



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: A3C0740 - 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 A3C0740, which was received by the laboratory on 3/21/2023 at 8:04:00AM.

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.

Cooler Receipt Information

(See Cooler Receipt Form for details)

Cooler #1	4.3	degC	Cooler #2	5.5	degC
Cooler #3	4.7	degC			

This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.

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



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Darwin Thomas, Business Development Director

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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:****A3C0740 - 05 19 23 0535****ANALYTICAL REPORT FOR SAMPLES****SAMPLE INFORMATION**

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
GS-032023-33	A3C0740-01	WG	03/20/23 11:00	03/21/23 08:04
GS-032023-34	A3C0740-02	WG	03/20/23 11:15	03/21/23 08:04
GS-032023-35	A3C0740-03	WG	03/20/23 12:45	03/21/23 08:04
GS-032023-36	A3C0740-04	WG	03/20/23 13:00	03/21/23 08:04
GS-032023-37	A3C0740-05	WG	03/20/23 14:20	03/21/23 08:04
GS-032023-38	A3C0740-06	WG	03/20/23 14:50	03/21/23 08:04
TB-032023	A3C0740-07	W	03/20/23 15:50	03/21/23 08:04

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## ANALYTICAL SAMPLE RESULTS

## Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>GS-032023-33 (A3C0740-01)</b>		<b>Matrix: WG</b>			<b>Batch: 23C1271</b>			
Diesel	ND	96.2	192	ug/L	1	03/31/23 21:48	NWTPH-Dx	
Oil	335	192	385	ug/L	1	03/31/23 21:48	NWTPH-Dx	J
Surrogate: o-Terphenyl (Surr)		Recovery: 89 %		Limits: 50-150 %	1	03/31/23 21:48	NWTPH-Dx	
<b>GS-032023-34 (A3C0740-02)</b>		<b>Matrix: WG</b>			<b>Batch: 23C1271</b>			
Diesel	ND	96.2	192	ug/L	1	03/31/23 22:08	NWTPH-Dx	
Oil	ND	192	385	ug/L	1	03/31/23 22:08	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 91 %		Limits: 50-150 %	1	03/31/23 22:08	NWTPH-Dx	
<b>GS-032023-35 (A3C0740-03)</b>		<b>Matrix: WG</b>			<b>Batch: 23C1271</b>			
Diesel	522	96.2	192	ug/L	1	03/31/23 22:29	NWTPH-Dx	F-13
Oil	511	192	385	ug/L	1	03/31/23 22:29	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 100 %		Limits: 50-150 %	1	03/31/23 22:29	NWTPH-Dx	
<b>GS-032023-36 (A3C0740-04)</b>		<b>Matrix: WG</b>			<b>Batch: 23C1271</b>			
Diesel	1480	96.2	192	ug/L	1	03/31/23 22:50	NWTPH-Dx	F-13
Oil	1200	192	385	ug/L	1	03/31/23 22:50	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 105 %		Limits: 50-150 %	1	03/31/23 22:50	NWTPH-Dx	
<b>GS-032023-37 (A3C0740-05)</b>		<b>Matrix: WG</b>			<b>Batch: 23C1271</b>			
Diesel	888	94.3	189	ug/L	1	03/31/23 23:10	NWTPH-Dx	F-13
Oil	354	189	377	ug/L	1	03/31/23 23:10	NWTPH-Dx	J
Surrogate: o-Terphenyl (Surr)		Recovery: 103 %		Limits: 50-150 %	1	03/31/23 23:10	NWTPH-Dx	
<b>GS-032023-38 (A3C0740-06)</b>		<b>Matrix: WG</b>			<b>Batch: 23C1271</b>			
Diesel	105	96.2	192	ug/L	1	03/31/23 23:31	NWTPH-Dx	J
Oil	949	192	385	ug/L	1	03/31/23 23:31	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 98 %		Limits: 50-150 %	1	03/31/23 23:31	NWTPH-Dx	

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

Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0740 - 05 19 23 0535

## ANALYTICAL SAMPLE RESULTS

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

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-032023-33 (A3C0740-01)				Matrix: WG		Batch: 23C0996		
Gasoline Range Organics	112	50.0	100	ug/L	1	03/25/23 04:10	NWTPH-Gx (MS)	F-12
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 92 %	Limits: 50-150 %	1	03/25/23 04:10	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		105 %	50-150 %	1	03/25/23 04:10	NWTPH-Gx (MS)		
GS-032023-34 (A3C0740-02)				Matrix: WG		Batch: 23C0996		
Gasoline Range Organics	ND	50.0	100	ug/L	1	03/25/23 03:26	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 95 %	Limits: 50-150 %	1	03/25/23 03:26	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		107 %	50-150 %	1	03/25/23 03:26	NWTPH-Gx (MS)		
GS-032023-35 (A3C0740-03)				Matrix: WG		Batch: 23C0996		
Gasoline Range Organics	ND	50.0	100	ug/L	1	03/25/23 03:48	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 96 %	Limits: 50-150 %	1	03/25/23 03:48	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		107 %	50-150 %	1	03/25/23 03:48	NWTPH-Gx (MS)		
GS-032023-36 (A3C0740-04)				Matrix: WG		Batch: 23C0997		
Gasoline Range Organics	956	50.0	100	ug/L	1	03/25/23 07:53	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 97 %	Limits: 50-150 %	1	03/25/23 07:53	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		98 %	50-150 %	1	03/25/23 07:53	NWTPH-Gx (MS)		
GS-032023-37 (A3C0740-05)				Matrix: WG		Batch: 23C0997		
Gasoline Range Organics	1190	50.0	100	ug/L	1	03/25/23 08:15	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 93 %	Limits: 50-150 %	1	03/25/23 08:15	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		98 %	50-150 %	1	03/25/23 08:15	NWTPH-Gx (MS)		
GS-032023-38 (A3C0740-06)				Matrix: WG		Batch: 23C0997		
Gasoline Range Organics	ND	100	100	ug/L	1	03/25/23 08:37	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 88 %	Limits: 50-150 %	1	03/25/23 08:37	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		99 %	50-150 %	1	03/25/23 08:37	NWTPH-Gx (MS)		

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## ANALYTICAL SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>GS-032023-33 (A3C0740-01)</b>		<b>Matrix: WG</b>			<b>Batch: 23C0996</b>			
Acetone	ND	20.0	20.0	ug/L	1	03/25/23 04:10	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	03/25/23 04:10	EPA 8260D	
Benzene	ND	0.100	0.200	ug/L	1	03/25/23 04:10	EPA 8260D	
Bromobenzene	ND	0.250	0.500	ug/L	1	03/25/23 04:10	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	03/25/23 04:10	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	03/25/23 04:10	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	03/25/23 04:10	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	03/25/23 04:10	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	03/25/23 04:10	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 04:10	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 04:10	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 04:10	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	03/25/23 04:10	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	03/25/23 04:10	EPA 8260D	
<b>Chlorobenzene</b>	<b>7.20</b>	0.250	0.500	ug/L	1	03/25/23 04:10	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	03/25/23 04:10	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	03/25/23 04:10	EPA 8260D	
Chloromethane	ND	2.50	5.00	ug/L	1	03/25/23 04:10	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/25/23 04:10	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/25/23 04:10	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	03/25/23 04:10	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	03/25/23 04:10	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	03/25/23 04:10	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	03/25/23 04:10	EPA 8260D	
<b>1,2-Dichlorobenzene</b>	<b>24.9</b>	0.250	0.500	ug/L	1	03/25/23 04:10	EPA 8260D	
<b>1,3-Dichlorobenzene</b>	<b>0.800</b>	0.250	0.500	ug/L	1	03/25/23 04:10	EPA 8260D	
<b>1,4-Dichlorobenzene</b>	<b>10.9</b>	0.250	0.500	ug/L	1	03/25/23 04:10	EPA 8260D	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	03/25/23 04:10	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	03/25/23 04:10	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	03/25/23 04:10	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	03/25/23 04:10	EPA 8260D	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	03/25/23 04:10	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	03/25/23 04:10	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-032023-33 (A3C0740-01)</b>				<b>Matrix: WG</b>		<b>Batch: 23C0996</b>		
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	03/25/23 04:10	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	03/25/23 04:10	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	03/25/23 04:10	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	03/25/23 04:10	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/25/23 04:10	EPA 8260D	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/25/23 04:10	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	03/25/23 04:10	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	03/25/23 04:10	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	03/25/23 04:10	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 04:10	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	03/25/23 04:10	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	03/25/23 04:10	EPA 8260D	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	03/25/23 04:10	EPA 8260D	
<b>Methyl tert-butyl ether (MTBE)</b>	<b>4.52</b>	0.500	1.00	ug/L	1	03/25/23 04:10	EPA 8260D	
Naphthalene	ND	1.00	2.00	ug/L	1	03/25/23 04:10	EPA 8260D	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	03/25/23 04:10	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	03/25/23 04:10	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	03/25/23 04:10	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	03/25/23 04:10	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	03/25/23 04:10	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	03/25/23 04:10	EPA 8260D	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/25/23 04:10	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/25/23 04:10	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	03/25/23 04:10	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	03/25/23 04:10	EPA 8260D	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	03/25/23 04:10	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	03/25/23 04:10	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	03/25/23 04:10	EPA 8260D	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 04:10	EPA 8260D	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 04:10	EPA 8260D	
Vinyl chloride	ND	0.200	0.400	ug/L	1	03/25/23 04:10	EPA 8260D	
m,p-Xylene	ND	0.500	1.00	ug/L	1	03/25/23 04:10	EPA 8260D	
o-Xylene	ND	0.250	0.500	ug/L	1	03/25/23 04:10	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
GS-032023-33 (A3C0740-01)		Matrix: WG			Batch: 23C0996			
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 100 %	Limits: 80-120 %	1		03/25/23 04:10	EPA 8260D	
Toluene-d8 (Surr)		103 %	80-120 %	1		03/25/23 04:10	EPA 8260D	
4-Bromofluorobenzene (Surr)		96 %	80-120 %	1		03/25/23 04:10	EPA 8260D	
GS-032023-34 (A3C0740-02)		Matrix: WG			Batch: 23C0996			
Acetone	ND	10.0	20.0	ug/L	1	03/25/23 03:26	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	03/25/23 03:26	EPA 8260D	
Benzene	0.120	0.100	0.200	ug/L	1	03/25/23 03:26	EPA 8260D	J
Bromobenzene	ND	0.250	0.500	ug/L	1	03/25/23 03:26	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	03/25/23 03:26	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	03/25/23 03:26	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	03/25/23 03:26	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	03/25/23 03:26	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	03/25/23 03:26	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 03:26	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 03:26	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 03:26	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	03/25/23 03:26	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	03/25/23 03:26	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	03/25/23 03:26	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	03/25/23 03:26	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	03/25/23 03:26	EPA 8260D	
Chloromethane	ND	2.50	5.00	ug/L	1	03/25/23 03:26	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/25/23 03:26	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/25/23 03:26	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	03/25/23 03:26	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	03/25/23 03:26	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	03/25/23 03:26	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	03/25/23 03:26	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/25/23 03:26	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/25/23 03:26	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/25/23 03:26	EPA 8260D	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	03/25/23 03:26	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	03/25/23 03:26	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:****A3C0740 - 05 19 23 0535**

## 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-032023-34 (A3C0740-02)</b>		<b>Matrix: WG</b>			<b>Batch: 23C0996</b>			
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	03/25/23 03:26	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	03/25/23 03:26	EPA 8260D	
<b>cis-1,2-Dichloroethene</b>	<b>0.450</b>	0.200	0.400	ug/L	1	03/25/23 03:26	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	03/25/23 03:26	EPA 8260D	
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	03/25/23 03:26	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	03/25/23 03:26	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	03/25/23 03:26	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	03/25/23 03:26	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/25/23 03:26	EPA 8260D	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/25/23 03:26	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	03/25/23 03:26	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	03/25/23 03:26	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	03/25/23 03:26	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 03:26	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	03/25/23 03:26	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	03/25/23 03:26	EPA 8260D	
4-Methyl-2-pentanone (MIBK)	ND	5.00	10.0	ug/L	1	03/25/23 03:26	EPA 8260D	
<b>Methyl tert-butyl ether (MTBE)</b>	<b>8.07</b>	0.500	1.00	ug/L	1	03/25/23 03:26	EPA 8260D	
Naphthalene	ND	1.00	2.00	ug/L	1	03/25/23 03:26	EPA 8260D	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	03/25/23 03:26	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	03/25/23 03:26	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	03/25/23 03:26	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	03/25/23 03:26	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	03/25/23 03:26	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	03/25/23 03:26	EPA 8260D	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/25/23 03:26	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/25/23 03:26	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	03/25/23 03:26	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	03/25/23 03:26	EPA 8260D	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	03/25/23 03:26	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	03/25/23 03:26	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	03/25/23 03:26	EPA 8260D	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 03:26	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:****A3C0740 - 05 19 23 0535**

## 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-032023-34 (A3C0740-02)</b>		<b>Matrix: WG</b>			<b>Batch: 23C0996</b>			
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 03:26	EPA 8260D	
<b>Vinyl chloride</b>	<b>0.400</b>	0.200	0.400	ug/L	1	03/25/23 03:26	EPA 8260D	<b>Q-54d</b>
m,p-Xylene	ND	0.500	1.00	ug/L	1	03/25/23 03:26	EPA 8260D	
o-Xylene	ND	0.250	0.500	ug/L	1	03/25/23 03:26	EPA 8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 102 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>03/25/23 03:26</i>	<i>EPA 8260D</i>	
<i>Toluene-d8 (Surr)</i>		<i>103 %</i>		<i>80-120 %</i>	<i>1</i>	<i>03/25/23 03:26</i>	<i>EPA 8260D</i>	
<i>4-Bromofluorobenzene (Surr)</i>		<i>97 %</i>		<i>80-120 %</i>	<i>1</i>	<i>03/25/23 03:26</i>	<i>EPA 8260D</i>	
<b>GS-032023-35 (A3C0740-03)</b>		<b>Matrix: WG</b>			<b>Batch: 23C0996</b>			
Acetone	ND	20.0	20.0	ug/L	1	03/25/23 03:48	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	03/25/23 03:48	EPA 8260D	
Benzene	ND	0.100	0.200	ug/L	1	03/25/23 03:48	EPA 8260D	
Bromobenzene	ND	0.250	0.500	ug/L	1	03/25/23 03:48	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	03/25/23 03:48	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	03/25/23 03:48	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	03/25/23 03:48	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	03/25/23 03:48	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	03/25/23 03:48	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 03:48	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 03:48	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 03:48	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	03/25/23 03:48	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	03/25/23 03:48	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	03/25/23 03:48	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	03/25/23 03:48	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	03/25/23 03:48	EPA 8260D	
Chloromethane	ND	2.50	5.00	ug/L	1	03/25/23 03:48	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/25/23 03:48	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/25/23 03:48	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	03/25/23 03:48	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	03/25/23 03:48	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	03/25/23 03:48	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	03/25/23 03:48	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/25/23 03:48	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:****A3C0740 - 05 19 23 0535**

## 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-032023-35 (A3C0740-03)</b>		<b>Matrix: WG</b>			<b>Batch: 23C0996</b>			
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/25/23 03:48	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/25/23 03:48	EPA 8260D	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	03/25/23 03:48	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	03/25/23 03:48	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	03/25/23 03:48	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	03/25/23 03:48	EPA 8260D	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	03/25/23 03:48	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	03/25/23 03:48	EPA 8260D	
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	03/25/23 03:48	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	03/25/23 03:48	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	03/25/23 03:48	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	03/25/23 03:48	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/25/23 03:48	EPA 8260D	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/25/23 03:48	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	03/25/23 03:48	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	03/25/23 03:48	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	03/25/23 03:48	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 03:48	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	03/25/23 03:48	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	03/25/23 03:48	EPA 8260D	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	03/25/23 03:48	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	03/25/23 03:48	EPA 8260D	
Naphthalene	ND	1.00	2.00	ug/L	1	03/25/23 03:48	EPA 8260D	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	03/25/23 03:48	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	03/25/23 03:48	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	03/25/23 03:48	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	03/25/23 03:48	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	03/25/23 03:48	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	03/25/23 03:48	EPA 8260D	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/25/23 03:48	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/25/23 03:48	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	03/25/23 03:48	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	03/25/23 03:48	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:****A3C0740 - 05 19 23 0535**

## 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-032023-35 (A3C0740-03)</b>		<b>Matrix: WG</b>			<b>Batch: 23C0996</b>			
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	03/25/23 03:48	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	03/25/23 03:48	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	03/25/23 03:48	EPA 8260D	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 03:48	EPA 8260D	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 03:48	EPA 8260D	
Vinyl chloride	ND	0.200	0.400	ug/L	1	03/25/23 03:48	EPA 8260D	
m,p-Xylene	ND	0.500	1.00	ug/L	1	03/25/23 03:48	EPA 8260D	
o-Xylene	ND	0.250	0.500	ug/L	1	03/25/23 03:48	EPA 8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 103 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>03/25/23 03:48</i>	<i>EPA 8260D</i>	
<i>Toluene-d8 (Surr)</i>		<i>103 %</i>		<i>80-120 %</i>	<i>1</i>	<i>03/25/23 03:48</i>	<i>EPA 8260D</i>	
<i>4-Bromofluorobenzene (Surr)</i>		<i>96 %</i>		<i>80-120 %</i>	<i>1</i>	<i>03/25/23 03:48</i>	<i>EPA 8260D</i>	
<b>GS-032023-36 (A3C0740-04)</b>		<b>Matrix: WG</b>			<b>Batch: 23C0997</b>			
Acetone	ND	20.0	20.0	ug/L	1	03/25/23 07:53	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	03/25/23 07:53	EPA 8260D	
<b>Benzene</b>	<b>28.3</b>	0.100	0.200	ug/L	1	03/25/23 07:53	EPA 8260D	
Bromobenzene	ND	0.250	0.500	ug/L	1	03/25/23 07:53	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	03/25/23 07:53	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	03/25/23 07:53	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	03/25/23 07:53	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	03/25/23 07:53	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	03/25/23 07:53	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 07:53	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 07:53	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 07:53	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	03/25/23 07:53	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	03/25/23 07:53	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	03/25/23 07:53	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	03/25/23 07:53	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	03/25/23 07:53	EPA 8260D	
Chloromethane	ND	2.50	5.00	ug/L	1	03/25/23 07:53	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/25/23 07:53	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/25/23 07:53	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	03/25/23 07:53	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:

A3C0740 - 05 19 23 0535

## ANALYTICAL SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-032023-36 (A3C0740-04)		Matrix: WG			Batch: 23C0997			
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	03/25/23 07:53	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	03/25/23 07:53	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	03/25/23 07:53	EPA 8260D	
1,2-Dichlorobenzene	0.570	0.250	0.500	ug/L	1	03/25/23 07:53	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/25/23 07:53	EPA 8260D	
1,4-Dichlorobenzene	0.250	0.250	0.500	ug/L	1	03/25/23 07:53	EPA 8260D	J
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	03/25/23 07:53	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	03/25/23 07:53	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	03/25/23 07:53	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	03/25/23 07:53	EPA 8260D	
cis-1,2-Dichloroethene	0.210	0.200	0.400	ug/L	1	03/25/23 07:53	EPA 8260D	J
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	03/25/23 07:53	EPA 8260D	
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	03/25/23 07:53	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	03/25/23 07:53	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	03/25/23 07:53	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	03/25/23 07:53	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/25/23 07:53	EPA 8260D	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/25/23 07:53	EPA 8260D	
Ethylbenzene	0.830	0.250	0.500	ug/L	1	03/25/23 07:53	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	03/25/23 07:53	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	03/25/23 07:53	EPA 8260D	
Isopropylbenzene	3.26	0.500	1.00	ug/L	1	03/25/23 07:53	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	03/25/23 07:53	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	03/25/23 07:53	EPA 8260D	
4-Methyl-2-pentanone (MIBK)	ND	5.00	10.0	ug/L	1	03/25/23 07:53	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	03/25/23 07:53	EPA 8260D	
Naphthalene	2.87	2.00	2.00	ug/L	1	03/25/23 07:53	EPA 8260D	Q-54s
n-Propylbenzene	1.54	0.250	0.500	ug/L	1	03/25/23 07:53	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	03/25/23 07:53	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	03/25/23 07:53	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	03/25/23 07:53	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	03/25/23 07:53	EPA 8260D	
Toluene	0.800	0.500	1.00	ug/L	1	03/25/23 07:53	EPA 8260D	J

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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:

A3C0740 - 05 19 23 0535

## ANALYTICAL SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-032023-36 (A3C0740-04)		Matrix: WG			Batch: 23C0997			
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/25/23 07:53	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/25/23 07:53	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	03/25/23 07:53	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	03/25/23 07:53	EPA 8260D	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	03/25/23 07:53	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	03/25/23 07:53	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	03/25/23 07:53	EPA 8260D	
1,2,4-Trimethylbenzene	7.14	0.500	1.00	ug/L	1	03/25/23 07:53	EPA 8260D	
1,3,5-Trimethylbenzene	3.25	0.500	1.00	ug/L	1	03/25/23 07:53	EPA 8260D	
Vinyl chloride	0.570	0.200	0.400	ug/L	1	03/25/23 07:53	EPA 8260D	Q-54
m,p-Xylene	6.90	0.500	1.00	ug/L	1	03/25/23 07:53	EPA 8260D	
o-Xylene	5.12	0.250	0.500	ug/L	1	03/25/23 07:53	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 92 %		Limits: 80-120 %	1	03/25/23 07:53	EPA 8260D	
Toluene-d8 (Surr)		102 %		80-120 %	1	03/25/23 07:53	EPA 8260D	
4-Bromofluorobenzene (Surr)		94 %		80-120 %	1	03/25/23 07:53	EPA 8260D	
GS-032023-37 (A3C0740-05)		Matrix: WG			Batch: 23C0997			
Acetone	ND	10.0	20.0	ug/L	1	03/25/23 08:15	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	03/25/23 08:15	EPA 8260D	
Benzene	37.0	0.100	0.200	ug/L	1	03/25/23 08:15	EPA 8260D	
Bromobenzene	ND	0.250	0.500	ug/L	1	03/25/23 08:15	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	03/25/23 08:15	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	03/25/23 08:15	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	03/25/23 08:15	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	03/25/23 08:15	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	03/25/23 08:15	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 08:15	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 08:15	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 08:15	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	03/25/23 08:15	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	03/25/23 08:15	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	03/25/23 08:15	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	03/25/23 08:15	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:****A3C0740 - 05 19 23 0535**

## 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-032023-37 (A3C0740-05)</b>		<b>Matrix: WG</b>			<b>Batch: 23C0997</b>			
Chloroform	ND	0.500	1.00	ug/L	1	03/25/23 08:15	EPA 8260D	
Chloromethane	ND	2.50	5.00	ug/L	1	03/25/23 08:15	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/25/23 08:15	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/25/23 08:15	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	03/25/23 08:15	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	03/25/23 08:15	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	03/25/23 08:15	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	03/25/23 08:15	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/25/23 08:15	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/25/23 08:15	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/25/23 08:15	EPA 8260D	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	03/25/23 08:15	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	03/25/23 08:15	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	03/25/23 08:15	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	03/25/23 08:15	EPA 8260D	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	03/25/23 08:15	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	03/25/23 08:15	EPA 8260D	
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	03/25/23 08:15	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	03/25/23 08:15	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	03/25/23 08:15	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	03/25/23 08:15	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/25/23 08:15	EPA 8260D	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/25/23 08:15	EPA 8260D	
<b>Ethylbenzene</b>	<b>10.0</b>	0.250	0.500	ug/L	1	03/25/23 08:15	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	03/25/23 08:15	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	03/25/23 08:15	EPA 8260D	
<b>Isopropylbenzene</b>	<b>0.590</b>	0.500	1.00	ug/L	1	03/25/23 08:15	EPA 8260D	<b>J</b>
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	03/25/23 08:15	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	03/25/23 08:15	EPA 8260D	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	03/25/23 08:15	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	03/25/23 08:15	EPA 8260D	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	03/25/23 08:15	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	03/25/23 08:15	EPA 8260D	

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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:

A3C0740 - 05 19 23 0535

## ANALYTICAL SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-032023-37 (A3C0740-05)		Matrix: WG			Batch: 23C0997			
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	03/25/23 08:15	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	03/25/23 08:15	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	03/25/23 08:15	EPA 8260D	
Toluene	0.580	0.500	1.00	ug/L	1	03/25/23 08:15	EPA 8260D	J
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/25/23 08:15	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/25/23 08:15	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	03/25/23 08:15	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	03/25/23 08:15	EPA 8260D	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	03/25/23 08:15	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	03/25/23 08:15	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	03/25/23 08:15	EPA 8260D	
1,2,4-Trimethylbenzene	3.27	0.500	1.00	ug/L	1	03/25/23 08:15	EPA 8260D	
1,3,5-Trimethylbenzene	1.04	0.500	1.00	ug/L	1	03/25/23 08:15	EPA 8260D	
Vinyl chloride	ND	0.200	0.400	ug/L	1	03/25/23 08:15	EPA 8260D	
m,p-Xylene	5.43	0.500	1.00	ug/L	1	03/25/23 08:15	EPA 8260D	
o-Xylene	4.83	0.250	0.500	ug/L	1	03/25/23 08:15	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 93 %		Limits: 80-120 %	1	03/25/23 08:15	EPA 8260D	
Toluene-d8 (Surr)		102 %		80-120 %	1	03/25/23 08:15	EPA 8260D	
4-Bromofluorobenzene (Surr)		96 %		80-120 %	1	03/25/23 08:15	EPA 8260D	
GS-032023-37 (A3C0740-05RE1)		Matrix: WG			Batch: 23C1041			
Naphthalene	296	10.0	20.0	ug/L	10	03/27/23 19:12	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 98 %		Limits: 80-120 %	1	03/27/23 19:12	EPA 8260D	
Toluene-d8 (Surr)		101 %		80-120 %	1	03/27/23 19:12	EPA 8260D	
4-Bromofluorobenzene (Surr)		100 %		80-120 %	1	03/27/23 19:12	EPA 8260D	
GS-032023-38 (A3C0740-06)		Matrix: WG			Batch: 23C0997			
Acetone	ND	10.0	20.0	ug/L	1	03/25/23 08:37	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	03/25/23 08:37	EPA 8260D	
Benzene	10.9	0.100	0.200	ug/L	1	03/25/23 08:37	EPA 8260D	
Bromobenzene	ND	0.250	0.500	ug/L	1	03/25/23 08:37	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	03/25/23 08:37	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	03/25/23 08:37	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	03/25/23 08:37	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:****A3C0740 - 05 19 23 0535**

## 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-032023-38 (A3C0740-06)</b>				<b>Matrix: WG</b>		<b>Batch: 23C0997</b>		
Bromomethane	ND	5.00	5.00	ug/L	1	03/25/23 08:37	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	03/25/23 08:37	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 08:37	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 08:37	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 08:37	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	03/25/23 08:37	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	03/25/23 08:37	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	03/25/23 08:37	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	03/25/23 08:37	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	03/25/23 08:37	EPA 8260D	
Chloromethane	ND	2.50	5.00	ug/L	1	03/25/23 08:37	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/25/23 08:37	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/25/23 08:37	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	03/25/23 08:37	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	03/25/23 08:37	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	03/25/23 08:37	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	03/25/23 08:37	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/25/23 08:37	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/25/23 08:37	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/25/23 08:37	EPA 8260D	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	03/25/23 08:37	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	03/25/23 08:37	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	03/25/23 08:37	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	03/25/23 08:37	EPA 8260D	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	03/25/23 08:37	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	03/25/23 08:37	EPA 8260D	
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	03/25/23 08:37	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	03/25/23 08:37	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	03/25/23 08:37	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	03/25/23 08:37	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/25/23 08:37	EPA 8260D	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/25/23 08:37	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	03/25/23 08:37	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:****A3C0740 - 05 19 23 0535**

## 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-032023-38 (A3C0740-06)</b>		<b>Matrix: WG</b>			<b>Batch: 23C0997</b>			
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	03/25/23 08:37	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	03/25/23 08:37	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 08:37	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	03/25/23 08:37	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	03/25/23 08:37	EPA 8260D	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	03/25/23 08:37	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	03/25/23 08:37	EPA 8260D	
Naphthalene	ND	3.50	3.50	ug/L	1	03/25/23 08:37	EPA 8260D	R-06
n-Propylbenzene	ND	0.250	0.500	ug/L	1	03/25/23 08:37	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	03/25/23 08:37	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	03/25/23 08:37	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	03/25/23 08:37	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	03/25/23 08:37	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	03/25/23 08:37	EPA 8260D	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/25/23 08:37	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/25/23 08:37	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	03/25/23 08:37	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	03/25/23 08:37	EPA 8260D	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	03/25/23 08:37	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	03/25/23 08:37	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	03/25/23 08:37	EPA 8260D	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 08:37	EPA 8260D	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 08:37	EPA 8260D	
Vinyl chloride	ND	0.200	0.400	ug/L	1	03/25/23 08:37	EPA 8260D	
m,p-Xylene	ND	0.500	1.00	ug/L	1	03/25/23 08:37	EPA 8260D	
o-Xylene	ND	0.250	0.500	ug/L	1	03/25/23 08:37	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 95 %		Limits: 80-120 %	1	03/25/23 08:37	EPA 8260D	
Toluene-d8 (Surr)		102 %		80-120 %	1	03/25/23 08:37	EPA 8260D	
4-Bromofluorobenzene (Surr)		99 %		80-120 %	1	03/25/23 08:37	EPA 8260D	

**TB-032023 (A3C0740-07)****Matrix: W****Batch: 23C0997**

Acetone	ND	10.0	20.0	ug/L	1	03/25/23 07:30	EPA 8260D
Acrylonitrile	ND	1.00	2.00	ug/L	1	03/25/23 07:30	EPA 8260D
Benzene	ND	0.100	0.200	ug/L	1	03/25/23 07:30	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:****A3C0740 - 05 19 23 0535**

## 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-032023 (A3C0740-07)</b>		<b>Matrix: W</b>			<b>Batch: 23C0997</b>			
Bromobenzene	ND	0.250	0.500	ug/L	1	03/25/23 07:30	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	03/25/23 07:30	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	03/25/23 07:30	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	03/25/23 07:30	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	03/25/23 07:30	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	03/25/23 07:30	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 07:30	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 07:30	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 07:30	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	03/25/23 07:30	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	03/25/23 07:30	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	03/25/23 07:30	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	03/25/23 07:30	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	03/25/23 07:30	EPA 8260D	
Chloromethane	ND	2.50	5.00	ug/L	1	03/25/23 07:30	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/25/23 07:30	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/25/23 07:30	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	03/25/23 07:30	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	03/25/23 07:30	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	03/25/23 07:30	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	03/25/23 07:30	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/25/23 07:30	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/25/23 07:30	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/25/23 07:30	EPA 8260D	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	03/25/23 07:30	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	03/25/23 07:30	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	03/25/23 07:30	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	03/25/23 07:30	EPA 8260D	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	03/25/23 07:30	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	03/25/23 07:30	EPA 8260D	
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	03/25/23 07:30	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	03/25/23 07:30	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	03/25/23 07:30	EPA 8260D	

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Darwin Thomas, Business Development Director



## ANALYTICAL REPORT

Apex Laboratories, LLC

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503-718-2323  
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125  
Portland, OR 97219Project: **Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001F**Project Manager: **John Renda****Report ID:****A3C0740 - 05 19 23 0535**

## 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-032023 (A3C0740-07)</b>		<b>Matrix: W</b>			<b>Batch: 23C0997</b>			
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	03/25/23 07:30	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/25/23 07:30	EPA 8260D	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/25/23 07:30	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	03/25/23 07:30	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	03/25/23 07:30	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	03/25/23 07:30	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 07:30	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	03/25/23 07:30	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	03/25/23 07:30	EPA 8260D	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	03/25/23 07:30	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	03/25/23 07:30	EPA 8260D	
Naphthalene	ND	2.00	2.00	ug/L	1	03/25/23 07:30	EPA 8260D	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	03/25/23 07:30	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	03/25/23 07:30	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	03/25/23 07:30	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	03/25/23 07:30	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	03/25/23 07:30	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	03/25/23 07:30	EPA 8260D	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/25/23 07:30	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/25/23 07:30	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	03/25/23 07:30	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	03/25/23 07:30	EPA 8260D	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	03/25/23 07:30	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	03/25/23 07:30	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	03/25/23 07:30	EPA 8260D	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 07:30	EPA 8260D	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	03/25/23 07:30	EPA 8260D	
Vinyl chloride	ND	0.200	0.400	ug/L	1	03/25/23 07:30	EPA 8260D	
m,p-Xylene	ND	0.500	1.00	ug/L	1	03/25/23 07:30	EPA 8260D	
o-Xylene	ND	0.250	0.500	ug/L	1	03/25/23 07:30	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery:	101 %	Limits:	80-120 %	1	03/25/23 07:30	EPA 8260D
Toluene-d8 (Surr)			104 %		80-120 %	1	03/25/23 07:30	EPA 8260D
4-Bromofluorobenzene (Surr)			98 %		80-120 %	1	03/25/23 07:30	EPA 8260D

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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:

A3C0740 - 05 19 23 0535

## 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-032023-33 (A3C0740-01)		Matrix: WG			Batch: 23C0837			
Acenaphthene	ND	0.0428	0.0428	ug/L	1	03/22/23 19:50	EPA 8270E LVI	
Acenaphthylene	ND	0.0214	0.0428	ug/L	1	03/22/23 19:50	EPA 8270E LVI	
Anthracene	0.0235	0.0214	0.0428	ug/L	1	03/22/23 19:50	EPA 8270E LVI	J
Benz(a)anthracene	ND	0.0107	0.0214	ug/L	1	03/22/23 19:50	EPA 8270E LVI	
Benzo(a)pyrene	ND	0.0107	0.0214	ug/L	1	03/22/23 19:50	EPA 8270E LVI	
Benzo(b)fluoranthene	ND	0.0107	0.0214	ug/L	1	03/22/23 19:50	EPA 8270E LVI	
Benzo(k)fluoranthene	ND	0.0107	0.0214	ug/L	1	03/22/23 19:50	EPA 8270E LVI	
Benzo(g,h,i)perylene	ND	0.0214	0.0428	ug/L	1	03/22/23 19:50	EPA 8270E LVI	
Chrysene	ND	0.0107	0.0214	ug/L	1	03/22/23 19:50	EPA 8270E LVI	
Dibenz(a,h)anthracene	ND	0.0107	0.0214	ug/L	1	03/22/23 19:50	EPA 8270E LVI	
Fluoranthene	ND	0.0214	0.0428	ug/L	1	03/22/23 19:50	EPA 8270E LVI	
Fluorene	ND	0.0214	0.0428	ug/L	1	03/22/23 19:50	EPA 8270E LVI	
Indeno(1,2,3-cd)pyrene	ND	0.0107	0.0214	ug/L	1	03/22/23 19:50	EPA 8270E LVI	
1-Methylnaphthalene	ND	0.0428	0.0855	ug/L	1	03/22/23 19:50	EPA 8270E LVI	
2-Methylnaphthalene	ND	0.0428	0.0855	ug/L	1	03/22/23 19:50	EPA 8270E LVI	
Naphthalene	ND	0.162	0.162	ug/L	1	03/22/23 19:50	EPA 8270E LVI	R-02
Phenanthrene	ND	0.0428	0.0855	ug/L	1	03/22/23 19:50	EPA 8270E LVI	
Pyrene	ND	0.0214	0.0428	ug/L	1	03/22/23 19:50	EPA 8270E LVI	
Carbazole	ND	0.0214	0.0428	ug/L	1	03/22/23 19:50	EPA 8270E LVI	
Dibenzofuran	ND	0.0214	0.0428	ug/L	1	03/22/23 19:50	EPA 8270E LVI	
Surrogate: Acenaphthylene-d8 (Surr)		Recovery:	117 %	Limits:	78-134 %	1	03/22/23 19:50	EPA 8270E LVI
Benzo(a)pyrene-d12 (Surr)			125 %		80-132 %	1	03/22/23 19:50	EPA 8270E LVI

## GS-032023-34 (A3C0740-02)

Matrix: WG

Batch: 23C0837

Acenaphthene	0.0698	0.0193	0.0385	ug/L	1	03/22/23 20:23	EPA 8270E LVI
Acenaphthylene	0.249	0.0193	0.0385	ug/L	1	03/22/23 20:23	EPA 8270E LVI
Anthracene	0.180	0.0193	0.0385	ug/L	1	03/22/23 20:23	EPA 8270E LVI
Benz(a)anthracene	ND	0.00963	0.0193	ug/L	1	03/22/23 20:23	EPA 8270E LVI
Benzo(a)pyrene	ND	0.00963	0.0193	ug/L	1	03/22/23 20:23	EPA 8270E LVI
Benzo(b)fluoranthene	ND	0.00963	0.0193	ug/L	1	03/22/23 20:23	EPA 8270E LVI
Benzo(k)fluoranthene	ND	0.00963	0.0193	ug/L	1	03/22/23 20:23	EPA 8270E LVI
Benzo(g,h,i)perylene	ND	0.0193	0.0385	ug/L	1	03/22/23 20:23	EPA 8270E LVI
Chrysene	ND	0.00963	0.0193	ug/L	1	03/22/23 20:23	EPA 8270E LVI

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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:

A3C0740 - 05 19 23 0535

## 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-032023-34 (A3C0740-02)		Matrix: WG			Batch: 23C0837			
Dibenz(a,h)anthracene	ND	0.00963	0.0193	ug/L	1	03/22/23 20:23	EPA 8270E LVI	
Fluoranthene	0.0366	0.0193	0.0385	ug/L	1	03/22/23 20:23	EPA 8270E LVI	J
Fluorene	ND	0.0385	0.0385	ug/L	1	03/22/23 20:23	EPA 8270E LVI	
Indeno(1,2,3-cd)pyrene	ND	0.00963	0.0193	ug/L	1	03/22/23 20:23	EPA 8270E LVI	
1-Methylnaphthalene	ND	0.0385	0.0770	ug/L	1	03/22/23 20:23	EPA 8270E LVI	
2-Methylnaphthalene	ND	0.0385	0.0770	ug/L	1	03/22/23 20:23	EPA 8270E LVI	
Naphthalene	0.0664	0.0385	0.0770	ug/L	1	03/22/23 20:23	EPA 8270E LVI	J
Phenanthrene	0.0404	0.0385	0.0770	ug/L	1	03/22/23 20:23	EPA 8270E LVI	J
Pyrene	0.0433	0.0193	0.0385	ug/L	1	03/22/23 20:23	EPA 8270E LVI	
Carbazole	ND	0.0193	0.0385	ug/L	1	03/22/23 20:23	EPA 8270E LVI	
Dibenzofuran	ND	0.0193	0.0385	ug/L	1	03/22/23 20:23	EPA 8270E LVI	
Surrogate: Acenaphthylene-d8 (Surr)		Recovery:	123 %	Limits:	78-134 %	1	03/22/23 20:23	EPA 8270E LVI
Benzo(a)pyrene-d12 (Surr)			127 %		80-132 %	1	03/22/23 20:23	EPA 8270E LVI
GS-032023-35 (A3C0740-03)		Matrix: WG			Batch: 23C0837			
Acenaphthene	110	0.218	0.436	ug/L	10	03/22/23 14:51	EPA 8270E LVI	
Acenaphthylene	4.99	0.218	0.436	ug/L	10	03/22/23 14:51	EPA 8270E LVI	
Anthracene	0.490	0.218	0.436	ug/L	10	03/22/23 14:51	EPA 8270E LVI	
Benz(a)anthracene	ND	0.109	0.218	ug/L	10	03/22/23 14:51	EPA 8270E LVI	
Benzo(a)pyrene	ND	0.109	0.218	ug/L	10	03/22/23 14:51	EPA 8270E LVI	
Benzo(b)fluoranthene	ND	0.109	0.218	ug/L	10	03/22/23 14:51	EPA 8270E LVI	
Benzo(k)fluoranthene	ND	0.109	0.218	ug/L	10	03/22/23 14:51	EPA 8270E LVI	
Benzo(g,h,i)perylene	ND	0.218	0.436	ug/L	10	03/22/23 14:51	EPA 8270E LVI	
Chrysene	ND	0.109	0.218	ug/L	10	03/22/23 14:51	EPA 8270E LVI	
Dibenz(a,h)anthracene	ND	0.109	0.218	ug/L	10	03/22/23 14:51	EPA 8270E LVI	
Fluoranthene	1.56	0.218	0.436	ug/L	10	03/22/23 14:51	EPA 8270E LVI	
Fluorene	ND	0.967	0.967	ug/L	10	03/22/23 14:51	EPA 8270E LVI	R-02
Indeno(1,2,3-cd)pyrene	ND	0.109	0.218	ug/L	10	03/22/23 14:51	EPA 8270E LVI	
1-Methylnaphthalene	ND	0.436	0.872	ug/L	10	03/22/23 14:51	EPA 8270E LVI	
2-Methylnaphthalene	ND	0.436	0.872	ug/L	10	03/22/23 14:51	EPA 8270E LVI	
Naphthalene	ND	0.436	0.872	ug/L	10	03/22/23 14:51	EPA 8270E LVI	
Phenanthrene	ND	0.436	0.872	ug/L	10	03/22/23 14:51	EPA 8270E LVI	
Pyrene	3.69	0.218	0.436	ug/L	10	03/22/23 14:51	EPA 8270E LVI	

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Project Manager: John Renda

Report ID:

A3C0740 - 05 19 23 0535

## 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-032023-35 (A3C0740-03)		Matrix: WG			Batch: 23C0837			
Carbazole	ND	0.218	0.436	ug/L	10	03/22/23 14:51	EPA 8270E LVI	
Dibenzofuran	ND	0.218	0.436	ug/L	10	03/22/23 14:51	EPA 8270E LVI	
Surrogate: Acenaphthylene-d8 (Surr)		Recovery: 101 %		Limits: 78-134 %	10	03/22/23 14:51	EPA 8270E LVI	S-05
Benzo(a)pyrene-d12 (Surr)		82 %		80-132 %	10	03/22/23 14:51	EPA 8270E LVI	S-05
GS-032023-36 (A3C0740-04)		Matrix: WG			Batch: 23C0837			
Acenaphthene	87.1	0.180	0.361	ug/L	10	03/22/23 15:24	EPA 8270E LVI	
Acenaphthylene	ND	4.60	4.60	ug/L	10	03/22/23 15:24	EPA 8270E LVI	R-02
Anthracene	6.06	0.180	0.361	ug/L	10	03/22/23 15:24	EPA 8270E LVI	
Benz(a)anthracene	0.176	0.0902	0.180	ug/L	10	03/22/23 15:24	EPA 8270E LVI	J
Benzo(a)pyrene	ND	0.0902	0.180	ug/L	10	03/22/23 15:24	EPA 8270E LVI	
Benzo(b)fluoranthene	ND	0.0902	0.180	ug/L	10	03/22/23 15:24	EPA 8270E LVI	
Benzo(k)fluoranthene	ND	0.0902	0.180	ug/L	10	03/22/23 15:24	EPA 8270E LVI	
Benzo(g,h,i)perylene	ND	0.180	0.361	ug/L	10	03/22/23 15:24	EPA 8270E LVI	
Chrysene	0.140	0.0902	0.180	ug/L	10	03/22/23 15:24	EPA 8270E LVI	J
Dibenz(a,h)anthracene	ND	0.0902	0.180	ug/L	10	03/22/23 15:24	EPA 8270E LVI	
Fluoranthene	3.73	0.180	0.361	ug/L	10	03/22/23 15:24	EPA 8270E LVI	
Fluorene	23.6	0.180	0.361	ug/L	10	03/22/23 15:24	EPA 8270E LVI	
Indeno(1,2,3-cd)pyrene	ND	0.0902	0.180	ug/L	10	03/22/23 15:24	EPA 8270E LVI	
1-Methylnaphthalene	42.6	0.361	0.721	ug/L	10	03/22/23 15:24	EPA 8270E LVI	
2-Methylnaphthalene	2.03	0.361	0.721	ug/L	10	03/22/23 15:24	EPA 8270E LVI	
Naphthalene	2.65	0.361	0.721	ug/L	10	03/22/23 15:24	EPA 8270E LVI	
Phenanthrene	31.7	0.361	0.721	ug/L	10	03/22/23 15:24	EPA 8270E LVI	
Pyrene	3.65	0.180	0.361	ug/L	10	03/22/23 15:24	EPA 8270E LVI	
Carbazole	0.505	0.180	0.361	ug/L	10	03/22/23 15:24	EPA 8270E LVI	
Dibenzofuran	2.85	0.180	0.361	ug/L	10	03/22/23 15:24	EPA 8270E LVI	
Surrogate: Acenaphthylene-d8 (Surr)		Recovery: 90 %		Limits: 78-134 %	10	03/22/23 15:24	EPA 8270E LVI	S-05
Benzo(a)pyrene-d12 (Surr)		97 %		80-132 %	10	03/22/23 15:24	EPA 8270E LVI	S-05
GS-032023-37 (A3C0740-05)		Matrix: WG			Batch: 23C0837			
Acenaphthylene	ND	1.41	1.41	ug/L	1	03/22/23 20:56	EPA 8270E LVI	R-02
Anthracene	3.19	0.0205	0.0410	ug/L	1	03/22/23 20:56	EPA 8270E LVI	
Benz(a)anthracene	0.194	0.0103	0.0205	ug/L	1	03/22/23 20:56	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:

A3C0740 - 05 19 23 0535

## 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-032023-37 (A3C0740-05)		Matrix: WG			Batch: 23C0837			
Benzo(a)pyrene	0.0282	0.0103	0.0205	ug/L	1	03/22/23 20:56	EPA 8270E LVI	
Benzo(b)fluoranthene	0.0298	0.0103	0.0205	ug/L	1	03/22/23 20:56	EPA 8270E LVI	M-05
Benzo(k)fluoranthene	0.0159	0.0103	0.0205	ug/L	1	03/22/23 20:56	EPA 8270E LVI	J
Benzo(g,h,i)perylene	ND	0.0205	0.0410	ug/L	1	03/22/23 20:56	EPA 8270E LVI	
Chrysene	0.190	0.0103	0.0205	ug/L	1	03/22/23 20:56	EPA 8270E LVI	
Dibenz(a,h)anthracene	ND	0.0103	0.0205	ug/L	1	03/22/23 20:56	EPA 8270E LVI	
Fluoranthene	4.23	0.0205	0.0410	ug/L	1	03/22/23 20:56	EPA 8270E LVI	
Fluorene	10.4	0.0205	0.0410	ug/L	1	03/22/23 20:56	EPA 8270E LVI	
Indeno(1,2,3-cd)pyrene	ND	0.0103	0.0205	ug/L	1	03/22/23 20:56	EPA 8270E LVI	
2-Methylnaphthalene	18.9	0.0410	0.0821	ug/L	1	03/22/23 20:56	EPA 8270E LVI	
Phenanthrene	13.5	0.0410	0.0821	ug/L	1	03/22/23 20:56	EPA 8270E LVI	
Pyrene	4.42	0.0205	0.0410	ug/L	1	03/22/23 20:56	EPA 8270E LVI	
Carbazole	5.61	0.0205	0.0410	ug/L	1	03/22/23 20:56	EPA 8270E LVI	
Dibenzofuran	1.14	0.0205	0.0410	ug/L	1	03/22/23 20:56	EPA 8270E LVI	
Surrogate: Acenaphthylene-d8 (Surr)		Recovery: 119 %		Limits: 78-134 %	1	03/22/23 20:56	EPA 8270E LVI	
Benzo(a)pyrene-d12 (Surr)		127 %		80-132 %	1	03/22/23 20:56	EPA 8270E LVI	
GS-032023-37 (A3C0740-05RE1)		Matrix: WG			Batch: 23C0837			
Acenaphthene	26.1	1.03	2.05	ug/L	50	03/23/23 20:27	EPA 8270E LVI	
1-Methylnaphthalene	12.6	2.05	4.10	ug/L	50	03/23/23 20:27	EPA 8270E LVI	
Naphthalene	185	2.05	4.10	ug/L	50	03/23/23 20:27	EPA 8270E LVI	
GS-032023-38 (A3C0740-06RE1)		Matrix: WG			Batch: 23C0837			
Acenaphthene	0.0466	0.0196	0.0392	ug/L	1	03/23/23 21:00	EPA 8270E LVI	
Acenaphthylene	0.232	0.0196	0.0392	ug/L	1	03/23/23 21:00	EPA 8270E LVI	
Anthracene	0.176	0.0196	0.0392	ug/L	1	03/23/23 21:00	EPA 8270E LVI	
Benz(a)anthracene	ND	0.00980	0.0196	ug/L	1	03/23/23 21:00	EPA 8270E LVI	
Benzo(a)pyrene	ND	0.00980	0.0196	ug/L	1	03/23/23 21:00	EPA 8270E LVI	
Benzo(b)fluoranthene	ND	0.00980	0.0196	ug/L	1	03/23/23 21:00	EPA 8270E LVI	
Benzo(k)fluoranthene	ND	0.00980	0.0196	ug/L	1	03/23/23 21:00	EPA 8270E LVI	
Benzo(g,h,i)perylene	ND	0.0196	0.0392	ug/L	1	03/23/23 21:00	EPA 8270E LVI	
Chrysene	ND	0.00980	0.0196	ug/L	1	03/23/23 21:00	EPA 8270E LVI	
Dibenz(a,h)anthracene	ND	0.00980	0.0196	ug/L	1	03/23/23 21:00	EPA 8270E LVI	

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**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:****A3C0740 - 05 19 23 0535**

## 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-032023-38 (A3C0740-06RE1)</b>		<b>Matrix: WG</b>			<b>Batch: 23C0837</b>			
<b>Fluoranthene</b>	<b>0.0421</b>	0.0196	0.0392	ug/L	1	03/23/23 21:00	EPA 8270E LVI	
Fluorene	ND	0.0196	0.0392	ug/L	1	03/23/23 21:00	EPA 8270E LVI	
Indeno(1,2,3-cd)pyrene	ND	0.00980	0.0196	ug/L	1	03/23/23 21:00	EPA 8270E LVI	
1-Methylnaphthalene	ND	0.0392	0.0784	ug/L	1	03/23/23 21:00	EPA 8270E LVI	
2-Methylnaphthalene	ND	0.0392	0.0784	ug/L	1	03/23/23 21:00	EPA 8270E LVI	
<b>Naphthalene</b>	<b>0.111</b>	0.0392	0.0784	ug/L	1	03/23/23 21:00	EPA 8270E LVI	
<b>Phenanthrene</b>	<b>0.106</b>	0.0392	0.0784	ug/L	1	03/23/23 21:00	EPA 8270E LVI	
<b>Pyrene</b>	<b>0.0701</b>	0.0196	0.0392	ug/L	1	03/23/23 21:00	EPA 8270E LVI	
Carbazole	ND	0.0196	0.0392	ug/L	1	03/23/23 21:00	EPA 8270E LVI	
Dibenzofuran	ND	0.0196	0.0392	ug/L	1	03/23/23 21:00	EPA 8270E LVI	
Surrogate: Acenaphthylene-d8 (Surr)		Recovery: 121 %		Limits: 78-134 %	1	03/23/23 21:00	EPA 8270E LVI	
Benzo(a)pyrene-d12 (Surr)		124 %		80-132 %	1	03/23/23 21:00	EPA 8270E LVI	

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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:****A3C0740 - 05 19 23 0535**

## 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-032023-33 (A3C0740-01)</b>		<b>Matrix: WG</b>						
Batch: 23C1176								
Aluminum	ND	25.0	50.0	ug/L	1	03/30/23 23:27	EPA 6020B	
Antimony	ND	0.500	1.00	ug/L	1	03/30/23 23:27	EPA 6020B	
<b>Arsenic</b>	<b>1.85</b>	0.500	1.00	ug/L	1	03/30/23 23:27	EPA 6020B	
<b>Barium</b>	<b>38.6</b>	1.00	2.00	ug/L	1	03/30/23 23:27	EPA 6020B	
Cadmium	ND	0.100	0.200	ug/L	1	03/30/23 23:27	EPA 6020B	
Chromium	ND	1.00	2.00	ug/L	1	03/30/23 23:27	EPA 6020B	
Copper	ND	1.00	2.00	ug/L	1	03/30/23 23:27	EPA 6020B	
<b>Iron</b>	<b>18400</b>	25.0	50.0	ug/L	1	03/30/23 23:27	EPA 6020B	
Lead	ND	0.110	0.200	ug/L	1	03/30/23 23:27	EPA 6020B	
<b>Manganese</b>	<b>1370</b>	0.500	1.00	ug/L	1	03/30/23 23:27	EPA 6020B	
Mercury	ND	0.0400	0.0800	ug/L	1	03/30/23 23:27	EPA 6020B	
Nickel	ND	1.00	2.00	ug/L	1	03/30/23 23:27	EPA 6020B	
Selenium	ND	0.500	1.00	ug/L	1	03/30/23 23:27	EPA 6020B	
Silver	ND	0.100	0.200	ug/L	1	03/30/23 23:27	EPA 6020B	
Thallium	ND	0.100	0.200	ug/L	1	03/30/23 23:27	EPA 6020B	
Vanadium	ND	1.00	2.00	ug/L	1	03/30/23 23:27	EPA 6020B	
<b>Zinc</b>	<b>2.81</b>	2.00	4.00	ug/L	1	03/30/23 23:27	EPA 6020B	<b>J</b>
<b>GS-032023-33 (A3C0740-01RE1)</b>		<b>Matrix: WG</b>						
Batch: 23C1176								
Beryllium	ND	0.100	0.200	ug/L	1	04/01/23 03:33	EPA 6020B	
<b>GS-032023-34 (A3C0740-02)</b>		<b>Matrix: WG</b>						
Batch: 23C1176								
<b>Aluminum</b>	<b>848</b>	25.0	50.0	ug/L	1	03/30/23 23:32	EPA 6020B	
Antimony	ND	0.500	1.00	ug/L	1	03/30/23 23:32	EPA 6020B	
<b>Arsenic</b>	<b>3.88</b>	0.500	1.00	ug/L	1	03/30/23 23:32	EPA 6020B	
<b>Barium</b>	<b>45.0</b>	1.00	2.00	ug/L	1	03/30/23 23:32	EPA 6020B	
Cadmium	ND	0.100	0.200	ug/L	1	03/30/23 23:32	EPA 6020B	
<b>Chromium</b>	<b>1.13</b>	1.00	2.00	ug/L	1	03/30/23 23:32	EPA 6020B	<b>J</b>
<b>Copper</b>	<b>1.64</b>	1.00	2.00	ug/L	1	03/30/23 23:32	EPA 6020B	<b>J</b>
<b>Iron</b>	<b>28300</b>	25.0	50.0	ug/L	1	03/30/23 23:32	EPA 6020B	
<b>Lead</b>	<b>0.731</b>	0.110	0.200	ug/L	1	03/30/23 23:32	EPA 6020B	

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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:****A3C0740 - 05 19 23 0535**

## 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-032023-34 (A3C0740-02)</b>		<b>Matrix: WG</b>						
Manganese	1080	0.500	1.00	ug/L	1	03/30/23 23:32	EPA 6020B	
Mercury	ND	0.0400	0.0800	ug/L	1	03/30/23 23:32	EPA 6020B	
Nickel	1.72	1.00	2.00	ug/L	1	03/30/23 23:32	EPA 6020B	J
Selenium	ND	0.500	1.00	ug/L	1	03/30/23 23:32	EPA 6020B	
Silver	ND	0.100	0.200	ug/L	1	03/30/23 23:32	EPA 6020B	
Thallium	ND	0.100	0.200	ug/L	1	03/30/23 23:32	EPA 6020B	
Vanadium	2.82	1.00	2.00	ug/L	1	03/30/23 23:32	EPA 6020B	
Zinc	4.62	2.00	4.00	ug/L	1	03/30/23 23:32	EPA 6020B	
<b>GS-032023-34 (A3C0740-02RE1)</b>		<b>Matrix: WG</b>						
Batch: 23C1176								
Beryllium	ND	0.100	0.200	ug/L	1	04/01/23 03:38	EPA 6020B	
<b>GS-032023-35 (A3C0740-03)</b>		<b>Matrix: WG</b>						
Batch: 23C1176								
Aluminum	ND	25.0	50.0	ug/L	1	03/30/23 23:37	EPA 6020B	
Antimony	ND	0.500	1.00	ug/L	1	03/30/23 23:37	EPA 6020B	
Arsenic	24.1	0.500	1.00	ug/L	1	03/30/23 23:37	EPA 6020B	
Barium	74.9	1.00	2.00	ug/L	1	03/30/23 23:37	EPA 6020B	
Cadmium	ND	0.100	0.200	ug/L	1	03/30/23 23:37	EPA 6020B	
Chromium	ND	1.00	2.00	ug/L	1	03/30/23 23:37	EPA 6020B	
Copper	ND	1.00	2.00	ug/L	1	03/30/23 23:37	EPA 6020B	
Lead	ND	0.110	0.200	ug/L	1	03/30/23 23:37	EPA 6020B	
Mercury	ND	0.0400	0.0800	ug/L	1	03/30/23 23:37	EPA 6020B	
Nickel	1.99	1.00	2.00	ug/L	1	03/30/23 23:37	EPA 6020B	J
Selenium	ND	0.500	1.00	ug/L	1	03/30/23 23:37	EPA 6020B	
Silver	ND	0.100	0.200	ug/L	1	03/30/23 23:37	EPA 6020B	
Thallium	ND	0.100	0.200	ug/L	1	03/30/23 23:37	EPA 6020B	
Vanadium	ND	1.00	2.00	ug/L	1	03/30/23 23:37	EPA 6020B	
Zinc	3.64	2.00	4.00	ug/L	1	03/30/23 23:37	EPA 6020B	J
<b>GS-032023-35 (A3C0740-03RE1)</b>		<b>Matrix: WG</b>						
Batch: 23C1176								
Iron	77500	250	500	ug/L	10	03/31/23 12:34	EPA 6020B	

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Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0740 - 05 19 23 0535

## ANALYTICAL SAMPLE RESULTS

## Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-032023-35 (A3C0740-03RE1) Matrix: WG								
Manganese	3010	5.00	10.0	ug/L	10	03/31/23 12:34	EPA 6020B	
GS-032023-35 (A3C0740-03RE2) Matrix: WG								
Batch: 23C1176								
Beryllium	ND	0.100	0.200	ug/L	1	04/01/23 03:43	EPA 6020B	
GS-032023-36 (A3C0740-04) Matrix: WG								
Batch: 23C1176								
Aluminum	ND	25.0	50.0	ug/L	1	03/30/23 23:41	EPA 6020B	
Antimony	ND	0.500	1.00	ug/L	1	03/30/23 23:41	EPA 6020B	
Arsenic	8.76	0.500	1.00	ug/L	1	03/30/23 23:41	EPA 6020B	
Barium	135	1.00	2.00	ug/L	1	03/30/23 23:41	EPA 6020B	
Cadmium	ND	0.100	0.200	ug/L	1	03/30/23 23:41	EPA 6020B	
Chromium	ND	1.00	2.00	ug/L	1	03/30/23 23:41	EPA 6020B	
Copper	ND	1.00	2.00	ug/L	1	03/30/23 23:41	EPA 6020B	
Lead	ND	0.110	0.200	ug/L	1	03/30/23 23:41	EPA 6020B	
Mercury	ND	0.0400	0.0800	ug/L	1	03/30/23 23:41	EPA 6020B	
Nickel	1.96	1.00	2.00	ug/L	1	03/30/23 23:41	EPA 6020B	J
Selenium	ND	0.500	1.00	ug/L	1	03/30/23 23:41	EPA 6020B	
Silver	ND	0.100	0.200	ug/L	1	03/30/23 23:41	EPA 6020B	
Thallium	ND	0.100	0.200	ug/L	1	03/30/23 23:41	EPA 6020B	
Vanadium	2.18	1.00	2.00	ug/L	1	03/30/23 23:41	EPA 6020B	
Zinc	7.22	2.00	4.00	ug/L	1	03/30/23 23:41	EPA 6020B	
GS-032023-36 (A3C0740-04RE1) Matrix: WG								
Batch: 23C1176								
Iron	85100	250	500	ug/L	10	03/31/23 12:39	EPA 6020B	
Manganese	4130	5.00	10.0	ug/L	10	03/31/23 12:39	EPA 6020B	
GS-032023-36 (A3C0740-04RE2) Matrix: WG								
Batch: 23C1176								
Beryllium	ND	0.100	0.200	ug/L	1	04/01/23 03:48	EPA 6020B	
GS-032023-37 (A3C0740-05) Matrix: WG								
Batch: 23C1176								

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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:****A3C0740 - 05 19 23 0535**

## ANALYTICAL SAMPLE RESULTS

## Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-032023-37 (A3C0740-05)		Matrix: WG						
Aluminum	ND	25.0	50.0	ug/L	1	03/30/23 23:46	EPA 6020B	
Antimony	ND	0.500	1.00	ug/L	1	03/30/23 23:46	EPA 6020B	
Arsenic	2.49	0.500	1.00	ug/L	1	03/30/23 23:46	EPA 6020B	
Barium	175	1.00	2.00	ug/L	1	03/30/23 23:46	EPA 6020B	
Cadmium	ND	0.100	0.200	ug/L	1	03/30/23 23:46	EPA 6020B	
Chromium	ND	1.00	2.00	ug/L	1	03/30/23 23:46	EPA 6020B	
Copper	ND	1.00	2.00	ug/L	1	03/30/23 23:46	EPA 6020B	
Iron	37600	25.0	50.0	ug/L	1	03/30/23 23:46	EPA 6020B	
Lead	0.116	0.110	0.200	ug/L	1	03/30/23 23:46	EPA 6020B	J
Manganese	2570	0.500	1.00	ug/L	1	03/30/23 23:46	EPA 6020B	
Mercury	ND	0.0400	0.0800	ug/L	1	03/30/23 23:46	EPA 6020B	
Nickel	3.00	1.00	2.00	ug/L	1	03/30/23 23:46	EPA 6020B	
Selenium	ND	0.500	1.00	ug/L	1	03/30/23 23:46	EPA 6020B	
Silver	ND	0.100	0.200	ug/L	1	03/30/23 23:46	EPA 6020B	
Thallium	ND	0.100	0.200	ug/L	1	03/30/23 23:46	EPA 6020B	
Vanadium	ND	1.00	2.00	ug/L	1	03/30/23 23:46	EPA 6020B	
Zinc	87.2	2.00	4.00	ug/L	1	03/30/23 23:46	EPA 6020B	
GS-032023-37 (A3C0740-05RE1)		Matrix: WG						
Batch: 23C1176								
Beryllium	ND	0.100	0.200	ug/L	1	04/01/23 03:53	EPA 6020B	
GS-032023-38 (A3C0740-06)		Matrix: WG						
Batch: 23C1176								
Aluminum	284	25.0	50.0	ug/L	1	03/30/23 23:51	EPA 6020B	
Antimony	ND	0.500	1.00	ug/L	1	03/30/23 23:51	EPA 6020B	
Arsenic	5.48	0.500	1.00	ug/L	1	03/30/23 23:51	EPA 6020B	
Barium	71.8	1.00	2.00	ug/L	1	03/30/23 23:51	EPA 6020B	
Cadmium	ND	0.100	0.200	ug/L	1	03/30/23 23:51	EPA 6020B	
Chromium	ND	1.00	2.00	ug/L	1	03/30/23 23:51	EPA 6020B	
Copper	ND	1.00	2.00	ug/L	1	03/30/23 23:51	EPA 6020B	
Lead	0.163	0.110	0.200	ug/L	1	03/30/23 23:51	EPA 6020B	J
Mercury	ND	0.0400	0.0800	ug/L	1	03/30/23 23:51	EPA 6020B	
Nickel	1.62	1.00	2.00	ug/L	1	03/30/23 23:51	EPA 6020B	J

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Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0740 - 05 19 23 0535

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-032023-38 (A3C0740-06)				Matrix: WG				
Selenium	ND	0.500	1.00	ug/L	1	03/30/23 23:51	EPA 6020B	J
Silver	ND	0.100	0.200	ug/L	1	03/30/23 23:51	EPA 6020B	
Thallium	ND	0.100	0.200	ug/L	1	03/30/23 23:51	EPA 6020B	
Vanadium	1.29	1.00	2.00	ug/L	1	03/30/23 23:51	EPA 6020B	
Zinc	10.1	2.00	4.00	ug/L	1	03/30/23 23:51	EPA 6020B	
GS-032023-38 (A3C0740-06RE1)				Matrix: WG				
Batch: 23C1176								
Iron	65400	250	500	ug/L	10	03/31/23 12:44	EPA 6020B	
Manganese	4100	5.00	10.0	ug/L	10	03/31/23 12:44	EPA 6020B	
GS-032023-38 (A3C0740-06RE2)				Matrix: WG				
Batch: 23C1176								
Beryllium	ND	0.100	0.200	ug/L	1	04/01/23 03:58	EPA 6020B	

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Project Manager: John Renda

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## ANALYTICAL SAMPLE RESULTS

## Total Cyanide by Flow Analysis (Aqueous)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>GS-032023-33 (A3C0740-01RE2)</b>				<b>Matrix: WG</b>		<b>Batch: 23C1090</b>		
Total Cyanide	0.0248	0.00500	0.00500	mg/L	1	03/28/23 16:40	EPA 335.4	
<b>GS-032023-34 (A3C0740-02)</b>				<b>Matrix: WG</b>		<b>Batch: 23C1090</b>		
Total Cyanide	0.130	0.00500	0.00500	mg/L	1	03/28/23 15:44	EPA 335.4	PRES
<b>GS-032023-35 (A3C0740-03)</b>				<b>Matrix: WG</b>		<b>Batch: 23C1090</b>		
Total Cyanide	0.177	0.00500	0.00500	mg/L	1	03/28/23 15:46	EPA 335.4	
<b>GS-032023-36 (A3C0740-04RE1)</b>				<b>Matrix: WG</b>		<b>Batch: 23C1090</b>		
Total Cyanide	0.927	0.0250	0.0250	mg/L	5	03/28/23 16:34	EPA 335.4	
<b>GS-032023-37 (A3C0740-05RE1)</b>				<b>Matrix: WG</b>		<b>Batch: 23C1090</b>		
Total Cyanide	0.172	0.00500	0.00500	mg/L	1	03/28/23 17:16	EPA 335.4	
<b>GS-032023-38 (A3C0740-06RE1)</b>				<b>Matrix: WG</b>		<b>Batch: 23C1090</b>		
Total Cyanide	0.851	0.0200	0.0200	mg/L	4	03/28/23 16:36	EPA 335.4	

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## ANALYTICAL SAMPLE RESULTS

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

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-032023-33 (A3C0740-01)				Matrix: WG		Batch: 23C0905		
Available Cyanide	ND	0.00100	0.00200	mg/L	1	03/23/23 15:23	D6888-09	
GS-032023-34 (A3C0740-02)				Matrix: WG		Batch: 23C0905		
Available Cyanide	ND	0.00100	0.00200	mg/L	1	03/23/23 15:26	D6888-09	
GS-032023-35 (A3C0740-03)				Matrix: WG		Batch: 23C0905		
Available Cyanide	ND	0.00100	0.00200	mg/L	1	03/23/23 15:27	D6888-09	
GS-032023-36 (A3C0740-04)				Matrix: WG		Batch: 23C0905		
Available Cyanide	0.00116	0.00100	0.00200	mg/L	1	03/23/23 15:29	D6888-09	J
GS-032023-37 (A3C0740-05)				Matrix: WG		Batch: 23C0907		
Available Cyanide	ND	0.00100	0.00200	mg/L	1	03/23/23 15:36	D6888-09	
GS-032023-38 (A3C0740-06)				Matrix: WG		Batch: 23C0907		
Available Cyanide	0.00116	0.00100	0.00200	mg/L	1	03/23/23 15:38	D6888-09	J

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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:****A3C0740 - 05 19 23 0535**

## 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-032023-33 (A3C0740-01)</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 16:03	D4282-02	
<b>GS-032023-34 (A3C0740-02)</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 16:08	D4282-02	
<b>GS-032023-35 (A3C0740-03)</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 16:08	D4282-02	
<b>GS-032023-36 (A3C0740-04)</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 16:08	D4282-02	
<b>GS-032023-37 (A3C0740-05)</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 16:08	D4282-02	
<b>GS-032023-38 (A3C0740-06)</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 16:13	D4282-02	

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Project Manager: **John Renda**

**Report ID:**

**A3C0740 - 05 19 23 0535**

## Analytical Resources, LLC

### ANALYTICAL SAMPLE RESULTS (Subcontracted)

#### Washington Department of Ecology Methods

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-032023-33 (A3C0740-01)				Matrix: WG		Batch: BLC0652		
Batch: BLC0652								
C8-C10 Aliphatics	ND	---	40	ug/L	1	03/30/23 19:23	WA EPH	U
>C10-C12 Aliphatics	ND	---	40	ug/L	1	03/30/23 19:23	WA EPH	U
>C12-C16 Aliphatics	ND	---	40	ug/L	1	03/30/23 19:23	WA EPH	U
>C16-C21 Aliphatics	ND	---	40	ug/L	1	03/30/23 19:23	WA EPH	U
>C21-C34 Aliphatics	100	---	40	ug/L	1	03/30/23 19:23	WA EPH	
C8-C10 Aromatics	ND	---	40	ug/L	1	03/30/23 12:06	WA EPH	U
>C10-C12 Aromatics	ND	---	40	ug/L	1	03/30/23 12:06	WA EPH	U
>C12-C16 Aromatics	ND	---	40	ug/L	1	03/30/23 12:06	WA EPH	U
>C16-C21 Aromatics	ND	---	40	ug/L	1	03/30/23 12:06	WA EPH	U
>C21-C34 Aromatics	ND	---	40	ug/L	1	03/30/23 12:06	WA EPH	U
Batch: BLC0828								
C5-C6 Aliphatics	ND	---	50	ug/L	1	03/30/23 19:29	WA VPH	U
>C6-C8 Aliphatics	ND	---	50	ug/L	1	03/30/23 19:29	WA VPH	U
>C8-C10 Aliphatics	ND	---	50	ug/L	1	03/30/23 19:29	WA VPH	U
>C10-C12 Aliphatics	ND	---	50	ug/L	1	03/30/23 19:29	WA VPH	U
C8-C10 Aromatics	ND	---	50	ug/L	1	03/30/23 19:29	WA VPH	U
>C10-C12 Aromatics	ND	---	50	ug/L	1	03/30/23 19:29	WA VPH	U
>C12-C13 Aromatics	ND	---	50	ug/L	1	03/30/23 19:29	WA VPH	U
Methyl tert-butyl Ether	ND	---	5	ug/L	1	03/30/23 19:29	WA VPH	U
Benzene	ND	---	5	ug/L	1	03/30/23 19:29	WA VPH	U
Toluene	ND	---	5	ug/L	1	03/30/23 19:29	WA VPH	U
Ethylbenzene	7	---	5	ug/L	1	03/30/23 19:29	WA VPH	
1,2,3-Trimethylbenzene	12	---	5	ug/L	1	03/30/23 19:29	WA VPH	
m,p-Xylene	ND	---	10	ug/L	1	03/30/23 19:29	WA VPH	U
Naphthalene	ND	---	5	ug/L	1	03/30/23 19:29	WA VPH	U
1-Methylnaphthalene	ND	---	5	ug/L	1	03/30/23 19:29	WA VPH	U
o-Xylene	ND	---	5	ug/L	1	03/30/23 19:29	WA VPH	U
n-Pentane	ND	---	5	ug/L	1	03/30/23 19:29	WA VPH	U
n-Hexane	ND	---	5	ug/L	1	03/30/23 19:29	WA VPH	U
n-Octane	ND	---	5	ug/L	1	03/30/23 19:29	WA VPH	U
n-Decane	ND	---	5	ug/L	1	03/30/23 19:29	WA VPH	U

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Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-032023-33 (A3C0740-01)			Matrix: WG			Batch: BLC0828		
n-Dodecane	ND	---	5	ug/L	1	03/30/23 19:29	WA VPH	U
Batch: BLC0652								
Surrogate: o-Terphenyl		Recovery:	54.0 %	Limits:	41-120 %	1	03/30/23 12:06	WA EPH
1-Chloro-octadecane			31.1 %		36-120 %	1	03/30/23 19:23	WA EPH
Batch: BLC0828								
PID: 2,5-Dibromotoluene			82.3 %		60-140 %	1	03/30/23 19:29	WA VPH
FID: 2,5-Dibromotoluene			85.4 %		60-140 %	1	03/30/23 19:29	WA VPH
GS-032023-34 (A3C0740-02)			Matrix: WG			Batch: BLC0652		
Batch: BLC0652								
C8-C10 Aliphatics	ND	---	40	ug/L	1	03/30/23 19:47	WA EPH	U
>C10-C12 Aliphatics	ND	---	40	ug/L	1	03/30/23 19:47	WA EPH	U
>C12-C16 Aliphatics	ND	---	40	ug/L	1	03/30/23 19:47	WA EPH	U
>C16-C21 Aliphatics	ND	---	40	ug/L	1	03/30/23 19:47	WA EPH	U
>C21-C34 Aliphatics	ND	---	40	ug/L	1	03/30/23 19:47	WA EPH	U
C8-C10 Aromatics	ND	---	40	ug/L	1	03/30/23 12:30	WA EPH	U
>C10-C12 Aromatics	ND	---	40	ug/L	1	03/30/23 12:30	WA EPH	U
>C12-C16 Aromatics	ND	---	40	ug/L	1	03/30/23 12:30	WA EPH	U
>C16-C21 Aromatics	ND	---	40	ug/L	1	03/30/23 12:30	WA EPH	U
>C21-C34 Aromatics	ND	---	40	ug/L	1	03/30/23 12:30	WA EPH	U
Batch: BLC0828								
C5-C6 Aliphatics	ND	---	50	ug/L	1	03/30/23 20:00	WA VPH	U
>C6-C8 Aliphatics	ND	---	50	ug/L	1	03/30/23 20:00	WA VPH	U
>C8-C10 Aliphatics	ND	---	50	ug/L	1	03/30/23 20:00	WA VPH	U
>C10-C12 Aliphatics	ND	---	50	ug/L	1	03/30/23 20:00	WA VPH	U
C8-C10 Aromatics	ND	---	50	ug/L	1	03/30/23 20:00	WA VPH	U
>C10-C12 Aromatics	ND	---	50	ug/L	1	03/30/23 20:00	WA VPH	U
>C12-C13 Aromatics	ND	---	50	ug/L	1	03/30/23 20:00	WA VPH	U
Methyl tert-butyl Ether	7	---	5	ug/L	1	03/30/23 20:00	WA VPH	
Benzene	ND	---	5	ug/L	1	03/30/23 20:00	WA VPH	U
Toluene	ND	---	5	ug/L	1	03/30/23 20:00	WA VPH	U
Ethylbenzene	ND	---	5	ug/L	1	03/30/23 20:00	WA VPH	U

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Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-032023-34 (A3C0740-02)		Matrix: WG			Batch: BLC0828			
1,2,3-Trimethylbenzene	ND	---	5	ug/L	1	03/30/23 20:00	WA VPH	U
m,p-Xylene	ND	---	10	ug/L	1	03/30/23 20:00	WA VPH	U
Naphthalene	ND	---	5	ug/L	1	03/30/23 20:00	WA VPH	U
1-Methylnaphthalene	ND	---	5	ug/L	1	03/30/23 20:00	WA VPH	U
o-Xylene	ND	---	5	ug/L	1	03/30/23 20:00	WA VPH	U
n-Pentane	ND	---	5	ug/L	1	03/30/23 20:00	WA VPH	U
n-Hexane	ND	---	5	ug/L	1	03/30/23 20:00	WA VPH	U
n-Octane	ND	---	5	ug/L	1	03/30/23 20:00	WA VPH	U
n-Decane	ND	---	5	ug/L	1	03/30/23 20:00	WA VPH	U
n-Dodecane	ND	---	5	ug/L	1	03/30/23 20:00	WA VPH	U
Batch: BLC0652								
Surrogate: o-Terphenyl		Recovery:	67.7 %	Limits:	41-120 %	1	03/30/23 12:30	WA EPH
1-Chloro-octadecane			37.9 %		36-120 %	1	03/30/23 19:47	WA EPH
Batch: BLC0828								
PID: 2,5-Dibromotoluene			80.7 %		60-140 %	1	03/30/23 20:00	WA VPH
FID: 2,5-Dibromotoluene			84.2 %		60-140 %	1	03/30/23 20:00	WA VPH
GS-032023-35 (A3C0740-03)		Matrix: WG			Batch: BLC0652			
Batch: BLC0652								
C8-C10 Aliphatics	ND	---	40	ug/L	1	03/30/23 20:11	WA EPH	U
>C10-C12 Aliphatics	ND	---	40	ug/L	1	03/30/23 20:11	WA EPH	U
>C12-C16 Aliphatics	ND	---	40	ug/L	1	03/30/23 20:11	WA EPH	U
>C16-C21 Aliphatics	ND	---	40	ug/L	1	03/30/23 20:11	WA EPH	U
>C21-C34 Aliphatics	80	---	40	ug/L	1	03/30/23 20:11	WA EPH	
C8-C10 Aromatics	ND	---	40	ug/L	1	03/30/23 12:54	WA EPH	U
>C10-C12 Aromatics	ND	---	40	ug/L	1	03/30/23 12:54	WA EPH	U
>C12-C16 Aromatics	120	---	40	ug/L	1	03/30/23 12:54	WA EPH	
>C16-C21 Aromatics	53	---	40	ug/L	1	03/30/23 12:54	WA EPH	
>C21-C34 Aromatics	ND	---	40	ug/L	1	03/30/23 12:54	WA EPH	U
Batch: BLC0828								
C5-C6 Aliphatics	ND	---	50	ug/L	1	03/30/23 20:30	WA VPH	U
>C6-C8 Aliphatics	ND	---	50	ug/L	1	03/30/23 20:30	WA VPH	U

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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:****A3C0740 - 05 19 23 0535****Analytical Resources, LLC****ANALYTICAL SAMPLE RESULTS (Subcontracted)****Washington Department of Ecology Methods**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes	
GS-032023-35 (A3C0740-03)			Matrix: WG		Batch: BLC0828				
>C8-C10 Aliphatics	ND	---	50	ug/L	1	03/30/23 20:30	WA VPH	U	
>C10-C12 Aliphatics	ND	---	50	ug/L	1	03/30/23 20:30	WA VPH	U	
C8-C10 Aromatics	ND	---	50	ug/L	1	03/30/23 20:30	WA VPH	U	
>C10-C12 Aromatics	ND	---	50	ug/L	1	03/30/23 20:30	WA VPH	U	
>C12-C13 Aromatics	ND	---	50	ug/L	1	03/30/23 20:30	WA VPH	U	
Methyl tert-butyl Ether	ND	---	5	ug/L	1	03/30/23 20:30	WA VPH	U	
Benzene	ND	---	5	ug/L	1	03/30/23 20:30	WA VPH	U	
Toluene	ND	---	5	ug/L	1	03/30/23 20:30	WA VPH	U	
Ethylbenzene	ND	---	5	ug/L	1	03/30/23 20:30	WA VPH	U	
1,2,3-Trimethylbenzene	ND	---	5	ug/L	1	03/30/23 20:30	WA VPH	U	
m,p-Xylene	ND	---	10	ug/L	1	03/30/23 20:30	WA VPH	U	
Naphthalene	ND	---	5	ug/L	1	03/30/23 20:30	WA VPH	U	
1-Methylnaphthalene	ND	---	5	ug/L	1	03/30/23 20:30	WA VPH	U	
o-Xylene	ND	---	5	ug/L	1	03/30/23 20:30	WA VPH	U	
n-Pentane	ND	---	5	ug/L	1	03/30/23 20:30	WA VPH	U	
n-Hexane	ND	---	5	ug/L	1	03/30/23 20:30	WA VPH	U	
n-Octane	ND	---	5	ug/L	1	03/30/23 20:30	WA VPH	U	
n-Decane	ND	---	5	ug/L	1	03/30/23 20:30	WA VPH	U	
n-Dodecane	ND	---	5	ug/L	1	03/30/23 20:30	WA VPH	U	
Batch: BLC0652									
Surrogate: o-Terphenyl		Recovery: 68.1 %		Limits: 41-120 %		1	03/30/23 12:54	WA EPH	
1-Chloro-octadecane		41.7 %		36-120 %		1	03/30/23 20:11	WA EPH	
Batch: BLC0828									
PID: 2,5-Dibromotoluene			90.0 %		60-140 %		1	03/30/23 20:30	WA VPH
FID: 2,5-Dibromotoluene			95.1 %		60-140 %		1	03/30/23 20:30	WA VPH

**GS-032023-36 (A3C0740-04)****Matrix: WG****Batch: BLC0652**

Batch: BLC0652								
C8-C10 Aliphatics	ND	---	40	ug/L	1	03/30/23 20:35	WA EPH	U
>C10-C12 Aliphatics	ND	---	40	ug/L	1	03/30/23 20:35	WA EPH	U
>C12-C16 Aliphatics	ND	---	40	ug/L	1	03/30/23 20:35	WA EPH	U
>C16-C21 Aliphatics	ND	---	40	ug/L	1	03/30/23 20:35	WA EPH	U

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Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-032023-36 (A3C0740-04)				Matrix: WG		Batch: BLC0652		
>C21-C34 Aliphatics	255	---	40	ug/L	1	03/30/23 20:35	WA EPH	
C8-C10 Aromatics	ND	---	40	ug/L	1	03/30/23 13:18	WA EPH	U
>C10-C12 Aromatics	ND	---	40	ug/L	1	03/30/23 13:18	WA EPH	U
>C12-C16 Aromatics	185	---	40	ug/L	1	03/30/23 13:18	WA EPH	
>C16-C21 Aromatics	127	---	40	ug/L	1	03/30/23 13:18	WA EPH	
>C21-C34 Aromatics	ND	---	40	ug/L	1	03/30/23 13:18	WA EPH	U
Batch: BLC0828								
C5-C6 Aliphatics	ND	---	50	ug/L	1	03/30/23 21:01	WA VPH	U
>C6-C8 Aliphatics	ND	---	50	ug/L	1	03/30/23 21:01	WA VPH	U
>C8-C10 Aliphatics	ND	---	50	ug/L	1	03/30/23 21:01	WA VPH	U
>C10-C12 Aliphatics	139	---	50	ug/L	1	03/30/23 21:01	WA VPH	
C8-C10 Aromatics	56	---	50	ug/L	1	03/30/23 21:01	WA VPH	
>C10-C12 Aromatics	146	---	50	ug/L	1	03/30/23 21:01	WA VPH	
>C12-C13 Aromatics	132	---	50	ug/L	1	03/30/23 21:01	WA VPH	
Methyl tert-butyl Ether	ND	---	5	ug/L	1	03/30/23 21:01	WA VPH	U
Benzene	27	---	5	ug/L	1	03/30/23 21:01	WA VPH	
Toluene	ND	---	5	ug/L	1	03/30/23 21:01	WA VPH	U
Ethylbenzene	ND	---	5	ug/L	1	03/30/23 21:01	WA VPH	U
1,2,3-Trimethylbenzene	9	---	5	ug/L	1	03/30/23 21:01	WA VPH	
m,p-Xylene	ND	---	10	ug/L	1	03/30/23 21:01	WA VPH	U
Naphthalene	ND	---	5	ug/L	1	03/30/23 21:01	WA VPH	U
1-Methylnaphthalene	63	---	5	ug/L	1	03/30/23 21:01	WA VPH	
o-Xylene	6	---	5	ug/L	1	03/30/23 21:01	WA VPH	
n-Pentane	ND	---	5	ug/L	1	03/30/23 21:01	WA VPH	U
n-Hexane	ND	---	5	ug/L	1	03/30/23 21:01	WA VPH	U
n-Octane	ND	---	5	ug/L	1	03/30/23 21:01	WA VPH	U
n-Decane	ND	---	5	ug/L	1	03/30/23 21:01	WA VPH	U
n-Dodecane	7	---	5	ug/L	1	03/30/23 21:01	WA VPH	
Batch: BLC0652								
Surrogate: o-Terphenyl		Recovery: 58.1 %		Limits: 41-120 %	1	03/30/23 13:18	WA EPH	
1-Chloro-octadecane		40.6 %		36-120 %	1	03/30/23 20:35	WA EPH	
Batch: BLC0828								

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Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0740 - 05 19 23 0535

## Analytical Resources, LLC

## ANALYTICAL SAMPLE RESULTS (Subcontracted)

## Washington Department of Ecology Methods

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>GS-032023-36 (A3C0740-04)</b>		<b>Matrix: WG</b>			<b>Batch: BLC0828</b>			
Surrogate: PID: 2,5-Dibromotoluene		Recovery: 93.8 %	Limits: 60-140 %	1	03/30/23 21:01	WA VPH		
FID: 2,5-Dibromotoluene		97.5 %	60-140 %	1	03/30/23 21:01	WA VPH		
<b>GS-032023-37 (A3C0740-05)</b>		<b>Matrix: WG</b>			<b>Batch: BLC0652</b>			
Batch: BLC0652								
C8-C10 Aliphatics	ND	---	40	ug/L	1	03/30/23 20:59	WA EPH	U
>C10-C12 Aliphatics	ND	---	40	ug/L	1	03/30/23 20:59	WA EPH	U
>C12-C16 Aliphatics	ND	---	40	ug/L	1	03/30/23 20:59	WA EPH	U
>C16-C21 Aliphatics	ND	---	40	ug/L	1	03/30/23 20:59	WA EPH	U
>C21-C34 Aliphatics	84	---	40	ug/L	1	03/30/23 20:59	WA EPH	
C8-C10 Aromatics	ND	---	40	ug/L	1	03/30/23 13:42	WA EPH	U
>C10-C12 Aromatics	153	---	40	ug/L	1	03/30/23 13:42	WA EPH	
>C12-C16 Aromatics	69	---	40	ug/L	1	03/30/23 13:42	WA EPH	
>C16-C21 Aromatics	62	---	40	ug/L	1	03/30/23 13:42	WA EPH	
>C21-C34 Aromatics	ND	---	40	ug/L	1	03/30/23 13:42	WA EPH	U
Batch: BLC0828								
C5-C6 Aliphatics	ND	---	50	ug/L	1	03/30/23 21:31	WA VPH	U
>C6-C8 Aliphatics	ND	---	50	ug/L	1	03/30/23 21:31	WA VPH	U
>C8-C10 Aliphatics	ND	---	50	ug/L	1	03/30/23 21:31	WA VPH	U
>C10-C12 Aliphatics	ND	---	50	ug/L	1	03/30/23 21:31	WA VPH	U
C8-C10 Aromatics	ND	---	50	ug/L	1	03/30/23 21:31	WA VPH	U
>C10-C12 Aromatics	329	---	50	ug/L	1	03/30/23 21:31	WA VPH	
>C12-C13 Aromatics	95	---	50	ug/L	1	03/30/23 21:31	WA VPH	
Methyl tert-butyl Ether	ND	---	5	ug/L	1	03/30/23 21:31	WA VPH	U
Benzene	35	---	5	ug/L	1	03/30/23 21:31	WA VPH	
Toluene	ND	---	5	ug/L	1	03/30/23 21:31	WA VPH	U
Ethylbenzene	7	---	5	ug/L	1	03/30/23 21:31	WA VPH	
1,2,3-Trimethylbenzene	ND	---	5	ug/L	1	03/30/23 21:31	WA VPH	U
m,p-Xylene	ND	---	10	ug/L	1	03/30/23 21:31	WA VPH	U
Naphthalene	271	---	5	ug/L	1	03/30/23 21:31	WA VPH	
1-Methylnaphthalene	25	---	5	ug/L	1	03/30/23 21:31	WA VPH	
o-Xylene	ND	---	5	ug/L	1	03/30/23 21:31	WA VPH	U

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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:****A3C0740 - 05 19 23 0535****Analytical Resources, LLC****ANALYTICAL SAMPLE RESULTS (Subcontracted)****Washington Department of Ecology Methods**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-032023-37 (A3C0740-05)			Matrix: WG			Batch: BLC0828		
n-Pentane	ND	---	5	ug/L	1	03/30/23 21:31	WA VPH	U
n-Hexane	ND	---	5	ug/L	1	03/30/23 21:31	WA VPH	U
n-Octane	ND	---	5	ug/L	1	03/30/23 21:31	WA VPH	U
n-Decane	ND	---	5	ug/L	1	03/30/23 21:31	WA VPH	U
n-Dodecane	ND	---	5	ug/L	1	03/30/23 21:31	WA VPH	U
Batch: BLC0652								
Surrogate: o-Terphenyl		Recovery:	75.7 %	Limits:	41-120 %	1	03/30/23 13:42	WA EPH
1-Chloro-octadecane			48.7 %		36-120 %	1	03/30/23 20:59	WA EPH
Batch: BLC0828								
PID: 2,5-Dibromotoluene			91.7 %	60-140 %	1	03/30/23 21:31	WA VPH	
FID: 2,5-Dibromotoluene			94.0 %	60-140 %	1	03/30/23 21:31	WA VPH	

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A3C0740 - 05 19 23 0535

## QUALITY CONTROL (QC) SAMPLE RESULTS

### Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23C1271 - EPA 3510C (Fuels/Acid Ext.)						Water						
Blank (23C1271-BLK1)			Prepared: 03/31/23 11:24    Analyzed: 03/31/23 20:46									
NWTPH-Dx												
Diesel	ND	100	200	ug/L	1	---	---	---	---	---	---	
Oil	ND	200	400	ug/L	1	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)		Recovery: 92 %		Limits: 50-150 %		Dilution: 1x						
LCS (23C1271-BS1)			Prepared: 03/31/23 11:24    Analyzed: 03/31/23 21:06									
NWTPH-Dx												
Diesel	604	100	200	ug/L	1	1250	---	48	36-132%	---	---	
Surr: o-Terphenyl (Surr)		Recovery: 96 %		Limits: 50-150 %		Dilution: 1x						
LCS Dup (23C1271-BSD1)			Prepared: 03/31/23 11:24    Analyzed: 03/31/23 21:27									
NWTPH-Dx												
Diesel	604	100	200	ug/L	1	1250	---	48	36-132%	0.02	30%	
Surr: o-Terphenyl (Surr)		Recovery: 101 %		Limits: 50-150 %		Dilution: 1x						

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## QUALITY CONTROL (QC) SAMPLE RESULTS

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

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23C0996 - EPA 5030C						Water						
Blank (23C0996-BLK1)			Prepared: 03/24/23 15:42   Analyzed: 03/24/23 20:23									
<u>NWTPH-Gx (MS)</u>												
Gasoline Range Organics	ND	50.0	100	ug/L	1	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 93 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		105 %		50-150 %		"						
LCS (23C0996-BS2)			Prepared: 03/24/23 15:42   Analyzed: 03/24/23 20:00									
<u>NWTPH-Gx (MS)</u>												
Gasoline Range Organics	523	50.0	100	ug/L	1	500	---	105	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 91 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		100 %		50-150 %		"						
Duplicate (23C0996-DUP1)			Prepared: 03/24/23 15:42   Analyzed: 03/24/23 21:52									
<u>QC Source Sample: Non-SDG (A3C0779-07)</u>												
Gasoline Range Organics	ND	50.0	100	ug/L	1	---	ND	---	---	---	30%	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 93 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		107 %		50-150 %		"						

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## QUALITY CONTROL (QC) SAMPLE RESULTS

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

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23C0997 - EPA 5030C						Water						
Blank (23C0997-BLK1)			Prepared: 03/24/23 15:45   Analyzed: 03/25/23 07:08									
<u>NWTPH-Gx (MS)</u>												
Gasoline Range Organics	ND	50.0	100	ug/L	1	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 91 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		104 %		50-150 %		"						
LCS (23C0997-BS2)			Prepared: 03/24/23 15:45   Analyzed: 03/25/23 06:46									
<u>NWTPH-Gx (MS)</u>												
Gasoline Range Organics	486	50.0	100	ug/L	1	500	---	97	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 91 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		99 %		50-150 %		"						
Duplicate (23C0997-DUP1)			Prepared: 03/24/23 15:45   Analyzed: 03/25/23 10:28									
<u>QC Source Sample: Non-SDG (A3C0788-03)</u>												
Gasoline Range Organics	ND	2500	5000	ug/L	50	---	ND	---	---	---	30%	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 92 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		103 %		50-150 %		"						

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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 23C0996 - EPA 5030C						Water						
Blank (23C0996-BLK1)			Prepared: 03/24/23 15:42		Analyzed: 03/24/23 20:23							
EPA 8260D												
Acetone	ND	10.0	20.0	ug/L	1	---	---	---	---	---	---	
Acrylonitrile	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
Benzene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Bromobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Bromochloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Bromoform	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Bromomethane	ND	5.00	5.00	ug/L	1	---	---	---	---	---	---	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Carbon disulfide	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Chlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Chloroethane	ND	5.00	5.00	ug/L	1	---	---	---	---	---	---	
Chloroform	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Chloromethane	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Dibromomethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	

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Darwin Thomas, Business Development Director



## ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

## Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0740 - 05 19 23 0535

## 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 23C0996 - EPA 5030C						Water						
Blank (23C0996-BLK1)						Prepared: 03/24/23 15:42 Analyzed: 03/24/23 20:23						
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: 100 % Limits: 80-120 % Dilution: 1x												

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Darwin Thomas, Business Development Director



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Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0740 - 05 19 23 0535

## 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 23C0996 - EPA 5030C						Water						
Blank (23C0996-BLK1)			Prepared: 03/24/23 15:42		Analyzed: 03/24/23 20:23							
Surr: Toluene-d8 (Surr)		Recovery: 102 %		Limits: 80-120 %		Dilution: 1x						
4-Bromofluorobenzene (Surr)		98 %		80-120 %		"						
LCS (23C0996-BS1)			Prepared: 03/24/23 15:42		Analyzed: 03/24/23 19:38							
EPA 8260D												
Acetone	44.7	10.0	20.0	ug/L	1	40.0	---	112	80-120%	---	---	
Acrylonitrile	23.7	1.00	2.00	ug/L	1	20.0	---	118	80-120%	---	---	
Benzene	22.3	0.100	0.200	ug/L	1	20.0	---	112	80-120%	---	---	
Bromobenzene	20.0	0.250	0.500	ug/L	1	20.0	---	100	80-120%	---	---	
Bromochloromethane	27.0	0.500	1.00	ug/L	1	20.0	---	135	80-120%	---	---	Q-56
Bromodichloromethane	23.8	0.500	1.00	ug/L	1	20.0	---	119	80-120%	---	---	
Bromoform	22.8	0.500	1.00	ug/L	1	20.0	---	114	80-120%	---	---	
Bromomethane	26.0	5.00	5.00	ug/L	1	20.0	---	130	80-120%	---	---	Q-56
2-Butanone (MEK)	49.2	5.00	10.0	ug/L	1	40.0	---	123	80-120%	---	---	Q-56
n-Butylbenzene	24.3	0.500	1.00	ug/L	1	20.0	---	122	80-120%	---	---	Q-56
sec-Butylbenzene	25.3	0.500	1.00	ug/L	1	20.0	---	126	80-120%	---	---	Q-56
tert-Butylbenzene	24.1	0.500	1.00	ug/L	1	20.0	---	120	80-120%	---	---	
Carbon disulfide	24.2	5.00	10.0	ug/L	1	20.0	---	121	80-120%	---	---	Q-56
Carbon tetrachloride	25.3	0.500	1.00	ug/L	1	20.0	---	126	80-120%	---	---	Q-56
Chlorobenzene	21.5	0.250	0.500	ug/L	1	20.0	---	108	80-120%	---	---	
Chloroethane	30.2	5.00	5.00	ug/L	1	20.0	---	151	80-120%	---	---	Q-56
Chloroform	22.2	0.500	1.00	ug/L	1	20.0	---	111	80-120%	---	---	
Chloromethane	26.0	2.50	5.00	ug/L	1	20.0	---	130	80-120%	---	---	Q-56
2-Chlorotoluene	21.6	0.500	1.00	ug/L	1	20.0	---	108	80-120%	---	---	
4-Chlorotoluene	23.0	0.500	1.00	ug/L	1	20.0	---	115	80-120%	---	---	
Dibromochloromethane	22.6	0.500	1.00	ug/L	1	20.0	---	113	80-120%	---	---	
1,2-Dibromo-3-chloropropane	19.7	2.50	5.00	ug/L	1	20.0	---	99	80-120%	---	---	
1,2-Dibromoethane (EDB)	21.9	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	21.2	0.250	0.500	ug/L	1	20.0	---	106	80-120%	---	---	
1,3-Dichlorobenzene	21.6	0.250	0.500	ug/L	1	20.0	---	108	80-120%	---	---	
1,4-Dichlorobenzene	20.4	0.250	0.500	ug/L	1	20.0	---	102	80-120%	---	---	
Dichlorodifluoromethane	27.6	0.500	1.00	ug/L	1	20.0	---	138	80-120%	---	---	Q-56
1,1-Dichloroethane	23.9	0.200	0.400	ug/L	1	20.0	---	120	80-120%	---	---	

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Project Number: 000029-02.84 T-01.001F

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A3C0740 - 05 19 23 0535

## 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 23C0996 - EPA 5030C						Water						
LCS (23C0996-BS1)						Prepared: 03/24/23 15:42 Analyzed: 03/24/23 19:38						
1,2-Dichloroethane (EDC)	24.6	0.200	0.400	ug/L	1	20.0	---	123	80-120%	---	---	Q-56
1,1-Dichloroethene	24.6	0.200	0.400	ug/L	1	20.0	---	123	80-120%	---	---	Q-56
cis-1,2-Dichloroethene	22.5	0.200	0.400	ug/L	1	20.0	---	113	80-120%	---	---	
trans-1,2-Dichloroethene	22.7	0.200	0.400	ug/L	1	20.0	---	113	80-120%	---	---	
1,2-Dichloropropane	22.1	0.250	0.500	ug/L	1	20.0	---	111	80-120%	---	---	
1,3-Dichloropropane	22.8	0.500	1.00	ug/L	1	20.0	---	114	80-120%	---	---	
2,2-Dichloropropane	26.1	0.500	1.00	ug/L	1	20.0	---	130	80-120%	---	---	Q-56
1,1-Dichloropropene	23.4	0.500	1.00	ug/L	1	20.0	---	117	80-120%	---	---	
cis-1,3-Dichloropropene	23.6	0.500	1.00	ug/L	1	20.0	---	118	80-120%	---	---	
trans-1,3-Dichloropropene	26.0	0.500	1.00	ug/L	1	20.0	---	130	80-120%	---	---	Q-56
Ethylbenzene	23.3	0.250	0.500	ug/L	1	20.0	---	116	80-120%	---	---	
Hexachlorobutadiene	22.0	2.50	5.00	ug/L	1	20.0	---	110	80-120%	---	---	
2-Hexanone	47.0	5.00	10.0	ug/L	1	40.0	---	118	80-120%	---	---	
Isopropylbenzene	23.7	0.500	1.00	ug/L	1	20.0	---	119	80-120%	---	---	
4-Isopropyltoluene	24.5	0.500	1.00	ug/L	1	20.0	---	122	80-120%	---	---	Q-56
Methylene chloride	21.6	5.00	10.0	ug/L	1	20.0	---	108	80-120%	---	---	
4-Methyl-2-pentanone (MiBK)	54.6	5.00	10.0	ug/L	1	40.0	---	136	80-120%	---	---	Q-56
Methyl tert-butyl ether (MTBE)	22.2	0.500	1.00	ug/L	1	20.0	---	111	80-120%	---	---	
Naphthalene	16.2	1.00	2.00	ug/L	1	20.0	---	81	80-120%	---	---	
n-Propylbenzene	23.1	0.250	0.500	ug/L	1	20.0	---	116	80-120%	---	---	
Styrene	24.1	0.500	1.00	ug/L	1	20.0	---	120	80-120%	---	---	
1,1,1,2-Tetrachloroethane	21.2	0.200	0.400	ug/L	1	20.0	---	106	80-120%	---	---	
1,1,2,2-Tetrachloroethane	23.2	0.250	0.500	ug/L	1	20.0	---	116	80-120%	---	---	
Tetrachloroethene (PCE)	22.7	0.200	0.400	ug/L	1	20.0	---	114	80-120%	---	---	
Toluene	21.6	0.500	1.00	ug/L	1	20.0	---	108	80-120%	---	---	
1,2,3-Trichlorobenzene	21.5	1.00	2.00	ug/L	1	20.0	---	107	80-120%	---	---	
1,2,4-Trichlorobenzene	19.7	1.00	2.00	ug/L	1	20.0	---	98	80-120%	---	---	
1,1,1-Trichloroethane	24.1	0.200	0.400	ug/L	1	20.0	---	120	80-120%	---	---	
1,1,2-Trichloroethane	22.0	0.250	0.500	ug/L	1	20.0	---	110	80-120%	---	---	
Trichloroethene (TCE)	20.3	0.200	0.400	ug/L	1	20.0	---	101	80-120%	---	---	
Trichlorofluoromethane	26.4	1.00	2.00	ug/L	1	20.0	---	132	80-120%	---	---	Q-56
1,2,3-Trichloropropane	22.4	0.500	1.00	ug/L	1	20.0	---	112	80-120%	---	---	
1,2,4-Trimethylbenzene	24.6	0.500	1.00	ug/L	1	20.0	---	123	80-120%	---	---	Q-56
1,3,5-Trimethylbenzene	24.4	0.500	1.00	ug/L	1	20.0	---	122	80-120%	---	---	Q-56

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Page 46 of 96



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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 23C0996 - EPA 5030C						Water						
LCS (23C0996-BS1)			Prepared: 03/24/23 15:42		Analyzed: 03/24/23 19:38							
Vinyl chloride	27.1	0.200	0.400	ug/L	1	20.0	---	136	80-120%	---	---	Q-56
m,p-Xylene	50.3	0.500	1.00	ug/L	1	40.0	---	126	80-120%	---	---	Q-56
o-Xylene	23.2	0.250	0.500	ug/L	1	20.0	---	116	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 97 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		101 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		92 %		80-120 %		"						

**Duplicate (23C0996-DUP1)**

Prepared: 03/24/23 15:42 Analyzed: 03/24/23 21:52

**QC Source Sample: Non-SDG (A3C0779-07)**

Acetone	ND	10.0	20.0	ug/L	1	---	ND	---	---	---	30%
Acrylonitrile	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	30%
Benzene	ND	0.100	0.200	ug/L	1	---	ND	---	---	---	30%
Bromobenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%
Bromochloromethane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%
Bromodichloromethane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%
Bromoform	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%
Bromomethane	ND	5.00	5.00	ug/L	1	---	ND	---	---	---	30%
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%
n-Butylbenzene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%
Carbon disulfide	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%
Chlorobenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%
Chloroethane	ND	5.00	5.00	ug/L	1	---	ND	---	---	---	30%
Chloroform	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%
Chloromethane	ND	2.50	5.00	ug/L	1	---	ND	---	---	---	30%
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%
Dibromochloromethane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	---	ND	---	---	---	30%
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%
Dibromomethane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%

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## 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 23C0996 - EPA 5030C						Water						
Duplicate (23C0996-DUP1)			Prepared: 03/24/23 15:42		Analyzed: 03/24/23 21:52							
QC Source Sample: Non-SDG (A3C0779-07)												
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	0.290	0.200	0.400	ug/L	1	---	0.290	---	---	0	30%	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	0.400	0.400	ug/L	1	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	1.46	0.200	0.400	ug/L	1	---	1.48	---	---	1	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%	
Tetrachloroethene (PCE)	2.07	0.200	0.400	ug/L	1	---	2.17	---	---	5	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	0.270	0.200	0.400	ug/L	1	---	0.270	---	---	0	30%	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	

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Darwin Thomas, Business Development Director





## ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

## Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0740 - 05 19 23 0535

## QUALITY CONTROL (QC) SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	Limits	RPD	RPD Limit	Notes
Batch 23C0996 - EPA 5030C						Water						
Duplicate (23C0996-DUP1)			Prepared: 03/24/23 15:42   Analyzed: 03/24/23 21:52									
QC Source Sample: Non-SDG (A3C0779-07)												
Trichloroethene (TCE)	5.70	0.200	0.400	ug/L	1	---	5.73	---	---	0.5	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: 102 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		103 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		97 %		80-120 %		"						
Matrix Spike (23C0996-MS1)						Prepared: 03/24/23 15:42   Analyzed: 03/25/23 04:32						
QC Source Sample: GS-032023-33 (A3C0740-01)												
EPA 8260D												
Acetone	53.6	10.0	20.0	ug/L	1	40.0	ND	108	39-160%	---	---	
Acrylonitrile	22.4	1.00	2.00	ug/L	1	20.0	ND	112	63-135%	---	---	
Benzene	21.8	0.100	0.200	ug/L	1	20.0	ND	109	79-120%	---	---	
Bromobenzene	18.9	0.250	0.500	ug/L	1	20.0	ND	94	80-120%	---	---	
Bromochloromethane	26.2	0.500	1.00	ug/L	1	20.0	ND	131	78-123%	---	---	Q-54c
Bromodichloromethane	23.3	0.500	1.00	ug/L	1	20.0	ND	116	79-125%	---	---	
Bromoform	21.9	0.500	1.00	ug/L	1	20.0	ND	109	66-130%	---	---	
Bromomethane	24.1	5.00	5.00	ug/L	1	20.0	ND	121	53-141%	---	---	Q-54a
2-Butanone (MEK)	46.8	5.00	10.0	ug/L	1	40.0	ND	117	56-143%	---	---	Q-54h
n-Butylbenzene	23.2	0.500	1.00	ug/L	1	20.0	ND	116	75-128%	---	---	Q-54f
sec-Butylbenzene	24.2	0.500	1.00	ug/L	1	20.0	ND	121	77-126%	---	---	Q-54k
tert-Butylbenzene	23.4	0.500	1.00	ug/L	1	20.0	ND	117	78-124%	---	---	
Carbon disulfide	25.1	5.00	10.0	ug/L	1	20.0	ND	126	64-133%	---	---	Q-54j
Carbon tetrachloride	25.8	0.500	1.00	ug/L	1	20.0	ND	129	72-136%	---	---	Q-54k
Chlorobenzene	28.1	0.250	0.500	ug/L	1	20.0	7.20	105	80-120%	---	---	
Chloroethane	31.1	5.00	5.00	ug/L	1	20.0	ND	155	60-138%	---	---	Q-54i
Chloroform	21.7	0.500	1.00	ug/L	1	20.0	ND	109	79-124%	---	---	
Chloromethane	25.0	2.50	5.00	ug/L	1	20.0	ND	125	50-139%	---	---	Q-54a

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Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0740 - 05 19 23 0535

## 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 23C0996 - EPA 5030C						Water						
Matrix Spike (23C0996-MS1)			Prepared: 03/24/23 15:42		Analyzed: 03/25/23 04:32							
QC Source Sample: GS-032023-33 (A3C0740-01)												
2-Chlorotoluene	20.7	0.500	1.00	ug/L	1	20.0	ND	103	79-122%	---	---	
4-Chlorotoluene	22.1	0.500	1.00	ug/L	1	20.0	ND	110	78-122%	---	---	
Dibromochloromethane	22.1	0.500	1.00	ug/L	1	20.0	ND	110	74-126%	---	---	
1,2-Dibromo-3-chloropropane	18.6	2.50	5.00	ug/L	1	20.0	ND	93	62-128%	---	---	
1,2-Dibromoethane (EDB)	21.1	0.250	0.500	ug/L	1	20.0	ND	106	77-121%	---	---	
Dibromomethane	21.4	0.500	1.00	ug/L	1	20.0	ND	107	79-123%	---	---	
1,2-Dichlorobenzene	45.1	0.250	0.500	ug/L	1	20.0	24.9	101	80-120%	---	---	
1,3-Dichlorobenzene	21.8	0.250	0.500	ug/L	1	20.0	0.800	105	80-120%	---	---	
1,4-Dichlorobenzene	29.4	0.250	0.500	ug/L	1	20.0	10.9	93	79-120%	---	---	
Dichlorodifluoromethane	28.7	0.500	1.00	ug/L	1	20.0	ND	144	32-152%	---	---	Q-54e
1,1-Dichloroethane	23.5	0.200	0.400	ug/L	1	20.0	ND	118	77-125%	---	---	
1,2-Dichloroethane (EDC)	24.2	0.200	0.400	ug/L	1	20.0	ND	121	73-128%	---	---	Q-54h
1,1-Dichloroethene	25.1	0.200	0.400	ug/L	1	20.0	ND	126	71-131%	---	---	Q-54h
cis-1,2-Dichloroethene	22.6	0.200	0.400	ug/L	1	20.0	ND	113	78-123%	---	---	
trans-1,2-Dichloroethene	22.8	0.200	0.400	ug/L	1	20.0	ND	114	75-124%	---	---	
1,2-Dichloropropane	21.6	0.250	0.500	ug/L	1	20.0	ND	108	78-122%	---	---	
1,3-Dichloropropane	21.6	0.500	1.00	ug/L	1	20.0	ND	108	80-120%	---	---	
2,2-Dichloropropane	21.7	0.500	1.00	ug/L	1	20.0	ND	108	60-139%	---	---	Q-54a
1,1-Dichloropropene	23.6	0.500	1.00	ug/L	1	20.0	ND	118	79-125%	---	---	
cis-1,3-Dichloropropene	19.7	0.500	1.00	ug/L	1	20.0	ND	98	75-124%	---	---	
trans-1,3-Dichloropropene	24.5	0.500	1.00	ug/L	1	20.0	ND	123	73-127%	---	---	Q-54a
Ethylbenzene	22.7	0.250	0.500	ug/L	1	20.0	ND	114	79-121%	---	---	
Hexachlorobutadiene	20.6	2.50	5.00	ug/L	1	20.0	ND	103	66-134%	---	---	
2-Hexanone	45.2	5.00	10.0	ug/L	1	40.0	ND	113	57-139%	---	---	
Isopropylbenzene	23.1	0.500	1.00	ug/L	1	20.0	ND	116	72-131%	---	---	
4-Isopropyltoluene	23.7	0.500	1.00	ug/L	1	20.0	ND	118	77-127%	---	---	Q-54f
Methylene chloride	20.7	5.00	10.0	ug/L	1	20.0	ND	104	74-124%	---	---	
4-Methyl-2-pentanone (MiBK)	51.3	5.00	10.0	ug/L	1	40.0	ND	128	67-130%	---	---	Q-54d
Methyl tert-butyl ether (MTBE)	26.6	0.500	1.00	ug/L	1	20.0	4.52	110	71-124%	---	---	
Naphthalene	16.0	1.00	2.00	ug/L	1	20.0	ND	80	61-128%	---	---	
n-Propylbenzene	22.1	0.250	0.500	ug/L	1	20.0	ND	111	76-126%	---	---	
Styrene	23.3	0.500	1.00	ug/L	1	20.0	ND	117	78-123%	---	---	
1,1,1,2-Tetrachloroethane	21.1	0.200	0.400	ug/L	1	20.0	ND	105	78-124%	---	---	

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## ANALYTICAL REPORT

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Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0740 - 05 19 23 0535

## 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 23C0996 - EPA 5030C						Water						
Matrix Spike (23C0996-MS1)			Prepared: 03/24/23 15:42		Analyzed: 03/25/23 04:32							
QC Source Sample: GS-032023-33 (A3C0740-01)												
1,1,2,2-Tetrachloroethane	22.5	0.250	0.500	ug/L	1	20.0	ND	113	71-121%	---	---	
Tetrachloroethene (PCE)	22.1	0.200	0.400	ug/L	1	20.0	ND	110	74-129%	---	---	
Toluene	21.0	0.500	1.00	ug/L	1	20.0	ND	105	80-121%	---	---	
1,2,3-Trichlorobenzene	20.9	1.00	2.00	ug/L	1	20.0	ND	105	69-129%	---	---	
1,2,4-Trichlorobenzene	18.6	1.00	2.00	ug/L	1	20.0	ND	93	69-130%	---	---	
1,1,1-Trichloroethane	23.8	0.200	0.400	ug/L	1	20.0	ND	119	74-131%	---	---	
1,1,2-Trichloroethane	20.9	0.250	0.500	ug/L	1	20.0	ND	105	80-120%	---	---	
Trichloroethene (TCE)	19.7	0.200	0.400	ug/L	1	20.0	ND	98	79-123%	---	---	
Trichlorofluoromethane	27.1	1.00	2.00	ug/L	1	20.0	ND	135	65-141%	---	---	Q-54b
1,2,3-Trichloropropane	20.8	0.500	1.00	ug/L	1	20.0	ND	104	73-122%	---	---	
1,2,4-Trimethylbenzene	23.5	0.500	1.00	ug/L	1	20.0	ND	117	76-124%	---	---	Q-54h
1,3,5-Trimethylbenzene	23.6	0.500	1.00	ug/L	1	20.0	ND	118	75-124%	---	---	Q-54f
Vinyl chloride	27.1	0.200	0.400	ug/L	1	20.0	ND	135	58-137%	---	---	Q-54d
m,p-Xylene	49.3	0.500	1.00	ug/L	1	40.0	ND	123	80-121%	---	---	Q-54k
o-Xylene	22.5	0.250	0.500	ug/L	1	20.0	ND	112	78-122%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 95 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		99 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		92 %		80-120 %		"						

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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:****A3C0740 - 05 19 23 0535****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 23C0997 - EPA 5030C						Water						
Blank (23C0997-BLK1)			Prepared: 03/24/23 15:45		Analyzed: 03/25/23 07:08							
EPA 8260D												
Acetone	ND	10.0	20.0	ug/L	1	---	---	---	---	---	---	
Acrylonitrile	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
Benzene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Bromobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Bromochloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Bromoform	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Bromomethane	ND	5.00	5.00	ug/L	1	---	---	---	---	---	---	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Carbon disulfide	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Chlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Chloroethane	ND	5.00	5.00	ug/L	1	---	---	---	---	---	---	
Chloroform	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Chloromethane	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Dibromomethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	

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## QUALITY CONTROL (QC) SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23C0997 - EPA 5030C						Water						
Blank (23C0997-BLK1)						Prepared: 03/24/23 15:45 Analyzed: 03/25/23 07:08						
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Ethylbenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
2-Hexanone	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Methylene chloride	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Naphthalene	ND	2.00	2.00	ug/L	1	---	---	---	---	---	---	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Styrene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
Toluene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Vinyl chloride	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
m,p-Xylene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
o-Xylene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr) Recovery: 99 % Limits: 80-120 % Dilution: 1x												

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Darwin Thomas, Business Development Director



## 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:****A3C0740 - 05 19 23 0535**

## 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 23C0997 - EPA 5030C						Water						
Blank (23C0997-BLK1)			Prepared: 03/24/23 15:45		Analyzed: 03/25/23 07:08							
Surr: Toluene-d8 (Surr)		Recovery: 104 %		Limits: 80-120 %		Dilution: 1x						
4-Bromofluorobenzene (Surr)		97 %		80-120 %		"						
LCS (23C0997-BS1)			Prepared: 03/24/23 15:45		Analyzed: 03/25/23 06:24							
EPA 8260D												
Acetone	46.4	10.0	20.0	ug/L	1	40.0	---	116	80-120%	---	---	
Acrylonitrile	22.6	1.00	2.00	ug/L	1	20.0	---	113	80-120%	---	---	
Benzene	20.8	0.100	0.200	ug/L	1	20.0	---	104	80-120%	---	---	
Bromobenzene	19.1	0.250	0.500	ug/L	1	20.0	---	95	80-120%	---	---	
Bromochloromethane	26.0	0.500	1.00	ug/L	1	20.0	---	130	80-120%	---	---	Q-56
Bromodichloromethane	23.0	0.500	1.00	ug/L	1	20.0	---	115	80-120%	---	---	
Bromoform	22.6	0.500	1.00	ug/L	1	20.0	---	113	80-120%	---	---	
Bromomethane	24.9	5.00	5.00	ug/L	1	20.0	---	125	80-120%	---	---	Q-56
2-Butanone (MEK)	47.8	5.00	10.0	ug/L	1	40.0	---	119	80-120%	---	---	
n-Butylbenzene	21.6	0.500	1.00	ug/L	1	20.0	---	108	80-120%	---	---	
sec-Butylbenzene	22.7	0.500	1.00	ug/L	1	20.0	---	114	80-120%	---	---	
tert-Butylbenzene	21.7	0.500	1.00	ug/L	1	20.0	---	109	80-120%	---	---	
Carbon disulfide	21.9	5.00	10.0	ug/L	1	20.0	---	110	80-120%	---	---	
Carbon tetrachloride	23.5	0.500	1.00	ug/L	1	20.0	---	117	80-120%	---	---	
Chlorobenzene	20.2	0.250	0.500	ug/L	1	20.0	---	101	80-120%	---	---	
Chloroethane	28.6	5.00	5.00	ug/L	1	20.0	---	143	80-120%	---	---	Q-56
Chloroform	21.4	0.500	1.00	ug/L	1	20.0	---	107	80-120%	---	---	
Chloromethane	23.2	2.50	5.00	ug/L	1	20.0	---	116	80-120%	---	---	
2-Chlorotoluene	19.8	0.500	1.00	ug/L	1	20.0	---	99	80-120%	---	---	
4-Chlorotoluene	21.4	0.500	1.00	ug/L	1	20.0	---	107	80-120%	---	---	
Dibromochloromethane	22.0	0.500	1.00	ug/L	1	20.0	---	110	80-120%	---	---	
1,2-Dibromo-3-chloropropane	19.2	2.50	5.00	ug/L	1	20.0	---	96	80-120%	---	---	
1,2-Dibromoethane (EDB)	21.4	0.250	0.500	ug/L	1	20.0	---	107	80-120%	---	---	
Dibromomethane	21.7	0.500	1.00	ug/L	1	20.0	---	108	80-120%	---	---	
1,2-Dichlorobenzene	20.1	0.250	0.500	ug/L	1	20.0	---	100	80-120%	---	---	
1,3-Dichlorobenzene	20.4	0.250	0.500	ug/L	1	20.0	---	102	80-120%	---	---	
1,4-Dichlorobenzene	19.4	0.250	0.500	ug/L	1	20.0	---	97	80-120%	---	---	
Dichlorodifluoromethane	25.6	0.500	1.00	ug/L	1	20.0	---	128	80-120%	---	---	Q-56
1,1-Dichloroethane	22.7	0.200	0.400	ug/L	1	20.0	---	113	80-120%	---	---	

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Apex Laboratories, LLC

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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:

A3C0740 - 05 19 23 0535

## 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 23C0997 - EPA 5030C						Water						
LCS (23C0997-BS1)			Prepared: 03/24/23 15:45		Analyzed: 03/25/23 06:24							
1,2-Dichloroethane (EDC)	23.8	0.200	0.400	ug/L	1	20.0	---	119	80-120%	---	---	
1,1-Dichloroethene	22.5	0.200	0.400	ug/L	1	20.0	---	113	80-120%	---	---	
cis-1,2-Dichloroethene	21.3	0.200	0.400	ug/L	1	20.0	---	106	80-120%	---	---	
trans-1,2-Dichloroethene	21.0	0.200	0.400	ug/L	1	20.0	---	105	80-120%	---	---	
1,2-Dichloropropane	21.2	0.250	0.500	ug/L	1	20.0	---	106	80-120%	---	---	
1,3-Dichloropropane	21.8	0.500	1.00	ug/L	1	20.0	---	109	80-120%	---	---	
2,2-Dichloropropane	19.8	0.500	1.00	ug/L	1	20.0	---	99	80-120%	---	---	
1,1-Dichloropropene	21.2	0.500	1.00	ug/L	1	20.0	---	106	80-120%	---	---	
cis-1,3-Dichloropropene	21.7	0.500	1.00	ug/L	1	20.0	---	108	80-120%	---	---	
trans-1,3-Dichloropropene	24.2	0.500	1.00	ug/L	1	20.0	---	121	80-120%	---	---	Q-56
Ethylbenzene	21.4	0.250	0.500	ug/L	1	20.0	---	107	80-120%	---	---	
Hexachlorobutadiene	19.4	2.50	5.00	ug/L	1	20.0	---	97	80-120%	---	---	
2-Hexanone	45.6	5.00	10.0	ug/L	1	40.0	---	114	80-120%	---	---	
Isopropylbenzene	21.5	0.500	1.00	ug/L	1	20.0	---	108	80-120%	---	---	
4-Isopropyltoluene	22.3	0.500	1.00	ug/L	1	20.0	---	111	80-120%	---	---	
Methylene chloride	20.8	5.00	10.0	ug/L	1	20.0	---	104	80-120%	---	---	
4-Methyl-2-pentanone (MiBK)	52.8	5.00	10.0	ug/L	1	40.0	---	132	80-120%	---	---	Q-56
Methyl tert-butyl ether (MTBE)	21.4	0.500	1.00	ug/L	1	20.0	---	107	80-120%	---	---	
Naphthalene	15.2	2.00	2.00	ug/L	1	20.0	---	76	80-120%	---	---	Q-55
n-Propylbenzene	21.1	0.250	0.500	ug/L	1	20.0	---	106	80-120%	---	---	
Styrene	22.6	0.500	1.00	ug/L	1	20.0	---	113	80-120%	---	---	
1,1,1,2-Tetrachloroethane	20.4	0.200	0.400	ug/L	1	20.0	---	102	80-120%	---	---	
1,1,2,2-Tetrachloroethane	22.7	0.250	0.500	ug/L	1	20.0	---	114	80-120%	---	---	
Tetrachloroethene (PCE)	20.5	0.200	0.400	ug/L	1	20.0	---	102	80-120%	---	---	
Toluene	20.0	0.250	0.500	ug/L	1	20.0	---	100	80-120%	---	---	
1,2,3-Trichlorobenzene	20.2	1.00	2.00	ug/L	1	20.0	---	101	80-120%	---	---	
1,2,4-Trichlorobenzene	18.0	1.00	2.00	ug/L	1	20.0	---	90	80-120%	---	---	
1,1,1-Trichloroethane	22.4	0.200	0.400	ug/L	1	20.0	---	112	80-120%	---	---	
1,1,2-Trichloroethane	21.2	0.250	0.500	ug/L	1	20.0	---	106	80-120%	---	---	
Trichloroethene (TCE)	18.7	0.200	0.400	ug/L	1	20.0	---	94	80-120%	---	---	
Trichlorofluoromethane	24.4	1.00	2.00	ug/L	1	20.0	---	122	80-120%	---	---	Q-56
1,2,3-Trichloropropane	22.5	0.500	1.00	ug/L	1	20.0	---	113	80-120%	---	---	
1,2,4-Trimethylbenzene	22.8	0.500	1.00	ug/L	1	20.0	---	114	80-120%	---	---	
1,3,5-Trimethylbenzene	22.4	0.500	1.00	ug/L	1	20.0	---	112	80-120%	---	---	

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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:

A3C0740 - 05 19 23 0535

## 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 23C0997 - EPA 5030C						Water						
LCS (23C0997-BS1)				Prepared: 03/24/23 15:45		Analyzed: 03/25/23 06:24						
Vinyl chloride	24.2	0.200	0.400	ug/L	1	20.0	---	121	80-120%	---	---	Q-56
m,p-Xylene	46.2	0.500	1.00	ug/L	1	40.0	---	115	80-120%	---	---	
o-Xylene	21.2	0.250	0.500	ug/L	1	20.0	---	106	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 95 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		100 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		92 %		80-120 %		"						
Duplicate (23C0997-DUP1)						Prepared: 03/24/23 15:45		Analyzed: 03/25/23 10:28				
QC Source Sample: Non-SDG (A3C0788-03)												
Acetone	ND	500	1000	ug/L	50	---	ND	---	---	---	30%	
Acrylonitrile	ND	50.0	100	ug/L	50	---	ND	---	---	---	30%	
Benzene	5.00	5.00	10.0	ug/L	50	---	5.00	---	---	0	30%	J
Bromobenzene	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	
Bromochloromethane	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
Bromodichloromethane	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
Bromoform	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
Bromomethane	ND	250	250	ug/L	50	---	ND	---	---	---	30%	
2-Butanone (MEK)	ND	250	500	ug/L	50	---	ND	---	---	---	30%	
n-Butylbenzene	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
sec-Butylbenzene	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
tert-Butylbenzene	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
Carbon disulfide	ND	250	500	ug/L	50	---	ND	---	---	---	30%	
Carbon tetrachloride	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
Chlorobenzene	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	
Chloroethane	ND	250	250	ug/L	50	---	ND	---	---	---	30%	
Chloroform	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
Chloromethane	ND	125	250	ug/L	50	---	ND	---	---	---	30%	
2-Chlorotoluene	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
4-Chlorotoluene	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
Dibromochloromethane	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
1,2-Dibromo-3-chloropropane	ND	125	250	ug/L	50	---	ND	---	---	---	30%	
1,2-Dibromoethane (EDB)	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	
Dibromomethane	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
1,2-Dichlorobenzene	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	

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**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:****A3C0740 - 05 19 23 0535****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 23C0997 - EPA 5030C						Water						
Duplicate (23C0997-DUP1)			Prepared: 03/24/23 15:45   Analyzed: 03/25/23 10:28									
QC Source Sample: Non-SDG (A3C0788-03)												
1,3-Dichlorobenzene	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	10.0	20.0	ug/L	50	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	10.0	20.0	ug/L	50	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	10.0	20.0	ug/L	50	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	10.0	20.0	ug/L	50	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	10.0	20.0	ug/L	50	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	125	250	ug/L	50	---	ND	---	---	---	30%	
2-Hexanone	ND	250	500	ug/L	50	---	ND	---	---	---	30%	
Isopropylbenzene	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
Methylene chloride	ND	250	500	ug/L	50	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	250	500	ug/L	50	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
Naphthalene	ND	100	100	ug/L	50	---	ND	---	---	---	30%	
n-Propylbenzene	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	
Styrene	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	10.0	20.0	ug/L	50	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	10.0	20.0	ug/L	50	---	ND	---	---	---	30%	
Toluene	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	50.0	100	ug/L	50	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	50.0	100	ug/L	50	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	10.0	20.0	ug/L	50	---	ND	---	---	---	30%	
1,1,2-Trichloroethane	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	

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Darwin Thomas, Business Development Director



## ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

## Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0740 - 05 19 23 0535

## 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 23C0997 - EPA 5030C						Water						
Duplicate (23C0997-DUP1)			Prepared: 03/24/23 15:45   Analyzed: 03/25/23 10:28									
QC Source Sample: Non-SDG (A3C0788-03)												
Trichloroethene (TCE)	ND	10.0	20.0	ug/L	50	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	50.0	100	ug/L	50	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
Vinyl chloride	ND	10.0	20.0	ug/L	50	---	ND	---	---	---	30%	
m,p-Xylene	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
o-Xylene	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 98 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		102 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		100 %		80-120 %		"						
Matrix Spike (23C0997-MS1)						Prepared: 03/24/23 15:45   Analyzed: 03/25/23 14:55						
QC Source Sample: Non-SDG (A3C0830-07)												
EPA 8260D												
Acetone	4780	1000	2000	ug/L	100	4000	ND	119	39-160%	---	---	
Acrylonitrile	2280	100	200	ug/L	100	2000	ND	114	63-135%	---	---	
Benzene	11200	10.0	20.0	ug/L	100	2000	8890	115	79-120%	---	---	
Bromobenzene	1990	25.0	50.0	ug/L	100	2000	ND	99	80-120%	---	---	
Bromochloromethane	2460	50.0	100	ug/L	100	2000	ND	123	78-123%	---	---	Q-54a
Bromodichloromethane	2170	50.0	100	ug/L	100	2000	ND	108	79-125%	---	---	
Bromoform	2120	50.0	100	ug/L	100	2000	ND	106	66-130%	---	---	
Bromomethane	2020	500	500	ug/L	100	2000	ND	101	53-141%	---	---	Q-54b
2-Butanone (MEK)	4900	500	1000	ug/L	100	4000	ND	123	56-143%	---	---	
n-Butylbenzene	2560	50.0	100	ug/L	100	2000	ND	128	75-128%	---	---	
sec-Butylbenzene	2580	50.0	100	ug/L	100	2000	ND	129	77-126%	---	---	Q-01
tert-Butylbenzene	2490	50.0	100	ug/L	100	2000	ND	125	78-124%	---	---	Q-01
Carbon disulfide	2260	500	1000	ug/L	100	2000	ND	113	64-133%	---	---	
Carbon tetrachloride	2380	50.0	100	ug/L	100	2000	ND	119	72-136%	---	---	
Chlorobenzene	2050	25.0	50.0	ug/L	100	2000	ND	102	80-120%	---	---	
Chloroethane	2410	500	500	ug/L	100	2000	ND	120	60-138%	---	---	Q-54c
Chloroform	2080	50.0	100	ug/L	100	2000	ND	104	79-124%	---	---	
Chloromethane	2560	250	500	ug/L	100	2000	ND	128	50-139%	---	---	

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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:

A3C0740 - 05 19 23 0535

## 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 23C0997 - EPA 5030C						Water						
Matrix Spike (23C0997-MS1)			Prepared: 03/24/23 15:45   Analyzed: 03/25/23 14:55									
QC Source Sample: Non-SDG (A3C0830-07)												
2-Chlorotoluene	2210	50.0	100	ug/L	100	2000	ND	111	79-122%	---	---	
4-Chlorotoluene	2260	50.0	100	ug/L	100	2000	ND	113	78-122%	---	---	
Dibromochloromethane	2140	50.0	100	ug/L	100	2000	ND	107	74-126%	---	---	
1,2-Dibromo-3-chloropropane	2140	250	500	ug/L	100	2000	ND	107	62-128%	---	---	
1,2-Dibromoethane (EDB)	2150	25.0	50.0	ug/L	100	2000	ND	108	77-121%	---	---	
Dibromomethane	2060	50.0	100	ug/L	100	2000	ND	103	79-123%	---	---	
1,2-Dichlorobenzene	2100	25.0	50.0	ug/L	100	2000	ND	105	80-120%	---	---	
1,3-Dichlorobenzene	2120	25.0	50.0	ug/L	100	2000	ND	106	80-120%	---	---	
1,4-Dichlorobenzene	1960	25.0	50.0	ug/L	100	2000	ND	98	79-120%	---	---	
Dichlorodifluoromethane	2760	50.0	100	ug/L	100	2000	ND	138	32-152%	---	---	Q-54I
1,1-Dichloroethane	2270	20.0	40.0	ug/L	100	2000	ND	113	77-125%	---	---	
1,2-Dichloroethane (EDC)	2210	20.0	40.0	ug/L	100	2000	ND	111	73-128%	---	---	
1,1-Dichloroethene	2400	20.0	40.0	ug/L	100	2000	ND	120	71-131%	---	---	
cis-1,2-Dichloroethene	2320	20.0	40.0	ug/L	100	2000	ND	116	78-123%	---	---	
trans-1,2-Dichloroethene	2310	20.0	40.0	ug/L	100	2000	ND	116	75-124%	---	---	
1,2-Dichloropropane	2180	25.0	50.0	ug/L	100	2000	ND	109	78-122%	---	---	
1,3-Dichloropropane	2240	50.0	100	ug/L	100	2000	ND	112	80-120%	---	---	
2,2-Dichloropropane	1780	50.0	100	ug/L	100	2000	ND	89	60-139%	---	---	
1,1-Dichloropropene	2470	50.0	100	ug/L	100	2000	ND	124	79-125%	---	---	
cis-1,3-Dichloropropene	2080	50.0	100	ug/L	100	2000	ND	104	75-124%	---	---	
trans-1,3-Dichloropropene	2340	50.0	100	ug/L	100	2000	ND	117	73-127%	---	---	Q-54
Ethylbenzene	3010	25.0	50.0	ug/L	100	2000	659	117	79-121%	---	---	
Hexachlorobutadiene	2350	250	500	ug/L	100	2000	ND	118	66-134%	---	---	
2-Hexanone	5140	500	1000	ug/L	100	4000	ND	128	57-139%	---	---	
Isopropylbenzene	2530	50.0	100	ug/L	100	2000	ND	127	72-131%	---	---	
4-Isopropyltoluene	2550	50.0	100	ug/L	100	2000	ND	128	77-127%	---	---	Q-01
Methylene chloride	2010	500	1000	ug/L	100	2000	ND	100	74-124%	---	---	
4-Methyl-2-pentanone (MiBK)	5520	500	1000	ug/L	100	4000	ND	138	67-130%	---	---	Q-54b
Methyl tert-butyl ether (MTBE)	2200	50.0	100	ug/L	100	2000	ND	110	71-124%	---	---	
Naphthalene	6160	200	200	ug/L	100	2000	3790	119	61-128%	---	---	Q-54s
n-Propylbenzene	2300	25.0	50.0	ug/L	100	2000	ND	115	76-126%	---	---	
Styrene	2340	50.0	100	ug/L	100	2000	ND	117	78-123%	---	---	
1,1,1,2-Tetrachloroethane	2000	20.0	40.0	ug/L	100	2000	ND	100	78-124%	---	---	

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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:

A3C0740 - 05 19 23 0535

## 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 23C0997 - EPA 5030C						Water						
Matrix Spike (23C0997-MS1)			Prepared: 03/24/23 15:45    Analyzed: 03/25/23 14:55									
QC Source Sample: Non-SDG (A3C0830-07)												
1,1,2,2-Tetrachloroethane	2210	25.0	50.0	ug/L	100	2000	ND	110	71-121%	---	---	
Tetrachloroethene (PCE)	2230	20.0	40.0	ug/L	100	2000	ND	112	74-129%	---	---	
Toluene	2370	50.0	100	ug/L	100	2000	280	104	80-121%	---	---	
1,2,3-Trichlorobenzene	2410	100	200	ug/L	100	2000	ND	120	69-129%	---	---	
1,2,4-Trichlorobenzene	2340	100	200	ug/L	100	2000	ND	117	69-130%	---	---	
1,1,1-Trichloroethane	2280	20.0	40.0	ug/L	100	2000	ND	114	74-131%	---	---	
1,1,2-Trichloroethane	2070	25.0	50.0	ug/L	100	2000	ND	103	80-120%	---	---	
Trichloroethene (TCE)	2020	20.0	40.0	ug/L	100	2000	ND	101	79-123%	---	---	
Trichlorofluoromethane	2470	100	200	ug/L	100	2000	ND	124	65-141%	---	---	Q-54h
1,2,3-Trichloropropane	2150	50.0	100	ug/L	100	2000	ND	108	73-122%	---	---	
1,2,4-Trimethylbenzene	2590	50.0	100	ug/L	100	2000	106	124	76-124%	---	---	
1,3,5-Trimethylbenzene	2460	50.0	100	ug/L	100	2000	ND	123	75-124%	---	---	
Vinyl chloride	2580	20.0	40.0	ug/L	100	2000	ND	129	58-137%	---	---	Q-54
m,p-Xylene	5080	50.0	100	ug/L	100	4000	190	122	80-121%	---	---	Q-01
o-Xylene	2710	25.0	50.0	ug/L	100	2000	204	125	78-122%	---	---	Q-01
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 95 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		99 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		97 %		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:****A3C0740 - 05 19 23 0535****QUALITY CONTROL (QC) SAMPLE RESULTS****Volatile Organic Compounds by EPA 8260D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23C1041 - EPA 5030C						Water						
Blank (23C1041-BLK1)				Prepared: 03/27/23 14:13		Analyzed: 03/27/23 16:30						
EPA 8260D												
Acetone	ND	10.0	20.0	ug/L	1	---	---	---	---	---	---	
Acrylonitrile	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
Benzene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Bromobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Bromochloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Bromoform	ND	1.00	1.00	ug/L	1	---	---	---	---	---	---	
Bromomethane	ND	5.00	5.00	ug/L	1	---	---	---	---	---	---	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Carbon disulfide	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Carbon tetrachloride	ND	1.00	1.00	ug/L	1	---	---	---	---	---	---	
Chlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Chloroethane	ND	5.00	5.00	ug/L	1	---	---	---	---	---	---	
Chloroform	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Chloromethane	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Dibromochloromethane	ND	1.00	1.00	ug/L	1	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	5.00	5.00	ug/L	1	---	---	---	---	---	---	Q-54q
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 Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0740 - 05 19 23 0535

## QUALITY CONTROL (QC) SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

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

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Project Manager: John Renda

Report ID:

A3C0740 - 05 19 23 0535

## QUALITY CONTROL (QC) SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

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

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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:

A3C0740 - 05 19 23 0535

## QUALITY CONTROL (QC) SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

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

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Darwin Thomas, Business Development Director

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A3C0740 - 05 19 23 0535

## QUALITY CONTROL (QC) SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

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

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Darwin Thomas, Business Development Director



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503-718-2323

ORELAP ID: OR100062

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Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0740 - 05 19 23 0535

## QUALITY CONTROL (QC) SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23C1041 - EPA 5030C						Water						
Duplicate (23C1041-DUP1)			Prepared: 03/27/23 14:13		Analyzed: 03/27/23 22:21							
QC Source Sample: Non-SDG (A3C0826-01)												
1,3-Dichlorobenzene	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	Q-54r
1,4-Dichlorobenzene	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	10.0	20.0	ug/L	50	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	10.0	20.0	ug/L	50	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	10.0	20.0	ug/L	50	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	10.0	20.0	ug/L	50	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	10.0	20.0	ug/L	50	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	50.0	50.0	ug/L	50	---	ND	---	---	---	30%	Q-54o
1,1-Dichloropropene	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	50.0	50.0	ug/L	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	125	250	ug/L	50	---	ND	---	---	---	30%	
2-Hexanone	ND	250	500	ug/L	50	---	ND	---	---	---	30%	
Isopropylbenzene	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
Methylene chloride	ND	250	500	ug/L	50	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	250	500	ug/L	50	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
Naphthalene	ND	50.0	100	ug/L	50	---	ND	---	---	---	30%	
n-Propylbenzene	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	
Styrene	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	10.0	20.0	ug/L	50	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	10.0	20.0	ug/L	50	---	ND	---	---	---	30%	
Toluene	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	50.0	100	ug/L	50	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	50.0	100	ug/L	50	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	20.0	20.0	ug/L	50	---	ND	---	---	---	30%	
1,1,2-Trichloroethane	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	

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A3C0740 - 05 19 23 0535

## QUALITY CONTROL (QC) SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23C1041 - EPA 5030C						Water						
Duplicate (23C1041-DUP1)			Prepared: 03/27/23 14:13   Analyzed: 03/27/23 22:21									
QC Source Sample: Non-SDG (A3C0826-01)												
Trichloroethene (TCE)	ND	10.0	20.0	ug/L	50	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	50.0	100	ug/L	50	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
Vinyl chloride	ND	10.0	20.0	ug/L	50	---	ND	---	---	---	30%	
m,p-Xylene	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
o-Xylene	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 98 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		100 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		106 %		80-120 %		"						
Matrix Spike (23C1041-MS1)						Prepared: 03/27/23 14:13   Analyzed: 03/28/23 02:25						
QC Source Sample: Non-SDG (A3C0826-06)												
EPA 8260D												
Acetone	1920	500	1000	ug/L	50	2000	ND	96	39-160%	---	---	
Acrylonitrile	972	50.0	100	ug/L	50	1000	ND	97	63-135%	---	---	
Benzene	1110	5.00	10.0	ug/L	50	1000	59.5	105	79-120%	---	---	
Bromobenzene	1040	12.5	25.0	ug/L	50	1000	ND	104	80-120%	---	---	
Bromochloromethane	1010	25.0	50.0	ug/L	50	1000	ND	101	78-123%	---	---	
Bromodichloromethane	1110	25.0	50.0	ug/L	50	1000	ND	111	79-125%	---	---	
Bromoform	740	50.0	50.0	ug/L	50	1000	ND	74	66-130%	---	---	Q-54u
Bromomethane	1160	250	250	ug/L	50	1000	ND	116	53-141%	---	---	
2-Butanone (MEK)	2090	250	500	ug/L	50	2000	ND	104	56-143%	---	---	
n-Butylbenzene	1300	25.0	50.0	ug/L	50	1000	ND	130	75-128%	---	---	Q-01
sec-Butylbenzene	1230	25.0	50.0	ug/L	50	1000	ND	123	77-126%	---	---	
tert-Butylbenzene	1150	25.0	50.0	ug/L	50	1000	ND	115	78-124%	---	---	
Carbon disulfide	1070	250	500	ug/L	50	1000	ND	107	64-133%	---	---	
Carbon tetrachloride	802	50.0	50.0	ug/L	50	1000	ND	80	72-136%	---	---	Q-54t
Chlorobenzene	1060	12.5	25.0	ug/L	50	1000	ND	106	80-120%	---	---	
Chloroethane	1180	250	250	ug/L	50	1000	ND	118	60-138%	---	---	
Chloroform	1070	25.0	50.0	ug/L	50	1000	ND	107	79-124%	---	---	
Chloromethane	1060	125	250	ug/L	50	1000	ND	106	50-139%	---	---	

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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:**

**A3C0740 - 05 19 23 0535**

## QUALITY CONTROL (QC) SAMPLE RESULTS

### Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23C1041 - EPA 5030C						Water						
Matrix Spike (23C1041-MS1)			Prepared: 03/27/23 14:13    Analyzed: 03/28/23 02:25									
QC Source Sample: Non-SDG (A3C0826-06)												
2-Chlorotoluene	1100	25.0	50.0	ug/L	50	1000	ND	110	79-122%	---	---	
4-Chlorotoluene	1080	25.0	50.0	ug/L	50	1000	ND	108	78-122%	---	---	
Dibromochloromethane	834	50.0	50.0	ug/L	50	1000	ND	83	74-126%	---	---	Q-54p
1,2-Dibromo-3-chloropropane	646	250	250	ug/L	50	1000	ND	65	62-128%	---	---	Q-54n
1,2-Dibromoethane (EDB)	946	12.5	25.0	ug/L	50	1000	ND	95	77-121%	---	---	
Dibromomethane	1150	25.0	50.0	ug/L	50	1000	ND	115	79-123%	---	---	
1,2-Dichlorobenzene	1130	12.5	25.0	ug/L	50	1000	ND	113	80-120%	---	---	
1,3-Dichlorobenzene	1110	12.5	25.0	ug/L	50	1000	ND	111	80-120%	---	---	
1,4-Dichlorobenzene	1060	12.5	25.0	ug/L	50	1000	ND	106	79-120%	---	---	
Dichlorodifluoromethane	1240	25.0	50.0	ug/L	50	1000	ND	124	32-152%	---	---	
1,1-Dichloroethane	1060	10.0	20.0	ug/L	50	1000	ND	106	77-125%	---	---	
1,2-Dichloroethane (EDC)	1080	10.0	20.0	ug/L	50	1000	ND	108	73-128%	---	---	
1,1-Dichloroethene	1120	10.0	20.0	ug/L	50	1000	ND	112	71-131%	---	---	
cis-1,2-Dichloroethene	1080	10.0	20.0	ug/L	50	1000	ND	108	78-123%	---	---	
trans-1,2-Dichloroethene	1090	10.0	20.0	ug/L	50	1000	ND	109	75-124%	---	---	
1,2-Dichloropropane	1010	12.5	25.0	ug/L	50	1000	ND	101	78-122%	---	---	
1,3-Dichloropropane	1100	25.0	50.0	ug/L	50	1000	ND	110	80-120%	---	---	
2,2-Dichloropropane	495	50.0	50.0	ug/L	50	1000	ND	50	60-139%	---	---	Q-54r
1,1-Dichloropropene	1170	25.0	50.0	ug/L	50	1000	ND	117	79-125%	---	---	
cis-1,3-Dichloropropene	860	25.0	50.0	ug/L	50	1000	ND	86	75-124%	---	---	
trans-1,3-Dichloropropene	680	50.0	50.0	ug/L	50	1000	ND	68	73-127%	---	---	Q-54o
Ethylbenzene	1200	12.5	25.0	ug/L	50	1000	50.5	115	79-121%	---	---	
Hexachlorobutadiene	1300	125	250	ug/L	50	1000	ND	130	66-134%	---	---	
2-Hexanone	2260	250	500	ug/L	50	2000	ND	113	57-139%	---	---	
Isopropylbenzene	1190	25.0	50.0	ug/L	50	1000	ND	119	72-131%	---	---	
4-Isopropyltoluene	1280	25.0	50.0	ug/L	50	1000	ND	128	77-127%	---	---	Q-01
Methylene chloride	990	250	500	ug/L	50	1000	ND	99	74-124%	---	---	
4-Methyl-2-pentanone (MiBK)	2170	250	500	ug/L	50	2000	ND	108	67-130%	---	---	
Methyl tert-butyl ether (MTBE)	898	25.0	50.0	ug/L	50	1000	ND	90	71-124%	---	---	
Naphthalene	2510	50.0	100	ug/L	50	1000	1290	122	61-128%	---	---	
n-Propylbenzene	1140	12.5	25.0	ug/L	50	1000	ND	114	76-126%	---	---	
Styrene	1150	25.0	50.0	ug/L	50	1000	ND	115	78-123%	---	---	
1,1,1,2-Tetrachloroethane	870	10.0	20.0	ug/L	50	1000	ND	87	78-124%	---	---	

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Darwin Thomas, Business Development Director



## ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

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Portland, OR 97219

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Project Manager: John Renda

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A3C0740 - 05 19 23 0535

## QUALITY CONTROL (QC) SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

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

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Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0740 - 05 19 23 0535

## 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 23C0837 - EPA 3511 (Bottle Extraction)						Water						
Blank (23C0837-BLK1)			Prepared: 03/22/23 06:06		Analyzed: 03/22/23 12:37							
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: 119 %		Limits: 78-134 %		Dilution: 1x						
Benzo(a)pyrene-d12 (Surr)		119 %		80-132 %		"						

LCS (23C0837-BS1)

Prepared: 03/22/23 06:06 Analyzed: 03/22/23 13:11

EPA 8270E LVI												
Acenaphthene	1.56	0.0160	0.0320	ug/L	1	1.60	---	98	80-120%	---	---	
Acenaphthylene	1.77	0.0160	0.0320	ug/L	1	1.60	---	110	80-124%	---	---	
Anthracene	1.67	0.0160	0.0320	ug/L	1	1.60	---	104	80-123%	---	---	
Benz(a)anthracene	1.79	0.00800	0.0160	ug/L	1	1.60	---	112	80-122%	---	---	
Benzo(a)pyrene	1.94	0.00800	0.0160	ug/L	1	1.60	---	121	80-129%	---	---	
Benzo(b)fluoranthene	1.86	0.00800	0.0160	ug/L	1	1.60	---	116	80-124%	---	---	
Benzo(k)fluoranthene	1.86	0.00800	0.0160	ug/L	1	1.60	---	116	80-125%	---	---	
Benzo(g,h,i)perylene	1.67	0.0160	0.0320	ug/L	1	1.60	---	104	80-120%	---	---	

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Report ID:

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## 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 23C0837 - EPA 3511 (Bottle Extraction)						Water						
LCS (23C0837-BS1)						Prepared: 03/22/23 06:06 Analyzed: 03/22/23 13:11						
Chrysene	1.64	0.00800	0.0160	ug/L	1	1.60	---	103	80-120%	---	---	
Dibenz(a,h)anthracene	1.55	0.00800	0.0160	ug/L	1	1.60	---	97	80-120%	---	---	
Fluoranthene	1.64	0.0160	0.0320	ug/L	1	1.60	---	102	80-126%	---	---	
Fluorene	1.62	0.0160	0.0320	ug/L	1	1.60	---	101	77-127%	---	---	
Indeno(1,2,3-cd)pyrene	1.56	0.00800	0.0160	ug/L	1	1.60	---	97	80-121%	---	---	
1-Methylnaphthalene	1.52	0.0320	0.0640	ug/L	1	1.60	---	95	53-148%	---	---	
2-Methylnaphthalene	1.52	0.0320	0.0640	ug/L	1	1.60	---	95	48-150%	---	---	
Naphthalene	1.60	0.0320	0.0640	ug/L	1	1.60	---	100	78-120%	---	---	
Phenanthrene	1.54	0.0320	0.0640	ug/L	1	1.60	---	96	80-120%	---	---	
Pyrene	1.65	0.0160	0.0320	ug/L	1	1.60	---	103	80-125%	---	---	
Carbazole	1.84	0.0160	0.0320	ug/L	1	1.60	---	115	65-141%	---	---	
Dibenzofuran	1.68	0.0160	0.0320	ug/L	1	1.60	---	105	76-121%	---	---	
Surr: Acenaphthylene-d8 (Surr)		Recovery: 121 %		Limits: 78-134 %		Dilution: 1x						
Benzo(a)pyrene-d12 (Surr)		124 %		80-132 %		"						

LCS Dup (23C0837-BSD1)				Prepared: 03/22/23 06:06    Analyzed: 03/22/23 13:44								Q-19	
EPA 8270E LVI													
Acenaphthene	1.56	0.0160	0.0320	ug/L	1	1.60	---	98	80-120%	0.03	30%		
Acenaphthylene	1.79	0.0160	0.0320	ug/L	1	1.60	---	112	80-124%	1	30%		
Anthracene	1.68	0.0160	0.0320	ug/L	1	1.60	---	105	80-123%	1	30%		
Benz(a)anthracene	1.81	0.00800	0.0160	ug/L	1	1.60	---	113	80-122%	1	30%		
Benzo(a)pyrene	1.96	0.00800	0.0160	ug/L	1	1.60	---	122	80-129%	0.9	30%		
Benzo(b)fluoranthene	1.89	0.00800	0.0160	ug/L	1	1.60	---	118	80-124%	2	30%		
Benzo(k)fluoranthene	1.92	0.00800	0.0160	ug/L	1	1.60	---	120	80-125%	3	30%		
Benzo(g,h,i)perylene	1.71	0.0160	0.0320	ug/L	1	1.60	---	107	80-120%	2	30%		
Chrysene	1.67	0.00800	0.0160	ug/L	1	1.60	---	104	80-120%	2	30%		
Dibenz(a,h)anthracene	1.59	0.00800	0.0160	ug/L	1	1.60	---	100	80-120%	3	30%		
Fluoranthene	1.65	0.0160	0.0320	ug/L	1	1.60	---	103	80-126%	0.9	30%		
Fluorene	1.60	0.0160	0.0320	ug/L	1	1.60	---	100	77-127%	1	30%		
Indeno(1,2,3-cd)pyrene	1.57	0.00800	0.0160	ug/L	1	1.60	---	98	80-121%	1	30%		
1-Methylnaphthalene	1.55	0.0320	0.0640	ug/L	1	1.60	---	97	53-148%	2	30%		
2-Methylnaphthalene	1.55	0.0320	0.0640	ug/L	1	1.60	---	97	48-150%	2	30%		
Naphthalene	1.60	0.0320	0.0640	ug/L	1	1.60	---	100	78-120%	0.1	30%		
Phenanthrene	1.54	0.0320	0.0640	ug/L	1	1.60	---	96	80-120%	0.2	30%		

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## 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 23C0837 - EPA 3511 (Bottle Extraction)						Water						
LCS Dup (23C0837-BSD1)			Prepared: 03/22/23 06:06 Analyzed: 03/22/23 13:44								Q-19	
Pyrene	1.64	0.0160	0.0320	ug/L	1	1.60	---	102	80-125%	1	30%	
Carbazole	1.86	0.0160	0.0320	ug/L	1	1.60	---	116	65-141%	0.9	30%	
Dibenzofuran	1.70	0.0160	0.0320	ug/L	1	1.60	---	106	76-121%	1	30%	
Surr: Acenaphthylene-d8 (Surr)		Recovery: 122 %		Limits: 78-134 %		Dilution: 1x						
Benzo(a)pyrene-d12 (Surr)		125 %		80-132 %		"						

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## 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:****A3C0740 - 05 19 23 0535**

## 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
<b>Batch 23C1176 - EPA 3015A</b>						<b>Water</b>						
<b>LCS (23C1176-BS1)</b>						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%	---	---	
<b>LCS (23C1176-BS2)</b>						Prepared: 03/29/23 14:43 Analyzed: 03/31/23 12:54						
<b>EPA 6020B</b>												
Beryllium	24.9	0.100	0.200	ug/L	1	27.8	---	90	80-120%	---	---	Q-16
<b>Duplicate (23C1176-DUP1)</b>						Prepared: 03/29/23 14:43 Analyzed: 03/30/23 22:42						
<b>QC Source Sample: Non-SDG (A3C0670-02)</b>												
Aluminum	<b>155</b>	25.0	50.0	ug/L	1	---	141	---	---	9	20%	
Antimony	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	20%	
Arsenic	<b>1.48</b>	0.500	1.00	ug/L	1	---	1.48	---	---	0.3	20%	
Barium	<b>20.2</b>	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	<b>3350</b>	25.0	50.0	ug/L	1	---	3310	---	---	1	20%	
Lead	<b>0.110</b>	0.110	0.200	ug/L	1	---	0.122	---	---	10	20%	J
Manganese	<b>415</b>	0.500	1.00	ug/L	1	---	415	---	---	0.2	20%	
Mercury	ND	0.0400	0.0800	ug/L	1	---	ND	---	---	---	20%	
Nickel	<b>1.60</b>	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	<b>1.50</b>	1.00	2.00	ug/L	1	---	1.49	---	---	0.9	20%	J
Zinc	<b>11.7</b>	2.00	4.00	ug/L	1	---	11.6	---	---	0.7	20%	

**Duplicate (23C1176-DUP2)**

Prepared: 03/29/23 14:43 Analyzed: 03/31/23 13:04

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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:

A3C0740 - 05 19 23 0535

## 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: Non-SDG (A3C0670-02RE1)												
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: Non-SDG (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: Non-SDG (A3C0670-02RE1)												
EPA 6020B												
Beryllium	18.8	0.100	0.200	ug/L	1	27.8	ND	68	75-125%	---	---	Q-16
Matrix Spike Dup (23C1176-MSD1)			Prepared: 03/29/23 14:43    Analyzed: 03/30/23 22:52									
QC Source Sample: Non-SDG (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%	

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Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0740 - 05 19 23 0535

## 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: Non-SDG (A3C0670-02)												
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 97219Project: **Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001F**Project Manager: **John Renda****Report ID:****A3C0740 - 05 19 23 0535****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: Non-SDG (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: Non-SDG (A3C0670-02RE1)												
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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## ANALYTICAL REPORT

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Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0740 - 05 19 23 0535

## 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: Non-SDG (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: Non-SDG (A3C0670-02)</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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## ANALYTICAL REPORT

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Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0740 - 05 19 23 0535

## QUALITY CONTROL (QC) SAMPLE RESULTS

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

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

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## 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							
<u>D4282-02</u>												
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							
<u>D4282-02</u>												
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							
<u>D4282-02</u>												
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							
<u>QC Source Sample: Non-SDG (A3C0670-02)</u>												
<u>D4282-02</u>												
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							
<u>QC Source Sample: Non-SDG (A3C0670-02)</u>												
Free Cyanide	0.0605	0.00250	0.00500	mg/L	1	0.0667	ND	91	74-120%	6	20%	

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## ANALYTICAL REPORT

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## Analytical Resources, LLC

## QUALITY CONTROL (QC) SAMPLE RESULTS

## Washington Department of Ecology Methods

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch BLC0652 - EPA 3510C SepF						Water						
Blank (BLC0652-BLK1)			Prepared: 03/27/23 11:57   Analyzed: 03/30/23 16:32									
WAEPH												
C8-C10 Aliphatics	ND	---	40	ug/L	1	---	---	---	---	---	---	U
>C10-C12 Aliphatics	ND	---	40	ug/L	1	---	---	---	---	---	---	U
>C12-C16 Aliphatics	ND	---	40	ug/L	1	---	---	---	---	---	---	U
>C16-C21 Aliphatics	ND	---	40	ug/L	1	---	---	---	---	---	---	U
>C21-C34 Aliphatics	ND	---	40	ug/L	1	---	---	---	---	---	---	U
Surr: 1-Chloro-octadecane		Recovery: 47.1 %		Limits: 36-120 %		Dilution: 1x						

Blank (BLC0652-BLK2)				Prepared: 03/27/23 11:57   Analyzed: 03/30/23 09:18								
WAEPH												
C8-C10 Aromatics	ND	---	40	ug/L	1	---	---	---	---	---	---	U
>C10-C12 Aromatics	ND	---	40	ug/L	1	---	---	---	---	---	---	U
>C12-C16 Aromatics	ND	---	40	ug/L	1	---	---	---	---	---	---	U
>C16-C21 Aromatics	ND	---	40	ug/L	1	---	---	---	---	---	---	U
>C21-C34 Aromatics	ND	---	40	ug/L	1	---	---	---	---	---	---	U
Surr: o-Terphenyl		Recovery: 78.2 %		Limits: 41-120 %		Dilution: 1x						

LCS (BLC0652-BS1)				Prepared: 03/27/23 11:57   Analyzed: 03/30/23 16:57							
WAEPH											
C8-C10 Aliphatics	111	---	40	ug/L	1	300.00	---	36.9	12-130%	---	---
>C10-C12 Aliphatics	122	---	40	ug/L	1	300.00	---	40.7	10-130%	---	---
>C12-C16 Aliphatics	160	---	40	ug/L	1	300.00	---	53.2	35-130%	---	---
>C16-C21 Aliphatics	213	---	40	ug/L	1	300.00	---	71.0	45-130%	---	---
>C21-C34 Aliphatics	206	---	40	ug/L	1	300.00	---	68.7	19-130%	---	---
Surr: 1-Chloro-octadecane		Recovery: 42.7 %		Limits: 36-120 %		Dilution: 1x					

LCS (BLC0652-BS2)				Prepared: 03/27/23 11:57   Analyzed: 03/30/23 09:42							
<u>WA EPH</u>											
>C10-C12 Aromatics	167	---	40	ug/L	1	300.00	---	55.5	12-130%	---	---
>C12-C16 Aromatics	159	---	40	ug/L	1	300.00	---	52.9	31-130%	---	---
>C16-C21 Aromatics	464	---	40	ug/L	1	600.00	---	77.3	48-130%	---	---

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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:**

**A3C0740 - 05 19 23 0535**

## Analytical Resources, LLC

### QUALITY CONTROL (QC) SAMPLE RESULTS

#### Washington Department of Ecology Methods

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch BLC0652 - EPA 3510C SepF						Water						
LCS (BLC0652-BS2)			Prepared: 03/27/23 11:57   Analyzed: 03/30/23 09:42									
>C21-C34 Aromatics	214	---	40	ug/L	1	300.00	---	71.5	33-130%	---	---	
Surr: o-Terphenyl		Recovery: 75.1 %		Limits: 41-120 %		Dilution: 1x						
LCS Dup (BLC0652-BSD1)			Prepared: 03/27/23 11:57   Analyzed: 03/30/23 17:21									
WAEPH												
C8-C10 Aliphatics	115	---	40	ug/L	1	300.00	---	38.4	12-130%	3.89	30%	
>C10-C12 Aliphatics	134	---	40	ug/L	1	300.00	---	44.7	10-130%	9.52	30%	
>C12-C16 Aliphatics	165	---	40	ug/L	1	300.00	---	55.1	35-130%	3.45	30%	
>C16-C21 Aliphatics	225	---	40	ug/L	1	300.00	---	74.9	45-130%	5.30	30%	
>C21-C34 Aliphatics	227	---	40	ug/L	1	300.00	---	75.6	19-130%	9.61	30%	
Surr: 1-Chloro-octadecane		Recovery: 43.8 %		Limits: 36-120 %		Dilution: 1x						
LCS Dup (BLC0652-BSD2)			Prepared: 03/27/23 11:57   Analyzed: 03/30/23 10:06									
WAEPH												
>C10-C12 Aromatics	179	---	40	ug/L	1	300.00	---	59.7	12-130%	7.18	30%	
>C12-C16 Aromatics	181	---	40	ug/L	1	300.00	---	60.3	31-130%	13.1	30%	
>C16-C21 Aromatics	545	---	40	ug/L	1	600.00	---	90.8	48-130%	16.1	30%	
>C21-C34 Aromatics	240	---	40	ug/L	1	300.00	---	79.9	33-130%	11.1	30%	
Surr: o-Terphenyl		Recovery: 85.9 %		Limits: 41-120 %		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 97219Project: **Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001F**Project Manager: **John Renda****Report ID:****A3C0740 - 05 19 23 0535****Analytical Resources, LLC****QUALITY CONTROL (QC) SAMPLE RESULTS****Washington Department of Ecology Methods**

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

**LCS (BLC0828-BS1)**

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

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

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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:**  
**A3C0740 - 05 19 23 0535**

## Analytical Resources, LLC

### QUALITY CONTROL (QC) SAMPLE RESULTS

#### Washington Department of Ecology Methods

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

**LCS Dup (BLC0828-BSD1)**

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

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

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# ANALYTICAL 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:**

**A3C0740 - 05 19 23 0535**

## Analytical Resources, LLC

### QUALITY CONTROL (QC) SAMPLE RESULTS

#### Washington Department of Ecology Methods

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch BLC0828 - EPA 5030C (Purge and Trap)						Water						
LCS Dup (BLC0828-BSD1)			Prepared: 03/30/23 15:42		Analyzed: 03/30/23 16:26							
1,2,3-Trimethylbenzene	49.6	---	5	ug/L	1	50.000	---	99.2	70-130%	1.20	30%	
m,p-Xylene	104	---	10	ug/L	1	100.00	---	104	70-133%	2.83	30%	
Naphthalene	49.3	---	5	ug/L	1	50.000	---	98.6	70-130%	1.64	30%	
1-Methylnaphthalene	45.4	---	5	ug/L	1	50.000	---	90.8	70-130%	0.663	30%	
o-Xylene	55.2	---	5	ug/L	1	50.000	---	110	70-130%	1.83	30%	
n-Pentane	54.3	---	5	ug/L	1	50.000	---	109	70-130%	4.33	30%	
n-Hexane	49.5	---	5	ug/L	1	50.000	---	99.0	70-130%	7.02	30%	
n-Octane	40.6	---	5	ug/L	1	50.000	---	81.2	56-120%	1.22	30%	
n-Decane	44.9	---	5	ug/L	1	50.000	---	89.8	61-120%	0.222	30%	
n-Dodecane	57.6	---	5	ug/L	1	50.000	---	115	70-130%	3.89	30%	
Surr: PID: 2,5-Dibromotoluene		Recovery: 84.9 %		Limits: 60-140 %		Dilution: 1x						
FID: 2,5-Dibromotoluene		86.6 %		60-140 %		"						

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**ANALYTICAL REPORT****Apex Laboratories, LLC**6700 S.W. Sandburg Street  
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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:****A3C0740 - 05 19 23 0535****SAMPLE PREPARATION INFORMATION****Diesel and/or Oil Hydrocarbons by NWTPH-Dx**

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

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<u>Batch: 23C1271</u>							
A3C0740-01	WG	NWTPH-Dx	03/20/23 11:00	03/31/23 11:24	1040mL/5mL	1000mL/5mL	0.96
A3C0740-02	WG	NWTPH-Dx	03/20/23 11:15	03/31/23 11:24	1040mL/5mL	1000mL/5mL	0.96
A3C0740-03	WG	NWTPH-Dx	03/20/23 12:45	03/31/23 11:24	1040mL/5mL	1000mL/5mL	0.96
A3C0740-04	WG	NWTPH-Dx	03/20/23 13:00	03/31/23 11:24	1040mL/5mL	1000mL/5mL	0.96
A3C0740-05	WG	NWTPH-Dx	03/20/23 14:20	03/31/23 11:24	1060mL/5mL	1000mL/5mL	0.94
A3C0740-06	WG	NWTPH-Dx	03/20/23 14:50	03/31/23 11:24	1040mL/5mL	1000mL/5mL	0.96

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

Prep: EPA 5030C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<u>Batch: 23C0996</u>							
A3C0740-01	WG	NWTPH-Gx (MS)	03/20/23 11:00	03/24/23 15:42	5mL/5mL	5mL/5mL	1.00
A3C0740-02	WG	NWTPH-Gx (MS)	03/20/23 11:15	03/24/23 15:42	5mL/5mL	5mL/5mL	1.00
A3C0740-03	WG	NWTPH-Gx (MS)	03/20/23 12:45	03/24/23 15:42	5mL/5mL	5mL/5mL	1.00
<u>Batch: 23C0997</u>							
A3C0740-04	WG	NWTPH-Gx (MS)	03/20/23 13:00	03/24/23 15:45	5mL/5mL	5mL/5mL	1.00
A3C0740-05	WG	NWTPH-Gx (MS)	03/20/23 14:20	03/24/23 15:45	5mL/5mL	5mL/5mL	1.00
A3C0740-06	WG	NWTPH-Gx (MS)	03/20/23 14:50	03/24/23 15:45	5mL/5mL	5mL/5mL	1.00

**Volatile Organic Compounds by EPA 8260D**

Prep: EPA 5030C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<u>Batch: 23C0996</u>							
A3C0740-01	WG	EPA 8260D	03/20/23 11:00	03/24/23 15:42	5mL/5mL	5mL/5mL	1.00
A3C0740-02	WG	EPA 8260D	03/20/23 11:15	03/24/23 15:42	5mL/5mL	5mL/5mL	1.00
A3C0740-03	WG	EPA 8260D	03/20/23 12:45	03/24/23 15:42	5mL/5mL	5mL/5mL	1.00
<u>Batch: 23C0997</u>							
A3C0740-04	WG	EPA 8260D	03/20/23 13:00	03/24/23 15:45	5mL/5mL	5mL/5mL	1.00
A3C0740-05	WG	EPA 8260D	03/20/23 14:20	03/24/23 15:45	5mL/5mL	5mL/5mL	1.00
A3C0740-06	WG	EPA 8260D	03/20/23 14:50	03/24/23 15:45	5mL/5mL	5mL/5mL	1.00
A3C0740-07	W	EPA 8260D	03/20/23 15:50	03/24/23 15:45	5mL/5mL	5mL/5mL	1.00
<u>Batch: 23C1041</u>							
A3C0740-05RE1	WG	EPA 8260D	03/20/23 14:20	03/27/23 14:13	5mL/5mL	5mL/5mL	1.00

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**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:****A3C0740 - 05 19 23 0535****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
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**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
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**Batch: 23C0837**

A3C0740-01	WG	EPA 8270E LVI	03/20/23 11:00	03/22/23 06:06	93.55mL/5mL	125mL/5mL	1.34
A3C0740-02	WG	EPA 8270E LVI	03/20/23 11:15	03/22/23 06:06	103.86mL/5mL	125mL/5mL	1.20
A3C0740-03	WG	EPA 8270E LVI	03/20/23 12:45	03/22/23 06:06	91.78mL/5mL	125mL/5mL	1.36
A3C0740-04	WG	EPA 8270E LVI	03/20/23 13:00	03/22/23 06:06	110.89mL/5mL	125mL/5mL	1.13
A3C0740-05	WG	EPA 8270E LVI	03/20/23 14:20	03/22/23 06:06	97.47mL/5mL	125mL/5mL	1.28
A3C0740-05RE1	WG	EPA 8270E LVI	03/20/23 14:20	03/22/23 06:06	97.47mL/5mL	125mL/5mL	1.28
A3C0740-06RE1	WG	EPA 8270E LVI	03/20/23 14:50	03/22/23 06:06	102.02mL/5mL	125mL/5mL	1.23

**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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**Batch: 23C1176**

A3C0740-01	WG	EPA 6020B	03/20/23 11:00	03/29/23 14:43	45mL/50mL	45mL/50mL	1.00
A3C0740-01RE1	WG	EPA 6020B	03/20/23 11:00	03/29/23 14:43	45mL/50mL	45mL/50mL	1.00
A3C0740-02	WG	EPA 6020B	03/20/23 11:15	03/29/23 14:43	45mL/50mL	45mL/50mL	1.00
A3C0740-02RE1	WG	EPA 6020B	03/20/23 11:15	03/29/23 14:43	45mL/50mL	45mL/50mL	1.00
A3C0740-03	WG	EPA 6020B	03/20/23 12:45	03/29/23 14:43	45mL/50mL	45mL/50mL	1.00
A3C0740-03RE1	WG	EPA 6020B	03/20/23 12:45	03/29/23 14:43	45mL/50mL	45mL/50mL	1.00
A3C0740-03RE2	WG	EPA 6020B	03/20/23 12:45	03/29/23 14:43	45mL/50mL	45mL/50mL	1.00
A3C0740-04	WG	EPA 6020B	03/20/23 13:00	03/29/23 14:43	45mL/50mL	45mL/50mL	1.00
A3C0740-04RE1	WG	EPA 6020B	03/20/23 13:00	03/29/23 14:43	45mL/50mL	45mL/50mL	1.00
A3C0740-04RE2	WG	EPA 6020B	03/20/23 13:00	03/29/23 14:43	45mL/50mL	45mL/50mL	1.00
A3C0740-05	WG	EPA 6020B	03/20/23 14:20	03/29/23 14:43	45mL/50mL	45mL/50mL	1.00
A3C0740-05RE1	WG	EPA 6020B	03/20/23 14:20	03/29/23 14:43	45mL/50mL	45mL/50mL	1.00
A3C0740-06	WG	EPA 6020B	03/20/23 14:50	03/29/23 14:43	45mL/50mL	45mL/50mL	1.00
A3C0740-06RE1	WG	EPA 6020B	03/20/23 14:50	03/29/23 14:43	45mL/50mL	45mL/50mL	1.00
A3C0740-06RE2	WG	EPA 6020B	03/20/23 14:50	03/29/23 14:43	45mL/50mL	45mL/50mL	1.00

**Total Cyanide by Flow Analysis (Aqueous)**

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 97219Project: **Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001F**Project Manager: **John Renda****Report ID:****A3C0740 - 05 19 23 0535****SAMPLE PREPARATION INFORMATION****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
<b>Batch: 23C1090</b>							
A3C0740-01RE2	WG	EPA 335.4	03/20/23 11:00	03/28/23 10:33	6mL/6mL	6mL/6mL	1.00
A3C0740-02	WG	EPA 335.4	03/20/23 11:15	03/28/23 10:33	6mL/6mL	6mL/6mL	1.00
A3C0740-03	WG	EPA 335.4	03/20/23 12:45	03/28/23 10:33	6mL/6mL	6mL/6mL	1.00
A3C0740-04RE1	WG	EPA 335.4	03/20/23 13:00	03/28/23 10:33	6mL/6mL	6mL/6mL	1.00
A3C0740-05RE1	WG	EPA 335.4	03/20/23 14:20	03/28/23 10:33	6mL/6mL	6mL/6mL	1.00
A3C0740-06RE1	WG	EPA 335.4	03/20/23 14:50	03/28/23 10:33	6mL/6mL	6mL/6mL	1.00

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

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<b>Batch: 23C0905</b>							
A3C0740-01	WG	D6888-09	03/20/23 11:00	03/23/23 10:44	5mL/5mL	5mL/5mL	1.00
A3C0740-02	WG	D6888-09	03/20/23 11:15	03/23/23 10:44	5mL/5mL	5mL/5mL	1.00
A3C0740-03	WG	D6888-09	03/20/23 12:45	03/23/23 10:44	5mL/5mL	5mL/5mL	1.00
A3C0740-04	WG	D6888-09	03/20/23 13:00	03/23/23 10:44	5mL/5mL	5mL/5mL	1.00
<b>Batch: 23C0907</b>							
A3C0740-05	WG	D6888-09	03/20/23 14:20	03/23/23 10:51	5mL/5mL	5mL/5mL	1.00
A3C0740-06	WG	D6888-09	03/20/23 14:50	03/23/23 10:51	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
<b>Batch: 23C0849</b>							
A3C0740-01	WG	D4282-02	03/20/23 11:00	03/22/23 09:53	3mL/3mL	3mL/3mL	1.00
A3C0740-02	WG	D4282-02	03/20/23 11:15	03/22/23 09:53	3mL/3mL	3mL/3mL	1.00
A3C0740-03	WG	D4282-02	03/20/23 12:45	03/22/23 09:53	3mL/3mL	3mL/3mL	1.00
A3C0740-04	WG	D4282-02	03/20/23 13:00	03/22/23 09:53	3mL/3mL	3mL/3mL	1.00
A3C0740-05	WG	D4282-02	03/20/23 14:20	03/22/23 09:53	3mL/3mL	3mL/3mL	1.00
A3C0740-06	WG	D4282-02	03/20/23 14:50	03/22/23 09:53	3mL/3mL	3mL/3mL	1.00

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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:****A3C0740 - 05 19 23 0535****Analytical Resources, LLC****SAMPLE PREPARATION INFORMATION****Washington Department of Ecology Methods****Prep: EPA 3510C SepF**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<b>Batch: BLC0652</b>							
A3C0740-01	WG	WA EPH	03/20/23 11:00	03/27/23 11:57	500mL/1mL	500mL/1mL	1.00
A3C0740-02	WG	WA EPH	03/20/23 11:15	03/27/23 11:57	500mL/1mL	500mL/1mL	1.00
A3C0740-03	WG	WA EPH	03/20/23 12:45	03/27/23 11:57	500mL/1mL	500mL/1mL	1.00
A3C0740-04	WG	WA EPH	03/20/23 13:00	03/27/23 11:57	500mL/1mL	500mL/1mL	1.00
A3C0740-05	WG	WA EPH	03/20/23 14:20	03/27/23 11:57	500mL/1mL	500mL/1mL	1.00

**Prep: EPA 5030C (Purge and Trap)**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<b>Batch: BLC0828</b>							
A3C0740-01	WG	WA VPH	03/20/23 11:00	03/30/23 15:42	10mL/10ml	10mL/10ml	1.00
A3C0740-02	WG	WA VPH	03/20/23 11:15	03/30/23 15:42	10mL/10ml	10mL/10ml	1.00
A3C0740-03	WG	WA VPH	03/20/23 12:45	03/30/23 15:42	10mL/10ml	10mL/10ml	1.00
A3C0740-04	WG	WA VPH	03/20/23 13:00	03/30/23 15:42	10mL/10ml	10mL/10ml	1.00
A3C0740-05	WG	WA VPH	03/20/23 14:20	03/30/23 15:42	10mL/10ml	10mL/10ml	1.00

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

Project Manager: **John Renda**

**Report ID:**

**A3C0740 - 05 19 23 0535**

## QUALIFIER DEFINITIONS

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

#### **Apex Laboratories**

- F-12** The result for this hydrocarbon range is primarily due to the presence of individual analyte peaks in the quantitation range. No fuel pattern detected.
- F-13** The chromatographic pattern does not resemble the fuel standard used for quantitation
- J** Estimated Result. Result detected below the lowest point of the calibration curve, but above the specified MDL.
- M-05** Estimated results. Peak separation for structural isomers is insufficient for accurate quantification.
- 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-16** Reanalysis of an original Batch QC sample.
- Q-19** Blank Spike Duplicate (BSD) sample analyzed in place of Matrix Spike/Duplicate samples due to limited sample amount available for analysis.
- Q-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 +10%. 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 +12%. 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 +15%. The results are reported as Estimated Values.
- Q-54d** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +16%. The results are reported as Estimated Values.
- Q-54e** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +18%. The results are reported as Estimated Values.
- Q-54f** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +2%. The results are reported as Estimated Values.
- Q-54g** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +23%. The results are reported as Estimated Values.
- Q-54h** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +3%. The results are reported as Estimated Values.
- Q-54i** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +31%. The results are reported as Estimated Values.

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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:**

**A3C0740 - 05 19 23 0535**

- Q-54j** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +5%. The results are reported as Estimated Values.
- Q-54k** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +6%. The results are reported as Estimated Values.
- Q-54l** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +8%. The results are reported as Estimated Values.
- Q-54m** 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-54n** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -10%. The results are reported as Estimated Values.
- Q-54o** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -17%. The results are reported as Estimated Values.
- Q-54p** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -2%. The results are reported as Estimated Values.
- Q-54q** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -20%. The results are reported as Estimated Values.
- Q-54r** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -27%. The results are reported as Estimated Values.
- Q-54s** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -4%. The results are reported as Estimated Values.
- Q-54t** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -7%. The results are reported as Estimated Values.
- Q-54u** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -9%. The results are reported as Estimated Values.
- Q-55** Daily CCV/LCS recovery for this analyte was below the +/-20% criteria listed in EPA 8260, however there is adequate sensitivity to ensure detection at the reporting level.
- Q-56** Daily CCV/LCS recovery for this analyte was above the +/-20% criteria listed in EPA 8260
- R-02** The Reporting Limit for this analyte has been raised to account for interference from coeluting organic compounds present in the sample.
- R-06** Reporting level raised due to possible carryover from a previous sample.
- S-05** Surrogate recovery is estimated due to sample dilution required for high analyte concentration and/or matrix interference.

**Analytical Resources, LLC**

- \* Flagged value is not within established control limits.
- U This analyte is not detected above the reporting limit (RL) or if noted, not detected above the limit of detection (LOD).

Apex Laboratories

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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:**

**A3C0740 - 05 19 23 0535**

### REPORTING NOTES AND CONVENTIONS:

**Abbreviations:**

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

**Detection Limits: Limit of Detection (LOD)**

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

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

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

**Reporting Conventions:**

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

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

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

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

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

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

**QC Source:**

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

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

**Miscellaneous Notes:**

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

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

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**Report ID:**

**A3C0740 - 05 19 23 0535**

### 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
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All reported analytes are included in Apex Laboratories' current ORELAP scope.

**Secondary Accreditations**

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

**Subcontract Laboratory Accreditations**

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

**Field Testing Parameters**

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

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Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3C0740 - 05 19 23 0535

## APEX LABS COOLER RECEIPT FORM

Client: Anchor QEA Element WO#: A3 C0740Project/Project #: Gasco-CMMA/TCE Mon. Wells 1Q 2023 Perf. Mon. / 000029-02.84 T-01.001F

## Delivery Info:

Date/time received: 3/2/23 @ 8:04 By: RKDelivered by: Apex ☒ Client ☐ ESS ☐ FedEx ☐ UPS ☐ Radio ☐ Morgan ☐ SDS ☐ Evergreen ☐ Other ☐Cooler Inspection Date/time inspected: 3/2/23 @ 8:55 By: ERANChain 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>4.3</u>	<u>5.5</u>	<u>4.7</u>				
Custody seals? (Y/N)	<u>N</u>	<u>Y</u>	<u>Y</u>				
Received on ice? (Y/N)	<u>Y</u>	<u>Y</u>	<u>Y</u>				
Temp. blanks? (Y/N)	<u>N</u>	<u>Y</u>	<u>Y</u>				
Ice type: (Gel/Real/Other)	<u>Real</u>	<u>Y</u>	<u>Y</u>				
Condition (In/Out):	<u>IN</u>	<u>Y</u>	<u>Y</u>				

Cooler out of temp? (Y/N) Y 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: 3/2/23 @ 12:00 By: KPSAll samples intact? Yes ☒ No ☐ Comments: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:

Water samples: pH checked: Yes ☒ No ☐ NA ☐ pH appropriate? Yes ☐ No ☒ NA ☐Comments: -33 & -34 & -35 & -36 & -37 & -38 NaOH Poly pH ~9

## Additional information:

Labeled by:

KPS

Witness:

AKC

Cooler Inspected by:

KPS

Form Y-003 R-00

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