



ANALYTICAL REPORT

Apex Laboratories, LLC

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

Friday, May 19, 2023

John Renda

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

RE: A3C0878 - Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon. - 000029-02.84 T-01.001E

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 A3C0878, which was received by the laboratory on 3/24/2023 at 8:40:00AM.

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

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

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Cooler Receipt Information

(See Cooler Receipt Form for details)

Default Cooler      1.7      degC

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This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.

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

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Darwin Thomas, Business Development Director



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Project: Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3C0878 - 05 19 23 0528

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
GS-032323-55	A3C0878-01	WG	03/23/23 11:10	03/24/23 08:40
GS-032323-56	A3C0878-02	WG	03/23/23 11:15	03/24/23 08:40
GS-032323-60	A3C0878-03	WG	03/23/23 14:50	03/24/23 08:40
TB-032323	A3C0878-04	W	03/23/23 15:30	03/24/23 08:40

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

Project Manager: **John Renda**

**Report ID:**

**A3C0878 - 05 19 23 0528**

### 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-032323-55 (A3C0878-01)			Matrix: WG		Batch: 23C1222			
Diesel	157	98.0	196	ug/L	1	03/30/23 20:41	NWTPH-Dx	J
Oil	334	196	392	ug/L	1	03/30/23 20:41	NWTPH-Dx	J
Surrogate: o-Terphenyl (Surr)		Recovery: 88 %		Limits: 50-150 %	1	03/30/23 20:41	NWTPH-Dx	
GS-032323-56 (A3C0878-02)			Matrix: WG		Batch: 23C1222			
Diesel	ND	96.2	192	ug/L	1	03/30/23 21:02	NWTPH-Dx	
Oil	368	192	385	ug/L	1	03/30/23 21:02	NWTPH-Dx	J
Surrogate: o-Terphenyl (Surr)		Recovery: 88 %		Limits: 50-150 %	1	03/30/23 21:02	NWTPH-Dx	
GS-032323-60 (A3C0878-03)			Matrix: WG		Batch: 23C1222			
Diesel	ND	97.1	194	ug/L	1	03/30/23 21:23	NWTPH-Dx	
Oil	ND	194	388	ug/L	1	03/30/23 21:23	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 90 %		Limits: 50-150 %	1	03/30/23 21:23	NWTPH-Dx	

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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
<b>GS-032323-55 (A3C0878-01RE1)</b>		<b>Matrix: WG</b>			<b>Batch: 23C1116</b>			
Gasoline Range Organics	ND	50.0	100	ug/L	1	03/29/23 04:19	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 97 %	Limits: 50-150 %	1	03/29/23 04:19	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		107 %	50-150 %	1	03/29/23 04:19	NWTPH-Gx (MS)		
<b>GS-032323-56 (A3C0878-02RE1)</b>		<b>Matrix: WG</b>			<b>Batch: 23D0016</b>			
Gasoline Range Organics	ND	50.0	100	ug/L	1	04/03/23 12:43	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 93 %	Limits: 50-150 %	1	04/03/23 12:43	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		101 %	50-150 %	1	04/03/23 12:43	NWTPH-Gx (MS)		
<b>GS-032323-60 (A3C0878-03RE1)</b>		<b>Matrix: WG</b>			<b>Batch: 23C1149</b>			
Gasoline Range Organics	ND	50.0	100	ug/L	1	03/29/23 14:20	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 98 %	Limits: 50-150 %	1	03/29/23 14:20	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		102 %	50-150 %	1	03/29/23 14:20	NWTPH-Gx (MS)		

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## ANALYTICAL SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>GS-032323-55 (A3C0878-01RE1)</b>				<b>Matrix: WG</b>		<b>Batch: 23C1116</b>		
Acetone	ND	10.0	20.0	ug/L	1	03/29/23 04:19	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	03/29/23 04:19	EPA 8260D	
Benzene	ND	0.100	0.200	ug/L	1	03/29/23 04:19	EPA 8260D	
Bromobenzene	ND	0.250	0.500	ug/L	1	03/29/23 04:19	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	03/29/23 04:19	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	03/29/23 04:19	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	03/29/23 04:19	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	03/29/23 04:19	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	03/29/23 04:19	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	03/29/23 04:19	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	03/29/23 04:19	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	03/29/23 04:19	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	03/29/23 04:19	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	03/29/23 04:19	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	03/29/23 04:19	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	03/29/23 04:19	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	03/29/23 04:19	EPA 8260D	
Chloromethane	ND	2.50	5.00	ug/L	1	03/29/23 04:19	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/29/23 04:19	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/29/23 04:19	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	03/29/23 04:19	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	03/29/23 04:19	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	03/29/23 04:19	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	03/29/23 04:19	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/29/23 04:19	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/29/23 04:19	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/29/23 04:19	EPA 8260D	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	03/29/23 04:19	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	03/29/23 04:19	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	03/29/23 04:19	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	03/29/23 04:19	EPA 8260D	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	03/29/23 04:19	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	03/29/23 04:19	EPA 8260D	

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## ANALYTICAL SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>GS-032323-55 (A3C0878-01RE1)</b>				<b>Matrix: WG</b>		<b>Batch: 23C1116</b>		
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	03/29/23 04:19	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	03/29/23 04:19	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	03/29/23 04:19	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	03/29/23 04:19	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/29/23 04:19	EPA 8260D	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/29/23 04:19	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	03/29/23 04:19	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	03/29/23 04:19	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	03/29/23 04:19	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	03/29/23 04:19	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	03/29/23 04:19	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	03/29/23 04:19	EPA 8260D	
4-Methyl-2-pentanone (MIBK)	ND	5.00	10.0	ug/L	1	03/29/23 04:19	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	03/29/23 04:19	EPA 8260D	
Naphthalene	ND	2.00	2.00	ug/L	1	03/29/23 04:19	EPA 8260D	Q-54d
n-Propylbenzene	ND	0.250	0.500	ug/L	1	03/29/23 04:19	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	03/29/23 04:19	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	03/29/23 04:19	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	03/29/23 04:19	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	03/29/23 04:19	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	03/29/23 04:19	EPA 8260D	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/29/23 04:19	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/29/23 04:19	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	03/29/23 04:19	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	03/29/23 04:19	EPA 8260D	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	03/29/23 04:19	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	03/29/23 04:19	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	03/29/23 04:19	EPA 8260D	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	03/29/23 04:19	EPA 8260D	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	03/29/23 04:19	EPA 8260D	
Vinyl chloride	ND	0.200	0.400	ug/L	1	03/29/23 04:19	EPA 8260D	
m,p-Xylene	ND	0.500	1.00	ug/L	1	03/29/23 04:19	EPA 8260D	
o-Xylene	ND	0.250	0.500	ug/L	1	03/29/23 04:19	EPA 8260D	

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## ANALYTICAL SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>GS-032323-55 (A3C0878-01RE1)</b>		<b>Matrix: WG</b>			<b>Batch: 23C1116</b>			
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 101 %	Limits: 80-120 %	1		03/29/23 04:19	EPA 8260D	
Toluene-d8 (Surr)		103 %	80-120 %	1		03/29/23 04:19	EPA 8260D	
4-Bromofluorobenzene (Surr)		97 %	80-120 %	1		03/29/23 04:19	EPA 8260D	
<b>GS-032323-56 (A3C0878-02RE1)</b>		<b>Matrix: WG</b>			<b>Batch: 23D0016</b>			
Acetone	ND	20.0	20.0	ug/L	1	04/03/23 12:43	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	04/03/23 12:43	EPA 8260D	
Benzene	ND	0.100	0.200	ug/L	1	04/03/23 12:43	EPA 8260D	
Bromobenzene	ND	0.250	0.500	ug/L	1	04/03/23 12:43	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	04/03/23 12:43	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	04/03/23 12:43	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	04/03/23 12:43	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	04/03/23 12:43	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	04/03/23 12:43	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	04/03/23 12:43	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	04/03/23 12:43	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	04/03/23 12:43	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	04/03/23 12:43	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	04/03/23 12:43	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	04/03/23 12:43	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	04/03/23 12:43	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	04/03/23 12:43	EPA 8260D	
Chloromethane	ND	2.50	5.00	ug/L	1	04/03/23 12:43	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	04/03/23 12:43	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	04/03/23 12:43	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	04/03/23 12:43	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	04/03/23 12:43	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	04/03/23 12:43	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	04/03/23 12:43	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	04/03/23 12:43	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	04/03/23 12:43	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	04/03/23 12:43	EPA 8260D	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	04/03/23 12:43	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	04/03/23 12:43	EPA 8260D	

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Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>GS-032323-56 (A3C0878-02RE1)</b>				<b>Matrix: WG</b>		<b>Batch: 23D0016</b>		
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	04/03/23 12:43	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	04/03/23 12:43	EPA 8260D	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	04/03/23 12:43	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	04/03/23 12:43	EPA 8260D	
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	04/03/23 12:43	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	04/03/23 12:43	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	04/03/23 12:43	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	04/03/23 12:43	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	04/03/23 12:43	EPA 8260D	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	04/03/23 12:43	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	04/03/23 12:43	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	04/03/23 12:43	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	04/03/23 12:43	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	04/03/23 12:43	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	04/03/23 12:43	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	04/03/23 12:43	EPA 8260D	
4-Methyl-2-pentanone (MIBK)	ND	5.00	10.0	ug/L	1	04/03/23 12:43	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	04/03/23 12:43	EPA 8260D	
Naphthalene	ND	1.00	2.00	ug/L	1	04/03/23 12:43	EPA 8260D	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	04/03/23 12:43	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	04/03/23 12:43	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	04/03/23 12:43	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	04/03/23 12:43	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	04/03/23 12:43	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	04/03/23 12:43	EPA 8260D	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	04/03/23 12:43	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	04/03/23 12:43	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	04/03/23 12:43	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	04/03/23 12:43	EPA 8260D	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	04/03/23 12:43	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	04/03/23 12:43	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	04/03/23 12:43	EPA 8260D	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	04/03/23 12:43	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-MGP Only Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3C0878 - 05 19 23 0528**

## ANALYTICAL SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>GS-032323-56 (A3C0878-02RE1)</b>		<b>Matrix: WG</b>			<b>Batch: 23D0016</b>			
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	04/03/23 12:43	EPA 8260D	
Vinyl chloride	ND	0.200	0.400	ug/L	1	04/03/23 12:43	EPA 8260D	
m,p-Xylene	ND	0.500	1.00	ug/L	1	04/03/23 12:43	EPA 8260D	
o-Xylene	ND	0.250	0.500	ug/L	1	04/03/23 12:43	EPA 8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 102 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>04/03/23 12:43</i>	<i>EPA 8260D</i>	
<i>Toluene-d8 (Surr)</i>		<i>101 %</i>		<i>80-120 %</i>	<i>1</i>	<i>04/03/23 12:43</i>	<i>EPA 8260D</i>	
<i>4-Bromofluorobenzene (Surr)</i>		<i>108 %</i>		<i>80-120 %</i>	<i>1</i>	<i>04/03/23 12:43</i>	<i>EPA 8260D</i>	
<b>GS-032323-60 (A3C0878-03RE1)</b>		<b>Matrix: WG</b>			<b>Batch: 23C1149</b>			
Acetone	ND	10.0	20.0	ug/L	1	03/29/23 14:20	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	03/29/23 14:20	EPA 8260D	
Benzene	ND	0.100	0.200	ug/L	1	03/29/23 14:20	EPA 8260D	
Bromobenzene	ND	0.250	0.500	ug/L	1	03/29/23 14:20	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	03/29/23 14:20	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	03/29/23 14:20	EPA 8260D	
Bromoform	ND	1.00	1.00	ug/L	1	03/29/23 14:20	EPA 8260D	Q-54g
Bromomethane	ND	5.00	5.00	ug/L	1	03/29/23 14:20	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	03/29/23 14:20	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	03/29/23 14:20	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	03/29/23 14:20	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	03/29/23 14:20	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	03/29/23 14:20	EPA 8260D	
Carbon tetrachloride	ND	1.00	1.00	ug/L	1	03/29/23 14:20	EPA 8260D	Q-54k
Chlorobenzene	ND	0.250	0.500	ug/L	1	03/29/23 14:20	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	03/29/23 14:20	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	03/29/23 14:20	EPA 8260D	
Chloromethane	ND	2.50	5.00	ug/L	1	03/29/23 14:20	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/29/23 14:20	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/29/23 14:20	EPA 8260D	
Dibromochloromethane	ND	1.00	1.00	ug/L	1	03/29/23 14:20	EPA 8260D	Q-54d
1,2-Dibromo-3-chloropropane	ND	5.00	5.00	ug/L	1	03/29/23 14:20	EPA 8260D	Q-54n
1,2-Dibromoethane (EDB)	ND	0.500	0.500	ug/L	1	03/29/23 14:20	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	03/29/23 14:20	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/29/23 14:20	EPA 8260D	

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Darwin Thomas, Business Development Director



## ANALYTICAL REPORT

Apex Laboratories, LLC

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503-718-2323  
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125  
Portland, OR 97219Project: **Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3C0878 - 05 19 23 0528**

## ANALYTICAL SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>GS-032323-60 (A3C0878-03RE1)</b>		<b>Matrix: WG</b>		<b>Batch: 23C1149</b>				
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/29/23 14:20	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/29/23 14:20	EPA 8260D	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	03/29/23 14:20	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	03/29/23 14:20	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	03/29/23 14:20	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	03/29/23 14:20	EPA 8260D	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	03/29/23 14:20	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	03/29/23 14:20	EPA 8260D	
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	03/29/23 14:20	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	03/29/23 14:20	EPA 8260D	
2,2-Dichloropropane	ND	1.00	1.00	ug/L	1	03/29/23 14:20	EPA 8260D	Q-54o
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	03/29/23 14:20	EPA 8260D	
cis-1,3-Dichloropropene	ND	1.00	1.00	ug/L	1	03/29/23 14:20	EPA 8260D	
trans-1,3-Dichloropropene	ND	1.00	1.00	ug/L	1	03/29/23 14:20	EPA 8260D	Q-54m
Ethylbenzene	ND	0.250	0.500	ug/L	1	03/29/23 14:20	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	03/29/23 14:20	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	03/29/23 14:20	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	03/29/23 14:20	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	03/29/23 14:20	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	03/29/23 14:20	EPA 8260D	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	03/29/23 14:20	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	1.00	1.00	ug/L	1	03/29/23 14:20	EPA 8260D	
Naphthalene	ND	1.00	2.00	ug/L	1	03/29/23 14:20	EPA 8260D	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	03/29/23 14:20	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	03/29/23 14:20	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.400	0.400	ug/L	1	03/29/23 14:20	EPA 8260D	Q-54f
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	03/29/23 14:20	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	03/29/23 14:20	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	03/29/23 14:20	EPA 8260D	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/29/23 14:20	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/29/23 14:20	EPA 8260D	
1,1,1-Trichloroethane	ND	0.400	0.400	ug/L	1	03/29/23 14:20	EPA 8260D	Q-54e
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	03/29/23 14:20	EPA 8260D	

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Darwin Thomas, Business Development Director



## ANALYTICAL REPORT

Apex Laboratories, LLC

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Tigard, OR 97223  
503-718-2323  
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125  
Portland, OR 97219Project: **Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3C0878 - 05 19 23 0528**

## ANALYTICAL SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>GS-032323-60 (A3C0878-03RE1)</b>		<b>Matrix: WG</b>			<b>Batch: 23C1149</b>			
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	03/29/23 14:20	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	03/29/23 14:20	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	03/29/23 14:20	EPA 8260D	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	03/29/23 14:20	EPA 8260D	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	03/29/23 14:20	EPA 8260D	
Vinyl chloride	ND	0.200	0.400	ug/L	1	03/29/23 14:20	EPA 8260D	
m,p-Xylene	ND	0.500	1.00	ug/L	1	03/29/23 14:20	EPA 8260D	
o-Xylene	ND	0.250	0.500	ug/L	1	03/29/23 14:20	EPA 8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 97 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>03/29/23 14:20</i>	<i>EPA 8260D</i>	
<i>Toluene-d8 (Surr)</i>		<i>101 %</i>		<i>80-120 %</i>	<i>1</i>	<i>03/29/23 14:20</i>	<i>EPA 8260D</i>	
<i>4-Bromofluorobenzene (Surr)</i>		<i>104 %</i>		<i>80-120 %</i>	<i>1</i>	<i>03/29/23 14:20</i>	<i>EPA 8260D</i>	
<b>TB-032323 (A3C0878-04)</b>		<b>Matrix: W</b>			<b>Batch: 23C1116</b>			<b>A-01</b>
Acetone	ND	10.0	20.0	ug/L	1	03/28/23 22:19	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	03/28/23 22:19	EPA 8260D	
Benzene	ND	0.100	0.200	ug/L	1	03/28/23 22:19	EPA 8260D	
Bromobenzene	ND	0.250	0.500	ug/L	1	03/28/23 22:19	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	03/28/23 22:19	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	03/28/23 22:19	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	03/28/23 22:19	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	03/28/23 22:19	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	03/28/23 22:19	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	03/28/23 22:19	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	03/28/23 22:19	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	03/28/23 22:19	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	03/28/23 22:19	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	03/28/23 22:19	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	03/28/23 22:19	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	03/28/23 22:19	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	03/28/23 22:19	EPA 8260D	
Chloromethane	ND	2.50	5.00	ug/L	1	03/28/23 22:19	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/28/23 22:19	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/28/23 22:19	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	03/28/23 22:19	EPA 8260D	

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Darwin Thomas, Business Development Director



## ANALYTICAL REPORT

Apex Laboratories, LLC

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503-718-2323  
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125  
Portland, OR 97219Project: **Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3C0878 - 05 19 23 0528**

## ANALYTICAL SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>TB-032323 (A3C0878-04)</b>		<b>Matrix: W</b>			<b>Batch: 23C1116</b>		<b>A-01</b>	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	03/28/23 22:19	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	03/28/23 22:19	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	03/28/23 22:19	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/28/23 22:19	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/28/23 22:19	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/28/23 22:19	EPA 8260D	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	03/28/23 22:19	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	03/28/23 22:19	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	03/28/23 22:19	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	03/28/23 22:19	EPA 8260D	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	03/28/23 22:19	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	03/28/23 22:19	EPA 8260D	
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	03/28/23 22:19	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	03/28/23 22:19	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	03/28/23 22:19	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	03/28/23 22:19	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/28/23 22:19	EPA 8260D	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/28/23 22:19	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	03/28/23 22:19	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	03/28/23 22:19	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	03/28/23 22:19	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	03/28/23 22:19	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	03/28/23 22:19	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	03/28/23 22:19	EPA 8260D	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	03/28/23 22:19	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	03/28/23 22:19	EPA 8260D	
Naphthalene	ND	2.00	2.00	ug/L	1	03/28/23 22:19	EPA 8260D	Q-54d
n-Propylbenzene	ND	0.250	0.500	ug/L	1	03/28/23 22:19	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	03/28/23 22:19	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	03/28/23 22:19	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	03/28/23 22:19	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	03/28/23 22:19	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	03/28/23 22:19	EPA 8260D	

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## ANALYTICAL REPORT

Apex Laboratories, LLC

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ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125  
Portland, OR 97219Project: **Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3C0878 - 05 19 23 0528**

## ANALYTICAL SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>TB-032323 (A3C0878-04)</b>		<b>Matrix: W</b>			<b>Batch: 23C1116</b>		<b>A-01</b>	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/28/23 22:19	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/28/23 22:19	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	03/28/23 22:19	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	03/28/23 22:19	EPA 8260D	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	03/28/23 22:19	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	03/28/23 22:19	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	03/28/23 22:19	EPA 8260D	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	03/28/23 22:19	EPA 8260D	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	03/28/23 22:19	EPA 8260D	
Vinyl chloride	ND	0.200	0.400	ug/L	1	03/28/23 22:19	EPA 8260D	
m,p-Xylene	ND	0.500	1.00	ug/L	1	03/28/23 22:19	EPA 8260D	
o-Xylene	ND	0.250	0.500	ug/L	1	03/28/23 22:19	EPA 8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>	<i>101 %</i>	<i>Limits:</i>	<i>80-120 %</i>	<i>1</i>	<i>03/28/23 22:19</i>	<i>EPA 8260D</i>
<i>Toluene-d8 (Surr)</i>			<i>102 %</i>		<i>80-120 %</i>	<i>1</i>	<i>03/28/23 22:19</i>	<i>EPA 8260D</i>
<i>4-Bromofluorobenzene (Surr)</i>			<i>100 %</i>		<i>80-120 %</i>	<i>1</i>	<i>03/28/23 22:19</i>	<i>EPA 8260D</i>

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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-MGP Only Mon. Wells 1Q 2023 Perf. Mon.

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3C0878 - 05 19 23 0528

## 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-032323-55 (A3C0878-01)		Matrix: WG			Batch: 23C1086			
Acenaphthene	ND	0.0206	0.0412	ug/L	1	03/28/23 20:45	EPA 8270E LVI	
Acenaphthylene	0.0694	0.0206	0.0412	ug/L	1	03/28/23 20:45	EPA 8270E LVI	
Anthracene	0.116	0.0206	0.0412	ug/L	1	03/28/23 20:45	EPA 8270E LVI	
Benz(a)anthracene	ND	0.0103	0.0206	ug/L	1	03/28/23 20:45	EPA 8270E LVI	
Benzo(a)pyrene	ND	0.0103	0.0206	ug/L	1	03/28/23 20:45	EPA 8270E LVI	
Benzo(b)fluoranthene	ND	0.0103	0.0206	ug/L	1	03/28/23 20:45	EPA 8270E LVI	
Benzo(k)fluoranthene	ND	0.0103	0.0206	ug/L	1	03/28/23 20:45	EPA 8270E LVI	
Benzo(g,h,i)perylene	ND	0.0206	0.0412	ug/L	1	03/28/23 20:45	EPA 8270E LVI	
Chrysene	ND	0.0103	0.0206	ug/L	1	03/28/23 20:45	EPA 8270E LVI	
Dibenz(a,h)anthracene	ND	0.0103	0.0206	ug/L	1	03/28/23 20:45	EPA 8270E LVI	
Fluoranthene	ND	0.0206	0.0412	ug/L	1	03/28/23 20:45	EPA 8270E LVI	
Fluorene	ND	0.0206	0.0412	ug/L	1	03/28/23 20:45	EPA 8270E LVI	
Indeno(1,2,3-cd)pyrene	ND	0.0103	0.0206	ug/L	1	03/28/23 20:45	EPA 8270E LVI	
1-Methylnaphthalene	ND	0.0412	0.0823	ug/L	1	03/28/23 20:45	EPA 8270E LVI	
2-Methylnaphthalene	ND	0.0412	0.0823	ug/L	1	03/28/23 20:45	EPA 8270E LVI	
Naphthalene	0.116	0.0412	0.0823	ug/L	1	03/28/23 20:45	EPA 8270E LVI	
Phenanthrene	ND	0.0412	0.0823	ug/L	1	03/28/23 20:45	EPA 8270E LVI	
Pyrene	ND	0.0206	0.0412	ug/L	1	03/28/23 20:45	EPA 8270E LVI	
Carbazole	ND	0.0206	0.0412	ug/L	1	03/28/23 20:45	EPA 8270E LVI	
Dibenzofuran	ND	0.0206	0.0412	ug/L	1	03/28/23 20:45	EPA 8270E LVI	
Surrogate: Acenaphthylene-d8 (Surr)		Recovery: 124 %		Limits: 78-134 %	1	03/28/23 20:45	EPA 8270E LVI	
Benzo(a)pyrene-d12 (Surr)		126 %		80-132 %	1	03/28/23 20:45	EPA 8270E LVI	

## GS-032323-56 (A3C0878-02RE1)

Matrix: WG

Batch: 23C1086

R-04

Acenaphthene	ND	0.0652	0.130	ug/L	4	03/30/23 22:17	EPA 8270E LVI	
Acenaphthylene	0.119	0.0652	0.130	ug/L	4	03/30/23 22:17	EPA 8270E LVI	J
Anthracene	ND	0.0652	0.130	ug/L	4	03/30/23 22:17	EPA 8270E LVI	
Benz(a)anthracene	ND	0.0326	0.0652	ug/L	4	03/30/23 22:17	EPA 8270E LVI	
Benzo(a)pyrene	ND	0.0326	0.0652	ug/L	4	03/30/23 22:17	EPA 8270E LVI	
Benzo(b)fluoranthene	ND	0.0326	0.0652	ug/L	4	03/30/23 22:17	EPA 8270E LVI	
Benzo(k)fluoranthene	ND	0.0326	0.0652	ug/L	4	03/30/23 22:17	EPA 8270E LVI	
Benzo(g,h,i)perylene	ND	0.0652	0.130	ug/L	4	03/30/23 22:17	EPA 8270E LVI	
Chrysene	ND	0.0326	0.0652	ug/L	4	03/30/23 22:17	EPA 8270E LVI	

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Darwin Thomas, Business Development Director



## ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street  
Tigard, OR 97223  
503-718-2323  
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125  
Portland, OR 97219Project: **Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3C0878 - 05 19 23 0528**

## ANALYTICAL SAMPLE RESULTS

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

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>GS-032323-56 (A3C0878-02RE1)</b>		<b>Matrix: WG</b>			<b>Batch: 23C1086</b>		<b>R-04</b>	
Dibenz(a,h)anthracene	ND	0.0326	0.0652	ug/L	4	03/30/23 22:17	EPA 8270E LVI	
Fluoranthene	ND	0.0652	0.130	ug/L	4	03/30/23 22:17	EPA 8270E LVI	
Fluorene	ND	0.0652	0.130	ug/L	4	03/30/23 22:17	EPA 8270E LVI	
Indeno(1,2,3-cd)pyrene	ND	0.0326	0.0652	ug/L	4	03/30/23 22:17	EPA 8270E LVI	
1-Methylnaphthalene	ND	0.130	0.261	ug/L	4	03/30/23 22:17	EPA 8270E LVI	
2-Methylnaphthalene	ND	0.130	0.261	ug/L	4	03/30/23 22:17	EPA 8270E LVI	
Naphthalene	ND	0.130	0.261	ug/L	4	03/30/23 22:17	EPA 8270E LVI	
Phenanthrene	ND	0.130	0.261	ug/L	4	03/30/23 22:17	EPA 8270E LVI	
Pyrene	ND	0.0652	0.130	ug/L	4	03/30/23 22:17	EPA 8270E LVI	
Carbazole	ND	0.0652	0.130	ug/L	4	03/30/23 22:17	EPA 8270E LVI	
Dibenzofuran	ND	0.0652	0.130	ug/L	4	03/30/23 22:17	EPA 8270E LVI	
Surrogate: Acenaphthylene-d8 (Surr)		Recovery: 116 %		Limits: 78-134 %	4	03/30/23 22:17	EPA 8270E LVI	S-05
Benzo(a)pyrene-d12 (Surr)		78 %		80-132 %	4	03/30/23 22:17	EPA 8270E LVI	S-05
<b>GS-032323-60 (A3C0878-03)</b>		<b>Matrix: WG</b>			<b>Batch: 23C1086</b>			
Acenaphthene	ND	0.0773	0.0773	ug/L	1	03/28/23 21:51	EPA 8270E LVI	R-02
Acenaphthylene	ND	0.0206	0.0412	ug/L	1	03/28/23 21:51	EPA 8270E LVI	
<b>Anthracene</b>	<b>0.0448</b>	0.0206	0.0412	ug/L	1	03/28/23 21:51	EPA 8270E LVI	
Benz(a)anthracene	ND	0.0103	0.0206	ug/L	1	03/28/23 21:51	EPA 8270E LVI	
Benzo(a)pyrene	ND	0.0103	0.0206	ug/L	1	03/28/23 21:51	EPA 8270E LVI	
Benzo(b)fluoranthene	ND	0.0103	0.0206	ug/L	1	03/28/23 21:51	EPA 8270E LVI	
Benzo(k)fluoranthene	ND	0.0103	0.0206	ug/L	1	03/28/23 21:51	EPA 8270E LVI	
Benzo(g,h,i)perylene	ND	0.0206	0.0412	ug/L	1	03/28/23 21:51	EPA 8270E LVI	
Chrysene	ND	0.0103	0.0206	ug/L	1	03/28/23 21:51	EPA 8270E LVI	
Dibenz(a,h)anthracene	ND	0.0103	0.0206	ug/L	1	03/28/23 21:51	EPA 8270E LVI	
Fluoranthene	ND	0.0206	0.0412	ug/L	1	03/28/23 21:51	EPA 8270E LVI	
Fluorene	ND	0.0206	0.0412	ug/L	1	03/28/23 21:51	EPA 8270E LVI	
Indeno(1,2,3-cd)pyrene	ND	0.0103	0.0206	ug/L	1	03/28/23 21:51	EPA 8270E LVI	
1-Methylnaphthalene	ND	0.0412	0.0825	ug/L	1	03/28/23 21:51	EPA 8270E LVI	
2-Methylnaphthalene	ND	0.0412	0.0825	ug/L	1	03/28/23 21:51	EPA 8270E LVI	
Naphthalene	ND	0.0412	0.0825	ug/L	1	03/28/23 21:51	EPA 8270E LVI	
Phenanthrene	ND	0.0412	0.0825	ug/L	1	03/28/23 21:51	EPA 8270E LVI	
Pyrene	ND	0.0206	0.0412	ug/L	1	03/28/23 21:51	EPA 8270E LVI	

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street  
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503-718-2323  
ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125  
Portland, OR 97219

Project: Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3C0878 - 05 19 23 0528

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-032323-60 (A3C0878-03)		Matrix: WG			Batch: 23C1086			
Carbazole	ND	0.0206	0.0412	ug/L	1	03/28/23 21:51	EPA 8270E LVI	
Dibenzofuran	ND	0.0206	0.0412	ug/L	1	03/28/23 21:51	EPA 8270E LVI	
Surrogate: Acenaphthylene-d8 (Surr)		Recovery:	125 %	Limits:	78-134 %	1	03/28/23 21:51	EPA 8270E LVI
Benzo(a)pyrene-d12 (Surr)			127 %		80-132 %	1	03/28/23 21:51	EPA 8270E LVI

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## ANALYTICAL REPORT

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Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

**Anchor QEA, LLC**

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

Project: **Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3C0878 - 05 19 23 0528**

## ANALYTICAL SAMPLE RESULTS

## Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-032323-55 (A3C0878-01)		Matrix: WG						
Batch: 23D0084								
Aluminum	ND	25.0	50.0	ug/L	1	04/04/23 16:55	EPA 6020B	
Antimony	ND	0.500	1.00	ug/L	1	04/04/23 16:55	EPA 6020B	
Arsenic	2.36	0.500	1.00	ug/L	1	04/04/23 16:55	EPA 6020B	
Barium	53.6	1.00	2.00	ug/L	1	04/04/23 16:55	EPA 6020B	
Beryllium	ND	0.100	0.200	ug/L	1	04/04/23 16:55	EPA 6020B	
Cadmium	ND	0.100	0.200	ug/L	1	04/04/23 16:55	EPA 6020B	
Chromium	ND	1.00	2.00	ug/L	1	04/04/23 16:55	EPA 6020B	
Copper	ND	1.00	2.00	ug/L	1	04/04/23 16:55	EPA 6020B	
Iron	22300	25.0	50.0	ug/L	1	04/04/23 16:55	EPA 6020B	
Lead	ND	0.110	0.200	ug/L	1	04/04/23 16:55	EPA 6020B	
Manganese	880	0.500	1.00	ug/L	1	04/04/23 16:55	EPA 6020B	
Mercury	ND	0.0400	0.0800	ug/L	1	04/04/23 16:55	EPA 6020B	
Nickel	ND	1.00	2.00	ug/L	1	04/04/23 16:55	EPA 6020B	
Selenium	ND	0.500	1.00	ug/L	1	04/04/23 16:55	EPA 6020B	
Silver	ND	0.100	0.200	ug/L	1	04/04/23 16:55	EPA 6020B	
Thallium	ND	0.100	0.200	ug/L	1	04/04/23 16:55	EPA 6020B	
Vanadium	ND	1.00	2.00	ug/L	1	04/04/23 16:55	EPA 6020B	
Zinc	3.32	2.00	4.00	ug/L	1	04/04/23 16:55	EPA 6020B	J
GS-032323-56 (A3C0878-02)		Matrix: WG						
Batch: 23D0084								
Aluminum	ND	25.0	50.0	ug/L	1	04/04/23 17:20	EPA 6020B	
Antimony	ND	0.500	1.00	ug/L	1	04/04/23 17:20	EPA 6020B	
Arsenic	ND	0.500	1.00	ug/L	1	04/04/23 17:20	EPA 6020B	
Barium	8.29	1.00	2.00	ug/L	1	04/04/23 17:20	EPA 6020B	
Beryllium	ND	0.100	0.200	ug/L	1	04/04/23 17:20	EPA 6020B	
Cadmium	ND	0.100	0.200	ug/L	1	04/04/23 17:20	EPA 6020B	
Chromium	ND	1.00	2.00	ug/L	1	04/04/23 17:20	EPA 6020B	
Copper	ND	1.00	2.00	ug/L	1	04/04/23 17:20	EPA 6020B	
Iron	505	25.0	50.0	ug/L	1	04/04/23 17:20	EPA 6020B	
Lead	ND	0.110	0.200	ug/L	1	04/04/23 17:20	EPA 6020B	
Manganese	134	0.500	1.00	ug/L	1	04/04/23 17:20	EPA 6020B	
Mercury	ND	0.0400	0.0800	ug/L	1	04/04/23 17:20	EPA 6020B	

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Portland, OR 97219

Project: Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3C0878 - 05 19 23 0528

## ANALYTICAL SAMPLE RESULTS

## Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-032323-56 (A3C0878-02)		Matrix: WG						
Nickel	3.46	1.00	2.00	ug/L	1	04/04/23 17:20	EPA 6020B	J
Selenium	ND	0.500	1.00	ug/L	1	04/04/23 17:20	EPA 6020B	
Silver	ND	0.100	0.200	ug/L	1	04/04/23 17:20	EPA 6020B	
Thallium	ND	0.100	0.200	ug/L	1	04/04/23 17:20	EPA 6020B	
Vanadium	1.35	1.00	2.00	ug/L	1	04/04/23 17:20	EPA 6020B	
Zinc	5.04	2.00	4.00	ug/L	1	04/04/23 17:20	EPA 6020B	
GS-032323-60 (A3C0878-03)		Matrix: WG						
Batch: 23D0084								
Aluminum	1540	25.0	50.0	ug/L	1	04/04/23 17:25	EPA 6020B	
Antimony	ND	0.500	1.00	ug/L	1	04/04/23 17:25	EPA 6020B	
Arsenic	1.96	0.500	1.00	ug/L	1	04/04/23 17:25	EPA 6020B	
Barium	32.0	1.00	2.00	ug/L	1	04/04/23 17:25	EPA 6020B	
Beryllium	ND	0.100	0.200	ug/L	1	04/04/23 17:25	EPA 6020B	
Cadmium	ND	0.100	0.200	ug/L	1	04/04/23 17:25	EPA 6020B	
Chromium	9.91	1.00	2.00	ug/L	1	04/04/23 17:25	EPA 6020B	
Copper	2.58	1.00	2.00	ug/L	1	04/04/23 17:25	EPA 6020B	
Lead	0.613	0.110	0.200	ug/L	1	04/04/23 17:25	EPA 6020B	
Mercury	ND	0.0400	0.0800	ug/L	1	04/04/23 17:25	EPA 6020B	
Nickel	5.96	1.00	2.00	ug/L	1	04/04/23 17:25	EPA 6020B	
Selenium	ND	0.500	1.00	ug/L	1	04/04/23 17:25	EPA 6020B	
Silver	ND	0.100	0.200	ug/L	1	04/04/23 17:25	EPA 6020B	
Thallium	ND	0.100	0.200	ug/L	1	04/04/23 17:25	EPA 6020B	
Vanadium	4.40	1.00	2.00	ug/L	1	04/04/23 17:25	EPA 6020B	
Zinc	4.04	2.00	4.00	ug/L	1	04/04/23 17:25	EPA 6020B	
GS-032323-60 (A3C0878-03RE1)		Matrix: WG						
Batch: 23D0084								
Iron	463000	1250	2500	ug/L	50	04/05/23 11:05	EPA 6020B	
Manganese	20300	25.0	50.0	ug/L	50	04/05/23 11:05	EPA 6020B	

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ORELAP ID: OR100062

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Project: **Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.**

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

Project Manager: **John Renda**

**Report ID:**

**A3C0878 - 05 19 23 0528**

## ANALYTICAL SAMPLE RESULTS

### Total Cyanide by Flow Analysis (Aqueous)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>GS-032323-55 (A3C0878-01)</b>				<b>Matrix: WG</b>		<b>Batch: 23D0035</b>		<b>PRES</b>
Total Cyanide	<b>0.213</b>	0.00500	0.00500	mg/L	1	04/03/23 14:57	EPA 335.4	
<b>GS-032323-56 (A3C0878-02)</b>				<b>Matrix: WG</b>		<b>Batch: 23D0035</b>		
Total Cyanide	<b>0.266</b>	0.00500	0.00500	mg/L	1	04/03/23 14:59	EPA 335.4	
<b>GS-032323-60 (A3C0878-03)</b>				<b>Matrix: WG</b>		<b>Batch: 23D0035</b>		<b>PRES</b>
Total Cyanide	<b>0.286</b>	0.00500	0.00500	mg/L	1	04/03/23 15:01	EPA 335.4	

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Project: **Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.**

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

Project Manager: **John Renda**

**Report ID:**

**A3C0878 - 05 19 23 0528**

## ANALYTICAL SAMPLE RESULTS

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

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>GS-032323-55 (A3C0878-01)</b>				<b>Matrix: WG</b>		<b>Batch: 23C1246</b>		
Available Cyanide	<b>0.00118</b>	0.00100	0.00200	mg/L	1	03/31/23 17:18	D6888-09	<b>J</b>
<b>GS-032323-56 (A3C0878-02)</b>				<b>Matrix: WG</b>		<b>Batch: 23C1246</b>		
Available Cyanide	<b>0.00155</b>	0.00100	0.00200	mg/L	1	03/31/23 17:20	D6888-09	<b>J</b>
<b>GS-032323-60 (A3C0878-03)</b>				<b>Matrix: WG</b>		<b>Batch: 23C1246</b>		
Available Cyanide	ND	0.00100	0.00200	mg/L	1	03/31/23 17:21	D6888-09	

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ANALYTICAL REPORT

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Project Manager: John Renda

Report ID:

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ANALYTICAL SAMPLE RESULTS

Free Cyanide by Microdiffusion/Colorimetric Spectrophotometry

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-032323-55 (A3C0878-01)				Matrix: WG		Batch: 23D0024		PRES
Free Cyanide	ND	0.00250	0.00500	mg/L	1	04/03/23 17:30	D4282-02	
GS-032323-56 (A3C0878-02)				Matrix: WG		Batch: 23D0024		
Free Cyanide	ND	0.00250	0.00500	mg/L	1	04/03/23 17:30	D4282-02	
GS-032323-60 (A3C0878-03)				Matrix: WG		Batch: 23D0024		PRES
Free Cyanide	ND	0.00250	0.00500	mg/L	1	04/03/23 17:30	D4282-02	

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Project Manager: **John Renda**

**Report ID:**

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## Analytical Resources, LLC

### ANALYTICAL SAMPLE RESULTS (Subcontracted)

#### Washington Department of Ecology Methods

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-032323-56 (A3C0878-02)			Matrix: WG		Batch: BLC0804			
Batch: BLC0804								
C8-C10 Aliphatics	ND	---	40	ug/L	1	04/11/23 18:06	WA EPH	U
>C10-C12 Aliphatics	ND	---	40	ug/L	1	04/11/23 18:06	WA EPH	U
>C12-C16 Aliphatics	ND	---	40	ug/L	1	04/11/23 18:06	WA EPH	U
>C16-C21 Aliphatics	ND	---	40	ug/L	1	04/11/23 18:06	WA EPH	U
>C21-C34 Aliphatics	ND	---	40	ug/L	1	04/11/23 18:06	WA EPH	U
C8-C10 Aromatics	ND	---	40	ug/L	1	04/10/23 22:51	WA EPH	U
>C10-C12 Aromatics	ND	---	40	ug/L	1	04/10/23 22:51	WA EPH	U
>C12-C16 Aromatics	ND	---	40	ug/L	1	04/10/23 22:51	WA EPH	U
>C16-C21 Aromatics	ND	---	40	ug/L	1	04/10/23 22:51	WA EPH	U
>C21-C34 Aromatics	ND	---	40	ug/L	1	04/10/23 22:51	WA EPH	U
Batch: BLC0828								
C5-C6 Aliphatics	ND	---	50	ug/L	1	03/30/23 23:03	WA VPH	U
>C6-C8 Aliphatics	ND	---	50	ug/L	1	03/30/23 23:03	WA VPH	U
>C8-C10 Aliphatics	ND	---	50	ug/L	1	03/30/23 23:03	WA VPH	U
>C10-C12 Aliphatics	ND	---	50	ug/L	1	03/30/23 23:03	WA VPH	U
C8-C10 Aromatics	ND	---	50	ug/L	1	03/30/23 23:03	WA VPH	U
>C10-C12 Aromatics	ND	---	50	ug/L	1	03/30/23 23:03	WA VPH	U
>C12-C13 Aromatics	ND	---	50	ug/L	1	03/30/23 23:03	WA VPH	U
Methyl tert-butyl Ether	ND	---	5	ug/L	1	03/30/23 23:03	WA VPH	U
Benzene	ND	---	5	ug/L	1	03/30/23 23:03	WA VPH	U
Toluene	ND	---	5	ug/L	1	03/30/23 23:03	WA VPH	U
Ethylbenzene	ND	---	5	ug/L	1	03/30/23 23:03	WA VPH	U
1,2,3-Trimethylbenzene	ND	---	5	ug/L	1	03/30/23 23:03	WA VPH	U
m,p-Xylene	ND	---	10	ug/L	1	03/30/23 23:03	WA VPH	U
Naphthalene	ND	---	5	ug/L	1	03/30/23 23:03	WA VPH	U
1-Methylnaphthalene	ND	---	5	ug/L	1	03/30/23 23:03	WA VPH	U
o-Xylene	ND	---	5	ug/L	1	03/30/23 23:03	WA VPH	U
n-Pentane	ND	---	5	ug/L	1	03/30/23 23:03	WA VPH	U
n-Hexane	ND	---	5	ug/L	1	03/30/23 23:03	WA VPH	U
n-Octane	ND	---	5	ug/L	1	03/30/23 23:03	WA VPH	U
n-Decane	ND	---	5	ug/L	1	03/30/23 23:03	WA VPH	U

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Project: **Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.**

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

Project Manager: **John Renda**

**Report ID:**

**A3C0878 - 05 19 23 0528**

## Analytical Resources, LLC

### ANALYTICAL SAMPLE RESULTS (Subcontracted)

#### Washington Department of Ecology Methods

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>GS-032323-56 (A3C0878-02)</b>		<b>Matrix: WG</b>			<b>Batch: BLC0828</b>			
n-Dodecane Batch: BLC0804	ND	---	5	ug/L	1	03/30/23 23:03	WA VPH	U
Surrogate: o-Terphenyl		Recovery:	60.4 %	Limits:	41-120 %	1	04/10/23 22:51	WA EPH
1-Chloro-octadecane			45.6 %		36-120 %	1	04/11/23 18:06	WA EPH
Batch: BLC0828								
PID: 2,5-Dibromotoluene			79.4 %		60-140 %	1	03/30/23 23:03	WA VPH
FID: 2,5-Dibromotoluene			83.7 %		60-140 %	1	03/30/23 23:03	WA VPH

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503-718-2323  
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125  
Portland, OR 97219Project: **Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3C0878 - 05 19 23 0528****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 23C1222 - EPA 3510C (Fuels/Acid Ext.)						Water						
Blank (23C1222-BLK1)			Prepared: 03/30/23 11:34   Analyzed: 03/30/23 19:39									
NWTPH-Dx												
Diesel	ND	100	200	ug/L	1	---	---	---	---	---	---	
Oil	ND	200	400	ug/L	1	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)		Recovery: 83 %		Limits: 50-150 %		Dilution: 1x						
LCS (23C1222-BS1)			Prepared: 03/30/23 11:34   Analyzed: 03/30/23 20:00									
NWTPH-Dx												
Diesel	558	100	200	ug/L	1	1250	---	45	36-132%	---	---	
Surr: o-Terphenyl (Surr)		Recovery: 82 %		Limits: 50-150 %		Dilution: 1x						
LCS Dup (23C1222-BSD1)			Prepared: 03/30/23 11:34   Analyzed: 03/30/23 20:21									Q-19
NWTPH-Dx												
Diesel	651	100	200	ug/L	1	1250	---	52	36-132%	15	30%	
Surr: o-Terphenyl (Surr)		Recovery: 97 %		Limits: 50-150 %		Dilution: 1x						

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Portland, OR 97219Project: **Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3C0878 - 05 19 23 0528****QUALITY CONTROL (QC) SAMPLE RESULTS****Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx**

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

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## QUALITY CONTROL (QC) SAMPLE RESULTS

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

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

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## 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 23C1149 - EPA 5030C						Water						
Blank (23C1149-BLK1)			Prepared: 03/29/23 09:42   Analyzed: 03/29/23 12:32									
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	50.0	100	ug/L	1	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 96 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		100 %		50-150 %		"						
LCS (23C1149-BS2)			Prepared: 03/29/23 09:42   Analyzed: 03/29/23 12:05									
NWTPH-Gx (MS)												
Gasoline Range Organics	489	50.0	100	ug/L	1	500	---	98	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 98 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		100 %		50-150 %		"						

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## QUALITY CONTROL (QC) SAMPLE RESULTS

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

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23D0016 - EPA 5030C						Water						
Blank (23D0016-BLK1)			Prepared: 04/03/23 08:28   Analyzed: 04/03/23 10:27									
<u>NWTPH-Gx (MS)</u>												
Gasoline Range Organics	ND	50.0	100	ug/L	1	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 93 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		100 %		50-150 %		"						
LCS (23D0016-BS2)			Prepared: 04/03/23 08:28   Analyzed: 04/03/23 10:00									
<u>NWTPH-Gx (MS)</u>												
Gasoline Range Organics	468	50.0	100	ug/L	1	500	---	94	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 96 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		99 %		50-150 %		"						
Duplicate (23D0016-DUP1)			Prepared: 04/03/23 08:28   Analyzed: 04/03/23 16:46									
<u>QC Source Sample: Non-SDG (A3C1125-01)</u>												
Gasoline Range Organics	ND	500	1000	ug/L	10	---	ND	---	---	---	30%	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 96 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		103 %		50-150 %		"						

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Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23C1041 - EPA 5030C						Water						
Blank (23C1041-BLK1)			Prepared: 03/27/23 14:13		Analyzed: 03/27/23 16:30							
EPA 8260D												
Acetone	ND	10.0	20.0	ug/L	1	---	---	---	---	---	---	
Acrylonitrile	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
Benzene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Bromobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Bromochloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Bromoform	ND	1.00	1.00	ug/L	1	---	---	---	---	---	---	
Bromomethane	ND	5.00	5.00	ug/L	1	---	---	---	---	---	---	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Carbon disulfide	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Carbon tetrachloride	ND	1.00	1.00	ug/L	1	---	---	---	---	---	---	
Chlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Chloroethane	ND	5.00	5.00	ug/L	1	---	---	---	---	---	---	
Chloroform	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Chloromethane	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Dibromochloromethane	ND	1.00	1.00	ug/L	1	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	5.00	5.00	ug/L	1	---	---	---	---	---	---	Q-54j
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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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-MGP Only Mon. Wells 1Q 2023 Perf. Mon.

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3C0878 - 05 19 23 0528

## QUALITY CONTROL (QC) SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

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

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Darwin Thomas, Business Development Director



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## Volatile Organic Compounds by EPA 8260D

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

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## QUALITY CONTROL (QC) SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

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

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## Volatile Organic Compounds by EPA 8260D

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

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

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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-MGP Only Mon. Wells 1Q 2023 Perf. Mon.

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3C0878 - 05 19 23 0528

## QUALITY CONTROL (QC) SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

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

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Darwin Thomas, Business Development Director



## ANALYTICAL REPORT

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Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

## Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

Project: Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3C0878 - 05 19 23 0528

## QUALITY CONTROL (QC) SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

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

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Darwin Thomas, Business Development Director

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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-MGP Only Mon. Wells 1Q 2023 Perf. Mon.

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3C0878 - 05 19 23 0528

## QUALITY CONTROL (QC) SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

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

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Page 37 of 85

**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-MGP Only Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3C0878 - 05 19 23 0528****QUALITY CONTROL (QC) SAMPLE RESULTS****Volatile Organic Compounds by EPA 8260D**

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

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A3C0878 - 05 19 23 0528

## QUALITY CONTROL (QC) SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

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

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Report ID:

A3C0878 - 05 19 23 0528

## QUALITY CONTROL (QC) SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

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

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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-MGP Only Mon. Wells 1Q 2023 Perf. Mon.

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3C0878 - 05 19 23 0528

## QUALITY CONTROL (QC) SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

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

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Darwin Thomas, Business Development Director

Page 41 of 85



## ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

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6720 SW Macadam Ave. Suite 125

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Project: Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3C0878 - 05 19 23 0528

## QUALITY CONTROL (QC) SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23C1116 - EPA 5030C						Water						
LCS (23C1116-BS1)			Prepared: 03/28/23 15:28		Analyzed: 03/28/23 20:49							
Vinyl chloride	20.1	0.200	0.400	ug/L	1	20.0	---	101	80-120%	---	---	
m,p-Xylene	42.0	0.500	1.00	ug/L	1	40.0	---	105	80-120%	---	---	
o-Xylene	19.0	0.250	0.500	ug/L	1	20.0	---	95	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 94 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		99 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		92 %		80-120 %		"						

## Duplicate (23C1116-DUP1)

Prepared: 03/28/23 15:28 Analyzed: 03/29/23 00:57

## QC Source Sample: Non-SDG (A3C0831-11)

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

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Darwin Thomas, Business Development Director



## ANALYTICAL REPORT

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6700 S.W. Sandburg Street

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503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

Project: Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3C0878 - 05 19 23 0528

## QUALITY CONTROL (QC) SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

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

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## QUALITY CONTROL (QC) SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

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

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Darwin Thomas, Business Development Director



## 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-MGP Only Mon. Wells 1Q 2023 Perf. Mon.

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3C0878 - 05 19 23 0528

## QUALITY CONTROL (QC) SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

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

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## 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-MGP Only Mon. Wells 1Q 2023 Perf. Mon.

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3C0878 - 05 19 23 0528

## QUALITY CONTROL (QC) SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

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

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Page 46 of 85

**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-MGP Only Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3C0878 - 05 19 23 0528****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 23C1149 - EPA 5030C						Water						
Blank (23C1149-BLK1)			Prepared: 03/29/23 09:42		Analyzed: 03/29/23 12:32							
EPA 8260D												
Acetone	ND	10.0	20.0	ug/L	1	---	---	---	---	---	---	
Acrylonitrile	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
Benzene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Bromobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Bromochloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Bromoform	ND	1.00	1.00	ug/L	1	---	---	---	---	---	---	Q-54g
Bromomethane	ND	5.00	5.00	ug/L	1	---	---	---	---	---	---	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Carbon disulfide	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Carbon tetrachloride	ND	1.00	1.00	ug/L	1	---	---	---	---	---	---	Q-54k
Chlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Chloroethane	ND	5.00	5.00	ug/L	1	---	---	---	---	---	---	
Chloroform	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Chloromethane	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Dibromochloromethane	ND	1.00	1.00	ug/L	1	---	---	---	---	---	---	Q-54d
1,2-Dibromo-3-chloropropane	ND	5.00	5.00	ug/L	1	---	---	---	---	---	---	Q-54n
1,2-Dibromoethane (EDB)	ND	0.500	0.500	ug/L	1	---	---	---	---	---	---	
Dibromomethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	

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Darwin Thomas, Business Development Director



## ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

## Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

Project: Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3C0878 - 05 19 23 0528

## 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 23C1149 - EPA 5030C						Water						
Blank (23C1149-BLK1)						Prepared: 03/29/23 09:42 Analyzed: 03/29/23 12:32						
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
2,2-Dichloropropane	ND	1.00	1.00	ug/L	1	---	---	---	---	---	---	Q-54o
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	1.00	1.00	ug/L	1	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	1.00	1.00	ug/L	1	---	---	---	---	---	---	Q-54m
Ethylbenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
2-Hexanone	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Methylene chloride	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	1.00	1.00	ug/L	1	---	---	---	---	---	---	
Naphthalene	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Styrene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	0.400	0.400	ug/L	1	---	---	---	---	---	---	Q-54f
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
Toluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	0.400	0.400	ug/L	1	---	---	---	---	---	---	Q-54e
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Vinyl chloride	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
m,p-Xylene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
o-Xylene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr) Recovery: 97 % Limits: 80-120 % Dilution: 1x												

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## ANALYTICAL REPORT

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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 23C1149 - EPA 5030C						Water						
Blank (23C1149-BLK1)			Prepared: 03/29/23 09:42		Analyzed: 03/29/23 12:32							
Surr: Toluene-d8 (Surr)		Recovery: 100 %		Limits: 80-120 %		Dilution: 1x						
4-Bromofluorobenzene (Surr)		106 %		80-120 %		"						
LCS (23C1149-BS1)			Prepared: 03/29/23 09:42		Analyzed: 03/29/23 11:28							Q-50
EPA 8260D												
Acetone	36.8	10.0	20.0	ug/L	1	40.0	---	92	80-120%	---	---	
Acrylonitrile	19.4	1.00	2.00	ug/L	1	20.0	---	97	80-120%	---	---	
Benzene	19.2	0.100	0.200	ug/L	1	20.0	---	96	80-120%	---	---	
Bromobenzene	19.3	0.250	0.500	ug/L	1	20.0	---	96	80-120%	---	---	
Bromochloromethane	19.7	0.500	1.00	ug/L	1	20.0	---	99	80-120%	---	---	
Bromodichloromethane	18.7	0.500	1.00	ug/L	1	20.0	---	93	80-120%	---	---	
Bromoform	12.8	1.00	1.00	ug/L	1	20.0	---	64	80-120%	---	---	Q-54g
Bromomethane	23.2	5.00	5.00	ug/L	1	20.0	---	116	80-120%	---	---	
2-Butanone (MEK)	40.7	5.00	10.0	ug/L	1	40.0	---	102	80-120%	---	---	
n-Butylbenzene	23.4	0.500	1.00	ug/L	1	20.0	---	117	80-120%	---	---	
sec-Butylbenzene	21.8	0.500	1.00	ug/L	1	20.0	---	109	80-120%	---	---	
tert-Butylbenzene	20.5	0.500	1.00	ug/L	1	20.0	---	103	80-120%	---	---	
Carbon disulfide	20.3	5.00	10.0	ug/L	1	20.0	---	102	80-120%	---	---	
Carbon tetrachloride	11.7	1.00	1.00	ug/L	1	20.0	---	59	80-120%	---	---	Q-54k
Chlorobenzene	19.4	0.250	0.500	ug/L	1	20.0	---	97	80-120%	---	---	
Chloroethane	21.9	5.00	5.00	ug/L	1	20.0	---	110	80-120%	---	---	ICV-01
Chloroform	19.6	0.500	1.00	ug/L	1	20.0	---	98	80-120%	---	---	
Chloromethane	18.9	2.50	5.00	ug/L	1	20.0	---	95	80-120%	---	---	
2-Chlorotoluene	19.7	0.500	1.00	ug/L	1	20.0	---	98	80-120%	---	---	
4-Chlorotoluene	19.8	0.500	1.00	ug/L	1	20.0	---	99	80-120%	---	---	
Dibromochloromethane	13.7	1.00	1.00	ug/L	1	20.0	---	69	80-120%	---	---	Q-54d
1,2-Dibromo-3-chloropropane	9.53	5.00	5.00	ug/L	1	20.0	---	48	80-120%	---	---	Q-54n
1,2-Dibromoethane (EDB)	15.0	0.500	0.500	ug/L	1	20.0	---	75	80-120%	---	---	Q-55
Dibromomethane	21.6	0.500	1.00	ug/L	1	20.0	---	108	80-120%	---	---	
1,2-Dichlorobenzene	20.7	0.250	0.500	ug/L	1	20.0	---	104	80-120%	---	---	
1,3-Dichlorobenzene	20.4	0.250	0.500	ug/L	1	20.0	---	102	80-120%	---	---	
1,4-Dichlorobenzene	19.4	0.250	0.500	ug/L	1	20.0	---	97	80-120%	---	---	
Dichlorodifluoromethane	20.6	0.500	1.00	ug/L	1	20.0	---	103	80-120%	---	---	
1,1-Dichloroethane	19.4	0.200	0.400	ug/L	1	20.0	---	97	80-120%	---	---	

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Darwin Thomas, Business Development Director

Page 49 of 85



## 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-MGP Only Mon. Wells 1Q 2023 Perf. Mon.

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3C0878 - 05 19 23 0528

## 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 23C1149 - EPA 5030C						Water						
LCS (23C1149-BS1)						Prepared: 03/29/23 09:42 Analyzed: 03/29/23 11:28						Q-50
1,2-Dichloroethane (EDC)	20.4	0.200	0.400	ug/L	1	20.0	---	102	80-120%	---	---	
1,1-Dichloroethene	19.6	0.200	0.400	ug/L	1	20.0	---	98	80-120%	---	---	
cis-1,2-Dichloroethene	19.7	0.200	0.400	ug/L	1	20.0	---	99	80-120%	---	---	
trans-1,2-Dichloroethene	19.8	0.200	0.400	ug/L	1	20.0	---	99	80-120%	---	---	
1,2-Dichloropropane	18.6	0.250	0.500	ug/L	1	20.0	---	93	80-120%	---	---	
1,3-Dichloropropane	20.7	0.500	1.00	ug/L	1	20.0	---	103	80-120%	---	---	
2,2-Dichloropropane	8.42	1.00	1.00	ug/L	1	20.0	---	42	80-120%	---	---	Q-54o
1,1-Dichloropropene	20.6	0.500	1.00	ug/L	1	20.0	---	103	80-120%	---	---	
cis-1,3-Dichloropropene	14.2	1.00	1.00	ug/L	1	20.0	---	71	80-120%	---	---	Q-55
trans-1,3-Dichloropropene	10.3	1.00	1.00	ug/L	1	20.0	---	52	80-120%	---	---	Q-54m
Ethylbenzene	20.7	0.250	0.500	ug/L	1	20.0	---	104	80-120%	---	---	
Hexachlorobutadiene	23.3	2.50	5.00	ug/L	1	20.0	---	117	80-120%	---	---	
2-Hexanone	43.1	5.00	10.0	ug/L	1	40.0	---	108	80-120%	---	---	
Isopropylbenzene	21.1	0.500	1.00	ug/L	1	20.0	---	106	80-120%	---	---	
4-Isopropyltoluene	22.5	0.500	1.00	ug/L	1	20.0	---	112	80-120%	---	---	
Methylene chloride	19.3	5.00	10.0	ug/L	1	20.0	---	96	80-120%	---	---	
4-Methyl-2-pentanone (MiBK)	41.6	5.00	10.0	ug/L	1	40.0	---	104	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	15.8	1.00	1.00	ug/L	1	20.0	---	79	80-120%	---	---	Q-55
Naphthalene	18.3	1.00	2.00	ug/L	1	20.0	---	91	80-120%	---	---	
n-Propylbenzene	20.4	0.250	0.500	ug/L	1	20.0	---	102	80-120%	---	---	
Styrene	21.3	0.500	1.00	ug/L	1	20.0	---	106	80-120%	---	---	
1,1,1,2-Tetrachloroethane	13.4	0.400	0.400	ug/L	1	20.0	---	67	80-120%	---	---	Q-54f
1,1,2,2-Tetrachloroethane	18.9	0.250	0.500	ug/L	1	20.0	---	94	80-120%	---	---	
Tetrachloroethene (PCE)	20.4	0.200	0.400	ug/L	1	20.0	---	102	80-120%	---	---	
Toluene	18.6	0.500	1.00	ug/L	1	20.0	---	93	80-120%	---	---	
1,2,3-Trichlorobenzene	19.3	1.00	2.00	ug/L	1	20.0	---	96	80-120%	---	---	
1,2,4-Trichlorobenzene	19.9	1.00	2.00	ug/L	1	20.0	---	99	80-120%	---	---	
1,1,1-Trichloroethane	13.6	0.400	0.400	ug/L	1	20.0	---	68	80-120%	---	---	Q-54e
1,1,2-Trichloroethane	19.8	0.250	0.500	ug/L	1	20.0	---	99	80-120%	---	---	
Trichloroethene (TCE)	19.9	0.200	0.400	ug/L	1	20.0	---	100	80-120%	---	---	
Trichlorofluoromethane	24.4	1.00	2.00	ug/L	1	20.0	---	122	80-120%	---	---	Q-56
1,2,3-Trichloropropane	20.2	0.500	1.00	ug/L	1	20.0	---	101	80-120%	---	---	
1,2,4-Trimethylbenzene	21.3	0.500	1.00	ug/L	1	20.0	---	107	80-120%	---	---	
1,3,5-Trimethylbenzene	21.5	0.500	1.00	ug/L	1	20.0	---	108	80-120%	---	---	

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Darwin Thomas, Business Development Director

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# ANALYTICAL REPORT

Apex Laboratories, LLC

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

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125  
Portland, OR 97219

Project: Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3C0878 - 05 19 23 0528

## 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 23C1149 - EPA 5030C						Water						
LCS (23C1149-BS1)			Prepared: 03/29/23 09:42 Analyzed: 03/29/23 11:28						Q-50			
Vinyl chloride	19.6	0.200	0.400	ug/L	1	20.0	---	98	80-120%	---	---	
m,p-Xylene	41.0	0.500	1.00	ug/L	1	40.0	---	102	80-120%	---	---	
o-Xylene	20.6	0.250	0.500	ug/L	1	20.0	---	103	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 97 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		99 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		94 %		80-120 %		"						

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## ANALYTICAL REPORT

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A3C0878 - 05 19 23 0528

## QUALITY CONTROL (QC) SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

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

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Project Number: 000029-02.84 T-01.001E

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Report ID:

A3C0878 - 05 19 23 0528

## QUALITY CONTROL (QC) SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

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

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Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3C0878 - 05 19 23 0528

## QUALITY CONTROL (QC) SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

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

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Project: **Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3C0878 - 05 19 23 0528****QUALITY CONTROL (QC) SAMPLE RESULTS****Volatile Organic Compounds by EPA 8260D**

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

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Darwin Thomas, Business Development Director



## 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-MGP Only Mon. Wells 1Q 2023 Perf. Mon.

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3C0878 - 05 19 23 0528

## QUALITY CONTROL (QC) SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

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

## Duplicate (23D0016-DUP1)

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

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

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

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Project Manager: John Renda

Report ID:

A3C0878 - 05 19 23 0528

## QUALITY CONTROL (QC) SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

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

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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-MGP Only Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3C0878 - 05 19 23 0528**

## QUALITY CONTROL (QC) SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

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

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ORELAP ID: OR100062

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Project: **Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3C0878 - 05 19 23 0528**

## QUALITY CONTROL (QC) SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

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

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## QUALITY CONTROL (QC) SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

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

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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-MGP Only Mon. Wells 1Q 2023 Perf. Mon.

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3C0878 - 05 19 23 0528

## 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 23C1086 - EPA 3511 (Bottle Extraction)						Water						
Blank (23C1086-BLK1)			Prepared: 03/28/23 09:47   Analyzed: 03/28/23 15:10									
EPA 8270E LVI												
Acenaphthene	ND	0.0160	0.0320	ug/L	1	---	---	---	---	---	---	
Acenaphthylene	ND	0.0160	0.0320	ug/L	1	---	---	---	---	---	---	
Anthracene	ND	0.0160	0.0320	ug/L	1	---	---	---	---	---	---	
Benz(a)anthracene	ND	0.00800	0.0160	ug/L	1	---	---	---	---	---	---	
Benzo(a)pyrene	ND	0.00800	0.0160	ug/L	1	---	---	---	---	---	---	
Benzo(b)fluoranthene	ND	0.00800	0.0160	ug/L	1	---	---	---	---	---	---	
Benzo(k)fluoranthene	ND	0.00800	0.0160	ug/L	1	---	---	---	---	---	---	
Benzo(g,h,i)perylene	ND	0.0160	0.0320	ug/L	1	---	---	---	---	---	---	
Chrysene	ND	0.00800	0.0160	ug/L	1	---	---	---	---	---	---	
Dibenz(a,h)anthracene	ND	0.00800	0.0160	ug/L	1	---	---	---	---	---	---	
Fluoranthene	ND	0.0160	0.0320	ug/L	1	---	---	---	---	---	---	
Fluorene	ND	0.0160	0.0320	ug/L	1	---	---	---	---	---	---	
Indeno(1,2,3-cd)pyrene	ND	0.00800	0.0160	ug/L	1	---	---	---	---	---	---	
1-Methylnaphthalene	ND	0.0320	0.0640	ug/L	1	---	---	---	---	---	---	
2-Methylnaphthalene	ND	0.0320	0.0640	ug/L	1	---	---	---	---	---	---	
Naphthalene	ND	0.0320	0.0640	ug/L	1	---	---	---	---	---	---	
Phenanthrene	ND	0.0320	0.0640	ug/L	1	---	---	---	---	---	---	
Pyrene	ND	0.0160	0.0320	ug/L	1	---	---	---	---	---	---	
Carbazole	ND	0.0160	0.0320	ug/L	1	---	---	---	---	---	---	
Dibenzofuran	ND	0.0160	0.0320	ug/L	1	---	---	---	---	---	---	
Surr: Acenaphthylene-d8 (Surr)		Recovery: 121 %		Limits: 78-134 %		Dilution: 1x						
Benzo(a)pyrene-d12 (Surr)		128 %		80-132 %		"						

LCS (23C1086-BS1)

Prepared: 03/28/23 09:47 Analyzed: 03/28/23 15:43

EPA 8270E LVI												
Acenaphthene	1.59	0.0160	0.0320	ug/L	1	1.60	---	99	80-120%	---	---	
Acenaphthylene	1.78	0.0160	0.0320	ug/L	1	1.60	---	111	80-124%	---	---	
Anthracene	1.71	0.0160	0.0320	ug/L	1	1.60	---	107	80-123%	---	---	
Benz(a)anthracene	1.86	0.00800	0.0160	ug/L	1	1.60	---	116	80-122%	---	---	
Benzo(a)pyrene	2.07	0.00800	0.0160	ug/L	1	1.60	---	129	80-129%	---	---	
Benzo(b)fluoranthene	1.94	0.00800	0.0160	ug/L	1	1.60	---	121	80-124%	---	---	
Benzo(k)fluoranthene	1.97	0.00800	0.0160	ug/L	1	1.60	---	123	80-125%	---	---	
Benzo(g,h,i)perylene	1.57	0.0160	0.0320	ug/L	1	1.60	---	98	80-120%	---	---	

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Darwin Thomas, Business Development Director



## ANALYTICAL REPORT

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6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

## Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

Project: Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3C0878 - 05 19 23 0528

## 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 23C1086 - EPA 3511 (Bottle Extraction)						Water						
LCS (23C1086-BS1)			Prepared: 03/28/23 09:47		Analyzed: 03/28/23 15:43							
Chrysene	1.70	0.00800	0.0160	ug/L	1	1.60	---	106	80-120%	---	---	
Dibenz(a,h)anthracene	1.65	0.00800	0.0160	ug/L	1	1.60	---	103	80-120%	---	---	
Fluoranthene	1.71	0.0160	0.0320	ug/L	1	1.60	---	107	80-126%	---	---	
Fluorene	1.71	0.0160	0.0320	ug/L	1	1.60	---	107	77-127%	---	---	
Indeno(1,2,3-cd)pyrene	1.53	0.00800	0.0160	ug/L	1	1.60	---	96	80-121%	---	---	
1-Methylnaphthalene	1.76	0.0320	0.0640	ug/L	1	1.60	---	110	53-148%	---	---	
2-Methylnaphthalene	1.76	0.0320	0.0640	ug/L	1	1.60	---	110	48-150%	---	---	
Naphthalene	1.64	0.0320	0.0640	ug/L	1	1.60	---	102	78-120%	---	---	
Phenanthrene	1.55	0.0320	0.0640	ug/L	1	1.60	---	97	80-120%	---	---	
Pyrene	1.72	0.0160	0.0320	ug/L	1	1.60	---	108	80-125%	---	---	
Carbazole	1.98	0.0160	0.0320	ug/L	1	1.60	---	124	65-141%	---	---	
Dibenzofuran	1.68	0.0160	0.0320	ug/L	1	1.60	---	105	76-121%	---	---	
Surr: Acenaphthylene-d8 (Surr)		Recovery: 123 %		Limits: 78-134 %		Dilution: 1x						
Benzo(a)pyrene-d12 (Surr)		129 %		80-132 %		"						

LCS Dup (23C1086-BSD1)				Prepared: 03/28/23 09:47    Analyzed: 03/28/23 16:17								Q-19
EPA 8270E LVI												
Acenaphthene	1.67	0.0160	0.0320	ug/L	1	1.60	---	104	80-120%	5	30%	
Acenaphthylene	1.85	0.0160	0.0320	ug/L	1	1.60	---	116	80-124%	4	30%	
Anthracene	1.76	0.0160	0.0320	ug/L	1	1.60	---	110	80-123%	2	30%	
Benz(a)anthracene	1.85	0.00800	0.0160	ug/L	1	1.60	---	116	80-122%	0.3	30%	
Benzo(a)pyrene	2.12	0.00800	0.0160	ug/L	1	1.60	---	133	80-129%	2	30%	Q-29
Benzo(b)fluoranthene	2.00	0.00800	0.0160	ug/L	1	1.60	---	125	80-124%	3	30%	Q-29
Benzo(k)fluoranthene	2.03	0.00800	0.0160	ug/L	1	1.60	---	127	80-125%	3	30%	Q-29
Benzo(g,h,i)perylene	1.59	0.0160	0.0320	ug/L	1	1.60	---	100	80-120%	1	30%	
Chrysene	1.73	0.00800	0.0160	ug/L	1	1.60	---	108	80-120%	1	30%	
Dibenz(a,h)anthracene	1.64	0.00800	0.0160	ug/L	1	1.60	---	102	80-120%	0.6	30%	
Fluoranthene	1.76	0.0160	0.0320	ug/L	1	1.60	---	110	80-126%	2	30%	
Fluorene	1.77	0.0160	0.0320	ug/L	1	1.60	---	111	77-127%	4	30%	
Indeno(1,2,3-cd)pyrene	1.55	0.00800	0.0160	ug/L	1	1.60	---	97	80-121%	1	30%	
1-Methylnaphthalene	1.72	0.0320	0.0640	ug/L	1	1.60	---	107	53-148%	2	30%	
2-Methylnaphthalene	1.69	0.0320	0.0640	ug/L	1	1.60	---	105	48-150%	4	30%	
Naphthalene	1.69	0.0320	0.0640	ug/L	1	1.60	---	106	78-120%	3	30%	
Phenanthrene	1.61	0.0320	0.0640	ug/L	1	1.60	---	101	80-120%	4	30%	

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Darwin Thomas, Business Development Director



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Project: Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3C0878 - 05 19 23 0528

## 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 23C1086 - EPA 3511 (Bottle Extraction)						Water						
LCS Dup (23C1086-BSD1)			Prepared: 03/28/23 09:47 Analyzed: 03/28/23 16:17								Q-19	
Pyrene	1.76	0.0160	0.0320	ug/L	1	1.60	---	110	80-125%	2	30%	
Carbazole	2.04	0.0160	0.0320	ug/L	1	1.60	---	127	65-141%	3	30%	
Dibenzofuran	1.73	0.0160	0.0320	ug/L	1	1.60	---	108	76-121%	3	30%	
Surr: Acenaphthylene-d8 (Surr)		Recovery: 123 %		Limits: 78-134 %		Dilution: 1x						
Benzo(a)pyrene-d12 (Surr)		129 %		80-132 %		"						

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Page 63 of 85



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Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3C0878 - 05 19 23 0528

## 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 23D0084 - EPA 3015A						Water						
Blank (23D0084-BLK1)			Prepared: 04/04/23 09:27   Analyzed: 04/04/23 16:45									
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 (23D0084-BS1)

Prepared: 04/04/23 09:27 Analyzed: 04/04/23 16:50

EPA 6020B												
Aluminum	2940	25.0	50.0	ug/L	1	2780	---	106	80-120%	---	---	
Antimony	26.6	0.500	1.00	ug/L	1	27.8	---	96	80-120%	---	---	
Arsenic	54.4	0.500	1.00	ug/L	1	55.6	---	98	80-120%	---	---	
Barium	58.9	1.00	2.00	ug/L	1	55.6	---	106	80-120%	---	---	
Beryllium	26.5	0.100	0.200	ug/L	1	27.8	---	95	80-120%	---	---	
Cadmium	54.6	0.100	0.200	ug/L	1	55.6	---	98	80-120%	---	---	
Chromium	54.9	1.00	2.00	ug/L	1	55.6	---	99	80-120%	---	---	
Copper	55.8	1.00	2.00	ug/L	1	55.6	---	100	80-120%	---	---	
Iron	2890	25.0	50.0	ug/L	1	2780	---	104	80-120%	---	---	
Lead	54.7	0.110	0.200	ug/L	1	55.6	---	98	80-120%	---	---	
Manganese	57.6	0.500	1.00	ug/L	1	55.6	---	104	80-120%	---	---	
Mercury	1.02	0.0400	0.0800	ug/L	1	1.11	---	92	80-120%	---	---	

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Project: Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3C0878 - 05 19 23 0528

## 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 23D0084 - EPA 3015A						Water						
LCS (23D0084-BS1)			Prepared: 04/04/23 09:27   Analyzed: 04/04/23 16:50									
Nickel	57.2	1.00	2.00	ug/L	1	55.6	---	103	80-120%	---	---	
Selenium	27.5	0.500	1.00	ug/L	1	27.8	---	99	80-120%	---	---	
Silver	26.3	0.100	0.200	ug/L	1	27.8	---	95	80-120%	---	---	
Thallium	27.0	0.100	0.200	ug/L	1	27.8	---	97	80-120%	---	---	
Vanadium	55.2	1.00	2.00	ug/L	1	55.6	---	99	80-120%	---	---	
Zinc	58.6	2.00	4.00	ug/L	1	55.6	---	106	80-120%	---	---	

## Duplicate (23D0084-DUP1)

Prepared: 04/04/23 09:27 Analyzed: 04/04/23 17:00

QC Source Sample: GS-032323-55 (A3C0878-01)

## EPA 6020B

Aluminum	ND	25.0	50.0	ug/L	1	---	ND	---	---	---	20%	
Antimony	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	20%	
Arsenic	2.28	0.500	1.00	ug/L	1	---	2.36	---	---	3	20%	
Barium	53.2	1.00	2.00	ug/L	1	---	53.6	---	---	0.7	20%	
Beryllium	ND	0.100	0.200	ug/L	1	---	ND	---	---	---	20%	
Cadmium	ND	0.100	0.200	ug/L	1	---	ND	---	---	---	20%	
Chromium	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	20%	
Copper	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	20%	
Iron	22000	25.0	50.0	ug/L	1	---	22300	---	---	1	20%	
Lead	ND	0.110	0.200	ug/L	1	---	ND	---	---	---	20%	
Manganese	872	0.500	1.00	ug/L	1	---	880	---	---	1	20%	
Mercury	ND	0.0400	0.0800	ug/L	1	---	ND	---	---	---	20%	
Nickel	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	20%	
Selenium	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	20%	
Silver	ND	0.100	0.200	ug/L	1	---	ND	---	---	---	20%	
Thallium	ND	0.100	0.200	ug/L	1	---	ND	---	---	---	20%	
Vanadium	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	20%	
Zinc	3.74	2.00	4.00	ug/L	1	---	3.32	---	---	12	20%	J

## Matrix Spike (23D0084-MS1)

Prepared: 04/04/23 09:27 Analyzed: 04/04/23 17:05

QC Source Sample: GS-032323-55 (A3C0878-01)

## EPA 6020B

Aluminum	2850	25.0	50.0	ug/L	1	2780	ND	102	75-125%	---	---	
Antimony	27.9	0.500	1.00	ug/L	1	27.8	ND	100	75-125%	---	---	

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Project Manager: John Renda

Report ID:

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## QUALITY CONTROL (QC) SAMPLE RESULTS

### Total Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23D0084 - EPA 3015A						Water						
Matrix Spike (23D0084-MS1)				Prepared: 04/04/23 09:27		Analyzed: 04/04/23 17:05						
QC Source Sample: GS-032323-55 (A3C0878-01)												
Arsenic	56.8	0.500	1.00	ug/L	1	55.6	2.36	98	75-125%	---	---	
Barium	111	1.00	2.00	ug/L	1	55.6	53.6	104	75-125%	---	---	
Beryllium	28.0	0.100	0.200	ug/L	1	27.8	ND	101	75-125%	---	---	
Cadmium	54.2	0.100	0.200	ug/L	1	55.6	ND	97	75-125%	---	---	
Chromium	54.3	1.00	2.00	ug/L	1	55.6	ND	98	75-125%	---	---	
Copper	52.3	1.00	2.00	ug/L	1	55.6	ND	94	75-125%	---	---	
Iron	25100	25.0	50.0	ug/L	1	2780	22300	100	75-125%	---	---	
Lead	54.6	0.110	0.200	ug/L	1	55.6	ND	98	75-125%	---	---	
Manganese	942	0.500	1.00	ug/L	1	55.6	880	111	75-125%	---	---	
Mercury	1.04	0.0400	0.0800	ug/L	1	1.11	ND	94	75-125%	---	---	
Nickel	55.3	1.00	2.00	ug/L	1	55.6	ND	100	75-125%	---	---	
Selenium	28.2	0.500	1.00	ug/L	1	27.8	ND	102	75-125%	---	---	
Silver	26.3	0.100	0.200	ug/L	1	27.8	ND	95	75-125%	---	---	
Thallium	27.2	0.100	0.200	ug/L	1	27.8	ND	98	75-125%	---	---	
Vanadium	54.5	1.00	2.00	ug/L	1	55.6	ND	98	75-125%	---	---	
Zinc	59.0	2.00	4.00	ug/L	1	55.6	3.32	100	75-125%	---	---	

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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-MGP Only Mon. Wells 1Q 2023 Perf. Mon.

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3C0878 - 05 19 23 0528

## QUALITY CONTROL (QC) SAMPLE RESULTS

## Total Cyanide by Flow Analysis (Aqueous)

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

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Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

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A3C0878 - 05 19 23 0528

## 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 23C1246 - Method Prep: Aq						Water						
Blank (23C1246-BLK1)			Prepared: 03/31/23 13:48		Analyzed: 03/31/23 16:54							
<u>D6888-09</u>												
Available Cyanide	ND	0.00100	0.00200	mg/L	1	---	---	---	---	---	---	
LCS (23C1246-BS1)			Prepared: 03/31/23 13:48		Analyzed: 03/31/23 16:56							
<u>D6888-09</u>												
Available Cyanide	0.0235	0.00100	0.00200	mg/L	1	0.0250	---	94	90-117%	---	---	
Matrix Spike (23C1246-MS1)			Prepared: 03/31/23 13:48		Analyzed: 03/31/23 17:00							
<u>QC Source Sample: Non-SDG (A3C0830-12)</u>												
<u>D6888-09</u>												
Available Cyanide	0.0430	0.00101	0.00201	mg/L	1	0.0251	0.0160	107	82-130%	---	---	
Matrix Spike Dup (23C1246-MSD1)			Prepared: 03/31/23 13:48		Analyzed: 03/31/23 17:02							
<u>QC Source Sample: Non-SDG (A3C0830-12)</u>												
Available Cyanide	0.0428	0.00101	0.00201	mg/L	1	0.0251	0.0160	107	82-130%	0.3	11%	

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A3C0878 - 05 19 23 0528

## QUALITY CONTROL (QC) SAMPLE RESULTS

## Free Cyanide by Microdiffusion/Colorimetric Spectrophotometry

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

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## Analytical Resources, LLC

## QUALITY CONTROL (QC) SAMPLE RESULTS

## Washington Department of Ecology Methods

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

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

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

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

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# ANALYTICAL REPORT

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ORELAP ID: OR100062

**Anchor QEA, LLC**

6720 SW Macadam Ave. Suite 125  
Portland, OR 97219

Project: **Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.**

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

Project Manager: **John Renda**

**Report ID:**

**A3C0878 - 05 19 23 0528**

## Analytical Resources, LLC

### QUALITY CONTROL (QC) SAMPLE RESULTS

#### Washington Department of Ecology Methods

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

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## ANALYTICAL 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-MGP Only Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3C0878 - 05 19 23 0528**

## Analytical Resources, LLC

## QUALITY CONTROL (QC) SAMPLE RESULTS

## Washington Department of Ecology Methods

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

**LCS (BLC0828-BS1)**

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

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

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Project: **Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3C0878 - 05 19 23 0528****Analytical Resources, LLC****QUALITY CONTROL (QC) SAMPLE RESULTS****Washington Department of Ecology Methods**

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

**LCS Dup (BLC0828-BS1)**

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

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

Apex Laboratories

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Darwin Thomas, Business Development Director



# ANALYTICAL REPORT

Apex Laboratories, LLC

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

**Anchor QEA, LLC**

6720 SW Macadam Ave. Suite 125  
Portland, OR 97219

Project: **Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.**

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

Project Manager: **John Renda**

**Report ID:**

**A3C0878 - 05 19 23 0528**

## Analytical Resources, LLC

### QUALITY CONTROL (QC) SAMPLE RESULTS

#### Washington Department of Ecology Methods

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

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Portland, OR 97219Project: **Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3C0878 - 05 19 23 0528****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
<b>Batch: 23C1222</b>							
A3C0878-01	WG	NWTPH-Dx	03/23/23 11:10	03/30/23 11:34	1020mL/5mL	1000mL/5mL	0.98
A3C0878-02	WG	NWTPH-Dx	03/23/23 11:15	03/30/23 11:34	1040mL/5mL	1000mL/5mL	0.96
A3C0878-03	WG	NWTPH-Dx	03/23/23 14:50	03/30/23 11:34	1030mL/5mL	1000mL/5mL	0.97

**Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx****Prep: EPA 5030C**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<b>Batch: 23C1116</b>							
A3C0878-01RE1	WG	NWTPH-Gx (MS)	03/23/23 11:10	03/28/23 15:28	5mL/5mL	5mL/5mL	1.00
<b>Batch: 23C1149</b>							
A3C0878-03RE1	WG	NWTPH-Gx (MS)	03/23/23 14:50	03/29/23 09:42	5mL/5mL	5mL/5mL	1.00
<b>Batch: 23D0016</b>							
A3C0878-02RE1	WG	NWTPH-Gx (MS)	03/23/23 11:15	04/03/23 08:30	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
<b>Batch: 23C1116</b>							
A3C0878-01RE1	WG	EPA 8260D	03/23/23 11:10	03/28/23 15:28	5mL/5mL	5mL/5mL	1.00
A3C0878-04	W	EPA 8260D	03/23/23 15:30	03/28/23 15:28	5mL/5mL	5mL/5mL	1.00
<b>Batch: 23C1149</b>							
A3C0878-03RE1	WG	EPA 8260D	03/23/23 14:50	03/29/23 09:42	5mL/5mL	5mL/5mL	1.00
<b>Batch: 23D0016</b>							
A3C0878-02RE1	WG	EPA 8260D	03/23/23 11:15	04/03/23 08:30	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
<b>Batch: 23C1086</b>							
A3C0878-01	WG	EPA 8270E LVI	03/23/23 11:10	03/28/23 09:47	97.2mL/5mL	125mL/5mL	1.29
A3C0878-02RE1	WG	EPA 8270E LVI	03/23/23 11:15	03/28/23 09:47	122.79mL/5mL	125mL/5mL	1.02

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Portland, OR 97219

Project: **Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3C0878 - 05 19 23 0528****SAMPLE PREPARATION INFORMATION****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
A3C0878-03	WG	EPA 8270E LVI	03/23/23 14:50	03/28/23 09:47	97.01mL/5mL	125mL/5mL	1.29

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

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<b>Batch: 23D0084</b>							
A3C0878-01	WG	EPA 6020B	03/23/23 11:10	04/04/23 08:32	45mL/50mL	45mL/50mL	1.00
A3C0878-02	WG	EPA 6020B	03/23/23 11:15	04/04/23 08:32	45mL/50mL	45mL/50mL	1.00
A3C0878-03	WG	EPA 6020B	03/23/23 14:50	04/04/23 08:32	45mL/50mL	45mL/50mL	1.00
A3C0878-03RE1	WG	EPA 6020B	03/23/23 14:50	04/04/23 08:32	45mL/50mL	45mL/50mL	1.00

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

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<b>Batch: 23D0035</b>							
A3C0878-01	WG	EPA 335.4	03/23/23 11:10	04/03/23 10:10	6mL/6mL	6mL/6mL	1.00
A3C0878-02	WG	EPA 335.4	03/23/23 11:15	04/03/23 10:10	6mL/6mL	6mL/6mL	1.00
A3C0878-03	WG	EPA 335.4	03/23/23 14:50	04/03/23 10:10	6mL/6mL	6mL/6mL	1.00

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

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<b>Batch: 23C1246</b>							
A3C0878-01	WG	D6888-09	03/23/23 11:10	03/31/23 13:48	5mL/5mL	5mL/5mL	1.00
A3C0878-02	WG	D6888-09	03/23/23 11:15	03/31/23 13:48	5mL/5mL	5mL/5mL	1.00
A3C0878-03	WG	D6888-09	03/23/23 14:50	03/31/23 13:48	5mL/5mL	5mL/5mL	1.00

**Free Cyanide by Microdiffusion/Colorimetric Spectrophotometry****Prep: Microdiffusion**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<b>Batch: 23D0024</b>							
A3C0878-01	WG	D4282-02	03/23/23 11:10	04/03/23 10:10	3mL/3mL	3mL/3mL	1.00
A3C0878-02	WG	D4282-02	03/23/23 11:15	04/03/23 10:10	3mL/3mL	3mL/3mL	1.00

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Project Manager: John Renda

Report ID:

A3C0878 - 05 19 23 0528

SAMPLE PREPARATION INFORMATION

Free Cyanide by Microdiffusion/Colorimetric Spectrophotometry

Prep: Microdiffusion

						Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared		Initial/Final	Initial/Final	Factor
A3C0878-03	WG	D4282-02	03/23/23 14:50	04/03/23 10:10		3mL/3mL	3mL/3mL	1.00

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**Analytical Resources, LLC**

**SAMPLE PREPARATION INFORMATION**

**Washington Department of Ecology Methods**

Prep: EPA 3510C SepF

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<u>Batch: BLC0804</u>							
A3C0878-02	WG	WA EPH	03/23/23 11:15	03/30/23 11:37	500mL/1mL	500mL/1mL	1.00

Prep: EPA 5030C (Purge and Trap)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<u>Batch: BLC0828</u>							
A3C0878-02	WG	WA VPH	03/23/23 11:15	03/30/23 15:42	10mL/10ml	10mL/10ml	1.00

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## QUALIFIER DEFINITIONS

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

#### Apex Laboratories

- A-01** Trip Blank results copied from A3C0869-06
- E** Estimated Value. The result is above the calibration range of the instrument.
- ICV-01** Estimated Result. Initial Calibration Verification (ICV) failed high. There is no effect on non-detect results.
- J** Estimated Result. Result detected below the lowest point of the calibration curve, but above the specified MDL.
- PRES** Incomplete field preservation. Additional preservative was added to adjust the pH within the appropriate range for this analysis.
- Q-01** Spike recovery and/or RPD is outside acceptance limits.
- Q-03** Spike recovery and/or RPD is outside control limits due to the high concentration of analyte present in the sample.
- Q-19** Blank Spike Duplicate (BSD) sample analyzed in place of Matrix Spike/Duplicate samples due to limited sample amount available for analysis.
- Q-29** Recovery for Lab Control Spike (LCS) is above the upper control limit. Data may be biased high.
- Q-50** Due to instrument malfunction, not all Batch QC samples were analyzed. The batch is accepted based on the recoveries of the Blank Spike (BS).
- Q-54** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +3%. The results are reported as Estimated Values.
- Q-54a** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +4%. The results are reported as Estimated Values.
- Q-54b** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -1%. The results are reported as Estimated Values.
- Q-54c** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -10%. The results are reported as Estimated Values.
- Q-54d** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -11%. The results are reported as Estimated Values.
- Q-54e** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -12%. The results are reported as Estimated Values.
- Q-54f** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -13%. The results are reported as Estimated Values.
- Q-54g** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -16%. The results are reported as Estimated Values.
- Q-54h** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -17%. The results are reported as Estimated Values.
- Q-54i** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -2%. The results are reported as Estimated Values.

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**A3C0878 - 05 19 23 0528**

- Q-54j** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -20%. The results are reported as Estimated Values.
- Q-54k** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -21%. The results are reported as Estimated Values.
- Q-54l** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -27%. The results are reported as Estimated Values.
- Q-54m** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -28%. The results are reported as Estimated Values.
- Q-54n** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -32%. The results are reported as Estimated Values.
- Q-54o** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -38%. The results are reported as Estimated Values.
- Q-54p** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -7%. The results are reported as Estimated Values.
- Q-54q** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -9%. The results are reported as Estimated Values.
- Q-55** Daily CCV/LCS recovery for this analyte was below the +/-20% criteria listed in EPA 8260, however there is adequate sensitivity to ensure detection at the reporting level.
- Q-56** Daily CCV/LCS recovery for this analyte was above the +/-20% criteria listed in EPA 8260
- R-02** The Reporting Limit for this analyte has been raised to account for interference from coeluting organic compounds present in the sample.
- R-04** Reporting levels elevated due to preparation and/or analytical dilution necessary for analysis.
- S-05** Surrogate recovery is estimated due to sample dilution required for high analyte concentration and/or matrix interference.

**Analytical Resources, LLC**

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

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### REPORTING NOTES AND CONVENTIONS:

**Abbreviations:**

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

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

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

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

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

**Reporting Conventions:**

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

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

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

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

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

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

**QC Source:**

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

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

**Miscellaneous Notes:**

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

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

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

**Blanks:**

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

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

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

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

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

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

**Preparation Notes:**

**Mixed Matrix Samples:**

**Water Samples:**

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

**Soil and Sediment Samples:**

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

**Sampling and Preservation Notes:**

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

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

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

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

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### LABORATORY ACCREDITATION INFORMATION

**ORELAP Certification ID: OR100062 (Primary Accreditation)** -

**EPA ID: OR01039**

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

**Apex Laboratories**

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

**Secondary Accreditations**

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

**Subcontract Laboratory Accreditations**

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

**Field Testing Parameters**

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

Apex Laboratories

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

Darwin Thomas, Business Development Director





## ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

Project: Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3C0878 - 05 19 23 0528

## APEX LABS COOLER RECEIPT FORM

Client: Anchor QEA

Element WO#: A3 C0878

Project/Project #: 6000-MGP only Mon. Wells 1Q 2023 Perf. Mon.

## Delivery Info:

Date/time received: 3/24/23 @ 8:41 By: JS

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

Cooler Inspection Date/time inspected: 3/24/23 @ 9:40 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)	1.7						
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: 3/23/23 @ 12:42 By: JS

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 ☐

Comments: pH 9 on 125 ml brown poly for 66-95, 66-60

Additional information: IB # 3255

Labeled by: JS

Witness: AAW

Cooler Inspected by: JS

Form Y-003 R-00

Apex Laboratories

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Darwin Thomas, Business Development Director