



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Tuesday, December 5, 2023

John Renda

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

RE: A311285 - Gasco-TCE Only Mon. Wells 3Q 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 A311285, which was received by the laboratory on 9/21/2023 at 8:54:00AM.

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

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

Cooler Receipt Information

Acceptable Receipt Temperature is less than, or equal to, 6 degC (not frozen), or received on ice the same day as sampling.

(See Cooler Receipt Form for details)

Cooler#1 4.6 degC

This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.

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



Apex Laboratories

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Darwin Thomas, Business Development Director



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6720 SW Macadam Ave. Suite 125
Portland, OR 97219

Project: **Gasco-TCE Only Mon. Wells 3Q 2023 Perf. Mon**

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

Project Manager: **John Renda**

Report ID:

A3I1285 - 12 05 23 0700

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
GS-092023-29	A3I1285-01	WG	09/20/23 09:45	09/21/23 08:54
GS-092023-30	A3I1285-02	WG	09/20/23 12:10	09/21/23 08:54
TB-092023	A3I1285-03	W	09/20/23 15:30	09/21/23 08:54

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Anchor QEA, LLC

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Portland, OR 97219

Project: **Gasco-TCE Only Mon. Wells 3Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001F**Project Manager: **John Renda****Report ID:****A3I1285 - 12 05 23 0700****ANALYTICAL SAMPLE RESULTS****Diesel and/or Oil Hydrocarbons by NWTPH-Dx**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-092023-29 (A3I1285-01)		Matrix: WG			Batch: 23J0071			
Diesel	253	108	215	ug/L	1	10/04/23 07:47	NWTPH-Dx	
Oil	ND	215	430	ug/L	1	10/04/23 07:47	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 91 %		Limits: 50-150 %	1	10/04/23 07:47	NWTPH-Dx	
GS-092023-30 (A3I1285-02)		Matrix: WG			Batch: 23J0071			
Diesel	267	99.0	198	ug/L	1	10/04/23 08:07	NWTPH-Dx	F-13
Oil	355	198	396	ug/L	1	10/04/23 08:07	NWTPH-Dx	J
Surrogate: o-Terphenyl (Surr)		Recovery: 87 %		Limits: 50-150 %	1	10/04/23 08:07	NWTPH-Dx	

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Project Manager: John Renda

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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-092023-29 (A3I1285-01)		Matrix: WG		Batch: 23I1013				
Gasoline Range Organics	ND	50.0	100	ug/L	1	09/30/23 00:32	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 103 %	Limits: 50-150 %	1	09/30/23 00:32	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		106 %	50-150 %	1	09/30/23 00:32	NWTPH-Gx (MS)		
GS-092023-30 (A3I1285-02)		Matrix: WG		Batch: 23I1013				
Gasoline Range Organics	74.7	50.0	100	ug/L	1	09/30/23 01:00	NWTPH-Gx (MS)	J
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 104 %	Limits: 50-150 %	1	09/30/23 01:00	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		107 %	50-150 %	1	09/30/23 01:00	NWTPH-Gx (MS)		

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Portland, OR 97219Project: **Gasco-TCE Only Mon. Wells 3Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001F**Project Manager: **John Renda****Report ID:****A3I1285 - 12 05 23 0700**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-092023-29 (A3I1285-01)		Matrix: WG			Batch: 23I1013			
Acetone	ND	20.0	20.0	ug/L	1	09/30/23 00:32	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	09/30/23 00:32	EPA 8260D	
Benzene	ND	0.100	0.200	ug/L	1	09/30/23 00:32	EPA 8260D	
Bromobenzene	ND	0.250	0.500	ug/L	1	09/30/23 00:32	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	09/30/23 00:32	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	09/30/23 00:32	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	09/30/23 00:32	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	09/30/23 00:32	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	09/30/23 00:32	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	09/30/23 00:32	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	09/30/23 00:32	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	09/30/23 00:32	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	09/30/23 00:32	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	09/30/23 00:32	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	09/30/23 00:32	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	09/30/23 00:32	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	09/30/23 00:32	EPA 8260D	
Chloromethane	ND	2.50	5.00	ug/L	1	09/30/23 00:32	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	09/30/23 00:32	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	09/30/23 00:32	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	09/30/23 00:32	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	09/30/23 00:32	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	09/30/23 00:32	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	09/30/23 00:32	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	09/30/23 00:32	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	09/30/23 00:32	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	09/30/23 00:32	EPA 8260D	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	09/30/23 00:32	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	09/30/23 00:32	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	09/30/23 00:32	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	09/30/23 00:32	EPA 8260D	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	09/30/23 00:32	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	09/30/23 00:32	EPA 8260D	

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Portland, OR 97219Project: **Gasco-TCE Only Mon. Wells 3Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001F**Project Manager: **John Renda****Report ID:****A311285 - 12 05 23 0700****ANALYTICAL SAMPLE RESULTS****Volatile Organic Compounds by EPA 8260D**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-092023-29 (A311285-01)		Matrix: WG			Batch: 2311013			
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	09/30/23 00:32	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	09/30/23 00:32	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	09/30/23 00:32	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	09/30/23 00:32	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	09/30/23 00:32	EPA 8260D	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	09/30/23 00:32	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	09/30/23 00:32	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	09/30/23 00:32	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	09/30/23 00:32	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	09/30/23 00:32	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	09/30/23 00:32	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	09/30/23 00:32	EPA 8260D	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	09/30/23 00:32	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	09/30/23 00:32	EPA 8260D	
Naphthalene	ND	2.50	5.00	ug/L	1	09/30/23 00:32	EPA 8260D	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	09/30/23 00:32	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	09/30/23 00:32	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	09/30/23 00:32	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	09/30/23 00:32	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	09/30/23 00:32	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	09/30/23 00:32	EPA 8260D	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	09/30/23 00:32	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	09/30/23 00:32	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	09/30/23 00:32	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	09/30/23 00:32	EPA 8260D	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	09/30/23 00:32	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	09/30/23 00:32	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	09/30/23 00:32	EPA 8260D	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	09/30/23 00:32	EPA 8260D	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	09/30/23 00:32	EPA 8260D	
Vinyl chloride	ND	0.100	0.200	ug/L	1	09/30/23 00:32	EPA 8260D	
m,p-Xylene	ND	0.500	1.00	ug/L	1	09/30/23 00:32	EPA 8260D	
o-Xylene	ND	0.250	0.500	ug/L	1	09/30/23 00:32	EPA 8260D	

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Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3I1285 - 12 05 23 0700

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-092023-29 (A3I1285-01)		Matrix: WG			Batch: 23I1013			
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 104 %	Limits: 80-120 %	1	09/30/23 00:32	EPA 8260D		
Toluene-d8 (Surr)		101 %	80-120 %	1	09/30/23 00:32	EPA 8260D		
4-Bromofluorobenzene (Surr)		99 %	80-120 %	1	09/30/23 00:32	EPA 8260D		
GS-092023-30 (A3I1285-02)		Matrix: WG			Batch: 23I1013			
Acetone	ND	10.0	20.0	ug/L	1	09/30/23 01:00	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	09/30/23 01:00	EPA 8260D	
Benzene	ND	0.100	0.200	ug/L	1	09/30/23 01:00	EPA 8260D	
Bromobenzene	ND	0.250	0.500	ug/L	1	09/30/23 01:00	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	09/30/23 01:00	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	09/30/23 01:00	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	09/30/23 01:00	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	09/30/23 01:00	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	09/30/23 01:00	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	09/30/23 01:00	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	09/30/23 01:00	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	09/30/23 01:00	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	09/30/23 01:00	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	09/30/23 01:00	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	09/30/23 01:00	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	09/30/23 01:00	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	09/30/23 01:00	EPA 8260D	
Chloromethane	ND	2.50	5.00	ug/L	1	09/30/23 01:00	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	09/30/23 01:00	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	09/30/23 01:00	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	09/30/23 01:00	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	09/30/23 01:00	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	09/30/23 01:00	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	09/30/23 01:00	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	09/30/23 01:00	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	09/30/23 01:00	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	09/30/23 01:00	EPA 8260D	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	09/30/23 01:00	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	09/30/23 01:00	EPA 8260D	

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Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-092023-30 (A311285-02)		Matrix: WG			Batch: 231013			
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	09/30/23 01:00	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	09/30/23 01:00	EPA 8260D	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	09/30/23 01:00	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	09/30/23 01:00	EPA 8260D	
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	09/30/23 01:00	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	09/30/23 01:00	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	09/30/23 01:00	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	09/30/23 01:00	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	09/30/23 01:00	EPA 8260D	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	09/30/23 01:00	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	09/30/23 01:00	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	09/30/23 01:00	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	09/30/23 01:00	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	09/30/23 01:00	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	09/30/23 01:00	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	09/30/23 01:00	EPA 8260D	
4-Methyl-2-pentanone (MIBK)	ND	5.00	10.0	ug/L	1	09/30/23 01:00	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	09/30/23 01:00	EPA 8260D	
Naphthalene	ND	2.50	5.00	ug/L	1	09/30/23 01:00	EPA 8260D	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	09/30/23 01:00	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	09/30/23 01:00	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	09/30/23 01:00	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	09/30/23 01:00	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	09/30/23 01:00	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	09/30/23 01:00	EPA 8260D	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	09/30/23 01:00	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	09/30/23 01:00	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	09/30/23 01:00	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	09/30/23 01:00	EPA 8260D	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	09/30/23 01:00	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	09/30/23 01:00	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	09/30/23 01:00	EPA 8260D	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	09/30/23 01:00	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-TCE Only Mon. Wells 3Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001F**Project Manager: **John Renda****Report ID:****A3I1285 - 12 05 23 0700**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-092023-30 (A3I1285-02)		Matrix: WG			Batch: 23I1013			
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	09/30/23 01:00	EPA 8260D	
Vinyl chloride	ND	0.100	0.200	ug/L	1	09/30/23 01:00	EPA 8260D	
m,p-Xylene	ND	0.500	1.00	ug/L	1	09/30/23 01:00	EPA 8260D	
o-Xylene	ND	0.250	0.500	ug/L	1	09/30/23 01:00	EPA 8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 104 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>09/30/23 01:00</i>	<i>EPA 8260D</i>	
<i>Toluene-d8 (Surr)</i>		<i>101 %</i>		<i>80-120 %</i>	<i>1</i>	<i>09/30/23 01:00</i>	<i>EPA 8260D</i>	
<i>4-Bromofluorobenzene (Surr)</i>		<i>99 %</i>		<i>80-120 %</i>	<i>1</i>	<i>09/30/23 01:00</i>	<i>EPA 8260D</i>	
TB-092023 (A3I1285-03)		Matrix: W			Batch: 23I1013			
Acetone	ND	10.0	20.0	ug/L	1	09/29/23 18:04	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	09/29/23 18:04	EPA 8260D	
Benzene	ND	0.100	0.200	ug/L	1	09/29/23 18:04	EPA 8260D	
Bromobenzene	ND	0.250	0.500	ug/L	1	09/29/23 18:04	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	09/29/23 18:04	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	09/29/23 18:04	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	09/29/23 18:04	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	09/29/23 18:04	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	09/29/23 18:04	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	09/29/23 18:04	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	09/29/23 18:04	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	09/29/23 18:04	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	09/29/23 18:04	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	09/29/23 18:04	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	09/29/23 18:04	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	09/29/23 18:04	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	09/29/23 18:04	EPA 8260D	
Chloromethane	ND	2.50	5.00	ug/L	1	09/29/23 18:04	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	09/29/23 18:04	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	09/29/23 18:04	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	09/29/23 18:04	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	09/29/23 18:04	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	09/29/23 18:04	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	09/29/23 18:04	EPA 8260D	

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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 97219Project: **Gasco-TCE Only Mon. Wells 3Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001F**Project Manager: **John Renda****Report ID:****A311285 - 12 05 23 0700**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
TB-092023 (A311285-03)		Matrix: W			Batch: 231013			
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	09/29/23 18:04	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	09/29/23 18:04	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	09/29/23 18:04	EPA 8260D	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	09/29/23 18:04	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	09/29/23 18:04	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	09/29/23 18:04	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	09/29/23 18:04	EPA 8260D	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	09/29/23 18:04	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	09/29/23 18:04	EPA 8260D	
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	09/29/23 18:04	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	09/29/23 18:04	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	09/29/23 18:04	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	09/29/23 18:04	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	09/29/23 18:04	EPA 8260D	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	09/29/23 18:04	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	09/29/23 18:04	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	09/29/23 18:04	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	09/29/23 18:04	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	09/29/23 18:04	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	09/29/23 18:04	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	09/29/23 18:04	EPA 8260D	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	09/29/23 18:04	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	09/29/23 18:04	EPA 8260D	
Naphthalene	ND	2.50	5.00	ug/L	1	09/29/23 18:04	EPA 8260D	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	09/29/23 18:04	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	09/29/23 18:04	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	09/29/23 18:04	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	09/29/23 18:04	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	09/29/23 18:04	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	09/29/23 18:04	EPA 8260D	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	09/29/23 18:04	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	09/29/23 18:04	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	09/29/23 18:04	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-TCE Only Mon. Wells 3Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001F**Project Manager: **John Renda****Report ID:****A3I1285 - 12 05 23 0700**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
TB-092023 (A3I1285-03)		Matrix: W			Batch: 23I1013			
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	09/29/23 18:04	EPA 8260D	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	09/29/23 18:04	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	09/29/23 18:04	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	09/29/23 18:04	EPA 8260D	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	09/29/23 18:04	EPA 8260D	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	09/29/23 18:04	EPA 8260D	
Vinyl chloride	ND	0.100	0.200	ug/L	1	09/29/23 18:04	EPA 8260D	
m,p-Xylene	ND	0.500	1.00	ug/L	1	09/29/23 18:04	EPA 8260D	
o-Xylene	ND	0.250	0.500	ug/L	1	09/29/23 18:04	EPA 8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 104 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>09/29/23 18:04</i>	<i>EPA 8260D</i>	
<i>Toluene-d8 (Surr)</i>		<i>102 %</i>		<i>80-120 %</i>	<i>1</i>	<i>09/29/23 18:04</i>	<i>EPA 8260D</i>	
<i>4-Bromofluorobenzene (Surr)</i>		<i>100 %</i>		<i>80-120 %</i>	<i>1</i>	<i>09/29/23 18:04</i>	<i>EPA 8260D</i>	

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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-TCE Only Mon. Wells 3Q 2023 Perf. Mon

Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3I1285 - 12 05 23 0700

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-092023-29 (A3I1285-01)		Matrix: WG			Batch: 23I0794			
Acenaphthene	0.452	0.0228	0.0456	ug/L	1	09/25/23 22:58	EPA 8270E LVI	
Acenaphthylene	0.508	0.0228	0.0456	ug/L	1	09/25/23 22:58	EPA 8270E LVI	
Anthracene	1.26	0.0228	0.0456	ug/L	1	09/25/23 22:58	EPA 8270E LVI	
Benz(a)anthracene	0.0473	0.0114	0.0228	ug/L	1	09/25/23 22:58	EPA 8270E LVI	
Benzo(a)pyrene	0.0177	0.0114	0.0228	ug/L	1	09/25/23 22:58	EPA 8270E LVI	J
Benzo(b+j)fluoranthene(s)	0.0171	0.0114	0.0228	ug/L	1	09/25/23 22:58	EPA 8270E LVI	J
Benzo(k)fluoranthene	0.0188	0.0114	0.0228	ug/L	1	09/25/23 22:58	EPA 8270E LVI	J
Benzo(g,h,i)perylene	ND	0.0228	0.0456	ug/L	1	09/25/23 22:58	EPA 8270E LVI	
Chrysene	0.0183	0.0114	0.0228	ug/L	1	09/25/23 22:58	EPA 8270E LVI	J
Dibenz(a,h)anthracene	ND	0.0114	0.0228	ug/L	1	09/25/23 22:58	EPA 8270E LVI	
Fluoranthene	0.141	0.0228	0.0456	ug/L	1	09/25/23 22:58	EPA 8270E LVI	
Fluorene	0.213	0.0228	0.0456	ug/L	1	09/25/23 22:58	EPA 8270E LVI	M-04
Indeno(1,2,3-cd)pyrene	ND	0.0114	0.0228	ug/L	1	09/25/23 22:58	EPA 8270E LVI	
1-Methylnaphthalene	ND	0.0456	0.0913	ug/L	1	09/25/23 22:58	EPA 8270E LVI	
2-Methylnaphthalene	ND	0.0456	0.0913	ug/L	1	09/25/23 22:58	EPA 8270E LVI	
Naphthalene	0.0730	0.0456	0.0913	ug/L	1	09/25/23 22:58	EPA 8270E LVI	J
Phenanthrene	0.116	0.0456	0.0913	ug/L	1	09/25/23 22:58	EPA 8270E LVI	
Pyrene	0.139	0.0228	0.0456	ug/L	1	09/25/23 22:58	EPA 8270E LVI	
Dibenzofuran	ND	0.0228	0.0456	ug/L	1	09/25/23 22:58	EPA 8270E LVI	
Surrogate: Acenaphthylene-d8 (Surr)		Recovery: 92 %		Limits: 78-134 %	1	09/25/23 22:58	EPA 8270E LVI	
Benzo(a)pyrene-d12 (Surr)		117 %		80-132 %	1	09/25/23 22:58	EPA 8270E LVI	

GS-092023-30 (A3I1285-02)

Matrix: WG

Batch: 23I0794

Acenaphthene	33.0	0.197	0.393	ug/L	10	09/25/23 23:30	EPA 8270E LVI
Acenaphthylene	1.20	0.197	0.393	ug/L	10	09/25/23 23:30	EPA 8270E LVI
Anthracene	0.501	0.197	0.393	ug/L	10	09/25/23 23:30	EPA 8270E LVI
Benz(a)anthracene	ND	0.0983	0.197	ug/L	10	09/25/23 23:30	EPA 8270E LVI
Benzo(a)pyrene	ND	0.0983	0.197	ug/L	10	09/25/23 23:30	EPA 8270E LVI
Benzo(b+j)fluoranthene(s)	ND	0.0983	0.197	ug/L	10	09/25/23 23:30	EPA 8270E LVI
Benzo(k)fluoranthene	ND	0.0983	0.197	ug/L	10	09/25/23 23:30	EPA 8270E LVI
Benzo(g,h,i)perylene	ND	0.197	0.393	ug/L	10	09/25/23 23:30	EPA 8270E LVI
Chrysene	ND	0.0983	0.197	ug/L	10	09/25/23 23:30	EPA 8270E LVI
Dibenz(a,h)anthracene	ND	0.0983	0.197	ug/L	10	09/25/23 23:30	EPA 8270E LVI

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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-TCE Only Mon. Wells 3Q 2023 Perf. Mon

Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3I1285 - 12 05 23 0700

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-092023-30 (A3I1285-02)		Matrix: WG			Batch: 23I0794			
Fluoranthene	1.26	0.197	0.393	ug/L	10	09/25/23 23:30	EPA 8270E LVI	
Fluorene	8.52	0.197	0.393	ug/L	10	09/25/23 23:30	EPA 8270E LVI	
Indeno(1,2,3-cd)pyrene	ND	0.0983	0.197	ug/L	10	09/25/23 23:30	EPA 8270E LVI	
1-Methylnaphthalene	ND	0.393	0.786	ug/L	10	09/25/23 23:30	EPA 8270E LVI	
2-Methylnaphthalene	ND	0.393	0.786	ug/L	10	09/25/23 23:30	EPA 8270E LVI	
Naphthalene	ND	0.393	0.786	ug/L	10	09/25/23 23:30	EPA 8270E LVI	
Phenanthrene	10.7	0.393	0.786	ug/L	10	09/25/23 23:30	EPA 8270E LVI	
Pyrene	1.03	0.197	0.393	ug/L	10	09/25/23 23:30	EPA 8270E LVI	
Dibenzofuran	ND	0.197	0.393	ug/L	10	09/25/23 23:30	EPA 8270E LVI	
Surrogate: Acenaphthylene-d8 (Surr)		Recovery: 40 %		Limits: 78-134 %	10	09/25/23 23:30	EPA 8270E LVI	S-05
Benzo(a)pyrene-d12 (Surr)		115 %		80-132 %	10	09/25/23 23:30	EPA 8270E LVI	S-05

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Page 13 of 48



ANALYTICAL REPORT

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6720 SW Macadam Ave. Suite 125
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Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3I1285 - 12 05 23 0700

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-092023-29 (A3I1285-01)				Matrix: WG				
Batch: 23I1021								
Aluminum	6120	25.0	50.0	ug/L	1	09/30/23 05:26	EPA 6020B	
Antimony	11.4	0.500	1.00	ug/L	1	09/30/23 05:26	EPA 6020B	
Arsenic	21.6	0.500	1.00	ug/L	1	09/30/23 05:26	EPA 6020B	
Barium	214	1.00	2.00	ug/L	1	09/30/23 05:26	EPA 6020B	
Beryllium	0.687	0.100	0.200	ug/L	1	09/30/23 05:26	EPA 6020B	
Cadmium	0.242	0.100	0.200	ug/L	1	09/30/23 05:26	EPA 6020B	
Chromium	15.3	1.00	2.00	ug/L	1	09/30/23 05:26	EPA 6020B	
Copper	17.6	1.00	2.00	ug/L	1	09/30/23 05:26	EPA 6020B	
Lead	12.8	0.110	0.200	ug/L	1	09/30/23 05:26	EPA 6020B	
Mercury	ND	0.0400	0.0800	ug/L	1	09/30/23 05:26	EPA 6020B	
Nickel	30.2	1.00	2.00	ug/L	1	09/30/23 05:26	EPA 6020B	
Selenium	ND	0.500	1.00	ug/L	1	09/30/23 05:26	EPA 6020B	
Silver	0.137	0.100	0.200	ug/L	1	09/30/23 05:26	EPA 6020B	J
Thallium	0.392	0.100	0.200	ug/L	1	09/30/23 05:26	EPA 6020B	
Vanadium	23.5	1.00	2.00	ug/L	1	09/30/23 05:26	EPA 6020B	
Zinc	187	2.00	4.00	ug/L	1	09/30/23 05:26	EPA 6020B	
GS-092023-29 (A3I1285-01RE1)				Matrix: WG				
Batch: 23I1021								
Iron	75800	250	500	ug/L	10	10/02/23 16:13	EPA 6020B	
Manganese	7420	5.00	10.0	ug/L	10	10/02/23 16:13	EPA 6020B	
GS-092023-30 (A3I1285-02)				Matrix: WG				
Batch: 23I1021								
Aluminum	77.0	25.0	50.0	ug/L	1	09/30/23 05:41	EPA 6020B	
Antimony	ND	0.500	1.00	ug/L	1	09/30/23 05:41	EPA 6020B	
Arsenic	9.82	0.500	1.00	ug/L	1	09/30/23 05:41	EPA 6020B	
Barium	73.9	1.00	2.00	ug/L	1	09/30/23 05:41	EPA 6020B	
Beryllium	ND	0.100	0.200	ug/L	1	09/30/23 05:41	EPA 6020B	
Cadmium	ND	0.100	0.200	ug/L	1	09/30/23 05:41	EPA 6020B	
Chromium	ND	1.00	2.00	ug/L	1	09/30/23 05:41	EPA 6020B	
Copper	ND	1.00	2.00	ug/L	1	09/30/23 05:41	EPA 6020B	
Iron	54100	25.0	50.0	ug/L	1	09/30/23 05:41	EPA 6020B	

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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-TCE Only Mon. Wells 3Q 2023 Perf. Mon

Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3I1285 - 12 05 23 0700

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-092023-30 (A3I1285-02)		Matrix: WG						
Lead	0.139	0.110	0.200	ug/L	1	09/30/23 05:41	EPA 6020B	J
Manganese	1680	0.500	1.00	ug/L	1	09/30/23 05:41	EPA 6020B	
Mercury	ND	0.0400	0.0800	ug/L	1	09/30/23 05:41	EPA 6020B	
Nickel	2.03	1.00	2.00	ug/L	1	09/30/23 05:41	EPA 6020B	
Selenium	ND	0.500	1.00	ug/L	1	09/30/23 05:41	EPA 6020B	
Silver	ND	0.100	0.200	ug/L	1	09/30/23 05:41	EPA 6020B	
Thallium	ND	0.100	0.200	ug/L	1	09/30/23 05:41	EPA 6020B	
Vanadium	1.00	1.00	2.00	ug/L	1	09/30/23 05:41	EPA 6020B	J
Zinc	3.95	2.00	4.00	ug/L	1	09/30/23 05:41	EPA 6020B	J

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503-718-2323
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125
Portland, OR 97219Project: **Gasco-TCE Only Mon. Wells 3Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001F**Project Manager: **John Renda****Report ID:****A3I1285 - 12 05 23 0700****ANALYTICAL SAMPLE RESULTS****Total Cyanide by Flow Analysis (Aqueous)**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-092023-29 (A3I1285-01)				Matrix: WG		Batch: 23I0845		
Total Cyanide	0.477	0.00500	0.00500	mg/L	1	09/26/23 17:14	EPA 335.4	
GS-092023-30 (A3I1285-02)				Matrix: WG		Batch: 23I0845		
Total Cyanide	0.0417	0.00500	0.00500	mg/L	1	09/26/23 17:16	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-092023-29 (A3I1285-01)				Matrix: WG		Batch: 23I0791		
Available Cyanide	ND	0.00100	0.00200	mg/L	1	09/25/23 15:46	D6888-09	
GS-092023-30 (A3I1285-02)				Matrix: WG		Batch: 23I0791		
Available Cyanide	ND	0.00100	0.00200	mg/L	1	09/25/23 15:53	D6888-09	Q-42

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Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-092023-29 (A3I1285-01)				Matrix: WG		Batch: 23I0927		
Free Cyanide	ND	0.00250	0.00500	mg/L	1	09/28/23 16:13	D4282-02	
GS-092023-30 (A3I1285-02)				Matrix: WG		Batch: 23I0927		
Free Cyanide	ND	0.00250	0.00500	mg/L	1	09/28/23 16:13	D4282-02	

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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 23J0071 - EPA 3510C (Fuels/Acid Ext.)						Water						
Blank (23J0071-BLK1)			Prepared: 10/03/23 10:45 Analyzed: 10/04/23 06:45									
NWTPH-Dx												
Diesel	ND	100	200	ug/L	1	---	---	---	---	---	---	
Oil	ND	200	400	ug/L	1	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)		Recovery: 72 %		Limits: 50-150 %		Dilution: 1x						
LCS (23J0071-BS1)			Prepared: 10/03/23 10:45 Analyzed: 10/04/23 07:06									
NWTPH-Dx												
Diesel	726	100	200	ug/L	1	1250	---	58	36-132%	---	---	
Surr: o-Terphenyl (Surr)		Recovery: 90 %		Limits: 50-150 %		Dilution: 1x						
LCS Dup (23J0071-BSD1)			Prepared: 10/03/23 10:45 Analyzed: 10/04/23 07:26									
NWTPH-Dx												
Diesel	755	100	200	ug/L	1	1250	---	60	36-132%	4	30%	
Surr: o-Terphenyl (Surr)		Recovery: 95 %		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 23I1013 - EPA 5030C						Water						
Blank (23I1013-BLK1)			Prepared: 09/29/23 11:26 Analyzed: 09/29/23 15:46									
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	50.0	100	ug/L	1	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 102 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		106 %		50-150 %		"						
LCS (23I1013-BS2)			Prepared: 09/29/23 11:26 Analyzed: 09/29/23 15:18									
NWTPH-Gx (MS)												
Gasoline Range Organics	533	50.0	100	ug/L	1	500	---	107	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 96 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		100 %		50-150 %		"						
Duplicate (23I1013-DUP1)			Prepared: 09/29/23 11:26 Analyzed: 09/30/23 01:28									
QC Source Sample: GS-092023-30 (A3I1285-02)												
NWTPH-Gx (MS)												
Gasoline Range Organics	81.5	50.0	100	ug/L	1	---	74.7	---	---	9	30%	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 104 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		106 %		50-150 %		"						

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ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125
Portland, OR 97219Project: **Gasco-TCE Only Mon. Wells 3Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001F**Project Manager: **John Renda****Report ID:****A3I1285 - 12 05 23 0700****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 23I1013 - EPA 5030C						Water						
Blank (23I1013-BLK1)			Prepared: 09/29/23 11:26		Analyzed: 09/29/23 15:46							
EPA 8260D												
Acetone	ND	10.0	20.0	ug/L	1	---	---	---	---	---	---	
Acrylonitrile	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
Benzene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Bromobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Bromochloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Bromoform	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Bromomethane	ND	5.00	5.00	ug/L	1	---	---	---	---	---	---	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Carbon disulfide	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Chlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Chloroethane	ND	5.00	5.00	ug/L	1	---	---	---	---	---	---	
Chloroform	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Chloromethane	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Dibromomethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	

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Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3I1285 - 12 05 23 0700

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 23I1013 - EPA 5030C						Water						
Blank (23I1013-BLK1)						Prepared: 09/29/23 11:26 Analyzed: 09/29/23 15:46						
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Ethylbenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
2-Hexanone	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Methylene chloride	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Naphthalene	ND	2.50	5.00	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	0.100	0.200	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: 104 % Limits: 80-120 % Dilution: 1x												

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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 23I1013 - EPA 5030C						Water						
Blank (23I1013-BLK1)			Prepared: 09/29/23 11:26		Analyzed: 09/29/23 15:46							
Surr: Toluene-d8 (Surr)		Recovery: 101 %		Limits: 80-120 %		Dilution: 1x						
4-Bromofluorobenzene (Surr)		100 %		80-120 %		"						
LCS (23I1013-BS1)			Prepared: 09/29/23 11:26		Analyzed: 09/29/23 14:06							
EPA 8260D												
Acetone	39.5	10.0	20.0	ug/L	1	40.0	---	99	80-120%	---	---	
Acrylonitrile	19.6	1.00	2.00	ug/L	1	20.0	---	98	80-120%	---	---	
Benzene	21.0	0.100	0.200	ug/L	1	20.0	---	105	80-120%	---	---	
Bromobenzene	19.7	0.250	0.500	ug/L	1	20.0	---	98	80-120%	---	---	
Bromochloromethane	20.5	0.500	1.00	ug/L	1	20.0	---	102	80-120%	---	---	
Bromodichloromethane	21.5	0.500	1.00	ug/L	1	20.0	---	108	80-120%	---	---	
Bromoform	19.2	0.500	1.00	ug/L	1	20.0	---	96	80-120%	---	---	
Bromomethane	16.7	5.00	5.00	ug/L	1	20.0	---	83	80-120%	---	---	
2-Butanone (MEK)	41.4	5.00	10.0	ug/L	1	40.0	---	104	80-120%	---	---	
n-Butylbenzene	23.1	0.500	1.00	ug/L	1	20.0	---	116	80-120%	---	---	
sec-Butylbenzene	22.0	0.500	1.00	ug/L	1	20.0	---	110	80-120%	---	---	
tert-Butylbenzene	21.8	0.500	1.00	ug/L	1	20.0	---	109	80-120%	---	---	
Carbon disulfide	22.8	5.00	10.0	ug/L	1	20.0	---	114	80-120%	---	---	
Carbon tetrachloride	23.1	0.500	1.00	ug/L	1	20.0	---	115	80-120%	---	---	
Chlorobenzene	19.7	0.250	0.500	ug/L	1	20.0	---	99	80-120%	---	---	
Chloroethane	22.0	5.00	5.00	ug/L	1	20.0	---	110	80-120%	---	---	
Chloroform	20.2	0.500	1.00	ug/L	1	20.0	---	101	80-120%	---	---	
Chloromethane	18.9	2.50	5.00	ug/L	1	20.0	---	95	80-120%	---	---	
2-Chlorotoluene	21.0	0.500	1.00	ug/L	1	20.0	---	105	80-120%	---	---	
4-Chlorotoluene	21.5	0.500	1.00	ug/L	1	20.0	---	108	80-120%	---	---	
Dibromochloromethane	19.8	0.500	1.00	ug/L	1	20.0	---	99	80-120%	---	---	
1,2-Dibromo-3-chloropropane	18.3	2.50	5.00	ug/L	1	20.0	---	92	80-120%	---	---	
1,2-Dibromoethane (EDB)	21.3	0.250	0.500	ug/L	1	20.0	---	106	80-120%	---	---	
Dibromomethane	19.4	0.500	1.00	ug/L	1	20.0	---	97	80-120%	---	---	
1,2-Dichlorobenzene	20.8	0.250	0.500	ug/L	1	20.0	---	104	80-120%	---	---	
1,3-Dichlorobenzene	21.5	0.250	0.500	ug/L	1	20.0	---	107	80-120%	---	---	
1,4-Dichlorobenzene	18.9	0.250	0.500	ug/L	1	20.0	---	94	80-120%	---	---	
Dichlorodifluoromethane	22.5	0.500	1.00	ug/L	1	20.0	---	113	80-120%	---	---	
1,1-Dichloroethane	20.4	0.200	0.400	ug/L	1	20.0	---	102	80-120%	---	---	

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**ANALYTICAL REPORT****Apex Laboratories, LLC**6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125
Portland, OR 97219Project: **Gasco-TCE Only Mon. Wells 3Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001F**Project Manager: **John Renda****Report ID:****A3I1285 - 12 05 23 0700****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 23I1013 - EPA 5030C						Water						
LCS (23I1013-BS1)						Prepared: 09/29/23 11:26 Analyzed: 09/29/23 14:06						
1,2-Dichloroethane (EDC)	20.4	0.200	0.400	ug/L	1	20.0	---	102	80-120%	---	---	
1,1-Dichloroethene	22.2	0.200	0.400	ug/L	1	20.0	---	111	80-120%	---	---	
cis-1,2-Dichloroethene	20.5	0.200	0.400	ug/L	1	20.0	---	102	80-120%	---	---	
trans-1,2-Dichloroethene	19.9	0.200	0.400	ug/L	1	20.0	---	99	80-120%	---	---	
1,2-Dichloropropane	19.6	0.250	0.500	ug/L	1	20.0	---	98	80-120%	---	---	
1,3-Dichloropropane	21.1	0.500	1.00	ug/L	1	20.0	---	106	80-120%	---	---	
2,2-Dichloropropane	22.8	0.500	1.00	ug/L	1	20.0	---	114	80-120%	---	---	
1,1-Dichloropropene	22.3	0.500	1.00	ug/L	1	20.0	---	111	80-120%	---	---	
cis-1,3-Dichloropropene	20.1	0.500	1.00	ug/L	1	20.0	---	100	80-120%	---	---	
trans-1,3-Dichloropropene	20.3	0.500	1.00	ug/L	1	20.0	---	101	80-120%	---	---	
Ethylbenzene	20.6	0.250	0.500	ug/L	1	20.0	---	103	80-120%	---	---	
Hexachlorobutadiene	20.0	2.50	5.00	ug/L	1	20.0	---	100	80-120%	---	---	
2-Hexanone	35.5	5.00	10.0	ug/L	1	40.0	---	89	80-120%	---	---	
Isopropylbenzene	20.1	0.500	1.00	ug/L	1	20.0	---	101	80-120%	---	---	
4-Isopropyltoluene	20.3	0.500	1.00	ug/L	1	20.0	---	101	80-120%	---	---	
Methylene chloride	20.7	5.00	10.0	ug/L	1	20.0	---	103	80-120%	---	---	
4-Methyl-2-pentanone (MiBK)	38.6	5.00	10.0	ug/L	1	40.0	---	96	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	21.7	0.500	1.00	ug/L	1	20.0	---	108	80-120%	---	---	
Naphthalene	19.7	2.50	5.00	ug/L	1	20.0	---	98	80-120%	---	---	
n-Propylbenzene	21.0	0.250	0.500	ug/L	1	20.0	---	105	80-120%	---	---	
Styrene	19.8	0.500	1.00	ug/L	1	20.0	---	99	80-120%	---	---	
1,1,1,2-Tetrachloroethane	22.2	0.200	0.400	ug/L	1	20.0	---	111	80-120%	---	---	
1,1,2,2-Tetrachloroethane	20.1	0.250	0.500	ug/L	1	20.0	---	101	80-120%	---	---	
Tetrachloroethene (PCE)	21.0	0.200	0.400	ug/L	1	20.0	---	105	80-120%	---	---	
Toluene	19.0	0.500	1.00	ug/L	1	20.0	---	95	80-120%	---	---	
1,2,3-Trichlorobenzene	22.0	1.00	2.00	ug/L	1	20.0	---	110	80-120%	---	---	
1,2,4-Trichlorobenzene	21.0	1.00	2.00	ug/L	1	20.0	---	105	80-120%	---	---	
1,1,1-Trichloroethane	22.6	0.200	0.400	ug/L	1	20.0	---	113	80-120%	---	---	
1,1,2-Trichloroethane	20.9	0.250	0.500	ug/L	1	20.0	---	104	80-120%	---	---	
Trichloroethene (TCE)	20.0	0.200	0.400	ug/L	1	20.0	---	100	80-120%	---	---	
Trichlorofluoromethane	23.4	1.00	2.00	ug/L	1	20.0	---	117	80-120%	---	---	
1,2,3-Trichloropropane	20.7	0.500	1.00	ug/L	1	20.0	---	104	80-120%	---	---	
1,2,4-Trimethylbenzene	23.0	0.500	1.00	ug/L	1	20.0	---	115	80-120%	---	---	
1,3,5-Trimethylbenzene	22.6	0.500	1.00	ug/L	1	20.0	---	113	80-120%	---	---	

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

Project: Gasco-TCE Only Mon. Wells 3Q 2023 Perf. Mon

Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3I1285 - 12 05 23 0700

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 23I1013 - EPA 5030C						Water						
LCS (23I1013-BS1)						Prepared: 09/29/23 11:26 Analyzed: 09/29/23 14:06						
Vinyl chloride	20.3	0.100	0.200	ug/L	1	20.0	---	101	80-120%	---	---	
m,p-Xylene	40.6	0.500	1.00	ug/L	1	40.0	---	102	80-120%	---	---	
o-Xylene	19.6	0.250	0.500	ug/L	1	20.0	---	98	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)				Recovery: 99 %	Limits: 80-120 %	Dilution: 1x						
Toluene-d8 (Surr)				100 %	80-120 %	"						
4-Bromofluorobenzene (Surr)				96 %	80-120 %	"						

Duplicate (23I1013-DUP1)

Prepared: 09/29/23 11:26 Analyzed: 09/30/23 01:28

QC Source Sample: GS-092023-30 (A3I1285-02)

EPA 8260D

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%

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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-TCE Only Mon. Wells 3Q 2023 Perf. Mon

Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3I1285 - 12 05 23 0700

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 23I1013 - EPA 5030C						Water						
Duplicate (23I1013-DUP1)			Prepared: 09/29/23 11:26		Analyzed: 09/30/23 01:28							
QC Source Sample: GS-092023-30 (A3I1285-02)												
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Ethylbenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	---	ND	---	---	---	30%	
2-Hexanone	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Methylene chloride	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Naphthalene	ND	2.50	5.00	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)	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
Toluene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	

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Darwin Thomas, Business Development Director

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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-TCE Only Mon. Wells 3Q 2023 Perf. Mon

Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3I1285 - 12 05 23 0700

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 23I1013 - EPA 5030C						Water						
Duplicate (23I1013-DUP1)			Prepared: 09/29/23 11:26 Analyzed: 09/30/23 01:28									
QC Source Sample: GS-092023-30 (A3I1285-02)												
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Vinyl chloride	ND	0.100	0.200	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)		100 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		99 %		80-120 %		"						

Matrix Spike (23I1013-MS1)

Prepared: 09/29/23 11:26 Analyzed: 09/30/23 01:56

QC Source Sample: Non-SDG (A3I1222-08)

EPA 8260D

Acetone	36.8	10.0	20.0	ug/L	1	40.0	ND	92	39-160%	---	---	
Acrylonitrile	21.0	1.00	2.00	ug/L	1	20.0	ND	105	63-135%	---	---	
Benzene	22.1	0.100	0.200	ug/L	1	20.0	ND	111	79-120%	---	---	
Bromobenzene	19.8	0.250	0.500	ug/L	1	20.0	ND	99	80-120%	---	---	
Bromochloromethane	21.5	0.500	1.00	ug/L	1	20.0	ND	108	78-123%	---	---	
Bromodichloromethane	22.3	0.500	1.00	ug/L	1	20.0	ND	112	79-125%	---	---	
Bromoform	19.0	0.500	1.00	ug/L	1	20.0	ND	95	66-130%	---	---	
Bromomethane	16.5	5.00	5.00	ug/L	1	20.0	ND	82	53-141%	---	---	
2-Butanone (MEK)	40.1	5.00	10.0	ug/L	1	40.0	ND	100	56-143%	---	---	
n-Butylbenzene	23.2	0.500	1.00	ug/L	1	20.0	ND	116	75-128%	---	---	
sec-Butylbenzene	22.7	0.500	1.00	ug/L	1	20.0	ND	114	77-126%	---	---	
tert-Butylbenzene	22.8	0.500	1.00	ug/L	1	20.0	ND	114	78-124%	---	---	
Carbon disulfide	24.9	5.00	10.0	ug/L	1	20.0	ND	124	64-133%	---	---	
Carbon tetrachloride	24.4	0.500	1.00	ug/L	1	20.0	ND	122	72-136%	---	---	
Chlorobenzene	22.5	0.250	0.500	ug/L	1	20.0	2.80	98	80-120%	---	---	
Chloroethane	23.1	5.00	5.00	ug/L	1	20.0	ND	116	60-138%	---	---	
Chloroform	21.4	0.500	1.00	ug/L	1	20.0	ND	107	79-124%	---	---	

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Page 27 of 48

**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-TCE Only Mon. Wells 3Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001F**Project Manager: **John Renda****Report ID:****A3I1285 - 12 05 23 0700****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 23I1013 - EPA 5030C						Water						
Matrix Spike (23I1013-MS1)			Prepared: 09/29/23 11:26 Analyzed: 09/30/23 01:56									
QC Source Sample: Non-SDG (A3I1222-08)												
Chloromethane	24.7	2.50	5.00	ug/L	1	20.0	ND	123	50-139%	---	---	
2-Chlorotoluene	21.7	0.500	1.00	ug/L	1	20.0	ND	108	79-122%	---	---	
4-Chlorotoluene	22.1	0.500	1.00	ug/L	1	20.0	ND	111	78-122%	---	---	
Dibromochloromethane	19.4	0.500	1.00	ug/L	1	20.0	ND	97	74-126%	---	---	
1,2-Dibromo-3-chloropropane	18.5	2.50	5.00	ug/L	1	20.0	ND	93	62-128%	---	---	
1,2-Dibromoethane (EDB)	21.4	0.250	0.500	ug/L	1	20.0	ND	107	77-121%	---	---	
Dibromomethane	19.6	0.500	1.00	ug/L	1	20.0	ND	98	79-123%	---	---	
1,2-Dichlorobenzene	20.8	0.250	0.500	ug/L	1	20.0	ND	104	80-120%	---	---	
1,3-Dichlorobenzene	21.9	0.250	0.500	ug/L	1	20.0	ND	109	80-120%	---	---	
1,4-Dichlorobenzene	19.0	0.250	0.500	ug/L	1	20.0	ND	95	79-120%	---	---	
Dichlorodifluoromethane	25.1	0.500	1.00	ug/L	1	20.0	ND	126	32-152%	---	---	
1,1-Dichloroethane	22.4	0.200	0.400	ug/L	1	20.0	0.340	110	77-125%	---	---	
1,2-Dichloroethane (EDC)	20.6	0.200	0.400	ug/L	1	20.0	ND	103	73-128%	---	---	
1,1-Dichloroethene	24.8	0.200	0.400	ug/L	1	20.0	0.360	122	71-131%	---	---	
cis-1,2-Dichloroethene	25.2	0.200	0.400	ug/L	1	20.0	2.64	113	78-123%	---	---	
trans-1,2-Dichloroethene	21.7	0.200	0.400	ug/L	1	20.0	ND	109	75-124%	---	---	
1,2-Dichloropropane	21.2	0.250	0.500	ug/L	1	20.0	ND	106	78-122%	---	---	
1,3-Dichloropropane	21.3	0.500	1.00	ug/L	1	20.0	ND	107	80-120%	---	---	
2,2-Dichloropropane	18.8	0.500	1.00	ug/L	1	20.0	ND	94	60-139%	---	---	
1,1-Dichloropropene	24.3	0.500	1.00	ug/L	1	20.0	ND	122	79-125%	---	---	
cis-1,3-Dichloropropene	18.0	0.500	1.00	ug/L	1	20.0	ND	90	75-124%	---	---	
trans-1,3-Dichloropropene	19.0	0.500	1.00	ug/L	1	20.0	ND	95	73-127%	---	---	
Ethylbenzene	21.6	0.250	0.500	ug/L	1	20.0	ND	108	79-121%	---	---	
Hexachlorobutadiene	20.6	2.50	5.00	ug/L	1	20.0	ND	103	66-134%	---	---	
2-Hexanone	36.2	5.00	10.0	ug/L	1	40.0	ND	91	57-139%	---	---	
Isopropylbenzene	20.9	0.500	1.00	ug/L	1	20.0	ND	104	72-131%	---	---	
4-Isopropyltoluene	20.8	0.500	1.00	ug/L	1	20.0	ND	104	77-127%	---	---	
Methylene chloride	21.2	5.00	10.0	ug/L	1	20.0	ND	106	74-124%	---	---	
4-Methyl-2-pentanone (MiBK)	39.8	5.00	10.0	ug/L	1	40.0	ND	100	67-130%	---	---	
Methyl tert-butyl ether (MTBE)	22.9	0.500	1.00	ug/L	1	20.0	ND	114	71-124%	---	---	
Naphthalene	20.5	2.50	5.00	ug/L	1	20.0	ND	103	61-128%	---	---	
n-Propylbenzene	21.9	0.250	0.500	ug/L	1	20.0	ND	109	76-126%	---	---	
Styrene	19.3	0.500	1.00	ug/L	1	20.0	ND	97	78-123%	---	---	

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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-TCE Only Mon. Wells 3Q 2023 Perf. Mon

Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3I1285 - 12 05 23 0700

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 23I1013 - EPA 5030C						Water						
Matrix Spike (23I1013-MS1)				Prepared: 09/29/23 11:26 Analyzed: 09/30/23 01:56								
QC Source Sample: Non-SDG (A3I1222-08)												
1,1,1,2-Tetrachloroethane	22.2	0.200	0.400	ug/L	1	20.0	ND	111	78-124%	---	---	
1,1,2,2-Tetrachloroethane	20.3	0.250	0.500	ug/L	1	20.0	ND	102	71-121%	---	---	
Tetrachloroethene (PCE)	22.7	0.200	0.400	ug/L	1	20.0	0.990	108	74-129%	---	---	
Toluene	19.7	0.500	1.00	ug/L	1	20.0	ND	99	80-121%	---	---	
1,2,3-Trichlorobenzene	21.9	1.00	2.00	ug/L	1	20.0	ND	110	69-129%	---	---	
1,2,4-Trichlorobenzene	21.8	1.00	2.00	ug/L	1	20.0	ND	109	69-130%	---	---	
1,1,1-Trichloroethane	23.9	0.200	0.400	ug/L	1	20.0	ND	119	74-131%	---	---	
1,1,2-Trichloroethane	20.8	0.250	0.500	ug/L	1	20.0	ND	104	80-120%	---	---	
Trichloroethene (TCE)	22.2	0.200	0.400	ug/L	1	20.0	1.49	103	79-123%	---	---	
Trichlorofluoromethane	25.9	1.00	2.00	ug/L	1	20.0	ND	130	65-141%	---	---	
1,2,3-Trichloropropane	20.7	0.500	1.00	ug/L	1	20.0	ND	104	73-122%	---	---	
1,2,4-Trimethylbenzene	23.4	0.500	1.00	ug/L	1	20.0	ND	117	76-124%	---	---	
1,3,5-Trimethylbenzene	23.1	0.500	1.00	ug/L	1	20.0	ND	116	75-124%	---	---	
Vinyl chloride	23.8	0.100	0.200	ug/L	1	20.0	ND	119	58-137%	---	---	
m,p-Xylene	41.8	0.500	1.00	ug/L	1	40.0	ND	105	80-121%	---	---	
o-Xylene	20.3	0.250	0.500	ug/L	1	20.0	ND	102	78-122%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 101 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		100 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		97 %		80-120 %		"						

Matrix Spike Dup (23I1013-MSD1)

Prepared: 09/29/23 11:26 Analyzed: 09/30/23 02:23

T-02

QC Source Sample: Non-SDG (A3I1222-08)

Acetone	37.7	10.0	20.0	ug/L	1	40.0	ND	94	39-160%	2	30%
Acrylonitrile	21.6	1.00	2.00	ug/L	1	20.0	ND	108	63-135%	3	30%
Benzene	23.3	0.100	0.200	ug/L	1	20.0	ND	116	79-120%	5	30%
Bromobenzene	21.0	0.250	0.500	ug/L	1	20.0	ND	105	80-120%	6	30%
Bromochloromethane	22.4	0.500	1.00	ug/L	1	20.0	ND	112	78-123%	4	30%
Bromodichloromethane	23.4	0.500	1.00	ug/L	1	20.0	ND	117	79-125%	5	30%
Bromoform	19.8	0.500	1.00	ug/L	1	20.0	ND	99	66-130%	4	30%
Bromomethane	17.6	5.00	5.00	ug/L	1	20.0	ND	88	53-141%	7	30%
2-Butanone (MEK)	42.8	5.00	10.0	ug/L	1	40.0	ND	107	56-143%	6	30%
n-Butylbenzene	24.9	0.500	1.00	ug/L	1	20.0	ND	125	75-128%	7	30%
sec-Butylbenzene	24.2	0.500	1.00	ug/L	1	20.0	ND	121	77-126%	6	30%

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Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A311285 - 12 05 23 0700

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 23I1013 - EPA 5030C						Water						
Matrix Spike Dup (23I1013-MSD1)			Prepared: 09/29/23 11:26 Analyzed: 09/30/23 02:23					T-02				
QC Source Sample: Non-SDG (A3I1222-08)												
tert-Butylbenzene	24.4	0.500	1.00	ug/L	1	20.0	ND	122	78-124%	7	30%	
Carbon disulfide	26.4	5.00	10.0	ug/L	1	20.0	ND	132	64-133%	6	30%	
Carbon tetrachloride	25.6	0.500	1.00	ug/L	1	20.0	ND	128	72-136%	5	30%	
Chlorobenzene	23.7	0.250	0.500	ug/L	1	20.0	2.80	105	80-120%	5	30%	
Chloroethane	26.0	5.00	5.00	ug/L	1	20.0	ND	130	60-138%	12	30%	
Chloroform	22.2	0.500	1.00	ug/L	1	20.0	ND	111	79-124%	4	30%	
Chloromethane	25.7	2.50	5.00	ug/L	1	20.0	ND	128	50-139%	4	30%	
2-Chlorotoluene	22.7	0.500	1.00	ug/L	1	20.0	ND	114	79-122%	5	30%	
4-Chlorotoluene	23.3	0.500	1.00	ug/L	1	20.0	ND	116	78-122%	5	30%	
Dibromochloromethane	20.8	0.500	1.00	ug/L	1	20.0	ND	104	74-126%	7	30%	
1,2-Dibromo-3-chloropropane	20.0	2.50	5.00	ug/L	1	20.0	ND	100	62-128%	8	30%	
1,2-Dibromoethane (EDB)	22.1	0.250	0.500	ug/L	1	20.0	ND	111	77-121%	3	30%	
Dibromomethane	20.1	0.500	1.00	ug/L	1	20.0	ND	100	79-123%	2	30%	
1,2-Dichlorobenzene	22.0	0.250	0.500	ug/L	1	20.0	ND	110	80-120%	5	30%	
1,3-Dichlorobenzene	23.1	0.250	0.500	ug/L	1	20.0	ND	116	80-120%	6	30%	
1,4-Dichlorobenzene	20.1	0.250	0.500	ug/L	1	20.0	ND	101	79-120%	6	30%	
Dichlorodifluoromethane	26.4	0.500	1.00	ug/L	1	20.0	ND	132	32-152%	5	30%	
1,1-Dichloroethane	23.2	0.200	0.400	ug/L	1	20.0	0.340	114	77-125%	4	30%	
1,2-Dichloroethane (EDC)	21.5	0.200	0.400	ug/L	1	20.0	ND	107	73-128%	4	30%	
1,1-Dichloroethene	25.6	0.200	0.400	ug/L	1	20.0	0.360	126	71-131%	3	30%	
cis-1,2-Dichloroethene	26.3	0.200	0.400	ug/L	1	20.0	2.64	118	78-123%	4	30%	
trans-1,2-Dichloroethene	23.2	0.200	0.400	ug/L	1	20.0	ND	116	75-124%	7	30%	
1,2-Dichloropropane	21.9	0.250	0.500	ug/L	1	20.0	ND	109	78-122%	3	30%	
1,3-Dichloropropane	22.7	0.500	1.00	ug/L	1	20.0	ND	114	80-120%	6	30%	
2,2-Dichloropropane	19.8	0.500	1.00	ug/L	1	20.0	ND	99	60-139%	6	30%	
1,1-Dichloropropene	25.1	0.500	1.00	ug/L	1	20.0	ND	125	79-125%	3	30%	
cis-1,3-Dichloropropene	19.2	0.500	1.00	ug/L	1	20.0	ND	96	75-124%	6	30%	
trans-1,3-Dichloropropene	20.2	0.500	1.00	ug/L	1	20.0	ND	101	73-127%	6	30%	
Ethylbenzene	22.5	0.250	0.500	ug/L	1	20.0	ND	112	79-121%	4	30%	
Hexachlorobutadiene	21.3	2.50	5.00	ug/L	1	20.0	ND	106	66-134%	3	30%	
2-Hexanone	38.3	5.00	10.0	ug/L	1	40.0	ND	96	57-139%	6	30%	
Isopropylbenzene	22.1	0.500	1.00	ug/L	1	20.0	ND	111	72-131%	6	30%	
4-Isopropyltoluene	22.2	0.500	1.00	ug/L	1	20.0	ND	111	77-127%	7	30%	

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Darwin Thomas, Business Development Director

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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-TCE Only Mon. Wells 3Q 2023 Perf. Mon

Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3I1285 - 12 05 23 0700

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 23I1013 - EPA 5030C						Water						
Matrix Spike Dup (23I1013-MSD1)			Prepared: 09/29/23 11:26		Analyzed: 09/30/23 02:23		T-02					
QC Source Sample: Non-SDG (A3I1222-08)												
Methylene chloride	21.9	5.00	10.0	ug/L	1	20.0	ND	109	74-124%	3	30%	
4-Methyl-2-pentanone (MiBK)	42.1	5.00	10.0	ug/L	1	40.0	ND	105	67-130%	6	30%	
Methyl tert-butyl ether (MTBE)	24.3	0.500	1.00	ug/L	1	20.0	ND	121	71-124%	6	30%	
Naphthalene	21.4	2.50	5.00	ug/L	1	20.0	ND	107	61-128%	4	30%	
n-Propylbenzene	23.2	0.250	0.500	ug/L	1	20.0	ND	116	76-126%	6	30%	
Styrene	20.6	0.500	1.00	ug/L	1	20.0	ND	103	78-123%	7	30%	
1,1,1,2-Tetrachloroethane	23.7	0.200	0.400	ug/L	1	20.0	ND	118	78-124%	6	30%	
1,1,2,2-Tetrachloroethane	21.6	0.250	0.500	ug/L	1	20.0	ND	108	71-121%	6	30%	
Tetrachloroethene (PCE)	23.8	0.200	0.400	ug/L	1	20.0	0.990	114	74-129%	5	30%	
Toluene	20.9	0.500	1.00	ug/L	1	20.0	ND	104	80-121%	6	30%	
1,2,3-Trichlorobenzene	23.5	1.00	2.00	ug/L	1	20.0	ND	117	69-129%	7	30%	
1,2,4-Trichlorobenzene	22.5	1.00	2.00	ug/L	1	20.0	ND	112	69-130%	3	30%	
1,1,1-Trichloroethane	25.0	0.200	0.400	ug/L	1	20.0	ND	125	74-131%	4	30%	
1,1,2-Trichloroethane	22.2	0.250	0.500	ug/L	1	20.0	ND	111	80-120%	6	30%	
Trichloroethene (TCE)	23.4	0.200	0.400	ug/L	1	20.0	1.49	110	79-123%	6	30%	
Trichlorofluoromethane	26.2	1.00	2.00	ug/L	1	20.0	ND	131	65-141%	1	30%	
1,2,3-Trichloropropane	21.5	0.500	1.00	ug/L	1	20.0	ND	108	73-122%	4	30%	
1,2,4-Trimethylbenzene	24.8	0.500	1.00	ug/L	1	20.0	ND	124	76-124%	6	30%	
1,3,5-Trimethylbenzene	24.6	0.500	1.00	ug/L	1	20.0	ND	123	75-124%	6	30%	
Vinyl chloride	24.9	0.100	0.200	ug/L	1	20.0	ND	124	58-137%	5	30%	
m,p-Xylene	44.3	0.500	1.00	ug/L	1	40.0	ND	111	80-121%	6	30%	
o-Xylene	21.4	0.250	0.500	ug/L	1	20.0	ND	107	78-122%	5	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 100 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		99 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		97 %		80-120 %		"						

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Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3I1285 - 12 05 23 0700

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 23I0794 - EPA 3511 (Bottle Extraction)						Water						
Blank (23I0794-BLK1)			Prepared: 09/25/23 13:20		Analyzed: 09/25/23 16:59							
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+j)fluoranthene(s)	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: 90 %		Limits: 78-134 %		Dilution: 1x						
Benzo(a)pyrene-d12 (Surr)		113 %		80-132 %		"						

LCS (23I0794-BS1)

Prepared: 09/25/23 13:20 Analyzed: 09/25/23 17:32

EPA 8270E LVI

Acenaphthene	1.71	0.0160	0.0320	ug/L	1	1.60	---	107	80-120%	---	---
Acenaphthylene	1.74	0.0160	0.0320	ug/L	1	1.60	---	109	80-124%	---	---
Anthracene	1.77	0.0160	0.0320	ug/L	1	1.60	---	111	80-123%	---	---
Benz(a)anthracene	1.85	0.00800	0.0160	ug/L	1	1.60	---	115	80-122%	---	---
Benzo(a)pyrene	1.85	0.00800	0.0160	ug/L	1	1.60	---	115	80-129%	---	---
Benzo(b+j)fluoranthene(s)	1.80	0.00800	0.0160	ug/L	1	1.60	---	112	80-124%	---	---
Benzo(k)fluoranthene	1.85	0.00800	0.0160	ug/L	1	1.60	---	116	80-125%	---	---
Benzo(g,h,i)perylene	1.73	0.0160	0.0320	ug/L	1	1.60	---	108	80-120%	---	---

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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 2310794 - EPA 3511 (Bottle Extraction)						Water						
LCS (2310794-BS1)						Prepared: 09/25/23 13:20 Analyzed: 09/25/23 17:32						
Chrysene	1.72	0.00800	0.0160	ug/L	1	1.60	---	108	80-120%	---	---	
Dibenz(a,h)anthracene	1.72	0.00800	0.0160	ug/L	1	1.60	---	108	80-120%	---	---	
Fluoranthene	1.80	0.0160	0.0320	ug/L	1	1.60	---	113	80-126%	---	---	
Fluorene	1.93	0.0160	0.0320	ug/L	1	1.60	---	120	77-127%	---	---	
Indeno(1,2,3-cd)pyrene	1.75	0.00800	0.0160	ug/L	1	1.60	---	109	80-121%	---	---	
1-Methylnaphthalene	1.71	0.0320	0.0640	ug/L	1	1.60	---	107	53-148%	---	---	
2-Methylnaphthalene	1.77	0.0320	0.0640	ug/L	1	1.60	---	111	48-150%	---	---	
Naphthalene	1.78	0.0320	0.0640	ug/L	1	1.60	---	112	78-120%	---	---	
Phenanthrene	1.71	0.0320	0.0640	ug/L	1	1.60	---	107	80-120%	---	---	
Pyrene	1.79	0.0160	0.0320	ug/L	1	1.60	---	112	80-125%	---	---	
Carbazole	1.67	0.0160	0.0320	ug/L	1	1.60	---	104	65-141%	---	---	
Dibenzofuran	1.83	0.0160	0.0320	ug/L	1	1.60	---	114	76-121%	---	---	
Surr: Acenaphthylene-d8 (Surr) Recovery: 90 % Limits: 78-134 % Dilution: 1x												
Benzo(a)pyrene-d12 (Surr) 113 % 80-132 % "												

LCS Dup (2310794-BSD1)				Prepared: 09/25/23 13:20 Analyzed: 09/25/23 18:05								Q-19
EPA 8270E LVI												
Acenaphthene	1.72	0.0160	0.0320	ug/L	1	1.60	---	108	80-120%	0.4	30%	
Acenaphthylene	1.71	0.0160	0.0320	ug/L	1	1.60	---	107	80-124%	2	30%	
Anthracene	1.80	0.0160	0.0320	ug/L	1	1.60	---	112	80-123%	1	30%	
Benz(a)anthracene	1.87	0.00800	0.0160	ug/L	1	1.60	---	117	80-122%	1	30%	
Benzo(a)pyrene	1.89	0.00800	0.0160	ug/L	1	1.60	---	118	80-129%	3	30%	
Benzo(b+j)fluoranthene(s)	1.86	0.00800	0.0160	ug/L	1	1.60	---	116	80-124%	3	30%	
Benzo(k)fluoranthene	1.89	0.00800	0.0160	ug/L	1	1.60	---	118	80-125%	2	30%	
Benzo(g,h,i)perylene	1.82	0.0160	0.0320	ug/L	1	1.60	---	114	80-120%	5	30%	
Chrysene	1.73	0.00800	0.0160	ug/L	1	1.60	---	108	80-120%	0.3	30%	
Dibenz(a,h)anthracene	1.73	0.00800	0.0160	ug/L	1	1.60	---	108	80-120%	0.6	30%	
Fluoranthene	1.90	0.0160	0.0320	ug/L	1	1.60	---	119	80-126%	5	30%	
Fluorene	1.76	0.0160	0.0320	ug/L	1	1.60	---	110	77-127%	9	30%	
Indeno(1,2,3-cd)pyrene	1.79	0.00800	0.0160	ug/L	1	1.60	---	112	80-121%	2	30%	
1-Methylnaphthalene	1.65	0.0320	0.0640	ug/L	1	1.60	---	103	53-148%	3	30%	
2-Methylnaphthalene	1.65	0.0320	0.0640	ug/L	1	1.60	---	103	48-150%	7	30%	
Naphthalene	1.75	0.0320	0.0640	ug/L	1	1.60	---	109	78-120%	2	30%	
Phenanthrene	1.74	0.0320	0.0640	ug/L	1	1.60	---	109	80-120%	1	30%	

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ANALYTICAL REPORT

Apex Laboratories, LLC

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

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125
Portland, OR 97219

Project: Gasco-TCE Only Mon. Wells 3Q 2023 Perf. Mon

Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3I1285 - 12 05 23 0700

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 23I0794 - EPA 3511 (Bottle Extraction)						Water						
LCS Dup (23I0794-BSD1)			Prepared: 09/25/23 13:20 Analyzed: 09/25/23 18:05						Q-19			
Pyrene	1.90	0.0160	0.0320	ug/L	1	1.60	---	119	80-125%	6	30%	
Carbazole	1.78	0.0160	0.0320	ug/L	1	1.60	---	111	65-141%	6	30%	
Dibenzofuran	1.68	0.0160	0.0320	ug/L	1	1.60	---	105	76-121%	8	30%	
Surr: Acenaphthylene-d8 (Surr)		Recovery: 90 %		Limits: 78-134 %		Dilution: 1x						
Benzo(a)pyrene-d12 (Surr)		113 %		80-132 %		"						

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Project: **Gasco-TCE Only Mon. Wells 3Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001F**Project Manager: **John Renda****Report ID:****A3I1285 - 12 05 23 0700**

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 23I1021 - EPA 3015A						Water						
Blank (23I1021-BLK1)			Prepared: 09/29/23 12:19		Analyzed: 09/30/23 03:37							
EPA 6020B												
Aluminum	ND	25.0	50.0	ug/L	1	---	---	---	---	---	---	
Antimony	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Arsenic	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Barium	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
Beryllium	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Cadmium	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Chromium	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
Copper	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
Iron	ND	25.0	50.0	ug/L	1	---	---	---	---	---	---	
Lead	ND	0.110	0.200	ug/L	1	---	---	---	---	---	---	
Manganese	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Mercury	ND	0.0400	0.0800	ug/L	1	---	---	---	---	---	---	
Nickel	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
Selenium	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Silver	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Thallium	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Vanadium	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
Zinc	ND	2.00	4.00	ug/L	1	---	---	---	---	---	---	

LCS (23I1021-BS1)

Prepared: 09/29/23 12:19 Analyzed: 09/30/23 03:43

EPA 6020B												
Aluminum	2910	25.0	50.0	ug/L	1	2780	---	105	80-120%	---	---	
Antimony	27.5	0.500	1.00	ug/L	1	27.8	---	99	80-120%	---	---	
Arsenic	54.0	0.500	1.00	ug/L	1	55.6	---	97	80-120%	---	---	
Barium	56.4	1.00	2.00	ug/L	1	55.6	---	101	80-120%	---	---	
Beryllium	26.9	0.100	0.200	ug/L	1	27.8	---	97	80-120%	---	---	
Cadmium	55.1	0.100	0.200	ug/L	1	55.6	---	99	80-120%	---	---	
Chromium	55.6	1.00	2.00	ug/L	1	55.6	---	100	80-120%	---	---	
Copper	56.6	1.00	2.00	ug/L	1	55.6	---	102	80-120%	---	---	
Iron	2920	25.0	50.0	ug/L	1	2780	---	105	80-120%	---	---	
Lead	56.3	0.110	0.200	ug/L	1	55.6	---	101	80-120%	---	---	
Manganese	55.2	0.500	1.00	ug/L	1	55.6	---	99	80-120%	---	---	
Mercury	1.06	0.0400	0.0800	ug/L	1	1.11	---	96	80-120%	---	---	

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Darwin Thomas, Business Development Director



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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-TCE Only Mon. Wells 3Q 2023 Perf. Mon

Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A311285 - 12 05 23 0700

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 2311021 - EPA 3015A												
Water												
LCS (2311021-BS1)												
Prepared: 09/29/23 12:19 Analyzed: 09/30/23 03:43												
Nickel	56.3	1.00	2.00	ug/L	1	55.6	---	101	80-120%	---	---	
Selenium	26.5	0.500	1.00	ug/L	1	27.8	---	95	80-120%	---	---	
Silver	28.2	0.100	0.200	ug/L	1	27.8	---	102	80-120%	---	---	
Thallium	26.5	0.100	0.200	ug/L	1	27.8	---	96	80-120%	---	---	
Vanadium	55.0	1.00	2.00	ug/L	1	55.6	---	99	80-120%	---	---	
Zinc	54.6	2.00	4.00	ug/L	1	55.6	---	98	80-120%	---	---	
Matrix Spike (2311021-MS1)												
Prepared: 09/29/23 12:19 Analyzed: 09/30/23 04:39												
QC Source Sample: Non-SDG (A311222-08)												
EPA 6020B												
Aluminum	3120	25.0	50.0	ug/L	1	2780	134	108	75-125%	---	---	
Antimony	29.3	0.500	1.00	ug/L	1	27.8	ND	106	75-125%	---	---	
Arsenic	57.9	0.500	1.00	ug/L	1	55.6	3.55	98	75-125%	---	---	
Barium	68.7	1.00	2.00	ug/L	1	55.6	12.3	102	75-125%	---	---	
Beryllium	27.4	0.100	0.200	ug/L	1	27.8	ND	99	75-125%	---	---	
Cadmium	57.4	0.100	0.200	ug/L	1	55.6	ND	103	75-125%	---	---	
Chromium	54.3	1.00	2.00	ug/L	1	55.6	ND	98	75-125%	---	---	
Copper	55.2	1.00	2.00	ug/L	1	55.6	ND	99	75-125%	---	---	
Iron	3110	25.0	50.0	ug/L	1	2780	239	103	75-125%	---	---	
Lead	56.3	0.110	0.200	ug/L	1	55.6	ND	101	75-125%	---	---	
Manganese	1110	0.500	1.00	ug/L	1	55.6	1070	69	75-125%	---	---	Q-65
Mercury	1.10	0.0400	0.0800	ug/L	1	1.11	ND	99	75-125%	---	---	
Nickel	55.9	1.00	2.00	ug/L	1	55.6	2.39	96	75-125%	---	---	
Selenium	26.7	0.500	1.00	ug/L	1	27.8	ND	96	75-125%	---	---	
Silver	29.1	0.100	0.200	ug/L	1	27.8	ND	105	75-125%	---	---	
Thallium	26.8	0.100	0.200	ug/L	1	27.8	ND	96	75-125%	---	---	
Vanadium	61.5	1.00	2.00	ug/L	1	55.6	6.48	99	75-125%	---	---	
Zinc	55.9	2.00	4.00	ug/L	1	55.6	ND	101	75-125%	---	---	
Matrix Spike Dup (2311021-MSD1)												
Prepared: 09/29/23 12:19 Analyzed: 09/30/23 04:44												
QC Source Sample: Non-SDG (A311222-08)												
Aluminum	3110	25.0	50.0	ug/L	1	2780	134	107	75-125%	0.4	20%	
Antimony	29.3	0.500	1.00	ug/L	1	27.8	ND	106	75-125%	0.1	20%	
Arsenic	58.6	0.500	1.00	ug/L	1	55.6	3.55	99	75-125%	1	20%	

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Darwin Thomas, Business Development Director



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Tigard, OR 97223
503-718-2323
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Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125
Portland, OR 97219

Project: **Gasco-TCE Only Mon. Wells 3Q 2023 Perf. Mon**

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

Project Manager: **John Renda**

Report ID:

A3I1285 - 12 05 23 0700

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 23I1021 - EPA 3015A						Water						
Matrix Spike Dup (23I1021-MSD1)			Prepared: 09/29/23 12:19		Analyzed: 09/30/23 04:44							
QC Source Sample: Non-SDG (A3I1222-08)												
Barium	69.2	1.00	2.00	ug/L	1	55.6	12.3	102	75-125%	0.7	20%	Q-65
Beryllium	28.0	0.100	0.200	ug/L	1	27.8	ND	101	75-125%	2	20%	
Cadmium	57.2	0.100	0.200	ug/L	1	55.6	ND	103	75-125%	0.3	20%	
Chromium	55.8	1.00	2.00	ug/L	1	55.6	ND	100	75-125%	3	20%	
Copper	54.9	1.00	2.00	ug/L	1	55.6	ND	99	75-125%	0.6	20%	
Iron	3170	25.0	50.0	ug/L	1	2780	239	106	75-125%	2	20%	
Lead	56.0	0.110	0.200	ug/L	1	55.6	ND	101	75-125%	0.4	20%	
Manganese	1140	0.500	1.00	ug/L	1	55.6	1070	131	75-125%	3	20%	
Mercury	1.08	0.0400	0.0800	ug/L	1	1.11	ND	97	75-125%	2	20%	
Nickel	57.0	1.00	2.00	ug/L	1	55.6	2.39	98	75-125%	2	20%	
Selenium	27.5	0.500	1.00	ug/L	1	27.8	ND	99	75-125%	3	20%	
Silver	29.1	0.100	0.200	ug/L	1	27.8	ND	105	75-125%	0.08	20%	
Thallium	26.7	0.100	0.200	ug/L	1	27.8	ND	96	75-125%	0.3	20%	
Vanadium	62.2	1.00	2.00	ug/L	1	55.6	6.48	100	75-125%	1	20%	
Zinc	56.8	2.00	4.00	ug/L	1	55.6	ND	102	75-125%	2	20%	

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Project: Gasco-TCE Only Mon. Wells 3Q 2023 Perf. Mon

Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3I1285 - 12 05 23 0700

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 23I0845 - Lachat Micro Dist - aqueous						Water						
Blank (23I0845-BLK1)			Prepared: 09/26/23 12:59 Analyzed: 09/26/23 17:08									
EPA 335.4												
Total Cyanide	ND	0.00500	0.00500	mg/L	1	---	---	---	---	---	---	
LCS (23I0845-BS1)			Prepared: 09/26/23 12:59 Analyzed: 09/26/23 17:10									
EPA 335.4												
Total Cyanide	0.264	0.00500	0.00500	mg/L	1	0.250	---	105	90-110%	---	---	
Duplicate (23I0845-DUP1)			Prepared: 09/26/23 12:59 Analyzed: 09/26/23 17:32									
QC Source Sample: Non-SDG (A3I1334-03)												
Total Cyanide	0.166	0.00500	0.00500	mg/L	1	---	0.163	---	---	2	10%	
Matrix Spike (23I0845-MS1)			Prepared: 09/26/23 12:59 Analyzed: 09/26/23 17:34									
QC Source Sample: Non-SDG (A3I1334-03)												
EPA 335.4												
Total Cyanide	0.427	0.00500	0.00500	mg/L	1	0.250	0.163	106	90-110%	---	---	

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ANALYTICAL REPORT

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Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3I1285 - 12 05 23 0700

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 23I0791 - Method Prep: Aq						Water						
Blank (23I0791-BLK1)			Prepared: 09/25/23 11:23 Analyzed: 09/25/23 15:03									
D6888-09												
Available Cyanide	ND	0.00100	0.00200	mg/L	1	---	---	---	---	---	---	
LCS (23I0791-BS1)			Prepared: 09/25/23 11:23 Analyzed: 09/25/23 15:05									
D6888-09												
Available Cyanide	0.0283	0.00100	0.00200	mg/L	1	0.0250	---	113	90-117%	---	---	
Matrix Spike (23I0791-MS1)			Prepared: 09/25/23 11:23 Analyzed: 09/25/23 15:31									
QC Source Sample: Non-SDG (A3I1199-01)												
D6888-09												
Available Cyanide	0.0253	0.00101	0.00201	mg/L	1	0.0251	ND	101	82-130%	---	---	
Matrix Spike (23I0791-MS2)			Prepared: 09/25/23 11:23 Analyzed: 09/25/23 15:55									
QC Source Sample: GS-092023-30 (A3I1285-02)												
D6888-09												
Available Cyanide	0.0200	0.00101	0.00201	mg/L	1	0.0251	ND	80	82-130%	---	---	Q-02
Matrix Spike Dup (23I0791-MSD1)			Prepared: 09/25/23 11:23 Analyzed: 09/25/23 15:32									
QC Source Sample: Non-SDG (A3I1199-01)												
Available Cyanide	0.0259	0.00101	0.00201	mg/L	1	0.0251	ND	103	82-130%	2	11%	
Matrix Spike Dup (23I0791-MSD2)			Prepared: 09/25/23 11:23 Analyzed: 09/25/23 15:56									
QC Source Sample: GS-092023-30 (A3I1285-02)												
D6888-09												
Available Cyanide	0.0195	0.00101	0.00201	mg/L	1	0.0251	ND	78	82-130%	2	11%	Q-02

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Project Number: 000029-02.84 T-01.001F

Project Manager: John Renda

Report ID:

A3I1285 - 12 05 23 0700

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 2310927 - Microdiffusion						Water						
Blank (2310927-BLK1)			Prepared: 09/28/23 09:24 Analyzed: 09/28/23 15:50									
<u>D4282-02</u>												
Free Cyanide	ND	0.00250	0.00500	mg/L	1	---	---	---	---	---	---	
LCS (2310927-BS1)			Prepared: 09/28/23 09:24 Analyzed: 09/28/23 15:50									
<u>D4282-02</u>												
Free Cyanide	0.0625	0.00250	0.00500	mg/L	1	0.0667	---	94	74-120%	---	---	
LCS Dup (2310927-BSD1)			Prepared: 09/28/23 09:24 Analyzed: 09/28/23 15:56									
<u>D4282-02</u>												
Free Cyanide	0.0642	0.00250	0.00500	mg/L	1	0.0667	---	96	74-120%	3	20%	
Matrix Spike (2310927-MS1)			Prepared: 09/28/23 09:24 Analyzed: 09/28/23 16:01									
<u>QC Source Sample: Non-SDG (A311199-01)</u>												
<u>D4282-02</u>												
Free Cyanide	0.0627	0.00250	0.00500	mg/L	1	0.0667	ND	94	74-120%	---	---	
Matrix Spike Dup (2310927-MSD1)			Prepared: 09/28/23 09:24 Analyzed: 09/28/23 16:02									
<u>QC Source Sample: Non-SDG (A311199-01)</u>												
Free Cyanide	0.0722	0.00250	0.00500	mg/L	1	0.0667	ND	108	74-120%	14	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-TCE Only Mon. Wells 3Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001F**Project Manager: **John Renda****Report ID:****A3I1285 - 12 05 23 0700****SAMPLE PREPARATION INFORMATION****Diesel and/or Oil Hydrocarbons by NWTPH-Dx**

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

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23J0071							
A3I1285-01	WG	NWTPH-Dx	09/20/23 09:45	10/03/23 10:45	930mL/5mL	1000mL/5mL	1.08
A3I1285-02	WG	NWTPH-Dx	09/20/23 12:10	10/03/23 10:45	1010mL/5mL	1000mL/5mL	0.99

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

Prep: EPA 5030C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23I1013							
A3I1285-01	WG	NWTPH-Gx (MS)	09/20/23 09:45	09/29/23 11:26	5mL/5mL	5mL/5mL	1.00
A3I1285-02	WG	NWTPH-Gx (MS)	09/20/23 12:10	09/29/23 11:26	5mL/5mL	5mL/5mL	1.00

Volatile Organic Compounds by EPA 8260D

Prep: EPA 5030C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23I1013							
A3I1285-01	WG	EPA 8260D	09/20/23 09:45	09/29/23 11:26	5mL/5mL	5mL/5mL	1.00
A3I1285-02	WG	EPA 8260D	09/20/23 12:10	09/29/23 11:26	5mL/5mL	5mL/5mL	1.00
A3I1285-03	W	EPA 8260D	09/20/23 15:30	09/29/23 11:26	5mL/5mL	5mL/5mL	1.00

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

Prep: EPA 3511 (Bottle Extraction)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23I0794							
A3I1285-01	WG	EPA 8270E LVI	09/20/23 09:45	09/25/23 13:20	87.65mL/5mL	125mL/5mL	1.43
A3I1285-02	WG	EPA 8270E LVI	09/20/23 12:10	09/25/23 13:20	101.72mL/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
Batch: 23I1021							
A3I1285-01	WG	EPA 6020B	09/20/23 09:45	09/29/23 12:19	45mL/50mL	45mL/50mL	1.00
A3I1285-01RE1	WG	EPA 6020B	09/20/23 09:45	09/29/23 12:19	45mL/50mL	45mL/50mL	1.00
A3I1285-02	WG	EPA 6020B	09/20/23 12:10	09/29/23 12:19	45mL/50mL	45mL/50mL	1.00

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SAMPLE PREPARATION INFORMATION

Total Metals by EPA 6020B (ICPMS)

Prep: EPA 3015A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
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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
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Batch: 23I0845

A3I1285-01	WG	EPA 335.4	09/20/23 09:45	09/26/23 12:59	6mL/6mL	6mL/6mL	1.00
A3I1285-02	WG	EPA 335.4	09/20/23 12:10	09/26/23 12:59	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
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Batch: 23I0791

A3I1285-01	WG	D6888-09	09/20/23 09:45	09/25/23 11:23	5mL/5mL	5mL/5mL	1.00
A3I1285-02	WG	D6888-09	09/20/23 12:10	09/25/23 11:23	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
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Batch: 23I0927

A3I1285-01	WG	D4282-02	09/20/23 09:45	09/28/23 09:24	3mL/3mL	3mL/3mL	1.00
A3I1285-02	WG	D4282-02	09/20/23 12:10	09/28/23 09:24	3mL/3mL	3mL/3mL	1.00

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QUALIFIER DEFINITIONS

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

Apex Laboratories

- 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-04** Due to matrix interference, this analyte cannot be accurately quantified. The reported result may contain a high bias.
- Q-02** Spike recovery is outside of established control limits due to matrix interference.
- Q-19** Blank Spike Duplicate (BSD) sample analyzed in place of Matrix Spike/Duplicate samples due to limited sample amount available for analysis.
- Q-42** Matrix Spike and/or Duplicate analysis was performed on this sample. % Recovery or RPD for this analyte is outside laboratory control limits. (Refer to the QC Section of Analytical Report.)
- Q-65** Spike recovery is estimated due to the high analyte concentration of the source sample.
- S-05** Surrogate recovery is estimated due to sample dilution required for high analyte concentration and/or matrix interference.
- T-02** This Batch QC sample was analyzed outside of the method specified 12 hour analysis window. Results are estimated.

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REPORTING NOTES AND CONVENTIONS:

Abbreviations:

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

Detection Limits: Limit of Detection (LOD)

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

Reporting Limits: Limit of Quantitation (LOQ)

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

Reporting Conventions:

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

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

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

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

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

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

QC Source:

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

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

Miscellaneous Notes:

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

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

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REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks:

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

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

-For Blank hits above the RL, the associated sample and QC data will receive a 'B' qualifier, per Apex Laboratories' Blank Policy.

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

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

'B' and 'B-02' qualifications are only applied to sample results detected above the Reporting Level, if results are not reported to the MDL.

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

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

Soil and Sediment Samples:

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

Sampling and Preservation Notes:

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

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

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

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

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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
--------	----------	--------	---------	--------	---------------

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 Manager: John Renda

Report ID:

A3I1285 - 12 05 23 0700

APEX LABS COOLER RECEIPT FORM

Client: Anchor QEA

Element WO#: A3I1285

Project/Project #: Gasco TCE only Mon. Wells 3Q 2023 Perf. Mon.
000029-02.84 T-01.001F

Delivery Info:

Date/time received: 9/21/23 @ 8:45 By: JS

Delivered by: Apex ☒ Client ☐ ESS ☐ FedEx ☐ UPS ☐ Radio ☐ Morgan ☐ SDS ☐ Evergreen ☐ Other

Cooler Inspection Date/time inspected: 9/21/23 @ 10:20 By: JS

Chain 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)	4.6						
Custody seals? (Y/N)	N						
Received on ice? (Y/N)	y						
Temp. blanks? (Y/N)	y						
Ice type: (Gel/Real/Other)	Real						
Condition (In/Out):	In						

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

Green dots applied to out of temperature samples? Yes ☒ No ☐Out of temperature samples form initiated? Yes ☒ No ☐

Sample Inspection: Date/time inspected: 9/21/23 @ 12:12 By: APW

All samples intact? Yes ☒ No ☐ Comments:Bottle labels/COCs agree? Yes ☒ No ☐ Comments:COC/container discrepancies form initiated? Yes ☐ No ☒Containers/volumes received appropriate for analysis? Yes ☒ No ☐ Comments:Do VOA vials have visible headspace? Yes ☐ No ☒ NA ☐

Comments:

Water samples: pH checked: Yes ☒ No ☐ NA ☐ pH appropriate? Yes ☒ No ☐ NA ☐ pH ID: A23I172

Comments:

Additional information: #3379

Labeled by: APW

Witness:

DJS

Cooler Inspected by: APW

Form Y-003 R-01

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