	10		ND				20%	
Chromium	ND	50.0	100	ug/L	10		ND				20%	
Lead	ND	25.0	50.0	ug/L	10		ND				20%	
Mercury	ND	3.75	7.00	ug/L	10		ND				20%	
Selenium	ND	50.0	100	ug/L	10		ND				20%	
Silver	ND	50.0	100	ug/L	10		ND				20%	

Prepared: 10/26/22 08:11 Analyzed: 10/26/22 20:36

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Matrix Spike (22J1016-MS1)

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Danie Jam



# **Apex Laboratories, LLC**

6700 S.W. Sandburg Street Tigard, OR 97223 503-718-2323

ORELAP ID: OR100062

Sevenson Environmental Services, Inc.

Project: Gasco -- Filter Bags

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

Report ID: A2J0599 - 12 02 22 1304

# QUALITY CONTROL (QC) SAMPLE RESULTS

			TCLP N	letals by	EPA 602	OB (ICPMS	S)					
Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22J1016 - EPA 1311/301	5A						Sol	id				
Matrix Spike (22J1016-MS1)			Prepared	: 10/26/22	08:11 Anal	lyzed: 10/26	/22 20:36					
QC Source Sample: Non-SDG (A2	2J0639-01)											
<u>1311/6020B</u>												
Arsenic	4990	50.0	100	ug/L	10	5000	ND	100	50-150%			
Barium	10600	2500	5000	ug/L	10	10000	ND	106	50-150%			
Cadmium	990	50.0	100	ug/L	10	1000	ND	99	50-150%			
Chromium	4770	50.0	100	ug/L	10	5000	ND	95	50-150%			
Lead	4520	25.0	50.0	ug/L	10	5000	ND	90	50-150%			
Mercury	89.7	3.75	7.00	ug/L	10	100	ND	90	50-150%			
Selenium	980	50.0	100	ug/L	10	1000	ND	98	50-150%			
Silver	1000	50.0	100	ug/L	10	1000	ND	100	50-150%			
1311/6020B	5110	50.0	100	/r	10	5000	112	100	50 1500/			
QC Source Sample: Non-SDG (A2	<u>2J0588-01)</u>											
Arsenic	5110	50.0	100	ug/L	10	5000	113	100	50-150%			
Barium	9950	2500	5000	ug/L	10	10000	ND	100	50-150%			
Cadmium	1020	50.0	100	ug/L	10	1000	ND	102	50-150%			
Lead	5060	25.0	50.0	ug/L	10	5000	514	91	50-150%			
Mercury	90.6	3.75	7.00	ug/L	10	100	ND	91	50-150%			
Selenium	984	50.0	100	ug/L	10	1000	ND	98	50-150%			
Silver	1000	50.0	100	ug/L	10	1000	ND	100	50-150%			
Matrix Spike (22J1016-MS3)			Prepared	: 10/26/22	08:11 Anal	lyzed: 10/26	/22 20:13					
QC Source Sample: BF-101822-14	45 (A2J0599	<u>-01)</u>										
1311/6020B												
Arsenic	5020	50.0	100	ug/L	10	5000	ND	100	50-150%			
Barium	10200	2500	5000	ug/L	10	10000	ND	102	50-150%			
Cadmium	981	50.0	100	ug/L	10	1000	ND	98	50-150%			
Chromium	4760	50.0	100	ug/L	10	5000	ND	95	50-150%			
Lead	4530	25.0	50.0	ug/L	10	5000	ND	91	50-150%			
Mercury	89.6	3.75	7.00	ug/L	10	100	ND	90	50-150%			
Selenium	988	50.0	100	ug/L	10	1000	ND	99	50-150%			
Silver	1000	50.0	100	ug/L	10	1000	ND	100	50-150%			

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# **Apex Laboratories, LLC**

6700 S.W. Sandburg Street Tigard, OR 97223 503-718-2323

ORELAP ID: OR100062

Sevenson Environmental Services, Inc.

Services, Inc. Project: Gasco Project Number: 111323

2749 Lockport RoadProject Number: 111323Niagara Falls, NY 14305Project Manager: Chip Byrd

Report ID: A2J0599 - 12 02 22 1304

# QUALITY CONTROL (QC) SAMPLE RESULTS

Gasco -- Filter Bags

			TCLP N	letals by	EPA 602	OB (ICPM	S)					
Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22J1016 - EPA 1311/301	5A						So	lid				
Matrix Spike (22J1016-MS4)			Prepared	1: 10/26/22	08:11 Ana	lyzed: 10/27	/22 03:53					
QC Source Sample: Non-SDG (A2	J0679-01)											
<u>1311/6020B</u>												
Arsenic	4890	50.0	100	ug/L	10	5000	ND	98	50-150%			
Barium	10300	2500	5000	ug/L	10	10000	ND	103	50-150%			
Cadmium	988	50.0	100	ug/L	10	1000	ND	99	50-150%			
Chromium	4640	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 (22J1016-MS5)			Prepared	l: 10/26/22	08:11 Ana	lyzed: 10/27	/22 04:04					
QC Source Sample: Non-SDG (A2	J0695-01)											
Arsenic	4930	50.0	100	ug/L	10	5000	ND	99	50-150%			
Barium	10500	2500	5000	ug/L	10	10000	ND	105	50-150%			
Cadmium	1030	50.0	100	ug/L	10	1000	ND	103	50-150%			
Chromium	4760	50.0	100	ug/L	10	5000	55.7	94	50-150%			
Selenium	1020	50.0	100	ug/L	10	1000	ND	102	50-150%			
Silver	1030	50.0	100	ug/L	10	1000	ND	103	50-150%			Q-4
Matrix Spike (22J1016-MS6)			Prepared	l: 10/26/22	08:11 Ana	lyzed: 10/28	/22 09:30					
QC Source Sample: Non-SDG (A2	J0588-01RE	<u>E1)</u>										
<u>1311/6020B</u>				~								0.1
Chromium	66700	250	500	ug/L	50	5000	63400	66	50-150%			Q-1
Matrix Spike (22J1016-MS7)			Prepared	l: 10/26/22	08:11 Ana	lyzed: 10/28	/22 09:35					
QC Source Sample: Non-SDG (A2	<u>J0679-01)</u>											
1311/6020B												
Mercury	95.1	3.75	7.00	ug/L	10	100	ND	95	50-150%			
Matrix Spike (22J1016-MS8)			Prepared	l: 10/26/22	08:11 Ana	lyzed: 10/28	/22 09:55					
QC Source Sample: Non-SDG (A2	J0695-01RF	<u></u>										
<u>1311/6020B</u> Mercury	92.5	3.75	7.00	ug/L	10	100	ND	92	50-150%			TEM
iviciouiy	94.3	3.13	7.00	ug/L	10	100	ND	74	30-13070			I LIVI

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Darwin Thomas, Business Development Director



# **Apex Laboratories, LLC**

6700 S.W. Sandburg Street Tigard, OR 97223 503-718-2323

ORELAP ID: OR100062

Sevenson Environmental Services, Inc.

Project:

Gasco -- Filter Bags

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

Report ID: A2J0599 - 12 02 22 1304

# QUALITY CONTROL (QC) SAMPLE RESULTS

			TCLP I	Metals by	EPA 602	OB (ICPM	S)					
Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22J1016 - EPA 1311/	3015A						So	lid				
Matrix Spike (22J1016-MS	9)		Prepared	d: 10/26/22	08:11 Ana	lyzed: 10/28	3/22 17:56					
QC Source Sample: Non-SDG	(A2J0679-01)											
<u>1311/6020B</u>												
Lead	4990	25.0	50.0	ug/L	10	5000	ND	100	50-150%			Q-16
Mercury	96.6	3.75	7.00	ug/L	10	100	ND	97	50-150%			
Matrix Spike (22J1016-MS	<b>A</b> )		Prepared	d: 10/26/22	08:11 Ana	lyzed: 10/28	3/22 18:05					
QC Source Sample: Non-SDG	(A2J0695-01RI	E <u>2)</u>										
1311/6020B												
Lead	5290	25.0	50.0	ug/L	10	5000	ND	106	50-150%			Q-16

Apex Laboratories



# **Apex Laboratories, LLC**

6700 S.W. Sandburg Street Tigard, OR 97223 503-718-2323

ORELAP ID: OR100062

Sevenson Environmental Services, Inc.

Project:

Gasco -- Filter Bags

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

Report ID: A2J0599 - 12 02 22 1304

# QUALITY CONTROL (QC) SAMPLE RESULTS

	Solu	ıble Cyanid	de by UV Di	igestion/	Gas Diffu	sion/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 D75	511-12mod (S	)					Soi	ı				
Blank (22J1021-BLK1)			Prepared	: 10/26/22	09:54 Ana	lyzed: 10/26	5/22 12:39					
D7511-12 Total Cyanide	ND	50.0	100	ug/kg w	et 1							
LCS (22J1021-BS1)			Prepared	: 10/26/22	09:54 Ana	lyzed: 10/26	5/22 12:41					
D7511-12 Total Cyanide	409	50.0	100	ug/kg w	et 1	400		102	84-116%			
Matrix Spike (22J1021-MS	2)		Prepared	: 10/26/22	09:54 Ana	lyzed: 10/26	5/22 13:43					
QC Source Sample: Non-SDG D7511-12	(A2J0597-01RE	<u>E1)</u>										
Total Cyanide	6750	969	1940	ug/kg dı	y 5	1550	6650	6	64-136%			Q-01, Q-1
Matrix Spike Dup (22J1021	1-MSD2)		Prepared	: 10/26/22	09:54 Ana	lyzed: 10/26	5/22 13:45					
OC Source Sample: Non-SDG	(A2J0597-01RI	E <u>1)</u>										
Total Cyanide	8000	967	1930	ug/kg dı	y 5	1550	6650	87	64-136%	17	47%	Q-1

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# **Apex Laboratories, LLC**

6700 S.W. Sandburg Street Tigard, OR 97223 503-718-2323

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Project:

Gasco -- Filter Bags

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

Report ID: A2J0599 - 12 02 22 1304

# QUALITY CONTROL (QC) SAMPLE RESULTS

				Percent	Dry Wei	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	<u> </u>				
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	1.00	%	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	1.00	%	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: Non-SDG (A2	2J0597-01)											
% Solids	24.9	1.00	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	2J0598-01)											
% Solids	82.3	1.00	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	1.00	%	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	1.00	%	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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# **Apex Laboratories, LLC**

6700 S.W. Sandburg Street Tigard, OR 97223 503-718-2323

ORELAP ID: OR100062

Sevenson Environmental Services, Inc. Project:

2749 Lockport RoadProject Number:111323Report ID:Niagara Falls, NY 14305Project Manager:Chip ByrdA2J0599 - 12 02 22 1304

#### SAMPLE PREPARATION INFORMATION

Gasco -- Filter Bags

		Diesei and	d/or Oil Hydrocarbor	is by NVV I PH-DX			
Prep: EPA 3546 (Fue	ls)				Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
Batch: 22J0894							
A2J0599-01	Solid	NWTPH-Dx	10/18/22 16:00	10/24/22 06:59	10.11g/5mL	10g/5mL	0.99
	Gas	soline 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							
A2J0599-01RE1	Solid	NWTPH-Gx (MS)	10/18/22 16:00	10/19/22 14:32	5.87g/5mL	5g/5mL	0.85
		Volatile (	Organic Compounds	by EPA 8260D			
Prep: EPA 5035A			•	-	Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
Batch: 22J0853	IVIALIA	IVICUIOU	Sampicu	Терагеи			
A2J0599-01RE1	Solid	5035A/8260D	10/18/22 16:00	10/19/22 14:32	5.87g/5mL	5g/5mL	0.85
		Regulated TCLP Vo	latile Organic Comp	ounds by EPA 1311	/8260D		
Prep: EPA 1311/5030B	B TCLP Volatiles	<u>s</u>			Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
Batch: 22J1147							
A2J0599-01	Solid	1311/8260D	10/18/22 16:00	10/28/22 09:59	5mL/5mL	5mL/5mL	1.00
		Semivolatil	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			*	<del>-</del>			
A2J0599-01	Solid	EPA 8270E	10/18/22 16:00	10/31/22 05:43	10.24g/2mL	15g/2mL	1.46
A2J0599-01RE1	Solid	EPA 8270E	10/18/22 16:00	10/31/22 05:43	10.24g/2mL	15g/2mL	1.46
		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			1	•			
La arr I ala anataniaa			771 1.	1	1 1 1 .		C

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# **Apex Laboratories, LLC**

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 -- Filter Bags

Project Number: 111323
Project Manager: Chip Byrd

Report ID: A2J0599 - 12 02 22 1304

# SAMPLE PREPARATION INFORMATION

		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
A2J0599-01	Solid	EPA 6020B	10/18/22 16:00	10/27/22 07:21	0.481g/50mL	0.5g/50mL	1.04
		TCLF	P Metals by EPA 602	OB (ICPMS)			
Prep: EPA 1311/3015	<u>5A</u>		· · · · · · · · · · · · · · · · · · ·		Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
Batch: 22J1016							
A2J0599-01	Solid	1311/6020B	10/18/22 16:00	10/26/22 08:11	10mL/50mL	10mL/50mL	1.00
	S	Soluble Cyanide by U\	/ Digestion/Gas Diffu	usion/Amperometric	Detection		
Prep: ASTM D7511-1	12mod (S)				Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
Batch: 22J1021							
A2J0599-01	Solid	D7511-12	10/18/22 16:00	10/26/22 09:54	2.583g/50mL	2.5g/50mL	0.97
			Percent Dry Wei	ight			
Prep: Total Solids (Dr	ry Weight)				Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
Batch: 22J0822							
A2J0599-01	Solid	EPA 8000D	10/18/22 16:00	10/20/22 12:54			NA
		Т	CLP Extraction by E	PA 1311			
Prep: EPA 1311 (TCL	_ <u>P)</u>				Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
Batch: 22J0915			<del>-</del>	-			
A2J0599-01	Solid	EPA 1311	10/18/22 16:00	10/24/22 17:13	100g/2000g	100g/2000g	NA
Prep: EPA 1311 TCLI	P/ZHE				Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
Lao Nullioei	Manix	Method	Sampica	rieparea			
Batch: 22J1097	Matrix	Method	Sampled	Поршов			

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6700 S.W. Sandburg Street Tigard, OR 97223 503-718-2323

ORELAP ID: OR100062

Sevenson Environmental Services, Inc. Project: Gasco -- Filter Bags

2749 Lockport RoadProject Number:111323Report ID:Niagara Falls, NY 14305Project Manager:Chip ByrdA2J0599 - 12 02 22 1304

# **QUALIFIER DEFINITIONS**

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

#### **Apex Laboratories**

CA L'ADUI AU	THES
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.
E	Estimated Value. The result is above the calibration range of the instrument.
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-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.
Q-55	Daily CCV/LCS recovery for this analyte was below the +/-20% criteria listed in EPA 8260, however there is adequate sensitivity to ensure detection at the reporting level.
Q-56	Daily CCV/LCS recovery for this analyte was above the +/-20% criteria listed in EPA 8260
Q-65	Spike recovery is estimated due to the high analyte concentration of the source sample.
nex Labora	tories  The results in this report apply to the samples analyzed in accordance with the chain of

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#### Apex Laboratories, LLC

6700 S.W. Sandburg Street Tigard, OR 97223 503-718-2323

ORELAP ID: OR100062

Sevenson Environmental Services, Inc. Project: Gasco -- Filter Bags

2749 Lockport RoadProject Number:111323Report ID:Niagara Falls, NY 14305Project Manager:Chip ByrdA2J0599 - 12 02 22 1304

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 22J0915.

TCLPa This batch QC sample was prepared with TCLP or SPLP fluid from preparation batch 22J1097.

**TEMP** Sample was received outside of recommended temperature. See Case Narrative.

V-15 Sample aliquot was subsampled from the sample container. The subsampled aliquot was preserved in the laboratory within 48 hours of

sampling.

V-16 Sample aliquot was subsampled from the sample container in the laboratory. The subsampled aliquot was not preserved within 48 hours of

sampling.

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#### Apex Laboratories, LLC

6700 S.W. Sandburg Street Tigard, OR 97223 503-718-2323

ORELAP ID: OR100062

Sevenson Environmental Services, Inc. Project: Gasco -- Filter Bags

 2749 Lockport Road
 Project Number:
 111323
 Report ID:

 Niagara Falls, NY 14305
 Project Manager:
 Chip Byrd
 A2J0599 - 12 02 22 1304

#### 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.

#### **<u>Detection Limits:</u>** Limit of Detection (LOD)

Limits of Detection (LODs) are normally set at a level of one half the validated Limit of Quantitation (LOQ).

If no value is listed ('----'), then the data has not been evaluated below the Reporting Limit.

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

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

#### **Reporting Conventions:**

Basis: Results for soil samples are generally reported on a 100% dry weight basis.

The Result Basis is listed following the units as "dry", "wet", or " " (blank) designation.

"dry" Sample results and Reporting Limits are reported on a dry weight basis. (i.e. "ug/kg dry")

See Percent Solids section for details of dry weight analysis.

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

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

#### **QC Source:**

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

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

#### Miscellaneous Notes:

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

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

#### Blanks:

Standard practice is to evaluate the results from Blank QC Samples down to a level equal to ½ the Reporting Limit (RL).

- -For Blank hits falling between ½ the RL and the RL (J flagged hits), the associated sample and QC data will receive a 'B-02' qualifier.
- -For Blank hits above the RL, the associated sample and QC data will receive a 'B' qualifier, per Apex Laboratories' Blank Policy.

For further details, please request a copy of this document.

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#### Apex Laboratories, LLC

6700 S.W. Sandburg Street Tigard, OR 97223 503-718-2323

ORELAP ID: OR100062

Sevenson Environmental Services, Inc. Project: Gasco -- Filter Bags

2749 Lockport RoadProject Number: 111323Report ID:Niagara Falls, NY 14305Project Manager: Chip ByrdA2J0599 - 12 02 22 1304

#### **REPORTING NOTES AND CONVENTIONS (Cont.):**

#### Blanks (Cont.):

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

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

#### **Preparation Notes:**

#### Mixed Matrix Samples:

#### Water Samples:

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

#### Soil and Sediment Samples:

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

#### **Sampling and Preservation Notes:**

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

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

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

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

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#### Apex Laboratories, LLC

6700 S.W. Sandburg Street Tigard, OR 97223 503-718-2323

ORELAP ID: OR100062

Sevenson Environmental Services, Inc. Project: Gasco -- Filter Bags

 2749 Lockport Road
 Project Number:
 111323
 Report ID:

 Niagara Falls, NY 14305
 Project Manager:
 Chip Byrd
 A2J0599 - 12 02 22 1304

#### 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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# **Apex Laboratories, LLC**

6700 S.W. Sandburg Street Tigard, OR 97223 503-718-2323

ORELAP ID: OR100062

Sevenson Environmental Services, Inc. Project: Gasco -- Filter Bags

2749 Lockport RoadProject Number:111323Report ID:Niagara Falls, NY 14305Project Manager:Chip ByrdA2J0599 - 12 02 22 1304

				_						_								-				
COMPANY: Sevenson Environmental Services, Inc	es, Inc.			Pro	Project Mgr: Chip Byrd	S	p Byrd	l		ď	oject N	Name:	Gasco	Project Name: Gasco Bag Fitter	Filter	-	-	-	Project # 111323	111323		
Address: 2749 Lockport Road, Niagara Falls, NY 14305	agara F.	alls, NY 1430	25					Phone	716	Phone: (716) 583-2754	2754		Fax	,,		<u>~</u>	nail	wbyrd@	E-mail: wbyrd@sevenson.com	on.com		
Sampled by: Enill Schilecnt, Jeffrey Lubinski	34	Legs.	778	Suids	4									ANA	LYSIS	ANALYSIS REQUEST	83					
SAMPLE ID	#4 I B 4 J	DATE	TIME	XIATAM	# OF CONTAINERS	9260 VOCs	1311/8260 TCPL VOCs	3270D LL Full List	Vy Weight	Metals, RCRA 8 Metals, TPCL	Total Cyanide	×O- H9TWV	VWTPH-Gx									
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# **Apex Laboratories, LLC**

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 -- Filter Bags

Project Number: 111323
Project Manager: Chip Byrd

Report ID: A2J0599 - 12 02 22 1304

APEX LABS COOLER RECEIPT FORM
Client: Savenson Engran wental Senses In Element WO#: A2 J 1599
Project/Project #: <u>6asco</u> - Bay Filter 111323
Delivery Info:  Date/time received:  Delivered by: Apex X Client ESS FedEx UPS Swift Senvoy SDS Other  Cooler Inspection Date/time inspected:  Cooler Inspection Date/
Green dots applied to out of temperature samples? Yet/No Out of temperature samples form initiated? Yet/No Sample Inspection: Date/time inspected: \[ \frac{10}{2} \]
COC/container discrepancies form initiated? Yes No Comments: No Comments:
Do VOA vials have visible headspace? Yes No NA  Comments  Water samples: pH checked: Yes No NA pH appropriate? Yes No NA  Comments:
Additional information:
Labeled by: Witness: Cooler Inspected by:
Form Y-003 R-00 -

Apex Laboratories