



ANALYTICAL REPORT

Apex Laboratories, LLC

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

Friday, May 19, 2023

John Renda
Anchor QEA, LLC
6720 SW Macadam Ave. Suite 125
Portland, OR 97219

RE: A3C0826 - Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon. - 000029-02.84 T-01.001F

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 A3C0826, which was received by the laboratory on 3/23/2023 at 8:10:00AM.

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

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

Cooler Receipt Information

(See Cooler Receipt Form for details)

Cooler #1	2.3	degC	Cooler #2	3.1	degC
Cooler #3	3.3	degC			

This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.

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



Apex Laboratories

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Darwin Thomas, Business Development Director

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ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125
Portland, OR 97219Project: **Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001F**Project Manager: **John Renda****Report ID:****A3C0826 - 05 19 23 0544****ANALYTICAL REPORT FOR SAMPLES****SAMPLE INFORMATION**

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
GS-032223-46	A3C0826-01	WG	03/22/23 09:00	03/23/23 08:10
GS-032223-47	A3C0826-02	WG	03/22/23 10:15	03/23/23 08:10
GS-032223-48	A3C0826-03	WG	03/22/23 11:45	03/23/23 08:10
GS-032223-49	A3C0826-04	WG	03/22/23 12:40	03/23/23 08:10
GS-032223-50	A3C0826-05	WG	03/22/23 12:55	03/23/23 08:10
GS-032223-51	A3C0826-06	WG	03/22/23 13:40	03/23/23 08:10
GS-032223-52	A3C0826-07	WG	03/22/23 14:30	03/23/23 08:10
TB-032223	A3C0826-08	W	03/22/23 15:30	03/23/23 08:10

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Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0826 - 05 19 23 0544

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
GS-032223-46 (A3C0826-01)		Matrix: WG			Batch: 23D0077			
Diesel	ND	97.1	194	ug/L	1	04/04/23 20:40	NWTPH-Dx	
Oil	ND	194	388	ug/L	1	04/04/23 20:40	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 91 %		Limits: 50-150 %	1	04/04/23 20:40	NWTPH-Dx	
GS-032223-47 (A3C0826-02)		Matrix: WG			Batch: 23D0077			
Diesel	ND	96.2	192	ug/L	1	04/04/23 21:22	NWTPH-Dx	
Oil	ND	192	385	ug/L	1	04/04/23 21:22	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 92 %		Limits: 50-150 %	1	04/04/23 21:22	NWTPH-Dx	
GS-032223-48 (A3C0826-03)		Matrix: WG			Batch: 23D0077			
Diesel	ND	96.2	192	ug/L	1	04/04/23 21:42	NWTPH-Dx	
Oil	ND	192	385	ug/L	1	04/04/23 21:42	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 84 %		Limits: 50-150 %	1	04/04/23 21:42	NWTPH-Dx	
GS-032223-49 (A3C0826-04)		Matrix: WG			Batch: 23D0077			
Diesel	136	96.2	192	ug/L	1	04/04/23 22:03	NWTPH-Dx	J
Oil	394	192	385	ug/L	1	04/04/23 22:03	NWTPH-Dx	F-16
Surrogate: o-Terphenyl (Surr)		Recovery: 94 %		Limits: 50-150 %	1	04/04/23 22:03	NWTPH-Dx	
GS-032223-50 (A3C0826-05)		Matrix: WG			Batch: 23D0077			
Diesel	1040	96.2	192	ug/L	1	04/04/23 22:24	NWTPH-Dx	F-13
Oil	ND	192	385	ug/L	1	04/04/23 22:24	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 104 %		Limits: 50-150 %	1	04/04/23 22:24	NWTPH-Dx	
GS-032223-51 (A3C0826-06)		Matrix: WG			Batch: 23D0077			
Diesel	2930	96.2	192	ug/L	1	04/05/23 00:07	NWTPH-Dx	F-13
Oil	ND	192	385	ug/L	1	04/05/23 00:07	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 108 %		Limits: 50-150 %	1	04/05/23 00:07	NWTPH-Dx	
GS-032223-52 (A3C0826-07)		Matrix: WG			Batch: 23D0077			
Diesel	2850	97.1	194	ug/L	1	04/05/23 00:28	NWTPH-Dx	F-13
Oil	ND	194	388	ug/L	1	04/05/23 00:28	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 108 %		Limits: 50-150 %	1	04/05/23 00:28	NWTPH-Dx	

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Project: Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.

Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0826 - 05 19 23 0544

ANALYTICAL SAMPLE RESULTS

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

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-032223-46 (A3C0826-01RE1)		Matrix: WG			Batch: 23C1116			
Gasoline Range Organics	ND	50.0	100	ug/L	1	03/28/23 22:42	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 94 %	Limits: 50-150 %	1	03/28/23 22:42	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		105 %	50-150 %	1	03/28/23 22:42	NWTPH-Gx (MS)		
GS-032223-47 (A3C0826-02RE1)		Matrix: WG			Batch: 23C1116			
Gasoline Range Organics	ND	50.0	100	ug/L	1	03/28/23 23:05	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 99 %	Limits: 50-150 %	1	03/28/23 23:05	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		107 %	50-150 %	1	03/28/23 23:05	NWTPH-Gx (MS)		
GS-032223-48 (A3C0826-03RE1)		Matrix: WG			Batch: 23C1116			
Gasoline Range Organics	ND	50.0	100	ug/L	1	03/28/23 23:27	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 96 %	Limits: 50-150 %	1	03/28/23 23:27	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		105 %	50-150 %	1	03/28/23 23:27	NWTPH-Gx (MS)		
GS-032223-49 (A3C0826-04RE1)		Matrix: WG			Batch: 23C1116			
Gasoline Range Organics	ND	50.0	100	ug/L	1	03/28/23 23:50	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 95 %	Limits: 50-150 %	1	03/28/23 23:50	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		105 %	50-150 %	1	03/28/23 23:50	NWTPH-Gx (MS)		
GS-032223-50 (A3C0826-05RE1)		Matrix: WG			Batch: 23C1116			
Gasoline Range Organics	242	50.0	100	ug/L	1	03/29/23 00:12	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 98 %	Limits: 50-150 %	1	03/29/23 00:12	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		101 %	50-150 %	1	03/29/23 00:12	NWTPH-Gx (MS)		
GS-032223-51 (A3C0826-06RE1)		Matrix: WG			Batch: 23C1073			
Gasoline Range Organics	5610	1000	2000	ug/L	20	03/28/23 18:41	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 100 %	Limits: 50-150 %	1	03/28/23 18:41	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		101 %	50-150 %	1	03/28/23 18:41	NWTPH-Gx (MS)		
GS-032223-52 (A3C0826-07RE1)		Matrix: WG			Batch: 23C1207			
Gasoline Range Organics	3990	100	200	ug/L	2	03/30/23 18:38	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 98 %	Limits: 50-150 %	1	03/30/23 18:38	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		99 %	50-150 %	1	03/30/23 18:38	NWTPH-Gx (MS)		

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ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-032223-46 (A3C0826-01RE1)				Matrix: WG		Batch: 23C1116		
Acetone	ND	20.0	20.0	ug/L	1	03/28/23 22:42	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	03/28/23 22:42	EPA 8260D	
Benzene	ND	0.100	0.200	ug/L	1	03/28/23 22:42	EPA 8260D	
Bromobenzene	ND	0.250	0.500	ug/L	1	03/28/23 22:42	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	03/28/23 22:42	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	03/28/23 22:42	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	03/28/23 22:42	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	03/28/23 22:42	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	03/28/23 22:42	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	03/28/23 22:42	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	03/28/23 22:42	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	03/28/23 22:42	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	03/28/23 22:42	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	03/28/23 22:42	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	03/28/23 22:42	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	03/28/23 22:42	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	03/28/23 22:42	EPA 8260D	
Chloromethane	ND	2.50	5.00	ug/L	1	03/28/23 22:42	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/28/23 22:42	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/28/23 22:42	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	03/28/23 22:42	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	03/28/23 22:42	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	03/28/23 22:42	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	03/28/23 22:42	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/28/23 22:42	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/28/23 22:42	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/28/23 22:42	EPA 8260D	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	03/28/23 22:42	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	03/28/23 22:42	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	03/28/23 22:42	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	03/28/23 22:42	EPA 8260D	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	03/28/23 22:42	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	03/28/23 22:42	EPA 8260D	

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Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-032223-46 (A3C0826-01RE1)				Matrix: WG		Batch: 23C1116		
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	03/28/23 22:42	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	03/28/23 22:42	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	03/28/23 22:42	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	03/28/23 22:42	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/28/23 22:42	EPA 8260D	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/28/23 22:42	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	03/28/23 22:42	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	03/28/23 22:42	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	03/28/23 22:42	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	03/28/23 22:42	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	03/28/23 22:42	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	03/28/23 22:42	EPA 8260D	
4-Methyl-2-pentanone (MIBK)	ND	5.00	10.0	ug/L	1	03/28/23 22:42	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	03/28/23 22:42	EPA 8260D	
Naphthalene	ND	2.00	2.00	ug/L	1	03/28/23 22:42	EPA 8260D	Q-54m
n-Propylbenzene	ND	0.250	0.500	ug/L	1	03/28/23 22:42	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	03/28/23 22:42	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	03/28/23 22:42	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	03/28/23 22:42	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	03/28/23 22:42	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	03/28/23 22:42	EPA 8260D	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/28/23 22:42	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/28/23 22:42	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	03/28/23 22:42	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	03/28/23 22:42	EPA 8260D	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	03/28/23 22:42	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	03/28/23 22:42	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	03/28/23 22:42	EPA 8260D	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	03/28/23 22:42	EPA 8260D	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	03/28/23 22:42	EPA 8260D	
Vinyl chloride	ND	0.200	0.400	ug/L	1	03/28/23 22:42	EPA 8260D	
m,p-Xylene	ND	0.500	1.00	ug/L	1	03/28/23 22:42	EPA 8260D	
o-Xylene	ND	0.250	0.500	ug/L	1	03/28/23 22:42	EPA 8260D	

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Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-032223-46 (A3C0826-01RE1)		Matrix: WG			Batch: 23C1116			
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 100 %	Limits: 80-120 %	1		03/28/23 22:42	EPA 8260D	
Toluene-d8 (Surr)		101 %	80-120 %	1		03/28/23 22:42	EPA 8260D	
4-Bromofluorobenzene (Surr)		98 %	80-120 %	1		03/28/23 22:42	EPA 8260D	
GS-032223-47 (A3C0826-02RE1)		Matrix: WG			Batch: 23C1116			
Acetone	ND	10.0	20.0	ug/L	1	03/28/23 23:05	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	03/28/23 23:05	EPA 8260D	
Benzene	ND	0.100	0.200	ug/L	1	03/28/23 23:05	EPA 8260D	
Bromobenzene	ND	0.250	0.500	ug/L	1	03/28/23 23:05	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	03/28/23 23:05	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	03/28/23 23:05	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	03/28/23 23:05	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	03/28/23 23:05	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	03/28/23 23:05	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	03/28/23 23:05	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	03/28/23 23:05	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	03/28/23 23:05	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	03/28/23 23:05	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	03/28/23 23:05	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	03/28/23 23:05	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	03/28/23 23:05	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	03/28/23 23:05	EPA 8260D	
Chloromethane	ND	2.50	5.00	ug/L	1	03/28/23 23:05	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/28/23 23:05	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/28/23 23:05	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	03/28/23 23:05	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	03/28/23 23:05	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	03/28/23 23:05	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	03/28/23 23:05	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/28/23 23:05	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/28/23 23:05	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/28/23 23:05	EPA 8260D	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	03/28/23 23:05	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	03/28/23 23:05	EPA 8260D	

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

Project: **Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001F**Project Manager: **John Renda****Report ID:****A3C0826 - 05 19 23 0544**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-032223-47 (A3C0826-02RE1)		Matrix: WG		Batch: 23C1116				
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	03/28/23 23:05	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	03/28/23 23:05	EPA 8260D	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	03/28/23 23:05	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	03/28/23 23:05	EPA 8260D	
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	03/28/23 23:05	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	03/28/23 23:05	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	03/28/23 23:05	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	03/28/23 23:05	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/28/23 23:05	EPA 8260D	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/28/23 23:05	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	03/28/23 23:05	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	03/28/23 23:05	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	03/28/23 23:05	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	03/28/23 23:05	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	03/28/23 23:05	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	03/28/23 23:05	EPA 8260D	
4-Methyl-2-pentanone (MIBK)	ND	5.00	10.0	ug/L	1	03/28/23 23:05	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	03/28/23 23:05	EPA 8260D	
Naphthalene	ND	2.00	2.00	ug/L	1	03/28/23 23:05	EPA 8260D	Q-54m
n-Propylbenzene	ND	0.250	0.500	ug/L	1	03/28/23 23:05	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	03/28/23 23:05	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	03/28/23 23:05	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	03/28/23 23:05	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	03/28/23 23:05	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	03/28/23 23:05	EPA 8260D	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/28/23 23:05	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/28/23 23:05	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	03/28/23 23:05	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	03/28/23 23:05	EPA 8260D	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	03/28/23 23:05	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	03/28/23 23:05	EPA 8260D	
1,2,3-Trimethylpropane	ND	0.500	1.00	ug/L	1	03/28/23 23:05	EPA 8260D	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	03/28/23 23:05	EPA 8260D	

Apex Laboratories

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

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

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125
Portland, OR 97219

Project: Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.

Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0826 - 05 19 23 0544

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-032223-47 (A3C0826-02RE1)		Matrix: WG			Batch: 23C1116			
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	03/28/23 23:05	EPA 8260D	
Vinyl chloride	ND	0.200	0.400	ug/L	1	03/28/23 23:05	EPA 8260D	
m,p-Xylene	ND	0.500	1.00	ug/L	1	03/28/23 23:05	EPA 8260D	
o-Xylene	ND	0.250	0.500	ug/L	1	03/28/23 23:05	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 102 %		Limits: 80-120 %	1	03/28/23 23:05	EPA 8260D	
Toluene-d8 (Surr)		101 %		80-120 %	1	03/28/23 23:05	EPA 8260D	
4-Bromofluorobenzene (Surr)		99 %		80-120 %	1	03/28/23 23:05	EPA 8260D	
GS-032223-48 (A3C0826-03RE1)		Matrix: WG			Batch: 23C1116			
Acetone	ND	10.0	20.0	ug/L	1	03/28/23 23:27	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	03/28/23 23:27	EPA 8260D	
Benzene	ND	0.100	0.200	ug/L	1	03/28/23 23:27	EPA 8260D	
Bromobenzene	ND	0.250	0.500	ug/L	1	03/28/23 23:27	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	03/28/23 23:27	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	03/28/23 23:27	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	03/28/23 23:27	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	03/28/23 23:27	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	03/28/23 23:27	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	03/28/23 23:27	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	03/28/23 23:27	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	03/28/23 23:27	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	03/28/23 23:27	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	03/28/23 23:27	EPA 8260D	
Chlorobenzene	3.94	0.250	0.500	ug/L	1	03/28/23 23:27	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	03/28/23 23:27	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	03/28/23 23:27	EPA 8260D	
Chloromethane	ND	2.50	5.00	ug/L	1	03/28/23 23:27	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/28/23 23:27	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/28/23 23:27	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	03/28/23 23:27	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	03/28/23 23:27	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	03/28/23 23:27	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	03/28/23 23:27	EPA 8260D	
1,2-Dichlorobenzene	4.18	0.250	0.500	ug/L	1	03/28/23 23:27	EPA 8260D	

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125
Portland, OR 97219Project: **Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001F**Project Manager: **John Renda****Report ID:****A3C0826 - 05 19 23 0544**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-032223-48 (A3C0826-03RE1)				Matrix: WG		Batch: 23C1116		
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/28/23 23:27	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/28/23 23:27	EPA 8260D	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	03/28/23 23:27	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	03/28/23 23:27	EPA 8260D	
1,2-Dichloroethane (EDC)	0.200	0.200	0.400	ug/L	1	03/28/23 23:27	EPA 8260D	J
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	03/28/23 23:27	EPA 8260D	
cis-1,2-Dichloroethene	0.770	0.200	0.400	ug/L	1	03/28/23 23:27	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	03/28/23 23:27	EPA 8260D	
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	03/28/23 23:27	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	03/28/23 23:27	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	03/28/23 23:27	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	03/28/23 23:27	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/28/23 23:27	EPA 8260D	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/28/23 23:27	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	03/28/23 23:27	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	03/28/23 23:27	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	03/28/23 23:27	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	03/28/23 23:27	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	03/28/23 23:27	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	03/28/23 23:27	EPA 8260D	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	03/28/23 23:27	EPA 8260D	
Methyl tert-butyl ether (MTBE)	9.33	0.500	1.00	ug/L	1	03/28/23 23:27	EPA 8260D	
Naphthalene	ND	2.00	2.00	ug/L	1	03/28/23 23:27	EPA 8260D	Q-54m
n-Propylbenzene	ND	0.250	0.500	ug/L	1	03/28/23 23:27	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	03/28/23 23:27	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	03/28/23 23:27	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	03/28/23 23:27	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	03/28/23 23:27	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	03/28/23 23:27	EPA 8260D	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/28/23 23:27	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/28/23 23:27	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	03/28/23 23:27	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	03/28/23 23:27	EPA 8260D	

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125
Portland, OR 97219Project: **Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001F**Project Manager: **John Renda****Report ID:****A3C0826 - 05 19 23 0544**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-032223-48 (A3C0826-03RE1)		Matrix: WG			Batch: 23C1116			
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	03/28/23 23:27	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	03/28/23 23:27	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	03/28/23 23:27	EPA 8260D	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	03/28/23 23:27	EPA 8260D	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	03/28/23 23:27	EPA 8260D	
Vinyl chloride	ND	0.200	0.400	ug/L	1	03/28/23 23:27	EPA 8260D	
m,p-Xylene	ND	0.500	1.00	ug/L	1	03/28/23 23:27	EPA 8260D	
o-Xylene	ND	0.250	0.500	ug/L	1	03/28/23 23:27	EPA 8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 101 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>03/28/23 23:27</i>	<i>EPA 8260D</i>	
<i>Toluene-d8 (Surr)</i>		<i>102 %</i>		<i>80-120 %</i>	<i>1</i>	<i>03/28/23 23:27</i>	<i>EPA 8260D</i>	
<i>4-Bromofluorobenzene (Surr)</i>		<i>100 %</i>		<i>80-120 %</i>	<i>1</i>	<i>03/28/23 23:27</i>	<i>EPA 8260D</i>	
GS-032223-49 (A3C0826-04RE1)		Matrix: WG			Batch: 23C1116			
Acetone	ND	10.0	20.0	ug/L	1	03/28/23 23:50	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	03/28/23 23:50	EPA 8260D	
Benzene	ND	0.100	0.200	ug/L	1	03/28/23 23:50	EPA 8260D	
Bromobenzene	ND	0.250	0.500	ug/L	1	03/28/23 23:50	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	03/28/23 23:50	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	03/28/23 23:50	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	03/28/23 23:50	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	03/28/23 23:50	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	03/28/23 23:50	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	03/28/23 23:50	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	03/28/23 23:50	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	03/28/23 23:50	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	03/28/23 23:50	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	03/28/23 23:50	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	03/28/23 23:50	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	03/28/23 23:50	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	03/28/23 23:50	EPA 8260D	
Chloromethane	ND	2.50	5.00	ug/L	1	03/28/23 23:50	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/28/23 23:50	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/28/23 23:50	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	03/28/23 23:50	EPA 8260D	

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

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

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125
Portland, OR 97219

Project: Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.

Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0826 - 05 19 23 0544

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-032223-49 (A3C0826-04RE1)		Matrix: WG			Batch: 23C1116			
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	03/28/23 23:50	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	03/28/23 23:50	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	03/28/23 23:50	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/28/23 23:50	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/28/23 23:50	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/28/23 23:50	EPA 8260D	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	03/28/23 23:50	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	03/28/23 23:50	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	03/28/23 23:50	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	03/28/23 23:50	EPA 8260D	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	03/28/23 23:50	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	03/28/23 23:50	EPA 8260D	
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	03/28/23 23:50	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	03/28/23 23:50	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	03/28/23 23:50	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	03/28/23 23:50	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/28/23 23:50	EPA 8260D	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/28/23 23:50	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	03/28/23 23:50	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	03/28/23 23:50	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	03/28/23 23:50	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	03/28/23 23:50	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	03/28/23 23:50	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	03/28/23 23:50	EPA 8260D	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	03/28/23 23:50	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	03/28/23 23:50	EPA 8260D	
Naphthalene	ND	2.00	2.00	ug/L	1	03/28/23 23:50	EPA 8260D	Q-54m
n-Propylbenzene	ND	0.250	0.500	ug/L	1	03/28/23 23:50	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	03/28/23 23:50	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	03/28/23 23:50	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	03/28/23 23:50	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	03/28/23 23:50	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	03/28/23 23:50	EPA 8260D	

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

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

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125
Portland, OR 97219

Project: Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.

Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0826 - 05 19 23 0544

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-032223-49 (A3C0826-04RE1)		Matrix: WG			Batch: 23C1116			
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/28/23 23:50	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/28/23 23:50	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	03/28/23 23:50	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	03/28/23 23:50	EPA 8260D	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	03/28/23 23:50	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	03/28/23 23:50	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	03/28/23 23:50	EPA 8260D	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	03/28/23 23:50	EPA 8260D	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	03/28/23 23:50	EPA 8260D	
Vinyl chloride	ND	0.200	0.400	ug/L	1	03/28/23 23:50	EPA 8260D	
m,p-Xylene	ND	0.500	1.00	ug/L	1	03/28/23 23:50	EPA 8260D	
o-Xylene	ND	0.250	0.500	ug/L	1	03/28/23 23:50	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery:	101 %	Limits:	80-120 %	1	03/28/23 23:50	EPA 8260D
Toluene-d8 (Surr)			103 %		80-120 %	1	03/28/23 23:50	EPA 8260D
4-Bromofluorobenzene (Surr)			99 %		80-120 %	1	03/28/23 23:50	EPA 8260D
GS-032223-50 (A3C0826-05RE1)		Matrix: WG			Batch: 23C1116			
Acetone	ND	20.0	20.0	ug/L	1	03/29/23 00:12	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	03/29/23 00:12	EPA 8260D	
Benzene	6.32	0.100	0.200	ug/L	1	03/29/23 00:12	EPA 8260D	
Bromobenzene	ND	0.250	0.500	ug/L	1	03/29/23 00:12	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	03/29/23 00:12	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	03/29/23 00:12	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	03/29/23 00:12	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	03/29/23 00:12	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	03/29/23 00:12	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	03/29/23 00:12	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	03/29/23 00:12	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	03/29/23 00:12	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	03/29/23 00:12	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	03/29/23 00:12	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	03/29/23 00:12	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	03/29/23 00:12	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	03/29/23 00:12	EPA 8260D	

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125
Portland, OR 97219Project: **Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001F**Project Manager: **John Renda****Report ID:****A3C0826 - 05 19 23 0544**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-032223-50 (A3C0826-05RE1)		Matrix: WG			Batch: 23C1116			
Chloromethane	ND	2.50	5.00	ug/L	1	03/29/23 00:12	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/29/23 00:12	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/29/23 00:12	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	03/29/23 00:12	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	03/29/23 00:12	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	03/29/23 00:12	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	03/29/23 00:12	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/29/23 00:12	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/29/23 00:12	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/29/23 00:12	EPA 8260D	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	03/29/23 00:12	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	03/29/23 00:12	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	03/29/23 00:12	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	03/29/23 00:12	EPA 8260D	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	03/29/23 00:12	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	03/29/23 00:12	EPA 8260D	
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	03/29/23 00:12	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	03/29/23 00:12	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	03/29/23 00:12	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	03/29/23 00:12	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/29/23 00:12	EPA 8260D	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/29/23 00:12	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	03/29/23 00:12	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	03/29/23 00:12	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	03/29/23 00:12	EPA 8260D	
Isopropylbenzene	0.520	0.500	1.00	ug/L	1	03/29/23 00:12	EPA 8260D	J
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	03/29/23 00:12	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	03/29/23 00:12	EPA 8260D	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	03/29/23 00:12	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	03/29/23 00:12	EPA 8260D	
Naphthalene	ND	2.00	2.00	ug/L	1	03/29/23 00:12	EPA 8260D	Q-54m
n-Propylbenzene	0.420	0.250	0.500	ug/L	1	03/29/23 00:12	EPA 8260D	J
Styrene	ND	0.500	1.00	ug/L	1	03/29/23 00:12	EPA 8260D	

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

Project: **Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001F**Project Manager: **John Renda****Report ID:****A3C0826 - 05 19 23 0544**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-032223-50 (A3C0826-05RE1)		Matrix: WG			Batch: 23C1116			
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	03/29/23 00:12	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	03/29/23 00:12	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	03/29/23 00:12	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	03/29/23 00:12	EPA 8260D	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/29/23 00:12	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/29/23 00:12	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	03/29/23 00:12	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	03/29/23 00:12	EPA 8260D	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	03/29/23 00:12	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	03/29/23 00:12	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	03/29/23 00:12	EPA 8260D	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	03/29/23 00:12	EPA 8260D	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	03/29/23 00:12	EPA 8260D	
Vinyl chloride	ND	0.200	0.400	ug/L	1	03/29/23 00:12	EPA 8260D	
m,p-Xylene	ND	0.500	1.00	ug/L	1	03/29/23 00:12	EPA 8260D	
o-Xylene	0.330	0.250	0.500	ug/L	1	03/29/23 00:12	EPA 8260D	J
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 95 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>03/29/23 00:12</i>	<i>EPA 8260D</i>	
<i>Toluene-d8 (Surr)</i>		<i>103 %</i>		<i>80-120 %</i>	<i>1</i>	<i>03/29/23 00:12</i>	<i>EPA 8260D</i>	
<i>4-Bromofluorobenzene (Surr)</i>		<i>97 %</i>		<i>80-120 %</i>	<i>1</i>	<i>03/29/23 00:12</i>	<i>EPA 8260D</i>	
GS-032223-51 (A3C0826-06RE1)		Matrix: WG			Batch: 23C1073			
Acetone	ND	200	400	ug/L	20	03/28/23 18:41	EPA 8260D	
Acrylonitrile	ND	20.0	40.0	ug/L	20	03/28/23 18:41	EPA 8260D	
Benzene	61.0	2.00	4.00	ug/L	20	03/28/23 18:41	EPA 8260D	
Bromobenzene	ND	5.00	10.0	ug/L	20	03/28/23 18:41	EPA 8260D	
Bromochloromethane	ND	10.0	20.0	ug/L	20	03/28/23 18:41	EPA 8260D	
Bromodichloromethane	ND	10.0	20.0	ug/L	20	03/28/23 18:41	EPA 8260D	
Bromoform	ND	20.0	20.0	ug/L	20	03/28/23 18:41	EPA 8260D	Q-54p
Bromomethane	ND	100	100	ug/L	20	03/28/23 18:41	EPA 8260D	
2-Butanone (MEK)	ND	100	200	ug/L	20	03/28/23 18:41	EPA 8260D	
n-Butylbenzene	ND	10.0	20.0	ug/L	20	03/28/23 18:41	EPA 8260D	
sec-Butylbenzene	ND	10.0	20.0	ug/L	20	03/28/23 18:41	EPA 8260D	
tert-Butylbenzene	ND	10.0	20.0	ug/L	20	03/28/23 18:41	EPA 8260D	
Carbon disulfide	ND	100	200	ug/L	20	03/28/23 18:41	EPA 8260D	

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125
Portland, OR 97219Project: **Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001F**Project Manager: **John Renda****Report ID:****A3C0826 - 05 19 23 0544**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-032223-51 (A3C0826-06RE1)				Matrix: WG		Batch: 23C1073		
Carbon tetrachloride	ND	20.0	20.0	ug/L	20	03/28/23 18:41	EPA 8260D	Q-54r
Chlorobenzene	ND	5.00	10.0	ug/L	20	03/28/23 18:41	EPA 8260D	
Chloroethane	ND	100	100	ug/L	20	03/28/23 18:41	EPA 8260D	
Chloroform	ND	10.0	20.0	ug/L	20	03/28/23 18:41	EPA 8260D	
Chloromethane	ND	50.0	100	ug/L	20	03/28/23 18:41	EPA 8260D	
2-Chlorotoluene	ND	10.0	20.0	ug/L	20	03/28/23 18:41	EPA 8260D	
4-Chlorotoluene	ND	10.0	20.0	ug/L	20	03/28/23 18:41	EPA 8260D	
Dibromochloromethane	ND	20.0	20.0	ug/L	20	03/28/23 18:41	EPA 8260D	Q-54n
1,2-Dibromo-3-chloropropane	ND	100	100	ug/L	20	03/28/23 18:41	EPA 8260D	Q-54v
1,2-Dibromoethane (EDB)	ND	10.0	10.0	ug/L	20	03/28/23 18:41	EPA 8260D	
Dibromomethane	ND	10.0	20.0	ug/L	20	03/28/23 18:41	EPA 8260D	
1,2-Dichlorobenzene	ND	5.00	10.0	ug/L	20	03/28/23 18:41	EPA 8260D	
1,3-Dichlorobenzene	ND	5.00	10.0	ug/L	20	03/28/23 18:41	EPA 8260D	
1,4-Dichlorobenzene	ND	5.00	10.0	ug/L	20	03/28/23 18:41	EPA 8260D	
Dichlorodifluoromethane	ND	10.0	20.0	ug/L	20	03/28/23 18:41	EPA 8260D	
1,1-Dichloroethane	ND	4.00	8.00	ug/L	20	03/28/23 18:41	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	4.00	8.00	ug/L	20	03/28/23 18:41	EPA 8260D	
1,2-Dichloropropane	ND	5.00	10.0	ug/L	20	03/28/23 18:41	EPA 8260D	
1,3-Dichloropropane	ND	10.0	20.0	ug/L	20	03/28/23 18:41	EPA 8260D	
2,2-Dichloropropane	ND	20.0	20.0	ug/L	20	03/28/23 18:41	EPA 8260D	Q-54x
1,1-Dichloropropene	ND	10.0	20.0	ug/L	20	03/28/23 18:41	EPA 8260D	
cis-1,3-Dichloropropene	ND	20.0	20.0	ug/L	20	03/28/23 18:41	EPA 8260D	Q-54l
trans-1,3-Dichloropropene	ND	20.0	20.0	ug/L	20	03/28/23 18:41	EPA 8260D	Q-54t
Ethylbenzene	55.0	5.00	10.0	ug/L	20	03/28/23 18:41	EPA 8260D	
Hexachlorobutadiene	ND	50.0	100	ug/L	20	03/28/23 18:41	EPA 8260D	
2-Hexanone	ND	100	200	ug/L	20	03/28/23 18:41	EPA 8260D	
Isopropylbenzene	ND	10.0	20.0	ug/L	20	03/28/23 18:41	EPA 8260D	
4-Isopropyltoluene	ND	10.0	20.0	ug/L	20	03/28/23 18:41	EPA 8260D	
Methylene chloride	ND	100	200	ug/L	20	03/28/23 18:41	EPA 8260D	
4-Methyl-2-pentanone (MIBK)	ND	100	200	ug/L	20	03/28/23 18:41	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	20.0	20.0	ug/L	20	03/28/23 18:41	EPA 8260D	
Naphthalene	1540	20.0	40.0	ug/L	20	03/28/23 18:41	EPA 8260D	
n-Propylbenzene	ND	5.00	10.0	ug/L	20	03/28/23 18:41	EPA 8260D	

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

Project: **Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001F**Project Manager: **John Renda****Report ID:****A3C0826 - 05 19 23 0544**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-032223-51 (A3C0826-06RE1)		Matrix: WG			Batch: 23C1073			
Styrene	ND	10.0	20.0	ug/L	20	03/28/23 18:41	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	8.00	8.00	ug/L	20	03/28/23 18:41	EPA 8260D	Q-54n
1,1,2,2-Tetrachloroethane	ND	5.00	10.0	ug/L	20	03/28/23 18:41	EPA 8260D	
Tetrachloroethene (PCE)	ND	4.00	8.00	ug/L	20	03/28/23 18:41	EPA 8260D	
Toluene	ND	10.0	20.0	ug/L	20	03/28/23 18:41	EPA 8260D	
1,2,3-Trichlorobenzene	ND	20.0	40.0	ug/L	20	03/28/23 18:41	EPA 8260D	
1,2,4-Trichlorobenzene	ND	20.0	40.0	ug/L	20	03/28/23 18:41	EPA 8260D	
1,1,1-Trichloroethane	ND	8.00	8.00	ug/L	20	03/28/23 18:41	EPA 8260D	Q-54m
1,1,2-Trichloroethane	ND	5.00	10.0	ug/L	20	03/28/23 18:41	EPA 8260D	
Trichlorofluoromethane	ND	20.0	40.0	ug/L	20	03/28/23 18:41	EPA 8260D	
1,2,3-Trichloropropane	ND	10.0	20.0	ug/L	20	03/28/23 18:41	EPA 8260D	
1,2,4-Trimethylbenzene	20.8	10.0	20.0	ug/L	20	03/28/23 18:41	EPA 8260D	
1,3,5-Trimethylbenzene	ND	10.0	20.0	ug/L	20	03/28/23 18:41	EPA 8260D	
m,p-Xylene	18.4	10.0	20.0	ug/L	20	03/28/23 18:41	EPA 8260D	J
o-Xylene	25.8	5.00	10.0	ug/L	20	03/28/23 18:41	EPA 8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 96 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>03/28/23 18:41</i>	<i>EPA 8260D</i>	
<i>Toluene-d8 (Surr)</i>		<i>100 %</i>		<i>80-120 %</i>	<i>1</i>	<i>03/28/23 18:41</i>	<i>EPA 8260D</i>	
<i>4-Bromofluorobenzene (Surr)</i>		<i>96 %</i>		<i>80-120 %</i>	<i>1</i>	<i>03/28/23 18:41</i>	<i>EPA 8260D</i>	
GS-032223-52 (A3C0826-07RE1)		Matrix: WG			Batch: 23C1207			
Acetone	ND	20.0	40.0	ug/L	2	03/30/23 18:38	EPA 8260D	
Acrylonitrile	ND	2.00	4.00	ug/L	2	03/30/23 18:38	EPA 8260D	
Benzene	ND	0.400	0.400	ug/L	2	03/30/23 18:38	EPA 8260D	
Bromobenzene	ND	0.500	1.00	ug/L	2	03/30/23 18:38	EPA 8260D	
Bromochloromethane	ND	1.00	2.00	ug/L	2	03/30/23 18:38	EPA 8260D	
Bromodichloromethane	ND	1.00	2.00	ug/L	2	03/30/23 18:38	EPA 8260D	
Bromoform	ND	1.00	2.00	ug/L	2	03/30/23 18:38	EPA 8260D	
Bromomethane	ND	10.0	10.0	ug/L	2	03/30/23 18:38	EPA 8260D	
2-Butanone (MEK)	ND	10.0	20.0	ug/L	2	03/30/23 18:38	EPA 8260D	
n-Butylbenzene	ND	1.00	2.00	ug/L	2	03/30/23 18:38	EPA 8260D	
sec-Butylbenzene	ND	1.00	2.00	ug/L	2	03/30/23 18:38	EPA 8260D	
tert-Butylbenzene	ND	1.00	2.00	ug/L	2	03/30/23 18:38	EPA 8260D	
Carbon disulfide	ND	10.0	20.0	ug/L	2	03/30/23 18:38	EPA 8260D	
Carbon tetrachloride	ND	1.00	2.00	ug/L	2	03/30/23 18:38	EPA 8260D	

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125
Portland, OR 97219Project: **Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001F**Project Manager: **John Renda****Report ID:****A3C0826 - 05 19 23 0544**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-032223-52 (A3C0826-07RE1)		Matrix: WG		Batch: 23C1207				
Chlorobenzene	1.34	0.500	1.00	ug/L	2	03/30/23 18:38	EPA 8260D	
Chloroethane	ND	10.0	10.0	ug/L	2	03/30/23 18:38	EPA 8260D	
Chloroform	ND	1.00	2.00	ug/L	2	03/30/23 18:38	EPA 8260D	
Chloromethane	ND	5.00	10.0	ug/L	2	03/30/23 18:38	EPA 8260D	
2-Chlorotoluene	ND	1.00	2.00	ug/L	2	03/30/23 18:38	EPA 8260D	
4-Chlorotoluene	ND	1.00	2.00	ug/L	2	03/30/23 18:38	EPA 8260D	
Dibromochloromethane	ND	1.00	2.00	ug/L	2	03/30/23 18:38	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	5.00	10.0	ug/L	2	03/30/23 18:38	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.500	1.00	ug/L	2	03/30/23 18:38	EPA 8260D	
Dibromomethane	ND	1.00	2.00	ug/L	2	03/30/23 18:38	EPA 8260D	
1,2-Dichlorobenzene	ND	0.500	1.00	ug/L	2	03/30/23 18:38	EPA 8260D	
1,3-Dichlorobenzene	ND	0.500	1.00	ug/L	2	03/30/23 18:38	EPA 8260D	
1,4-Dichlorobenzene	ND	0.500	1.00	ug/L	2	03/30/23 18:38	EPA 8260D	
Dichlorodifluoromethane	ND	1.00	2.00	ug/L	2	03/30/23 18:38	EPA 8260D	
1,1-Dichloroethane	ND	0.400	0.800	ug/L	2	03/30/23 18:38	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.400	0.800	ug/L	2	03/30/23 18:38	EPA 8260D	
1,2-Dichloropropane	ND	0.500	1.00	ug/L	2	03/30/23 18:38	EPA 8260D	
1,3-Dichloropropane	ND	1.00	2.00	ug/L	2	03/30/23 18:38	EPA 8260D	
2,2-Dichloropropane	ND	1.00	2.00	ug/L	2	03/30/23 18:38	EPA 8260D	
1,1-Dichloropropene	ND	1.00	2.00	ug/L	2	03/30/23 18:38	EPA 8260D	
cis-1,3-Dichloropropene	ND	1.00	2.00	ug/L	2	03/30/23 18:38	EPA 8260D	
trans-1,3-Dichloropropene	ND	1.00	2.00	ug/L	2	03/30/23 18:38	EPA 8260D	
Ethylbenzene	0.640	0.500	1.00	ug/L	2	03/30/23 18:38	EPA 8260D	J
Hexachlorobutadiene	ND	5.00	10.0	ug/L	2	03/30/23 18:38	EPA 8260D	
2-Hexanone	ND	10.0	20.0	ug/L	2	03/30/23 18:38	EPA 8260D	
Isopropylbenzene	8.10	1.00	2.00	ug/L	2	03/30/23 18:38	EPA 8260D	
4-Isopropyltoluene	ND	1.00	2.00	ug/L	2	03/30/23 18:38	EPA 8260D	
Methylene chloride	ND	10.0	20.0	ug/L	2	03/30/23 18:38	EPA 8260D	
4-Methyl-2-pentanone (MIBK)	ND	10.0	20.0	ug/L	2	03/30/23 18:38	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	1.00	2.00	ug/L	2	03/30/23 18:38	EPA 8260D	
Naphthalene	ND	4.00	4.00	ug/L	2	03/30/23 18:38	EPA 8260D	
n-Propylbenzene	0.940	0.500	1.00	ug/L	2	03/30/23 18:38	EPA 8260D	J
Styrene	ND	1.00	2.00	ug/L	2	03/30/23 18:38	EPA 8260D	

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

Project: Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.

Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0826 - 05 19 23 0544

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-032223-52 (A3C0826-07RE1)		Matrix: WG			Batch: 23C1207			
1,1,1,2-Tetrachloroethane	ND	0.400	0.800	ug/L	2	03/30/23 18:38	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	0.500	1.00	ug/L	2	03/30/23 18:38	EPA 8260D	
Toluene	ND	1.00	2.00	ug/L	2	03/30/23 18:38	EPA 8260D	
1,2,3-Trichlorobenzene	ND	2.00	4.00	ug/L	2	03/30/23 18:38	EPA 8260D	
1,2,4-Trichlorobenzene	ND	2.00	4.00	ug/L	2	03/30/23 18:38	EPA 8260D	
1,1,1-Trichloroethane	ND	0.400	0.800	ug/L	2	03/30/23 18:38	EPA 8260D	
1,1,2-Trichloroethane	ND	0.500	1.00	ug/L	2	03/30/23 18:38	EPA 8260D	
Trichlorofluoromethane	ND	2.00	4.00	ug/L	2	03/30/23 18:38	EPA 8260D	
1,2,3-Trichloropropane	ND	1.00	2.00	ug/L	2	03/30/23 18:38	EPA 8260D	
1,2,4-Trimethylbenzene	ND	1.00	2.00	ug/L	2	03/30/23 18:38	EPA 8260D	
1,3,5-Trimethylbenzene	ND	1.00	2.00	ug/L	2	03/30/23 18:38	EPA 8260D	
m,p-Xylene	1.00	1.00	2.00	ug/L	2	03/30/23 18:38	EPA 8260D	J
o-Xylene	2.30	0.500	1.00	ug/L	2	03/30/23 18:38	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 95 %		Limits: 80-120 %	1	03/30/23 18:38	EPA 8260D	
Toluene-d8 (Surr)		101 %		80-120 %	1	03/30/23 18:38	EPA 8260D	
4-Bromofluorobenzene (Surr)		100 %		80-120 %	1	03/30/23 18:38	EPA 8260D	
GS-032223-52 (A3C0826-07RE2)		Matrix: WG			Batch: 23D0016			
Tetrachloroethene (PCE)	ND	0.400	0.800	ug/L	2	04/03/23 19:56	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 101 %		Limits: 80-120 %	1	04/03/23 19:56	EPA 8260D	
Toluene-d8 (Surr)		100 %		80-120 %	1	04/03/23 19:56	EPA 8260D	
4-Bromofluorobenzene (Surr)		100 %		80-120 %	1	04/03/23 19:56	EPA 8260D	
TB-032223 (A3C0826-08)		Matrix: W			Batch: 23C1041			
Acetone	ND	10.0	20.0	ug/L	1	03/27/23 16:57	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	03/27/23 16:57	EPA 8260D	
Benzene	ND	0.100	0.200	ug/L	1	03/27/23 16:57	EPA 8260D	
Bromobenzene	ND	0.250	0.500	ug/L	1	03/27/23 16:57	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	03/27/23 16:57	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	03/27/23 16:57	EPA 8260D	
Bromoform	ND	1.00	1.00	ug/L	1	03/27/23 16:57	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	03/27/23 16:57	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	03/27/23 16:57	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	03/27/23 16:57	EPA 8260D	

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125
Portland, OR 97219Project: **Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001F**Project Manager: **John Renda****Report ID:****A3C0826 - 05 19 23 0544**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
TB-032223 (A3C0826-08)		Matrix: W			Batch: 23C1041			
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	03/27/23 16:57	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	03/27/23 16:57	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	03/27/23 16:57	EPA 8260D	
Carbon tetrachloride	ND	1.00	1.00	ug/L	1	03/27/23 16:57	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	03/27/23 16:57	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	03/27/23 16:57	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	03/27/23 16:57	EPA 8260D	
Chloromethane	ND	2.50	5.00	ug/L	1	03/27/23 16:57	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/27/23 16:57	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/27/23 16:57	EPA 8260D	
Dibromochloromethane	ND	1.00	1.00	ug/L	1	03/27/23 16:57	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	5.00	5.00	ug/L	1	03/27/23 16:57	EPA 8260D	Q-54r
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	03/27/23 16:57	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	03/27/23 16:57	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/27/23 16:57	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/27/23 16:57	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/27/23 16:57	EPA 8260D	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	03/27/23 16:57	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	03/27/23 16:57	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	03/27/23 16:57	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	03/27/23 16:57	EPA 8260D	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	03/27/23 16:57	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	03/27/23 16:57	EPA 8260D	
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	03/27/23 16:57	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	03/27/23 16:57	EPA 8260D	
2,2-Dichloropropane	ND	1.00	1.00	ug/L	1	03/27/23 16:57	EPA 8260D	Q-54s
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	03/27/23 16:57	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/27/23 16:57	EPA 8260D	
trans-1,3-Dichloropropene	ND	1.00	1.00	ug/L	1	03/27/23 16:57	EPA 8260D	Q-54o
Ethylbenzene	ND	0.250	0.500	ug/L	1	03/27/23 16:57	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	03/27/23 16:57	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	03/27/23 16:57	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	03/27/23 16:57	EPA 8260D	

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125
Portland, OR 97219Project: **Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001F**Project Manager: **John Renda****Report ID:****A3C0826 - 05 19 23 0544**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
TB-032223 (A3C0826-08)		Matrix: W			Batch: 23C1041			
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	03/27/23 16:57	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	03/27/23 16:57	EPA 8260D	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	03/27/23 16:57	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	03/27/23 16:57	EPA 8260D	
Naphthalene	ND	1.00	2.00	ug/L	1	03/27/23 16:57	EPA 8260D	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	03/27/23 16:57	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	03/27/23 16:57	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	03/27/23 16:57	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	03/27/23 16:57	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	03/27/23 16:57	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	03/27/23 16:57	EPA 8260D	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/27/23 16:57	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/27/23 16:57	EPA 8260D	
1,1,1-Trichloroethane	ND	0.400	0.400	ug/L	1	03/27/23 16:57	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	03/27/23 16:57	EPA 8260D	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	03/27/23 16:57	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	03/27/23 16:57	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	03/27/23 16:57	EPA 8260D	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	03/27/23 16:57	EPA 8260D	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	03/27/23 16:57	EPA 8260D	
Vinyl chloride	ND	0.200	0.400	ug/L	1	03/27/23 16:57	EPA 8260D	
m,p-Xylene	ND	0.500	1.00	ug/L	1	03/27/23 16:57	EPA 8260D	
o-Xylene	ND	0.250	0.500	ug/L	1	03/27/23 16:57	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 98 %		Limits: 80-120 %	1	03/27/23 16:57	EPA 8260D	
Toluene-d8 (Surr)		100 %		80-120 %	1	03/27/23 16:57	EPA 8260D	
4-Bromofluorobenzene (Surr)		107 %		80-120 %	1	03/27/23 16:57	EPA 8260D	

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
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503-718-2323
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125
Portland, OR 97219Project: **Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001F**Project Manager: **John Renda****Report ID:****A3C0826 - 05 19 23 0544**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D SIM

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-032223-51 (A3C0826-06)		Matrix: WG			Batch: 23C1275			
1,1-Dichloroethene	ND	0.250	0.500	ug/L	25	03/31/23 19:45	EPA 8260D SIM	
cis-1,2-Dichloroethene	ND	0.250	0.500	ug/L	25	03/31/23 19:45	EPA 8260D SIM	
trans-1,2-Dichloroethene	ND	0.250	0.500	ug/L	25	03/31/23 19:45	EPA 8260D SIM	
Trichloroethene (TCE)	ND	0.250	0.500	ug/L	25	03/31/23 19:45	EPA 8260D SIM	
Vinyl chloride	ND	0.250	0.500	ug/L	25	03/31/23 19:45	EPA 8260D SIM	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>	104 %	<i>Limits:</i>	80-120 %	1	03/31/23 19:45	EPA 8260D SIM
<i>Toluene-d8 (Surr)</i>			99 %		80-120 %	1	03/31/23 19:45	EPA 8260D SIM
<i>4-Bromofluorobenzene (Surr)</i>			93 %		80-120 %	1	03/31/23 19:45	EPA 8260D SIM
GS-032223-52 (A3C0826-07)		Matrix: WG			Batch: 23C1275			
1,1-Dichloroethene	ND	0.250	0.500	ug/L	25	03/31/23 20:12	EPA 8260D SIM	
cis-1,2-Dichloroethene	ND	0.250	0.500	ug/L	25	03/31/23 20:12	EPA 8260D SIM	
trans-1,2-Dichloroethene	ND	0.250	0.500	ug/L	25	03/31/23 20:12	EPA 8260D SIM	
Trichloroethene (TCE)	ND	0.250	0.500	ug/L	25	03/31/23 20:12	EPA 8260D SIM	
Vinyl chloride	ND	0.250	0.500	ug/L	25	03/31/23 20:12	EPA 8260D SIM	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>	104 %	<i>Limits:</i>	80-120 %	1	03/31/23 20:12	EPA 8260D SIM
<i>Toluene-d8 (Surr)</i>			99 %		80-120 %	1	03/31/23 20:12	EPA 8260D SIM
<i>4-Bromofluorobenzene (Surr)</i>			95 %		80-120 %	1	03/31/23 20:12	EPA 8260D SIM

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Darwin Thomas, Business Development Director

Page 22 of 120



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

Project: Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.

Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0826 - 05 19 23 0544

ANALYTICAL SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E (Large Volume Injection)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-032223-46 (A3C0826-01)		Matrix: WG			Batch: 23C0946			
Acenaphthene	ND	0.165	0.165	ug/L	1	03/24/23 19:29	EPA 8270E LVI	R-02
Acenaphthylene	ND	0.0165	0.0329	ug/L	1	03/24/23 19:29	EPA 8270E LVI	
Anthracene	ND	0.0165	0.0329	ug/L	1	03/24/23 19:29	EPA 8270E LVI	
Benz(a)anthracene	ND	0.00824	0.0165	ug/L	1	03/24/23 19:29	EPA 8270E LVI	
Benzo(a)pyrene	ND	0.00824	0.0165	ug/L	1	03/24/23 19:29	EPA 8270E LVI	
Benzo(b)fluoranthene	ND	0.00824	0.0165	ug/L	1	03/24/23 19:29	EPA 8270E LVI	
Benzo(k)fluoranthene	ND	0.00824	0.0165	ug/L	1	03/24/23 19:29	EPA 8270E LVI	
Benzo(g,h,i)perylene	ND	0.0165	0.0329	ug/L	1	03/24/23 19:29	EPA 8270E LVI	
Chrysene	ND	0.00824	0.0165	ug/L	1	03/24/23 19:29	EPA 8270E LVI	
Dibenz(a,h)anthracene	ND	0.00824	0.0165	ug/L	1	03/24/23 19:29	EPA 8270E LVI	
Fluoranthene	ND	0.0165	0.0329	ug/L	1	03/24/23 19:29	EPA 8270E LVI	
Fluorene	ND	0.0165	0.0329	ug/L	1	03/24/23 19:29	EPA 8270E LVI	
Indeno(1,2,3-cd)pyrene	ND	0.00824	0.0165	ug/L	1	03/24/23 19:29	EPA 8270E LVI	
1-Methylnaphthalene	0.0441	0.0329	0.0659	ug/L	1	03/24/23 19:29	EPA 8270E LVI	J
2-Methylnaphthalene	0.0618	0.0329	0.0659	ug/L	1	03/24/23 19:29	EPA 8270E LVI	J
Naphthalene	0.264	0.0329	0.0659	ug/L	1	03/24/23 19:29	EPA 8270E LVI	
Phenanthrene	ND	0.0329	0.0659	ug/L	1	03/24/23 19:29	EPA 8270E LVI	
Pyrene	ND	0.0165	0.0329	ug/L	1	03/24/23 19:29	EPA 8270E LVI	
Carbazole	ND	0.0165	0.0329	ug/L	1	03/24/23 19:29	EPA 8270E LVI	
Dibenzofuran	ND	0.0165	0.0329	ug/L	1	03/24/23 19:29	EPA 8270E LVI	
Surrogate: Acenaphthylene-d8 (Surr)		Recovery:	121 %	Limits:	78-134 %	1	03/24/23 19:29	EPA 8270E LVI
Benzo(a)pyrene-d12 (Surr)			122 %		80-132 %	1	03/24/23 19:29	EPA 8270E LVI

GS-032223-47 (A3C0826-02)

Matrix: WG

Batch: 23C0946

Acenaphthene	0.0290	0.0242	0.0484	ug/L	1	03/24/23 20:01	EPA 8270E LVI	J
Acenaphthylene	ND	0.0242	0.0484	ug/L	1	03/24/23 20:01	EPA 8270E LVI	
Anthracene	ND	0.0242	0.0484	ug/L	1	03/24/23 20:01	EPA 8270E LVI	
Benz(a)anthracene	ND	0.0121	0.0242	ug/L	1	03/24/23 20:01	EPA 8270E LVI	
Benzo(a)pyrene	ND	0.0121	0.0242	ug/L	1	03/24/23 20:01	EPA 8270E LVI	
Benzo(b)fluoranthene	ND	0.0121	0.0242	ug/L	1	03/24/23 20:01	EPA 8270E LVI	
Benzo(k)fluoranthene	ND	0.0121	0.0242	ug/L	1	03/24/23 20:01	EPA 8270E LVI	
Benzo(g,h,i)perylene	ND	0.0242	0.0484	ug/L	1	03/24/23 20:01	EPA 8270E LVI	
Chrysene	ND	0.0121	0.0242	ug/L	1	03/24/23 20:01	EPA 8270E LVI	

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Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0826 - 05 19 23 0544

ANALYTICAL SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E (Large Volume Injection)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-032223-47 (A3C0826-02)		Matrix: WG			Batch: 23C0946			
Dibenz(a,h)anthracene	ND	0.0121	0.0242	ug/L	1	03/24/23 20:01	EPA 8270E LVI	
Fluoranthene	0.0478	0.0242	0.0484	ug/L	1	03/24/23 20:01	EPA 8270E LVI	J
Fluorene	ND	0.0242	0.0484	ug/L	1	03/24/23 20:01	EPA 8270E LVI	
Indeno(1,2,3-cd)pyrene	ND	0.0121	0.0242	ug/L	1	03/24/23 20:01	EPA 8270E LVI	
1-Methylnaphthalene	ND	0.0484	0.0968	ug/L	1	03/24/23 20:01	EPA 8270E LVI	
2-Methylnaphthalene	ND	0.0484	0.0968	ug/L	1	03/24/23 20:01	EPA 8270E LVI	
Naphthalene	ND	0.0484	0.0968	ug/L	1	03/24/23 20:01	EPA 8270E LVI	
Phenanthrene	0.119	0.0484	0.0968	ug/L	1	03/24/23 20:01	EPA 8270E LVI	
Pyrene	0.0496	0.0242	0.0484	ug/L	1	03/24/23 20:01	EPA 8270E LVI	
Carbazole	ND	0.0242	0.0484	ug/L	1	03/24/23 20:01	EPA 8270E LVI	
Dibenzofuran	ND	0.0242	0.0484	ug/L	1	03/24/23 20:01	EPA 8270E LVI	
Surrogate: Acenaphthylene-d8 (Surr)		Recovery:	120 %	Limits:	78-134 %	1	03/24/23 20:01	EPA 8270E LVI
Benzo(a)pyrene-d12 (Surr)			120 %		80-132 %	1	03/24/23 20:01	EPA 8270E LVI
GS-032223-48 (A3C0826-03)		Matrix: WG			Batch: 23C0946			
Acenaphthene	ND	0.0234	0.0468	ug/L	1	03/24/23 20:34	EPA 8270E LVI	
Acenaphthylene	ND	0.0234	0.0468	ug/L	1	03/24/23 20:34	EPA 8270E LVI	
Anthracene	ND	0.0234	0.0468	ug/L	1	03/24/23 20:34	EPA 8270E LVI	
Benz(a)anthracene	ND	0.0117	0.0234	ug/L	1	03/24/23 20:34	EPA 8270E LVI	
Benzo(a)pyrene	ND	0.0117	0.0234	ug/L	1	03/24/23 20:34	EPA 8270E LVI	
Benzo(b)fluoranthene	ND	0.0117	0.0234	ug/L	1	03/24/23 20:34	EPA 8270E LVI	
Benzo(k)fluoranthene	ND	0.0117	0.0234	ug/L	1	03/24/23 20:34	EPA 8270E LVI	
Benzo(g,h,i)perylene	ND	0.0234	0.0468	ug/L	1	03/24/23 20:34	EPA 8270E LVI	
Chrysene	ND	0.0117	0.0234	ug/L	1	03/24/23 20:34	EPA 8270E LVI	
Dibenz(a,h)anthracene	ND	0.0117	0.0234	ug/L	1	03/24/23 20:34	EPA 8270E LVI	
Fluoranthene	ND	0.0234	0.0468	ug/L	1	03/24/23 20:34	EPA 8270E LVI	
Fluorene	ND	0.0234	0.0468	ug/L	1	03/24/23 20:34	EPA 8270E LVI	
Indeno(1,2,3-cd)pyrene	ND	0.0117	0.0234	ug/L	1	03/24/23 20:34	EPA 8270E LVI	
1-Methylnaphthalene	ND	0.0468	0.0936	ug/L	1	03/24/23 20:34	EPA 8270E LVI	
2-Methylnaphthalene	ND	0.0468	0.0936	ug/L	1	03/24/23 20:34	EPA 8270E LVI	
Naphthalene	ND	0.0468	0.0936	ug/L	1	03/24/23 20:34	EPA 8270E LVI	
Phenanthrene	ND	0.0468	0.0936	ug/L	1	03/24/23 20:34	EPA 8270E LVI	
Pyrene	ND	0.0234	0.0468	ug/L	1	03/24/23 20:34	EPA 8270E LVI	

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

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

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125
Portland, OR 97219

Project: Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.

Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0826 - 05 19 23 0544

ANALYTICAL SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E (Large Volume Injection)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-032223-48 (A3C0826-03)		Matrix: WG			Batch: 23C0946			
Carbazole	ND	0.0234	0.0468	ug/L	1	03/24/23 20:34	EPA 8270E LVI	
Dibenzofuran	ND	0.0234	0.0468	ug/L	1	03/24/23 20:34	EPA 8270E LVI	
Surrogate: Acenaphthylene-d8 (Surr)		Recovery: 119 %		Limits: 78-134 %	1	03/24/23 20:34	EPA 8270E LVI	
Benzo(a)pyrene-d12 (Surr)		126 %		80-132 %	1	03/24/23 20:34	EPA 8270E LVI	
GS-032223-49 (A3C0826-04)		Matrix: WG			Batch: 23C0946			
Acenaphthene	1.49	0.0176	0.0353	ug/L	1	03/24/23 21:07	EPA 8270E LVI	
Acenaphthylene	0.168	0.0176	0.0353	ug/L	1	03/24/23 21:07	EPA 8270E LVI	
Anthracene	0.280	0.0176	0.0353	ug/L	1	03/24/23 21:07	EPA 8270E LVI	
Benz(a)anthracene	0.0115	0.00882	0.0176	ug/L	1	03/24/23 21:07	EPA 8270E LVI	J
Benzo(a)pyrene	ND	0.00882	0.0176	ug/L	1	03/24/23 21:07	EPA 8270E LVI	
Benzo(b)fluoranthene	ND	0.00882	0.0176	ug/L	1	03/24/23 21:07	EPA 8270E LVI	
Benzo(k)fluoranthene	ND	0.00882	0.0176	ug/L	1	03/24/23 21:07	EPA 8270E LVI	
Benzo(g,h,i)perylene	ND	0.0176	0.0353	ug/L	1	03/24/23 21:07	EPA 8270E LVI	
Chrysene	ND	0.00882	0.0176	ug/L	1	03/24/23 21:07	EPA 8270E LVI	
Dibenz(a,h)anthracene	ND	0.00882	0.0176	ug/L	1	03/24/23 21:07	EPA 8270E LVI	
Fluoranthene	0.0476	0.0176	0.0353	ug/L	1	03/24/23 21:07	EPA 8270E LVI	
Fluorene	ND	0.0353	0.0353	ug/L	1	03/24/23 21:07	EPA 8270E LVI	
Indeno(1,2,3-cd)pyrene	ND	0.00882	0.0176	ug/L	1	03/24/23 21:07	EPA 8270E LVI	
1-Methylnaphthalene	ND	0.0353	0.0705	ug/L	1	03/24/23 21:07	EPA 8270E LVI	
2-Methylnaphthalene	ND	0.0353	0.0705	ug/L	1	03/24/23 21:07	EPA 8270E LVI	
Naphthalene	0.0511	0.0353	0.0705	ug/L	1	03/24/23 21:07	EPA 8270E LVI	J
Phenanthrene	0.0361	0.0353	0.0705	ug/L	1	03/24/23 21:07	EPA 8270E LVI	J
Pyrene	0.0965	0.0176	0.0353	ug/L	1	03/24/23 21:07	EPA 8270E LVI	
Carbazole	ND	0.0176	0.0353	ug/L	1	03/24/23 21:07	EPA 8270E LVI	
Dibenzofuran	ND	0.0176	0.0353	ug/L	1	03/24/23 21:07	EPA 8270E LVI	
Surrogate: Acenaphthylene-d8 (Surr)		Recovery: 122 %		Limits: 78-134 %	1	03/24/23 21:07	EPA 8270E LVI	
Benzo(a)pyrene-d12 (Surr)		124 %		80-132 %	1	03/24/23 21:07	EPA 8270E LVI	
GS-032223-50 (A3C0826-05)		Matrix: WG			Batch: 23C0946			
Acenaphthene	19.1	0.185	0.371	ug/L	10	03/24/23 18:23	EPA 8270E LVI	
Acenaphthylene	ND	1.97	1.97	ug/L	10	03/24/23 18:23	EPA 8270E LVI	R-02
Anthracene	5.82	0.185	0.371	ug/L	10	03/24/23 18:23	EPA 8270E LVI	
Benz(a)anthracene	0.523	0.0927	0.185	ug/L	10	03/24/23 18:23	EPA 8270E LVI	

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Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0826 - 05 19 23 0544

ANALYTICAL SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E (Large Volume Injection)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-032223-50 (A3C0826-05)		Matrix: WG			Batch: 23C0946			
Benzo(a)pyrene	0.144	0.0927	0.185	ug/L	10	03/24/23 18:23	EPA 8270E LVI	J
Benzo(b)fluoranthene	0.190	0.0927	0.185	ug/L	10	03/24/23 18:23	EPA 8270E LVI	
Benzo(k)fluoranthene	ND	0.0927	0.185	ug/L	10	03/24/23 18:23	EPA 8270E LVI	
Benzo(g,h,i)perylene	ND	0.185	0.371	ug/L	10	03/24/23 18:23	EPA 8270E LVI	
Chrysene	0.695	0.0927	0.185	ug/L	10	03/24/23 18:23	EPA 8270E LVI	
Dibenz(a,h)anthracene	ND	0.0927	0.185	ug/L	10	03/24/23 18:23	EPA 8270E LVI	
Fluoranthene	7.30	0.185	0.371	ug/L	10	03/24/23 18:23	EPA 8270E LVI	
Fluorene	9.91	0.185	0.371	ug/L	10	03/24/23 18:23	EPA 8270E LVI	
Indeno(1,2,3-cd)pyrene	ND	0.0927	0.185	ug/L	10	03/24/23 18:23	EPA 8270E LVI	
1-Methylnaphthalene	4.06	0.371	0.741	ug/L	10	03/24/23 18:23	EPA 8270E LVI	
2-Methylnaphthalene	ND	0.371	0.741	ug/L	10	03/24/23 18:23	EPA 8270E LVI	
Naphthalene	0.755	0.371	0.741	ug/L	10	03/24/23 18:23	EPA 8270E LVI	
Phenanthrene	13.1	0.371	0.741	ug/L	10	03/24/23 18:23	EPA 8270E LVI	
Pyrene	9.07	0.185	0.371	ug/L	10	03/24/23 18:23	EPA 8270E LVI	
Carbazole	0.463	0.185	0.371	ug/L	10	03/24/23 18:23	EPA 8270E LVI	
Dibenzofuran	0.964	0.185	0.371	ug/L	10	03/24/23 18:23	EPA 8270E LVI	
Surrogate: Acenaphthylene-d8 (Surr)		Recovery: 99 %		Limits: 78-134 %	10	03/24/23 18:23	EPA 8270E LVI	S-05
Benzo(a)pyrene-d12 (Surr)		74 %		80-132 %	10	03/24/23 18:23	EPA 8270E LVI	S-05
GS-032223-51 (A3C0826-06)		Matrix: WG			Batch: 23C0946			
Acenaphthene	76.8	1.13	2.25	ug/L	50	03/24/23 17:50	EPA 8270E LVI	
Acenaphthylene	ND	4.93	4.93	ug/L	50	03/24/23 17:50	EPA 8270E LVI	R-02
Anthracene	7.91	1.13	2.25	ug/L	50	03/24/23 17:50	EPA 8270E LVI	
Benz(a)anthracene	ND	0.563	1.13	ug/L	50	03/24/23 17:50	EPA 8270E LVI	
Benzo(a)pyrene	ND	0.563	1.13	ug/L	50	03/24/23 17:50	EPA 8270E LVI	
Benzo(b)fluoranthene	ND	0.563	1.13	ug/L	50	03/24/23 17:50	EPA 8270E LVI	
Benzo(k)fluoranthene	ND	0.563	1.13	ug/L	50	03/24/23 17:50	EPA 8270E LVI	
Benzo(g,h,i)perylene	ND	1.13	2.25	ug/L	50	03/24/23 17:50	EPA 8270E LVI	
Chrysene	ND	0.563	1.13	ug/L	50	03/24/23 17:50	EPA 8270E LVI	
Dibenz(a,h)anthracene	ND	0.563	1.13	ug/L	50	03/24/23 17:50	EPA 8270E LVI	
Fluoranthene	4.00	1.13	2.25	ug/L	50	03/24/23 17:50	EPA 8270E LVI	
Fluorene	28.9	1.13	2.25	ug/L	50	03/24/23 17:50	EPA 8270E LVI	
Indeno(1,2,3-cd)pyrene	ND	0.563	1.13	ug/L	50	03/24/23 17:50	EPA 8270E LVI	

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Project Manager: John Renda

Report ID:

A3C0826 - 05 19 23 0544

ANALYTICAL SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E (Large Volume Injection)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-032223-51 (A3C0826-06)		Matrix: WG			Batch: 23C0946			
1-Methylnaphthalene	94.8	2.25	4.50	ug/L	50	03/24/23 17:50	EPA 8270E LVI	
2-Methylnaphthalene	48.0	2.25	4.50	ug/L	50	03/24/23 17:50	EPA 8270E LVI	
Naphthalene	737	2.25	4.50	ug/L	50	03/24/23 17:50	EPA 8270E LVI	
Phenanthrene	28.0	2.25	4.50	ug/L	50	03/24/23 17:50	EPA 8270E LVI	
Pyrene	3.91	1.13	2.25	ug/L	50	03/24/23 17:50	EPA 8270E LVI	
Carbazole	59.5	1.13	2.25	ug/L	50	03/24/23 17:50	EPA 8270E LVI	
Dibenzofuran	5.77	1.13	2.25	ug/L	50	03/24/23 17:50	EPA 8270E LVI	
Surrogate: Acenaphthylene-d8 (Surr)		Recovery: 65 %		Limits: 78-134 %	50	03/24/23 17:50	EPA 8270E LVI	S-05
Benzo(a)pyrene-d12 (Surr)		69 %		80-132 %	50	03/24/23 17:50	EPA 8270E LVI	S-05
GS-032223-52 (A3C0826-07)		Matrix: WG			Batch: 23C0946			
Acenaphthene	109	0.223	0.446	ug/L	10	03/24/23 18:56	EPA 8270E LVI	
Acenaphthylene	7.04	0.223	0.446	ug/L	10	03/24/23 18:56	EPA 8270E LVI	
Anthracene	1.55	0.223	0.446	ug/L	10	03/24/23 18:56	EPA 8270E LVI	
Benz(a)anthracene	ND	0.111	0.223	ug/L	10	03/24/23 18:56	EPA 8270E LVI	
Benzo(a)pyrene	ND	0.111	0.223	ug/L	10	03/24/23 18:56	EPA 8270E LVI	
Benzo(b)fluoranthene	ND	0.111	0.223	ug/L	10	03/24/23 18:56	EPA 8270E LVI	
Benzo(k)fluoranthene	ND	0.111	0.223	ug/L	10	03/24/23 18:56	EPA 8270E LVI	
Benzo(g,h,i)perylene	ND	0.223	0.446	ug/L	10	03/24/23 18:56	EPA 8270E LVI	
Chrysene	ND	0.111	0.223	ug/L	10	03/24/23 18:56	EPA 8270E LVI	
Dibenz(a,h)anthracene	ND	0.111	0.223	ug/L	10	03/24/23 18:56	EPA 8270E LVI	
Fluoranthene	0.914	0.223	0.446	ug/L	10	03/24/23 18:56	EPA 8270E LVI	
Fluorene	4.65	0.223	0.446	ug/L	10	03/24/23 18:56	EPA 8270E LVI	
Indeno(1,2,3-cd)pyrene	ND	0.111	0.223	ug/L	10	03/24/23 18:56	EPA 8270E LVI	
1-Methylnaphthalene	1.69	0.446	0.892	ug/L	10	03/24/23 18:56	EPA 8270E LVI	
2-Methylnaphthalene	ND	0.446	0.892	ug/L	10	03/24/23 18:56	EPA 8270E LVI	
Naphthalene	0.546	0.446	0.892	ug/L	10	03/24/23 18:56	EPA 8270E LVI	J
Phenanthrene	1.56	0.446	0.892	ug/L	10	03/24/23 18:56	EPA 8270E LVI	
Pyrene	0.847	0.223	0.446	ug/L	10	03/24/23 18:56	EPA 8270E LVI	
Carbazole	ND	0.223	0.446	ug/L	10	03/24/23 18:56	EPA 8270E LVI	
Dibenzofuran	0.574	0.223	0.446	ug/L	10	03/24/23 18:56	EPA 8270E LVI	
Surrogate: Acenaphthylene-d8 (Surr)		Recovery: 90 %		Limits: 78-134 %	10	03/24/23 18:56	EPA 8270E LVI	S-05
Benzo(a)pyrene-d12 (Surr)		81 %		80-132 %	10	03/24/23 18:56	EPA 8270E LVI	S-05

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ANALYTICAL REPORT

Apex Laboratories, LLC

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503-718-2323
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125
Portland, OR 97219Project: **Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001F**Project Manager: **John Renda****Report ID:****A3C0826 - 05 19 23 0544**

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-032223-46 (A3C0826-01)		Matrix: WG						
Batch: 23C1272								
Aluminum	ND	25.0	50.0	ug/L	1	04/03/23 17:48	EPA 6020B	
Antimony	ND	0.500	1.00	ug/L	1	04/03/23 17:48	EPA 6020B	
Arsenic	ND	0.500	1.00	ug/L	1	04/03/23 17:48	EPA 6020B	
Barium	ND	1.00	2.00	ug/L	1	04/03/23 17:48	EPA 6020B	
Beryllium	ND	0.100	0.200	ug/L	1	04/03/23 17:48	EPA 6020B	
Cadmium	ND	0.100	0.200	ug/L	1	04/03/23 17:48	EPA 6020B	
Chromium	ND	1.00	2.00	ug/L	1	04/03/23 17:48	EPA 6020B	
Copper	ND	1.00	2.00	ug/L	1	04/03/23 17:48	EPA 6020B	
Iron	ND	25.0	50.0	ug/L	1	04/03/23 17:48	EPA 6020B	
Lead	ND	0.110	0.200	ug/L	1	04/03/23 17:48	EPA 6020B	
Manganese	ND	0.500	1.00	ug/L	1	04/03/23 17:48	EPA 6020B	
Mercury	ND	0.0400	0.0800	ug/L	1	04/03/23 17:48	EPA 6020B	
Nickel	ND	1.00	2.00	ug/L	1	04/03/23 17:48	EPA 6020B	
Selenium	ND	0.500	1.00	ug/L	1	04/03/23 17:48	EPA 6020B	
Silver	ND	0.100	0.200	ug/L	1	04/03/23 17:48	EPA 6020B	
Thallium	ND	0.100	0.200	ug/L	1	04/03/23 17:48	EPA 6020B	
Vanadium	ND	1.00	2.00	ug/L	1	04/03/23 17:48	EPA 6020B	
Zinc	ND	2.00	4.00	ug/L	1	04/03/23 17:48	EPA 6020B	
GS-032223-47 (A3C0826-02)		Matrix: WG						
Batch: 23C1272								
Aluminum	218	25.0	50.0	ug/L	1	04/03/23 18:03	EPA 6020B	
Antimony	ND	0.500	1.00	ug/L	1	04/03/23 18:03	EPA 6020B	
Arsenic	7.88	0.500	1.00	ug/L	1	04/03/23 18:03	EPA 6020B	
Barium	40.8	1.00	2.00	ug/L	1	04/03/23 18:03	EPA 6020B	
Beryllium	ND	0.100	0.200	ug/L	1	04/03/23 18:03	EPA 6020B	
Cadmium	ND	0.100	0.200	ug/L	1	04/03/23 18:03	EPA 6020B	
Chromium	ND	1.00	2.00	ug/L	1	04/03/23 18:03	EPA 6020B	
Copper	ND	1.00	2.00	ug/L	1	04/03/23 18:03	EPA 6020B	
Iron	26100	25.0	50.0	ug/L	1	04/03/23 18:03	EPA 6020B	
Lead	0.220	0.110	0.200	ug/L	1	04/03/23 18:03	EPA 6020B	
Mercury	ND	0.0400	0.0800	ug/L	1	04/03/23 18:03	EPA 6020B	
Nickel	1.60	1.00	2.00	ug/L	1	04/03/23 18:03	EPA 6020B	J

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Portland, OR 97219Project: **Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001F**Project Manager: **John Renda****Report ID:****A3C0826 - 05 19 23 0544**

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-032223-47 (A3C0826-02)		Matrix: WG						
Selenium	ND	0.500	1.00	ug/L	1	04/03/23 18:03	EPA 6020B	
Silver	ND	0.100	0.200	ug/L	1	04/03/23 18:03	EPA 6020B	
Thallium	ND	0.100	0.200	ug/L	1	04/03/23 18:03	EPA 6020B	
Vanadium	ND	1.00	2.00	ug/L	1	04/03/23 18:03	EPA 6020B	
Zinc	7.70	2.00	4.00	ug/L	1	04/03/23 18:03	EPA 6020B	
GS-032223-47 (A3C0826-02RE1)		Matrix: WG						
Batch: 23C1272								
Manganese	3000	5.00	10.0	ug/L	10	04/04/23 10:51	EPA 6020B	
GS-032223-48 (A3C0826-03)		Matrix: WG						
Batch: 23C1272								
Aluminum	26.4	25.0	50.0	ug/L	1	04/03/23 18:09	EPA 6020B	J
Antimony	ND	0.500	1.00	ug/L	1	04/03/23 18:09	EPA 6020B	
Arsenic	0.735	0.500	1.00	ug/L	1	04/03/23 18:09	EPA 6020B	J
Barium	45.5	1.00	2.00	ug/L	1	04/03/23 18:09	EPA 6020B	
Beryllium	ND	0.100	0.200	ug/L	1	04/03/23 18:09	EPA 6020B	
Cadmium	ND	0.100	0.200	ug/L	1	04/03/23 18:09	EPA 6020B	
Chromium	ND	1.00	2.00	ug/L	1	04/03/23 18:09	EPA 6020B	
Copper	ND	1.00	2.00	ug/L	1	04/03/23 18:09	EPA 6020B	
Iron	17000	25.0	50.0	ug/L	1	04/03/23 18:09	EPA 6020B	
Lead	ND	0.110	0.200	ug/L	1	04/03/23 18:09	EPA 6020B	
Manganese	2020	0.500	1.00	ug/L	1	04/03/23 18:09	EPA 6020B	
Mercury	ND	0.0400	0.0800	ug/L	1	04/03/23 18:09	EPA 6020B	
Nickel	ND	1.00	2.00	ug/L	1	04/03/23 18:09	EPA 6020B	
Selenium	ND	0.500	1.00	ug/L	1	04/03/23 18:09	EPA 6020B	
Silver	ND	0.100	0.200	ug/L	1	04/03/23 18:09	EPA 6020B	
Thallium	ND	0.100	0.200	ug/L	1	04/03/23 18:09	EPA 6020B	
Vanadium	ND	1.00	2.00	ug/L	1	04/03/23 18:09	EPA 6020B	
Zinc	ND	2.00	4.00	ug/L	1	04/03/23 18:09	EPA 6020B	
GS-032223-49 (A3C0826-04)		Matrix: WG						
Batch: 23C1272								
Aluminum	ND	25.0	50.0	ug/L	1	04/03/23 18:24	EPA 6020B	

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ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-032223-49 (A3C0826-04)		Matrix: WG						
Antimony	ND	0.500	1.00	ug/L	1	04/03/23 18:24	EPA 6020B	
Arsenic	7.65	0.500	1.00	ug/L	1	04/03/23 18:24	EPA 6020B	
Barium	49.9	1.00	2.00	ug/L	1	04/03/23 18:24	EPA 6020B	
Beryllium	ND	0.100	0.200	ug/L	1	04/03/23 18:24	EPA 6020B	
Cadmium	ND	0.100	0.200	ug/L	1	04/03/23 18:24	EPA 6020B	
Chromium	ND	1.00	2.00	ug/L	1	04/03/23 18:24	EPA 6020B	
Copper	ND	1.00	2.00	ug/L	1	04/03/23 18:24	EPA 6020B	
Iron	26800	25.0	50.0	ug/L	1	04/03/23 18:24	EPA 6020B	
Lead	ND	0.110	0.200	ug/L	1	04/03/23 18:24	EPA 6020B	
Mercury	ND	0.0400	0.0800	ug/L	1	04/03/23 18:24	EPA 6020B	
Nickel	3.00	1.00	2.00	ug/L	1	04/03/23 18:24	EPA 6020B	
Selenium	ND	0.500	1.00	ug/L	1	04/03/23 18:24	EPA 6020B	
Silver	ND	0.100	0.200	ug/L	1	04/03/23 18:24	EPA 6020B	
Thallium	ND	0.100	0.200	ug/L	1	04/03/23 18:24	EPA 6020B	
Vanadium	ND	1.00	2.00	ug/L	1	04/03/23 18:24	EPA 6020B	
Zinc	2.10	2.00	4.00	ug/L	1	04/03/23 18:24	EPA 6020B	J
GS-032223-49 (A3C0826-04RE1)		Matrix: WG						
Batch: 23C1272								
Manganese	6230	5.00	10.0	ug/L	10	04/04/23 10:56	EPA 6020B	
GS-032223-50 (A3C0826-05)		Matrix: WG						
Batch: 23C1272								
Aluminum	390	25.0	50.0	ug/L	1	04/03/23 18:28	EPA 6020B	
Antimony	ND	0.500	1.00	ug/L	1	04/03/23 18:28	EPA 6020B	
Arsenic	2.39	0.500	1.00	ug/L	1	04/03/23 18:28	EPA 6020B	
Barium	30.7	1.00	2.00	ug/L	1	04/03/23 18:28	EPA 6020B	
Beryllium	ND	0.100	0.200	ug/L	1	04/03/23 18:28	EPA 6020B	
Cadmium	ND	0.100	0.200	ug/L	1	04/03/23 18:28	EPA 6020B	
Chromium	ND	1.00	2.00	ug/L	1	04/03/23 18:28	EPA 6020B	
Copper	ND	1.00	2.00	ug/L	1	04/03/23 18:28	EPA 6020B	
Iron	16300	25.0	50.0	ug/L	1	04/03/23 18:28	EPA 6020B	
Lead	3.31	0.110	0.200	ug/L	1	04/03/23 18:28	EPA 6020B	
Mercury	ND	0.0400	0.0800	ug/L	1	04/03/23 18:28	EPA 6020B	

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Portland, OR 97219Project: **Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001F**Project Manager: **John Renda****Report ID:****A3C0826 - 05 19 23 0544**

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-032223-50 (A3C0826-05)		Matrix: WG						
Nickel	2.39	1.00	2.00	ug/L	1	04/03/23 18:28	EPA 6020B	
Selenium	ND	0.500	1.00	ug/L	1	04/03/23 18:28	EPA 6020B	
Silver	ND	0.100	0.200	ug/L	1	04/03/23 18:28	EPA 6020B	
Thallium	ND	0.100	0.200	ug/L	1	04/03/23 18:28	EPA 6020B	
Vanadium	3.41	1.00	2.00	ug/L	1	04/03/23 18:28	EPA 6020B	
Zinc	26.5	2.00	4.00	ug/L	1	04/03/23 18:28	EPA 6020B	
GS-032223-50 (A3C0826-05RE1)		Matrix: WG						
Batch: 23C1272								
Manganese	3560	5.00	10.0	ug/L	10	04/04/23 11:01	EPA 6020B	
GS-032223-51 (A3C0826-06)		Matrix: WG						
Batch: 23C1272								
Aluminum	ND	25.0	50.0	ug/L	1	04/03/23 18:33	EPA 6020B	
Antimony	ND	0.500	1.00	ug/L	1	04/03/23 18:33	EPA 6020B	
Arsenic	4.17	0.500	1.00	ug/L	1	04/03/23 18:33	EPA 6020B	
Barium	163	1.00	2.00	ug/L	1	04/03/23 18:33	EPA 6020B	
Beryllium	ND	0.100	0.200	ug/L	1	04/03/23 18:33	EPA 6020B	
Cadmium	ND	0.100	0.200	ug/L	1	04/03/23 18:33	EPA 6020B	
Chromium	ND	1.00	2.00	ug/L	1	04/03/23 18:33	EPA 6020B	
Copper	ND	1.00	2.00	ug/L	1	04/03/23 18:33	EPA 6020B	
Iron	52500	25.0	50.0	ug/L	1	04/03/23 18:33	EPA 6020B	
Lead	ND	0.110	0.200	ug/L	1	04/03/23 18:33	EPA 6020B	
Mercury	ND	0.0400	0.0800	ug/L	1	04/03/23 18:33	EPA 6020B	
Nickel	ND	1.00	2.00	ug/L	1	04/03/23 18:33	EPA 6020B	
Selenium	ND	0.500	1.00	ug/L	1	04/03/23 18:33	EPA 6020B	
Silver	ND	0.100	0.200	ug/L	1	04/03/23 18:33	EPA 6020B	
Thallium	ND	0.100	0.200	ug/L	1	04/03/23 18:33	EPA 6020B	
Vanadium	ND	1.00	2.00	ug/L	1	04/03/23 18:33	EPA 6020B	
Zinc	2.27	2.00	4.00	ug/L	1	04/03/23 18:33	EPA 6020B	J
GS-032223-51 (A3C0826-06RE1)		Matrix: WG						
Batch: 23C1272								
Manganese	6280	5.00	10.0	ug/L	10	04/04/23 11:06	EPA 6020B	

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ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-032223-52 (A3C0826-07)		Matrix: WG						
Batch: 23C1272								
Aluminum	ND	25.0	50.0	ug/L	1	04/03/23 18:38	EPA 6020B	
Antimony	ND	0.500	1.00	ug/L	1	04/03/23 18:38	EPA 6020B	
Arsenic	13.0	0.500	1.00	ug/L	1	04/03/23 18:38	EPA 6020B	
Barium	128	1.00	2.00	ug/L	1	04/03/23 18:38	EPA 6020B	
Beryllium	ND	0.100	0.200	ug/L	1	04/03/23 18:38	EPA 6020B	
Cadmium	ND	0.100	0.200	ug/L	1	04/03/23 18:38	EPA 6020B	
Chromium	ND	1.00	2.00	ug/L	1	04/03/23 18:38	EPA 6020B	
Copper	ND	1.00	2.00	ug/L	1	04/03/23 18:38	EPA 6020B	
Lead	ND	0.110	0.200	ug/L	1	04/03/23 18:38	EPA 6020B	
Manganese	2670	0.500	1.00	ug/L	1	04/03/23 18:38	EPA 6020B	
Mercury	ND	0.0400	0.0800	ug/L	1	04/03/23 18:38	EPA 6020B	
Nickel	ND	1.00	2.00	ug/L	1	04/03/23 18:38	EPA 6020B	
Selenium	ND	0.500	1.00	ug/L	1	04/03/23 18:38	EPA 6020B	
Silver	ND	0.100	0.200	ug/L	1	04/03/23 18:38	EPA 6020B	
Thallium	ND	0.100	0.200	ug/L	1	04/03/23 18:38	EPA 6020B	
Vanadium	2.17	1.00	2.00	ug/L	1	04/03/23 18:38	EPA 6020B	
Zinc	4.59	2.00	4.00	ug/L	1	04/03/23 18:38	EPA 6020B	
GS-032223-52 (A3C0826-07RE1)		Matrix: WG						
Batch: 23C1272								
Iron	96500	250	500	ug/L	10	04/04/23 11:11	EPA 6020B	

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ANALYTICAL REPORT

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ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125
Portland, OR 97219

Project: Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.

Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0826 - 05 19 23 0544

ANALYTICAL SAMPLE RESULTS

Total Cyanide by Flow Analysis (Aqueous)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-032223-46 (A3C0826-01)				Matrix: WG		Batch: 23D0035		
Total Cyanide	ND	0.00500	0.00500	mg/L	1	04/03/23 14:15	EPA 335.4	
GS-032223-47 (A3C0826-02)				Matrix: WG		Batch: 23D0035		
Total Cyanide	ND	0.00500	0.00500	mg/L	1	04/03/23 14:29	EPA 335.4	
GS-032223-48 (A3C0826-03)				Matrix: WG		Batch: 23D0035		
Total Cyanide	ND	0.00500	0.00500	mg/L	1	04/03/23 14:31	EPA 335.4	
GS-032223-49 (A3C0826-04)				Matrix: WG		Batch: 23D0035		
Total Cyanide	0.481	0.00500	0.00500	mg/L	1	04/03/23 14:33	EPA 335.4	
GS-032223-50 (A3C0826-05RE1)				Matrix: WG		Batch: 23D0035		
Total Cyanide	2.56	0.0500	0.0500	mg/L	10	04/03/23 15:03	EPA 335.4	
GS-032223-51 (A3C0826-06RE1)				Matrix: WG		Batch: 23D0035		
Total Cyanide	5.21	0.100	0.100	mg/L	20	04/03/23 15:05	EPA 335.4	PRES
GS-032223-52 (A3C0826-07RE1)				Matrix: WG		Batch: 23D0035		
Total Cyanide	3.22	0.0500	0.0500	mg/L	10	04/03/23 15:07	EPA 335.4	PRES

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Project Number: 000029-02.84 T-01.001F

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Report ID:

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ANALYTICAL SAMPLE RESULTS

Available Cyanide by FIA, Ligand Exchange and Amperometric Detection

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-032223-46 (A3C0826-01)				Matrix: WG		Batch: 23C0907		
Available Cyanide	ND	0.00100	0.00200	mg/L	1	03/23/23 16:09	D6888-09	
GS-032223-47 (A3C0826-02)				Matrix: WG		Batch: 23C0907		
Available Cyanide	ND	0.00100	0.00200	mg/L	1	03/23/23 16:11	D6888-09	
GS-032223-48 (A3C0826-03)				Matrix: WG		Batch: 23C0907		
Available Cyanide	ND	0.00100	0.00200	mg/L	1	03/23/23 16:12	D6888-09	
GS-032223-49 (A3C0826-04)				Matrix: WG		Batch: 23C0907		
Available Cyanide	0.00108	0.00100	0.00200	mg/L	1	03/23/23 16:14	D6888-09	J
GS-032223-50 (A3C0826-05)				Matrix: WG		Batch: 23C0907		
Available Cyanide	0.00454	0.00100	0.00200	mg/L	1	03/23/23 16:15	D6888-09	
GS-032223-51 (A3C0826-06)				Matrix: WG		Batch: 23C0907		
Available Cyanide	0.00452	0.00100	0.00200	mg/L	1	03/23/23 16:18	D6888-09	Q-42
GS-032223-52 (A3C0826-07)				Matrix: WG		Batch: 23C0907		
Available Cyanide	0.00189	0.00100	0.00200	mg/L	1	03/23/23 16:24	D6888-09	J

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062Anchor QEA, LLC6720 SW Macadam Ave. Suite 125
Portland, OR 97219Project: Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.

Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0826 - 05 19 23 0544

ANALYTICAL SAMPLE RESULTS

Free Cyanide by Microdiffusion/Colorimetric Spectrophotometry

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-032223-46 (A3C0826-01)				Matrix: WG		Batch: 23D0024		
Free Cyanide	ND	0.00250	0.00500	mg/L	1	04/03/23 17:13	D4282-02	
GS-032223-47 (A3C0826-02)				Matrix: WG		Batch: 23C1077		
Free Cyanide	ND	0.00250	0.00500	mg/L	1	03/28/23 16:08	D4282-02	
GS-032223-48 (A3C0826-03)				Matrix: WG		Batch: 23C1077		
Free Cyanide	ND	0.00250	0.00500	mg/L	1	03/28/23 16:09	D4282-02	
GS-032223-49 (A3C0826-04)				Matrix: WG		Batch: 23C1077		
Free Cyanide	ND	0.00250	0.00500	mg/L	1	03/28/23 16:09	D4282-02	
GS-032223-50 (A3C0826-05)				Matrix: WG		Batch: 23C1077		
Free Cyanide	ND	0.00250	0.00500	mg/L	1	03/28/23 16:09	D4282-02	
GS-032223-51 (A3C0826-06)				Matrix: WG		Batch: 23D0024		PRES
Free Cyanide	ND	0.00250	0.00500	mg/L	1	04/03/23 17:18	D4282-02	
GS-032223-52 (A3C0826-07)				Matrix: WG		Batch: 23D0024		PRES
Free Cyanide	ND	0.00250	0.00500	mg/L	1	04/03/23 17:18	D4282-02	

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Analytical Resources, LLC

ANALYTICAL SAMPLE RESULTS (Subcontracted)

Washington Department of Ecology Methods

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-032223-46 (A3C0826-01)			Matrix: WG			Batch: BLC0804		
Batch: BLC0804								
C8-C10 Aliphatics	ND	---	40	ug/L	1	04/11/23 17:16	WA EPH	U
>C10-C12 Aliphatics	ND	---	40	ug/L	1	04/11/23 17:16	WA EPH	U
>C12-C16 Aliphatics	ND	---	40	ug/L	1	04/11/23 17:16	WA EPH	U
>C16-C21 Aliphatics	ND	---	40	ug/L	1	04/11/23 17:16	WA EPH	U
>C21-C34 Aliphatics	ND	---	40	ug/L	1	04/11/23 17:16	WA EPH	U
C8-C10 Aromatics	ND	---	40	ug/L	1	04/10/23 22:02	WA EPH	U
>C10-C12 Aromatics	ND	---	40	ug/L	1	04/10/23 22:02	WA EPH	U
>C12-C16 Aromatics	ND	---	40	ug/L	1	04/10/23 22:02	WA EPH	U
>C16-C21 Aromatics	ND	---	40	ug/L	1	04/10/23 22:02	WA EPH	U
>C21-C34 Aromatics	ND	---	40	ug/L	1	04/10/23 22:02	WA EPH	U
Batch: BLC0828								
C5-C6 Aliphatics	ND	---	50	ug/L	1	03/30/23 22:02	WA VPH	U
>C6-C8 Aliphatics	ND	---	50	ug/L	1	03/30/23 22:02	WA VPH	U
>C8-C10 Aliphatics	ND	---	50	ug/L	1	03/30/23 22:02	WA VPH	U
>C10-C12 Aliphatics	ND	---	50	ug/L	1	03/30/23 22:02	WA VPH	U
C8-C10 Aromatics	ND	---	50	ug/L	1	03/30/23 22:02	WA VPH	U
>C10-C12 Aromatics	ND	---	50	ug/L	1	03/30/23 22:02	WA VPH	U
>C12-C13 Aromatics	ND	---	50	ug/L	1	03/30/23 22:02	WA VPH	U
Methyl tert-butyl Ether	ND	---	5	ug/L	1	03/30/23 22:02	WA VPH	U
Benzene	ND	---	5	ug/L	1	03/30/23 22:02	WA VPH	U
Toluene	ND	---	5	ug/L	1	03/30/23 22:02	WA VPH	U
Ethylbenzene	ND	---	5	ug/L	1	03/30/23 22:02	WA VPH	U
1,2,3-Trimethylbenzene	ND	---	5	ug/L	1	03/30/23 22:02	WA VPH	U
m,p-Xylene	ND	---	10	ug/L	1	03/30/23 22:02	WA VPH	U
Naphthalene	ND	---	5	ug/L	1	03/30/23 22:02	WA VPH	U
1-Methylnaphthalene	ND	---	5	ug/L	1	03/30/23 22:02	WA VPH	U
o-Xylene	ND	---	5	ug/L	1	03/30/23 22:02	WA VPH	U
n-Pentane	ND	---	5	ug/L	1	03/30/23 22:02	WA VPH	U
n-Hexane	ND	---	5	ug/L	1	03/30/23 22:02	WA VPH	U
n-Octane	ND	---	5	ug/L	1	03/30/23 22:02	WA VPH	U
n-Decane	ND	---	5	ug/L	1	03/30/23 22:02	WA VPH	U

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503-718-2323
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125
Portland, OR 97219Project: **Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001F**Project Manager: **John Renda****Report ID:****A3C0826 - 05 19 23 0544****Analytical Resources, LLC****ANALYTICAL SAMPLE RESULTS (Subcontracted)****Washington Department of Ecology Methods**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-032223-46 (A3C0826-01)		Matrix: WG			Batch: BLC0828			
n-Dodecane	ND	---	5	ug/L	1	03/30/23 22:02	WA VPH	U
Batch: BLC0804								
Surrogate: o-Terphenyl		Recovery:	79.3 %	Limits:	41-120 %	1	04/10/23 22:02	WA EPH
1-Chloro-octadecane			54.9 %		36-120 %	1	04/11/23 17:16	WA EPH
Batch: BLC0828								
PID: 2,5-Dibromotoluene			79.1 %		60-140 %	1	03/30/23 22:02	WA VPH
FID: 2,5-Dibromotoluene			83.9 %		60-140 %	1	03/30/23 22:02	WA VPH
GS-032223-50 (A3C0826-05)		Matrix: WG			Batch: BLC0804			
Batch: BLC0804								
C8-C10 Aliphatics	ND	---	40	ug/L	1	04/11/23 17:41	WA EPH	U
>C10-C12 Aliphatics	ND	---	40	ug/L	1	04/11/23 17:41	WA EPH	U
>C12-C16 Aliphatics	ND	---	40	ug/L	1	04/11/23 17:41	WA EPH	U
>C16-C21 Aliphatics	ND	---	40	ug/L	1	04/11/23 17:41	WA EPH	U
>C21-C34 Aliphatics	ND	---	40	ug/L	1	04/11/23 17:41	WA EPH	U
C8-C10 Aromatics	ND	---	40	ug/L	1	04/10/23 22:26	WA EPH	U
>C10-C12 Aromatics	ND	---	40	ug/L	1	04/10/23 22:26	WA EPH	U
>C12-C16 Aromatics	67	---	40	ug/L	1	04/10/23 22:26	WA EPH	
>C16-C21 Aromatics	145	---	40	ug/L	1	04/10/23 22:26	WA EPH	
>C21-C34 Aromatics	52	---	40	ug/L	1	04/10/23 22:26	WA EPH	
Batch: BLC0828								
C5-C6 Aliphatics	ND	---	50	ug/L	1	03/30/23 22:32	WA VPH	U
>C6-C8 Aliphatics	ND	---	50	ug/L	1	03/30/23 22:32	WA VPH	U
>C8-C10 Aliphatics	ND	---	50	ug/L	1	03/30/23 22:32	WA VPH	U
>C10-C12 Aliphatics	ND	---	50	ug/L	1	03/30/23 22:32	WA VPH	U
C8-C10 Aromatics	ND	---	50	ug/L	1	03/30/23 22:32	WA VPH	U
>C10-C12 Aromatics	57	---	50	ug/L	1	03/30/23 22:32	WA VPH	
>C12-C13 Aromatics	ND	---	50	ug/L	1	03/30/23 22:32	WA VPH	U
Methyl tert-butyl Ether	ND	---	5	ug/L	1	03/30/23 22:32	WA VPH	U
Benzene	7	---	5	ug/L	1	03/30/23 22:32	WA VPH	
Toluene	ND	---	5	ug/L	1	03/30/23 22:32	WA VPH	U
Ethylbenzene	ND	---	5	ug/L	1	03/30/23 22:32	WA VPH	U

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Project: **Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.**

Project Number: **000029-02.84 T-01.001F**

Project Manager: **John Renda**

Report ID:

A3C0826 - 05 19 23 0544

Analytical Resources, LLC

ANALYTICAL SAMPLE RESULTS (Subcontracted)

Washington Department of Ecology Methods

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-032223-50 (A3C0826-05)		Matrix: WG		Batch: BLC0828				
1,2,3-Trimethylbenzene	ND	---	5	ug/L	1	03/30/23 22:32	WA VPH	U
m,p-Xylene	ND	---	10	ug/L	1	03/30/23 22:32	WA VPH	U
Naphthalene	ND	---	5	ug/L	1	03/30/23 22:32	WA VPH	U
1-Methylnaphthalene	7	---	5	ug/L	1	03/30/23 22:32	WA VPH	
o-Xylene	ND	---	5	ug/L	1	03/30/23 22:32	WA VPH	U
n-Pentane	ND	---	5	ug/L	1	03/30/23 22:32	WA VPH	U
n-Hexane	ND	---	5	ug/L	1	03/30/23 22:32	WA VPH	U
n-Octane	ND	---	5	ug/L	1	03/30/23 22:32	WA VPH	U
n-Decane	ND	---	5	ug/L	1	03/30/23 22:32	WA VPH	U
n-Dodecane	ND	---	5	ug/L	1	03/30/23 22:32	WA VPH	U
Batch: BLC0804								
Surrogate: o-Terphenyl		Recovery:	65.0 %	Limits:	41-120 %	1	04/10/23 22:26	WA EPH
1-Chloro-octadecane			53.7 %		36-120 %	1	04/11/23 17:41	WA EPH
Batch: BLC0828								
PID: 2,5-Dibromotoluene			86.5 %		60-140 %	1	03/30/23 22:32	WA VPH
FID: 2,5-Dibromotoluene			90.6 %		60-140 %	1	03/30/23 22:32	WA VPH

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Portland, OR 97219Project: **Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001F**Project Manager: **John Renda****Report ID:****A3C0826 - 05 19 23 0544**

QUALITY CONTROL (QC) SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes	
Batch 23D0077 - EPA 3510C (Fuels/Acid Ext.)						Water							
Blank (23D0077-BLK1)			Prepared: 04/04/23 06:37 Analyzed: 04/04/23 19:17										
NWTPH-Dx													
Diesel	ND	100	200	ug/L	1	---	---	---	---	---	---		
Oil	ND	200	400	ug/L	1	---	---	---	---	---	---		
Surr: o-Terphenyl (Surr)		Recovery: 87 %		Limits: 50-150 %		Dilution: 1x							
LCS (23D0077-BS1)			Prepared: 04/04/23 06:37 Analyzed: 04/04/23 19:38										
NWTPH-Dx													
Diesel	863	100	200	ug/L	1	1250	---	69	36-132%	---	---		
Surr: o-Terphenyl (Surr)		Recovery: 93 %		Limits: 50-150 %		Dilution: 1x							
LCS Dup (23D0077-BSD1)			Prepared: 04/04/23 06:37 Analyzed: 04/04/23 19:58										Q-19
NWTPH-Dx													
Diesel	849	100	200	ug/L	1	1250	---	68	36-132%	2	30%		
Surr: o-Terphenyl (Surr)		Recovery: 93 %		Limits: 50-150 %		Dilution: 1x							

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Project Manager: John Renda

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A3C0826 - 05 19 23 0544

QUALITY CONTROL (QC) SAMPLE RESULTS

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

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23C1041 - EPA 5030C						Water						
Blank (23C1041-BLK1)			Prepared: 03/27/23 14:13 Analyzed: 03/27/23 16:30									
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	50.0	100	ug/L	1	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 95 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		97 %		50-150 %		"						
LCS (23C1041-BS2)			Prepared: 03/27/23 14:13 Analyzed: 03/27/23 15:08									
NWTPH-Gx (MS)												
Gasoline Range Organics	477	50.0	100	ug/L	1	500	---	95	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 98 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		98 %		50-150 %		"						
Duplicate (23C1041-DUP1)			Prepared: 03/27/23 14:13 Analyzed: 03/27/23 22:21									
QC Source Sample: GS-032223-46 (A3C0826-01)												
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	2500	5000	ug/L	50	---	ND	---	---	---	30%	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 95 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		98 %		50-150 %		"						

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QUALITY CONTROL (QC) SAMPLE RESULTS

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

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23C1073 - EPA 5030C						Water						
Blank (23C1073-BLK1)			Prepared: 03/28/23 12:00 Analyzed: 03/28/23 14:08									
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	50.0	100	ug/L	1	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 96 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		99 %		50-150 %		"						
LCS (23C1073-BS2)			Prepared: 03/28/23 12:00 Analyzed: 03/28/23 13:40									
NWTPH-Gx (MS)												
Gasoline Range Organics	477	50.0	100	ug/L	1	500	---	95	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 99 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		99 %		50-150 %		"						
Duplicate (23C1073-DUP1)			Prepared: 03/28/23 13:31 Analyzed: 03/28/23 19:35									
QC Source Sample: Non-SDG (A3C0869-05)												
Gasoline Range Organics	50400	5000	10000	ug/L	100	---	50500	---	---	0.2	30%	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 99 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		101 %		50-150 %		"						
Duplicate (23C1073-DUP2)			Prepared: 03/28/23 13:31 Analyzed: 03/28/23 21:23									
QC Source Sample: Non-SDG (A3C0959-01)												
Gasoline Range Organics	8240	500	1000	ug/L	10	---	8310	---	---	0.8	30%	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 99 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		101 %		50-150 %		"						

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Project Manager: John Renda

Report ID:

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QUALITY CONTROL (QC) SAMPLE RESULTS

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

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23C1116 - EPA 5030C						Water						
Blank (23C1116-BLK1)			Prepared: 03/28/23 15:28 Analyzed: 03/28/23 21:34									
<u>NWTPH-Gx (MS)</u>												
Gasoline Range Organics	ND	50.0	100	ug/L	1	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 95 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		106 %		50-150 %		"						
LCS (23C1116-BS2)			Prepared: 03/28/23 15:28 Analyzed: 03/28/23 21:12									
<u>NWTPH-Gx (MS)</u>												
Gasoline Range Organics	490	50.0	100	ug/L	1	500	---	98	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 91 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		99 %		50-150 %		"						
Duplicate (23C1116-DUP1)			Prepared: 03/28/23 15:28 Analyzed: 03/29/23 00:57									
<u>QC Source Sample: Non-SDG (A3C0831-11)</u>												
Gasoline Range Organics	ND	50.0	100	ug/L	1	---	ND	---	---	---	30%	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 94 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		105 %		50-150 %		"						

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503-718-2323
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125
Portland, OR 97219Project: **Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001F**Project Manager: **John Renda****Report ID:****A3C0826 - 05 19 23 0544**

QUALITY CONTROL (QC) SAMPLE RESULTS

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

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23C1207 - EPA 5030C						Water						
Blank (23C1207-BLK1)			Prepared: 03/30/23 10:00 Analyzed: 03/30/23 11:35									
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	50.0	100	ug/L	1	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 92 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		104 %		50-150 %		"						
LCS (23C1207-BS2)			Prepared: 03/30/23 10:00 Analyzed: 03/30/23 11:13									
NWTPH-Gx (MS)												
Gasoline Range Organics	424	50.0	100	ug/L	1	500	---	85	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 89 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		91 %		50-150 %		"						
Duplicate (23C1207-DUP1)			Prepared: 03/30/23 11:50 Analyzed: 03/30/23 18:15									
QC Source Sample: Non-SDG (A3C1058-05)												
Gasoline Range Organics	7610	250	500	ug/L	5	---	7580	---	---	0.4	30%	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 96 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		100 %		50-150 %		"						

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Darwin Thomas, Business Development Director

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ANALYTICAL REPORT

Apex Laboratories, LLC

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Project Number: 000029-02.84 T-01.001F

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QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23C1041 - EPA 5030C						Water						
Blank (23C1041-BLK1)			Prepared: 03/27/23 14:13		Analyzed: 03/27/23 16:30							
EPA 8260D												
Acetone	ND	10.0	20.0	ug/L	1	---	---	---	---	---	---	
Acrylonitrile	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
Benzene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Bromobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Bromochloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Bromoform	ND	1.00	1.00	ug/L	1	---	---	---	---	---	---	
Bromomethane	ND	5.00	5.00	ug/L	1	---	---	---	---	---	---	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Carbon disulfide	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Carbon tetrachloride	ND	1.00	1.00	ug/L	1	---	---	---	---	---	---	
Chlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Chloroethane	ND	5.00	5.00	ug/L	1	---	---	---	---	---	---	
Chloroform	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Chloromethane	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Dibromochloromethane	ND	1.00	1.00	ug/L	1	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	5.00	5.00	ug/L	1	---	---	---	---	---	---	Q-54r
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Dibromomethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	

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Darwin Thomas, Business Development Director



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Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0826 - 05 19 23 0544

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 23C1041 - EPA 5030C						Water						
Blank (23C1041-BLK1)						Prepared: 03/27/23 14:13 Analyzed: 03/27/23 16:30						
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
2,2-Dichloropropane	ND	1.00	1.00	ug/L	1	---	---	---	---	---	---	Q-54s
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	1.00	1.00	ug/L	1	---	---	---	---	---	---	Q-54o
Ethylbenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
2-Hexanone	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Methylene chloride	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Naphthalene	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Styrene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
Toluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	0.400	0.400	ug/L	1	---	---	---	---	---	---	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Vinyl chloride	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
m,p-Xylene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
o-Xylene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr) Recovery: 98 % Limits: 80-120 % Dilution: 1x												

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ANALYTICAL REPORT

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Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0826 - 05 19 23 0544

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 23C1041 - EPA 5030C						Water						
Blank (23C1041-BLK1)			Prepared: 03/27/23 14:13		Analyzed: 03/27/23 16:30							
Surr: Toluene-d8 (Surr)		Recovery: 100 %		Limits: 80-120 %		Dilution: 1x						
4-Bromofluorobenzene (Surr)		108 %		80-120 %		"						
LCS (23C1041-BS1)			Prepared: 03/27/23 14:13		Analyzed: 03/27/23 14:37							
EPA 8260D												
Acetone	34.8	10.0	20.0	ug/L	1	40.0	---	87	80-120%	---	---	
Acrylonitrile	18.6	1.00	2.00	ug/L	1	20.0	---	93	80-120%	---	---	
Benzene	19.3	0.100	0.200	ug/L	1	20.0	---	96	80-120%	---	---	
Bromobenzene	19.3	0.250	0.500	ug/L	1	20.0	---	97	80-120%	---	---	
Bromochloromethane	18.5	0.500	1.00	ug/L	1	20.0	---	93	80-120%	---	---	
Bromodichloromethane	20.6	0.500	1.00	ug/L	1	20.0	---	103	80-120%	---	---	
Bromoform	14.1	1.00	1.00	ug/L	1	20.0	---	71	80-120%	---	---	Q-55
Bromomethane	21.0	5.00	5.00	ug/L	1	20.0	---	105	80-120%	---	---	
2-Butanone (MEK)	39.5	5.00	10.0	ug/L	1	40.0	---	99	80-120%	---	---	
n-Butylbenzene	23.2	0.500	1.00	ug/L	1	20.0	---	116	80-120%	---	---	
sec-Butylbenzene	21.9	0.500	1.00	ug/L	1	20.0	---	109	80-120%	---	---	
tert-Butylbenzene	20.2	0.500	1.00	ug/L	1	20.0	---	101	80-120%	---	---	
Carbon disulfide	20.3	5.00	10.0	ug/L	1	20.0	---	102	80-120%	---	---	
Carbon tetrachloride	14.7	1.00	1.00	ug/L	1	20.0	---	73	80-120%	---	---	Q-55
Chlorobenzene	19.7	0.250	0.500	ug/L	1	20.0	---	98	80-120%	---	---	
Chloroethane	19.2	5.00	5.00	ug/L	1	20.0	---	96	80-120%	---	---	
Chloroform	19.8	0.500	1.00	ug/L	1	20.0	---	99	80-120%	---	---	
Chloromethane	18.9	2.50	5.00	ug/L	1	20.0	---	95	80-120%	---	---	
2-Chlorotoluene	19.9	0.500	1.00	ug/L	1	20.0	---	99	80-120%	---	---	
4-Chlorotoluene	19.6	0.500	1.00	ug/L	1	20.0	---	98	80-120%	---	---	
Dibromochloromethane	15.6	1.00	1.00	ug/L	1	20.0	---	78	80-120%	---	---	Q-55
1,2-Dibromo-3-chloropropane	12.0	5.00	5.00	ug/L	1	20.0	---	60	80-120%	---	---	Q-54r
1,2-Dibromoethane (EDB)	17.4	0.250	0.500	ug/L	1	20.0	---	87	80-120%	---	---	
Dibromomethane	21.7	0.500	1.00	ug/L	1	20.0	---	108	80-120%	---	---	
1,2-Dichlorobenzene	20.8	0.250	0.500	ug/L	1	20.0	---	104	80-120%	---	---	
1,3-Dichlorobenzene	20.6	0.250	0.500	ug/L	1	20.0	---	103	80-120%	---	---	
1,4-Dichlorobenzene	19.5	0.250	0.500	ug/L	1	20.0	---	98	80-120%	---	---	
Dichlorodifluoromethane	21.7	0.500	1.00	ug/L	1	20.0	---	108	80-120%	---	---	
1,1-Dichloroethane	19.6	0.200	0.400	ug/L	1	20.0	---	98	80-120%	---	---	

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QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23C1041 - EPA 5030C						Water						
LCS (23C1041-BS1)						Prepared: 03/27/23 14:13 Analyzed: 03/27/23 14:37						
1,2-Dichloroethane (EDC)	20.1	0.200	0.400	ug/L	1	20.0	---	100	80-120%	---	---	
1,1-Dichloroethene	19.9	0.200	0.400	ug/L	1	20.0	---	99	80-120%	---	---	
cis-1,2-Dichloroethene	19.5	0.200	0.400	ug/L	1	20.0	---	98	80-120%	---	---	
trans-1,2-Dichloroethene	19.8	0.200	0.400	ug/L	1	20.0	---	99	80-120%	---	---	
1,2-Dichloropropane	18.7	0.250	0.500	ug/L	1	20.0	---	93	80-120%	---	---	
1,3-Dichloropropane	20.3	0.500	1.00	ug/L	1	20.0	---	101	80-120%	---	---	
2,2-Dichloropropane	10.7	1.00	1.00	ug/L	1	20.0	---	53	80-120%	---	---	Q-54s
1,1-Dichloropropene	21.0	0.500	1.00	ug/L	1	20.0	---	105	80-120%	---	---	
cis-1,3-Dichloropropene	16.4	0.500	1.00	ug/L	1	20.0	---	82	80-120%	---	---	
trans-1,3-Dichloropropene	12.7	1.00	1.00	ug/L	1	20.0	---	63	80-120%	---	---	Q-54o
Ethylbenzene	20.6	0.250	0.500	ug/L	1	20.0	---	103	80-120%	---	---	
Hexachlorobutadiene	23.7	2.50	5.00	ug/L	1	20.0	---	118	80-120%	---	---	
2-Hexanone	41.6	5.00	10.0	ug/L	1	40.0	---	104	80-120%	---	---	
Isopropylbenzene	21.5	0.500	1.00	ug/L	1	20.0	---	107	80-120%	---	---	
4-Isopropyltoluene	22.7	0.500	1.00	ug/L	1	20.0	---	113	80-120%	---	---	
Methylene chloride	18.6	5.00	10.0	ug/L	1	20.0	---	93	80-120%	---	---	
4-Methyl-2-pentanone (MiBK)	40.0	5.00	10.0	ug/L	1	40.0	---	100	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	16.4	0.500	1.00	ug/L	1	20.0	---	82	80-120%	---	---	
Naphthalene	18.7	1.00	2.00	ug/L	1	20.0	---	94	80-120%	---	---	
n-Propylbenzene	20.0	0.250	0.500	ug/L	1	20.0	---	100	80-120%	---	---	
Styrene	21.5	0.500	1.00	ug/L	1	20.0	---	108	80-120%	---	---	
1,1,1,2-Tetrachloroethane	16.3	0.200	0.400	ug/L	1	20.0	---	81	80-120%	---	---	
1,1,2,2-Tetrachloroethane	19.3	0.250	0.500	ug/L	1	20.0	---	97	80-120%	---	---	
Tetrachloroethene (PCE)	21.2	0.200	0.400	ug/L	1	20.0	---	106	80-120%	---	---	
Toluene	18.6	0.500	1.00	ug/L	1	20.0	---	93	80-120%	---	---	
1,2,3-Trichlorobenzene	19.8	1.00	2.00	ug/L	1	20.0	---	99	80-120%	---	---	
1,2,4-Trichlorobenzene	20.2	1.00	2.00	ug/L	1	20.0	---	101	80-120%	---	---	
1,1,1-Trichloroethane	15.8	0.400	0.400	ug/L	1	20.0	---	79	80-120%	---	---	Q-55
1,1,2-Trichloroethane	19.8	0.250	0.500	ug/L	1	20.0	---	99	80-120%	---	---	
Trichloroethene (TCE)	20.3	0.200	0.400	ug/L	1	20.0	---	102	80-120%	---	---	
Trichlorofluoromethane	24.6	1.00	2.00	ug/L	1	20.0	---	123	80-120%	---	---	Q-56
1,2,3-Trichloropropane	19.7	0.500	1.00	ug/L	1	20.0	---	99	80-120%	---	---	
1,2,4-Trimethylbenzene	21.0	0.500	1.00	ug/L	1	20.0	---	105	80-120%	---	---	
1,3,5-Trimethylbenzene	21.4	0.500	1.00	ug/L	1	20.0	---	107	80-120%	---	---	

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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 23C1041 - EPA 5030C						Water						
LCS (23C1041-BS1)				Prepared: 03/27/23 14:13 Analyzed: 03/27/23 14:37								
Vinyl chloride	20.1	0.200	0.400	ug/L	1	20.0	---	101	80-120%	---	---	
m,p-Xylene	41.0	0.500	1.00	ug/L	1	40.0	---	103	80-120%	---	---	
o-Xylene	20.5	0.250	0.500	ug/L	1	20.0	---	103	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 99 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		98 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		95 %		80-120 %		"						
Duplicate (23C1041-DUP1)						Prepared: 03/27/23 14:13 Analyzed: 03/27/23 22:21						
QC Source Sample: GS-032223-46 (A3C0826-01)												
EPA 8260D												
Acetone	ND	500	1000	ug/L	50	---	ND	---	---	---	30%	
Acrylonitrile	ND	50.0	100	ug/L	50	---	ND	---	---	---	30%	
Benzene	ND	10.0	10.0	ug/L	50	---	ND	---	---	---	30%	
Bromobenzene	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	
Bromochloromethane	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
Bromodichloromethane	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
Bromoform	ND	50.0	50.0	ug/L	50	---	ND	---	---	---	30%	
Bromomethane	ND	250	250	ug/L	50	---	ND	---	---	---	30%	
2-Butanone (MEK)	ND	250	500	ug/L	50	---	ND	---	---	---	30%	
n-Butylbenzene	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
sec-Butylbenzene	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
tert-Butylbenzene	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
Carbon disulfide	ND	250	500	ug/L	50	---	ND	---	---	---	30%	
Carbon tetrachloride	ND	50.0	50.0	ug/L	50	---	ND	---	---	---	30%	
Chlorobenzene	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	
Chloroethane	ND	250	250	ug/L	50	---	ND	---	---	---	30%	
Chloroform	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
Chloromethane	ND	125	250	ug/L	50	---	ND	---	---	---	30%	
2-Chlorotoluene	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
4-Chlorotoluene	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
Dibromochloromethane	ND	50.0	50.0	ug/L	50	---	ND	---	---	---	30%	
1,2-Dibromo-3-chloropropane	ND	250	250	ug/L	50	---	ND	---	---	---	30%	Q-54r
1,2-Dibromoethane (EDB)	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	
Dibromomethane	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

Project: Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.

Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0826 - 05 19 23 0544

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 23C1041 - EPA 5030C						Water						
Duplicate (23C1041-DUP1)			Prepared: 03/27/23 14:13		Analyzed: 03/27/23 22:21							
QC Source Sample: GS-032223-46 (A3C0826-01)												
1,2-Dichlorobenzene	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	Q-54s
1,3-Dichlorobenzene	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	10.0	20.0	ug/L	50	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	10.0	20.0	ug/L	50	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	10.0	20.0	ug/L	50	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	10.0	20.0	ug/L	50	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	10.0	20.0	ug/L	50	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	Q-54o
2,2-Dichloropropane	ND	50.0	50.0	ug/L	50	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	50.0	50.0	ug/L	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	125	250	ug/L	50	---	ND	---	---	---	30%	
2-Hexanone	ND	250	500	ug/L	50	---	ND	---	---	---	30%	
Isopropylbenzene	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
Methylene chloride	ND	250	500	ug/L	50	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	250	500	ug/L	50	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
Naphthalene	ND	50.0	100	ug/L	50	---	ND	---	---	---	30%	
n-Propylbenzene	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	
Styrene	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	10.0	20.0	ug/L	50	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	10.0	20.0	ug/L	50	---	ND	---	---	---	30%	
Toluene	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	50.0	100	ug/L	50	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	50.0	100	ug/L	50	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	20.0	20.0	ug/L	50	---	ND	---	---	---	30%	

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Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0826 - 05 19 23 0544

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 23C1041 - EPA 5030C						Water						
Duplicate (23C1041-DUP1)			Prepared: 03/27/23 14:13 Analyzed: 03/27/23 22:21									
QC Source Sample: GS-032223-46 (A3C0826-01)												
1,1,2-Trichloroethane	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	
Trichloroethene (TCE)	ND	10.0	20.0	ug/L	50	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	50.0	100	ug/L	50	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
Vinyl chloride	ND	10.0	20.0	ug/L	50	---	ND	---	---	---	30%	
m,p-Xylene	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
o-Xylene	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 98 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		100 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		106 %		80-120 %		"						
Matrix Spike (23C1041-MS1)						Prepared: 03/27/23 14:13 Analyzed: 03/28/23 02:25						
QC Source Sample: GS-032223-51 (A3C0826-06)												
EPA 8260D												
Acetone	1920	500	1000	ug/L	50	2000	ND	96	39-160%	---	---	
Acrylonitrile	972	50.0	100	ug/L	50	1000	ND	97	63-135%	---	---	
Benzene	1110	5.00	10.0	ug/L	50	1000	59.5	105	79-120%	---	---	
Bromobenzene	1040	12.5	25.0	ug/L	50	1000	ND	104	80-120%	---	---	
Bromochloromethane	1010	25.0	50.0	ug/L	50	1000	ND	101	78-123%	---	---	
Bromodichloromethane	1110	25.0	50.0	ug/L	50	1000	ND	111	79-125%	---	---	
Bromoform	740	50.0	50.0	ug/L	50	1000	ND	74	66-130%	---	---	Q-54z
Bromomethane	1160	250	250	ug/L	50	1000	ND	116	53-141%	---	---	
2-Butanone (MEK)	2090	250	500	ug/L	50	2000	ND	104	56-143%	---	---	
n-Butylbenzene	1300	25.0	50.0	ug/L	50	1000	ND	130	75-128%	---	---	Q-01
sec-Butylbenzene	1230	25.0	50.0	ug/L	50	1000	ND	123	77-126%	---	---	
tert-Butylbenzene	1150	25.0	50.0	ug/L	50	1000	ND	115	78-124%	---	---	
Carbon disulfide	1070	250	500	ug/L	50	1000	ND	107	64-133%	---	---	
Carbon tetrachloride	802	50.0	50.0	ug/L	50	1000	ND	80	72-136%	---	---	Q-54y
Chlorobenzene	1060	12.5	25.0	ug/L	50	1000	ND	106	80-120%	---	---	
Chloroethane	1180	250	250	ug/L	50	1000	ND	118	60-138%	---	---	
Chloroform	1070	25.0	50.0	ug/L	50	1000	ND	107	79-124%	---	---	

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Project Manager: John Renda

Report ID:

A3C0826 - 05 19 23 0544

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 23C1041 - EPA 5030C						Water						
Matrix Spike (23C1041-MS1)			Prepared: 03/27/23 14:13			Analyzed: 03/28/23 02:25						
QC Source Sample: GS-032223-51 (A3C0826-06)												
Chloromethane	1060	125	250	ug/L	50	1000	ND	106	50-139%	---	---	
2-Chlorotoluene	1100	25.0	50.0	ug/L	50	1000	ND	110	79-122%	---	---	
4-Chlorotoluene	1080	25.0	50.0	ug/L	50	1000	ND	108	78-122%	---	---	
Dibromochloromethane	834	50.0	50.0	ug/L	50	1000	ND	83	74-126%	---	---	Q-54q
1,2-Dibromo-3-chloropropane	646	250	250	ug/L	50	1000	ND	65	62-128%	---	---	Q-54l
1,2-Dibromoethane (EDB)	946	12.5	25.0	ug/L	50	1000	ND	95	77-121%	---	---	
Dibromomethane	1150	25.0	50.0	ug/L	50	1000	ND	115	79-123%	---	---	
1,2-Dichlorobenzene	1130	12.5	25.0	ug/L	50	1000	ND	113	80-120%	---	---	
1,3-Dichlorobenzene	1110	12.5	25.0	ug/L	50	1000	ND	111	80-120%	---	---	
1,4-Dichlorobenzene	1060	12.5	25.0	ug/L	50	1000	ND	106	79-120%	---	---	
Dichlorodifluoromethane	1240	25.0	50.0	ug/L	50	1000	ND	124	32-152%	---	---	
1,1-Dichloroethane	1060	10.0	20.0	ug/L	50	1000	ND	106	77-125%	---	---	
1,2-Dichloroethane (EDC)	1080	10.0	20.0	ug/L	50	1000	ND	108	73-128%	---	---	
1,1-Dichloroethene	1120	10.0	20.0	ug/L	50	1000	ND	112	71-131%	---	---	
cis-1,2-Dichloroethene	1080	10.0	20.0	ug/L	50	1000	ND	108	78-123%	---	---	
trans-1,2-Dichloroethene	1090	10.0	20.0	ug/L	50	1000	ND	109	75-124%	---	---	
1,2-Dichloropropane	1010	12.5	25.0	ug/L	50	1000	ND	101	78-122%	---	---	
1,3-Dichloropropane	1100	25.0	50.0	ug/L	50	1000	ND	110	80-120%	---	---	
2,2-Dichloropropane	495	50.0	50.0	ug/L	50	1000	ND	50	60-139%	---	---	Q-54s
1,1-Dichloropropene	1170	25.0	50.0	ug/L	50	1000	ND	117	79-125%	---	---	
cis-1,3-Dichloropropene	860	25.0	50.0	ug/L	50	1000	ND	86	75-124%	---	---	
trans-1,3-Dichloropropene	680	50.0	50.0	ug/L	50	1000	ND	68	73-127%	---	---	Q-54o
Ethylbenzene	1200	12.5	25.0	ug/L	50	1000	50.5	115	79-121%	---	---	
Hexachlorobutadiene	1300	125	250	ug/L	50	1000	ND	130	66-134%	---	---	
2-Hexanone	2260	250	500	ug/L	50	2000	ND	113	57-139%	---	---	
Isopropylbenzene	1190	25.0	50.0	ug/L	50	1000	ND	119	72-131%	---	---	
4-Isopropyltoluene	1280	25.0	50.0	ug/L	50	1000	ND	128	77-127%	---	---	Q-01
Methylene chloride	990	250	500	ug/L	50	1000	ND	99	74-124%	---	---	
4-Methyl-2-pentanone (MiBK)	2170	250	500	ug/L	50	2000	ND	108	67-130%	---	---	
Methyl tert-butyl ether (MTBE)	898	25.0	50.0	ug/L	50	1000	ND	90	71-124%	---	---	
Naphthalene	2510	50.0	100	ug/L	50	1000	1290	122	61-128%	---	---	
n-Propylbenzene	1140	12.5	25.0	ug/L	50	1000	ND	114	76-126%	---	---	
Styrene	1150	25.0	50.0	ug/L	50	1000	ND	115	78-123%	---	---	

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QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23C1041 - EPA 5030C						Water						
Matrix Spike (23C1041-MS1)			Prepared: 03/27/23 14:13 Analyzed: 03/28/23 02:25									
QC Source Sample: GS-032223-51 (A3C0826-06)												
1,1,1,2-Tetrachloroethane	870	10.0	20.0	ug/L	50	1000	ND	87	78-124%	---	---	
1,1,2,2-Tetrachloroethane	1060	12.5	25.0	ug/L	50	1000	ND	106	71-121%	---	---	
Tetrachloroethene (PCE)	1150	10.0	20.0	ug/L	50	1000	ND	115	74-129%	---	---	
Toluene	1040	25.0	50.0	ug/L	50	1000	ND	104	80-121%	---	---	
1,2,3-Trichlorobenzene	1110	50.0	100	ug/L	50	1000	ND	111	69-129%	---	---	
1,2,4-Trichlorobenzene	1140	50.0	100	ug/L	50	1000	ND	114	69-130%	---	---	
1,1,1-Trichloroethane	913	20.0	20.0	ug/L	50	1000	ND	91	74-131%	---	---	Q-54k
1,1,2-Trichloroethane	1060	12.5	25.0	ug/L	50	1000	ND	106	80-120%	---	---	
Trichloroethene (TCE)	1090	10.0	20.0	ug/L	50	1000	ND	109	79-123%	---	---	
Trichlorofluoromethane	1400	50.0	100	ug/L	50	1000	ND	140	65-141%	---	---	Q-54f
1,2,3-Trichloropropane	1060	25.0	50.0	ug/L	50	1000	ND	106	73-122%	---	---	
1,2,4-Trimethylbenzene	1200	25.0	50.0	ug/L	50	1000	ND	120	76-124%	---	---	
1,3,5-Trimethylbenzene	1200	25.0	50.0	ug/L	50	1000	ND	120	75-124%	---	---	
Vinyl chloride	1130	10.0	20.0	ug/L	50	1000	ND	113	58-137%	---	---	
m,p-Xylene	2270	25.0	50.0	ug/L	50	2000	ND	114	80-121%	---	---	
o-Xylene	1150	12.5	25.0	ug/L	50	1000	22.0	113	78-122%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 97 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		99 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		95 %		80-120 %		"						

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QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23C1073 - EPA 5030C						Water						
Blank (23C1073-BLK1)			Prepared: 03/28/23 12:00		Analyzed: 03/28/23 14:08							
EPA 8260D												
Acetone	ND	10.0	20.0	ug/L	1	---	---	---	---	---	---	
Acrylonitrile	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
Benzene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Bromobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Bromochloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Bromoform	ND	1.00	1.00	ug/L	1	---	---	---	---	---	---	Q-54p
Bromomethane	ND	5.00	5.00	ug/L	1	---	---	---	---	---	---	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Carbon disulfide	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Carbon tetrachloride	ND	1.00	1.00	ug/L	1	---	---	---	---	---	---	Q-54r
Chlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Chloroethane	ND	5.00	5.00	ug/L	1	---	---	---	---	---	---	
Chloroform	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Chloromethane	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Dibromochloromethane	ND	1.00	1.00	ug/L	1	---	---	---	---	---	---	Q-54n
1,2-Dibromo-3-chloropropane	ND	5.00	5.00	ug/L	1	---	---	---	---	---	---	Q-54v
1,2-Dibromoethane (EDB)	ND	0.500	0.500	ug/L	1	---	---	---	---	---	---	
Dibromomethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

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Project: Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.

Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0826 - 05 19 23 0544

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 23C1073 - EPA 5030C						Water						
Blank (23C1073-BLK1)						Prepared: 03/28/23 12:00 Analyzed: 03/28/23 14:08						
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
2,2-Dichloropropane	ND	1.00	1.00	ug/L	1	---	---	---	---	---	---	Q-54x
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	1.00	1.00	ug/L	1	---	---	---	---	---	---	Q-54l
trans-1,3-Dichloropropene	ND	1.00	1.00	ug/L	1	---	---	---	---	---	---	Q-54t
Ethylbenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
2-Hexanone	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Methylene chloride	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	1.00	1.00	ug/L	1	---	---	---	---	---	---	
Naphthalene	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Styrene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	0.400	0.400	ug/L	1	---	---	---	---	---	---	Q-54n
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
Toluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	0.400	0.400	ug/L	1	---	---	---	---	---	---	Q-54m
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Vinyl chloride	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
m,p-Xylene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
o-Xylene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr) Recovery: 98 % Limits: 80-120 % Dilution: 1x												

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Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

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A3C0826 - 05 19 23 0544

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 23C1073 - EPA 5030C						Water						
Blank (23C1073-BLK1)			Prepared: 03/28/23 12:00		Analyzed: 03/28/23 14:08							
Surr: Toluene-d8 (Surr)		Recovery: 100 %		Limits: 80-120 %		Dilution: 1x						
4-Bromofluorobenzene (Surr)		105 %		80-120 %		"						
LCS (23C1073-BS1)			Prepared: 03/28/23 12:00		Analyzed: 03/28/23 12:41							
EPA 8260D												
Acetone	36.5	10.0	20.0	ug/L	1	40.0	---	91	80-120%	---	---	
Acrylonitrile	19.0	1.00	2.00	ug/L	1	20.0	---	95	80-120%	---	---	
Benzene	19.0	0.100	0.200	ug/L	1	20.0	---	95	80-120%	---	---	
Bromobenzene	18.6	0.250	0.500	ug/L	1	20.0	---	93	80-120%	---	---	
Bromochloromethane	18.8	0.500	1.00	ug/L	1	20.0	---	94	80-120%	---	---	
Bromodichloromethane	18.8	0.500	1.00	ug/L	1	20.0	---	94	80-120%	---	---	
Bromoform	12.4	1.00	1.00	ug/L	1	20.0	---	62	80-120%	---	---	Q-54p
Bromomethane	21.7	5.00	5.00	ug/L	1	20.0	---	108	80-120%	---	---	
2-Butanone (MEK)	40.5	5.00	10.0	ug/L	1	40.0	---	101	80-120%	---	---	
n-Butylbenzene	23.0	0.500	1.00	ug/L	1	20.0	---	115	80-120%	---	---	
sec-Butylbenzene	21.5	0.500	1.00	ug/L	1	20.0	---	108	80-120%	---	---	
tert-Butylbenzene	20.2	0.500	1.00	ug/L	1	20.0	---	101	80-120%	---	---	
Carbon disulfide	19.6	5.00	10.0	ug/L	1	20.0	---	98	80-120%	---	---	
Carbon tetrachloride	12.0	1.00	1.00	ug/L	1	20.0	---	60	80-120%	---	---	Q-54r
Chlorobenzene	19.2	0.250	0.500	ug/L	1	20.0	---	96	80-120%	---	---	
Chloroethane	20.4	5.00	5.00	ug/L	1	20.0	---	102	80-120%	---	---	
Chloroform	19.2	0.500	1.00	ug/L	1	20.0	---	96	80-120%	---	---	
Chloromethane	19.1	2.50	5.00	ug/L	1	20.0	---	95	80-120%	---	---	
2-Chlorotoluene	19.4	0.500	1.00	ug/L	1	20.0	---	97	80-120%	---	---	
4-Chlorotoluene	19.3	0.500	1.00	ug/L	1	20.0	---	97	80-120%	---	---	
Dibromochloromethane	13.7	1.00	1.00	ug/L	1	20.0	---	68	80-120%	---	---	Q-54n
1,2-Dibromo-3-chloropropane	9.47	5.00	5.00	ug/L	1	20.0	---	47	80-120%	---	---	Q-54v
1,2-Dibromoethane (EDB)	15.1	0.500	0.500	ug/L	1	20.0	---	76	80-120%	---	---	Q-55
Dibromomethane	21.5	0.500	1.00	ug/L	1	20.0	---	108	80-120%	---	---	
1,2-Dichlorobenzene	20.5	0.250	0.500	ug/L	1	20.0	---	102	80-120%	---	---	
1,3-Dichlorobenzene	20.1	0.250	0.500	ug/L	1	20.0	---	100	80-120%	---	---	
1,4-Dichlorobenzene	19.0	0.250	0.500	ug/L	1	20.0	---	95	80-120%	---	---	
Dichlorodifluoromethane	21.7	0.500	1.00	ug/L	1	20.0	---	108	80-120%	---	---	
1,1-Dichloroethane	19.2	0.200	0.400	ug/L	1	20.0	---	96	80-120%	---	---	

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Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0826 - 05 19 23 0544

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 23C1073 - EPA 5030C						Water						
LCS (23C1073-BS1)						Prepared: 03/28/23 12:00 Analyzed: 03/28/23 12:41						
1,2-Dichloroethane (EDC)	20.2	0.200	0.400	ug/L	1	20.0	---	101	80-120%	---	---	
1,1-Dichloroethene	19.7	0.200	0.400	ug/L	1	20.0	---	98	80-120%	---	---	
cis-1,2-Dichloroethene	19.7	0.200	0.400	ug/L	1	20.0	---	98	80-120%	---	---	
trans-1,2-Dichloroethene	19.7	0.200	0.400	ug/L	1	20.0	---	99	80-120%	---	---	
1,2-Dichloropropane	18.2	0.250	0.500	ug/L	1	20.0	---	91	80-120%	---	---	
1,3-Dichloropropane	20.5	0.500	1.00	ug/L	1	20.0	---	102	80-120%	---	---	
2,2-Dichloropropane	8.01	1.00	1.00	ug/L	1	20.0	---	40	80-120%	---	---	Q-54x
1,1-Dichloropropene	20.5	0.500	1.00	ug/L	1	20.0	---	103	80-120%	---	---	
cis-1,3-Dichloropropene	14.0	1.00	1.00	ug/L	1	20.0	---	70	80-120%	---	---	Q-54l
trans-1,3-Dichloropropene	10.4	1.00	1.00	ug/L	1	20.0	---	52	80-120%	---	---	Q-54t
Ethylbenzene	20.5	0.250	0.500	ug/L	1	20.0	---	103	80-120%	---	---	
Hexachlorobutadiene	22.9	2.50	5.00	ug/L	1	20.0	---	115	80-120%	---	---	
2-Hexanone	42.8	5.00	10.0	ug/L	1	40.0	---	107	80-120%	---	---	
Isopropylbenzene	21.1	0.500	1.00	ug/L	1	20.0	---	106	80-120%	---	---	
4-Isopropyltoluene	22.3	0.500	1.00	ug/L	1	20.0	---	111	80-120%	---	---	
Methylene chloride	18.3	5.00	10.0	ug/L	1	20.0	---	91	80-120%	---	---	
4-Methyl-2-pentanone (MiBK)	41.3	5.00	10.0	ug/L	1	40.0	---	103	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	15.4	1.00	1.00	ug/L	1	20.0	---	77	80-120%	---	---	Q-55
Naphthalene	18.5	1.00	2.00	ug/L	1	20.0	---	92	80-120%	---	---	
n-Propylbenzene	20.1	0.250	0.500	ug/L	1	20.0	---	100	80-120%	---	---	
Styrene	21.2	0.500	1.00	ug/L	1	20.0	---	106	80-120%	---	---	
1,1,1,2-Tetrachloroethane	13.6	0.400	0.400	ug/L	1	20.0	---	68	80-120%	---	---	Q-54n
1,1,2,2-Tetrachloroethane	19.0	0.250	0.500	ug/L	1	20.0	---	95	80-120%	---	---	
Tetrachloroethene (PCE)	20.5	0.200	0.400	ug/L	1	20.0	---	102	80-120%	---	---	
Toluene	18.6	0.500	1.00	ug/L	1	20.0	---	93	80-120%	---	---	
1,2,3-Trichlorobenzene	19.3	1.00	2.00	ug/L	1	20.0	---	97	80-120%	---	---	
1,2,4-Trichlorobenzene	19.8	1.00	2.00	ug/L	1	20.0	---	99	80-120%	---	---	
1,1,1-Trichloroethane	13.9	0.400	0.400	ug/L	1	20.0	---	69	80-120%	---	---	Q-54m
1,1,2-Trichloroethane	19.7	0.250	0.500	ug/L	1	20.0	---	99	80-120%	---	---	
Trichloroethene (TCE)	19.7	0.200	0.400	ug/L	1	20.0	---	99	80-120%	---	---	
Trichlorofluoromethane	24.4	1.00	2.00	ug/L	1	20.0	---	122	80-120%	---	---	Q-56
1,2,3-Trichloropropane	19.8	0.500	1.00	ug/L	1	20.0	---	99	80-120%	---	---	
1,2,4-Trimethylbenzene	20.8	0.500	1.00	ug/L	1	20.0	---	104	80-120%	---	---	
1,3,5-Trimethylbenzene	21.2	0.500	1.00	ug/L	1	20.0	---	106	80-120%	---	---	

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Page 56 of 120



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QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23C1073 - EPA 5030C						Water						
LCS (23C1073-BS1)				Prepared: 03/28/23 12:00		Analyzed: 03/28/23 12:41						
Vinyl chloride	19.8	0.200	0.400	ug/L	1	20.0	---	99	80-120%	---	---	
m,p-Xylene	40.7	0.500	1.00	ug/L	1	40.0	---	102	80-120%	---	---	
o-Xylene	20.4	0.250	0.500	ug/L	1	20.0	---	102	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 98 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		99 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		93 %		80-120 %		"						
Duplicate (23C1073-DUP1)						Prepared: 03/28/23 13:31		Analyzed: 03/28/23 19:35				
QC Source Sample: Non-SDG (A3C0869-05)												
Acetone	ND	1000	2000	ug/L	100	---	ND	---	---	---	30%	
Acrylonitrile	ND	100	200	ug/L	100	---	ND	---	---	---	30%	
Benzene	274	10.0	20.0	ug/L	100	---	278	---	---	1	30%	
Bromobenzene	ND	25.0	50.0	ug/L	100	---	ND	---	---	---	30%	
Bromochloromethane	ND	50.0	100	ug/L	100	---	ND	---	---	---	30%	
Bromodichloromethane	ND	50.0	100	ug/L	100	---	ND	---	---	---	30%	
Bromoform	ND	100	100	ug/L	100	---	ND	---	---	---	30%	Q-54p
Bromomethane	ND	500	500	ug/L	100	---	ND	---	---	---	30%	
2-Butanone (MEK)	ND	500	1000	ug/L	100	---	ND	---	---	---	30%	
n-Butylbenzene	ND	50.0	100	ug/L	100	---	ND	---	---	---	30%	
sec-Butylbenzene	ND	50.0	100	ug/L	100	---	ND	---	---	---	30%	
tert-Butylbenzene	ND	50.0	100	ug/L	100	---	ND	---	---	---	30%	
Carbon disulfide	ND	500	1000	ug/L	100	---	ND	---	---	---	30%	
Carbon tetrachloride	ND	100	100	ug/L	100	---	ND	---	---	---	30%	Q-54r
Chlorobenzene	ND	25.0	50.0	ug/L	100	---	ND	---	---	---	30%	
Chloroethane	ND	500	500	ug/L	100	---	ND	---	---	---	30%	
Chloroform	ND	50.0	100	ug/L	100	---	ND	---	---	---	30%	
Chloromethane	ND	250	500	ug/L	100	---	ND	---	---	---	30%	
2-Chlorotoluene	ND	50.0	100	ug/L	100	---	ND	---	---	---	30%	
4-Chlorotoluene	ND	50.0	100	ug/L	100	---	ND	---	---	---	30%	
Dibromochloromethane	ND	100	100	ug/L	100	---	ND	---	---	---	30%	Q-54n
1,2-Dibromo-3-chloropropane	ND	500	500	ug/L	100	---	ND	---	---	---	30%	Q-54v
1,2-Dibromoethane (EDB)	ND	50.0	50.0	ug/L	100	---	ND	---	---	---	30%	
Dibromomethane	ND	50.0	100	ug/L	100	---	ND	---	---	---	30%	
1,2-Dichlorobenzene	ND	25.0	50.0	ug/L	100	---	ND	---	---	---	30%	

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Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23C1073 - EPA 5030C						Water						
Duplicate (23C1073-DUP1)			Prepared: 03/28/23 13:31 Analyzed: 03/28/23 19:35									
QC Source Sample: Non-SDG (A3C0869-05)												
1,3-Dichlorobenzene	ND	25.0	50.0	ug/L	100	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	25.0	50.0	ug/L	100	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	50.0	100	ug/L	100	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	20.0	40.0	ug/L	100	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	20.0	40.0	ug/L	100	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	20.0	40.0	ug/L	100	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	20.0	40.0	ug/L	100	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	20.0	40.0	ug/L	100	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	25.0	50.0	ug/L	100	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	50.0	100	ug/L	100	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	100	100	ug/L	100	---	ND	---	---	---	30%	Q-54x
1,1-Dichloropropene	ND	50.0	100	ug/L	100	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	100	100	ug/L	100	---	ND	---	---	---	30%	Q-54l
trans-1,3-Dichloropropene	ND	100	100	ug/L	100	---	ND	---	---	---	30%	Q-54t
Ethylbenzene	413	25.0	50.0	ug/L	100	---	427	---	---	3	30%	
Hexachlorobutadiene	ND	250	500	ug/L	100	---	ND	---	---	---	30%	
2-Hexanone	ND	500	1000	ug/L	100	---	ND	---	---	---	30%	
Isopropylbenzene	ND	50.0	100	ug/L	100	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	50.0	100	ug/L	100	---	ND	---	---	---	30%	
Methylene chloride	ND	500	1000	ug/L	100	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	500	1000	ug/L	100	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	100	100	ug/L	100	---	ND	---	---	---	30%	
Naphthalene	16000	100	200	ug/L	100	---	15900	---	---	0.6	30%	
n-Propylbenzene	ND	25.0	50.0	ug/L	100	---	ND	---	---	---	30%	
Styrene	ND	50.0	100	ug/L	100	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	40.0	40.0	ug/L	100	---	ND	---	---	---	30%	Q-54n
1,1,2,2-Tetrachloroethane	ND	25.0	50.0	ug/L	100	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	20.0	40.0	ug/L	100	---	ND	---	---	---	30%	
Toluene	ND	50.0	100	ug/L	100	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	100	200	ug/L	100	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	100	200	ug/L	100	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	40.0	40.0	ug/L	100	---	ND	---	---	---	30%	Q-54m
1,1,2-Trichloroethane	ND	25.0	50.0	ug/L	100	---	ND	---	---	---	30%	

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Darwin Thomas, Business Development Director

Page 58 of 120



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

Project: Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.

Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0826 - 05 19 23 0544

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 23C1073 - EPA 5030C						Water						
Duplicate (23C1073-DUP1)			Prepared: 03/28/23 13:31		Analyzed: 03/28/23 19:35							
QC Source Sample: Non-SDG (A3C0869-05)												
Trichloroethene (TCE)	ND	20.0	40.0	ug/L	100	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	100	200	ug/L	100	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	50.0	100	ug/L	100	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	141	50.0	100	ug/L	100	---	146	---	---	3	30%	
1,3,5-Trimethylbenzene	ND	50.0	100	ug/L	100	---	ND	---	---	---	30%	
Vinyl chloride	ND	20.0	40.0	ug/L	100	---	ND	---	---	---	30%	
m,p-Xylene	294	50.0	100	ug/L	100	---	302	---	---	3	30%	
o-Xylene	165	25.0	50.0	ug/L	100	---	166	---	---	0.6	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 96 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		101 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		95 %		80-120 %		"						
Duplicate (23C1073-DUP2)			Prepared: 03/28/23 13:31		Analyzed: 03/28/23 21:23							
QC Source Sample: Non-SDG (A3C0959-01)												
Acetone	ND	100	200	ug/L	10	---	ND	---	---	---	30%	
Acrylonitrile	ND	20.0	20.0	ug/L	10	---	ND	---	---	---	30%	
Benzene	76.0	1.00	2.00	ug/L	10	---	77.7	---	---	2	30%	
Bromobenzene	ND	2.50	5.00	ug/L	10	---	ND	---	---	---	30%	
Bromochloromethane	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
Bromodichloromethane	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
Bromoform	ND	10.0	10.0	ug/L	10	---	ND	---	---	---	30%	Q-54p
Bromomethane	ND	50.0	50.0	ug/L	10	---	ND	---	---	---	30%	
2-Butanone (MEK)	ND	50.0	100	ug/L	10	---	ND	---	---	---	30%	
n-Butylbenzene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
sec-Butylbenzene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
tert-Butylbenzene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
Carbon disulfide	ND	50.0	100	ug/L	10	---	ND	---	---	---	30%	
Carbon tetrachloride	ND	10.0	10.0	ug/L	10	---	ND	---	---	---	30%	Q-54r
Chlorobenzene	ND	2.50	5.00	ug/L	10	---	ND	---	---	---	30%	
Chloroethane	ND	50.0	50.0	ug/L	10	---	ND	---	---	---	30%	
Chloroform	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
Chloromethane	ND	25.0	50.0	ug/L	10	---	ND	---	---	---	30%	
2-Chlorotoluene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	

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Project Manager: John Renda

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A3C0826 - 05 19 23 0544

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 23C1073 - EPA 5030C						Water						
Duplicate (23C1073-DUP2)			Prepared: 03/28/23 13:31 Analyzed: 03/28/23 21:23									
QC Source Sample: Non-SDG (A3C0959-01)												
4-Chlorotoluene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
Dibromochloromethane	ND	10.0	10.0	ug/L	10	---	ND	---	---	---	30%	Q-54n
1,2-Dibromo-3-chloropropane	ND	50.0	50.0	ug/L	10	---	ND	---	---	---	30%	Q-54v
1,2-Dibromoethane (EDB)	ND	5.00	5.00	ug/L	10	---	ND	---	---	---	30%	
Dibromomethane	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
1,2-Dichlorobenzene	ND	2.50	5.00	ug/L	10	---	ND	---	---	---	30%	
1,3-Dichlorobenzene	ND	2.50	5.00	ug/L	10	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	2.50	5.00	ug/L	10	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	2.50	5.00	ug/L	10	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	10.0	10.0	ug/L	10	---	ND	---	---	---	30%	Q-54x
1,1-Dichloropropene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	10.0	10.0	ug/L	10	---	ND	---	---	---	30%	Q-54l
trans-1,3-Dichloropropene	ND	10.0	10.0	ug/L	10	---	ND	---	---	---	30%	Q-54t
Ethylbenzene	190	2.50	5.00	ug/L	10	---	194	---	---	2	30%	
Hexachlorobutadiene	ND	25.0	50.0	ug/L	10	---	ND	---	---	---	30%	
2-Hexanone	ND	50.0	100	ug/L	10	---	ND	---	---	---	30%	
Isopropylbenzene	12.9	5.00	10.0	ug/L	10	---	12.6	---	---	2	30%	
4-Isopropyltoluene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
Methylene chloride	ND	50.0	100	ug/L	10	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	50.0	100	ug/L	10	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	10.0	10.0	ug/L	10	---	ND	---	---	---	30%	
Naphthalene	80.7	10.0	20.0	ug/L	10	---	83.8	---	---	4	30%	
n-Propylbenzene	25.5	2.50	5.00	ug/L	10	---	26.1	---	---	2	30%	
Styrene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	4.00	4.00	ug/L	10	---	ND	---	---	---	30%	Q-54n
1,1,2,2-Tetrachloroethane	ND	2.50	5.00	ug/L	10	---	ND	---	---	---	30%	

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A3C0826 - 05 19 23 0544

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 23C1073 - EPA 5030C						Water						
Duplicate (23C1073-DUP2)			Prepared: 03/28/23 13:31 Analyzed: 03/28/23 21:23									
QC Source Sample: Non-SDG (A3C0959-01)												
Tetrachloroethene (PCE)	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	Q-54m
Toluene	20.3	5.00	10.0	ug/L	10	---	20.8	---	---	2	30%	
1,2,3-Trichlorobenzene	ND	10.0	20.0	ug/L	10	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	10.0	20.0	ug/L	10	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	4.00	4.00	ug/L	10	---	ND	---	---	---	30%	
1,1,2-Trichloroethane	ND	2.50	5.00	ug/L	10	---	ND	---	---	---	30%	
Trichloroethene (TCE)	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	10.0	20.0	ug/L	10	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	308	5.00	10.0	ug/L	10	---	314	---	---	2	30%	
1,3,5-Trimethylbenzene	56.1	5.00	10.0	ug/L	10	---	56.9	---	---	1	30%	
Vinyl chloride	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	
m,p-Xylene	698	5.00	10.0	ug/L	10	---	717	---	---	3	30%	
o-Xylene	33.7	2.50	5.00	ug/L	10	---	34.8	---	---	3	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 96 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		100 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		97 %		80-120 %		"						

Matrix Spike (23C1073-MS1)

Prepared: 03/28/23 13:31 Analyzed: 03/28/23 23:38

QC Source Sample: Non-SDG (A3C0969-18)

EPA 8260D

Acetone	401	100	200	ug/L	10	400	ND	100	39-160%	---	---	Q-54p
Acrylonitrile	196	10.0	20.0	ug/L	10	200	ND	98	63-135%	---	---	
Benzene	202	1.00	2.00	ug/L	10	200	ND	101	79-120%	---	---	
Bromobenzene	201	2.50	5.00	ug/L	10	200	ND	101	80-120%	---	---	
Bromochloromethane	204	5.00	10.0	ug/L	10	200	ND	102	78-123%	---	---	
Bromodichloromethane	216	5.00	10.0	ug/L	10	200	ND	108	79-125%	---	---	
Bromoform	150	10.0	10.0	ug/L	10	200	ND	75	66-130%	---	---	
Bromomethane	240	50.0	50.0	ug/L	10	200	ND	120	53-141%	---	---	
2-Butanone (MEK)	409	50.0	100	ug/L	10	400	ND	102	56-143%	---	---	
n-Butylbenzene	250	5.00	10.0	ug/L	10	200	ND	125	75-128%	---	---	
sec-Butylbenzene	234	5.00	10.0	ug/L	10	200	ND	117	77-126%	---	---	Q-54p
tert-Butylbenzene	224	5.00	10.0	ug/L	10	200	ND	112	78-124%	---	---	

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A3C0826 - 05 19 23 0544

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 23C1073 - EPA 5030C						Water						
Matrix Spike (23C1073-MS1)			Prepared: 03/28/23 13:31			Analyzed: 03/28/23 23:38						
QC Source Sample: Non-SDG (A3C0969-18)												
Carbon disulfide	222	50.0	100	ug/L	10	200	ND	111	64-133%	---	---	Q-54r
Carbon tetrachloride	158	10.0	10.0	ug/L	10	200	ND	79	72-136%	---	---	
Chlorobenzene	202	2.50	5.00	ug/L	10	200	ND	101	80-120%	---	---	
Chloroethane	236	50.0	50.0	ug/L	10	200	ND	118	60-138%	---	---	
Chloroform	208	5.00	10.0	ug/L	10	200	ND	104	79-124%	---	---	Q-54n
Chloromethane	206	25.0	50.0	ug/L	10	200	ND	103	50-139%	---	---	
2-Chlorotoluene	209	5.00	10.0	ug/L	10	200	ND	104	79-122%	---	---	
4-Chlorotoluene	212	5.00	10.0	ug/L	10	200	ND	106	78-122%	---	---	
Dibromochloromethane	162	10.0	10.0	ug/L	10	200	ND	81	74-126%	---	---	Q-54v
1,2-Dibromo-3-chloropropane	128	50.0	50.0	ug/L	10	200	ND	64	62-128%	---	---	
1,2-Dibromoethane (EDB)	188	5.00	5.00	ug/L	10	200	ND	94	77-121%	---	---	
Dibromomethane	222	5.00	10.0	ug/L	10	200	ND	111	79-123%	---	---	
1,2-Dichlorobenzene	216	2.50	5.00	ug/L	10	200	ND	108	80-120%	---	---	Q-54w
1,3-Dichlorobenzene	214	2.50	5.00	ug/L	10	200	ND	107	80-120%	---	---	
1,4-Dichlorobenzene	202	2.50	5.00	ug/L	10	200	ND	101	79-120%	---	---	
Dichlorodifluoromethane	230	5.00	10.0	ug/L	10	200	ND	115	32-152%	---	---	
1,1-Dichloroethane	206	2.00	4.00	ug/L	10	200	ND	103	77-125%	---	---	Q-54x
1,2-Dichloroethane (EDC)	209	2.00	4.00	ug/L	10	200	ND	104	73-128%	---	---	
1,1-Dichloroethene	215	2.00	4.00	ug/L	10	200	ND	107	71-131%	---	---	
cis-1,2-Dichloroethene	210	2.00	4.00	ug/L	10	200	ND	105	78-123%	---	---	
trans-1,2-Dichloroethene	214	2.00	4.00	ug/L	10	200	ND	107	75-124%	---	---	Q-54l
1,2-Dichloropropane	196	2.50	5.00	ug/L	10	200	ND	98	78-122%	---	---	
1,3-Dichloropropane	211	5.00	10.0	ug/L	10	200	ND	106	80-120%	---	---	
2,2-Dichloropropane	93.6	10.0	10.0	ug/L	10	200	ND	47	60-139%	---	---	
1,1-Dichloropropene	226	5.00	10.0	ug/L	10	200	ND	113	79-125%	---	---	Q-54t
cis-1,3-Dichloropropene	166	10.0	10.0	ug/L	10	200	ND	83	75-124%	---	---	
trans-1,3-Dichloropropene	130	10.0	10.0	ug/L	10	200	ND	65	73-127%	---	---	
Ethylbenzene	218	2.50	5.00	ug/L	10	200	ND	109	79-121%	---	---	
Hexachlorobutadiene	239	25.0	50.0	ug/L	10	200	ND	119	66-134%	---	---	
2-Hexanone	437	50.0	100	ug/L	10	400	ND	109	57-139%	---	---	
Isopropylbenzene	227	5.00	10.0	ug/L	10	200	ND	114	72-131%	---	---	
4-Isopropyltoluene	240	5.00	10.0	ug/L	10	200	ND	120	77-127%	---	---	
Methylene chloride	194	50.0	100	ug/L	10	200	ND	97	74-124%	---	---	

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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 23C1073 - EPA 5030C						Water						
Matrix Spike (23C1073-MS1)			Prepared: 03/28/23 13:31 Analyzed: 03/28/23 23:38									
QC Source Sample: Non-SDG (A3C0969-18)												
4-Methyl-2-pentanone (MiBK)	422	50.0	100	ug/L	10	400	ND	105	67-130%	---	---	
Methyl tert-butyl ether (MTBE)	171	10.0	10.0	ug/L	10	200	ND	86	71-124%	---	---	Q-54u
Naphthalene	186	10.0	20.0	ug/L	10	200	ND	93	61-128%	---	---	
n-Propylbenzene	221	2.50	5.00	ug/L	10	200	ND	111	76-126%	---	---	
Styrene	221	5.00	10.0	ug/L	10	200	ND	110	78-123%	---	---	
1,1,1,2-Tetrachloroethane	170	4.00	4.00	ug/L	10	200	ND	85	78-124%	---	---	Q-54n
1,1,2,2-Tetrachloroethane	206	2.50	5.00	ug/L	10	200	ND	103	71-121%	---	---	
Tetrachloroethene (PCE)	218	2.00	4.00	ug/L	10	200	ND	109	74-129%	---	---	
Toluene	198	5.00	10.0	ug/L	10	200	ND	99	80-121%	---	---	
1,2,3-Trichlorobenzene	198	10.0	20.0	ug/L	10	200	ND	99	69-129%	---	---	
1,2,4-Trichlorobenzene	201	10.0	20.0	ug/L	10	200	ND	100	69-130%	---	---	
1,1,1-Trichloroethane	176	4.00	4.00	ug/L	10	200	ND	88	74-131%	---	---	Q-54m
1,1,2-Trichloroethane	204	2.50	5.00	ug/L	10	200	ND	102	80-120%	---	---	
Trichloroethene (TCE)	210	2.00	4.00	ug/L	10	200	ND	105	79-123%	---	---	
Trichlorofluoromethane	267	10.0	20.0	ug/L	10	200	ND	133	65-141%	---	---	Q-54d
1,2,3-Trichloropropane	207	5.00	10.0	ug/L	10	200	ND	104	73-122%	---	---	
1,2,4-Trimethylbenzene	226	5.00	10.0	ug/L	10	200	ND	113	76-124%	---	---	
1,3,5-Trimethylbenzene	229	5.00	10.0	ug/L	10	200	ND	115	75-124%	---	---	
Vinyl chloride	219	2.00	4.00	ug/L	10	200	ND	110	58-137%	---	---	
m,p-Xylene	436	5.00	10.0	ug/L	10	400	ND	109	80-121%	---	---	
o-Xylene	217	2.50	5.00	ug/L	10	200	ND	109	78-122%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 97 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		100 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		95 %		80-120 %		"						

Apex Laboratories

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

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Project: Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.

Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0826 - 05 19 23 0544

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 23C1116 - EPA 5030C						Water						
Blank (23C1116-BLK1)			Prepared: 03/28/23 15:28		Analyzed: 03/28/23 21:34							
EPA 8260D												
Acetone	ND	10.0	20.0	ug/L	1	---	---	---	---	---	---	
Acrylonitrile	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
Benzene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Bromobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Bromochloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Bromoform	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Bromomethane	ND	5.00	5.00	ug/L	1	---	---	---	---	---	---	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Carbon disulfide	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Chlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Chloroethane	ND	5.00	5.00	ug/L	1	---	---	---	---	---	---	
Chloroform	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Chloromethane	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Dibromomethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	

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Project Number: 000029-02.84 T-01.001F

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A3C0826 - 05 19 23 0544

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 23C1116 - EPA 5030C						Water						
Blank (23C1116-BLK1)						Prepared: 03/28/23 15:28 Analyzed: 03/28/23 21:34						
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Ethylbenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
2-Hexanone	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Methylene chloride	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Naphthalene	ND	2.00	2.00	ug/L	1	---	---	---	---	---	---	Q-54m
n-Propylbenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Styrene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
Toluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Vinyl chloride	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
m,p-Xylene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
o-Xylene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr) Recovery: 100 % Limits: 80-120 % Dilution: 1x												

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

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503-718-2323

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Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0826 - 05 19 23 0544

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 23C1116 - EPA 5030C						Water						
Blank (23C1116-BLK1)				Prepared: 03/28/23 15:28		Analyzed: 03/28/23 21:34						
Surr: Toluene-d8 (Surr)		Recovery: 103 %		Limits: 80-120 %		Dilution: 1x						
4-Bromofluorobenzene (Surr)		99 %		80-120 %		"						
LCS (23C1116-BS1)				Prepared: 03/28/23 15:28		Analyzed: 03/28/23 20:49						
EPA 8260D												
Acetone	39.1	10.0	20.0	ug/L	1	40.0	---	98	80-120%	---	---	Q-56
Acrylonitrile	19.4	1.00	2.00	ug/L	1	20.0	---	97	80-120%	---	---	
Benzene	18.1	0.100	0.200	ug/L	1	20.0	---	90	80-120%	---	---	
Bromobenzene	16.8	0.250	0.500	ug/L	1	20.0	---	84	80-120%	---	---	
Bromochloromethane	21.8	0.500	1.00	ug/L	1	20.0	---	109	80-120%	---	---	
Bromodichloromethane	20.1	0.500	1.00	ug/L	1	20.0	---	101	80-120%	---	---	
Bromoform	20.4	0.500	1.00	ug/L	1	20.0	---	102	80-120%	---	---	
Bromomethane	24.8	5.00	5.00	ug/L	1	20.0	---	124	80-120%	---	---	
2-Butanone (MEK)	41.2	5.00	10.0	ug/L	1	40.0	---	103	80-120%	---	---	
n-Butylbenzene	19.3	0.500	1.00	ug/L	1	20.0	---	96	80-120%	---	---	
sec-Butylbenzene	20.4	0.500	1.00	ug/L	1	20.0	---	102	80-120%	---	---	
tert-Butylbenzene	19.4	0.500	1.00	ug/L	1	20.0	---	97	80-120%	---	---	
Carbon disulfide	19.7	5.00	10.0	ug/L	1	20.0	---	98	80-120%	---	---	
Carbon tetrachloride	22.5	0.500	1.00	ug/L	1	20.0	---	112	80-120%	---	---	
Chlorobenzene	18.2	0.250	0.500	ug/L	1	20.0	---	91	80-120%	---	---	
Chloroethane	23.2	5.00	5.00	ug/L	1	20.0	---	116	80-120%	---	---	
Chloroform	18.6	0.500	1.00	ug/L	1	20.0	---	93	80-120%	---	---	
Chloromethane	21.1	2.50	5.00	ug/L	1	20.0	---	106	80-120%	---	---	
2-Chlorotoluene	17.5	0.500	1.00	ug/L	1	20.0	---	88	80-120%	---	---	
4-Chlorotoluene	18.8	0.500	1.00	ug/L	1	20.0	---	94	80-120%	---	---	
Dibromochloromethane	19.8	0.500	1.00	ug/L	1	20.0	---	99	80-120%	---	---	
1,2-Dibromo-3-chloropropane	17.6	2.50	5.00	ug/L	1	20.0	---	88	80-120%	---	---	
1,2-Dibromoethane (EDB)	18.9	0.250	0.500	ug/L	1	20.0	---	94	80-120%	---	---	
Dibromomethane	18.6	0.500	1.00	ug/L	1	20.0	---	93	80-120%	---	---	
1,2-Dichlorobenzene	17.9	0.250	0.500	ug/L	1	20.0	---	89	80-120%	---	---	
1,3-Dichlorobenzene	18.4	0.250	0.500	ug/L	1	20.0	---	92	80-120%	---	---	
1,4-Dichlorobenzene	17.1	0.250	0.500	ug/L	1	20.0	---	85	80-120%	---	---	
Dichlorodifluoromethane	23.4	0.500	1.00	ug/L	1	20.0	---	117	80-120%	---	---	
1,1-Dichloroethane	19.4	0.200	0.400	ug/L	1	20.0	---	97	80-120%	---	---	

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QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23C1116 - EPA 5030C						Water						
LCS (23C1116-BS1)			Prepared: 03/28/23 15:28		Analyzed: 03/28/23 20:49							
1,2-Dichloroethane (EDC)	21.2	0.200	0.400	ug/L	1	20.0	---	106	80-120%	---	---	
1,1-Dichloroethene	20.6	0.200	0.400	ug/L	1	20.0	---	103	80-120%	---	---	
cis-1,2-Dichloroethene	18.3	0.200	0.400	ug/L	1	20.0	---	91	80-120%	---	---	
trans-1,2-Dichloroethene	18.4	0.200	0.400	ug/L	1	20.0	---	92	80-120%	---	---	
1,2-Dichloropropane	17.8	0.250	0.500	ug/L	1	20.0	---	89	80-120%	---	---	
1,3-Dichloropropane	19.1	0.500	1.00	ug/L	1	20.0	---	96	80-120%	---	---	
2,2-Dichloropropane	21.5	0.500	1.00	ug/L	1	20.0	---	108	80-120%	---	---	
1,1-Dichloropropene	19.1	0.500	1.00	ug/L	1	20.0	---	96	80-120%	---	---	
cis-1,3-Dichloropropene	19.2	0.500	1.00	ug/L	1	20.0	---	96	80-120%	---	---	
trans-1,3-Dichloropropene	22.3	0.500	1.00	ug/L	1	20.0	---	111	80-120%	---	---	
Ethylbenzene	19.4	0.250	0.500	ug/L	1	20.0	---	97	80-120%	---	---	
Hexachlorobutadiene	18.5	2.50	5.00	ug/L	1	20.0	---	93	80-120%	---	---	
2-Hexanone	39.7	5.00	10.0	ug/L	1	40.0	---	99	80-120%	---	---	
Isopropylbenzene	19.8	0.500	1.00	ug/L	1	20.0	---	99	80-120%	---	---	
4-Isopropyltoluene	19.7	0.500	1.00	ug/L	1	20.0	---	99	80-120%	---	---	
Methylene chloride	17.7	5.00	10.0	ug/L	1	20.0	---	89	80-120%	---	---	
4-Methyl-2-pentanone (MiBK)	44.9	5.00	10.0	ug/L	1	40.0	---	112	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	19.0	0.500	1.00	ug/L	1	20.0	---	95	80-120%	---	---	
Naphthalene	13.8	2.00	2.00	ug/L	1	20.0	---	69	80-120%	---	---	Q-54m
n-Propylbenzene	18.6	0.250	0.500	ug/L	1	20.0	---	93	80-120%	---	---	
Styrene	20.3	0.500	1.00	ug/L	1	20.0	---	102	80-120%	---	---	
1,1,1,2-Tetrachloroethane	18.7	0.200	0.400	ug/L	1	20.0	---	94	80-120%	---	---	
1,1,2,2-Tetrachloroethane	19.6	0.250	0.500	ug/L	1	20.0	---	98	80-120%	---	---	
Tetrachloroethene (PCE)	19.0	0.200	0.400	ug/L	1	20.0	---	95	80-120%	---	---	
Toluene	17.8	0.500	1.00	ug/L	1	20.0	---	89	80-120%	---	---	
1,2,3-Trichlorobenzene	18.3	1.00	2.00	ug/L	1	20.0	---	92	80-120%	---	---	
1,2,4-Trichlorobenzene	16.2	1.00	2.00	ug/L	1	20.0	---	81	80-120%	---	---	
1,1,1-Trichloroethane	20.5	0.200	0.400	ug/L	1	20.0	---	103	80-120%	---	---	
1,1,2-Trichloroethane	18.8	0.250	0.500	ug/L	1	20.0	---	94	80-120%	---	---	
Trichloroethene (TCE)	16.6	0.200	0.400	ug/L	1	20.0	---	83	80-120%	---	---	
Trichlorofluoromethane	22.9	1.00	2.00	ug/L	1	20.0	---	114	80-120%	---	---	
1,2,3-Trichloropropane	19.5	0.500	1.00	ug/L	1	20.0	---	98	80-120%	---	---	
1,2,4-Trimethylbenzene	20.2	0.500	1.00	ug/L	1	20.0	---	101	80-120%	---	---	
1,3,5-Trimethylbenzene	20.0	0.500	1.00	ug/L	1	20.0	---	100	80-120%	---	---	

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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 23C1116 - EPA 5030C						Water						
LCS (23C1116-BS1)			Prepared: 03/28/23 15:28		Analyzed: 03/28/23 20:49							
Vinyl chloride	20.1	0.200	0.400	ug/L	1	20.0	---	101	80-120%	---	---	
m,p-Xylene	42.0	0.500	1.00	ug/L	1	40.0	---	105	80-120%	---	---	
o-Xylene	19.0	0.250	0.500	ug/L	1	20.0	---	95	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 94 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		99 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		92 %		80-120 %		"						
Duplicate (23C1116-DUP1)						Prepared: 03/28/23 15:28		Analyzed: 03/29/23 00:57				
QC Source Sample: Non-SDG (A3C0831-11)												
Acetone	ND	10.0	20.0	ug/L	1	---	ND	---	---	---	30%	
Acrylonitrile	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	30%	
Benzene	ND	0.100	0.200	ug/L	1	---	ND	---	---	---	30%	
Bromobenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Bromochloromethane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Bromoform	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Bromomethane	ND	5.00	5.00	ug/L	1	---	ND	---	---	---	30%	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Carbon disulfide	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Chlorobenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Chloroethane	ND	5.00	5.00	ug/L	1	---	ND	---	---	---	30%	
Chloroform	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Chloromethane	ND	2.50	5.00	ug/L	1	---	ND	---	---	---	30%	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	---	ND	---	---	---	30%	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Dibromomethane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

Project: Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.

Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0826 - 05 19 23 0544

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 23C1116 - EPA 5030C						Water						
Duplicate (23C1116-DUP1)			Prepared: 03/28/23 15:28		Analyzed: 03/29/23 00:57							
QC Source Sample: Non-SDG (A3C0831-11)												
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	Q-54m
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Ethylbenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	---	ND	---	---	---	30%	
2-Hexanone	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Methylene chloride	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Naphthalene	ND	2.00	2.00	ug/L	1	---	ND	---	---	---	30%	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Styrene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	1.08	0.200	0.400	ug/L	1	---	1.04	---	---	4	30%	
Toluene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	

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Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0826 - 05 19 23 0544

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	Limits	RPD	RPD Limit	Notes
Batch 23C1116 - EPA 5030C						Water						
Duplicate (23C1116-DUP1)			Prepared: 03/28/23 15:28		Analyzed: 03/29/23 00:57							
QC Source Sample: Non-SDG (A3C0831-11)												
Trichloroethene (TCE)	2.68	0.200	0.400	ug/L	1	---	2.64	---	---	2	30%	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Vinyl chloride	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
m,p-Xylene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
o-Xylene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 100 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		103 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		100 %		80-120 %		"						
Matrix Spike (23C1116-MS1)						Prepared: 03/28/23 15:28 Analyzed: 03/29/23 05:49						
QC Source Sample: Non-SDG (A3C0869-04)												
EPA 8260D												
Acetone	52.4	10.0	20.0	ug/L	1	40.0	ND	131	39-160%	---	---	
Acrylonitrile	21.6	1.00	2.00	ug/L	1	20.0	ND	108	63-135%	---	---	
Benzene	68.2	0.100	0.200	ug/L	1	20.0	46.8	107	79-120%	---	---	
Bromobenzene	19.1	0.250	0.500	ug/L	1	20.0	ND	96	80-120%	---	---	
Bromochloromethane	24.9	0.500	1.00	ug/L	1	20.0	ND	125	78-123%	---	---	Q-01
Bromodichloromethane	22.6	0.500	1.00	ug/L	1	20.0	ND	113	79-125%	---	---	
Bromoform	22.8	0.500	1.00	ug/L	1	20.0	ND	114	66-130%	---	---	
Bromomethane	26.2	5.00	5.00	ug/L	1	20.0	ND	131	53-141%	---	---	Q-54h
2-Butanone (MEK)	48.1	5.00	10.0	ug/L	1	40.0	ND	120	56-143%	---	---	
n-Butylbenzene	25.1	0.500	1.00	ug/L	1	20.0	ND	126	75-128%	---	---	
sec-Butylbenzene	24.5	0.500	1.00	ug/L	1	20.0	ND	123	77-126%	---	---	
tert-Butylbenzene	24.1	0.500	1.00	ug/L	1	20.0	ND	121	78-124%	---	---	
Carbon disulfide	23.0	5.00	10.0	ug/L	1	20.0	ND	115	64-133%	---	---	
Carbon tetrachloride	25.5	0.500	1.00	ug/L	1	20.0	ND	127	72-136%	---	---	
Chlorobenzene	21.1	0.250	0.500	ug/L	1	20.0	ND	105	80-120%	---	---	
Chloroethane	28.4	5.00	5.00	ug/L	1	20.0	ND	142	60-138%	---	---	Q-01
Chloroform	21.4	0.500	1.00	ug/L	1	20.0	ND	107	79-124%	---	---	
Chloromethane	24.4	2.50	5.00	ug/L	1	20.0	ND	122	50-139%	---	---	

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Darwin Thomas, Business Development Director



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Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0826 - 05 19 23 0544

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 23C1116 - EPA 5030C						Water						
Matrix Spike (23C1116-MS1)			Prepared: 03/28/23 15:28		Analyzed: 03/29/23 05:49							
QC Source Sample: Non-SDG (A3C0869-04)												
2-Chlorotoluene	21.0	0.500	1.00	ug/L	1	20.0	ND	105	79-122%	---	---	
4-Chlorotoluene	22.2	0.500	1.00	ug/L	1	20.0	ND	111	78-122%	---	---	
Dibromochloromethane	22.3	0.500	1.00	ug/L	1	20.0	ND	111	74-126%	---	---	
1,2-Dibromo-3-chloropropane	20.9	2.50	5.00	ug/L	1	20.0	ND	104	62-128%	---	---	
1,2-Dibromoethane (EDB)	21.6	0.250	0.500	ug/L	1	20.0	ND	108	77-121%	---	---	
Dibromomethane	20.8	0.500	1.00	ug/L	1	20.0	ND	104	79-123%	---	---	
1,2-Dichlorobenzene	21.0	0.250	0.500	ug/L	1	20.0	ND	105	80-120%	---	---	
1,3-Dichlorobenzene	21.2	0.250	0.500	ug/L	1	20.0	ND	106	80-120%	---	---	
1,4-Dichlorobenzene	19.5	0.250	0.500	ug/L	1	20.0	ND	97	79-120%	---	---	
Dichlorodifluoromethane	25.1	0.500	1.00	ug/L	1	20.0	ND	126	32-152%	---	---	
1,1-Dichloroethane	22.7	0.200	0.400	ug/L	1	20.0	ND	113	77-125%	---	---	
1,2-Dichloroethane (EDC)	23.7	0.200	0.400	ug/L	1	20.0	ND	118	73-128%	---	---	
1,1-Dichloroethene	24.4	0.200	0.400	ug/L	1	20.0	ND	122	71-131%	---	---	
cis-1,2-Dichloroethene	25.8	0.200	0.400	ug/L	1	20.0	3.25	113	78-123%	---	---	
trans-1,2-Dichloroethene	22.1	0.200	0.400	ug/L	1	20.0	ND	110	75-124%	---	---	
1,2-Dichloropropane	20.7	0.250	0.500	ug/L	1	20.0	ND	104	78-122%	---	---	
1,3-Dichloropropane	21.8	0.500	1.00	ug/L	1	20.0	ND	109	80-120%	---	---	
2,2-Dichloropropane	21.7	0.500	1.00	ug/L	1	20.0	ND	108	60-139%	---	---	
1,1-Dichloropropene	23.2	0.500	1.00	ug/L	1	20.0	ND	116	79-125%	---	---	
cis-1,3-Dichloropropene	20.0	0.500	1.00	ug/L	1	20.0	ND	100	75-124%	---	---	
trans-1,3-Dichloropropene	25.0	0.500	1.00	ug/L	1	20.0	ND	125	73-127%	---	---	
Ethylbenzene	28.7	0.250	0.500	ug/L	1	20.0	5.06	118	79-121%	---	---	
Hexachlorobutadiene	23.2	2.50	5.00	ug/L	1	20.0	ND	116	66-134%	---	---	
2-Hexanone	47.8	5.00	10.0	ug/L	1	40.0	ND	120	57-139%	---	---	
Isopropylbenzene	24.7	0.500	1.00	ug/L	1	20.0	ND	124	72-131%	---	---	
4-Isopropyltoluene	24.1	0.500	1.00	ug/L	1	20.0	ND	120	77-127%	---	---	
Methylene chloride	19.8	5.00	10.0	ug/L	1	20.0	ND	99	74-124%	---	---	
4-Methyl-2-pentanone (MiBK)	54.0	5.00	10.0	ug/L	1	40.0	ND	135	67-130%	---	---	Q-01
Methyl tert-butyl ether (MTBE)	22.0	0.500	1.00	ug/L	1	20.0	ND	110	71-124%	---	---	
Naphthalene	102	2.00	2.00	ug/L	1	20.0	79.9	112	61-128%	---	---	Q-54m
n-Propylbenzene	22.4	0.250	0.500	ug/L	1	20.0	ND	112	76-126%	---	---	
Styrene	23.5	0.500	1.00	ug/L	1	20.0	ND	118	78-123%	---	---	
1,1,1,2-Tetrachloroethane	21.1	0.200	0.400	ug/L	1	20.0	ND	105	78-124%	---	---	

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Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0826 - 05 19 23 0544

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 23C1116 - EPA 5030C						Water						
Matrix Spike (23C1116-MS1)			Prepared: 03/28/23 15:28		Analyzed: 03/29/23 05:49							
QC Source Sample: Non-SDG (A3C0869-04)												
1,1,2,2-Tetrachloroethane	22.4	0.250	0.500	ug/L	1	20.0	ND	112	71-121%	---	---	
Tetrachloroethene (PCE)	22.4	0.200	0.400	ug/L	1	20.0	ND	112	74-129%	---	---	
Toluene	22.0	0.500	1.00	ug/L	1	20.0	1.11	104	80-121%	---	---	
1,2,3-Trichlorobenzene	24.7	1.00	2.00	ug/L	1	20.0	ND	124	69-129%	---	---	
1,2,4-Trichlorobenzene	22.5	1.00	2.00	ug/L	1	20.0	ND	112	69-130%	---	---	
1,1,1-Trichloroethane	23.3	0.200	0.400	ug/L	1	20.0	ND	117	74-131%	---	---	
1,1,2-Trichloroethane	21.3	0.250	0.500	ug/L	1	20.0	ND	106	80-120%	---	---	
Trichloroethene (TCE)	19.2	0.200	0.400	ug/L	1	20.0	ND	96	79-123%	---	---	
Trichlorofluoromethane	25.8	1.00	2.00	ug/L	1	20.0	ND	129	65-141%	---	---	
1,2,3-Trichloropropane	21.9	0.500	1.00	ug/L	1	20.0	ND	109	73-122%	---	---	
1,2,4-Trimethylbenzene	26.7	0.500	1.00	ug/L	1	20.0	1.71	125	76-124%	---	---	Q-01
1,3,5-Trimethylbenzene	24.1	0.500	1.00	ug/L	1	20.0	ND	121	75-124%	---	---	
Vinyl chloride	41.1	0.200	0.400	ug/L	1	20.0	18.3	114	58-137%	---	---	
m,p-Xylene	52.0	0.500	1.00	ug/L	1	40.0	1.73	126	80-121%	---	---	Q-01
o-Xylene	27.3	0.250	0.500	ug/L	1	20.0	2.89	122	78-122%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 92 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		97 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		92 %		80-120 %		"						

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Portland, OR 97219

Project: **Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001F**Project Manager: **John Renda****Report ID:****A3C0826 - 05 19 23 0544****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 23C1207 - EPA 5030C						Water						
Blank (23C1207-BLK1)			Prepared: 03/30/23 10:00		Analyzed: 03/30/23 11:35							
EPA 8260D												
Acetone	ND	10.0	20.0	ug/L	1	---	---	---	---	---	---	
Acrylonitrile	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
Benzene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Bromobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Bromochloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Bromoform	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Bromomethane	ND	5.00	5.00	ug/L	1	---	---	---	---	---	---	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Carbon disulfide	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Chlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Chloroethane	ND	5.00	5.00	ug/L	1	---	---	---	---	---	---	
Chloroform	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Chloromethane	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Dibromomethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

Project: Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.

Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0826 - 05 19 23 0544

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 23C1207 - EPA 5030C						Water						
Blank (23C1207-BLK1)						Prepared: 03/30/23 10:00 Analyzed: 03/30/23 11:35						
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Ethylbenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
2-Hexanone	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Methylene chloride	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Naphthalene	ND	2.00	2.00	ug/L	1	---	---	---	---	---	---	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Styrene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
Toluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Vinyl chloride	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
m,p-Xylene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
o-Xylene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr) Recovery: 99 % Limits: 80-120 % Dilution: 1x												

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Darwin Thomas, Business Development Director



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Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0826 - 05 19 23 0544

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 23C1207 - EPA 5030C						Water						
Blank (23C1207-BLK1)			Prepared: 03/30/23 10:00		Analyzed: 03/30/23 11:35							
Surr: Toluene-d8 (Surr)		Recovery: 103 %		Limits: 80-120 %		Dilution: 1x						
4-Bromofluorobenzene (Surr)		98 %		80-120 %		"						
LCS (23C1207-BS1)			Prepared: 03/30/23 10:00		Analyzed: 03/30/23 10:37							
EPA 8260D												
Acetone	40.1	10.0	20.0	ug/L	1	40.0	---	100	80-120%	---	---	
Acrylonitrile	20.2	1.00	2.00	ug/L	1	20.0	---	101	80-120%	---	---	
Benzene	20.1	0.100	0.200	ug/L	1	20.0	---	100	80-120%	---	---	
Bromobenzene	18.6	0.250	0.500	ug/L	1	20.0	---	93	80-120%	---	---	
Bromochloromethane	23.6	0.500	1.00	ug/L	1	20.0	---	118	80-120%	---	---	
Bromodichloromethane	22.5	0.500	1.00	ug/L	1	20.0	---	113	80-120%	---	---	
Bromoform	22.9	0.500	1.00	ug/L	1	20.0	---	114	80-120%	---	---	
Bromomethane	26.8	5.00	5.00	ug/L	1	20.0	---	134	80-120%	---	---	Q-56
2-Butanone (MEK)	43.9	5.00	10.0	ug/L	1	40.0	---	110	80-120%	---	---	
n-Butylbenzene	21.7	0.500	1.00	ug/L	1	20.0	---	109	80-120%	---	---	
sec-Butylbenzene	22.6	0.500	1.00	ug/L	1	20.0	---	113	80-120%	---	---	
tert-Butylbenzene	21.6	0.500	1.00	ug/L	1	20.0	---	108	80-120%	---	---	
Carbon disulfide	22.2	5.00	10.0	ug/L	1	20.0	---	111	80-120%	---	---	
Carbon tetrachloride	25.3	0.500	1.00	ug/L	1	20.0	---	127	80-120%	---	---	Q-56
Chlorobenzene	20.2	0.250	0.500	ug/L	1	20.0	---	101	80-120%	---	---	
Chloroethane	27.3	5.00	5.00	ug/L	1	20.0	---	137	80-120%	---	---	Q-56
Chloroform	21.0	0.500	1.00	ug/L	1	20.0	---	105	80-120%	---	---	
Chloromethane	24.9	2.50	5.00	ug/L	1	20.0	---	124	80-120%	---	---	Q-56
2-Chlorotoluene	19.5	0.500	1.00	ug/L	1	20.0	---	97	80-120%	---	---	
4-Chlorotoluene	20.9	0.500	1.00	ug/L	1	20.0	---	104	80-120%	---	---	
Dibromochloromethane	21.6	0.500	1.00	ug/L	1	20.0	---	108	80-120%	---	---	
1,2-Dibromo-3-chloropropane	18.3	2.50	5.00	ug/L	1	20.0	---	91	80-120%	---	---	
1,2-Dibromoethane (EDB)	20.4	0.250	0.500	ug/L	1	20.0	---	102	80-120%	---	---	
Dibromomethane	20.9	0.500	1.00	ug/L	1	20.0	---	104	80-120%	---	---	
1,2-Dichlorobenzene	19.4	0.250	0.500	ug/L	1	20.0	---	97	80-120%	---	---	
1,3-Dichlorobenzene	20.2	0.250	0.500	ug/L	1	20.0	---	101	80-120%	---	---	
1,4-Dichlorobenzene	18.9	0.250	0.500	ug/L	1	20.0	---	94	80-120%	---	---	
Dichlorodifluoromethane	30.8	0.500	1.00	ug/L	1	20.0	---	154	80-120%	---	---	Q-56
1,1-Dichloroethane	21.6	0.200	0.400	ug/L	1	20.0	---	108	80-120%	---	---	

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Project Manager: John Renda

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A3C0826 - 05 19 23 0544

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 23C1207 - EPA 5030C						Water						
LCS (23C1207-BS1)			Prepared: 03/30/23 10:00		Analyzed: 03/30/23 10:37							
1,2-Dichloroethane (EDC)	23.9	0.200	0.400	ug/L	1	20.0	---	119	80-120%	---	---	
1,1-Dichloroethene	22.6	0.200	0.400	ug/L	1	20.0	---	113	80-120%	---	---	
cis-1,2-Dichloroethene	20.2	0.200	0.400	ug/L	1	20.0	---	101	80-120%	---	---	
trans-1,2-Dichloroethene	20.1	0.200	0.400	ug/L	1	20.0	---	101	80-120%	---	---	
1,2-Dichloropropane	19.8	0.250	0.500	ug/L	1	20.0	---	99	80-120%	---	---	
1,3-Dichloropropane	20.7	0.500	1.00	ug/L	1	20.0	---	104	80-120%	---	---	
2,2-Dichloropropane	25.6	0.500	1.00	ug/L	1	20.0	---	128	80-120%	---	---	Q-56
1,1-Dichloropropene	21.4	0.500	1.00	ug/L	1	20.0	---	107	80-120%	---	---	
cis-1,3-Dichloropropene	21.3	0.500	1.00	ug/L	1	20.0	---	106	80-120%	---	---	
trans-1,3-Dichloropropene	24.3	0.500	1.00	ug/L	1	20.0	---	121	80-120%	---	---	Q-56
Ethylbenzene	21.4	0.250	0.500	ug/L	1	20.0	---	107	80-120%	---	---	
Hexachlorobutadiene	20.1	2.50	5.00	ug/L	1	20.0	---	100	80-120%	---	---	
2-Hexanone	41.2	5.00	10.0	ug/L	1	40.0	---	103	80-120%	---	---	
Isopropylbenzene	21.8	0.500	1.00	ug/L	1	20.0	---	109	80-120%	---	---	
4-Isopropyltoluene	22.1	0.500	1.00	ug/L	1	20.0	---	110	80-120%	---	---	
Methylene chloride	20.0	5.00	10.0	ug/L	1	20.0	---	100	80-120%	---	---	
4-Methyl-2-pentanone (MiBK)	46.4	5.00	10.0	ug/L	1	40.0	---	116	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	20.5	0.500	1.00	ug/L	1	20.0	---	103	80-120%	---	---	
Naphthalene	14.2	2.00	2.00	ug/L	1	20.0	---	71	80-120%	---	---	Q-55
n-Propylbenzene	20.7	0.250	0.500	ug/L	1	20.0	---	104	80-120%	---	---	
Styrene	22.3	0.500	1.00	ug/L	1	20.0	---	112	80-120%	---	---	
1,1,1,2-Tetrachloroethane	20.6	0.200	0.400	ug/L	1	20.0	---	103	80-120%	---	---	
1,1,2,2-Tetrachloroethane	20.9	0.250	0.500	ug/L	1	20.0	---	104	80-120%	---	---	
Tetrachloroethene (PCE)	21.8	0.200	0.400	ug/L	1	20.0	---	109	80-120%	---	---	
Toluene	19.6	0.500	1.00	ug/L	1	20.0	---	98	80-120%	---	---	
1,2,3-Trichlorobenzene	19.4	1.00	2.00	ug/L	1	20.0	---	97	80-120%	---	---	
1,2,4-Trichlorobenzene	17.4	1.00	2.00	ug/L	1	20.0	---	87	80-120%	---	---	
1,1,1-Trichloroethane	23.0	0.200	0.400	ug/L	1	20.0	---	115	80-120%	---	---	
1,1,2-Trichloroethane	20.7	0.250	0.500	ug/L	1	20.0	---	103	80-120%	---	---	
Trichloroethene (TCE)	18.5	0.200	0.400	ug/L	1	20.0	---	92	80-120%	---	---	
Trichlorofluoromethane	26.3	1.00	2.00	ug/L	1	20.0	---	132	80-120%	---	---	Q-56
1,2,3-Trichloropropane	21.4	0.500	1.00	ug/L	1	20.0	---	107	80-120%	---	---	
1,2,4-Trimethylbenzene	22.4	0.500	1.00	ug/L	1	20.0	---	112	80-120%	---	---	
1,3,5-Trimethylbenzene	22.4	0.500	1.00	ug/L	1	20.0	---	112	80-120%	---	---	

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Page 76 of 120



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QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23C1207 - EPA 5030C						Water						
LCS (23C1207-BS1)			Prepared: 03/30/23 10:00		Analyzed: 03/30/23 10:37							
Vinyl chloride	22.6	0.200	0.400	ug/L	1	20.0	---	113	80-120%	---	---	
m,p-Xylene	46.6	0.500	1.00	ug/L	1	40.0	---	117	80-120%	---	---	
o-Xylene	20.9	0.250	0.500	ug/L	1	20.0	---	105	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			Recovery: 95 %		Limits: 80-120 %		Dilution: 1x					
Toluene-d8 (Surr)			99 %		80-120 %		"					
4-Bromofluorobenzene (Surr)			91 %		80-120 %		"					
Duplicate (23C1207-DUP1)						Prepared: 03/30/23 11:50		Analyzed: 03/30/23 18:15				
QC Source Sample: Non-SDG (A3C1058-05)												
Acetone	ND	200	200	ug/L	5	---	ND	---	---	---	30%	R-02
Acrylonitrile	ND	5.00	10.0	ug/L	5	---	ND	---	---	---	30%	
Benzene	175	0.500	1.00	ug/L	5	---	175	---	---	0.2	30%	
Bromobenzene	ND	1.25	2.50	ug/L	5	---	ND	---	---	---	30%	
Bromochloromethane	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	30%	
Bromodichloromethane	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	30%	
Bromoform	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	30%	
Bromomethane	ND	25.0	25.0	ug/L	5	---	ND	---	---	---	30%	
2-Butanone (MEK)	ND	50.0	50.0	ug/L	5	---	ND	---	---	---	30%	
n-Butylbenzene	21.3	2.50	5.00	ug/L	5	---	20.7	---	---	3	30%	
sec-Butylbenzene	9.80	2.50	5.00	ug/L	5	---	9.10	---	---	7	30%	
tert-Butylbenzene	5.60	2.50	5.00	ug/L	5	---	4.95	---	---	12	30%	
Carbon disulfide	ND	25.0	50.0	ug/L	5	---	ND	---	---	---	30%	
Carbon tetrachloride	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	30%	
Chlorobenzene	ND	1.25	2.50	ug/L	5	---	ND	---	---	---	30%	
Chloroethane	ND	25.0	25.0	ug/L	5	---	ND	---	---	---	30%	
Chloroform	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	30%	
Chloromethane	ND	12.5	25.0	ug/L	5	---	ND	---	---	---	30%	
2-Chlorotoluene	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	30%	
4-Chlorotoluene	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	30%	
Dibromochloromethane	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	30%	
1,2-Dibromo-3-chloropropane	ND	12.5	25.0	ug/L	5	---	ND	---	---	---	30%	
1,2-Dibromoethane (EDB)	ND	1.25	2.50	ug/L	5	---	ND	---	---	---	30%	
Dibromomethane	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	30%	
1,2-Dichlorobenzene	ND	1.25	2.50	ug/L	5	---	ND	---	---	---	30%	

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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 23C1207 - EPA 5030C						Water						
Duplicate (23C1207-DUP1)			Prepared: 03/30/23 11:50		Analyzed: 03/30/23 18:15							
QC Source Sample: Non-SDG (A3C1058-05)												
1,3-Dichlorobenzene	ND	1.25	2.50	ug/L	5	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	1.25	2.50	ug/L	5	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	1.00	2.00	ug/L	5	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	1.00	2.00	ug/L	5	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	1.00	2.00	ug/L	5	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	1.00	2.00	ug/L	5	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	1.00	2.00	ug/L	5	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	1.25	2.50	ug/L	5	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	5.00	5.00	ug/L	5	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	30%	
Ethylbenzene	90.8	1.25	2.50	ug/L	5	---	90.8	---	---	0	30%	
Hexachlorobutadiene	ND	12.5	25.0	ug/L	5	---	ND	---	---	---	30%	
2-Hexanone	ND	25.0	50.0	ug/L	5	---	ND	---	---	---	30%	
Isopropylbenzene	43.2	2.50	5.00	ug/L	5	---	42.0	---	---	3	30%	
4-Isopropyltoluene	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	30%	
Methylene chloride	ND	25.0	50.0	ug/L	5	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	25.0	50.0	ug/L	5	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	30%	
Naphthalene	208	10.0	10.0	ug/L	5	---	197	---	---	5	30%	Q-54z
n-Propylbenzene	146	1.25	2.50	ug/L	5	---	144	---	---	0.8	30%	
Styrene	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	1.00	2.00	ug/L	5	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	1.25	2.50	ug/L	5	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	10.0	10.0	ug/L	5	---	ND	---	---	---	30%	R-06
Toluene	53.4	2.50	5.00	ug/L	5	---	53.6	---	---	0.5	30%	
1,2,3-Trichlorobenzene	ND	5.00	10.0	ug/L	5	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	5.00	10.0	ug/L	5	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	1.00	2.00	ug/L	5	---	ND	---	---	---	30%	
1,1,2-Trichloroethane	ND	1.25	2.50	ug/L	5	---	ND	---	---	---	30%	

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

Project: Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.

Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0826 - 05 19 23 0544

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	Limits	RPD	RPD Limit	Notes
Batch 23C1207 - EPA 5030C						Water						
Duplicate (23C1207-DUP1)			Prepared: 03/30/23 11:50 Analyzed: 03/30/23 18:15									
QC Source Sample: Non-SDG (A3C1058-05)												
Trichloroethene (TCE)	ND	1.00	2.00	ug/L	5	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	5.00	10.0	ug/L	5	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	31.8	2.50	5.00	ug/L	5	---	30.5	---	---	4	30%	
1,3,5-Trimethylbenzene	10.4	2.50	5.00	ug/L	5	---	9.85	---	---	5	30%	
Vinyl chloride	ND	1.00	2.00	ug/L	5	---	ND	---	---	---	30%	
m,p-Xylene	122	2.50	5.00	ug/L	5	---	122	---	---	0	30%	
o-Xylene	29.4	1.25	2.50	ug/L	5	---	28.4	---	---	3	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 95 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		102 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		98 %		80-120 %		"						
Matrix Spike (23C1207-MS1)			Prepared: 03/30/23 11:50 Analyzed: 03/30/23 19:44									
QC Source Sample: Non-SDG (A3C0853-01)												
EPA 8260D												
Acetone	459	100	200	ug/L	10	400	ND	115	39-160%	---	---	
Acrylonitrile	221	10.0	20.0	ug/L	10	200	ND	111	63-135%	---	---	
Benzene	215	1.00	2.00	ug/L	10	200	ND	107	79-120%	---	---	
Bromobenzene	202	2.50	5.00	ug/L	10	200	ND	101	80-120%	---	---	
Bromochloromethane	253	5.00	10.0	ug/L	10	200	ND	126	78-123%	---	---	Q-01
Bromodichloromethane	230	5.00	10.0	ug/L	10	200	ND	115	79-125%	---	---	
Bromoform	224	5.00	10.0	ug/L	10	200	ND	112	66-130%	---	---	
Bromomethane	265	50.0	50.0	ug/L	10	200	ND	133	53-141%	---	---	Q-54b
2-Butanone (MEK)	486	50.0	100	ug/L	10	400	ND	122	56-143%	---	---	
n-Butylbenzene	249	5.00	10.0	ug/L	10	200	ND	125	75-128%	---	---	
sec-Butylbenzene	258	5.00	10.0	ug/L	10	200	ND	129	77-126%	---	---	Q-01
tert-Butylbenzene	249	5.00	10.0	ug/L	10	200	ND	125	78-124%	---	---	Q-01
Carbon disulfide	231	50.0	100	ug/L	10	200	ND	115	64-133%	---	---	
Carbon tetrachloride	262	5.00	10.0	ug/L	10	200	ND	131	72-136%	---	---	Q-54i
Chlorobenzene	215	2.50	5.00	ug/L	10	200	ND	108	80-120%	---	---	
Chloroethane	262	50.0	50.0	ug/L	10	200	ND	131	60-138%	---	---	Q-54c
Chloroform	217	5.00	10.0	ug/L	10	200	ND	108	79-124%	---	---	
Chloromethane	270	25.0	50.0	ug/L	10	200	ND	135	50-139%	---	---	Q-54h

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503-718-2323

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Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0826 - 05 19 23 0544

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 23C1207 - EPA 5030C						Water						
Matrix Spike (23C1207-MS1)			Prepared: 03/30/23 11:50 Analyzed: 03/30/23 19:44									
QC Source Sample: Non-SDG (A3C0853-01)												
2-Chlorotoluene	218	5.00	10.0	ug/L	10	200	ND	109	79-122%	---	---	
4-Chlorotoluene	231	5.00	10.0	ug/L	10	200	ND	115	78-122%	---	---	
Dibromochloromethane	226	5.00	10.0	ug/L	10	200	ND	113	74-126%	---	---	
1,2-Dibromo-3-chloropropane	200	25.0	50.0	ug/L	10	200	ND	100	62-128%	---	---	
1,2-Dibromoethane (EDB)	216	2.50	5.00	ug/L	10	200	ND	108	77-121%	---	---	
Dibromomethane	214	5.00	10.0	ug/L	10	200	ND	107	79-123%	---	---	
1,2-Dichlorobenzene	212	2.50	5.00	ug/L	10	200	ND	106	80-120%	---	---	
1,3-Dichlorobenzene	218	2.50	5.00	ug/L	10	200	ND	109	80-120%	---	---	
1,4-Dichlorobenzene	200	2.50	5.00	ug/L	10	200	ND	100	79-120%	---	---	
Dichlorodifluoromethane	321	5.00	10.0	ug/L	10	200	ND	160	32-152%	---	---	Q-54g
1,1-Dichloroethane	229	2.00	4.00	ug/L	10	200	ND	114	77-125%	---	---	
1,2-Dichloroethane (EDC)	241	2.00	4.00	ug/L	10	200	ND	121	73-128%	---	---	
1,1-Dichloroethene	253	2.00	4.00	ug/L	10	200	ND	126	71-131%	---	---	
cis-1,2-Dichloroethene	228	2.00	4.00	ug/L	10	200	ND	114	78-123%	---	---	
trans-1,2-Dichloroethene	230	2.00	4.00	ug/L	10	200	ND	115	75-124%	---	---	
1,2-Dichloropropane	209	2.50	5.00	ug/L	10	200	ND	105	78-122%	---	---	
1,3-Dichloropropane	225	5.00	10.0	ug/L	10	200	ND	113	80-120%	---	---	
2,2-Dichloropropane	244	5.00	10.0	ug/L	10	200	ND	122	60-139%	---	---	Q-54j
1,1-Dichloropropene	245	5.00	10.0	ug/L	10	200	ND	122	79-125%	---	---	
cis-1,3-Dichloropropene	215	5.00	10.0	ug/L	10	200	ND	107	75-124%	---	---	
trans-1,3-Dichloropropene	256	5.00	10.0	ug/L	10	200	ND	128	73-127%	---	---	Q-54
Ethylbenzene	231	2.50	5.00	ug/L	10	200	ND	116	79-121%	---	---	
Hexachlorobutadiene	237	25.0	50.0	ug/L	10	200	ND	119	66-134%	---	---	
2-Hexanone	478	50.0	100	ug/L	10	400	ND	120	57-139%	---	---	
Isopropylbenzene	248	5.00	10.0	ug/L	10	200	ND	124	72-131%	---	---	
4-Isopropyltoluene	254	5.00	10.0	ug/L	10	200	ND	127	77-127%	---	---	
Methylene chloride	207	50.0	100	ug/L	10	200	ND	104	74-124%	---	---	
4-Methyl-2-pentanone (MiBK)	536	50.0	100	ug/L	10	400	ND	134	67-130%	---	---	Q-01
Methyl tert-butyl ether (MTBE)	219	5.00	10.0	ug/L	10	200	ND	110	71-124%	---	---	
Naphthalene	180	20.0	20.0	ug/L	10	200	ND	90	61-128%	---	---	Q-54z
n-Propylbenzene	231	2.50	5.00	ug/L	10	200	ND	116	76-126%	---	---	
Styrene	240	5.00	10.0	ug/L	10	200	ND	120	78-123%	---	---	
1,1,1,2-Tetrachloroethane	212	2.00	4.00	ug/L	10	200	ND	106	78-124%	---	---	

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Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0826 - 05 19 23 0544

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 23C1207 - EPA 5030C						Water						
Matrix Spike (23C1207-MS1)			Prepared: 03/30/23 11:50		Analyzed: 03/30/23 19:44							
QC Source Sample: Non-SDG (A3C0853-01)												
1,1,2,2-Tetrachloroethane	218	2.50	5.00	ug/L	10	200	ND	109	71-121%	---	---	Q-54a
Tetrachloroethene (PCE)	241	2.00	4.00	ug/L	10	200	11.9	115	74-129%	---	---	
Toluene	212	5.00	10.0	ug/L	10	200	ND	106	80-121%	---	---	
1,2,3-Trichlorobenzene	226	10.0	20.0	ug/L	10	200	ND	113	69-129%	---	---	
1,2,4-Trichlorobenzene	208	10.0	20.0	ug/L	10	200	ND	104	69-130%	---	---	
1,1,1-Trichloroethane	241	2.00	4.00	ug/L	10	200	ND	120	74-131%	---	---	
1,1,2-Trichloroethane	215	2.50	5.00	ug/L	10	200	ND	108	80-120%	---	---	
Trichloroethene (TCE)	202	2.00	4.00	ug/L	10	200	ND	101	79-123%	---	---	
Trichlorofluoromethane	271	10.0	20.0	ug/L	10	200	ND	135	65-141%	---	---	
1,2,3-Trichloropropane	221	5.00	10.0	ug/L	10	200	ND	110	73-122%	---	---	
1,2,4-Trimethylbenzene	248	5.00	10.0	ug/L	10	200	ND	124	76-124%	---	---	Q-01
1,3,5-Trimethylbenzene	247	5.00	10.0	ug/L	10	200	ND	123	75-124%	---	---	
Vinyl chloride	246	2.00	4.00	ug/L	10	200	ND	123	58-137%	---	---	
m,p-Xylene	505	5.00	10.0	ug/L	10	400	ND	126	80-121%	---	---	
o-Xylene	240	2.50	5.00	ug/L	10	200	ND	120	78-122%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 94 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		98 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		95 %		80-120 %		"						

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Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0826 - 05 19 23 0544

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 23D0016 - EPA 5030C						Water						
Blank (23D0016-BLK1)			Prepared: 04/03/23 08:28		Analyzed: 04/03/23 10:27							
EPA 8260D												
Acetone	ND	10.0	20.0	ug/L	1	---	---	---	---	---	---	
Acrylonitrile	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
Benzene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Bromobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Bromochloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Bromoform	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Bromomethane	ND	5.00	5.00	ug/L	1	---	---	---	---	---	---	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Carbon disulfide	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Chlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Chloroethane	ND	5.00	5.00	ug/L	1	---	---	---	---	---	---	
Chloroform	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Chloromethane	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Dibromomethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	

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QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23D0016 - EPA 5030C						Water						
Blank (23D0016-BLK1)						Prepared: 04/03/23 08:28 Analyzed: 04/03/23 10:27						
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Ethylbenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
2-Hexanone	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Methylene chloride	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Naphthalene	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Styrene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
Toluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Vinyl chloride	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
m,p-Xylene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
o-Xylene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr) Recovery: 102 % Limits: 80-120 % Dilution: 1x												

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

Project: Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.

Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0826 - 05 19 23 0544

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 23D0016 - EPA 5030C						Water						
Blank (23D0016-BLK1)			Prepared: 04/03/23 08:28		Analyzed: 04/03/23 10:27							
Surr: Toluene-d8 (Surr)		Recovery: 101 %		Limits: 80-120 %		Dilution: 1x						
4-Bromofluorobenzene (Surr)		111 %		80-120 %		"						
LCS (23D0016-BS1)			Prepared: 04/03/23 08:28		Analyzed: 04/03/23 09:33							
EPA 8260D												
Acetone	35.4	10.0	20.0	ug/L	1	40.0	---	88	80-120%	---	---	Q-55
Acrylonitrile	18.8	1.00	2.00	ug/L	1	20.0	---	94	80-120%	---	---	
Benzene	20.1	0.100	0.200	ug/L	1	20.0	---	100	80-120%	---	---	
Bromobenzene	19.8	0.250	0.500	ug/L	1	20.0	---	99	80-120%	---	---	
Bromochloromethane	20.5	0.500	1.00	ug/L	1	20.0	---	102	80-120%	---	---	
Bromodichloromethane	20.5	0.500	1.00	ug/L	1	20.0	---	103	80-120%	---	---	
Bromoform	21.3	0.500	1.00	ug/L	1	20.0	---	106	80-120%	---	---	
Bromomethane	20.4	5.00	5.00	ug/L	1	20.0	---	102	80-120%	---	---	
2-Butanone (MEK)	40.3	5.00	10.0	ug/L	1	40.0	---	101	80-120%	---	---	
n-Butylbenzene	22.3	0.500	1.00	ug/L	1	20.0	---	112	80-120%	---	---	
sec-Butylbenzene	21.5	0.500	1.00	ug/L	1	20.0	---	107	80-120%	---	---	
tert-Butylbenzene	20.3	0.500	1.00	ug/L	1	20.0	---	102	80-120%	---	---	
Carbon disulfide	20.8	5.00	10.0	ug/L	1	20.0	---	104	80-120%	---	---	
Carbon tetrachloride	20.5	0.500	1.00	ug/L	1	20.0	---	102	80-120%	---	---	
Chlorobenzene	19.6	0.250	0.500	ug/L	1	20.0	---	98	80-120%	---	---	
Chloroethane	14.6	5.00	5.00	ug/L	1	20.0	---	73	80-120%	---	---	
Chloroform	20.0	0.500	1.00	ug/L	1	20.0	---	100	80-120%	---	---	
Chloromethane	18.6	2.50	5.00	ug/L	1	20.0	---	93	80-120%	---	---	
2-Chlorotoluene	20.2	0.500	1.00	ug/L	1	20.0	---	101	80-120%	---	---	
4-Chlorotoluene	20.0	0.500	1.00	ug/L	1	20.0	---	100	80-120%	---	---	
Dibromochloromethane	18.2	0.500	1.00	ug/L	1	20.0	---	91	80-120%	---	---	
1,2-Dibromo-3-chloropropane	16.0	2.50	5.00	ug/L	1	20.0	---	80	80-120%	---	---	
1,2-Dibromoethane (EDB)	17.7	0.250	0.500	ug/L	1	20.0	---	88	80-120%	---	---	
Dibromomethane	20.4	0.500	1.00	ug/L	1	20.0	---	102	80-120%	---	---	
1,2-Dichlorobenzene	20.9	0.250	0.500	ug/L	1	20.0	---	104	80-120%	---	---	
1,3-Dichlorobenzene	20.1	0.250	0.500	ug/L	1	20.0	---	100	80-120%	---	---	
1,4-Dichlorobenzene	19.5	0.250	0.500	ug/L	1	20.0	---	98	80-120%	---	---	
Dichlorodifluoromethane	19.1	0.500	1.00	ug/L	1	20.0	---	96	80-120%	---	---	
1,1-Dichloroethane	20.2	0.200	0.400	ug/L	1	20.0	---	101	80-120%	---	---	

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Project Manager: John Renda

Report ID:

A3C0826 - 05 19 23 0544

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 23D0016 - EPA 5030C						Water						
LCS (23D0016-BS1)						Prepared: 04/03/23 08:28 Analyzed: 04/03/23 09:33						
1,2-Dichloroethane (EDC)	19.8	0.200	0.400	ug/L	1	20.0	---	99	80-120%	---	---	
1,1-Dichloroethene	20.4	0.200	0.400	ug/L	1	20.0	---	102	80-120%	---	---	
cis-1,2-Dichloroethene	20.5	0.200	0.400	ug/L	1	20.0	---	103	80-120%	---	---	
trans-1,2-Dichloroethene	20.7	0.200	0.400	ug/L	1	20.0	---	104	80-120%	---	---	
1,2-Dichloropropane	19.4	0.250	0.500	ug/L	1	20.0	---	97	80-120%	---	---	
1,3-Dichloropropane	20.0	0.500	1.00	ug/L	1	20.0	---	100	80-120%	---	---	
2,2-Dichloropropane	23.0	0.500	1.00	ug/L	1	20.0	---	115	80-120%	---	---	
1,1-Dichloropropene	21.1	0.500	1.00	ug/L	1	20.0	---	105	80-120%	---	---	
cis-1,3-Dichloropropene	21.5	0.500	1.00	ug/L	1	20.0	---	107	80-120%	---	---	
trans-1,3-Dichloropropene	19.1	0.500	1.00	ug/L	1	20.0	---	95	80-120%	---	---	
Ethylbenzene	20.4	0.250	0.500	ug/L	1	20.0	---	102	80-120%	---	---	
Hexachlorobutadiene	22.7	2.50	5.00	ug/L	1	20.0	---	113	80-120%	---	---	
2-Hexanone	41.6	5.00	10.0	ug/L	1	40.0	---	104	80-120%	---	---	
Isopropylbenzene	21.6	0.500	1.00	ug/L	1	20.0	---	108	80-120%	---	---	
4-Isopropyltoluene	22.7	0.500	1.00	ug/L	1	20.0	---	113	80-120%	---	---	
Methylene chloride	19.6	5.00	10.0	ug/L	1	20.0	---	98	80-120%	---	---	
4-Methyl-2-pentanone (MiBK)	41.7	5.00	10.0	ug/L	1	40.0	---	104	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	19.5	0.500	1.00	ug/L	1	20.0	---	98	80-120%	---	---	
Naphthalene	17.9	1.00	2.00	ug/L	1	20.0	---	90	80-120%	---	---	
n-Propylbenzene	20.3	0.250	0.500	ug/L	1	20.0	---	101	80-120%	---	---	
Styrene	21.7	0.500	1.00	ug/L	1	20.0	---	109	80-120%	---	---	
1,1,1,2-Tetrachloroethane	17.5	0.200	0.400	ug/L	1	20.0	---	88	80-120%	---	---	
1,1,2,2-Tetrachloroethane	20.2	0.250	0.500	ug/L	1	20.0	---	101	80-120%	---	---	
Tetrachloroethene (PCE)	20.9	0.200	0.400	ug/L	1	20.0	---	104	80-120%	---	---	
Toluene	19.8	0.500	1.00	ug/L	1	20.0	---	99	80-120%	---	---	
1,2,3-Trichlorobenzene	19.0	1.00	2.00	ug/L	1	20.0	---	95	80-120%	---	---	
1,2,4-Trichlorobenzene	20.4	1.00	2.00	ug/L	1	20.0	---	102	80-120%	---	---	
1,1,1-Trichloroethane	20.7	0.200	0.400	ug/L	1	20.0	---	104	80-120%	---	---	
1,1,2-Trichloroethane	19.9	0.250	0.500	ug/L	1	20.0	---	100	80-120%	---	---	
Trichloroethene (TCE)	20.5	0.200	0.400	ug/L	1	20.0	---	102	80-120%	---	---	
Trichlorofluoromethane	19.9	1.00	2.00	ug/L	1	20.0	---	99	80-120%	---	---	
1,2,3-Trichloropropane	19.5	0.500	1.00	ug/L	1	20.0	---	98	80-120%	---	---	
1,2,4-Trimethylbenzene	22.1	0.500	1.00	ug/L	1	20.0	---	111	80-120%	---	---	
1,3,5-Trimethylbenzene	21.3	0.500	1.00	ug/L	1	20.0	---	106	80-120%	---	---	

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Darwin Thomas, Business Development Director



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Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0826 - 05 19 23 0544

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 23D0016 - EPA 5030C						Water						
LCS (23D0016-BS1)			Prepared: 04/03/23 08:28		Analyzed: 04/03/23 09:33							
Vinyl chloride	19.0	0.200	0.400	ug/L	1	20.0	---	95	80-120%	---	---	
m,p-Xylene	40.4	0.500	1.00	ug/L	1	40.0	---	101	80-120%	---	---	
o-Xylene	21.0	0.250	0.500	ug/L	1	20.0	---	105	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 100 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		99 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		97 %		80-120 %		"						

Duplicate (23D0016-DUP1)

Prepared: 04/03/23 08:28 Analyzed: 04/03/23 16:46

QC Source Sample: Non-SDG (A3C1125-01)

Acetone	ND	100	200	ug/L	10	---	ND	---	---	---	30%
Acrylonitrile	ND	10.0	20.0	ug/L	10	---	ND	---	---	---	30%
Benzene	ND	1.00	2.00	ug/L	10	---	ND	---	---	---	30%
Bromobenzene	ND	2.50	5.00	ug/L	10	---	ND	---	---	---	30%
Bromochloromethane	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%
Bromodichloromethane	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%
Bromoform	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%
Bromomethane	ND	50.0	50.0	ug/L	10	---	ND	---	---	---	30%
2-Butanone (MEK)	ND	50.0	100	ug/L	10	---	ND	---	---	---	30%
n-Butylbenzene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%
sec-Butylbenzene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%
tert-Butylbenzene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%
Carbon disulfide	ND	50.0	100	ug/L	10	---	ND	---	---	---	30%
Carbon tetrachloride	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%
Chlorobenzene	ND	2.50	5.00	ug/L	10	---	ND	---	---	---	30%
Chloroethane	ND	50.0	50.0	ug/L	10	---	ND	---	---	---	30%
Chloroform	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%
Chloromethane	ND	25.0	50.0	ug/L	10	---	ND	---	---	---	30%
2-Chlorotoluene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%
4-Chlorotoluene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%
Dibromochloromethane	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%
1,2-Dibromo-3-chloropropane	ND	25.0	50.0	ug/L	10	---	ND	---	---	---	30%
1,2-Dibromoethane (EDB)	ND	2.50	5.00	ug/L	10	---	ND	---	---	---	30%
Dibromomethane	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%
1,2-Dichlorobenzene	ND	2.50	5.00	ug/L	10	---	ND	---	---	---	30%

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QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23D0016 - EPA 5030C						Water						
Duplicate (23D0016-DUP1)			Prepared: 04/03/23 08:28 Analyzed: 04/03/23 16:46									
QC Source Sample: Non-SDG (A3C1125-01)												
1,3-Dichlorobenzene	ND	2.50	5.00	ug/L	10	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	2.50	5.00	ug/L	10	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	2.50	5.00	ug/L	10	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
Ethylbenzene	ND	2.50	5.00	ug/L	10	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	25.0	50.0	ug/L	10	---	ND	---	---	---	30%	
2-Hexanone	ND	50.0	100	ug/L	10	---	ND	---	---	---	30%	
Isopropylbenzene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
Methylene chloride	ND	50.0	100	ug/L	10	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	50.0	100	ug/L	10	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
Naphthalene	ND	10.0	20.0	ug/L	10	---	ND	---	---	---	30%	
n-Propylbenzene	ND	2.50	5.00	ug/L	10	---	ND	---	---	---	30%	
Styrene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	2.50	5.00	ug/L	10	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	
Toluene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	10.0	20.0	ug/L	10	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	10.0	20.0	ug/L	10	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	
1,1,2-Trichloroethane	ND	2.50	5.00	ug/L	10	---	ND	---	---	---	30%	

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Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23D0016 - EPA 5030C						Water						
Duplicate (23D0016-DUP1)			Prepared: 04/03/23 08:28 Analyzed: 04/03/23 16:46									
QC Source Sample: Non-SDG (A3C1125-01)												
Trichloroethene (TCE)	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	10.0	20.0	ug/L	10	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
Vinyl chloride	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	
m,p-Xylene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
o-Xylene	ND	2.50	5.00	ug/L	10	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 102 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		102 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		107 %		80-120 %		"						
Matrix Spike (23D0016-MS1)						Prepared: 04/03/23 08:28 Analyzed: 04/03/23 18:08						
QC Source Sample: Non-SDG (A3C1043-01)												
EPA 8260D												
Acetone	1890	500	1000	ug/L	50	2000	ND	94	39-160%	---	---	
Acrylonitrile	998	50.0	100	ug/L	50	1000	ND	100	63-135%	---	---	
Benzene	1160	5.00	10.0	ug/L	50	1000	84.5	107	79-120%	---	---	
Bromobenzene	976	12.5	25.0	ug/L	50	1000	ND	98	80-120%	---	---	
Bromochloromethane	1080	25.0	50.0	ug/L	50	1000	ND	108	78-123%	---	---	
Bromodichloromethane	1080	25.0	50.0	ug/L	50	1000	ND	108	79-125%	---	---	
Bromoform	1050	25.0	50.0	ug/L	50	1000	ND	105	66-130%	---	---	
Bromomethane	1190	250	250	ug/L	50	1000	ND	119	53-141%	---	---	
2-Butanone (MEK)	2120	250	500	ug/L	50	2000	ND	106	56-143%	---	---	
n-Butylbenzene	1210	25.0	50.0	ug/L	50	1000	ND	121	75-128%	---	---	
sec-Butylbenzene	1120	25.0	50.0	ug/L	50	1000	ND	112	77-126%	---	---	
tert-Butylbenzene	1070	25.0	50.0	ug/L	50	1000	ND	107	78-124%	---	---	
Carbon disulfide	1120	250	500	ug/L	50	1000	ND	112	64-133%	---	---	
Carbon tetrachloride	1190	25.0	50.0	ug/L	50	1000	ND	119	72-136%	---	---	
Chlorobenzene	1010	12.5	25.0	ug/L	50	1000	ND	101	80-120%	---	---	
Chloroethane	848	250	250	ug/L	50	1000	ND	85	60-138%	---	---	Q-54y
Chloroform	1050	25.0	50.0	ug/L	50	1000	ND	105	79-124%	---	---	
Chloromethane	950	125	250	ug/L	50	1000	ND	95	50-139%	---	---	

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

Project: **Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001F**Project Manager: **John Renda****Report ID:****A3C0826 - 05 19 23 0544**

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 23D0016 - EPA 5030C						Water						
Matrix Spike (23D0016-MS1)			Prepared: 04/03/23 08:28		Analyzed: 04/03/23 18:08							
QC Source Sample: Non-SDG (A3C1043-01)												
2-Chlorotoluene	1040	25.0	50.0	ug/L	50	1000	ND	104	79-122%	---	---	
4-Chlorotoluene	1040	25.0	50.0	ug/L	50	1000	ND	104	78-122%	---	---	
Dibromochloromethane	917	25.0	50.0	ug/L	50	1000	ND	92	74-126%	---	---	
1,2-Dibromo-3-chloropropane	850	125	250	ug/L	50	1000	ND	85	62-128%	---	---	
1,2-Dibromoethane (EDB)	986	12.5	25.0	ug/L	50	1000	ND	99	77-121%	---	---	
Dibromomethane	1040	25.0	50.0	ug/L	50	1000	ND	104	79-123%	---	---	
1,2-Dichlorobenzene	1070	12.5	25.0	ug/L	50	1000	ND	107	80-120%	---	---	
1,3-Dichlorobenzene	1020	12.5	25.0	ug/L	50	1000	ND	102	80-120%	---	---	
1,4-Dichlorobenzene	1000	12.5	25.0	ug/L	50	1000	ND	100	79-120%	---	---	
Dichlorodifluoromethane	1030	25.0	50.0	ug/L	50	1000	ND	103	32-152%	---	---	
1,1-Dichloroethane	1090	10.0	20.0	ug/L	50	1000	ND	109	77-125%	---	---	
1,2-Dichloroethane (EDC)	1030	10.0	20.0	ug/L	50	1000	ND	103	73-128%	---	---	
1,1-Dichloroethene	1110	10.0	20.0	ug/L	50	1000	ND	111	71-131%	---	---	
cis-1,2-Dichloroethene	1090	10.0	20.0	ug/L	50	1000	ND	109	78-123%	---	---	
trans-1,2-Dichloroethene	1120	10.0	20.0	ug/L	50	1000	ND	112	75-124%	---	---	
1,2-Dichloropropane	1050	12.5	25.0	ug/L	50	1000	ND	105	78-122%	---	---	
1,3-Dichloropropane	1020	25.0	50.0	ug/L	50	1000	ND	102	80-120%	---	---	
2,2-Dichloropropane	1330	25.0	50.0	ug/L	50	1000	ND	133	60-139%	---	---	
1,1-Dichloropropene	1130	25.0	50.0	ug/L	50	1000	ND	113	79-125%	---	---	
cis-1,3-Dichloropropene	1180	25.0	50.0	ug/L	50	1000	ND	118	75-124%	---	---	
trans-1,3-Dichloropropene	1090	25.0	50.0	ug/L	50	1000	ND	109	73-127%	---	---	
Ethylbenzene	2000	12.5	25.0	ug/L	50	1000	886	111	79-121%	---	---	
Hexachlorobutadiene	1090	125	250	ug/L	50	1000	ND	109	66-134%	---	---	
2-Hexanone	2220	250	500	ug/L	50	2000	ND	111	57-139%	---	---	
Isopropylbenzene	1170	25.0	50.0	ug/L	50	1000	ND	117	72-131%	---	---	
4-Isopropyltoluene	1190	25.0	50.0	ug/L	50	1000	ND	119	77-127%	---	---	
Methylene chloride	1040	250	500	ug/L	50	1000	ND	104	74-124%	---	---	
4-Methyl-2-pentanone (MiBK)	2180	250	500	ug/L	50	2000	ND	109	67-130%	---	---	
Methyl tert-butyl ether (MTBE)	1090	25.0	50.0	ug/L	50	1000	ND	109	71-124%	---	---	
Naphthalene	14200	50.0	100	ug/L	50	1000	14000	18	61-128%	---	---	E, Q-03
n-Propylbenzene	1060	12.5	25.0	ug/L	50	1000	ND	106	76-126%	---	---	
Styrene	1130	25.0	50.0	ug/L	50	1000	ND	113	78-123%	---	---	
1,1,1,2-Tetrachloroethane	926	10.0	20.0	ug/L	50	1000	ND	93	78-124%	---	---	

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Project: Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.

Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0826 - 05 19 23 0544

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 23D0016 - EPA 5030C						Water						
Matrix Spike (23D0016-MS1)			Prepared: 04/03/23 08:28 Analyzed: 04/03/23 18:08									
QC Source Sample: Non-SDG (A3C1043-01)												
1,1,2,2-Tetrachloroethane	1020	12.5	25.0	ug/L	50	1000	ND	102	71-121%	---	---	
Tetrachloroethene (PCE)	1070	10.0	20.0	ug/L	50	1000	ND	107	74-129%	---	---	
Toluene	1060	25.0	50.0	ug/L	50	1000	25.0	103	80-121%	---	---	
1,2,3-Trichlorobenzene	1080	50.0	100	ug/L	50	1000	ND	108	69-129%	---	---	
1,2,4-Trichlorobenzene	1150	50.0	100	ug/L	50	1000	ND	115	69-130%	---	---	
1,1,1-Trichloroethane	1220	10.0	20.0	ug/L	50	1000	ND	122	74-131%	---	---	
1,1,2-Trichloroethane	1010	12.5	25.0	ug/L	50	1000	ND	101	80-120%	---	---	
Trichloroethene (TCE)	1070	10.0	20.0	ug/L	50	1000	ND	107	79-123%	---	---	
Trichlorofluoromethane	1080	50.0	100	ug/L	50	1000	ND	108	65-141%	---	---	
1,2,3-Trichloropropane	956	25.0	50.0	ug/L	50	1000	ND	96	73-122%	---	---	
1,2,4-Trimethylbenzene	1390	25.0	50.0	ug/L	50	1000	186	120	76-124%	---	---	
1,3,5-Trimethylbenzene	1190	25.0	50.0	ug/L	50	1000	60.5	113	75-124%	---	---	
Vinyl chloride	1080	10.0	20.0	ug/L	50	1000	ND	108	58-137%	---	---	
m,p-Xylene	2640	25.0	50.0	ug/L	50	2000	472	108	80-121%	---	---	
o-Xylene	1370	12.5	25.0	ug/L	50	1000	246	112	78-122%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 101 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		99 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		95 %		80-120 %		"						

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Project: Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.

Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0826 - 05 19 23 0544

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D SIM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23C1275 - EPA 5030C						Water						
Blank (23C1275-BLK1)			Prepared: 03/31/23 13:00		Analyzed: 03/31/23 15:16							
EPA 8260D SIM												
1,1-Dichloroethene	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
Vinyl chloride	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 105 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		101 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		98 %		80-120 %		"						
LCS (23C1275-BS1)			Prepared: 03/31/23 13:00		Analyzed: 03/31/23 14:22							
EPA 8260D SIM												
1,1-Dichloroethene	0.240	0.0100	0.0200	ug/L	1	0.200	---	120	80-120%	---	---	
cis-1,2-Dichloroethene	0.228	0.0100	0.0200	ug/L	1	0.200	---	114	80-120%	---	---	
trans-1,2-Dichloroethene	0.233	0.0100	0.0200	ug/L	1	0.200	---	117	80-120%	---	---	
Trichloroethene (TCE)	0.200	0.0100	0.0200	ug/L	1	0.200	---	100	80-120%	---	---	
Vinyl chloride	0.282	0.0100	0.0200	ug/L	1	0.200	---	141	80-120%	---	---	Q-56
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 103 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		100 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		97 %		80-120 %		"						
Duplicate (23C1275-DUP1)			Prepared: 03/31/23 14:48		Analyzed: 03/31/23 18:24							
QC Source Sample: Non-SDG (A3C0967-04)												
1,1-Dichloroethene	ND	0.0100	0.0200	ug/L	1	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	0.0392	0.0100	0.0200	ug/L	1	---	0.0380	---	---	3	30%	
trans-1,2-Dichloroethene	ND	0.0100	0.0200	ug/L	1	---	ND	---	---	---	30%	
Trichloroethene (TCE)	0.189	0.0100	0.0200	ug/L	1	---	0.182	---	---	4	30%	
Vinyl chloride	ND	0.0100	0.0200	ug/L	1	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 105 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		100 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		98 %		80-120 %		"						
Matrix Spike (23C1275-MS1)			Prepared: 03/31/23 14:48		Analyzed: 03/31/23 16:36							

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

Project: **Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001F**Project Manager: **John Renda****Report ID:****A3C0826 - 05 19 23 0544**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D SIM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23C1275 - EPA 5030C						Water						
Matrix Spike (23C1275-MS1)			Prepared: 03/31/23 14:48 Analyzed: 03/31/23 16:36									
QC Source Sample: Non-SDG (A3C0967-05)												
EPA 8260D SIM												
1,1-Dichloroethene	0.267	0.0100	0.0200	ug/L	1	0.200	ND	134	71-131%	---	---	Q-01
cis-1,2-Dichloroethene	0.240	0.0100	0.0200	ug/L	1	0.200	ND	120	78-123%	---	---	
trans-1,2-Dichloroethene	0.257	0.0100	0.0200	ug/L	1	0.200	ND	128	75-124%	---	---	Q-01
Trichloroethene (TCE)	0.214	0.0100	0.0200	ug/L	1	0.200	ND	107	79-123%	---	---	
Vinyl chloride	0.339	0.0100	0.0200	ug/L	1	0.200	ND	169	58-137%	---	---	Q-54e
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 105 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		101 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		98 %		80-120 %		"						

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Project: Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.

Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0826 - 05 19 23 0544

QUALITY CONTROL (QC) SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E (Large Volume Injection)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23C0946 - EPA 3511 (Bottle Extraction)						Water						
Blank (23C0946-BLK1)			Prepared: 03/24/23 06:25		Analyzed: 03/24/23 16:11							
EPA 8270E LVI												
Acenaphthene	ND	0.0160	0.0320	ug/L	1	---	---	---	---	---	---	
Acenaphthylene	ND	0.0160	0.0320	ug/L	1	---	---	---	---	---	---	
Anthracene	ND	0.0160	0.0320	ug/L	1	---	---	---	---	---	---	
Benz(a)anthracene	ND	0.00800	0.0160	ug/L	1	---	---	---	---	---	---	
Benzo(a)pyrene	ND	0.00800	0.0160	ug/L	1	---	---	---	---	---	---	
Benzo(b)fluoranthene	ND	0.00800	0.0160	ug/L	1	---	---	---	---	---	---	
Benzo(k)fluoranthene	ND	0.00800	0.0160	ug/L	1	---	---	---	---	---	---	
Benzo(g,h,i)perylene	ND	0.0160	0.0320	ug/L	1	---	---	---	---	---	---	
Chrysene	ND	0.00800	0.0160	ug/L	1	---	---	---	---	---	---	
Dibenz(a,h)anthracene	ND	0.00800	0.0160	ug/L	1	---	---	---	---	---	---	
Fluoranthene	ND	0.0160	0.0320	ug/L	1	---	---	---	---	---	---	
Fluorene	ND	0.0160	0.0320	ug/L	1	---	---	---	---	---	---	
Indeno(1,2,3-cd)pyrene	ND	0.00800	0.0160	ug/L	1	---	---	---	---	---	---	
1-Methylnaphthalene	ND	0.0320	0.0640	ug/L	1	---	---	---	---	---	---	
2-Methylnaphthalene	ND	0.0320	0.0640	ug/L	1	---	---	---	---	---	---	
Naphthalene	ND	0.0320	0.0640	ug/L	1	---	---	---	---	---	---	
Phenanthrene	ND	0.0320	0.0640	ug/L	1	---	---	---	---	---	---	
Pyrene	ND	0.0160	0.0320	ug/L	1	---	---	---	---	---	---	
Carbazole	ND	0.0160	0.0320	ug/L	1	---	---	---	---	---	---	
Dibenzofuran	ND	0.0160	0.0320	ug/L	1	---	---	---	---	---	---	
Surr: Acenaphthylene-d8 (Surr)		Recovery: 115 %		Limits: 78-134 %		Dilution: 1x						
Benzo(a)pyrene-d12 (Surr)		121 %		80-132 %		"						

LCS (23C0946-BS1)

Prepared: 03/24/23 06:25 Analyzed: 03/24/23 16:44

EPA 8270E LVI												
Acenaphthene	1.61	0.0160	0.0320	ug/L	1	1.60	---	100	80-120%	---	---	
Acenaphthylene	1.79	0.0160	0.0320	ug/L	1	1.60	---	112	80-124%	---	---	
Anthracene	1.71	0.0160	0.0320	ug/L	1	1.60	---	107	80-123%	---	---	
Benz(a)anthracene	1.89	0.00800	0.0160	ug/L	1	1.60	---	118	80-122%	---	---	
Benzo(a)pyrene	2.07	0.00800	0.0160	ug/L	1	1.60	---	129	80-129%	---	---	
Benzo(b)fluoranthene	1.95	0.00800	0.0160	ug/L	1	1.60	---	122	80-124%	---	---	
Benzo(k)fluoranthene	1.99	0.00800	0.0160	ug/L	1	1.60	---	124	80-125%	---	---	
Benzo(g,h,i)perylene	1.64	0.0160	0.0320	ug/L	1	1.60	---	102	80-120%	---	---	

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Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0826 - 05 19 23 0544

QUALITY CONTROL (QC) SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E (Large Volume Injection)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23C0946 - EPA 3511 (Bottle Extraction)						Water						
LCS (23C0946-BS1)			Prepared: 03/24/23 06:25		Analyzed: 03/24/23 16:44							
Chrysene	1.74	0.00800	0.0160	ug/L	1	1.60	---	109	80-120%	---	---	
Dibenz(a,h)anthracene	1.64	0.00800	0.0160	ug/L	1	1.60	---	103	80-120%	---	---	
Fluoranthene	1.68	0.0160	0.0320	ug/L	1	1.60	---	105	80-126%	---	---	
Fluorene	1.83	0.0160	0.0320	ug/L	1	1.60	---	114	77-127%	---	---	
Indeno(1,2,3-cd)pyrene	1.57	0.00800	0.0160	ug/L	1	1.60	---	98	80-121%	---	---	
1-Methylnaphthalene	1.59	0.0320	0.0640	ug/L	1	1.60	---	99	53-148%	---	---	
2-Methylnaphthalene	1.64	0.0320	0.0640	ug/L	1	1.60	---	102	48-150%	---	---	
Naphthalene	1.63	0.0320	0.0640	ug/L	1	1.60	---	102	78-120%	---	---	
Phenanthrene	1.57	0.0320	0.0640	ug/L	1	1.60	---	98	80-120%	---	---	
Pyrene	1.67	0.0160	0.0320	ug/L	1	1.60	---	105	80-125%	---	---	
Carbazole	1.97	0.0160	0.0320	ug/L	1	1.60	---	123	65-141%	---	---	
Dibenzofuran	1.84	0.0160	0.0320	ug/L	1	1.60	---	115	76-121%	---	---	
Surr: Acenaphthylene-d8 (Surr)		Recovery: 118 %		Limits: 78-134 %		Dilution: 1x						
Benzo(a)pyrene-d12 (Surr)		126 %		80-132 %		"						

LCS Dup (23C0946-BSD1)				Prepared: 03/24/23 06:25 Analyzed: 03/24/23 17:17								Q-19	
EPA 8270E LVI													
Acenaphthene	1.62	0.0160	0.0320	ug/L	1	1.60	---	101	80-120%	1	30%		
Acenaphthylene	1.78	0.0160	0.0320	ug/L	1	1.60	---	111	80-124%	0.3	30%		
Anthracene	1.71	0.0160	0.0320	ug/L	1	1.60	---	107	80-123%	0	30%		
Benz(a)anthracene	1.83	0.00800	0.0160	ug/L	1	1.60	---	115	80-122%	3	30%		
Benzo(a)pyrene	2.04	0.00800	0.0160	ug/L	1	1.60	---	128	80-129%	1	30%		
Benzo(b)fluoranthene	1.98	0.00800	0.0160	ug/L	1	1.60	---	124	80-124%	1	30%		
Benzo(k)fluoranthene	1.97	0.00800	0.0160	ug/L	1	1.60	---	123	80-125%	0.8	30%		
Benzo(g,h,i)perylene	1.64	0.0160	0.0320	ug/L	1	1.60	---	103	80-120%	0.3	30%		
Chrysene	1.71	0.00800	0.0160	ug/L	1	1.60	---	107	80-120%	2	30%		
Dibenz(a,h)anthracene	1.64	0.00800	0.0160	ug/L	1	1.60	---	102	80-120%	0.2	30%		
Fluoranthene	1.64	0.0160	0.0320	ug/L	1	1.60	---	102	80-126%	2	30%		
Fluorene	1.78	0.0160	0.0320	ug/L	1	1.60	---	111	77-127%	3	30%		
Indeno(1,2,3-cd)pyrene	1.54	0.00800	0.0160	ug/L	1	1.60	---	96	80-121%	2	30%		
1-Methylnaphthalene	1.51	0.0320	0.0640	ug/L	1	1.60	---	94	53-148%	5	30%		
2-Methylnaphthalene	1.57	0.0320	0.0640	ug/L	1	1.60	---	98	48-150%	5	30%		
Naphthalene	1.64	0.0320	0.0640	ug/L	1	1.60	---	102	78-120%	0.4	30%		
Phenanthrene	1.58	0.0320	0.0640	ug/L	1	1.60	---	98	80-120%	0.7	30%		

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

Project: Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.

Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0826 - 05 19 23 0544

QUALITY CONTROL (QC) SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E (Large Volume Injection)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23C0946 - EPA 3511 (Bottle Extraction)						Water						
LCS Dup (23C0946-BSD1)			Prepared: 03/24/23 06:25 Analyzed: 03/24/23 17:17								Q-19	
Pyrene	1.65	0.0160	0.0320	ug/L	1	1.60	---	103	80-125%	2	30%	
Carbazole	1.88	0.0160	0.0320	ug/L	1	1.60	---	117	65-141%	5	30%	
Dibenzofuran	1.81	0.0160	0.0320	ug/L	1	1.60	---	113	76-121%	2	30%	
Surr: Acenaphthylene-d8 (Surr)		Recovery: 118 %		Limits: 78-134 %		Dilution: 1x						
Benzo(a)pyrene-d12 (Surr)		127 %		80-132 %		"						

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Project: **Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001F**Project Manager: **John Renda****Report ID:****A3C0826 - 05 19 23 0544**

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23C1272 - EPA 3015A						Water						
Blank (23C1272-BLK1)			Prepared: 03/31/23 11:24 Analyzed: 04/03/23 17:38									
EPA 6020B												
Aluminum	ND	25.0	50.0	ug/L	1	---	---	---	---	---	---	
Antimony	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Arsenic	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Barium	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
Beryllium	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Cadmium	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Chromium	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
Copper	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
Iron	ND	25.0	50.0	ug/L	1	---	---	---	---	---	---	
Lead	ND	0.110	0.200	ug/L	1	---	---	---	---	---	---	
Manganese	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Mercury	ND	0.0400	0.0800	ug/L	1	---	---	---	---	---	---	
Nickel	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
Selenium	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Silver	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Thallium	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Vanadium	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
Zinc	ND	2.00	4.00	ug/L	1	---	---	---	---	---	---	

LCS (23C1272-BS1)

Prepared: 03/31/23 11:24 Analyzed: 04/03/23 17:43

EPA 6020B												
Aluminum	2930	25.0	50.0	ug/L	1	2780	---	106	80-120%	---	---	
Antimony	27.8	0.500	1.00	ug/L	1	27.8	---	100	80-120%	---	---	
Arsenic	55.0	0.500	1.00	ug/L	1	55.6	---	99	80-120%	---	---	
Barium	56.4	1.00	2.00	ug/L	1	55.6	---	101	80-120%	---	---	
Beryllium	28.8	0.100	0.200	ug/L	1	27.8	---	104	80-120%	---	---	
Cadmium	57.0	0.100	0.200	ug/L	1	55.6	---	103	80-120%	---	---	
Chromium	54.8	1.00	2.00	ug/L	1	55.6	---	99	80-120%	---	---	
Copper	56.0	1.00	2.00	ug/L	1	55.6	---	101	80-120%	---	---	
Iron	2820	25.0	50.0	ug/L	1	2780	---	101	80-120%	---	---	
Lead	56.6	0.110	0.200	ug/L	1	55.6	---	102	80-120%	---	---	
Manganese	57.7	0.500	1.00	ug/L	1	55.6	---	104	80-120%	---	---	
Mercury	0.970	0.0400	0.0800	ug/L	1	1.11	---	87	80-120%	---	---	

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

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503-718-2323

ORELAP ID: OR100062

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6720 SW Macadam Ave. Suite 125

Portland, OR 97219

Project: Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.

Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0826 - 05 19 23 0544

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23C1272 - EPA 3015A						Water						
LCS (23C1272-BS1)						Prepared: 03/31/23 11:24 Analyzed: 04/03/23 17:43						
Nickel	56.7	1.00	2.00	ug/L	1	55.6	---	102	80-120%	---	---	
Selenium	27.8	0.500	1.00	ug/L	1	27.8	---	100	80-120%	---	---	
Silver	25.7	0.100	0.200	ug/L	1	27.8	---	92	80-120%	---	---	
Thallium	28.8	0.100	0.200	ug/L	1	27.8	---	104	80-120%	---	---	
Vanadium	54.0	1.00	2.00	ug/L	1	55.6	---	97	80-120%	---	---	
Zinc	56.8	2.00	4.00	ug/L	1	55.6	---	102	80-120%	---	---	

Duplicate (23C1272-DUP1)

Prepared: 03/31/23 11:24 Analyzed: 04/03/23 17:53

QC Source Sample: GS-032223-46 (A3C0826-01)

EPA 6020B

Aluminum	ND	25.0	50.0	ug/L	1	---	ND	---	---	---	20%
Antimony	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	20%
Arsenic	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	20%
Barium	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	20%
Beryllium	ND	0.100	0.200	ug/L	1	---	ND	---	---	---	20%
Cadmium	ND	0.100	0.200	ug/L	1	---	ND	---	---	---	20%
Chromium	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	20%
Copper	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	20%
Iron	ND	25.0	50.0	ug/L	1	---	ND	---	---	---	20%
Lead	ND	0.110	0.200	ug/L	1	---	ND	---	---	---	20%
Manganese	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	20%
Mercury	ND	0.0400	0.0800	ug/L	1	---	ND	---	---	---	20%
Nickel	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	20%
Selenium	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	20%
Silver	ND	0.100	0.200	ug/L	1	---	ND	---	---	---	20%
Thallium	ND	0.100	0.200	ug/L	1	---	ND	---	---	---	20%
Vanadium	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	20%
Zinc	ND	2.00	4.00	ug/L	1	---	ND	---	---	---	20%

Matrix Spike (23C1272-MS1)

Prepared: 03/31/23 11:24 Analyzed: 04/03/23 17:58

QC Source Sample: GS-032223-46 (A3C0826-01)

EPA 6020B

Aluminum	2930	25.0	50.0	ug/L	1	2780	ND	106	75-125%	---	---
Antimony	27.1	0.500	1.00	ug/L	1	27.8	ND	98	75-125%	---	---

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**ANALYTICAL REPORT****Apex Laboratories, LLC**6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125
Portland, OR 97219Project: **Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001F**Project Manager: **John Renda****Report ID:****A3C0826 - 05 19 23 0544****QUALITY CONTROL (QC) SAMPLE RESULTS****Total Metals by EPA 6020B (ICPMS)**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23C1272 - EPA 3015A						Water						
Matrix Spike (23C1272-MS1)				Prepared: 03/31/23 11:24		Analyzed: 04/03/23 17:58						
QC Source Sample: GS-032223-46 (A3C0826-01)												
Arsenic	53.8	0.500	1.00	ug/L	1	55.6	ND	97	75-125%	---	---	
Barium	55.5	1.00	2.00	ug/L	1	55.6	ND	100	75-125%	---	---	
Beryllium	27.0	0.100	0.200	ug/L	1	27.8	ND	97	75-125%	---	---	
Cadmium	55.4	0.100	0.200	ug/L	1	55.6	ND	100	75-125%	---	---	
Chromium	53.9	1.00	2.00	ug/L	1	55.6	ND	97	75-125%	---	---	
Copper	55.4	1.00	2.00	ug/L	1	55.6	ND	100	75-125%	---	---	
Iron	2830	25.0	50.0	ug/L	1	2780	ND	102	75-125%	---	---	
Lead	54.9	0.110	0.200	ug/L	1	55.6	ND	99	75-125%	---	---	
Manganese	57.0	0.500	1.00	ug/L	1	55.6	ND	103	75-125%	---	---	
Mercury	1.00	0.0400	0.0800	ug/L	1	1.11	ND	90	75-125%	---	---	
Nickel	55.5	1.00	2.00	ug/L	1	55.6	ND	100	75-125%	---	---	
Selenium	26.3	0.500	1.00	ug/L	1	27.8	ND	95	75-125%	---	---	
Silver	24.5	0.100	0.200	ug/L	1	27.8	ND	88	75-125%	---	---	
Thallium	26.8	0.100	0.200	ug/L	1	27.8	ND	97	75-125%	---	---	
Vanadium	53.3	1.00	2.00	ug/L	1	55.6	ND	96	75-125%	---	---	
Zinc	55.8	2.00	4.00	ug/L	1	55.6	ND	101	75-125%	---	---	

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ANALYTICAL REPORT

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Project: Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.

Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0826 - 05 19 23 0544

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Cyanide by Flow Analysis (Aqueous)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23D0035 - Lachat Micro Dist - aqueous						Water						
Blank (23D0035-BLK1)			Prepared: 04/03/23 10:10 Analyzed: 04/03/23 13:59									
EPA 335.4												
Total Cyanide	ND	0.00500	0.00500	mg/L	1	---	---	---	---	---	---	
LCS (23D0035-BS1)			Prepared: 04/03/23 10:10 Analyzed: 04/03/23 14:01									
EPA 335.4												
Total Cyanide	0.239	0.00500	0.00500	mg/L	1	0.250	---	96	90-110%	---	---	
Duplicate (23D0035-DUP2)			Prepared: 04/03/23 10:10 Analyzed: 04/03/23 14:23									
QC Source Sample: GS-032223-46 (A3C0826-01)												
EPA 335.4												
Total Cyanide	ND	0.00500	0.00500	mg/L	1	---	ND	---	---	---	10%	
Matrix Spike (23D0035-MS1)			Prepared: 04/03/23 10:10 Analyzed: 04/03/23 14:09									
QC Source Sample: Non-SDG (A3C0788-07)												
EPA 335.4												
Total Cyanide	0.239	0.00500	0.00500	mg/L	1	0.250	ND	96	90-110%	---	---	
Matrix Spike (23D0035-MS2)			Prepared: 04/03/23 10:10 Analyzed: 04/03/23 14:25									
QC Source Sample: GS-032223-46 (A3C0826-01)												
EPA 335.4												
Total Cyanide	0.252	0.00500	0.00500	mg/L	1	0.250	ND	101	90-110%	---	---	
Matrix Spike Dup (23D0035-MSD1)			Prepared: 04/03/23 10:10 Analyzed: 04/03/23 14:11									
QC Source Sample: Non-SDG (A3C0788-07)												
Total Cyanide	0.239	0.00500	0.00500	mg/L	1	0.250	ND	96	90-110%	0.08	10%	

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Project Manager: John Renda

Report ID:

A3C0826 - 05 19 23 0544

QUALITY CONTROL (QC) SAMPLE RESULTS

Available Cyanide by FIA, Ligand Exchange and Amperometric Detection

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23C0907 - Method Prep: Aq						Water						
Blank (23C0907-BLK1)			Prepared: 03/23/23 10:51 Analyzed: 03/23/23 15:32									
<u>D6888-09</u>												
Available Cyanide	ND	0.00100	0.00200	mg/L	1	---	---	---	---	---	---	
LCS (23C0907-BS1)			Prepared: 03/23/23 10:51 Analyzed: 03/23/23 15:33									
<u>D6888-09</u>												
Available Cyanide	0.0241	0.00100	0.00200	mg/L	1	0.0250	---	96	90-117%	---	---	
Matrix Spike (23C0907-MS1)			Prepared: 03/23/23 10:51 Analyzed: 03/23/23 16:00									
<u>QC Source Sample: Non-SDG (A3C0788-07)</u>												
<u>D6888-09</u>												
Available Cyanide	0.0259	0.00101	0.00201	mg/L	1	0.0251	ND	103	82-130%	---	---	
Matrix Spike (23C0907-MS2)			Prepared: 03/23/23 10:51 Analyzed: 03/23/23 16:20									
<u>QC Source Sample: GS-032223-51 (A3C0826-06)</u>												
<u>D6888-09</u>												
Available Cyanide	0.0221	0.00101	0.00201	mg/L	1	0.0251	0.00452	70	82-130%	---	---	Q-02
Matrix Spike Dup (23C0907-MSD1)			Prepared: 03/23/23 10:51 Analyzed: 03/23/23 16:02									
<u>QC Source Sample: Non-SDG (A3C0788-07)</u>												
Available Cyanide	0.0268	0.00101	0.00201	mg/L	1	0.0251	ND	107	82-130%	3	11%	
Matrix Spike Dup (23C0907-MSD2)			Prepared: 03/23/23 10:51 Analyzed: 03/23/23 16:21									
<u>QC Source Sample: GS-032223-51 (A3C0826-06)</u>												
<u>D6888-09</u>												
Available Cyanide	0.0218	0.00101	0.00201	mg/L	1	0.0251	0.00452	69	82-130%	1	11%	Q-02

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Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0826 - 05 19 23 0544

QUALITY CONTROL (QC) SAMPLE RESULTS

Free Cyanide by Microdiffusion/Colorimetric Spectrophotometry

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23C1077 - Microdiffusion						Water						
Blank (23C1077-BLK1)			Prepared: 03/28/23 10:15 Analyzed: 03/28/23 15:45									
<u>D4282-02</u>												
Free Cyanide	ND	0.00250	0.00500	mg/L	1	---	---	---	---	---	---	
LCS (23C1077-BS1)			Prepared: 03/28/23 10:15 Analyzed: 03/28/23 15:45									
<u>D4282-02</u>												
Free Cyanide	0.0679	0.00250	0.00500	mg/L	1	0.0667	---	102	74-120%	---	---	
LCS Dup (23C1077-BSD1)			Prepared: 03/28/23 10:15 Analyzed: 03/28/23 15:50									
<u>D4282-02</u>												
Free Cyanide	0.0662	0.00250	0.00500	mg/L	1	0.0667	---	99	74-120%	3	20%	
Matrix Spike (23C1077-MS1)			Prepared: 03/28/23 10:15 Analyzed: 03/28/23 16:03									
<u>QC Source Sample: Non-SDG (A3C0788-07)</u>												
<u>D4282-02</u>												
Free Cyanide	0.0663	0.00250	0.00500	mg/L	1	0.0667	ND	99	74-120%	---	---	
Matrix Spike Dup (23C1077-MSD1)			Prepared: 03/28/23 10:15 Analyzed: 03/28/23 16:03									
<u>QC Source Sample: Non-SDG (A3C0788-07)</u>												
Free Cyanide	0.0670	0.00250	0.00500	mg/L	1	0.0667	ND	101	74-120%	1	20%	

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ANALYTICAL REPORT

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503-718-2323
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Anchor QEA, LLC

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Portland, OR 97219

Project: Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.

Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0826 - 05 19 23 0544

QUALITY CONTROL (QC) SAMPLE RESULTS

Free Cyanide by Microdiffusion/Colorimetric Spectrophotometry

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23D0024 - Microdiffusion						Water						
Blank (23D0024-BLK1)			Prepared: 04/03/23 10:10 Analyzed: 04/03/23 17:08									
<u>D4282-02</u>												
Free Cyanide	ND	0.00250	0.00500	mg/L	1	---	---	---	---	---	---	
LCS (23D0024-BS1)			Prepared: 04/03/23 10:10 Analyzed: 04/03/23 17:08									
<u>D4282-02</u>												
Free Cyanide	0.0692	0.00250	0.00500	mg/L	1	0.0667	---	104	74-120%	---	---	
LCS Dup (23D0024-BSD1)			Prepared: 04/03/23 10:10 Analyzed: 04/03/23 17:13									
<u>D4282-02</u>												
Free Cyanide	0.0695	0.00250	0.00500	mg/L	1	0.0667	---	104	74-120%	0.4	20%	
Duplicate (23D0024-DUP1)			Prepared: 04/03/23 10:10 Analyzed: 04/03/23 17:13									
<u>QC Source Sample: GS-032223-46 (A3C0826-01)</u>												
<u>D4282-02</u>												
Free Cyanide	ND	0.00250	0.00500	mg/L	1	---	ND	---	---	---	20%	
Matrix Spike (23D0024-MS1)			Prepared: 04/03/23 10:10 Analyzed: 04/03/23 17:13									
<u>QC Source Sample: GS-032223-46 (A3C0826-01)</u>												
<u>D4282-02</u>												
Free Cyanide	0.0610	0.00250	0.00500	mg/L	1	0.0667	ND	91	74-120%	---	---	

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QUALITY CONTROL (QC) SAMPLE RESULTS

Washington Department of Ecology Methods

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch BLC0804 - EPA 3510C SepF						Water						
Blank (BLC0804-BLK1)			Prepared: 03/30/23 16:26 Analyzed: 04/11/23 16:01									
WAEPH												
C8-C10 Aliphatics	ND	---	40	ug/L	1	---	---	---	---	---	---	U
>C10-C12 Aliphatics	ND	---	40	ug/L	1	---	---	---	---	---	---	U
>C12-C16 Aliphatics	ND	---	40	ug/L	1	---	---	---	---	---	---	U
>C16-C21 Aliphatics	ND	---	40	ug/L	1	---	---	---	---	---	---	U
>C21-C34 Aliphatics	ND	---	40	ug/L	1	---	---	---	---	---	---	U
Surr: 1-Chloro-octadecane		Recovery: 51.1 %		Limits: 36-120 %		Dilution: 1x						

Blank (BLC0804-BLK2)				Prepared: 03/30/23 16:26 Analyzed: 04/10/23 20:49								
WAEPH												
C8-C10 Aromatics	ND	---	40	ug/L	1	---	---	---	---	---	---	U
>C10-C12 Aromatics	ND	---	40	ug/L	1	---	---	---	---	---	---	U
>C12-C16 Aromatics	ND	---	40	ug/L	1	---	---	---	---	---	---	U
>C16-C21 Aromatics	ND	---	40	ug/L	1	---	---	---	---	---	---	U
>C21-C34 Aromatics	ND	---	40	ug/L	1	---	---	---	---	---	---	U
Surr: o-Terphenyl		Recovery: 67.2 %		Limits: 41-120 %		Dilution: 1x						

LCS (BLC0804-BS1)				Prepared: 03/30/23 16:26 Analyzed: 04/11/23 16:26							
WAEPH											
C8-C10 Aliphatics	112	---	40	ug/L	1	300.00	---	37.2	12-130%	---	---
>C10-C12 Aliphatics	126	---	40	ug/L	1	300.00	---	41.9	10-130%	---	---
>C12-C16 Aliphatics	155	---	40	ug/L	1	300.00	---	51.6	35-130%	---	---
>C16-C21 Aliphatics	185	---	40	ug/L	1	300.00	---	61.6	45-130%	---	---
>C21-C34 Aliphatics	137	---	40	ug/L	1	300.00	---	45.5	19-130%	---	---
Surr: 1-Chloro-octadecane		Recovery: 46.9 %		Limits: 36-120 %		Dilution: 1x					

LCS (BLC0804-BS2)				Prepared: 03/30/23 16:26 Analyzed: 04/10/23 21:13							
<u>WA EPH</u>											
>C10-C12 Aromatics	117	---	40	ug/L	1	300.00	---	39.0	12-130%	---	---
>C12-C16 Aromatics	121	---	40	ug/L	1	300.00	---	40.5	31-130%	---	---
>C16-C21 Aromatics	354	---	40	ug/L	1	600.00	---	59.0	48-130%	---	---

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Project Manager: **John Renda**

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Analytical Resources, LLC

QUALITY CONTROL (QC) SAMPLE RESULTS

Washington Department of Ecology Methods

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch BLC0804 - EPA 3510C SepF						Water						
LCS (BLC0804-BS2)			Prepared: 03/30/23 16:26		Analyzed: 04/10/23 21:13							
>C21-C34 Aromatics	175	---	40	ug/L	1	300.00	---	58.2	33-130%	---	---	
Surr: o-Terphenyl		Recovery: 60.0 %		Limits: 41-120 %		Dilution: 1x						
LCS Dup (BLC0804-BSD1)			Prepared: 03/30/23 16:26		Analyzed: 04/11/23 16:51							
WAEPH												
C8-C10 Aliphatics	91.0	---	40	ug/L	1	300.00	---	30.3	12-130%	20.3	30%	
>C10-C12 Aliphatics	112	---	40	ug/L	1	300.00	---	37.4	10-130%	11.3	30%	
>C12-C16 Aliphatics	156	---	40	ug/L	1	300.00	---	51.9	35-130%	0.515	30%	
>C16-C21 Aliphatics	195	---	40	ug/L	1	300.00	---	64.9	45-130%	5.27	30%	
>C21-C34 Aliphatics	142	---	40	ug/L	1	300.00	---	47.3	19-130%	3.74	30%	
Surr: 1-Chloro-octadecane		Recovery: 50.2 %		Limits: 36-120 %		Dilution: 1x						
LCS Dup (BLC0804-BSD2)			Prepared: 03/30/23 16:26		Analyzed: 04/10/23 21:38							
WAEPH												
>C10-C12 Aromatics	107	---	40	ug/L	1	300.00	---	35.5	12-130%	9.30	30%	
>C12-C16 Aromatics	115	---	40	ug/L	1	300.00	---	38.4	31-130%	5.24	30%	
>C16-C21 Aromatics	344	---	40	ug/L	1	600.00	---	57.4	48-130%	2.81	30%	
>C21-C34 Aromatics	160	---	40	ug/L	1	300.00	---	53.3	33-130%	8.73	30%	
Surr: o-Terphenyl		Recovery: 59.1 %		Limits: 41-120 %		Dilution: 1x						

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Analytical Resources, LLC

QUALITY CONTROL (QC) SAMPLE RESULTS

Washington Department of Ecology Methods

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch BLC0828 - EPA 5030C (Purge and Trap)						Water						
Blank (BLC0828-BLK1)			Prepared: 03/30/23 15:42 Analyzed: 03/30/23 16:57									
WAVPH												
C5-C6 Aliphatics	ND	---	50	ug/L	1	---	---	---	---	---	---	U
>C6-C8 Aliphatics	ND	---	50	ug/L	1	---	---	---	---	---	---	U
>C8-C10 Aliphatics	ND	---	50	ug/L	1	---	---	---	---	---	---	U
>C10-C12 Aliphatics	ND	---	50	ug/L	1	---	---	---	---	---	---	U
C8-C10 Aromatics	ND	---	50	ug/L	1	---	---	---	---	---	---	U
>C10-C12 Aromatics	ND	---	50	ug/L	1	---	---	---	---	---	---	U
>C12-C13 Aromatics	ND	---	50	ug/L	1	---	---	---	---	---	---	U
Methyl tert-butyl Ether	ND	---	5	ug/L	1	---	---	---	---	---	---	U
Benzene	ND	---	5	ug/L	1	---	---	---	---	---	---	U
Toluene	ND	---	5	ug/L	1	---	---	---	---	---	---	U
Ethylbenzene	ND	---	5	ug/L	1	---	---	---	---	---	---	U
1,2,3-Trimethylbenzene	ND	---	5	ug/L	1	---	---	---	---	---	---	U
m,p-Xylene	ND	---	10	ug/L	1	---	---	---	---	---	---	U
Naphthalene	ND	---	5	ug/L	1	---	---	---	---	---	---	U
1-Methylnaphthalene	ND	---	5	ug/L	1	---	---	---	---	---	---	U
o-Xylene	ND	---	5	ug/L	1	---	---	---	---	---	---	U
n-Pentane	ND	---	5	ug/L	1	---	---	---	---	---	---	U
n-Hexane	ND	---	5	ug/L	1	---	---	---	---	---	---	U
n-Octane	ND	---	5	ug/L	1	---	---	---	---	---	---	U
n-Decane	ND	---	5	ug/L	1	---	---	---	---	---	---	U
n-Dodecane	ND	---	5	ug/L	1	---	---	---	---	---	---	U
Surr: PID: 2,5-Dibromotoluene		Recovery: 74.0 %		Limits: 60-140 %		Dilution: 1x						
FID: 2,5-Dibromotoluene		76.6 %		60-140 %		"						

LCS (BLC0828-BS1)

Prepared: 03/30/23 15:42 Analyzed: 03/30/23 15:56

WAVPH												
C5-C6 Aliphatics	97.8	---	50	ug/L	1	---	---	---	---	---	---	
>C6-C8 Aliphatics	67.9	---	50	ug/L	1	---	---	---	---	---	---	
>C8-C10 Aliphatics	96.9	---	50	ug/L	1	---	---	---	---	---	---	
>C10-C12 Aliphatics	97.3	---	50	ug/L	1	---	---	---	---	---	---	
C8-C10 Aromatics	326	---	50	ug/L	1	---	---	---	---	---	---	

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A3C0826 - 05 19 23 0544

Analytical Resources, LLC

QUALITY CONTROL (QC) SAMPLE RESULTS

Washington Department of Ecology Methods

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch BLC0828 - EPA 5030C (Purge and Trap)						Water						
LCS (BLC0828-BS1)			Prepared: 03/30/23 15:42		Analyzed: 03/30/23 15:56							
>C10-C12 Aromatics	59.7	---	50	ug/L	1		---			---	---	U
>C12-C13 Aromatics	ND	---	50	ug/L	1		---			---	---	
Methyl tert-butyl Ether	62.6	---	5	ug/L	1	50.000	---	125	80-131%	---	---	
Benzene	61.3	---	5	ug/L	1	50.000	---	123	68-136%	---	---	
Toluene	61.9	---	5	ug/L	1	50.000	---	124	70-145%	---	---	
Ethylbenzene	49.5	---	5	ug/L	1	50.000	---	99.0	70-130%	---	---	
1,2,3-Trimethylbenzene	50.2	---	5	ug/L	1	50.000	---	100	70-130%	---	---	
m,p-Xylene	101	---	10	ug/L	1	100.00	---	101	70-133%	---	---	
Naphthalene	48.5	---	5	ug/L	1	50.000	---	97.0	70-130%	---	---	
1-Methylnaphthalene	45.1	---	5	ug/L	1	50.000	---	90.2	70-130%	---	---	
o-Xylene	54.2	---	5	ug/L	1	50.000	---	108	70-130%	---	---	
n-Pentane	52.0	---	5	ug/L	1	50.000	---	104	70-130%	---	---	
n-Hexane	53.1	---	5	ug/L	1	50.000	---	106	70-130%	---	---	
n-Octane	41.1	---	5	ug/L	1	50.000	---	82.2	56-120%	---	---	
n-Decane	45.0	---	5	ug/L	1	50.000	---	90.0	61-120%	---	---	
n-Dodecane	55.4	---	5	ug/L	1	50.000	---	111	70-130%	---	---	
Surr: PID: 2,5-Dibromotoluene		Recovery: 87.0 %		Limits: 60-140 %		Dilution: 1x						
FID: 2,5-Dibromotoluene		89.4 %		60-140 %		"						

LCS Dup (BLC0828-BSD1)

Prepared: 03/30/23 15:42 Analyzed: 03/30/23 16:26

WAVPH												
C5-C6 Aliphatics	90.8	---	50	ug/L	1	---	---	---	---	7.42	30%	
>C6-C8 Aliphatics	62.7	---	50	ug/L	1	---	---	---	---	7.96	30%	
>C8-C10 Aliphatics	98.4	---	50	ug/L	1	---	---	---	---	1.54	30%	
>C10-C12 Aliphatics	98.3	---	50	ug/L	1	---	---	---	---	1.02	30%	
C8-C10 Aromatics	332	---	50	ug/L	1	---	---	---	---	1.88	30%	
>C10-C12 Aromatics	60.7	---	50	ug/L	1	---	---	---	---	1.66	30%	
>C12-C13 Aromatics	ND	---	50	ug/L	1	---	---	---	---	0.663	30%	U
Methyl tert-butyl Ether	64.1	---	5	ug/L	1	50.000	---	128	80-131%	2.37	30%	
Benzene	62.3	---	5	ug/L	1	50.000	---	125	68-136%	1.62	30%	
Toluene	60.8	---	5	ug/L	1	50.000	---	122	70-145%	1.79	30%	
Ethylbenzene	50.7	---	5	ug/L	1	50.000	---	101	70-130%	2.40	30%	

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Analytical Resources, LLC

QUALITY CONTROL (QC) SAMPLE RESULTS

Washington Department of Ecology Methods

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch BLC0828 - EPA 5030C (Purge and Trap)						Water						
LCS Dup (BLC0828-BS01)			Prepared: 03/30/23 15:42		Analyzed: 03/30/23 16:26							
1,2,3-Trimethylbenzene	49.6	---	5	ug/L	1	50.000	---	99.2	70-130%	1.20	30%	
m,p-Xylene	104	---	10	ug/L	1	100.00	---	104	70-133%	2.83	30%	
Naphthalene	49.3	---	5	ug/L	1	50.000	---	98.6	70-130%	1.64	30%	
1-Methylnaphthalene	45.4	---	5	ug/L	1	50.000	---	90.8	70-130%	0.663	30%	
o-Xylene	55.2	---	5	ug/L	1	50.000	---	110	70-130%	1.83	30%	
n-Pentane	54.3	---	5	ug/L	1	50.000	---	109	70-130%	4.33	30%	
n-Hexane	49.5	---	5	ug/L	1	50.000	---	99.0	70-130%	7.02	30%	
n-Octane	40.6	---	5	ug/L	1	50.000	---	81.2	56-120%	1.22	30%	
n-Decane	44.9	---	5	ug/L	1	50.000	---	89.8	61-120%	0.222	30%	
n-Dodecane	57.6	---	5	ug/L	1	50.000	---	115	70-130%	3.89	30%	
Surr: PID: 2,5-Dibromotoluene		Recovery: 84.9 %		Limits: 60-140 %		Dilution: 1x						
FID: 2,5-Dibromotoluene		86.6 %		60-140 %		"						

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ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125
Portland, OR 97219Project: **Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001F**Project Manager: **John Renda****Report ID:****A3C0826 - 05 19 23 0544****SAMPLE PREPARATION INFORMATION****Diesel and/or Oil Hydrocarbons by NWTPH-Dx**

Prep: EPA 3510C (Fuels/Acid Ext.)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23D0077							
A3C0826-01	WG	NWTPH-Dx	03/22/23 09:00	04/04/23 11:39	1030mL/5mL	1000mL/5mL	0.97
A3C0826-02	WG	NWTPH-Dx	03/22/23 10:15	04/04/23 11:39	1040mL/5mL	1000mL/5mL	0.96
A3C0826-03	WG	NWTPH-Dx	03/22/23 11:45	04/04/23 11:39	1040mL/5mL	1000mL/5mL	0.96
A3C0826-04	WG	NWTPH-Dx	03/22/23 12:40	04/04/23 11:39	1040mL/5mL	1000mL/5mL	0.96
A3C0826-05	WG	NWTPH-Dx	03/22/23 12:55	04/04/23 11:39	1040mL/5mL	1000mL/5mL	0.96
A3C0826-06	WG	NWTPH-Dx	03/22/23 13:40	04/04/23 11:39	1040mL/5mL	1000mL/5mL	0.96
A3C0826-07	WG	NWTPH-Dx	03/22/23 14:30	04/04/23 11:39	1030mL/5mL	1000mL/5mL	0.97

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

Prep: EPA 5030C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23C1073							
A3C0826-06RE1	WG	NWTPH-Gx (MS)	03/22/23 13:40	03/28/23 13:31	5mL/5mL	5mL/5mL	1.00
Batch: 23C1116							
A3C0826-01RE1	WG	NWTPH-Gx (MS)	03/22/23 09:00	03/28/23 15:28	5mL/5mL	5mL/5mL	1.00
A3C0826-02RE1	WG	NWTPH-Gx (MS)	03/22/23 10:15	03/28/23 15:28	5mL/5mL	5mL/5mL	1.00
A3C0826-03RE1	WG	NWTPH-Gx (MS)	03/22/23 11:45	03/28/23 15:28	5mL/5mL	5mL/5mL	1.00
A3C0826-04RE1	WG	NWTPH-Gx (MS)	03/22/23 12:40	03/28/23 15:28	5mL/5mL	5mL/5mL	1.00
A3C0826-05RE1	WG	NWTPH-Gx (MS)	03/22/23 12:55	03/28/23 15:28	5mL/5mL	5mL/5mL	1.00
Batch: 23C1207							
A3C0826-07RE1	WG	NWTPH-Gx (MS)	03/22/23 14:30	03/30/23 11:50	5mL/5mL	5mL/5mL	1.00

Volatile Organic Compounds by EPA 8260D

Prep: EPA 5030C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23C1041							
A3C0826-08	W	EPA 8260D	03/22/23 15:30	03/27/23 14:13	5mL/5mL	5mL/5mL	1.00
Batch: 23C1073							
A3C0826-06RE1	WG	EPA 8260D	03/22/23 13:40	03/28/23 13:31	5mL/5mL	5mL/5mL	1.00
Batch: 23C1116							
A3C0826-01RE1	WG	EPA 8260D	03/22/23 09:00	03/28/23 15:28	5mL/5mL	5mL/5mL	1.00
A3C0826-02RE1	WG	EPA 8260D	03/22/23 10:15	03/28/23 15:28	5mL/5mL	5mL/5mL	1.00

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Darwin Thomas, Business Development Director

**ANALYTICAL REPORT****Apex Laboratories, LLC**6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125
Portland, OR 97219Project: **Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001F**Project Manager: **John Renda****Report ID:****A3C0826 - 05 19 23 0544****SAMPLE PREPARATION INFORMATION****Volatile Organic Compounds by EPA 8260D****Prep: EPA 5030C**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
A3C0826-03RE1	WG	EPA 8260D	03/22/23 11:45	03/28/23 15:28	5mL/5mL	5mL/5mL	1.00
A3C0826-04RE1	WG	EPA 8260D	03/22/23 12:40	03/28/23 15:28	5mL/5mL	5mL/5mL	1.00
A3C0826-05RE1	WG	EPA 8260D	03/22/23 12:55	03/28/23 15:28	5mL/5mL	5mL/5mL	1.00
Batch: 23C1207							
A3C0826-07RE1	WG	EPA 8260D	03/22/23 14:30	03/30/23 11:50	5mL/5mL	5mL/5mL	1.00
Batch: 23D0016							
A3C0826-07RE2	WG	EPA 8260D	03/22/23 14:30	04/03/23 08:30	5mL/5mL	5mL/5mL	1.00

Volatile Organic Compounds by EPA 8260D SIM**Prep: EPA 5030C**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23C1275							
A3C0826-06	WG	EPA 8260D SIM	03/22/23 13:40	03/31/23 14:48	5mL/5mL	5mL/5mL	1.00
A3C0826-07	WG	EPA 8260D SIM	03/22/23 14:30	03/31/23 14:48	5mL/5mL	5mL/5mL	1.00

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E (Large Volume Injection)**Prep: EPA 3511 (Bottle Extraction)**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23C0946							
A3C0826-01	WG	EPA 8270E LVI	03/22/23 09:00	03/24/23 06:25	121.4mL/5mL	125mL/5mL	1.03
A3C0826-02	WG	EPA 8270E LVI	03/22/23 10:15	03/24/23 06:25	82.62mL/5mL	125mL/5mL	1.51
A3C0826-03	WG	EPA 8270E LVI	03/22/23 11:45	03/24/23 06:25	85.44mL/5mL	125mL/5mL	1.46
A3C0826-04	WG	EPA 8270E LVI	03/22/23 12:40	03/24/23 06:25	113.42mL/5mL	125mL/5mL	1.10
A3C0826-05	WG	EPA 8270E LVI	03/22/23 12:55	03/24/23 06:25	107.93mL/5mL	125mL/5mL	1.16
A3C0826-06	WG	EPA 8270E LVI	03/22/23 13:40	03/24/23 06:25	88.83mL/5mL	125mL/5mL	1.41
A3C0826-07	WG	EPA 8270E LVI	03/22/23 14:30	03/24/23 06:25	89.73mL/5mL	125mL/5mL	1.39

Total Metals by EPA 6020B (ICPMS)**Prep: EPA 3015A**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23C1272							
A3C0826-01	WG	EPA 6020B	03/22/23 09:00	03/31/23 11:24	45mL/50mL	45mL/50mL	1.00
A3C0826-02	WG	EPA 6020B	03/22/23 10:15	03/31/23 11:24	45mL/50mL	45mL/50mL	1.00

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Portland, OR 97219

Project: **Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001F**Project Manager: **John Renda****Report ID:****A3C0826 - 05 19 23 0544****SAMPLE PREPARATION INFORMATION****Total Metals by EPA 6020B (ICPMS)****Prep: EPA 3015A**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
A3C0826-02RE1	WG	EPA 6020B	03/22/23 10:15	03/31/23 11:24	45mL/50mL	45mL/50mL	1.00
A3C0826-03	WG	EPA 6020B	03/22/23 11:45	03/31/23 11:24	45mL/50mL	45mL/50mL	1.00
A3C0826-04	WG	EPA 6020B	03/22/23 12:40	03/31/23 11:24	45mL/50mL	45mL/50mL	1.00
A3C0826-04RE1	WG	EPA 6020B	03/22/23 12:40	03/31/23 11:24	45mL/50mL	45mL/50mL	1.00
A3C0826-05	WG	EPA 6020B	03/22/23 12:55	03/31/23 11:24	45mL/50mL	45mL/50mL	1.00
A3C0826-05RE1	WG	EPA 6020B	03/22/23 12:55	03/31/23 11:24	45mL/50mL	45mL/50mL	1.00
A3C0826-06	WG	EPA 6020B	03/22/23 13:40	03/31/23 11:24	45mL/50mL	45mL/50mL	1.00
A3C0826-06RE1	WG	EPA 6020B	03/22/23 13:40	03/31/23 11:24	45mL/50mL	45mL/50mL	1.00
A3C0826-07	WG	EPA 6020B	03/22/23 14:30	03/31/23 11:24	45mL/50mL	45mL/50mL	1.00
A3C0826-07RE1	WG	EPA 6020B	03/22/23 14:30	03/31/23 11:24	45mL/50mL	45mL/50mL	1.00

Total Cyanide by Flow Analysis (Aqueous)**Prep: Lachat Micro Dist - aqueous**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23D0035							
A3C0826-01	WG	EPA 335.4	03/22/23 09:00	04/03/23 10:10	6mL/6mL	6mL/6mL	1.00
A3C0826-02	WG	EPA 335.4	03/22/23 10:15	04/03/23 10:10	6mL/6mL	6mL/6mL	1.00
A3C0826-03	WG	EPA 335.4	03/22/23 11:45	04/03/23 10:10	6mL/6mL	6mL/6mL	1.00
A3C0826-04	WG	EPA 335.4	03/22/23 12:40	04/03/23 10:10	6mL/6mL	6mL/6mL	1.00
A3C0826-05RE1	WG	EPA 335.4	03/22/23 12:55	04/03/23 10:10	6mL/6mL	6mL/6mL	1.00
A3C0826-06RE1	WG	EPA 335.4	03/22/23 13:40	04/03/23 10:10	6mL/6mL	6mL/6mL	1.00
A3C0826-07RE1	WG	EPA 335.4	03/22/23 14:30	04/03/23 10:10	6mL/6mL	6mL/6mL	1.00

Available Cyanide by FIA, Ligand Exchange and Amperometric Detection**Prep: Method Prep: Ag**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23C0907							
A3C0826-01	WG	D6888-09	03/22/23 09:00	03/23/23 10:51	5mL/5mL	5mL/5mL	1.00
A3C0826-02	WG	D6888-09	03/22/23 10:15	03/23/23 10:51	5mL/5mL	5mL/5mL	1.00
A3C0826-03	WG	D6888-09	03/22/23 11:45	03/23/23 10:51	5mL/5mL	5mL/5mL	1.00
A3C0826-04	WG	D6888-09	03/22/23 12:40	03/23/23 10:51	5mL/5mL	5mL/5mL	1.00
A3C0826-05	WG	D6888-09	03/22/23 12:55	03/23/23 10:51	5mL/5mL	5mL/5mL	1.00
A3C0826-06	WG	D6888-09	03/22/23 13:40	03/23/23 10:51	5mL/5mL	5mL/5mL	1.00
A3C0826-07	WG	D6888-09	03/22/23 14:30	03/23/23 10:51	5mL/5mL	5mL/5mL	1.00

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Portland, OR 97219

Project: **Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001F**Project Manager: **John Renda****Report ID:****A3C0826 - 05 19 23 0544****SAMPLE PREPARATION INFORMATION****Free Cyanide by Microdiffusion/Colorimetric Spectrophotometry****Prep: Microdiffusion**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23C1077							
A3C0826-02	WG	D4282-02	03/22/23 10:15	03/28/23 10:15	3mL/3mL	3mL/3mL	1.00
A3C0826-03	WG	D4282-02	03/22/23 11:45	03/28/23 10:15	3mL/3mL	3mL/3mL	1.00
A3C0826-04	WG	D4282-02	03/22/23 12:40	03/28/23 10:15	3mL/3mL	3mL/3mL	1.00
A3C0826-05	WG	D4282-02	03/22/23 12:55	03/28/23 10:15	3mL/3mL	3mL/3mL	1.00
Batch: 23D0024							
A3C0826-01	WG	D4282-02	03/22/23 09:00	04/03/23 10:10	3mL/3mL	3mL/3mL	1.00
A3C0826-06	WG	D4282-02	03/22/23 13:40	04/03/23 10:10	3mL/3mL	3mL/3mL	1.00
A3C0826-07	WG	D4282-02	03/22/23 14:30	04/03/23 10:10	3mL/3mL	3mL/3mL	1.00

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Portland, OR 97219**Project: **Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001F**Project Manager: **John Renda****Report ID:****A3C0826 - 05 19 23 0544****Analytical Resources, LLC****SAMPLE PREPARATION INFORMATION****Washington Department of Ecology Methods****Prep: EPA 3510C SepF**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: BLC0804							
A3C0826-01	WG	WA EPH	03/22/23 09:00	03/30/23 11:37	500mL/1mL	500mL/1mL	1.00
A3C0826-05	WG	WA EPH	03/22/23 12:55	03/30/23 11:37	500mL/1mL	500mL/1mL	1.00

Prep: EPA 5030C (Purge and Trap)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: BLC0828							
A3C0826-01	WG	WA VPH	03/22/23 09:00	03/30/23 15:42	10mL/10ml	10mL/10ml	1.00
A3C0826-05	WG	WA VPH	03/22/23 12:55	03/30/23 15:42	10mL/10ml	10mL/10ml	1.00

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Project Manager: **John Renda**

Report ID:

A3C0826 - 05 19 23 0544

QUALIFIER DEFINITIONS

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

Apex Laboratories

- E** Estimated Value. The result is above the calibration range of the instrument.
- F-13** The chromatographic pattern does not resemble the fuel standard used for quantitation
- F-16** Results for oil are estimated due to overlap from the reported diesel result.
- J** Estimated Result. Result detected below the lowest point of the calibration curve, but above the specified MDL.
- PRES** Incomplete field preservation. Additional preservative was added to adjust the pH within the appropriate range for this analysis.
- Q-01** Spike recovery and/or RPD is outside acceptance limits.
- Q-02** Spike recovery is outside of established control limits due to matrix interference.
- Q-03** Spike recovery and/or RPD is outside control limits due to the high concentration of analyte present in the sample.
- Q-19** Blank Spike Duplicate (BSD) sample analyzed in place of Matrix Spike/Duplicate samples due to limited sample amount available for analysis.
- Q-42** Matrix Spike and/or Duplicate analysis was performed on this sample. % Recovery or RPD for this analyte is outside laboratory control limits. (Refer to the QC Section of Analytical Report.)
- Q-54** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +1%. The results are reported as Estimated Values.
- Q-54a** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +12%. 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 +14%. 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 +17%. 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 +2%. The results are reported as Estimated Values.
- Q-54e** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +21%. The results are reported as Estimated Values.
- Q-54f** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +3%. The results are reported as Estimated Values.
- Q-54g** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +34%. The results are reported as Estimated Values.
- Q-54h** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +4%. The results are reported as Estimated Values.
- Q-54i** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +7%. The results are reported as Estimated Values.

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A3C0826 - 05 19 23 0544

- Q-54j** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +8%. The results are reported as Estimated Values.
- Q-54k** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -1%. The results are reported as Estimated Values.
- Q-54l** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -10%. The results are reported as Estimated Values.
- Q-54m** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -11%. The results are reported as Estimated Values.
- Q-54n** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -12%. The results are reported as Estimated Values.
- Q-54o** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -17%. The results are reported as Estimated Values.
- Q-54p** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -18%. The results are reported as Estimated Values.
- Q-54q** 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-54r** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -20%. The results are reported as Estimated Values.
- Q-54s** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -27%. The results are reported as Estimated Values.
- Q-54t** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -28%. The results are reported as Estimated Values.
- Q-54u** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -3%. The results are reported as Estimated Values.
- Q-54v** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -33%. The results are reported as Estimated Values.
- Q-54w** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -4%. The results are reported as Estimated Values.
- Q-54x** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -40%. The results are reported as Estimated Values.
- Q-54y** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -7%. The results are reported as Estimated Values.
- Q-54z** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -9%. The results are reported as Estimated Values.
- Q-55** Daily CCV/LCS recovery for this analyte was below the +/-20% criteria listed in EPA 8260, however there is adequate sensitivity to ensure detection at the reporting level.
- Q-56** Daily CCV/LCS recovery for this analyte was above the +/-20% criteria listed in EPA 8260
- R-02** The Reporting Limit for this analyte has been raised to account for interference from coeluting organic compounds present in the sample.
- R-06** Reporting level raised due to possible carryover from a previous sample.

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A3C0826 - 05 19 23 0544

S-05 Surrogate recovery is estimated due to sample dilution required for high analyte concentration and/or matrix interference.

Analytical Resources, LLC

U This analyte is not detected above the reporting limit (RL) or if noted, not detected above the limit of detection (LOD).

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REPORTING NOTES AND CONVENTIONS:

Abbreviations:

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

Detection Limits: Limit of Detection (LOD)

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

Reporting Limits: Limit of Quantitation (LOQ)

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

Reporting Conventions:

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

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

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

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

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

Results for Volatiles analyses on soils and sediments that are reported on a "dry weight" basis include the water miscible solvent (WMS) correction referenced in the EPA 8000 Method guidance documents. Solid and Liquid samples reported on an "As Received" basis do not have the WMS correction applied, as dry weight was not performed.

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).

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REPORTING NOTES AND CONVENTIONS (Cont.):

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.

-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, if results are not reported to the MDL.

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

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

Soil and Sediment Samples:

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

Sampling and Preservation Notes:

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

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

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

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

Apex Laboratories

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

Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

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

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125
Portland, OR 97219

Project: **Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.**

Project Number: **000029-02.84 T-01.001F**

Project Manager: **John Renda**

Report ID:

A3C0826 - 05 19 23 0544

LABORATORY ACCREDITATION INFORMATION

ORELAP Certification ID: OR100062 (Primary Accreditation) -

EPA ID: OR01039

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

Apex Laboratories

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

Secondary Accreditations

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

Subcontract Laboratory Accreditations

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

Field Testing Parameters

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

Apex Laboratories

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APEX LABS COOLER RECEIPT FORM

Client: Anchor QEA Element WO#: A3 10826Project/Project #: Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.

Delivery Info:

Date/time received: 3/23/23 @ 810 By: JS
Delivered by: Apex ☒ Client ☐ ESS ☐ FedEx ☐ UPS ☐ Radio ☐ Morgan ☐ SDS ☐ Evergreen ☐ Other ☐Cooler Inspection Date/time inspected: 3/23/23 @ 925 By: JSChain of Custody included? Yes ☒ No ☐Signed/dated by client? Yes ☒ No ☐

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	<u>2.3</u>	<u>3.1</u>	<u>3.3</u>				
Custody seals? (Y/N)	<u>N</u>	<u>N</u>	<u>N</u>				
Received on ice? (Y/N)	<u>y</u>	<u>y</u>	<u>y</u>				
Temp. blanks? (Y/N)	<u>y</u>	<u>y</u>	<u>y</u>				
Ice type: (Gel/Real/Other)	<u>real</u>	<u>real</u>	<u>real</u>				
Condition (In/Out):	<u>In</u>	<u>In</u>	<u>In</u>				

Cooler out of temp? (Y/N) Possible reason why:

Green dots applied to out of temperature samples? Yes ☐ No ☒Out of temperature samples form initiated? Yes ☐ No ☒Sample Inspection: Date/time inspected: 3/23/23 @ 1010 By: JSAll samples intact? Yes ☒ No ☐ Comments:Bottle labels/COCs agree? Yes ☒ No ☐ Comments:COC/container discrepancies form initiated? Yes ☐ No ☒Containers/volumes received appropriate for analysis? Yes ☒ No ☐ Comments:Do VOA vials have visible headspace? Yes ☒ No ☐ NA ☐Comments: 116 vials have HS on 615-47.Water samples: pH checked: Yes ☒ No ☐ NA ☐ pH appropriate? Yes ☐ No ☒ NA ☐Comments: pH 9 on 125ml NaOH brown polys on 615-49, 615-51, 615-52Additional information: TB# 3255

Labeled by:

Witness:

Cooler Inspected by:

Form Y-003 R-00

Apex Laboratories

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Darwin Thomas, Business Development Director

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