



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: A3C0670 - 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 A3C0670, which was received by the laboratory on 3/17/2023 at 8:15:00AM.

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](mailto: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.

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Cooler Receipt Information

(See Cooler Receipt Form for details)

Default Cooler      1.9      degC

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This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.

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

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Darwin Thomas, Business Development Director

**ANALYTICAL REPORT****Apex Laboratories, LLC**

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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:****A3C0670 - 05 19 23 0532****ANALYTICAL REPORT FOR SAMPLES****SAMPLE INFORMATION**

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
GS-031623-27	A3C0670-01	WG	03/16/23 10:05	03/17/23 08:15
GS-031623-28	A3C0670-02	WG	03/16/23 10:10	03/17/23 08:15
GS-031623-29	A3C0670-03	WG	03/16/23 11:20	03/17/23 08:15
GS-031623-30	A3C0670-04	WG	03/16/23 11:30	03/17/23 08:15
GS-031623-31	A3C0670-05	WG	03/16/23 13:00	03/17/23 08:15
GS-031623-32	A3C0670-06	WG	03/16/23 14:40	03/17/23 08:15
TB-031623	A3C0670-07	W	03/16/23 14:55	03/17/23 08:15

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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
<b>GS-031623-27 (A3C0670-01)</b>				<b>Matrix: WG</b>		<b>Batch: 23C0990</b>		
Acetone	ND	10.0	20.0	ug/L	1	03/25/23 02:40	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	03/25/23 02:40	EPA 8260D	
Benzene	ND	0.100	0.200	ug/L	1	03/25/23 02:40	EPA 8260D	
Bromobenzene	ND	0.250	0.500	ug/L	1	03/25/23 02:40	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	03/25/23 02:40	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	03/25/23 02:40	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	03/25/23 02:40	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	03/25/23 02:40	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	03/25/23 02:40	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 02:40	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 02:40	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 02:40	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	03/25/23 02:40	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	03/25/23 02:40	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	03/25/23 02:40	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	03/25/23 02:40	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	03/25/23 02:40	EPA 8260D	
Chloromethane	ND	2.50	5.00	ug/L	1	03/25/23 02:40	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/25/23 02:40	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/25/23 02:40	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	03/25/23 02:40	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	03/25/23 02:40	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	03/25/23 02:40	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	03/25/23 02:40	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/25/23 02:40	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/25/23 02:40	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/25/23 02:40	EPA 8260D	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	03/25/23 02:40	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	03/25/23 02:40	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	03/25/23 02:40	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	03/25/23 02:40	EPA 8260D	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	03/25/23 02:40	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	03/25/23 02:40	EPA 8260D	

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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
<b>GS-031623-27 (A3C0670-01)</b>		<b>Matrix: WG</b>			<b>Batch: 23C0990</b>			
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	03/25/23 02:40	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	03/25/23 02:40	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	03/25/23 02:40	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	03/25/23 02:40	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/25/23 02:40	EPA 8260D	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/25/23 02:40	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	03/25/23 02:40	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	03/25/23 02:40	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	03/25/23 02:40	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 02:40	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	03/25/23 02:40	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	03/25/23 02:40	EPA 8260D	
4-Methyl-2-pentanone (MIBK)	ND	5.00	10.0	ug/L	1	03/25/23 02:40	EPA 8260D	
<b>Methyl tert-butyl ether (MTBE)</b>	<b>5.73</b>	0.500	1.00	ug/L	1	03/25/23 02:40	EPA 8260D	
Naphthalene	ND	1.00	2.00	ug/L	1	03/25/23 02:40	EPA 8260D	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	03/25/23 02:40	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	03/25/23 02:40	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	03/25/23 02:40	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	03/25/23 02:40	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	03/25/23 02:40	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	03/25/23 02:40	EPA 8260D	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/25/23 02:40	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/25/23 02:40	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	03/25/23 02:40	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	03/25/23 02:40	EPA 8260D	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	03/25/23 02:40	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	03/25/23 02:40	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	03/25/23 02:40	EPA 8260D	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 02:40	EPA 8260D	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 02:40	EPA 8260D	
<b>Vinyl chloride</b>	<b>1.99</b>	0.200	0.400	ug/L	1	03/25/23 02:40	EPA 8260D	
m,p-Xylene	ND	0.500	1.00	ug/L	1	03/25/23 02:40	EPA 8260D	
o-Xylene	ND	0.250	0.500	ug/L	1	03/25/23 02:40	EPA 8260D	

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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
<b>GS-031623-27 (A3C0670-01)</b>		<b>Matrix: WG</b>			<b>Batch: 23C0990</b>			
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 100 %	Limits: 80-120 %	1	03/25/23 02:40	EPA 8260D		
Toluene-d8 (Surr)		102 %	80-120 %	1	03/25/23 02:40	EPA 8260D		
4-Bromofluorobenzene (Surr)		104 %	80-120 %	1	03/25/23 02:40	EPA 8260D		
<b>GS-031623-28 (A3C0670-02)</b>		<b>Matrix: WG</b>			<b>Batch: 23C0990</b>			
Acetone	ND	10.0	20.0	ug/L	1	03/25/23 11:41	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	03/25/23 11:41	EPA 8260D	
<b>Benzene</b>	<b>120</b>	0.100	0.200	ug/L	1	03/25/23 11:41	EPA 8260D	
Bromobenzene	ND	0.250	0.500	ug/L	1	03/25/23 11:41	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	03/25/23 11:41	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	03/25/23 11:41	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	03/25/23 11:41	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	03/25/23 11:41	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	03/25/23 11:41	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 11:41	EPA 8260D	
<b>sec-Butylbenzene</b>	<b>0.510</b>	0.500	1.00	ug/L	1	03/25/23 11:41	EPA 8260D	<b>J</b>
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 11:41	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	03/25/23 11:41	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	03/25/23 11:41	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	03/25/23 11:41	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	03/25/23 11:41	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	03/25/23 11:41	EPA 8260D	
Chloromethane	ND	2.50	5.00	ug/L	1	03/25/23 11:41	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/25/23 11:41	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/25/23 11:41	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	03/25/23 11:41	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	03/25/23 11:41	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	03/25/23 11:41	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	03/25/23 11:41	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/25/23 11:41	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/25/23 11:41	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/25/23 11:41	EPA 8260D	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	03/25/23 11:41	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	03/25/23 11:41	EPA 8260D	

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Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0670 - 05 19 23 0532

## ANALYTICAL SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-031623-28 (A3C0670-02)		Matrix: WG			Batch: 23C0990			
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	03/25/23 11:41	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	03/25/23 11:41	EPA 8260D	
cis-1,2-Dichloroethene	0.540	0.200	0.400	ug/L	1	03/25/23 11:41	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	03/25/23 11:41	EPA 8260D	
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	03/25/23 11:41	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	03/25/23 11:41	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	03/25/23 11:41	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	03/25/23 11:41	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/25/23 11:41	EPA 8260D	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/25/23 11:41	EPA 8260D	
Ethylbenzene	20.0	0.250	0.500	ug/L	1	03/25/23 11:41	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	03/25/23 11:41	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	03/25/23 11:41	EPA 8260D	
Isopropylbenzene	4.51	0.500	1.00	ug/L	1	03/25/23 11:41	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	03/25/23 11:41	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	03/25/23 11:41	EPA 8260D	
4-Methyl-2-pentanone (MIBK)	ND	5.00	10.0	ug/L	1	03/25/23 11:41	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	03/25/23 11:41	EPA 8260D	
n-Propylbenzene	0.340	0.250	0.500	ug/L	1	03/25/23 11:41	EPA 8260D	J
Styrene	ND	0.500	1.00	ug/L	1	03/25/23 11:41	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	03/25/23 11:41	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	03/25/23 11:41	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	03/25/23 11:41	EPA 8260D	
Toluene	6.17	0.500	1.00	ug/L	1	03/25/23 11:41	EPA 8260D	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/25/23 11:41	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/25/23 11:41	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	03/25/23 11:41	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	03/25/23 11:41	EPA 8260D	
Trichloroethene (TCE)	ND	0.400	0.400	ug/L	1	03/25/23 11:41	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	03/25/23 11:41	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	03/25/23 11:41	EPA 8260D	
1,2,4-Trimethylbenzene	12.5	0.500	1.00	ug/L	1	03/25/23 11:41	EPA 8260D	
1,3,5-Trimethylbenzene	2.61	0.500	1.00	ug/L	1	03/25/23 11:41	EPA 8260D	

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Project Manager: John Renda

Report ID:

A3C0670 - 05 19 23 0532

## ANALYTICAL SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-031623-28 (A3C0670-02)		Matrix: WG			Batch: 23C0990			
Vinyl chloride	0.950	0.200	0.400	ug/L	1	03/25/23 11:41	EPA 8260D	
m,p-Xylene	10.5	0.500	1.00	ug/L	1	03/25/23 11:41	EPA 8260D	
o-Xylene	13.3	0.250	0.500	ug/L	1	03/25/23 11:41	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 99 %		Limits: 80-120 %	1	03/25/23 11:41	EPA 8260D	
Toluene-d8 (Surr)		101 %		80-120 %	1	03/25/23 11:41	EPA 8260D	
4-Bromofluorobenzene (Surr)		94 %		80-120 %	1	03/25/23 11:41	EPA 8260D	
GS-031623-28 (A3C0670-02RE1)		Matrix: WG			Batch: 23C1004			
Naphthalene	350	20.0	40.0	ug/L	20	03/26/23 16:42	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 99 %		Limits: 80-120 %	1	03/26/23 16:42	EPA 8260D	
Toluene-d8 (Surr)		101 %		80-120 %	1	03/26/23 16:42	EPA 8260D	
4-Bromofluorobenzene (Surr)		105 %		80-120 %	1	03/26/23 16:42	EPA 8260D	
GS-031623-29 (A3C0670-03)		Matrix: WG			Batch: 23C0990			V-01
Acetone	ND	100	200	ug/L	10	03/25/23 04:29	EPA 8260D	
Acrylonitrile	ND	10.0	20.0	ug/L	10	03/25/23 04:29	EPA 8260D	
Benzene	162	1.00	2.00	ug/L	10	03/25/23 04:29	EPA 8260D	
Bromobenzene	ND	2.50	5.00	ug/L	10	03/25/23 04:29	EPA 8260D	
Bromochloromethane	ND	5.00	10.0	ug/L	10	03/25/23 04:29	EPA 8260D	
Bromodichloromethane	ND	5.00	10.0	ug/L	10	03/25/23 04:29	EPA 8260D	
Bromoform	ND	5.00	10.0	ug/L	10	03/25/23 04:29	EPA 8260D	
Bromomethane	ND	50.0	50.0	ug/L	10	03/25/23 04:29	EPA 8260D	
2-Butanone (MEK)	ND	50.0	100	ug/L	10	03/25/23 04:29	EPA 8260D	
n-Butylbenzene	ND	5.00	10.0	ug/L	10	03/25/23 04:29	EPA 8260D	
sec-Butylbenzene	ND	5.00	10.0	ug/L	10	03/25/23 04:29	EPA 8260D	
tert-Butylbenzene	ND	5.00	10.0	ug/L	10	03/25/23 04:29	EPA 8260D	
Carbon disulfide	ND	50.0	100	ug/L	10	03/25/23 04:29	EPA 8260D	
Carbon tetrachloride	ND	5.00	10.0	ug/L	10	03/25/23 04:29	EPA 8260D	
Chlorobenzene	ND	2.50	5.00	ug/L	10	03/25/23 04:29	EPA 8260D	
Chloroethane	ND	50.0	50.0	ug/L	10	03/25/23 04:29	EPA 8260D	
Chloroform	ND	5.00	10.0	ug/L	10	03/25/23 04:29	EPA 8260D	
Chloromethane	ND	25.0	50.0	ug/L	10	03/25/23 04:29	EPA 8260D	
2-Chlorotoluene	ND	5.00	10.0	ug/L	10	03/25/23 04:29	EPA 8260D	
4-Chlorotoluene	ND	5.00	10.0	ug/L	10	03/25/23 04:29	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:****A3C0670 - 05 19 23 0532**

## ANALYTICAL SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>GS-031623-29 (A3C0670-03)</b>		<b>Matrix: WG</b>			<b>Batch: 23C0990</b>		<b>V-01</b>	
Dibromochloromethane	ND	5.00	10.0	ug/L	10	03/25/23 04:29	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	25.0	50.0	ug/L	10	03/25/23 04:29	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	2.50	5.00	ug/L	10	03/25/23 04:29	EPA 8260D	
Dibromomethane	ND	5.00	10.0	ug/L	10	03/25/23 04:29	EPA 8260D	
1,2-Dichlorobenzene	ND	2.50	5.00	ug/L	10	03/25/23 04:29	EPA 8260D	
1,3-Dichlorobenzene	ND	2.50	5.00	ug/L	10	03/25/23 04:29	EPA 8260D	
1,4-Dichlorobenzene	ND	2.50	5.00	ug/L	10	03/25/23 04:29	EPA 8260D	
Dichlorodifluoromethane	ND	5.00	10.0	ug/L	10	03/25/23 04:29	EPA 8260D	
1,1-Dichloroethane	ND	2.00	4.00	ug/L	10	03/25/23 04:29	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	2.00	4.00	ug/L	10	03/25/23 04:29	EPA 8260D	
1,2-Dichloropropane	ND	2.50	5.00	ug/L	10	03/25/23 04:29	EPA 8260D	
1,3-Dichloropropane	ND	5.00	10.0	ug/L	10	03/25/23 04:29	EPA 8260D	
2,2-Dichloropropane	ND	5.00	10.0	ug/L	10	03/25/23 04:29	EPA 8260D	
1,1-Dichloropropene	ND	5.00	10.0	ug/L	10	03/25/23 04:29	EPA 8260D	
cis-1,3-Dichloropropene	ND	5.00	10.0	ug/L	10	03/25/23 04:29	EPA 8260D	
trans-1,3-Dichloropropene	ND	5.00	10.0	ug/L	10	03/25/23 04:29	EPA 8260D	
<b>Ethylbenzene</b>	<b>46.3</b>	2.50	5.00	ug/L	10	03/25/23 04:29	EPA 8260D	
Hexachlorobutadiene	ND	25.0	50.0	ug/L	10	03/25/23 04:29	EPA 8260D	
2-Hexanone	ND	50.0	100	ug/L	10	03/25/23 04:29	EPA 8260D	
<b>Isopropylbenzene</b>	<b>6.20</b>	5.00	10.0	ug/L	10	03/25/23 04:29	EPA 8260D	<b>J</b>
4-Isopropyltoluene	ND	5.00	10.0	ug/L	10	03/25/23 04:29	EPA 8260D	
Methylene chloride	ND	50.0	100	ug/L	10	03/25/23 04:29	EPA 8260D	
4-Methyl-2-pentanone (MIBK)	ND	50.0	100	ug/L	10	03/25/23 04:29	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	5.00	10.0	ug/L	10	03/25/23 04:29	EPA 8260D	
n-Propylbenzene	ND	2.50	5.00	ug/L	10	03/25/23 04:29	EPA 8260D	
Styrene	ND	5.00	10.0	ug/L	10	03/25/23 04:29	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	2.00	4.00	ug/L	10	03/25/23 04:29	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	2.50	5.00	ug/L	10	03/25/23 04:29	EPA 8260D	
Tetrachloroethene (PCE)	ND	2.00	4.00	ug/L	10	03/25/23 04:29	EPA 8260D	
Toluene	ND	5.00	10.0	ug/L	10	03/25/23 04:29	EPA 8260D	
1,2,3-Trichlorobenzene	ND	10.0	20.0	ug/L	10	03/25/23 04:29	EPA 8260D	
1,2,4-Trichlorobenzene	ND	10.0	20.0	ug/L	10	03/25/23 04:29	EPA 8260D	
1,1,1-Trichloroethane	ND	2.00	4.00	ug/L	10	03/25/23 04:29	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:

A3C0670 - 05 19 23 0532

## ANALYTICAL SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-031623-29 (A3C0670-03)		Matrix: WG		Batch: 23C0990		V-01		
1,1,2-Trichloroethane	ND	2.50	5.00	ug/L	10	03/25/23 04:29	EPA 8260D	
Trichlorofluoromethane	ND	10.0	20.0	ug/L	10	03/25/23 04:29	EPA 8260D	
1,2,3-Trichloropropane	ND	5.00	10.0	ug/L	10	03/25/23 04:29	EPA 8260D	
1,2,4-Trimethylbenzene	19.4	5.00	10.0	ug/L	10	03/25/23 04:29	EPA 8260D	
1,3,5-Trimethylbenzene	7.30	5.00	10.0	ug/L	10	03/25/23 04:29	EPA 8260D	J
m,p-Xylene	13.5	5.00	10.0	ug/L	10	03/25/23 04:29	EPA 8260D	
o-Xylene	16.7	2.50	5.00	ug/L	10	03/25/23 04:29	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 100 %		Limits: 80-120 %	1	03/25/23 04:29	EPA 8260D	
Toluene-d8 (Surr)		102 %		80-120 %	1	03/25/23 04:29	EPA 8260D	
4-Bromofluorobenzene (Surr)		95 %		80-120 %	1	03/25/23 04:29	EPA 8260D	
GS-031623-29 (A3C0670-03RE1)		Matrix: WG		Batch: 23C1004		V-01		
Naphthalene	1780	100	200	ug/L	100	03/26/23 14:00	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 99 %		Limits: 80-120 %	1	03/26/23 14:00	EPA 8260D	
Toluene-d8 (Surr)		100 %		80-120 %	1	03/26/23 14:00	EPA 8260D	
4-Bromofluorobenzene (Surr)		102 %		80-120 %	1	03/26/23 14:00	EPA 8260D	
GS-031623-30 (A3C0670-04)		Matrix: WG		Batch: 23C0990				
Acetone	ND	10.0	20.0	ug/L	1	03/25/23 03:07	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	03/25/23 03:07	EPA 8260D	
Benzene	42.8	0.100	0.200	ug/L	1	03/25/23 03:07	EPA 8260D	
Bromobenzene	ND	0.250	0.500	ug/L	1	03/25/23 03:07	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	03/25/23 03:07	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	03/25/23 03:07	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	03/25/23 03:07	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	03/25/23 03:07	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	03/25/23 03:07	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 03:07	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 03:07	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 03:07	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	03/25/23 03:07	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	03/25/23 03:07	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	03/25/23 03:07	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	03/25/23 03:07	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:****A3C0670 - 05 19 23 0532**

## ANALYTICAL SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>GS-031623-30 (A3C0670-04)</b>		<b>Matrix: WG</b>			<b>Batch: 23C0990</b>			
Chloroform	ND	0.500	1.00	ug/L	1	03/25/23 03:07	EPA 8260D	
Chloromethane	ND	2.50	5.00	ug/L	1	03/25/23 03:07	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/25/23 03:07	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/25/23 03:07	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	03/25/23 03:07	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	03/25/23 03:07	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	03/25/23 03:07	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	03/25/23 03:07	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/25/23 03:07	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/25/23 03:07	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/25/23 03:07	EPA 8260D	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	03/25/23 03:07	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	03/25/23 03:07	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	03/25/23 03:07	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	03/25/23 03:07	EPA 8260D	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	03/25/23 03:07	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	03/25/23 03:07	EPA 8260D	
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	03/25/23 03:07	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	03/25/23 03:07	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	03/25/23 03:07	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	03/25/23 03:07	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/25/23 03:07	EPA 8260D	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/25/23 03:07	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	03/25/23 03:07	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	03/25/23 03:07	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	03/25/23 03:07	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 03:07	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	03/25/23 03:07	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	03/25/23 03:07	EPA 8260D	
4-Methyl-2-pentanone (MIBK)	ND	5.00	10.0	ug/L	1	03/25/23 03:07	EPA 8260D	
<b>Methyl tert-butyl ether (MTBE)</b>	<b>0.890</b>	0.500	1.00	ug/L	1	03/25/23 03:07	EPA 8260D	<b>J</b>
Naphthalene	ND	1.00	2.00	ug/L	1	03/25/23 03:07	EPA 8260D	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	03/25/23 03:07	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:****A3C0670 - 05 19 23 0532**

## ANALYTICAL SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>GS-031623-30 (A3C0670-04)</b>		<b>Matrix: WG</b>			<b>Batch: 23C0990</b>			
Styrene	ND	0.500	1.00	ug/L	1	03/25/23 03:07	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	03/25/23 03:07	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	03/25/23 03:07	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	03/25/23 03:07	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	03/25/23 03:07	EPA 8260D	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/25/23 03:07	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/25/23 03:07	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	03/25/23 03:07	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	03/25/23 03:07	EPA 8260D	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	03/25/23 03:07	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	03/25/23 03:07	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	03/25/23 03:07	EPA 8260D	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 03:07	EPA 8260D	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 03:07	EPA 8260D	
<b>Vinyl chloride</b>	<b>0.210</b>	0.200	0.400	ug/L	1	03/25/23 03:07	EPA 8260D	<b>J</b>
m,p-Xylene	ND	0.500	1.00	ug/L	1	03/25/23 03:07	EPA 8260D	
<b>o-Xylene</b>	<b>0.300</b>	0.250	0.500	ug/L	1	03/25/23 03:07	EPA 8260D	<b>J</b>
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 100 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>03/25/23 03:07</i>	<i>EPA 8260D</i>	
<i>Toluene-d8 (Surr)</i>		<i>101 %</i>		<i>80-120 %</i>	<i>1</i>	<i>03/25/23 03:07</i>	<i>EPA 8260D</i>	
<i>4-Bromofluorobenzene (Surr)</i>		<i>105 %</i>		<i>80-120 %</i>	<i>1</i>	<i>03/25/23 03:07</i>	<i>EPA 8260D</i>	
<b>GS-031623-31 (A3C0670-05)</b>		<b>Matrix: WG</b>			<b>Batch: 23C0990</b>			
Acetone	ND	10.0	20.0	ug/L	1	03/25/23 03:35	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	03/25/23 03:35	EPA 8260D	
<b>Benzene</b>	<b>0.100</b>	0.100	0.200	ug/L	1	03/25/23 03:35	EPA 8260D	<b>J</b>
Bromobenzene	ND	0.250	0.500	ug/L	1	03/25/23 03:35	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	03/25/23 03:35	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	03/25/23 03:35	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	03/25/23 03:35	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	03/25/23 03:35	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	03/25/23 03:35	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 03:35	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 03:35	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 03:35	EPA 8260D	

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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:****A3C0670 - 05 19 23 0532**

## ANALYTICAL SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>GS-031623-31 (A3C0670-05)</b>		<b>Matrix: WG</b>			<b>Batch: 23C0990</b>			
Carbon disulfide	ND	5.00	10.0	ug/L	1	03/25/23 03:35	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	03/25/23 03:35	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	03/25/23 03:35	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	03/25/23 03:35	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	03/25/23 03:35	EPA 8260D	
Chloromethane	ND	2.50	5.00	ug/L	1	03/25/23 03:35	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/25/23 03:35	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/25/23 03:35	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	03/25/23 03:35	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	03/25/23 03:35	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	03/25/23 03:35	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	03/25/23 03:35	EPA 8260D	
<b>1,2-Dichlorobenzene</b>	<b>2.30</b>	0.250	0.500	ug/L	1	03/25/23 03:35	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/25/23 03:35	EPA 8260D	
<b>1,4-Dichlorobenzene</b>	<b>2.21</b>	0.250	0.500	ug/L	1	03/25/23 03:35	EPA 8260D	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	03/25/23 03:35	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	03/25/23 03:35	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	03/25/23 03:35	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	03/25/23 03:35	EPA 8260D	
<b>cis-1,2-Dichloroethene</b>	<b>0.460</b>	0.200	0.400	ug/L	1	03/25/23 03:35	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	03/25/23 03:35	EPA 8260D	
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	03/25/23 03:35	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	03/25/23 03:35	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	03/25/23 03:35	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	03/25/23 03:35	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/25/23 03:35	EPA 8260D	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/25/23 03:35	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	03/25/23 03:35	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	03/25/23 03:35	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	03/25/23 03:35	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 03:35	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	03/25/23 03:35	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	03/25/23 03:35	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:

A3C0670 - 05 19 23 0532

## ANALYTICAL SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-031623-31 (A3C0670-05)		Matrix: WG			Batch: 23C0990			
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	03/25/23 03:35	EPA 8260D	
Methyl tert-butyl ether (MTBE)	2.56	0.500	1.00	ug/L	1	03/25/23 03:35	EPA 8260D	
Naphthalene	ND	1.00	2.00	ug/L	1	03/25/23 03:35	EPA 8260D	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	03/25/23 03:35	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	03/25/23 03:35	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	03/25/23 03:35	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	03/25/23 03:35	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	03/25/23 03:35	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	03/25/23 03:35	EPA 8260D	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/25/23 03:35	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/25/23 03:35	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	03/25/23 03:35	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	03/25/23 03:35	EPA 8260D	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	03/25/23 03:35	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	03/25/23 03:35	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	03/25/23 03:35	EPA 8260D	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 03:35	EPA 8260D	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 03:35	EPA 8260D	
Vinyl chloride	ND	0.200	0.400	ug/L	1	03/25/23 03:35	EPA 8260D	
m,p-Xylene	ND	0.500	1.00	ug/L	1	03/25/23 03:35	EPA 8260D	
o-Xylene	ND	0.250	0.500	ug/L	1	03/25/23 03:35	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 100 %		Limits: 80-120 %	1	03/25/23 03:35	EPA 8260D	
Toluene-d8 (Surr)		101 %		80-120 %	1	03/25/23 03:35	EPA 8260D	
4-Bromofluorobenzene (Surr)		102 %		80-120 %	1	03/25/23 03:35	EPA 8260D	
GS-031623-32 (A3C0670-06)		Matrix: WG			Batch: 23C0990			
Acetone	30.9	10.0	20.0	ug/L	1	03/25/23 04:02	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	03/25/23 04:02	EPA 8260D	
Benzene	ND	0.100	0.200	ug/L	1	03/25/23 04:02	EPA 8260D	
Bromobenzene	ND	0.250	0.500	ug/L	1	03/25/23 04:02	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	03/25/23 04:02	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	03/25/23 04:02	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	03/25/23 04:02	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	03/25/23 04:02	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:****A3C0670 - 05 19 23 0532****ANALYTICAL SAMPLE RESULTS****Volatile Organic Compounds by EPA 8260D**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>GS-031623-32 (A3C0670-06)</b>		<b>Matrix: WG</b>			<b>Batch: 23C0990</b>			
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	03/25/23 04:02	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 04:02	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 04:02	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 04:02	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	03/25/23 04:02	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	03/25/23 04:02	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	03/25/23 04:02	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	03/25/23 04:02	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	03/25/23 04:02	EPA 8260D	
Chloromethane	ND	2.50	5.00	ug/L	1	03/25/23 04:02	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/25/23 04:02	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/25/23 04:02	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	03/25/23 04:02	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	03/25/23 04:02	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	03/25/23 04:02	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	03/25/23 04:02	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/25/23 04:02	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/25/23 04:02	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/25/23 04:02	EPA 8260D	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	03/25/23 04:02	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	03/25/23 04:02	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	03/25/23 04:02	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	03/25/23 04:02	EPA 8260D	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	03/25/23 04:02	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	03/25/23 04:02	EPA 8260D	
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	03/25/23 04:02	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	03/25/23 04:02	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	03/25/23 04:02	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	03/25/23 04:02	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/25/23 04:02	EPA 8260D	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/25/23 04:02	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	03/25/23 04:02	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	03/25/23 04:02	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:****A3C0670 - 05 19 23 0532**

## ANALYTICAL SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>GS-031623-32 (A3C0670-06)</b>		<b>Matrix: WG</b>			<b>Batch: 23C0990</b>			
2-Hexanone	ND	5.00	10.0	ug/L	1	03/25/23 04:02	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 04:02	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	03/25/23 04:02	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	03/25/23 04:02	EPA 8260D	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	03/25/23 04:02	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	03/25/23 04:02	EPA 8260D	
Naphthalene	ND	1.00	2.00	ug/L	1	03/25/23 04:02	EPA 8260D	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	03/25/23 04:02	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	03/25/23 04:02	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	03/25/23 04:02	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	03/25/23 04:02	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	03/25/23 04:02	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	03/25/23 04:02	EPA 8260D	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/25/23 04:02	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/25/23 04:02	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	03/25/23 04:02	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	03/25/23 04:02	EPA 8260D	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	03/25/23 04:02	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	03/25/23 04:02	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	03/25/23 04:02	EPA 8260D	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 04:02	EPA 8260D	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 04:02	EPA 8260D	
Vinyl chloride	ND	0.200	0.400	ug/L	1	03/25/23 04:02	EPA 8260D	
m,p-Xylene	ND	0.500	1.00	ug/L	1	03/25/23 04:02	EPA 8260D	
o-Xylene	ND	0.250	0.500	ug/L	1	03/25/23 04:02	EPA 8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 99 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>03/25/23 04:02</i>	<i>EPA 8260D</i>	
<i>Toluene-d8 (Surr)</i>		<i>102 %</i>		<i>80-120 %</i>	<i>1</i>	<i>03/25/23 04:02</i>	<i>EPA 8260D</i>	
<i>4-Bromofluorobenzene (Surr)</i>		<i>105 %</i>		<i>80-120 %</i>	<i>1</i>	<i>03/25/23 04:02</i>	<i>EPA 8260D</i>	

**TB-031623 (A3C0670-07)****Matrix: W****Batch: 23C0990**

Acetone	ND	10.0	20.0	ug/L	1	03/25/23 02:13	EPA 8260D
Acrylonitrile	ND	1.00	2.00	ug/L	1	03/25/23 02:13	EPA 8260D
Benzene	ND	0.100	0.200	ug/L	1	03/25/23 02:13	EPA 8260D
Bromobenzene	ND	0.250	0.500	ug/L	1	03/25/23 02:13	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 97219Project: **Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001F**Project Manager: **John Renda****Report ID:****A3C0670 - 05 19 23 0532**

## ANALYTICAL SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>TB-031623 (A3C0670-07)</b>		<b>Matrix: W</b>			<b>Batch: 23C0990</b>			
Bromochloromethane	ND	0.500	1.00	ug/L	1	03/25/23 02:13	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	03/25/23 02:13	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	03/25/23 02:13	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	03/25/23 02:13	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	03/25/23 02:13	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 02:13	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 02:13	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 02:13	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	03/25/23 02:13	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	03/25/23 02:13	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	03/25/23 02:13	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	03/25/23 02:13	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	03/25/23 02:13	EPA 8260D	
Chloromethane	ND	2.50	5.00	ug/L	1	03/25/23 02:13	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/25/23 02:13	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/25/23 02:13	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	03/25/23 02:13	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	03/25/23 02:13	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	03/25/23 02:13	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	03/25/23 02:13	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/25/23 02:13	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/25/23 02:13	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/25/23 02:13	EPA 8260D	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	03/25/23 02:13	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	03/25/23 02:13	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	03/25/23 02:13	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	03/25/23 02:13	EPA 8260D	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	03/25/23 02:13	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	03/25/23 02:13	EPA 8260D	
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	03/25/23 02:13	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	03/25/23 02:13	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	03/25/23 02:13	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	03/25/23 02:13	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:****A3C0670 - 05 19 23 0532**

## ANALYTICAL SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>TB-031623 (A3C0670-07)</b>		<b>Matrix: W</b>			<b>Batch: 23C0990</b>			
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/25/23 02:13	EPA 8260D	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/25/23 02:13	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	03/25/23 02:13	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	03/25/23 02:13	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	03/25/23 02:13	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 02:13	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	03/25/23 02:13	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	03/25/23 02:13	EPA 8260D	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	03/25/23 02:13	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	03/25/23 02:13	EPA 8260D	
Naphthalene	ND	1.00	2.00	ug/L	1	03/25/23 02:13	EPA 8260D	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	03/25/23 02:13	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	03/25/23 02:13	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	03/25/23 02:13	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	03/25/23 02:13	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	03/25/23 02:13	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	03/25/23 02:13	EPA 8260D	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/25/23 02:13	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/25/23 02:13	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	03/25/23 02:13	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	03/25/23 02:13	EPA 8260D	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	03/25/23 02:13	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	03/25/23 02:13	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	03/25/23 02:13	EPA 8260D	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 02:13	EPA 8260D	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 02:13	EPA 8260D	
Vinyl chloride	ND	0.200	0.400	ug/L	1	03/25/23 02:13	EPA 8260D	
m,p-Xylene	ND	0.500	1.00	ug/L	1	03/25/23 02:13	EPA 8260D	
o-Xylene	ND	0.250	0.500	ug/L	1	03/25/23 02:13	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 100 %		Limits: 80-120 %	1	03/25/23 02:13	EPA 8260D	
Toluene-d8 (Surr)		101 %		80-120 %	1	03/25/23 02:13	EPA 8260D	
4-Bromofluorobenzene (Surr)		104 %		80-120 %	1	03/25/23 02:13	EPA 8260D	

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## ANALYTICAL REPORT

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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:

A3C0670 - 05 19 23 0532

## 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-031623-29 (A3C0670-03)		Matrix: WG			Batch: 23C1096		V-01	
1,1-Dichloroethene	ND	0.250	0.500	ug/L	25	03/28/23 15:32	EPA 8260D SIM	
cis-1,2-Dichloroethene	ND	0.250	0.500	ug/L	25	03/28/23 15:32	EPA 8260D SIM	
trans-1,2-Dichloroethene	ND	0.250	0.500	ug/L	25	03/28/23 15:32	EPA 8260D SIM	
Trichloroethene (TCE)	ND	0.250	0.500	ug/L	25	03/28/23 15:32	EPA 8260D SIM	
Vinyl chloride	ND	0.250	0.500	ug/L	25	03/28/23 15:32	EPA 8260D SIM	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 103 %	Limits: 80-120 %	1	03/28/23 15:32	EPA 8260D SIM		
Toluene-d8 (Surr)		99 %	80-120 %	1	03/28/23 15:32	EPA 8260D SIM		
4-Bromofluorobenzene (Surr)		93 %	80-120 %	1	03/28/23 15:32	EPA 8260D SIM		

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## 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
<b>GS-031623-27 (A3C0670-01)</b>		<b>Matrix: WG</b>			<b>Batch: 23C0718</b>			
Acenaphthene	ND	0.0643	0.0643	ug/L	1	03/20/23 16:44	EPA 8270E LVI	
Acenaphthylene	ND	0.0643	0.0643	ug/L	1	03/20/23 16:44	EPA 8270E LVI	
Anthracene	ND	0.0321	0.0643	ug/L	1	03/20/23 16:44	EPA 8270E LVI	
Benz(a)anthracene	ND	0.0161	0.0321	ug/L	1	03/20/23 16:44	EPA 8270E LVI	
Benzo(a)pyrene	ND	0.0161	0.0321	ug/L	1	03/20/23 16:44	EPA 8270E LVI	
Benzo(b)fluoranthene	ND	0.0161	0.0321	ug/L	1	03/20/23 16:44	EPA 8270E LVI	
Benzo(k)fluoranthene	ND	0.0161	0.0321	ug/L	1	03/20/23 16:44	EPA 8270E LVI	
Benzo(g,h,i)perylene	ND	0.0321	0.0643	ug/L	1	03/20/23 16:44	EPA 8270E LVI	
Chrysene	ND	0.0161	0.0321	ug/L	1	03/20/23 16:44	EPA 8270E LVI	
Dibenz(a,h)anthracene	ND	0.0161	0.0321	ug/L	1	03/20/23 16:44	EPA 8270E LVI	
Fluoranthene	ND	0.0321	0.0643	ug/L	1	03/20/23 16:44	EPA 8270E LVI	
Fluorene	ND	0.0321	0.0643	ug/L	1	03/20/23 16:44	EPA 8270E LVI	
Indeno(1,2,3-cd)pyrene	ND	0.0161	0.0321	ug/L	1	03/20/23 16:44	EPA 8270E LVI	
1-Methylnaphthalene	ND	0.0643	0.129	ug/L	1	03/20/23 16:44	EPA 8270E LVI	
2-Methylnaphthalene	ND	0.0643	0.129	ug/L	1	03/20/23 16:44	EPA 8270E LVI	
<b>Naphthalene</b>	<b>0.249</b>	0.0643	0.129	ug/L	1	03/20/23 16:44	EPA 8270E LVI	
Phenanthrene	ND	0.0643	0.129	ug/L	1	03/20/23 16:44	EPA 8270E LVI	
Pyrene	ND	0.0321	0.0643	ug/L	1	03/20/23 16:44	EPA 8270E LVI	
<b>Carbazole</b>	<b>0.0410</b>	0.0321	0.0643	ug/L	1	03/20/23 16:44	EPA 8270E LVI	<b>J</b>
Dibenzofuran	ND	0.0321	0.0643	ug/L	1	03/20/23 16:44	EPA 8270E LVI	
<i>Surrogate: Acenaphthylene-d8 (Surr)</i>		<i>Recovery: 118 %</i>		<i>Limits: 78-134 %</i>	<i>1</i>	<i>03/20/23 16:44</i>	<i>EPA 8270E LVI</i>	
<i>Benzo(a)pyrene-d12 (Surr)</i>		<i>123 %</i>		<i>80-132 %</i>	<i>1</i>	<i>03/20/23 16:44</i>	<i>EPA 8270E LVI</i>	

**GS-031623-28 (A3C0670-02)****Matrix: WG****Batch: 23C0718**

<b>Acenaphthene</b>	<b>0.0424</b>	0.0160	0.0320	ug/L	1	03/20/23 14:31	EPA 8270E LVI
<b>Acenaphthylene</b>	<b>0.144</b>	0.0160	0.0320	ug/L	1	03/20/23 14:31	EPA 8270E LVI
<b>Anthracene</b>	<b>0.0360</b>	0.0160	0.0320	ug/L	1	03/20/23 14:31	EPA 8270E LVI
Benz(a)anthracene	ND	0.00800	0.0160	ug/L	1	03/20/23 14:31	EPA 8270E LVI
Benzo(a)pyrene	ND	0.00800	0.0160	ug/L	1	03/20/23 14:31	EPA 8270E LVI
Benzo(b)fluoranthene	ND	0.00800	0.0160	ug/L	1	03/20/23 14:31	EPA 8270E LVI
Benzo(k)fluoranthene	ND	0.00800	0.0160	ug/L	1	03/20/23 14:31	EPA 8270E LVI
Benzo(g,h,i)perylene	ND	0.0160	0.0320	ug/L	1	03/20/23 14:31	EPA 8270E LVI
Chrysene	ND	0.00800	0.0160	ug/L	1	03/20/23 14:31	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:

A3C0670 - 05 19 23 0532

## 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-031623-28 (A3C0670-02)		Matrix: WG			Batch: 23C0718			
Dibenz(a,h)anthracene	ND	0.00800	0.0160	ug/L	1	03/20/23 14:31	EPA 8270E LVI	
Fluoranthene	ND	0.0160	0.0320	ug/L	1	03/20/23 14:31	EPA 8270E LVI	
Fluorene	ND	0.0160	0.0320	ug/L	1	03/20/23 14:31	EPA 8270E LVI	
Indeno(1,2,3-cd)pyrene	ND	0.00800	0.0160	ug/L	1	03/20/23 14:31	EPA 8270E LVI	
1-Methylnaphthalene	1.29	0.0320	0.0640	ug/L	1	03/20/23 14:31	EPA 8270E LVI	
2-Methylnaphthalene	0.140	0.0320	0.0640	ug/L	1	03/20/23 14:31	EPA 8270E LVI	
Phenanthrene	ND	0.0320	0.0640	ug/L	1	03/20/23 14:31	EPA 8270E LVI	
Pyrene	ND	0.0160	0.0320	ug/L	1	03/20/23 14:31	EPA 8270E LVI	
Carbazole	0.0160	0.0160	0.0320	ug/L	1	03/20/23 14:31	EPA 8270E LVI	J
Dibenzofuran	ND	0.0160	0.0320	ug/L	1	03/20/23 14:31	EPA 8270E LVI	
Surrogate: Acenaphthylene-d8 (Surr)		Recovery: 118 %		Limits: 78-134 %	1	03/20/23 14:31	EPA 8270E LVI	
Benzo(a)pyrene-d12 (Surr)		125 %		80-132 %	1	03/20/23 14:31	EPA 8270E LVI	
GS-031623-28 (A3C0670-02RE1)		Matrix: WG			Batch: 23C0718			
Naphthalene	319	6.40	12.8	ug/L	200	03/20/23 18:58	EPA 8270E LVI	
GS-031623-29 (A3C0670-03)		Matrix: WG			Batch: 23C0718			
Acenaphthene	212	0.409	0.819	ug/L	20	03/20/23 16:11	EPA 8270E LVI	
Acenaphthylene	ND	5.37	5.37	ug/L	20	03/20/23 16:11	EPA 8270E LVI	R-02
Anthracene	7.77	0.409	0.819	ug/L	20	03/20/23 16:11	EPA 8270E LVI	
Benz(a)anthracene	ND	0.205	0.409	ug/L	20	03/20/23 16:11	EPA 8270E LVI	
Benzo(a)pyrene	ND	0.205	0.409	ug/L	20	03/20/23 16:11	EPA 8270E LVI	
Benzo(b)fluoranthene	ND	0.205	0.409	ug/L	20	03/20/23 16:11	EPA 8270E LVI	
Benzo(k)fluoranthene	ND	0.205	0.409	ug/L	20	03/20/23 16:11	EPA 8270E LVI	
Benzo(g,h,i)perylene	ND	0.409	0.819	ug/L	20	03/20/23 16:11	EPA 8270E LVI	
Chrysene	ND	0.205	0.409	ug/L	20	03/20/23 16:11	EPA 8270E LVI	
Dibenz(a,h)anthracene	ND	0.205	0.409	ug/L	20	03/20/23 16:11	EPA 8270E LVI	
Fluoranthene	3.26	0.409	0.819	ug/L	20	03/20/23 16:11	EPA 8270E LVI	
Fluorene	44.7	0.409	0.819	ug/L	20	03/20/23 16:11	EPA 8270E LVI	
Indeno(1,2,3-cd)pyrene	ND	0.205	0.409	ug/L	20	03/20/23 16:11	EPA 8270E LVI	
1-Methylnaphthalene	124	0.819	1.64	ug/L	20	03/20/23 16:11	EPA 8270E LVI	
2-Methylnaphthalene	138	0.819	1.64	ug/L	20	03/20/23 16:11	EPA 8270E LVI	
Phenanthrene	54.5	0.819	1.64	ug/L	20	03/20/23 16:11	EPA 8270E LVI	
Pyrene	2.96	0.409	0.819	ug/L	20	03/20/23 16:11	EPA 8270E LVI	

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Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0670 - 05 19 23 0532

## 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-031623-29 (A3C0670-03)		Matrix: WG			Batch: 23C0718			
Carbazole	56.1	0.409	0.819	ug/L	20	03/20/23 16:11	EPA 8270E LVI	
Dibenzofuran	9.15	0.409	0.819	ug/L	20	03/20/23 16:11	EPA 8270E LVI	
Surrogate: Acenaphthylene-d8 (Surr)		Recovery: 74 %		Limits: 78-134 %	20	03/20/23 16:11	EPA 8270E LVI	S-05
Benzo(a)pyrene-d12 (Surr)		82 %		80-132 %	20	03/20/23 16:11	EPA 8270E LVI	S-05
GS-031623-29 (A3C0670-03RE1)		Matrix: WG			Batch: 23C0718			
Naphthalene	1300	20.5	40.9	ug/L	500	03/20/23 19:31	EPA 8270E LVI	
GS-031623-30 (A3C0670-04)		Matrix: WG			Batch: 23C0718			
Acenaphthene	ND	0.0410	0.0410	ug/L	1	03/20/23 17:18	EPA 8270E LVI	
Acenaphthylene	0.217	0.0205	0.0410	ug/L	1	03/20/23 17:18	EPA 8270E LVI	
Anthracene	0.0405	0.0205	0.0410	ug/L	1	03/20/23 17:18	EPA 8270E LVI	J
Benz(a)anthracene	ND	0.0102	0.0205	ug/L	1	03/20/23 17:18	EPA 8270E LVI	
Benzo(a)pyrene	ND	0.0102	0.0205	ug/L	1	03/20/23 17:18	EPA 8270E LVI	
Benzo(b)fluoranthene	ND	0.0102	0.0205	ug/L	1	03/20/23 17:18	EPA 8270E LVI	
Benzo(k)fluoranthene	ND	0.0102	0.0205	ug/L	1	03/20/23 17:18	EPA 8270E LVI	
Benzo(g,h,i)perylene	ND	0.0205	0.0410	ug/L	1	03/20/23 17:18	EPA 8270E LVI	
Chrysene	ND	0.0102	0.0205	ug/L	1	03/20/23 17:18	EPA 8270E LVI	
Dibenz(a,h)anthracene	ND	0.0102	0.0205	ug/L	1	03/20/23 17:18	EPA 8270E LVI	
Fluoranthene	ND	0.0205	0.0410	ug/L	1	03/20/23 17:18	EPA 8270E LVI	
Fluorene	ND	0.0205	0.0410	ug/L	1	03/20/23 17:18	EPA 8270E LVI	
Indeno(1,2,3-cd)pyrene	ND	0.0102	0.0205	ug/L	1	03/20/23 17:18	EPA 8270E LVI	
1-Methylnaphthalene	ND	0.0410	0.0820	ug/L	1	03/20/23 17:18	EPA 8270E LVI	
2-Methylnaphthalene	ND	0.0410	0.0820	ug/L	1	03/20/23 17:18	EPA 8270E LVI	
Naphthalene	0.0999	0.0410	0.0820	ug/L	1	03/20/23 17:18	EPA 8270E LVI	
Phenanthrene	ND	0.0410	0.0820	ug/L	1	03/20/23 17:18	EPA 8270E LVI	
Pyrene	ND	0.0205	0.0410	ug/L	1	03/20/23 17:18	EPA 8270E LVI	
Carbazole	0.0236	0.0205	0.0410	ug/L	1	03/20/23 17:18	EPA 8270E LVI	J
Dibenzofuran	ND	0.0205	0.0410	ug/L	1	03/20/23 17:18	EPA 8270E LVI	
Surrogate: Acenaphthylene-d8 (Surr)		Recovery: 122 %		Limits: 78-134 %	1	03/20/23 17:18	EPA 8270E LVI	
Benzo(a)pyrene-d12 (Surr)		123 %		80-132 %	1	03/20/23 17:18	EPA 8270E LVI	
GS-031623-31 (A3C0670-05)		Matrix: WG			Batch: 23C0718			
Acenaphthene	ND	0.0176	0.0352	ug/L	1	03/20/23 17:51	EPA 8270E LVI	

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A3C0670 - 05 19 23 0532

## 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-031623-31 (A3C0670-05)		Matrix: WG			Batch: 23C0718			
Acenaphthylene	ND	0.0176	0.0352	ug/L	1	03/20/23 17:51	EPA 8270E LVI	
Anthracene	0.0242	0.0176	0.0352	ug/L	1	03/20/23 17:51	EPA 8270E LVI	J
Benz(a)anthracene	ND	0.00880	0.0176	ug/L	1	03/20/23 17:51	EPA 8270E LVI	
Benzo(a)pyrene	ND	0.00880	0.0176	ug/L	1	03/20/23 17:51	EPA 8270E LVI	
Benzo(b)fluoranthene	ND	0.00880	0.0176	ug/L	1	03/20/23 17:51	EPA 8270E LVI	
Benzo(k)fluoranthene	ND	0.00880	0.0176	ug/L	1	03/20/23 17:51	EPA 8270E LVI	
Benzo(g,h,i)perylene	ND	0.0176	0.0352	ug/L	1	03/20/23 17:51	EPA 8270E LVI	
Chrysene	ND	0.00880	0.0176	ug/L	1	03/20/23 17:51	EPA 8270E LVI	
Dibenz(a,h)anthracene	ND	0.00880	0.0176	ug/L	1	03/20/23 17:51	EPA 8270E LVI	
Fluoranthene	0.0233	0.0176	0.0352	ug/L	1	03/20/23 17:51	EPA 8270E LVI	J
Fluorene	ND	0.0176	0.0352	ug/L	1	03/20/23 17:51	EPA 8270E LVI	
Indeno(1,2,3-cd)pyrene	ND	0.00880	0.0176	ug/L	1	03/20/23 17:51	EPA 8270E LVI	
1-Methylnaphthalene	ND	0.0352	0.0704	ug/L	1	03/20/23 17:51	EPA 8270E LVI	
2-Methylnaphthalene	ND	0.0352	0.0704	ug/L	1	03/20/23 17:51	EPA 8270E LVI	
Naphthalene	0.0814	0.0352	0.0704	ug/L	1	03/20/23 17:51	EPA 8270E LVI	
Phenanthrene	ND	0.0352	0.0704	ug/L	1	03/20/23 17:51	EPA 8270E LVI	
Pyrene	0.0339	0.0176	0.0352	ug/L	1	03/20/23 17:51	EPA 8270E LVI	J
Carbazole	ND	0.0176	0.0352	ug/L	1	03/20/23 17:51	EPA 8270E LVI	
Dibenzofuran	ND	0.0176	0.0352	ug/L	1	03/20/23 17:51	EPA 8270E LVI	
Surrogate: Acenaphthylene-d8 (Surr)		Recovery: 118 %		Limits: 78-134 %	1	03/20/23 17:51	EPA 8270E LVI	
Benzo(a)pyrene-d12 (Surr)		123 %		80-132 %	1	03/20/23 17:51	EPA 8270E LVI	

## GS-031623-32 (A3C0670-06)

Matrix: WG

Batch: 23C0718

Acenaphthene	ND	0.0551	0.0551	ug/L	1	03/20/23 18:25	EPA 8270E LVI	R-02
Acenaphthylene	ND	0.0163	0.0327	ug/L	1	03/20/23 18:25	EPA 8270E LVI	
Anthracene	ND	0.0163	0.0327	ug/L	1	03/20/23 18:25	EPA 8270E LVI	
Benz(a)anthracene	ND	0.00817	0.0163	ug/L	1	03/20/23 18:25	EPA 8270E LVI	
Benzo(a)pyrene	ND	0.00817	0.0163	ug/L	1	03/20/23 18:25	EPA 8270E LVI	
Benzo(b)fluoranthene	ND	0.00817	0.0163	ug/L	1	03/20/23 18:25	EPA 8270E LVI	
Benzo(k)fluoranthene	ND	0.00817	0.0163	ug/L	1	03/20/23 18:25	EPA 8270E LVI	
Benzo(g,h,i)perylene	ND	0.0163	0.0327	ug/L	1	03/20/23 18:25	EPA 8270E LVI	
Chrysene	ND	0.00817	0.0163	ug/L	1	03/20/23 18:25	EPA 8270E LVI	
Dibenz(a,h)anthracene	ND	0.00817	0.0163	ug/L	1	03/20/23 18:25	EPA 8270E LVI	

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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:****A3C0670 - 05 19 23 0532**

## 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
<b>GS-031623-32 (A3C0670-06)</b>		<b>Matrix: WG</b>			<b>Batch: 23C0718</b>			
Fluoranthene	ND	0.0163	0.0327	ug/L	1	03/20/23 18:25	EPA 8270E LVI	
Fluorene	ND	0.0163	0.0327	ug/L	1	03/20/23 18:25	EPA 8270E LVI	
Indeno(1,2,3-cd)pyrene	ND	0.00817	0.0163	ug/L	1	03/20/23 18:25	EPA 8270E LVI	
1-Methylnaphthalene	ND	0.0327	0.0653	ug/L	1	03/20/23 18:25	EPA 8270E LVI	
2-Methylnaphthalene	ND	0.0327	0.0653	ug/L	1	03/20/23 18:25	EPA 8270E LVI	
<b>Naphthalene</b>	<b>0.0764</b>	0.0327	0.0653	ug/L	1	03/20/23 18:25	EPA 8270E LVI	
Phenanthrene	ND	0.0327	0.0653	ug/L	1	03/20/23 18:25	EPA 8270E LVI	
Pyrene	ND	0.0163	0.0327	ug/L	1	03/20/23 18:25	EPA 8270E LVI	
Carbazole	ND	0.0163	0.0327	ug/L	1	03/20/23 18:25	EPA 8270E LVI	
Dibenzofuran	ND	0.0163	0.0327	ug/L	1	03/20/23 18:25	EPA 8270E LVI	
<i>Surrogate: Acenaphthylene-d8 (Surr)</i>		<i>Recovery:</i>	<i>116 %</i>	<i>Limits:</i>	<i>78-134 %</i>	<i>1</i>	<i>03/20/23 18:25</i>	<i>EPA 8270E LVI</i>
<i>Benzo(a)pyrene-d12 (Surr)</i>			<i>122 %</i>		<i>80-132 %</i>	<i>1</i>	<i>03/20/23 18:25</i>	<i>EPA 8270E LVI</i>

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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:****A3C0670 - 05 19 23 0532****ANALYTICAL SAMPLE RESULTS****Total Metals by EPA 6020B (ICPMS)**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-031623-27 (A3C0670-01)		Matrix: WG						
Batch: 23C1176								
Aluminum	2780	25.0	50.0	ug/L	1	03/30/23 22:33	EPA 6020B	
Antimony	ND	0.500	1.00	ug/L	1	03/30/23 22:33	EPA 6020B	
Arsenic	1.02	0.500	1.00	ug/L	1	03/30/23 22:33	EPA 6020B	
Barium	177	1.00	2.00	ug/L	1	03/30/23 22:33	EPA 6020B	
Cadmium	ND	0.100	0.200	ug/L	1	03/30/23 22:33	EPA 6020B	
Chromium	3.23	1.00	2.00	ug/L	1	03/30/23 22:33	EPA 6020B	
Copper	5.39	1.00	2.00	ug/L	1	03/30/23 22:33	EPA 6020B	
Iron	12000	25.0	50.0	ug/L	1	03/30/23 22:33	EPA 6020B	
Lead	1.83	0.110	0.200	ug/L	1	03/30/23 22:33	EPA 6020B	
Mercury	ND	0.0400	0.0800	ug/L	1	03/30/23 22:33	EPA 6020B	
Nickel	11.0	1.00	2.00	ug/L	1	03/30/23 22:33	EPA 6020B	
Selenium	ND	0.500	1.00	ug/L	1	03/30/23 22:33	EPA 6020B	
Silver	ND	0.100	0.200	ug/L	1	03/30/23 22:33	EPA 6020B	
Thallium	ND	0.100	0.200	ug/L	1	03/30/23 22:33	EPA 6020B	
Vanadium	10.2	1.00	2.00	ug/L	1	03/30/23 22:33	EPA 6020B	
Zinc	37.6	2.00	4.00	ug/L	1	03/30/23 22:33	EPA 6020B	
GS-031623-27 (A3C0670-01RE1)		Matrix: WG						
Batch: 23C1176								
Beryllium	ND	1.00	2.00	ug/L	10	03/31/23 12:15	EPA 6020B	R-04
Manganese	3940	5.00	10.0	ug/L	10	03/31/23 12:15	EPA 6020B	
GS-031623-28 (A3C0670-02)		Matrix: WG						
Batch: 23C1176								
Aluminum	141	25.0	50.0	ug/L	1	03/30/23 22:37	EPA 6020B	
Antimony	ND	0.500	1.00	ug/L	1	03/30/23 22:37	EPA 6020B	
Arsenic	1.48	0.500	1.00	ug/L	1	03/30/23 22:37	EPA 6020B	
Barium	19.7	1.00	2.00	ug/L	1	03/30/23 22:37	EPA 6020B	
Cadmium	ND	0.100	0.200	ug/L	1	03/30/23 22:37	EPA 6020B	
Chromium	ND	1.00	2.00	ug/L	1	03/30/23 22:37	EPA 6020B	
Copper	ND	1.00	2.00	ug/L	1	03/30/23 22:37	EPA 6020B	
Iron	3310	25.0	50.0	ug/L	1	03/30/23 22:37	EPA 6020B	
Lead	0.122	0.110	0.200	ug/L	1	03/30/23 22:37	EPA 6020B	J

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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:****A3C0670 - 05 19 23 0532**

## ANALYTICAL SAMPLE RESULTS

## Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes	
GS-031623-28 (A3C0670-02)		Matrix: WG							
Manganese	415	0.500	1.00	ug/L	1	03/30/23 22:37	EPA 6020B	J	
Mercury	ND	0.0400	0.0800	ug/L	1	03/30/23 22:37	EPA 6020B		
Nickel	1.64	1.00	2.00	ug/L	1	03/30/23 22:37	EPA 6020B		
Selenium	ND	0.500	1.00	ug/L	1	03/30/23 22:37	EPA 6020B		
Silver	ND	0.100	0.200	ug/L	1	03/30/23 22:37	EPA 6020B		
Thallium	ND	0.100	0.200	ug/L	1	03/30/23 22:37	EPA 6020B	J	
Vanadium	1.49	1.00	2.00	ug/L	1	03/30/23 22:37	EPA 6020B		
Zinc	11.6	2.00	4.00	ug/L	1	03/30/23 22:37	EPA 6020B		
GS-031623-28 (A3C0670-02RE1)		Matrix: WG							
Batch: 23C1176									
Beryllium	ND	0.100	0.200	ug/L	1	03/31/23 12:59	EPA 6020B		
GS-031623-29 (A3C0670-03)		Matrix: WG							
Batch: 23C1176									
Aluminum	33.2	25.0	50.0	ug/L	1	03/30/23 23:07	EPA 6020B	J	
Antimony	ND	0.500	1.00	ug/L	1	03/30/23 23:07	EPA 6020B		
Arsenic	1.05	0.500	1.00	ug/L	1	03/30/23 23:07	EPA 6020B		
Barium	44.9	1.00	2.00	ug/L	1	03/30/23 23:07	EPA 6020B		
Cadmium	ND	0.100	0.200	ug/L	1	03/30/23 23:07	EPA 6020B		
Chromium	ND	1.00	2.00	ug/L	1	03/30/23 23:07	EPA 6020B		
Copper	ND	1.00	2.00	ug/L	1	03/30/23 23:07	EPA 6020B		
Lead	ND	0.110	0.200	ug/L	1	03/30/23 23:07	EPA 6020B		
Mercury	ND	0.0400	0.0800	ug/L	1	03/30/23 23:07	EPA 6020B		
Nickel	ND	1.00	2.00	ug/L	1	03/30/23 23:07	EPA 6020B		
Selenium	ND	0.500	1.00	ug/L	1	03/30/23 23:07	EPA 6020B		
Silver	ND	0.100	0.200	ug/L	1	03/30/23 23:07	EPA 6020B		
Thallium	ND	0.100	0.200	ug/L	1	03/30/23 23:07	EPA 6020B		
Vanadium	ND	1.00	2.00	ug/L	1	03/30/23 23:07	EPA 6020B		
Zinc	2.22	2.00	4.00	ug/L	1	03/30/23 23:07	EPA 6020B		
GS-031623-29 (A3C0670-03RE1)		Matrix: WG							
Batch: 23C1176									
Iron	74400	250	500	ug/L	10	03/31/23 12:29	EPA 6020B		

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## ANALYTICAL REPORT

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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:

A3C0670 - 05 19 23 0532

## ANALYTICAL SAMPLE RESULTS

## Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-031623-29 (A3C0670-03RE1) Matrix: WG								
Manganese	3290	5.00	10.0	ug/L	10	03/31/23 12:29	EPA 6020B	
GS-031623-29 (A3C0670-03RE2) Matrix: WG								
Batch: 23C1176								
Beryllium	ND	0.100	0.200	ug/L	1	03/31/23 13:14	EPA 6020B	
GS-031623-30 (A3C0670-04) Matrix: WG								
Batch: 23C1176								
Aluminum	155	25.0	50.0	ug/L	1	03/30/23 23:12	EPA 6020B	
Antimony	ND	0.500	1.00	ug/L	1	03/30/23 23:12	EPA 6020B	
Arsenic	4.74	0.500	1.00	ug/L	1	03/30/23 23:12	EPA 6020B	
Barium	61.6	1.00	2.00	ug/L	1	03/30/23 23:12	EPA 6020B	
Cadmium	ND	0.100	0.200	ug/L	1	03/30/23 23:12	EPA 6020B	
Chromium	ND	1.00	2.00	ug/L	1	03/30/23 23:12	EPA 6020B	
Copper	ND	1.00	2.00	ug/L	1	03/30/23 23:12	EPA 6020B	
Iron	39300	25.0	50.0	ug/L	1	03/30/23 23:12	EPA 6020B	
Lead	0.259	0.110	0.200	ug/L	1	03/30/23 23:12	EPA 6020B	
Manganese	2430	0.500	1.00	ug/L	1	03/30/23 23:12	EPA 6020B	
Mercury	ND	0.0400	0.0800	ug/L	1	03/30/23 23:12	EPA 6020B	
Nickel	2.15	1.00	2.00	ug/L	1	03/30/23 23:12	EPA 6020B	
Selenium	ND	0.500	1.00	ug/L	1	03/30/23 23:12	EPA 6020B	
Silver	ND	0.100	0.200	ug/L	1	03/30/23 23:12	EPA 6020B	
Thallium	ND	0.100	0.200	ug/L	1	03/30/23 23:12	EPA 6020B	
Vanadium	ND	1.00	2.00	ug/L	1	03/30/23 23:12	EPA 6020B	
Zinc	4.06	2.00	4.00	ug/L	1	03/30/23 23:12	EPA 6020B	
GS-031623-30 (A3C0670-04RE1) Matrix: WG								
Batch: 23C1176								
Beryllium	ND	0.100	0.200	ug/L	1	04/01/23 03:09	EPA 6020B	
GS-031623-31 (A3C0670-05) Matrix: WG								
Batch: 23C1176								
Aluminum	668	25.0	50.0	ug/L	1	03/30/23 23:17	EPA 6020B	
Antimony	ND	0.500	1.00	ug/L	1	03/30/23 23:17	EPA 6020B	
Arsenic	ND	0.500	1.00	ug/L	1	03/30/23 23:17	EPA 6020B	

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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:

A3C0670 - 05 19 23 0532

## ANALYTICAL SAMPLE RESULTS

## Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>GS-031623-31 (A3C0670-05) Matrix: WG</b>								
Barium	60.5	1.00	2.00	ug/L	1	03/30/23 23:17	EPA 6020B	
Cadmium	ND	0.100	0.200	ug/L	1	03/30/23 23:17	EPA 6020B	
Chromium	ND	1.00	2.00	ug/L	1	03/30/23 23:17	EPA 6020B	
Copper	1.38	1.00	2.00	ug/L	1	03/30/23 23:17	EPA 6020B	J
Iron	6570	25.0	50.0	ug/L	1	03/30/23 23:17	EPA 6020B	
Lead	0.374	0.110	0.200	ug/L	1	03/30/23 23:17	EPA 6020B	
Manganese	2580	0.500	1.00	ug/L	1	03/30/23 23:17	EPA 6020B	
Mercury	ND	0.0400	0.0800	ug/L	1	03/30/23 23:17	EPA 6020B	
Nickel	1.86	1.00	2.00	ug/L	1	03/30/23 23:17	EPA 6020B	J
Selenium	ND	0.500	1.00	ug/L	1	03/30/23 23:17	EPA 6020B	
Silver	ND	0.100	0.200	ug/L	1	03/30/23 23:17	EPA 6020B	
Thallium	ND	0.100	0.200	ug/L	1	03/30/23 23:17	EPA 6020B	
Vanadium	2.16	1.00	2.00	ug/L	1	03/30/23 23:17	EPA 6020B	
Zinc	6.63	2.00	4.00	ug/L	1	03/30/23 23:17	EPA 6020B	
<b>GS-031623-31 (A3C0670-05RE1) Matrix: WG</b>								
Batch: 23C1176								
Beryllium	ND	0.100	0.200	ug/L	1	04/01/23 03:14	EPA 6020B	
<b>GS-031623-32 (A3C0670-06) Matrix: WG</b>								
Batch: 23C1176								
Aluminum	ND	25.0	50.0	ug/L	1	03/30/23 23:22	EPA 6020B	
Antimony	ND	0.500	1.00	ug/L	1	03/30/23 23:22	EPA 6020B	
Arsenic	ND	0.500	1.00	ug/L	1	03/30/23 23:22	EPA 6020B	
Barium	ND	1.00	2.00	ug/L	1	03/30/23 23:22	EPA 6020B	
Cadmium	ND	0.100	0.200	ug/L	1	03/30/23 23:22	EPA 6020B	
Chromium	ND	1.00	2.00	ug/L	1	03/30/23 23:22	EPA 6020B	
Copper	ND	1.00	2.00	ug/L	1	03/30/23 23:22	EPA 6020B	
Iron	ND	25.0	50.0	ug/L	1	03/30/23 23:22	EPA 6020B	
Lead	ND	0.110	0.200	ug/L	1	03/30/23 23:22	EPA 6020B	
Manganese	ND	0.500	1.00	ug/L	1	03/30/23 23:22	EPA 6020B	
Mercury	ND	0.0400	0.0800	ug/L	1	03/30/23 23:22	EPA 6020B	
Nickel	ND	1.00	2.00	ug/L	1	03/30/23 23:22	EPA 6020B	
Selenium	ND	0.500	1.00	ug/L	1	03/30/23 23:22	EPA 6020B	

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ANALYTICAL REPORT

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503-718-2323

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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:

A3C0670 - 05 19 23 0532

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-031623-32 (A3C0670-06)		Matrix: WG						
Silver	ND	0.100	0.200	ug/L	1	03/30/23 23:22	EPA 6020B	
Thallium	ND	0.100	0.200	ug/L	1	03/30/23 23:22	EPA 6020B	
Vanadium	ND	1.00	2.00	ug/L	1	03/30/23 23:22	EPA 6020B	
Zinc	ND	2.00	4.00	ug/L	1	03/30/23 23:22	EPA 6020B	
GS-031623-32 (A3C0670-06RE1)		Matrix: WG						
Batch: 23C1176								
Beryllium	ND	0.100	0.200	ug/L	1	04/01/23 03:19	EPA 6020B	

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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:

A3C0670 - 05 19 23 0532

## ANALYTICAL SAMPLE RESULTS

## Total Cyanide by Flow Analysis (Aqueous)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-031623-27 (A3C0670-01RE1)				Matrix: WG		Batch: 23C1090		PRES
Total Cyanide	0.0204	0.00500	0.00500	mg/L	1	03/28/23 15:16	EPA 335.4	
GS-031623-28 (A3C0670-02RE1)				Matrix: WG		Batch: 23C1090		
Total Cyanide	0.0105	0.00500	0.00500	mg/L	1	03/28/23 15:18	EPA 335.4	Q-42
GS-031623-29 (A3C0670-03)				Matrix: WG		Batch: 23C0733		
Total Cyanide	0.0961	0.00500	0.00500	mg/L	1	03/21/23 15:31	EPA 335.4	B-02
GS-031623-30 (A3C0670-04RE1)				Matrix: WG		Batch: 23C0733		
Total Cyanide	0.163	0.00500	0.00500	mg/L	1	03/21/23 18:17	EPA 335.4	B-02
GS-031623-31 (A3C0670-05RE1)				Matrix: WG		Batch: 23C0733		
Total Cyanide	0.0444	0.00500	0.00500	mg/L	1	03/21/23 18:19	EPA 335.4	B-02
GS-031623-32 (A3C0670-06RE1)				Matrix: WG		Batch: 23C1090		
Total Cyanide	ND	0.00500	0.00500	mg/L	1	03/28/23 15:32	EPA 335.4	

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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:**

**A3C0670 - 05 19 23 0532**

## 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
<b>GS-031623-27 (A3C0670-01)</b>				<b>Matrix: WG</b>		<b>Batch: 23C0905</b>		
Available Cyanide	ND	0.00100	0.00200	mg/L	1	03/23/23 15:02	D6888-09	
<b>GS-031623-28 (A3C0670-02)</b>				<b>Matrix: WG</b>		<b>Batch: 23C0905</b>		
Available Cyanide	ND	0.00100	0.00200	mg/L	1	03/23/23 15:05	D6888-09	
<b>GS-031623-29 (A3C0670-03)</b>				<b>Matrix: WG</b>		<b>Batch: 23C0905</b>		
Available Cyanide	ND	0.00100	0.00200	mg/L	1	03/23/23 15:11	D6888-09	
<b>GS-031623-30 (A3C0670-04)</b>				<b>Matrix: WG</b>		<b>Batch: 23C0905</b>		
Available Cyanide	ND	0.00100	0.00200	mg/L	1	03/23/23 15:12	D6888-09	
<b>GS-031623-31 (A3C0670-05)</b>				<b>Matrix: WG</b>		<b>Batch: 23C0905</b>		
Available Cyanide	ND	0.00100	0.00200	mg/L	1	03/23/23 15:20	D6888-09	
<b>GS-031623-32 (A3C0670-06)</b>				<b>Matrix: WG</b>		<b>Batch: 23C0905</b>		
Available Cyanide	ND	0.00100	0.00200	mg/L	1	03/23/23 15:21	D6888-09	

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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:****A3C0670 - 05 19 23 0532****ANALYTICAL SAMPLE RESULTS****Free Cyanide by Microdiffusion/Colorimetric Spectrophotometry**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>GS-031623-27 (A3C0670-01)</b>				<b>Matrix: WG</b>		<b>Batch: 23C0849</b>		<b>PRES</b>
Free Cyanide	ND	0.00250	0.00500	mg/L	1	03/22/23 15:52	D4282-02	
<b>GS-031623-28 (A3C0670-02)</b>				<b>Matrix: WG</b>		<b>Batch: 23C0849</b>		
Free Cyanide	ND	0.00250	0.00500	mg/L	1	03/22/23 15:52	D4282-02	
<b>GS-031623-29 (A3C0670-03)</b>				<b>Matrix: WG</b>		<b>Batch: 23C0849</b>		<b>PRES</b>
Free Cyanide	ND	0.00250	0.00500	mg/L	1	03/22/23 15:57	D4282-02	
<b>GS-031623-30 (A3C0670-04)</b>				<b>Matrix: WG</b>		<b>Batch: 23C0849</b>		<b>PRES</b>
Free Cyanide	ND	0.00250	0.00500	mg/L	1	03/22/23 15:57	D4282-02	
<b>GS-031623-31 (A3C0670-05)</b>				<b>Matrix: WG</b>		<b>Batch: 23C0849</b>		<b>PRES</b>
Free Cyanide	ND	0.00250	0.00500	mg/L	1	03/22/23 15:58	D4282-02	
<b>GS-031623-32 (A3C0670-06)</b>				<b>Matrix: WG</b>		<b>Batch: 23C0849</b>		
Free Cyanide	ND	0.00250	0.00500	mg/L	1	03/22/23 16:03	D4282-02	

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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:****A3C0670 - 05 19 23 0532****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 23C0990 - EPA 5030C						Water						
Blank (23C0990-BLK1)			Prepared: 03/24/23 13:33		Analyzed: 03/25/23 01:46							
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

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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:

A3C0670 - 05 19 23 0532

## 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 23C0990 - EPA 5030C						Water						
Blank (23C0990-BLK1)						Prepared: 03/24/23 13:33 Analyzed: 03/25/23 01:46						
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: 99 % Limits: 80-120 % Dilution: 1x												

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A3C0670 - 05 19 23 0532

## 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 23C0990 - EPA 5030C						Water						
Blank (23C0990-BLK1)			Prepared: 03/24/23 13:33		Analyzed: 03/25/23 01:46							
Surr: Toluene-d8 (Surr)		Recovery: 102 %		Limits: 80-120 %		Dilution: 1x						
4-Bromofluorobenzene (Surr)		104 %		80-120 %		"						
LCS (23C0990-BS1)			Prepared: 03/24/23 13:33		Analyzed: 03/25/23 00:52							
EPA 8260D												
Acetone	40.5	10.0	20.0	ug/L	1	40.0	---	101	80-120%	---	---	ICV-01
Acrylonitrile	20.1	1.00	2.00	ug/L	1	20.0	---	101	80-120%	---	---	
Benzene	20.5	0.100	0.200	ug/L	1	20.0	---	102	80-120%	---	---	
Bromobenzene	19.2	0.250	0.500	ug/L	1	20.0	---	96	80-120%	---	---	
Bromochloromethane	21.2	0.500	1.00	ug/L	1	20.0	---	106	80-120%	---	---	
Bromodichloromethane	22.8	0.500	1.00	ug/L	1	20.0	---	114	80-120%	---	---	
Bromoform	16.2	0.500	1.00	ug/L	1	20.0	---	81	80-120%	---	---	
Bromomethane	23.0	5.00	5.00	ug/L	1	20.0	---	115	80-120%	---	---	
2-Butanone (MEK)	43.7	5.00	10.0	ug/L	1	40.0	---	109	80-120%	---	---	
n-Butylbenzene	23.8	0.500	1.00	ug/L	1	20.0	---	119	80-120%	---	---	
sec-Butylbenzene	22.9	0.500	1.00	ug/L	1	20.0	---	114	80-120%	---	---	
tert-Butylbenzene	21.3	0.500	1.00	ug/L	1	20.0	---	107	80-120%	---	---	
Carbon disulfide	19.7	5.00	10.0	ug/L	1	20.0	---	99	80-120%	---	---	
Carbon tetrachloride	21.4	0.500	1.00	ug/L	1	20.0	---	107	80-120%	---	---	
Chlorobenzene	19.9	0.250	0.500	ug/L	1	20.0	---	100	80-120%	---	---	
Chloroethane	17.1	5.00	5.00	ug/L	1	20.0	---	86	80-120%	---	---	
Chloroform	20.7	0.500	1.00	ug/L	1	20.0	---	104	80-120%	---	---	
Chloromethane	20.7	2.50	5.00	ug/L	1	20.0	---	104	80-120%	---	---	
2-Chlorotoluene	20.2	0.500	1.00	ug/L	1	20.0	---	101	80-120%	---	---	
4-Chlorotoluene	20.3	0.500	1.00	ug/L	1	20.0	---	101	80-120%	---	---	
Dibromochloromethane	17.7	0.500	1.00	ug/L	1	20.0	---	88	80-120%	---	---	
1,2-Dibromo-3-chloropropane	18.3	2.50	5.00	ug/L	1	20.0	---	92	80-120%	---	---	
1,2-Dibromoethane (EDB)	22.0	0.250	0.500	ug/L	1	20.0	---	110	80-120%	---	---	
Dibromomethane	22.0	0.500	1.00	ug/L	1	20.0	---	110	80-120%	---	---	
1,2-Dichlorobenzene	21.0	0.250	0.500	ug/L	1	20.0	---	105	80-120%	---	---	
1,3-Dichlorobenzene	20.7	0.250	0.500	ug/L	1	20.0	---	103	80-120%	---	---	
1,4-Dichlorobenzene	19.7	0.250	0.500	ug/L	1	20.0	---	99	80-120%	---	---	
Dichlorodifluoromethane	21.9	0.500	1.00	ug/L	1	20.0	---	110	80-120%	---	---	
1,1-Dichloroethane	20.9	0.200	0.400	ug/L	1	20.0	---	105	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 23C0990 - EPA 5030C						Water						
LCS (23C0990-BS1)						Prepared: 03/24/23 13:33 Analyzed: 03/25/23 00:52						
1,2-Dichloroethane (EDC)	20.9	0.200	0.400	ug/L	1	20.0	---	104	80-120%	---	---	
1,1-Dichloroethene	21.5	0.200	0.400	ug/L	1	20.0	---	107	80-120%	---	---	
cis-1,2-Dichloroethene	21.0	0.200	0.400	ug/L	1	20.0	---	105	80-120%	---	---	
trans-1,2-Dichloroethene	21.3	0.200	0.400	ug/L	1	20.0	---	106	80-120%	---	---	
1,2-Dichloropropane	20.5	0.250	0.500	ug/L	1	20.0	---	102	80-120%	---	---	
1,3-Dichloropropane	21.0	0.500	1.00	ug/L	1	20.0	---	105	80-120%	---	---	
2,2-Dichloropropane	16.4	0.500	1.00	ug/L	1	20.0	---	82	80-120%	---	---	
1,1-Dichloropropene	22.3	0.500	1.00	ug/L	1	20.0	---	111	80-120%	---	---	
cis-1,3-Dichloropropene	19.9	0.500	1.00	ug/L	1	20.0	---	100	80-120%	---	---	
trans-1,3-Dichloropropene	18.2	0.500	1.00	ug/L	1	20.0	---	91	80-120%	---	---	
Ethylbenzene	21.4	0.250	0.500	ug/L	1	20.0	---	107	80-120%	---	---	
Hexachlorobutadiene	23.4	2.50	5.00	ug/L	1	20.0	---	117	80-120%	---	---	
2-Hexanone	45.4	5.00	10.0	ug/L	1	40.0	---	113	80-120%	---	---	
Isopropylbenzene	22.0	0.500	1.00	ug/L	1	20.0	---	110	80-120%	---	---	
4-Isopropyltoluene	23.3	0.500	1.00	ug/L	1	20.0	---	116	80-120%	---	---	
Methylene chloride	20.0	5.00	10.0	ug/L	1	20.0	---	100	80-120%	---	---	
4-Methyl-2-pentanone (MiBK)	43.6	5.00	10.0	ug/L	1	40.0	---	109	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	19.4	0.500	1.00	ug/L	1	20.0	---	97	80-120%	---	---	
Naphthalene	19.1	1.00	2.00	ug/L	1	20.0	---	96	80-120%	---	---	
n-Propylbenzene	21.3	0.250	0.500	ug/L	1	20.0	---	106	80-120%	---	---	
Styrene	21.6	0.500	1.00	ug/L	1	20.0	---	108	80-120%	---	---	
1,1,1,2-Tetrachloroethane	22.0	0.200	0.400	ug/L	1	20.0	---	110	80-120%	---	---	
1,1,2,2-Tetrachloroethane	21.1	0.250	0.500	ug/L	1	20.0	---	106	80-120%	---	---	
Tetrachloroethene (PCE)	21.0	0.200	0.400	ug/L	1	20.0	---	105	80-120%	---	---	
Toluene	19.5	0.500	1.00	ug/L	1	20.0	---	98	80-120%	---	---	
1,2,3-Trichlorobenzene	19.9	1.00	2.00	ug/L	1	20.0	---	99	80-120%	---	---	
1,2,4-Trichlorobenzene	20.4	1.00	2.00	ug/L	1	20.0	---	102	80-120%	---	---	
1,1,1-Trichloroethane	21.4	0.200	0.400	ug/L	1	20.0	---	107	80-120%	---	---	
1,1,2-Trichloroethane	20.7	0.250	0.500	ug/L	1	20.0	---	103	80-120%	---	---	
Trichloroethene (TCE)	20.5	0.200	0.400	ug/L	1	20.0	---	103	80-120%	---	---	
Trichlorofluoromethane	24.6	1.00	2.00	ug/L	1	20.0	---	123	80-120%	---	---	Q-56
1,2,3-Trichloropropane	20.4	0.500	1.00	ug/L	1	20.0	---	102	80-120%	---	---	
1,2,4-Trimethylbenzene	21.6	0.500	1.00	ug/L	1	20.0	---	108	80-120%	---	---	
1,3,5-Trimethylbenzene	22.0	0.500	1.00	ug/L	1	20.0	---	110	80-120%	---	---	

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Darwin Thomas, Business Development Director

Page 35 of 77



## 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

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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:

A3C0670 - 05 19 23 0532

## 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 23C0990 - EPA 5030C						Water						
LCS (23C0990-BS1)			Prepared: 03/24/23 13:33		Analyzed: 03/25/23 00:52							
Vinyl chloride	22.2	0.200	0.400	ug/L	1	20.0	---	111	80-120%	---	---	
m,p-Xylene	42.3	0.500	1.00	ug/L	1	40.0	---	106	80-120%	---	---	
o-Xylene	21.2	0.250	0.500	ug/L	1	20.0	---	106	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 100 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		100 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		94 %		80-120 %		"						
Duplicate (23C0990-DUP1)						Prepared: 03/24/23 13:33 Analyzed: 03/25/23 07:38						
QC Source Sample: Non-SDG (A3C0668-06)												
Acetone	ND	50.0	100	ug/L	5	---	ND	---	---	---	30%	
Acrylonitrile	ND	5.00	10.0	ug/L	5	---	ND	---	---	---	30%	
Benzene	ND	0.500	1.00	ug/L	5	---	ND	---	---	---	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	25.0	50.0	ug/L	5	---	ND	---	---	---	30%	
n-Butylbenzene	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	30%	
sec-Butylbenzene	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	30%	
tert-Butylbenzene	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	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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## 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 23C0990 - EPA 5030C						Water						
Duplicate (23C0990-DUP1)			Prepared: 03/24/23 13:33    Analyzed: 03/25/23 07:38									
QC Source Sample: Non-SDG (A3C0668-06)												
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	9.90	1.00	2.00	ug/L	5	---	11.1	---	---	11	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	2.50	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	ND	1.25	2.50	ug/L	5	---	ND	---	---	---	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	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	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	ND	5.00	10.0	ug/L	5	---	ND	---	---	---	30%	
n-Propylbenzene	ND	1.25	2.50	ug/L	5	---	ND	---	---	---	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)	187	1.00	2.00	ug/L	5	---	199	---	---	6	30%	
Toluene	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	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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A3C0670 - 05 19 23 0532

## 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 23C0990 - EPA 5030C						Water						
Duplicate (23C0990-DUP1)			Prepared: 03/24/23 13:33   Analyzed: 03/25/23 07:38									
QC Source Sample: Non-SDG (A3C0668-06)												
Trichloroethene (TCE)	24.3	1.00	2.00	ug/L	5	---	26.1	---	---	7	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	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	30%	
Vinyl chloride	ND	1.00	2.00	ug/L	5	---	ND	---	---	---	30%	
m,p-Xylene	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	30%	
o-Xylene	ND	1.25	2.50	ug/L	5	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 100 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		102 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		105 %		80-120 %		"						
Matrix Spike (23C0990-MS1)						Prepared: 03/24/23 13:33   Analyzed: 03/25/23 12:08						
QC Source Sample: GS-031623-28 (A3C0670-02)												
EPA 8260D												
Acetone	50.0	10.0	20.0	ug/L	1	40.0	ND	125	39-160%	---	---	
Acrylonitrile	21.7	1.00	2.00	ug/L	1	20.0	ND	108	63-135%	---	---	
Benzene	143	0.100	0.200	ug/L	1	20.0	120	113	79-120%	---	---	
Bromobenzene	20.3	0.250	0.500	ug/L	1	20.0	ND	102	80-120%	---	---	
Bromochloromethane	22.2	0.500	1.00	ug/L	1	20.0	ND	111	78-123%	---	---	
Bromodichloromethane	23.8	0.500	1.00	ug/L	1	20.0	ND	119	79-125%	---	---	
Bromoform	16.0	0.500	1.00	ug/L	1	20.0	ND	80	66-130%	---	---	
Bromomethane	24.6	5.00	5.00	ug/L	1	20.0	ND	123	53-141%	---	---	
2-Butanone (MEK)	45.9	5.00	10.0	ug/L	1	40.0	ND	115	56-143%	---	---	
n-Butylbenzene	26.4	0.500	1.00	ug/L	1	20.0	ND	132	75-128%	---	---	Q-01
sec-Butylbenzene	24.7	0.500	1.00	ug/L	1	20.0	0.510	121	77-126%	---	---	
tert-Butylbenzene	22.9	0.500	1.00	ug/L	1	20.0	ND	114	78-124%	---	---	
Carbon disulfide	21.2	5.00	10.0	ug/L	1	20.0	ND	106	64-133%	---	---	
Carbon tetrachloride	22.3	0.500	1.00	ug/L	1	20.0	ND	112	72-136%	---	---	
Chlorobenzene	21.1	0.250	0.500	ug/L	1	20.0	ND	105	80-120%	---	---	
Chloroethane	21.2	5.00	5.00	ug/L	1	20.0	ND	106	60-138%	---	---	ICV-01
Chloroform	21.7	0.500	1.00	ug/L	1	20.0	ND	109	79-124%	---	---	
Chloromethane	22.8	2.50	5.00	ug/L	1	20.0	ND	114	50-139%	---	---	

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Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23C0990 - EPA 5030C						Water						
Matrix Spike (23C0990-MS1)			Prepared: 03/24/23 13:33		Analyzed: 03/25/23 12:08							
QC Source Sample: GS-031623-28 (A3C0670-02)												
2-Chlorotoluene	21.5	0.500	1.00	ug/L	1	20.0	ND	108	79-122%	---	---	
4-Chlorotoluene	21.4	0.500	1.00	ug/L	1	20.0	ND	107	78-122%	---	---	
Dibromochloromethane	18.1	0.500	1.00	ug/L	1	20.0	ND	90	74-126%	---	---	
1,2-Dibromo-3-chloropropane	18.4	2.50	5.00	ug/L	1	20.0	ND	92	62-128%	---	---	
1,2-Dibromoethane (EDB)	22.6	0.250	0.500	ug/L	1	20.0	ND	113	77-121%	---	---	
Dibromomethane	23.4	0.500	1.00	ug/L	1	20.0	ND	117	79-123%	---	---	
1,2-Dichlorobenzene	22.2	0.250	0.500	ug/L	1	20.0	ND	111	80-120%	---	---	
1,3-Dichlorobenzene	21.8	0.250	0.500	ug/L	1	20.0	ND	109	80-120%	---	---	
1,4-Dichlorobenzene	20.7	0.250	0.500	ug/L	1	20.0	ND	103	79-120%	---	---	
Dichlorodifluoromethane	23.6	0.500	1.00	ug/L	1	20.0	ND	118	32-152%	---	---	
1,1-Dichloroethane	22.4	0.200	0.400	ug/L	1	20.0	ND	112	77-125%	---	---	
1,2-Dichloroethane (EDC)	22.0	0.200	0.400	ug/L	1	20.0	ND	110	73-128%	---	---	
1,1-Dichloroethene	23.3	0.200	0.400	ug/L	1	20.0	ND	116	71-131%	---	---	
cis-1,2-Dichloroethene	23.0	0.200	0.400	ug/L	1	20.0	0.540	112	78-123%	---	---	
trans-1,2-Dichloroethene	22.9	0.200	0.400	ug/L	1	20.0	ND	114	75-124%	---	---	
1,2-Dichloropropane	21.8	0.250	0.500	ug/L	1	20.0	ND	109	78-122%	---	---	
1,3-Dichloropropane	21.9	0.500	1.00	ug/L	1	20.0	ND	109	80-120%	---	---	
2,2-Dichloropropane	12.3	0.500	1.00	ug/L	1	20.0	ND	62	60-139%	---	---	
1,1-Dichloropropene	23.9	0.500	1.00	ug/L	1	20.0	ND	120	79-125%	---	---	
cis-1,3-Dichloropropene	19.3	0.500	1.00	ug/L	1	20.0	ND	97	75-124%	---	---	
trans-1,3-Dichloropropene	17.8	0.500	1.00	ug/L	1	20.0	ND	89	73-127%	---	---	
Ethylbenzene	42.6	0.250	0.500	ug/L	1	20.0	20.0	113	79-121%	---	---	
Hexachlorobutadiene	22.1	2.50	5.00	ug/L	1	20.0	ND	110	66-134%	---	---	
2-Hexanone	48.1	5.00	10.0	ug/L	1	40.0	ND	120	57-139%	---	---	
Isopropylbenzene	27.9	0.500	1.00	ug/L	1	20.0	4.51	117	72-131%	---	---	
4-Isopropyltoluene	25.1	0.500	1.00	ug/L	1	20.0	ND	125	77-127%	---	---	
Methylene chloride	20.9	5.00	10.0	ug/L	1	20.0	ND	104	74-124%	---	---	
4-Methyl-2-pentanone (MiBK)	46.1	5.00	10.0	ug/L	1	40.0	ND	115	67-130%	---	---	
Methyl tert-butyl ether (MTBE)	20.0	0.500	1.00	ug/L	1	20.0	ND	100	71-124%	---	---	
Naphthalene	521	1.00	2.00	ug/L	1	20.0	512	46	61-128%	---	---	E, Q-03
n-Propylbenzene	23.0	0.250	0.500	ug/L	1	20.0	0.340	113	76-126%	---	---	
Styrene	22.7	0.500	1.00	ug/L	1	20.0	ND	113	78-123%	---	---	
1,1,1,2-Tetrachloroethane	22.2	0.200	0.400	ug/L	1	20.0	ND	111	78-124%	---	---	

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A3C0670 - 05 19 23 0532

## 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 23C0990 - EPA 5030C						Water						
Matrix Spike (23C0990-MS1)			Prepared: 03/24/23 13:33		Analyzed: 03/25/23 12:08							
QC Source Sample: GS-031623-28 (A3C0670-02)												
1,1,2,2-Tetrachloroethane	22.4	0.250	0.500	ug/L	1	20.0	ND	112	71-121%	---	---	Q-54a
Tetrachloroethene (PCE)	21.8	0.200	0.400	ug/L	1	20.0	ND	109	74-129%	---	---	
Toluene	26.6	0.500	1.00	ug/L	1	20.0	6.17	102	80-121%	---	---	
1,2,3-Trichlorobenzene	22.7	1.00	2.00	ug/L	1	20.0	ND	114	69-129%	---	---	
1,2,4-Trichlorobenzene	23.0	1.00	2.00	ug/L	1	20.0	ND	115	69-130%	---	---	
1,1,1-Trichloroethane	22.4	0.200	0.400	ug/L	1	20.0	ND	112	74-131%	---	---	
1,1,2-Trichloroethane	21.3	0.250	0.500	ug/L	1	20.0	ND	106	80-120%	---	---	
Trichloroethene (TCE)	21.8	0.200	0.400	ug/L	1	20.0	ND	108	79-123%	---	---	
Trichlorofluoromethane	26.1	1.00	2.00	ug/L	1	20.0	ND	131	65-141%	---	---	
1,2,3-Trichloropropane	21.6	0.500	1.00	ug/L	1	20.0	ND	108	73-122%	---	---	
1,2,4-Trimethylbenzene	36.9	0.500	1.00	ug/L	1	20.0	12.5	122	76-124%	---	---	
1,3,5-Trimethylbenzene	26.6	0.500	1.00	ug/L	1	20.0	2.61	120	75-124%	---	---	
Vinyl chloride	25.8	0.200	0.400	ug/L	1	20.0	0.950	124	58-137%	---	---	
m,p-Xylene	55.2	0.500	1.00	ug/L	1	40.0	10.5	112	80-121%	---	---	
o-Xylene	35.8	0.250	0.500	ug/L	1	20.0	13.3	112	78-122%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 100 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		100 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		94 %		80-120 %		"						

## Matrix Spike Dup (23C0990-MSD1)

Prepared: 03/24/23 13:33 Analyzed: 03/25/23 12:35

## QC Source Sample: GS-031623-28 (A3C0670-02)

## EPA 8260D

Acetone	47.2	10.0	20.0	ug/L	1	40.0	ND	118	39-160%	6	30%
Acrylonitrile	21.1	1.00	2.00	ug/L	1	20.0	ND	106	63-135%	3	30%
Benzene	139	0.100	0.200	ug/L	1	20.0	120	93	79-120%	3	30%
Bromobenzene	20.2	0.250	0.500	ug/L	1	20.0	ND	101	80-120%	0.4	30%
Bromochloromethane	21.8	0.500	1.00	ug/L	1	20.0	ND	109	78-123%	2	30%
Bromodichloromethane	24.4	0.500	1.00	ug/L	1	20.0	ND	122	79-125%	2	30%
Bromoform	17.0	0.500	1.00	ug/L	1	20.0	ND	85	66-130%	6	30%
Bromomethane	23.4	5.00	5.00	ug/L	1	20.0	ND	117	53-141%	5	30%
2-Butanone (MEK)	45.4	5.00	10.0	ug/L	1	40.0	ND	114	56-143%	1	30%
n-Butylbenzene	25.2	0.500	1.00	ug/L	1	20.0	ND	126	75-128%	4	30%
sec-Butylbenzene	24.0	0.500	1.00	ug/L	1	20.0	0.510	117	77-126%	3	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:

A3C0670 - 05 19 23 0532

## 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 23C0990 - EPA 5030C						Water						
Matrix Spike Dup (23C0990-MSD1)			Prepared: 03/24/23 13:33		Analyzed: 03/25/23 12:35							
QC Source Sample: GS-031623-28 (A3C0670-02)												
tert-Butylbenzene	22.6	0.500	1.00	ug/L	1	20.0	ND	113	78-124%	1	30%	ICV-01
Carbon disulfide	20.9	5.00	10.0	ug/L	1	20.0	ND	105	64-133%	1	30%	
Carbon tetrachloride	22.9	0.500	1.00	ug/L	1	20.0	ND	115	72-136%	3	30%	
Chlorobenzene	21.1	0.250	0.500	ug/L	1	20.0	ND	105	80-120%	0	30%	
Chloroethane	20.8	5.00	5.00	ug/L	1	20.0	ND	104	60-138%	2	30%	
Chloroform	21.6	0.500	1.00	ug/L	1	20.0	ND	108	79-124%	0.5	30%	
Chloromethane	22.6	2.50	5.00	ug/L	1	20.0	ND	113	50-139%	0.9	30%	
2-Chlorotoluene	21.3	0.500	1.00	ug/L	1	20.0	ND	107	79-122%	0.9	30%	
4-Chlorotoluene	21.4	0.500	1.00	ug/L	1	20.0	ND	107	78-122%	0.2	30%	
Dibromochloromethane	18.8	0.500	1.00	ug/L	1	20.0	ND	94	74-126%	4	30%	
1,2-Dibromo-3-chloropropane	19.1	2.50	5.00	ug/L	1	20.0	ND	96	62-128%	4	30%	
1,2-Dibromoethane (EDB)	22.6	0.250	0.500	ug/L	1	20.0	ND	113	77-121%	0.04	30%	
Dibromomethane	22.9	0.500	1.00	ug/L	1	20.0	ND	114	79-123%	2	30%	
1,2-Dichlorobenzene	22.4	0.250	0.500	ug/L	1	20.0	ND	112	80-120%	1	30%	
1,3-Dichlorobenzene	21.8	0.250	0.500	ug/L	1	20.0	ND	109	80-120%	0.1	30%	
1,4-Dichlorobenzene	20.7	0.250	0.500	ug/L	1	20.0	ND	104	79-120%	0.4	30%	
Dichlorodifluoromethane	21.5	0.500	1.00	ug/L	1	20.0	ND	108	32-152%	9	30%	
1,1-Dichloroethane	22.0	0.200	0.400	ug/L	1	20.0	ND	110	77-125%	2	30%	
1,2-Dichloroethane (EDC)	21.8	0.200	0.400	ug/L	1	20.0	ND	109	73-128%	1	30%	
1,1-Dichloroethene	22.5	0.200	0.400	ug/L	1	20.0	ND	113	71-131%	3	30%	
cis-1,2-Dichloroethene	22.6	0.200	0.400	ug/L	1	20.0	0.540	110	78-123%	2	30%	
trans-1,2-Dichloroethene	22.5	0.200	0.400	ug/L	1	20.0	ND	112	75-124%	2	30%	
1,2-Dichloropropane	21.4	0.250	0.500	ug/L	1	20.0	ND	107	78-122%	2	30%	
1,3-Dichloropropane	21.9	0.500	1.00	ug/L	1	20.0	ND	109	80-120%	0.05	30%	
2,2-Dichloropropane	12.1	0.500	1.00	ug/L	1	20.0	ND	60	60-139%	2	30%	
1,1-Dichloropropene	23.5	0.500	1.00	ug/L	1	20.0	ND	117	79-125%	2	30%	
cis-1,3-Dichloropropene	19.8	0.500	1.00	ug/L	1	20.0	ND	99	75-124%	2	30%	
trans-1,3-Dichloropropene	18.1	0.500	1.00	ug/L	1	20.0	ND	90	73-127%	1	30%	
Ethylbenzene	42.8	0.250	0.500	ug/L	1	20.0	20.0	114	79-121%	0.4	30%	
Hexachlorobutadiene	22.2	2.50	5.00	ug/L	1	20.0	ND	111	66-134%	0.2	30%	
2-Hexanone	48.1	5.00	10.0	ug/L	1	40.0	ND	120	57-139%	0	30%	
Isopropylbenzene	27.9	0.500	1.00	ug/L	1	20.0	4.51	117	72-131%	0.07	30%	
4-Isopropyltoluene	24.3	0.500	1.00	ug/L	1	20.0	ND	121	77-127%	3	30%	

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Darwin Thomas, Business Development Director

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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:

A3C0670 - 05 19 23 0532

## 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 23C0990 - EPA 5030C						Water						
Matrix Spike Dup (23C0990-MSD1)			Prepared: 03/24/23 13:33		Analyzed: 03/25/23 12:35							
QC Source Sample: GS-031623-28 (A3C0670-02)												
Methylene chloride	20.5	5.00	10.0	ug/L	1	20.0	ND	103	74-124%	2	30%	E
4-Methyl-2-pentanone (MiBK)	45.8	5.00	10.0	ug/L	1	40.0	ND	114	67-130%	0.7	30%	
Methyl tert-butyl ether (MTBE)	19.9	0.500	1.00	ug/L	1	20.0	ND	99	71-124%	0.6	30%	
Naphthalene	531	1.00	2.00	ug/L	1	20.0	512	98	61-128%	2	30%	
n-Propylbenzene	22.6	0.250	0.500	ug/L	1	20.0	0.340	111	76-126%	2	30%	Q-54a
Styrene	23.0	0.500	1.00	ug/L	1	20.0	ND	115	78-123%	1	30%	
1,1,1,2-Tetrachloroethane	22.7	0.200	0.400	ug/L	1	20.0	ND	114	78-124%	2	30%	
1,1,2,2-Tetrachloroethane	22.0	0.250	0.500	ug/L	1	20.0	ND	110	71-121%	1	30%	
Tetrachloroethene (PCE)	21.5	0.200	0.400	ug/L	1	20.0	ND	108	74-129%	1	30%	
Toluene	26.7	0.500	1.00	ug/L	1	20.0	6.17	103	80-121%	0.5	30%	
1,2,3-Trichlorobenzene	23.2	1.00	2.00	ug/L	1	20.0	ND	116	69-129%	2	30%	
1,2,4-Trichlorobenzene	23.3	1.00	2.00	ug/L	1	20.0	ND	117	69-130%	1	30%	
1,1,1-Trichloroethane	22.1	0.200	0.400	ug/L	1	20.0	ND	110	74-131%	1	30%	
1,1,2-Trichloroethane	21.5	0.250	0.500	ug/L	1	20.0	ND	107	80-120%	1	30%	
Trichloroethene (TCE)	21.4	0.200	0.400	ug/L	1	20.0	ND	106	79-123%	2	30%	
Trichlorofluoromethane	25.0	1.00	2.00	ug/L	1	20.0	ND	125	65-141%	4	30%	
1,2,3-Trichloropropane	21.3	0.500	1.00	ug/L	1	20.0	ND	106	73-122%	2	30%	
1,2,4-Trimethylbenzene	36.6	0.500	1.00	ug/L	1	20.0	12.5	121	76-124%	0.7	30%	
1,3,5-Trimethylbenzene	26.0	0.500	1.00	ug/L	1	20.0	2.61	117	75-124%	3	30%	
Vinyl chloride	25.0	0.200	0.400	ug/L	1	20.0	0.950	120	58-137%	3	30%	
m,p-Xylene	55.5	0.500	1.00	ug/L	1	40.0	10.5	112	80-121%	0.7	30%	
o-Xylene	36.1	0.250	0.500	ug/L	1	20.0	13.3	114	78-122%	0.9	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 100 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		100 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		93 %		80-120 %		"						

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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:****A3C0670 - 05 19 23 0532****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 23C1004 - EPA 5030C						Water						
Blank (23C1004-BLK1)			Prepared: 03/25/23 14:18		Analyzed: 03/26/23 06:21							
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

Project Manager: John Renda

Report ID:

A3C0670 - 05 19 23 0532

## 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 23C1004 - EPA 5030C						Water						
Blank (23C1004-BLK1)						Prepared: 03/25/23 14:18 Analyzed: 03/26/23 06:21						
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	Q-54c
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: 100 % 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:

A3C0670 - 05 19 23 0532

## 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 23C1004 - EPA 5030C						Water						
Blank (23C1004-BLK1)			Prepared: 03/25/23 14:18		Analyzed: 03/26/23 06:21							
Surr: Toluene-d8 (Surr)		Recovery: 100 %		Limits: 80-120 %		Dilution: 1x						
4-Bromofluorobenzene (Surr)		108 %		80-120 %		"						
LCS (23C1004-BS1)			Prepared: 03/25/23 14:18		Analyzed: 03/26/23 05:26							
EPA 8260D												
Acetone	37.9	10.0	20.0	ug/L	1	40.0	---	95	80-120%	---	---	ICV-01
Acrylonitrile	19.1	1.00	2.00	ug/L	1	20.0	---	95	80-120%	---	---	
Benzene	20.3	0.100	0.200	ug/L	1	20.0	---	102	80-120%	---	---	
Bromobenzene	20.0	0.250	0.500	ug/L	1	20.0	---	100	80-120%	---	---	
Bromochloromethane	19.8	0.500	1.00	ug/L	1	20.0	---	99	80-120%	---	---	
Bromodichloromethane	23.0	0.500	1.00	ug/L	1	20.0	---	115	80-120%	---	---	
Bromoform	16.5	0.500	1.00	ug/L	1	20.0	---	83	80-120%	---	---	
Bromomethane	22.4	5.00	5.00	ug/L	1	20.0	---	112	80-120%	---	---	
2-Butanone (MEK)	40.8	5.00	10.0	ug/L	1	40.0	---	102	80-120%	---	---	
n-Butylbenzene	23.6	0.500	1.00	ug/L	1	20.0	---	118	80-120%	---	---	
sec-Butylbenzene	22.9	0.500	1.00	ug/L	1	20.0	---	114	80-120%	---	---	
tert-Butylbenzene	21.1	0.500	1.00	ug/L	1	20.0	---	105	80-120%	---	---	
Carbon disulfide	18.7	5.00	10.0	ug/L	1	20.0	---	94	80-120%	---	---	
Carbon tetrachloride	20.3	0.500	1.00	ug/L	1	20.0	---	102	80-120%	---	---	
Chlorobenzene	20.4	0.250	0.500	ug/L	1	20.0	---	102	80-120%	---	---	
Chloroethane	20.3	5.00	5.00	ug/L	1	20.0	---	101	80-120%	---	---	
Chloroform	20.7	0.500	1.00	ug/L	1	20.0	---	104	80-120%	---	---	
Chloromethane	20.3	2.50	5.00	ug/L	1	20.0	---	101	80-120%	---	---	
2-Chlorotoluene	20.8	0.500	1.00	ug/L	1	20.0	---	104	80-120%	---	---	
4-Chlorotoluene	20.4	0.500	1.00	ug/L	1	20.0	---	102	80-120%	---	---	
Dibromochloromethane	18.3	0.500	1.00	ug/L	1	20.0	---	91	80-120%	---	---	
1,2-Dibromo-3-chloropropane	19.0	2.50	5.00	ug/L	1	20.0	---	95	80-120%	---	---	
1,2-Dibromoethane (EDB)	22.4	0.250	0.500	ug/L	1	20.0	---	112	80-120%	---	---	
Dibromomethane	22.2	0.500	1.00	ug/L	1	20.0	---	111	80-120%	---	---	
1,2-Dichlorobenzene	22.0	0.250	0.500	ug/L	1	20.0	---	110	80-120%	---	---	
1,3-Dichlorobenzene	21.6	0.250	0.500	ug/L	1	20.0	---	108	80-120%	---	---	
1,4-Dichlorobenzene	20.5	0.250	0.500	ug/L	1	20.0	---	102	80-120%	---	---	
Dichlorodifluoromethane	22.2	0.500	1.00	ug/L	1	20.0	---	111	80-120%	---	---	
1,1-Dichloroethane	20.5	0.200	0.400	ug/L	1	20.0	---	102	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:

A3C0670 - 05 19 23 0532

## 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 23C1004 - EPA 5030C						Water						
LCS (23C1004-BS1)			Prepared: 03/25/23 14:18		Analyzed: 03/26/23 05:26							
1,2-Dichloroethane (EDC)	20.6	0.200	0.400	ug/L	1	20.0	---	103	80-120%	---	---	
1,1-Dichloroethene	20.7	0.200	0.400	ug/L	1	20.0	---	104	80-120%	---	---	
cis-1,2-Dichloroethene	20.6	0.200	0.400	ug/L	1	20.0	---	103	80-120%	---	---	
trans-1,2-Dichloroethene	21.1	0.200	0.400	ug/L	1	20.0	---	105	80-120%	---	---	
1,2-Dichloropropane	19.9	0.250	0.500	ug/L	1	20.0	---	100	80-120%	---	---	
1,3-Dichloropropane	21.0	0.500	1.00	ug/L	1	20.0	---	105	80-120%	---	---	
2,2-Dichloropropane	13.6	0.500	1.00	ug/L	1	20.0	---	68	80-120%	---	---	Q-54c
1,1-Dichloropropene	21.8	0.500	1.00	ug/L	1	20.0	---	109	80-120%	---	---	
cis-1,3-Dichloropropene	19.4	0.500	1.00	ug/L	1	20.0	---	97	80-120%	---	---	
trans-1,3-Dichloropropene	17.6	0.500	1.00	ug/L	1	20.0	---	88	80-120%	---	---	
Ethylbenzene	21.5	0.250	0.500	ug/L	1	20.0	---	107	80-120%	---	---	
Hexachlorobutadiene	24.5	2.50	5.00	ug/L	1	20.0	---	123	80-120%	---	---	Q-56
2-Hexanone	42.8	5.00	10.0	ug/L	1	40.0	---	107	80-120%	---	---	
Isopropylbenzene	22.4	0.500	1.00	ug/L	1	20.0	---	112	80-120%	---	---	
4-Isopropyltoluene	23.6	0.500	1.00	ug/L	1	20.0	---	118	80-120%	---	---	
Methylene chloride	19.6	5.00	10.0	ug/L	1	20.0	---	98	80-120%	---	---	
4-Methyl-2-pentanone (MiBK)	40.8	5.00	10.0	ug/L	1	40.0	---	102	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	18.8	0.500	1.00	ug/L	1	20.0	---	94	80-120%	---	---	
Naphthalene	20.4	1.00	2.00	ug/L	1	20.0	---	102	80-120%	---	---	
n-Propylbenzene	21.1	0.250	0.500	ug/L	1	20.0	---	105	80-120%	---	---	
Styrene	22.2	0.500	1.00	ug/L	1	20.0	---	111	80-120%	---	---	
1,1,1,2-Tetrachloroethane	22.0	0.200	0.400	ug/L	1	20.0	---	110	80-120%	---	---	
1,1,2,2-Tetrachloroethane	20.6	0.250	0.500	ug/L	1	20.0	---	103	80-120%	---	---	
Tetrachloroethene (PCE)	22.1	0.200	0.400	ug/L	1	20.0	---	110	80-120%	---	---	
Toluene	19.6	0.500	1.00	ug/L	1	20.0	---	98	80-120%	---	---	
1,2,3-Trichlorobenzene	21.7	1.00	2.00	ug/L	1	20.0	---	109	80-120%	---	---	
1,2,4-Trichlorobenzene	21.8	1.00	2.00	ug/L	1	20.0	---	109	80-120%	---	---	
1,1,1-Trichloroethane	20.8	0.200	0.400	ug/L	1	20.0	---	104	80-120%	---	---	
1,1,2-Trichloroethane	20.9	0.250	0.500	ug/L	1	20.0	---	104	80-120%	---	---	
Trichloroethene (TCE)	21.1	0.200	0.400	ug/L	1	20.0	---	106	80-120%	---	---	
Trichlorofluoromethane	24.7	1.00	2.00	ug/L	1	20.0	---	124	80-120%	---	---	Q-56
1,2,3-Trichloropropane	20.4	0.500	1.00	ug/L	1	20.0	---	102	80-120%	---	---	
1,2,4-Trimethylbenzene	22.0	0.500	1.00	ug/L	1	20.0	---	110	80-120%	---	---	
1,3,5-Trimethylbenzene	22.3	0.500	1.00	ug/L	1	20.0	---	112	80-120%	---	---	

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Darwin Thomas, Business Development Director

Page 46 of 77



## ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

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6720 SW Macadam Ave. Suite 125

Portland, OR 97219

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Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0670 - 05 19 23 0532

## 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 23C1004 - EPA 5030C						Water						
LCS (23C1004-BS1)				Prepared: 03/25/23 14:18		Analyzed: 03/26/23 05:26						
Vinyl chloride	21.3	0.200	0.400	ug/L	1	20.0	---	107	80-120%	---	---	
m,p-Xylene	42.4	0.500	1.00	ug/L	1	40.0	---	106	80-120%	---	---	
o-Xylene	21.3	0.250	0.500	ug/L	1	20.0	---	107	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 100 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		98 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		95 %		80-120 %		"						
Duplicate (23C1004-DUP1)						Prepared: 03/25/23 14:18		Analyzed: 03/26/23 15:48				
QC Source Sample: Non-SDG (A3C0876-02)												
Acetone	ND	50.0	100	ug/L	5	---	ND	---	---	---	30%	R-02
Acrylonitrile	ND	16.0	16.0	ug/L	5	---	ND	---	---	---	30%	
Benzene	120	0.500	1.00	ug/L	5	---	122	---	---	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	25.0	50.0	ug/L	5	---	ND	---	---	---	30%	
n-Butylbenzene	8.45	2.50	5.00	ug/L	5	---	8.80	---	---	4	30%	
sec-Butylbenzene	7.25	2.50	5.00	ug/L	5	---	7.45	---	---	3	30%	
tert-Butylbenzene	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	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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Darwin Thomas, Business Development Director



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Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

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A3C0670 - 05 19 23 0532

## 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 23C1004 - EPA 5030C						Water						
Duplicate (23C1004-DUP1)			Prepared: 03/25/23 14:18		Analyzed: 03/26/23 15:48							
QC Source Sample: Non-SDG (A3C0876-02)												
1,3-Dichlorobenzene	ND	1.25	2.50	ug/L	5	---	ND	---	---	---	30%	Q-54c
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	2.50	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	70.2	1.25	2.50	ug/L	5	---	72.0	---	---	2	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	10.8	2.50	5.00	ug/L	5	---	10.6	---	---	0.9	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	50.8	5.00	10.0	ug/L	5	---	51.1	---	---	0.6	30%	
n-Propylbenzene	25.0	1.25	2.50	ug/L	5	---	25.0	---	---	0.4	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	1.00	2.00	ug/L	5	---	ND	---	---	---	30%	
Toluene	28.4	2.50	5.00	ug/L	5	---	28.7	---	---	1	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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## 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 23C1004 - EPA 5030C						Water						
Duplicate (23C1004-DUP1)				Prepared: 03/25/23 14:18    Analyzed: 03/26/23 15:48								
QC Source Sample: Non-SDG (A3C0876-02)												
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	312	2.50	5.00	ug/L	5	---	314	---	---	0.6	30%	
1,3,5-Trimethylbenzene	13.0	2.50	5.00	ug/L	5	---	13.2	---	---	0.8	30%	
Vinyl chloride	ND	1.00	2.00	ug/L	5	---	ND	---	---	---	30%	
m,p-Xylene	150	2.50	5.00	ug/L	5	---	152	---	---	1	30%	
o-Xylene	248	1.25	2.50	ug/L	5	---	249	---	---	0.5	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 98 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		99 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		95 %		80-120 %		"						
Duplicate (23C1004-DUP2)				Prepared: 03/25/23 14:18    Analyzed: 03/26/23 13:33								
QC Source Sample: Non-SDG (A3C0876-09)												
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%	

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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:

A3C0670 - 05 19 23 0532

## 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 23C1004 - EPA 5030C						Water						
Duplicate (23C1004-DUP2)			Prepared: 03/25/23 14:18		Analyzed: 03/26/23 13:33							
QC Source Sample: Non-SDG (A3C0876-09)												
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	Q-54c
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%	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
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	1.00	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%	

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A3C0670 - 05 19 23 0532

## 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 23C1004 - EPA 5030C						Water						
Duplicate (23C1004-DUP2)			Prepared: 03/25/23 14:18   Analyzed: 03/26/23 13:33									
QC Source Sample: Non-SDG (A3C0876-09)												
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	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%	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	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: 99 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		100 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		106 %		80-120 %		"						

## Matrix Spike (23C1004-MS1)

Prepared: 03/25/23 14:18 Analyzed: 03/26/23 17:09

## QC Source Sample: GS-031623-28 (A3C0670-02RE1)

## EPA 8260D

Acetone	810	200	400	ug/L	20	800	ND	101	39-160%	---	---
Acrylonitrile	387	20.0	40.0	ug/L	20	400	ND	97	63-135%	---	---
Benzene	522	2.00	4.00	ug/L	20	400	101	105	79-120%	---	---
Bromobenzene	407	5.00	10.0	ug/L	20	400	ND	102	80-120%	---	---
Bromochloromethane	409	10.0	20.0	ug/L	20	400	ND	102	78-123%	---	---
Bromodichloromethane	448	10.0	20.0	ug/L	20	400	ND	112	79-125%	---	---
Bromoform	297	10.0	20.0	ug/L	20	400	ND	74	66-130%	---	---
Bromomethane	428	100	100	ug/L	20	400	ND	107	53-141%	---	---
2-Butanone (MEK)	823	100	200	ug/L	20	800	ND	103	56-143%	---	---
n-Butylbenzene	487	10.0	20.0	ug/L	20	400	ND	122	75-128%	---	---
sec-Butylbenzene	465	10.0	20.0	ug/L	20	400	ND	116	77-126%	---	---
tert-Butylbenzene	438	10.0	20.0	ug/L	20	400	ND	110	78-124%	---	---

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Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0670 - 05 19 23 0532

## 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 23C1004 - EPA 5030C						Water						
Matrix Spike (23C1004-MS1)				Prepared: 03/25/23 14:18		Analyzed: 03/26/23 17:09						
QC Source Sample: GS-031623-28 (A3C0670-02RE1)												
Carbon disulfide	419	100	200	ug/L	20	400	ND	105	64-133%	---	---	ICV-01
Carbon tetrachloride	379	10.0	20.0	ug/L	20	400	ND	95	72-136%	---	---	
Chlorobenzene	416	5.00	10.0	ug/L	20	400	ND	104	80-120%	---	---	
Chloroethane	423	100	100	ug/L	20	400	ND	106	60-138%	---	---	
Chloroform	428	10.0	20.0	ug/L	20	400	ND	107	79-124%	---	---	
Chloromethane	421	50.0	100	ug/L	20	400	ND	105	50-139%	---	---	
2-Chlorotoluene	418	10.0	20.0	ug/L	20	400	ND	104	79-122%	---	---	
4-Chlorotoluene	413	10.0	20.0	ug/L	20	400	ND	103	78-122%	---	---	
Dibromochloromethane	333	10.0	20.0	ug/L	20	400	ND	83	74-126%	---	---	
1,2-Dibromo-3-chloropropane	335	50.0	100	ug/L	20	400	ND	84	62-128%	---	---	
1,2-Dibromoethane (EDB)	445	5.00	10.0	ug/L	20	400	ND	111	77-121%	---	---	Q-54c
Dibromomethane	451	10.0	20.0	ug/L	20	400	ND	113	79-123%	---	---	
1,2-Dichlorobenzene	443	5.00	10.0	ug/L	20	400	ND	111	80-120%	---	---	
1,3-Dichlorobenzene	432	5.00	10.0	ug/L	20	400	ND	108	80-120%	---	---	
1,4-Dichlorobenzene	409	5.00	10.0	ug/L	20	400	ND	102	79-120%	---	---	
Dichlorodifluoromethane	484	10.0	20.0	ug/L	20	400	ND	121	32-152%	---	---	
1,1-Dichloroethane	425	4.00	8.00	ug/L	20	400	ND	106	77-125%	---	---	
1,2-Dichloroethane (EDC)	422	4.00	8.00	ug/L	20	400	ND	105	73-128%	---	---	
1,1-Dichloroethene	441	4.00	8.00	ug/L	20	400	ND	110	71-131%	---	---	
cis-1,2-Dichloroethene	426	4.00	8.00	ug/L	20	400	ND	107	78-123%	---	---	
trans-1,2-Dichloroethene	435	4.00	8.00	ug/L	20	400	ND	109	75-124%	---	---	Q-54a
1,2-Dichloropropane	411	5.00	10.0	ug/L	20	400	ND	103	78-122%	---	---	
1,3-Dichloropropane	426	10.0	20.0	ug/L	20	400	ND	106	80-120%	---	---	
2,2-Dichloropropane	204	10.0	20.0	ug/L	20	400	ND	51	60-139%	---	---	
1,1-Dichloropropene	459	10.0	20.0	ug/L	20	400	ND	115	79-125%	---	---	
cis-1,3-Dichloropropene	362	10.0	20.0	ug/L	20	400	ND	91	75-124%	---	---	
trans-1,3-Dichloropropene	329	10.0	20.0	ug/L	20	400	ND	82	73-127%	---	---	
Ethylbenzene	461	5.00	10.0	ug/L	20	400	16.4	111	79-121%	---	---	
Hexachlorobutadiene	489	50.0	100	ug/L	20	400	ND	122	66-134%	---	---	
2-Hexanone	869	100	200	ug/L	20	800	ND	109	57-139%	---	---	
Isopropylbenzene	466	10.0	20.0	ug/L	20	400	ND	116	72-131%	---	---	
4-Isopropyltoluene	479	10.0	20.0	ug/L	20	400	ND	120	77-127%	---	---	
Methylene chloride	398	100	200	ug/L	20	400	ND	100	74-124%	---	---	

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Page 52 of 77



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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 23C1004 - EPA 5030C						Water						
Matrix Spike (23C1004-MS1)			Prepared: 03/25/23 14:18    Analyzed: 03/26/23 17:09									
QC Source Sample: GS-031623-28 (A3C0670-02RE1)												
4-Methyl-2-pentanone (MiBK)	834	100	200	ug/L	20	800	ND	104	67-130%	---	---	Q-54b
Methyl tert-butyl ether (MTBE)	386	10.0	20.0	ug/L	20	400	ND	96	71-124%	---	---	
Naphthalene	794	20.0	40.0	ug/L	20	400	350	111	61-128%	---	---	
n-Propylbenzene	433	5.00	10.0	ug/L	20	400	ND	108	76-126%	---	---	
Styrene	452	10.0	20.0	ug/L	20	400	ND	113	78-123%	---	---	
1,1,1,2-Tetrachloroethane	400	4.00	8.00	ug/L	20	400	ND	100	78-124%	---	---	
1,1,2,2-Tetrachloroethane	416	5.00	10.0	ug/L	20	400	ND	104	71-121%	---	---	
Tetrachloroethene (PCE)	452	4.00	8.00	ug/L	20	400	ND	113	74-129%	---	---	
Toluene	408	10.0	20.0	ug/L	20	400	ND	102	80-121%	---	---	
1,2,3-Trichlorobenzene	419	20.0	40.0	ug/L	20	400	ND	105	69-129%	---	---	
1,2,4-Trichlorobenzene	429	20.0	40.0	ug/L	20	400	ND	107	69-130%	---	---	
1,1,1-Trichloroethane	412	4.00	8.00	ug/L	20	400	ND	103	74-131%	---	---	
1,1,2-Trichloroethane	426	5.00	10.0	ug/L	20	400	ND	107	80-120%	---	---	
Trichloroethene (TCE)	435	4.00	8.00	ug/L	20	400	ND	109	79-123%	---	---	
Trichlorofluoromethane	544	20.0	40.0	ug/L	20	400	ND	136	65-141%	---	---	
1,2,3-Trichloropropane	414	10.0	20.0	ug/L	20	400	ND	104	73-122%	---	---	
1,2,4-Trimethylbenzene	465	10.0	20.0	ug/L	20	400	10.8	114	76-124%	---	---	
1,3,5-Trimethylbenzene	457	10.0	20.0	ug/L	20	400	ND	114	75-124%	---	---	
Vinyl chloride	456	4.00	8.00	ug/L	20	400	ND	114	58-137%	---	---	
m,p-Xylene	885	10.0	20.0	ug/L	20	800	ND	111	80-121%	---	---	
o-Xylene	455	5.00	10.0	ug/L	20	400	11.0	111	78-122%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 99 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		99 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		95 %		80-120 %		"						

## Matrix Spike Dup (23C1004-MSD1)

Prepared: 03/25/23 14:18 Analyzed: 03/26/23 17:36

T-02

QC Source Sample: GS-031623-28 (A3C0670-02RE1)

## EPA 8260D

Acetone	800	200	400	ug/L	20	800	ND	100	39-160%	1	30%
Acrylonitrile	382	20.0	40.0	ug/L	20	400	ND	95	63-135%	1	30%
Benzene	510	2.00	4.00	ug/L	20	400	101	102	79-120%	2	30%
Bromobenzene	405	5.00	10.0	ug/L	20	400	ND	101	80-120%	0.3	30%
Bromochloromethane	393	10.0	20.0	ug/L	20	400	ND	98	78-123%	4	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 23C1004 - EPA 5030C						Water						
Matrix Spike Dup (23C1004-MSD1)			Prepared: 03/25/23 14:18		Analyzed: 03/26/23 17:36		T-02					
QC Source Sample: GS-031623-28 (A3C0670-02RE1)												
Bromodichloromethane	462	10.0	20.0	ug/L	20	400	ND	116	79-125%	3	30%	ICV-01
Bromoform	324	10.0	20.0	ug/L	20	400	ND	81	66-130%	9	30%	
Bromomethane	441	100	100	ug/L	20	400	ND	110	53-141%	3	30%	
2-Butanone (MEK)	811	100	200	ug/L	20	800	ND	101	56-143%	1	30%	
n-Butylbenzene	488	10.0	20.0	ug/L	20	400	ND	122	75-128%	0.3	30%	
sec-Butylbenzene	473	10.0	20.0	ug/L	20	400	ND	118	77-126%	2	30%	
tert-Butylbenzene	443	10.0	20.0	ug/L	20	400	ND	111	78-124%	1	30%	
Carbon disulfide	417	100	200	ug/L	20	400	ND	104	64-133%	0.5	30%	
Carbon tetrachloride	410	10.0	20.0	ug/L	20	400	ND	102	72-136%	8	30%	
Chlorobenzene	415	5.00	10.0	ug/L	20	400	ND	104	80-120%	0.2	30%	
Chloroethane	419	100	100	ug/L	20	400	ND	105	60-138%	0.9	30%	Q-54c
Chloroform	420	10.0	20.0	ug/L	20	400	ND	105	79-124%	2	30%	
Chloromethane	419	50.0	100	ug/L	20	400	ND	105	50-139%	0.4	30%	
2-Chlorotoluene	424	10.0	20.0	ug/L	20	400	ND	106	79-122%	1	30%	
4-Chlorotoluene	411	10.0	20.0	ug/L	20	400	ND	103	78-122%	0.5	30%	
Dibromochloromethane	360	10.0	20.0	ug/L	20	400	ND	90	74-126%	8	30%	
1,2-Dibromo-3-chloropropane	365	50.0	100	ug/L	20	400	ND	91	62-128%	9	30%	
1,2-Dibromoethane (EDB)	445	5.00	10.0	ug/L	20	400	ND	111	77-121%	0.04	30%	
Dibromomethane	445	10.0	20.0	ug/L	20	400	ND	111	79-123%	1	30%	
1,2-Dichlorobenzene	442	5.00	10.0	ug/L	20	400	ND	111	80-120%	0.2	30%	
1,3-Dichlorobenzene	438	5.00	10.0	ug/L	20	400	ND	109	80-120%	1	30%	Q-54c
1,4-Dichlorobenzene	412	5.00	10.0	ug/L	20	400	ND	103	79-120%	0.8	30%	
Dichlorodifluoromethane	470	10.0	20.0	ug/L	20	400	ND	118	32-152%	3	30%	
1,1-Dichloroethane	416	4.00	8.00	ug/L	20	400	ND	104	77-125%	2	30%	
1,2-Dichloroethane (EDC)	413	4.00	8.00	ug/L	20	400	ND	103	73-128%	2	30%	
1,1-Dichloroethene	432	4.00	8.00	ug/L	20	400	ND	108	71-131%	2	30%	
cis-1,2-Dichloroethene	414	4.00	8.00	ug/L	20	400	ND	103	78-123%	3	30%	
trans-1,2-Dichloroethene	426	4.00	8.00	ug/L	20	400	ND	106	75-124%	2	30%	
1,2-Dichloropropane	400	5.00	10.0	ug/L	20	400	ND	100	78-122%	3	30%	
1,3-Dichloropropane	422	10.0	20.0	ug/L	20	400	ND	106	80-120%	0.8	30%	
2,2-Dichloropropane	196	10.0	20.0	ug/L	20	400	ND	49	60-139%	4	30%	Q-54c
1,1-Dichloropropene	457	10.0	20.0	ug/L	20	400	ND	114	79-125%	0.4	30%	
cis-1,3-Dichloropropene	367	10.0	20.0	ug/L	20	400	ND	92	75-124%	1	30%	

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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

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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:

A3C0670 - 05 19 23 0532

## 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 23C1004 - EPA 5030C						Water						
Matrix Spike Dup (23C1004-MSD1)				Prepared: 03/25/23 14:18    Analyzed: 03/26/23 17:36								T-02
QC Source Sample: GS-031623-28 (A3C0670-02RE1)												
trans-1,3-Dichloropropene	334	10.0	20.0	ug/L	20	400	ND	84	73-127%	2	30%	Q-54a
Ethylbenzene	458	5.00	10.0	ug/L	20	400	16.4	110	79-121%	0.8	30%	
Hexachlorobutadiene	513	50.0	100	ug/L	20	400	ND	128	66-134%	5	30%	
2-Hexanone	859	100	200	ug/L	20	800	ND	107	57-139%	1	30%	
Isopropylbenzene	466	10.0	20.0	ug/L	20	400	ND	117	72-131%	0.1	30%	Q-54b
4-Isopropyltoluene	487	10.0	20.0	ug/L	20	400	ND	122	77-127%	2	30%	
Methylene chloride	386	100	200	ug/L	20	400	ND	96	74-124%	3	30%	
4-Methyl-2-pentanone (MiBK)	818	100	200	ug/L	20	800	ND	102	67-130%	2	30%	
Methyl tert-butyl ether (MTBE)	379	10.0	20.0	ug/L	20	400	ND	95	71-124%	2	30%	Q-54b
Naphthalene	807	20.0	40.0	ug/L	20	400	350	114	61-128%	2	30%	
n-Propylbenzene	433	5.00	10.0	ug/L	20	400	ND	108	76-126%	0.2	30%	
Styrene	451	10.0	20.0	ug/L	20	400	ND	113	78-123%	0.3	30%	
1,1,1,2-Tetrachloroethane	429	4.00	8.00	ug/L	20	400	ND	107	78-124%	7	30%	Q-54b
1,1,2,2-Tetrachloroethane	415	5.00	10.0	ug/L	20	400	ND	104	71-121%	0.3	30%	
Tetrachloroethene (PCE)	451	4.00	8.00	ug/L	20	400	ND	113	74-129%	0.2	30%	
Toluene	404	10.0	20.0	ug/L	20	400	ND	101	80-121%	1	30%	
1,2,3-Trichlorobenzene	435	20.0	40.0	ug/L	20	400	ND	109	69-129%	4	30%	Q-54b
1,2,4-Trichlorobenzene	442	20.0	40.0	ug/L	20	400	ND	111	69-130%	3	30%	
1,1,1-Trichloroethane	420	4.00	8.00	ug/L	20	400	ND	105	74-131%	2	30%	
1,1,2-Trichloroethane	416	5.00	10.0	ug/L	20	400	ND	104	80-120%	2	30%	
Trichloroethene (TCE)	426	4.00	8.00	ug/L	20	400	ND	106	79-123%	2	30%	Q-54b
Trichlorofluoromethane	527	20.0	40.0	ug/L	20	400	ND	132	65-141%	3	30%	
1,2,3-Trichloropropane	417	10.0	20.0	ug/L	20	400	ND	104	73-122%	0.6	30%	
1,2,4-Trimethylbenzene	468	10.0	20.0	ug/L	20	400	10.8	114	76-124%	0.5	30%	
1,3,5-Trimethylbenzene	460	10.0	20.0	ug/L	20	400	ND	115	75-124%	0.6	30%	Q-54b
Vinyl chloride	447	4.00	8.00	ug/L	20	400	ND	112	58-137%	2	30%	
m,p-Xylene	881	10.0	20.0	ug/L	20	800	ND	110	80-121%	0.5	30%	
o-Xylene	453	5.00	10.0	ug/L	20	400	11.0	110	78-122%	0.4	30%	
Surr: 1,4-Difluorobenzene (Surr)												
		Recovery: 99 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		99 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		96 %		80-120 %		"						

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Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0670 - 05 19 23 0532

## 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 23C1096 - EPA 5030C						Water						
Blank (23C1096-BLK1)			Prepared: 03/28/23 12:00		Analyzed: 03/28/23 13:42							
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 (23C1096-BS1)						Prepared: 03/28/23 12:00		Analyzed: 03/28/23 12:48				
EPA 8260D SIM												
1,1-Dichloroethene	0.214	0.0100	0.0200	ug/L	1	0.200	---	107	80-120%	---	---	
cis-1,2-Dichloroethene	0.214	0.0100	0.0200	ug/L	1	0.200	---	107	80-120%	---	---	
trans-1,2-Dichloroethene	0.214	0.0100	0.0200	ug/L	1	0.200	---	107	80-120%	---	---	
Trichloroethene (TCE)	0.188	0.0100	0.0200	ug/L	1	0.200	---	94	80-120%	---	---	
Vinyl chloride	0.242	0.0100	0.0200	ug/L	1	0.200	---	121	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)		96 %		80-120 %		"						
Duplicate (23C1096-DUP1)						Prepared: 03/28/23 13:43		Analyzed: 03/28/23 14:38				
QC Source Sample: Non-SDG (A3C0601-02)												
1,1-Dichloroethene	ND	0.250	0.500	ug/L	25	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	0.250	0.500	ug/L	25	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	0.250	0.500	ug/L	25	---	ND	---	---	---	30%	
Trichloroethene (TCE)	ND	0.250	0.500	ug/L	25	---	ND	---	---	---	30%	
Vinyl chloride	ND	0.250	0.500	ug/L	25	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 104 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		100 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		94 %		80-120 %		"						
Matrix Spike (23C1096-MS1)						Prepared: 03/28/23 13:43		Analyzed: 03/28/23 15:59				

V-01

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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:

A3C0670 - 05 19 23 0532

## 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 23C1096 - EPA 5030C						Water						
Matrix Spike (23C1096-MS1)			Prepared: 03/28/23 13:43    Analyzed: 03/28/23 15:59						V-01			
QC Source Sample: GS-031623-29 (A3C0670-03)												
EPA 8260D SIM												
1,1-Dichloroethene	5.74	0.250	0.500	ug/L	25	5.00	ND	115	71-131%	---	---	Q-54
cis-1,2-Dichloroethene	5.54	0.250	0.500	ug/L	25	5.00	ND	111	78-123%	---	---	
trans-1,2-Dichloroethene	5.63	0.250	0.500	ug/L	25	5.00	ND	113	75-124%	---	---	
Trichloroethene (TCE)	4.72	0.250	0.500	ug/L	25	5.00	ND	94	79-123%	---	---	
Vinyl chloride	6.52	0.250	0.500	ug/L	25	5.00	ND	130	58-137%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 104 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		100 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		93 %		80-120 %		"						

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Report ID:

A3C0670 - 05 19 23 0532

## 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 23C0718 - EPA 3511 (Bottle Extraction)						Water						
Blank (23C0718-BLK1)			Prepared: 03/20/23 07:36    Analyzed: 03/20/23 12:04									
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: 117 %		Limits: 78-134 %		Dilution: 1x						
Benzo(a)pyrene-d12 (Surr)		124 %		80-132 %		"						

## LCS (23C0718-BS1)

Prepared: 03/20/23 07:36 Analyzed: 03/20/23 12:37

EPA 8270E LVI												
Acenaphthene	1.58	0.0160	0.0320	ug/L	1	1.60	---	99	80-120%	---	---	
Acenaphthylene	1.75	0.0160	0.0320	ug/L	1	1.60	---	110	80-124%	---	---	
Anthracene	1.65	0.0160	0.0320	ug/L	1	1.60	---	103	80-123%	---	---	
Benz(a)anthracene	1.79	0.00800	0.0160	ug/L	1	1.60	---	112	80-122%	---	---	
Benzo(a)pyrene	1.95	0.00800	0.0160	ug/L	1	1.60	---	122	80-129%	---	---	
Benzo(b)fluoranthene	1.87	0.00800	0.0160	ug/L	1	1.60	---	117	80-124%	---	---	
Benzo(k)fluoranthene	1.94	0.00800	0.0160	ug/L	1	1.60	---	121	80-125%	---	---	
Benzo(g,h,i)perylene	1.70	0.0160	0.0320	ug/L	1	1.60	---	106	80-120%	---	---	

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A3C0670 - 05 19 23 0532

## 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 23C0718 - EPA 3511 (Bottle Extraction)						Water						
LCS (23C0718-BS1)				Prepared: 03/20/23 07:36   Analyzed: 03/20/23 12:37								
Chrysene	1.66	0.00800	0.0160	ug/L	1	1.60	---	104	80-120%	---	---	
Dibenz(a,h)anthracene	1.57	0.00800	0.0160	ug/L	1	1.60	---	98	80-120%	---	---	
Fluoranthene	1.61	0.0160	0.0320	ug/L	1	1.60	---	100	80-126%	---	---	
Fluorene	1.63	0.0160	0.0320	ug/L	1	1.60	---	102	77-127%	---	---	
Indeno(1,2,3-cd)pyrene	1.58	0.00800	0.0160	ug/L	1	1.60	---	99	80-121%	---	---	
1-Methylnaphthalene	1.55	0.0320	0.0640	ug/L	1	1.60	---	97	53-148%	---	---	
2-Methylnaphthalene	1.56	0.0320	0.0640	ug/L	1	1.60	---	98	48-150%	---	---	
Naphthalene	1.61	0.0320	0.0640	ug/L	1	1.60	---	101	78-120%	---	---	
Phenanthrene	1.50	0.0320	0.0640	ug/L	1	1.60	---	94	80-120%	---	---	
Pyrene	1.59	0.0160	0.0320	ug/L	1	1.60	---	100	80-125%	---	---	
Carbazole	1.83	0.0160	0.0320	ug/L	1	1.60	---	114	65-141%	---	---	
Dibenzofuran	1.66	0.0160	0.0320	ug/L	1	1.60	---	104	76-121%	---	---	
Surr: Acenaphthylene-d8 (Surr)		Recovery: 118 %		Limits: 78-134 %		Dilution: 1x						
Benzo(a)pyrene-d12 (Surr)		123 %		80-132 %		"						
Matrix Spike (23C0718-MS1)				Prepared: 03/20/23 07:36   Analyzed: 03/20/23 15:04								
QC Source Sample: GS-031623-28 (A3C0670-02)												
EPA 8270E LV1												
Acenaphthene	1.65	0.0161	0.0322	ug/L	1	1.61	0.0424	100	80-120%	---	---	
Acenaphthylene	1.90	0.0161	0.0322	ug/L	1	1.61	0.144	109	80-124%	---	---	
Anthracene	1.79	0.0161	0.0322	ug/L	1	1.61	0.0360	109	80-123%	---	---	
Benz(a)anthracene	1.85	0.00806	0.0161	ug/L	1	1.61	ND	115	80-122%	---	---	
Benzo(a)pyrene	1.99	0.00806	0.0161	ug/L	1	1.61	ND	124	80-129%	---	---	
Benzo(b)fluoranthene	1.91	0.00806	0.0161	ug/L	1	1.61	ND	119	80-124%	---	---	
Benzo(k)fluoranthene	1.86	0.00806	0.0161	ug/L	1	1.61	ND	116	80-125%	---	---	
Benzo(g,h,i)perylene	1.66	0.0161	0.0322	ug/L	1	1.61	ND	103	80-120%	---	---	
Chrysene	1.69	0.00806	0.0161	ug/L	1	1.61	ND	105	80-120%	---	---	
Dibenz(a,h)anthracene	1.56	0.00806	0.0161	ug/L	1	1.61	ND	97	80-120%	---	---	
Fluoranthene	1.65	0.0161	0.0322	ug/L	1	1.61	ND	103	80-126%	---	---	
Fluorene	1.72	0.0161	0.0322	ug/L	1	1.61	ND	107	77-127%	---	---	
Indeno(1,2,3-cd)pyrene	1.59	0.00806	0.0161	ug/L	1	1.61	ND	98	80-121%	---	---	
1-Methylnaphthalene	3.46	0.0322	0.0644	ug/L	1	1.61	1.29	135	53-148%	---	---	
2-Methylnaphthalene	2.33	0.0322	0.0644	ug/L	1	1.61	0.140	136	48-150%	---	---	
Naphthalene	317	0.0322	0.0644	ug/L	1	1.61	298	1180	78-120%	---	---	E, Q-03

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Report ID:

A3C0670 - 05 19 23 0532

## 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 23C0718 - EPA 3511 (Bottle Extraction)						Water						
Matrix Spike (23C0718-MS1)			Prepared: 03/20/23 07:36		Analyzed: 03/20/23 15:04							
QC Source Sample: GS-031623-28 (A3C0670-02)												
Phenanthrene	1.61	0.0322	0.0644	ug/L	1	1.61	ND	100	80-120%	---	---	
Pyrene	1.63	0.0161	0.0322	ug/L	1	1.61	ND	101	80-125%	---	---	
Carbazole	2.03	0.0161	0.0322	ug/L	1	1.61	ND	126	65-141%	---	---	
Dibenzofuran	1.75	0.0161	0.0322	ug/L	1	1.61	ND	109	76-121%	---	---	
Surr: Acenaphthylene-d8 (Surr)		Recovery: 121 %		Limits: 78-134 %		Dilution: 1x						
Benzo(a)pyrene-d12 (Surr)		125 %		80-132 %		"						
Matrix Spike Dup (23C0718-MSD1)						Prepared: 03/20/23 07:36		Analyzed: 03/20/23 15:38				
QC Source Sample: GS-031623-28 (A3C0670-02)												
EPA 8270E LVI												
Acenaphthene	1.68	0.0163	0.0325	ug/L	1	1.63	0.0424	101	80-120%	1	30%	
Acenaphthylene	1.95	0.0163	0.0325	ug/L	1	1.63	0.144	111	80-124%	3	30%	
Anthracene	1.78	0.0163	0.0325	ug/L	1	1.63	0.0360	107	80-123%	0.6	30%	
Benz(a)anthracene	1.85	0.00813	0.0163	ug/L	1	1.63	ND	114	80-122%	0.3	30%	
Benzo(a)pyrene	2.03	0.00813	0.0163	ug/L	1	1.63	ND	125	80-129%	2	30%	
Benzo(b)fluoranthene	1.92	0.00813	0.0163	ug/L	1	1.63	ND	118	80-124%	0.2	30%	
Benzo(k)fluoranthene	1.93	0.00813	0.0163	ug/L	1	1.63	ND	118	80-125%	3	30%	
Benzo(g,h,i)perylene	1.70	0.0163	0.0325	ug/L	1	1.63	ND	105	80-120%	2	30%	
Chrysene	1.69	0.00813	0.0163	ug/L	1	1.63	ND	104	80-120%	0.03	30%	
Dibenz(a,h)anthracene	1.59	0.00813	0.0163	ug/L	1	1.63	ND	98	80-120%	2	30%	
Fluoranthene	1.64	0.0163	0.0325	ug/L	1	1.63	ND	101	80-126%	1	30%	
Fluorene	1.74	0.0163	0.0325	ug/L	1	1.63	ND	107	77-127%	0.8	30%	
Indeno(1,2,3-cd)pyrene	1.60	0.00813	0.0163	ug/L	1	1.63	ND	98	80-121%	0.7	30%	
1-Methylnaphthalene	3.03	0.0325	0.0650	ug/L	1	1.63	1.29	107	53-148%	13	30%	
2-Methylnaphthalene	2.03	0.0325	0.0650	ug/L	1	1.63	0.140	116	48-150%	14	30%	
Naphthalene	297	0.0325	0.0650	ug/L	1	1.63	298	-26	78-120%	6	30%	E, Q-03
Phenanthrene	1.58	0.0325	0.0650	ug/L	1	1.63	ND	97	80-120%	2	30%	
Pyrene	1.62	0.0163	0.0325	ug/L	1	1.63	ND	100	80-125%	0.6	30%	
Carbazole	2.03	0.0163	0.0325	ug/L	1	1.63	ND	125	65-141%	0.06	30%	
Dibenzofuran	1.73	0.0163	0.0325	ug/L	1	1.63	ND	106	76-121%	1	30%	
Surr: Acenaphthylene-d8 (Surr)		Recovery: 119 %		Limits: 78-134 %		Dilution: 1x						
Benzo(a)pyrene-d12 (Surr)		126 %		80-132 %		"						

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Darwin Thomas, Business Development Director

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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:****A3C0670 - 05 19 23 0532**

## 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 23C1176 - EPA 3015A						Water						
Blank (23C1176-BLK1)				Prepared: 03/29/23 14:43		Analyzed: 03/30/23 22:13						
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	---	---	---	---	---	---	
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	---	---	---	---	---	---	
Blank (23C1176-BLK2)				Prepared: 03/29/23 14:43		Analyzed: 03/31/23 12:49						
EPA 6020B												
Beryllium	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	Q-16
LCS (23C1176-BS1)				Prepared: 03/29/23 14:43		Analyzed: 03/30/23 22:18						
EPA 6020B												
Aluminum	2830	25.0	50.0	ug/L	1	2780	---	102	80-120%	---	---	
Antimony	27.6	0.500	1.00	ug/L	1	27.8	---	99	80-120%	---	---	
Arsenic	53.7	0.500	1.00	ug/L	1	55.6	---	97	80-120%	---	---	
Barium	57.1	1.00	2.00	ug/L	1	55.6	---	103	80-120%	---	---	
Cadmium	54.8	0.100	0.200	ug/L	1	55.6	---	99	80-120%	---	---	
Chromium	51.9	1.00	2.00	ug/L	1	55.6	---	93	80-120%	---	---	
Copper	54.7	1.00	2.00	ug/L	1	55.6	---	98	80-120%	---	---	
Iron	2760	25.0	50.0	ug/L	1	2780	---	99	80-120%	---	---	
Lead	55.5	0.110	0.200	ug/L	1	55.6	---	100	80-120%	---	---	

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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:

A3C0670 - 05 19 23 0532

## 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 23C1176 - EPA 3015A						Water						
LCS (23C1176-BS1)			Prepared: 03/29/23 14:43		Analyzed: 03/30/23 22:18							
Manganese	55.8	0.500	1.00	ug/L	1	55.6	---	100	80-120%	---	---	
Mercury	1.02	0.0400	0.0800	ug/L	1	1.11	---	92	80-120%	---	---	
Nickel	54.4	1.00	2.00	ug/L	1	55.6	---	98	80-120%	---	---	
Selenium	27.4	0.500	1.00	ug/L	1	27.8	---	99	80-120%	---	---	
Silver	26.7	0.100	0.200	ug/L	1	27.8	---	96	80-120%	---	---	
Thallium	27.3	0.100	0.200	ug/L	1	27.8	---	98	80-120%	---	---	
Vanadium	51.9	1.00	2.00	ug/L	1	55.6	---	93	80-120%	---	---	
Zinc	56.7	2.00	4.00	ug/L	1	55.6	---	102	80-120%	---	---	
LCS (23C1176-BS2)			Prepared: 03/29/23 14:43		Analyzed: 03/31/23 12:54							
EPA 6020B												
Beryllium	24.9	0.100	0.200	ug/L	1	27.8	---	90	80-120%	---	---	Q-16
Duplicate (23C1176-DUP1)			Prepared: 03/29/23 14:43		Analyzed: 03/30/23 22:42							
QC Source Sample: GS-031623-28 (A3C0670-02)												
EPA 6020B												
Aluminum	155	25.0	50.0	ug/L	1	---	141	---	---	9	20%	
Antimony	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	20%	
Arsenic	1.48	0.500	1.00	ug/L	1	---	1.48	---	---	0.3	20%	
Barium	20.2	1.00	2.00	ug/L	1	---	19.7	---	---	2	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	3350	25.0	50.0	ug/L	1	---	3310	---	---	1	20%	
Lead	0.110	0.110	0.200	ug/L	1	---	0.122	---	---	10	20%	J
Manganese	415	0.500	1.00	ug/L	1	---	415	---	---	0.2	20%	
Mercury	ND	0.0400	0.0800	ug/L	1	---	ND	---	---	---	20%	
Nickel	1.60	1.00	2.00	ug/L	1	---	1.64	---	---	3	20%	J
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	1.50	1.00	2.00	ug/L	1	---	1.49	---	---	0.9	20%	J
Zinc	11.7	2.00	4.00	ug/L	1	---	11.6	---	---	0.7	20%	

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Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0670 - 05 19 23 0532

## 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 23C1176 - EPA 3015A						Water						
Duplicate (23C1176-DUP2)			Prepared: 03/29/23 14:43    Analyzed: 03/31/23 13:04									
QC Source Sample: GS-031623-28 (A3C0670-02RE1)												
EPA 6020B												
Beryllium	ND	0.100	0.200	ug/L	1	---	ND	---	---	---	20%	Q-16
Matrix Spike (23C1176-MS1)			Prepared: 03/29/23 14:43    Analyzed: 03/30/23 22:47									
QC Source Sample: GS-031623-28 (A3C0670-02)												
EPA 6020B												
Aluminum	3060	25.0	50.0	ug/L	1	2780	141	105	75-125%	---	---	
Antimony	28.3	0.500	1.00	ug/L	1	27.8	ND	102	75-125%	---	---	
Arsenic	56.6	0.500	1.00	ug/L	1	55.6	1.48	99	75-125%	---	---	
Barium	78.2	1.00	2.00	ug/L	1	55.6	19.7	105	75-125%	---	---	
Cadmium	56.7	0.100	0.200	ug/L	1	55.6	ND	102	75-125%	---	---	
Chromium	52.9	1.00	2.00	ug/L	1	55.6	ND	95	75-125%	---	---	
Copper	55.1	1.00	2.00	ug/L	1	55.6	ND	99	75-125%	---	---	
Iron	6140	25.0	50.0	ug/L	1	2780	3310	102	75-125%	---	---	
Lead	55.5	0.110	0.200	ug/L	1	55.6	0.122	100	75-125%	---	---	
Manganese	475	0.500	1.00	ug/L	1	55.6	415	108	75-125%	---	---	
Mercury	1.05	0.0400	0.0800	ug/L	1	1.11	ND	94	75-125%	---	---	
Nickel	56.1	1.00	2.00	ug/L	1	55.6	1.64	98	75-125%	---	---	
Selenium	27.7	0.500	1.00	ug/L	1	27.8	ND	100	75-125%	---	---	
Silver	26.7	0.100	0.200	ug/L	1	27.8	ND	96	75-125%	---	---	
Thallium	27.3	0.100	0.200	ug/L	1	27.8	ND	98	75-125%	---	---	
Vanadium	54.9	1.00	2.00	ug/L	1	55.6	1.49	96	75-125%	---	---	
Zinc	69.7	2.00	4.00	ug/L	1	55.6	11.6	105	75-125%	---	---	

Matrix Spike (23C1176-MS2)

Prepared: 03/29/23 14:43 Analyzed: 03/31/23 13:09

QC Source Sample: GS-031623-28 (A3C0670-02RE1)

EPA 6020B

Beryllium	18.8	0.100	0.200	ug/L	1	27.8	ND	68	75-125%	---	---	Q-16
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Matrix Spike Dup (23C1176-MSD1)

Prepared: 03/29/23 14:43 Analyzed: 03/30/23 22:52

QC Source Sample: GS-031623-28 (A3C0670-02)

EPA 6020B

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## ANALYTICAL REPORT

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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 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:

A3C0670 - 05 19 23 0532

## 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 23C1176 - EPA 3015A						Water						
Matrix Spike Dup (23C1176-MSD1)			Prepared: 03/29/23 14:43		Analyzed: 03/30/23 22:52							
QC Source Sample: GS-031623-28 (A3C0670-02)												
Aluminum	3020	25.0	50.0	ug/L	1	2780	141	104	75-125%	1	20%	
Antimony	27.8	0.500	1.00	ug/L	1	27.8	ND	100	75-125%	2	20%	
Arsenic	55.3	0.500	1.00	ug/L	1	55.6	1.48	97	75-125%	2	20%	
Barium	76.9	1.00	2.00	ug/L	1	55.6	19.7	103	75-125%	2	20%	
Beryllium	29.0	0.100	0.200	ug/L	1	27.8	ND	104	75-125%	0.4	20%	
Cadmium	55.3	0.100	0.200	ug/L	1	55.6	ND	100	75-125%	2	20%	
Chromium	51.9	1.00	2.00	ug/L	1	55.6	ND	93	75-125%	2	20%	
Copper	53.5	1.00	2.00	ug/L	1	55.6	ND	96	75-125%	3	20%	
Iron	6120	25.0	50.0	ug/L	1	2780	3310	101	75-125%	0.2	20%	
Lead	54.7	0.110	0.200	ug/L	1	55.6	0.122	98	75-125%	1	20%	
Manganese	473	0.500	1.00	ug/L	1	55.6	415	104	75-125%	0.5	20%	
Mercury	1.03	0.0400	0.0800	ug/L	1	1.11	ND	92	75-125%	2	20%	
Nickel	54.7	1.00	2.00	ug/L	1	55.6	1.64	96	75-125%	2	20%	
Selenium	27.5	0.500	1.00	ug/L	1	27.8	ND	99	75-125%	0.6	20%	
Silver	26.6	0.100	0.200	ug/L	1	27.8	ND	96	75-125%	0.6	20%	
Thallium	27.1	0.100	0.200	ug/L	1	27.8	ND	98	75-125%	0.7	20%	
Vanadium	53.5	1.00	2.00	ug/L	1	55.6	1.49	94	75-125%	3	20%	
Zinc	66.7	2.00	4.00	ug/L	1	55.6	11.6	99	75-125%	4	20%	

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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:

A3C0670 - 05 19 23 0532

## 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 23C0733 - Lachat Micro Dist - aqueous						Water						
Blank (23C0733-BLK1)			Prepared: 03/20/23 09:33		Analyzed: 03/21/23 14:29							
EPA 335.4												
Total Cyanide	ND	0.00500	0.00500	mg/L	1	---	---	---	---	---	---	B-02
LCS (23C0733-BS1)			Prepared: 03/20/23 09:33		Analyzed: 03/21/23 14:31							
EPA 335.4												
Total Cyanide	0.266	0.00500	0.00500	mg/L	1	0.250	---	106	90-110%	---	---	B-02
Duplicate (23C0733-DUP3)			Prepared: 03/20/23 09:33		Analyzed: 03/21/23 18:01							
QC Source Sample: Non-SDG (A3C0601-01RE1)												
Total Cyanide	0.908	0.0250	0.0250	mg/L	5	---	0.952	---	---	5	10%	B-02, Q-16
Matrix Spike (23C0733-MS2)			Prepared: 03/20/23 09:33		Analyzed: 03/21/23 15:25							
QC Source Sample: GS-031623-28 (A3C0670-02)												
EPA 335.4												
Total Cyanide	0.285	0.00500	0.00500	mg/L	1	0.250	0.0180	107	90-110%	---	---	B-02
Matrix Spike (23C0733-MS3)			Prepared: 03/20/23 09:33		Analyzed: 03/21/23 18:03							
QC Source Sample: Non-SDG (A3C0601-01RE1)												
EPA 335.4												
Total Cyanide	0.680	0.0250	0.0250	mg/L	5	0.250	0.952	-109	90-110%	---	---	B-02, Q-02, Q-16
Matrix Spike Dup (23C0733-MSD2)			Prepared: 03/20/23 09:33		Analyzed: 03/21/23 15:27							
QC Source Sample: GS-031623-28 (A3C0670-02)												
EPA 335.4												
Total Cyanide	0.287	0.00500	0.00500	mg/L	1	0.250	0.0180	108	90-110%	0.6	10%	B-02

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## ANALYTICAL REPORT

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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:

A3C0670 - 05 19 23 0532

## 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 23C1090 - Lachat Micro Dist - aqueous						Water						
Blank (23C1090-BLK1)			Prepared: 03/28/23 10:33   Analyzed: 03/28/23 14:56									
EPA 335.4												
Total Cyanide	ND	0.00500	0.00500	mg/L	1	---	---	---	---	---	---	
LCS (23C1090-BS1)			Prepared: 03/28/23 10:33   Analyzed: 03/28/23 14:58									
EPA 335.4												
Total Cyanide	0.224	0.00500	0.00500	mg/L	1	0.250	---	90	90-110%	---	---	
Duplicate (23C1090-DUP1)			Prepared: 03/28/23 10:33   Analyzed: 03/28/23 15:10									
QC Source Sample: Non-SDG (A3C0634-23RE1)												
Total Cyanide	ND	0.00500	0.00500	mg/L	1	---	ND	---	---	---	10%	
Matrix Spike (23C1090-MS1)			Prepared: 03/28/23 10:33   Analyzed: 03/28/23 15:12									
QC Source Sample: Non-SDG (A3C0634-23RE1)												
EPA 335.4												
Total Cyanide	0.217	0.00500	0.00500	mg/L	1	0.250	ND	87	90-110%	---	---	Q-01
Matrix Spike (23C1090-MS2)			Prepared: 03/28/23 10:33   Analyzed: 03/28/23 15:20									
QC Source Sample: GS-031623-28 (A3C0670-02RE1)												
EPA 335.4												
Total Cyanide	0.228	0.00500	0.00500	mg/L	1	0.250	0.0105	87	90-110%	---	---	Q-01
Matrix Spike Dup (23C1090-MSD2)			Prepared: 03/28/23 10:33   Analyzed: 03/28/23 15:22									
QC Source Sample: GS-031623-28 (A3C0670-02RE1)												
EPA 335.4												
Total Cyanide	0.234	0.00500	0.00500	mg/L	1	0.250	0.0105	89	90-110%	3	10%	Q-01

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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 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:

A3C0670 - 05 19 23 0532

## 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 23C0905 - Method Prep: Aq						Water						
Blank (23C0905-BLK1)			Prepared: 03/23/23 10:44    Analyzed: 03/23/23 14:30									
<u>D6888-09</u>												
Available Cyanide	ND	0.00100	0.00200	mg/L	1	---	---	---	---	---	---	
LCS (23C0905-BS1)			Prepared: 03/23/23 10:44    Analyzed: 03/23/23 14:32									
<u>D6888-09</u>												
Available Cyanide	0.0243	0.00100	0.00200	mg/L	1	0.0250	---	97	90-117%	---	---	
Matrix Spike (23C0905-MS1)			Prepared: 03/23/23 10:44    Analyzed: 03/23/23 14:44									
<u>QC Source Sample: Non-SDG (A3C0601-05)</u>												
<u>D6888-09</u>												
Available Cyanide	0.0253	0.00101	0.00201	mg/L	1	0.0251	ND	101	82-130%	---	---	
Matrix Spike (23C0905-MS2)			Prepared: 03/23/23 10:44    Analyzed: 03/23/23 15:06									
<u>QC Source Sample: GS-031623-28 (A3C0670-02)</u>												
<u>D6888-09</u>												
Available Cyanide	0.0259	0.00101	0.00201	mg/L	1	0.0251	ND	103	82-130%	---	---	
Matrix Spike Dup (23C0905-MSD1)			Prepared: 03/23/23 10:44    Analyzed: 03/23/23 14:45									
<u>QC Source Sample: Non-SDG (A3C0601-05)</u>												
Available Cyanide	0.0270	0.00101	0.00201	mg/L	1	0.0251	ND	107	82-130%	7	11%	
Matrix Spike Dup (23C0905-MSD2)			Prepared: 03/23/23 10:44    Analyzed: 03/23/23 15:08									
<u>QC Source Sample: GS-031623-28 (A3C0670-02)</u>												
<u>D6888-09</u>												
Available Cyanide	0.0261	0.00101	0.00201	mg/L	1	0.0251	ND	104	82-130%	0.9	11%	

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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:****A3C0670 - 05 19 23 0532**

## 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 23C0849 - Microdiffusion						Water						
Blank (23C0849-BLK1)			Prepared: 03/22/23 09:53		Analyzed: 03/22/23 15:47							
D4282-02												
Free Cyanide	ND	0.00250	0.00500	mg/L	1	---	---	---	---	---	---	
LCS (23C0849-BS1)			Prepared: 03/22/23 09:53		Analyzed: 03/22/23 15:47							
D4282-02												
Free Cyanide	0.0636	0.00250	0.00500	mg/L	1	0.0667	---	95	74-120%	---	---	
LCS Dup (23C0849-BSD1)			Prepared: 03/22/23 09:53		Analyzed: 03/22/23 15:52							
D4282-02												
Free Cyanide	0.0662	0.00250	0.00500	mg/L	1	0.0667	---	99	74-120%	4	20%	
Matrix Spike (23C0849-MS1)			Prepared: 03/22/23 09:53		Analyzed: 03/22/23 15:52							
QC Source Sample: GS-031623-28 (A3C0670-02)												
D4282-02												
Free Cyanide	0.0644	0.00250	0.00500	mg/L	1	0.0667	ND	97	74-120%	---	---	
Matrix Spike Dup (23C0849-MSD1)			Prepared: 03/22/23 09:53		Analyzed: 03/22/23 15:57							
QC Source Sample: GS-031623-28 (A3C0670-02)												
D4282-02												
Free Cyanide	0.0605	0.00250	0.00500	mg/L	1	0.0667	ND	91	74-120%	6	20%	

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## 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
Batch: 23C0990							
A3C0670-01	WG	EPA 8260D	03/16/23 10:05	03/24/23 13:40	5mL/5mL	5mL/5mL	1.00
A3C0670-02	WG	EPA 8260D	03/16/23 10:10	03/24/23 13:40	5mL/5mL	5mL/5mL	1.00
A3C0670-03	WG	EPA 8260D	03/16/23 11:20	03/24/23 13:40	5mL/5mL	5mL/5mL	1.00
A3C0670-04	WG	EPA 8260D	03/16/23 11:30	03/24/23 13:40	5mL/5mL	5mL/5mL	1.00
A3C0670-05	WG	EPA 8260D	03/16/23 13:00	03/24/23 13:40	5mL/5mL	5mL/5mL	1.00
A3C0670-06	WG	EPA 8260D	03/16/23 14:40	03/24/23 13:40	5mL/5mL	5mL/5mL	1.00
A3C0670-07	W	EPA 8260D	03/16/23 14:55	03/24/23 13:40	5mL/5mL	5mL/5mL	1.00
Batch: 23C1004							
A3C0670-02RE1	WG	EPA 8260D	03/16/23 10:10	03/25/23 14:18	5mL/5mL	5mL/5mL	1.00
A3C0670-03RE1	WG	EPA 8260D	03/16/23 11:20	03/25/23 14:18	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: 23C1096							
A3C0670-03	WG	EPA 8260D SIM	03/16/23 11:20	03/28/23 13:43	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: 23C0718							
A3C0670-01	WG	EPA 8270E LVI	03/16/23 10:05	03/20/23 07:36	62.22mL/5mL	125mL/5mL	2.01
A3C0670-02	WG	EPA 8270E LVI	03/16/23 10:10	03/20/23 07:36	124.98mL/5mL	125mL/5mL	1.00
A3C0670-02RE1	WG	EPA 8270E LVI	03/16/23 10:10	03/20/23 07:36	124.98mL/5mL	125mL/5mL	1.00
A3C0670-03	WG	EPA 8270E LVI	03/16/23 11:20	03/20/23 07:36	97.69mL/5mL	125mL/5mL	1.28
A3C0670-03RE1	WG	EPA 8270E LVI	03/16/23 11:20	03/20/23 07:36	97.69mL/5mL	125mL/5mL	1.28
A3C0670-04	WG	EPA 8270E LVI	03/16/23 11:30	03/20/23 07:36	97.58mL/5mL	125mL/5mL	1.28
A3C0670-05	WG	EPA 8270E LVI	03/16/23 13:00	03/20/23 07:36	113.62mL/5mL	125mL/5mL	1.10
A3C0670-06	WG	EPA 8270E LVI	03/16/23 14:40	03/20/23 07:36	122.46mL/5mL	125mL/5mL	1.02

## Total Metals by EPA 6020B (ICPMS)

Prep: EPA 3015A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
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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:****A3C0670 - 05 19 23 0532**

## 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
<u>Batch: 23C1176</u>							
A3C0670-01	WG	EPA 6020B	03/16/23 10:05	03/29/23 14:43	45mL/50mL	45mL/50mL	1.00
A3C0670-01RE1	WG	EPA 6020B	03/16/23 10:05	03/29/23 14:43	45mL/50mL	45mL/50mL	1.00
A3C0670-02	WG	EPA 6020B	03/16/23 10:10	03/29/23 14:43	45mL/50mL	45mL/50mL	1.00
A3C0670-02RE1	WG	EPA 6020B	03/16/23 10:10	03/29/23 14:43	45mL/50mL	45mL/50mL	1.00
A3C0670-03	WG	EPA 6020B	03/16/23 11:20	03/29/23 14:43	45mL/50mL	45mL/50mL	1.00
A3C0670-03RE1	WG	EPA 6020B	03/16/23 11:20	03/29/23 14:43	45mL/50mL	45mL/50mL	1.00
A3C0670-03RE2	WG	EPA 6020B	03/16/23 11:20	03/29/23 14:43	45mL/50mL	45mL/50mL	1.00
A3C0670-04	WG	EPA 6020B	03/16/23 11:30	03/29/23 14:43	45mL/50mL	45mL/50mL	1.00
A3C0670-04RE1	WG	EPA 6020B	03/16/23 11:30	03/29/23 14:43	45mL/50mL	45mL/50mL	1.00
A3C0670-05	WG	EPA 6020B	03/16/23 13:00	03/29/23 14:43	45mL/50mL	45mL/50mL	1.00
A3C0670-05RE1	WG	EPA 6020B	03/16/23 13:00	03/29/23 14:43	45mL/50mL	45mL/50mL	1.00
A3C0670-06	WG	EPA 6020B	03/16/23 14:40	03/29/23 14:43	45mL/50mL	45mL/50mL	1.00
A3C0670-06RE1	WG	EPA 6020B	03/16/23 14:40	03/29/23 14:43	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
<u>Batch: 23C0733</u>							
A3C0670-03	WG	EPA 335.4	03/16/23 11:20	03/20/23 09:33	6mL/6mL	6mL/6mL	1.00
A3C0670-04RE1	WG	EPA 335.4	03/16/23 11:30	03/20/23 09:33	6mL/6mL	6mL/6mL	1.00
A3C0670-05RE1	WG	EPA 335.4	03/16/23 13:00	03/20/23 09:33	6mL/6mL	6mL/6mL	1.00
<u>Batch: 23C1090</u>							
A3C0670-01RE1	WG	EPA 335.4	03/16/23 10:05	03/28/23 10:33	6mL/6mL	6mL/6mL	1.00
A3C0670-02RE1	WG	EPA 335.4	03/16/23 10:10	03/28/23 10:33	6mL/6mL	6mL/6mL	1.00
A3C0670-06RE1	WG	EPA 335.4	03/16/23 14:40	03/28/23 10:33	6mL/6mL	6mL/6mL	1.00

## Available Cyanide by FIA, Ligand Exchange and Amperometric Detection

Prep: Method Prep: Aq

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<u>Batch: 23C0905</u>							
A3C0670-01	WG	D6888-09	03/16/23 10:05	03/23/23 10:44	5mL/5mL	5mL/5mL	1.00
A3C0670-02	WG	D6888-09	03/16/23 10:10	03/23/23 10:44	5mL/5mL	5mL/5mL	1.00
A3C0670-03	WG	D6888-09	03/16/23 11:20	03/23/23 10:44	5mL/5mL	5mL/5mL	1.00
A3C0670-04	WG	D6888-09	03/16/23 11:30	03/23/23 10:44	5mL/5mL	5mL/5mL	1.00

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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:****A3C0670 - 05 19 23 0532**

## SAMPLE PREPARATION INFORMATION

## 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
A3C0670-05	WG	D6888-09	03/16/23 13:00	03/23/23 10:44	5mL/5mL	5mL/5mL	1.00
A3C0670-06	WG	D6888-09	03/16/23 14:40	03/23/23 10:44	5mL/5mL	5mL/5mL	1.00

## Free Cyanide by Microdiffusion/Colorimetric Spectrophotometry

Prep: Microdiffusion

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<u>Batch: 23C0849</u>							
A3C0670-01	WG	D4282-02	03/16/23 10:05	03/22/23 09:53	3mL/3mL	3mL/3mL	1.00
A3C0670-02	WG	D4282-02	03/16/23 10:10	03/22/23 09:53	3mL/3mL	3mL/3mL	1.00
A3C0670-03	WG	D4282-02	03/16/23 11:20	03/22/23 09:53	3mL/3mL	3mL/3mL	1.00
A3C0670-04	WG	D4282-02	03/16/23 11:30	03/22/23 09:53	3mL/3mL	3mL/3mL	1.00
A3C0670-05	WG	D4282-02	03/16/23 13:00	03/22/23 09:53	3mL/3mL	3mL/3mL	1.00
A3C0670-06	WG	D4282-02	03/16/23 14:40	03/22/23 09:53	3mL/3mL	3mL/3mL	1.00

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**Report ID:**

**A3C0670 - 05 19 23 0532**

## QUALIFIER DEFINITIONS

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

#### **Apex Laboratories**

- B-02** Analyte detected in an associated blank at a level between one-half the MRL and the MRL. (See Notes and Conventions below.)
- E** Estimated Value. The result is above the calibration range of the instrument.
- ICV-01** Estimated Result. Initial Calibration Verification (ICV) failed high. There is no effect on non-detect results.
- J** Estimated Result. Result detected below the lowest point of the calibration curve, but above the specified MDL.
- 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-16** Reanalysis of an original Batch QC sample.
- 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 +3%. 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 +4%. 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 -12%. The results are reported as Estimated Values.
- 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-04** Reporting levels elevated due to preparation and/or analytical dilution necessary for analysis.
- S-05** Surrogate recovery is estimated due to sample dilution required for high analyte concentration and/or matrix interference.
- T-02** This Batch QC sample was analyzed outside of the method specified 12 hour analysis window. Results are estimated.
- V-01** Sample aliquot taken from VOA vial with headspace (air bubble greater than 6 mm diameter).

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Project Manager: **John Renda**

**Report ID:**

**A3C0670 - 05 19 23 0532**

### 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).

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:**

**A3C0670 - 05 19 23 0532**

### 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.

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### 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
<u>All reported analytes are included in Apex Laboratories' current ORELAP scope.</u>					

**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.

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## APEX LABS COOLER RECEIPT FORM

Client: Anchor QEA Element WO#: A3 C0670Project/Project #: Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.

## Delivery Info:

Date/time received: 3/17/23 @ 815 By: JS  
Delivered by: Apex ☒ Client ☐ ESS ☐ FedEx ☐ UPS ☐ Radio ☐ Morgan ☐ SDS ☐ Evergreen ☐ Other ☐Cooler Inspection Date/time inspected: 3/17/23 @ 845 By: JDChain 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>1.9</u>						
Custody seals? (Y/N)	<u>N</u>						
Received on ice? (Y/N)	<u>y</u>						
Temp. blanks? (Y/N)	<u>y</u>						
Ice type: (Gel/Real/Other)	<u>real</u>						
Condition (In/Out):	<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: 3/17/23 @ 1425 By: JSAll samples intact? Yes ☐ No ☒ Comments: 1/18 VOAS for GS-031623-28  
broken upon inspection of cooler.Bottle labels/COCs agree? Yes ☒ No ☐ Comments: TB #3255COC/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: 1/6 VOAS for GS-031623-29 #1, 1/5 for -30 #8Water samples: pH checked: Yes ☒ No ☐ NA ☐ pH appropriate? Yes ☒ No ☐ NA ☐Comments: NaOH polys for -27, -29, -30, -31 pH of  
~7

## Additional information:

Labeled by:

JS

Witness:

RAM

Cooler Inspected by:

JS

Form Y-003 R-00

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