



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: A3D1354 - Gasco-MGP Only-Prod. Wells 1Q 2023 Perf. Mon - 000029-02.84 T-01.001G

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 A3D1354, which was received by the laboratory on 4/19/2023 at 7:50:00AM.

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

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

Cooler Receipt Information

(See Cooler Receipt Form for details)

Cooler #1 1.6 degC

Cooler #2 3.1 degC

This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.

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



Apex Laboratories

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Darwin Thomas, Business Development Director

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ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125  
Portland, OR 97219Project: **Gasco-MGP Only-Prod. Wells 1Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001G**Project Manager: **John Renda****Report ID:****A3D1354 - 05 19 23 1322****ANALYTICAL REPORT FOR SAMPLES****SAMPLE INFORMATION**

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
GS-041823-80	A3D1354-01	WG	04/18/23 09:45	04/19/23 07:50
GS-041823-81	A3D1354-02	WG	04/18/23 10:20	04/19/23 07:50
GS-041823-82	A3D1354-03	WG	04/18/23 10:45	04/19/23 07:50
GS-041823-83	A3D1354-04	WG	04/18/23 12:00	04/19/23 07:50
GS-041823-84	A3D1354-05	WG	04/18/23 13:20	04/19/23 07:50
GS-041823-85	A3D1354-06	WG	04/18/23 14:00	04/19/23 07:50
GS-041823-86	A3D1354-07	WG	04/18/23 14:45	04/19/23 07:50
TB-041823	A3D1354-08	W	04/18/23 15:05	04/19/23 07:50

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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-041823-80 (A3D1354-01RE1)</b>				<b>Matrix: WG</b>		<b>Batch: 23D0866</b>		
Acetone	ND	10.0	20.0	ug/L	1	04/21/23 23:38	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	04/21/23 23:38	EPA 8260D	
Benzene	ND	0.100	0.200	ug/L	1	04/21/23 23:38	EPA 8260D	
Bromobenzene	ND	0.250	0.500	ug/L	1	04/21/23 23:38	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	04/21/23 23:38	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	04/21/23 23:38	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	04/21/23 23:38	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	04/21/23 23:38	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	04/21/23 23:38	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	04/21/23 23:38	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	04/21/23 23:38	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	04/21/23 23:38	EPA 8260D	
Carbon disulfide	ND	10.0	10.0	ug/L	1	04/21/23 23:38	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	04/21/23 23:38	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	04/21/23 23:38	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	04/21/23 23:38	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	04/21/23 23:38	EPA 8260D	
Chloromethane	ND	5.00	5.00	ug/L	1	04/21/23 23:38	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	04/21/23 23:38	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	04/21/23 23:38	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	04/21/23 23:38	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	04/21/23 23:38	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	04/21/23 23:38	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	04/21/23 23:38	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	04/21/23 23:38	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	04/21/23 23:38	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	04/21/23 23:38	EPA 8260D	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	04/21/23 23:38	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	04/21/23 23:38	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	04/21/23 23:38	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	04/21/23 23:38	EPA 8260D	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	04/21/23 23:38	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	04/21/23 23:38	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-041823-80 (A3D1354-01RE1)</b>				<b>Matrix: WG</b>		<b>Batch: 23D0866</b>		
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	04/21/23 23:38	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	04/21/23 23:38	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	04/21/23 23:38	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	04/21/23 23:38	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	04/21/23 23:38	EPA 8260D	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	04/21/23 23:38	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	04/21/23 23:38	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	04/21/23 23:38	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	04/21/23 23:38	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	04/21/23 23:38	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	04/21/23 23:38	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	04/21/23 23:38	EPA 8260D	
4-Methyl-2-pentanone (MIBK)	ND	5.00	10.0	ug/L	1	04/21/23 23:38	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	04/21/23 23:38	EPA 8260D	
Naphthalene	ND	1.00	2.00	ug/L	1	04/21/23 23:38	EPA 8260D	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	04/21/23 23:38	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	04/21/23 23:38	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	04/21/23 23:38	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	04/21/23 23:38	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.400	0.400	ug/L	1	04/21/23 23:38	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	04/21/23 23:38	EPA 8260D	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	04/21/23 23:38	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	04/21/23 23:38	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	04/21/23 23:38	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	04/21/23 23:38	EPA 8260D	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	04/21/23 23:38	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	04/21/23 23:38	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	04/21/23 23:38	EPA 8260D	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	04/21/23 23:38	EPA 8260D	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	04/21/23 23:38	EPA 8260D	
Vinyl chloride	ND	0.200	0.400	ug/L	1	04/21/23 23:38	EPA 8260D	
m,p-Xylene	ND	0.500	1.00	ug/L	1	04/21/23 23:38	EPA 8260D	
o-Xylene	ND	0.250	0.500	ug/L	1	04/21/23 23:38	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-041823-80 (A3D1354-01RE1)</b>		<b>Matrix: WG</b>			<b>Batch: 23D0866</b>			
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 94 %	Limits: 80-120 %	1		04/21/23 23:38	EPA 8260D	
Toluene-d8 (Surr)		101 %	80-120 %	1		04/21/23 23:38	EPA 8260D	
4-Bromofluorobenzene (Surr)		99 %	80-120 %	1		04/21/23 23:38	EPA 8260D	
<b>GS-041823-81 (A3D1354-02RE1)</b>		<b>Matrix: WG</b>			<b>Batch: 23D0866</b>			
Acetone	ND	20.0	20.0	ug/L	1	04/22/23 00:05	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	04/22/23 00:05	EPA 8260D	
Benzene	ND	0.100	0.200	ug/L	1	04/22/23 00:05	EPA 8260D	
Bromobenzene	ND	0.250	0.500	ug/L	1	04/22/23 00:05	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	04/22/23 00:05	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	04/22/23 00:05	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	04/22/23 00:05	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	04/22/23 00:05	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	04/22/23 00:05	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	04/22/23 00:05	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	04/22/23 00:05	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	04/22/23 00:05	EPA 8260D	
Carbon disulfide	ND	10.0	10.0	ug/L	1	04/22/23 00:05	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	04/22/23 00:05	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	04/22/23 00:05	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	04/22/23 00:05	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	04/22/23 00:05	EPA 8260D	
Chloromethane	ND	5.00	5.00	ug/L	1	04/22/23 00:05	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	04/22/23 00:05	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	04/22/23 00:05	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	04/22/23 00:05	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	04/22/23 00:05	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	04/22/23 00:05	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	04/22/23 00:05	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	04/22/23 00:05	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	04/22/23 00:05	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	04/22/23 00:05	EPA 8260D	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	04/22/23 00:05	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	04/22/23 00:05	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-041823-81 (A3D1354-02RE1)</b>				<b>Matrix: WG</b>		<b>Batch: 23D0866</b>		
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	04/22/23 00:05	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	04/22/23 00:05	EPA 8260D	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	04/22/23 00:05	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	04/22/23 00:05	EPA 8260D	
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	04/22/23 00:05	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	04/22/23 00:05	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	04/22/23 00:05	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	04/22/23 00:05	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	04/22/23 00:05	EPA 8260D	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	04/22/23 00:05	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	04/22/23 00:05	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	04/22/23 00:05	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	04/22/23 00:05	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	04/22/23 00:05	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	04/22/23 00:05	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	04/22/23 00:05	EPA 8260D	
4-Methyl-2-pentanone (MIBK)	ND	5.00	10.0	ug/L	1	04/22/23 00:05	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	04/22/23 00:05	EPA 8260D	
Naphthalene	ND	1.00	2.00	ug/L	1	04/22/23 00:05	EPA 8260D	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	04/22/23 00:05	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	04/22/23 00:05	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	04/22/23 00:05	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	04/22/23 00:05	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.400	0.400	ug/L	1	04/22/23 00:05	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	04/22/23 00:05	EPA 8260D	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	04/22/23 00:05	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	04/22/23 00:05	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	04/22/23 00:05	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	04/22/23 00:05	EPA 8260D	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	04/22/23 00:05	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	04/22/23 00:05	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	04/22/23 00:05	EPA 8260D	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	04/22/23 00:05	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-041823-81 (A3D1354-02RE1)</b>		<b>Matrix: WG</b>			<b>Batch: 23D0866</b>			
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	04/22/23 00:05	EPA 8260D	
Vinyl chloride	ND	0.200	0.400	ug/L	1	04/22/23 00:05	EPA 8260D	
m,p-Xylene	ND	0.500	1.00	ug/L	1	04/22/23 00:05	EPA 8260D	
o-Xylene	ND	0.250	0.500	ug/L	1	04/22/23 00:05	EPA 8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 95 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>04/22/23 00:05</i>	<i>EPA 8260D</i>	
<i>Toluene-d8 (Surr)</i>		<i>102 %</i>		<i>80-120 %</i>	<i>1</i>	<i>04/22/23 00:05</i>	<i>EPA 8260D</i>	
<i>4-Bromofluorobenzene (Surr)</i>		<i>98 %</i>		<i>80-120 %</i>	<i>1</i>	<i>04/22/23 00:05</i>	<i>EPA 8260D</i>	
<b>GS-041823-82 (A3D1354-03)</b>		<b>Matrix: WG</b>			<b>Batch: 23D0831</b>			
Acetone	ND	500	1000	ug/L	50	04/21/23 00:28	EPA 8260D	
Acrylonitrile	ND	50.0	100	ug/L	50	04/21/23 00:28	EPA 8260D	
<b>Benzene</b>	<b>3300</b>	5.00	10.0	ug/L	50	04/21/23 00:28	EPA 8260D	
Bromobenzene	ND	12.5	25.0	ug/L	50	04/21/23 00:28	EPA 8260D	
Bromochloromethane	ND	25.0	50.0	ug/L	50	04/21/23 00:28	EPA 8260D	
Bromodichloromethane	ND	25.0	50.0	ug/L	50	04/21/23 00:28	EPA 8260D	
Bromoform	ND	25.0	50.0	ug/L	50	04/21/23 00:28	EPA 8260D	
Bromomethane	ND	250	250	ug/L	50	04/21/23 00:28	EPA 8260D	
2-Butanone (MEK)	ND	250	500	ug/L	50	04/21/23 00:28	EPA 8260D	
n-Butylbenzene	ND	25.0	50.0	ug/L	50	04/21/23 00:28	EPA 8260D	
sec-Butylbenzene	ND	25.0	50.0	ug/L	50	04/21/23 00:28	EPA 8260D	
tert-Butylbenzene	ND	25.0	50.0	ug/L	50	04/21/23 00:28	EPA 8260D	
Carbon disulfide	ND	500	500	ug/L	50	04/21/23 00:28	EPA 8260D	
Carbon tetrachloride	ND	25.0	50.0	ug/L	50	04/21/23 00:28	EPA 8260D	
Chlorobenzene	ND	12.5	25.0	ug/L	50	04/21/23 00:28	EPA 8260D	
Chloroethane	ND	250	250	ug/L	50	04/21/23 00:28	EPA 8260D	
Chloroform	ND	25.0	50.0	ug/L	50	04/21/23 00:28	EPA 8260D	
Chloromethane	ND	125	250	ug/L	50	04/21/23 00:28	EPA 8260D	
2-Chlorotoluene	ND	25.0	50.0	ug/L	50	04/21/23 00:28	EPA 8260D	
4-Chlorotoluene	ND	25.0	50.0	ug/L	50	04/21/23 00:28	EPA 8260D	
Dibromochloromethane	ND	25.0	50.0	ug/L	50	04/21/23 00:28	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	125	250	ug/L	50	04/21/23 00:28	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	12.5	25.0	ug/L	50	04/21/23 00:28	EPA 8260D	
Dibromomethane	ND	25.0	50.0	ug/L	50	04/21/23 00:28	EPA 8260D	
1,2-Dichlorobenzene	ND	12.5	25.0	ug/L	50	04/21/23 00:28	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-Prod. Wells 1Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001G**Project Manager: **John Renda****Report ID:****A3D1354 - 05 19 23 1322**

## 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-041823-82 (A3D1354-03)</b>				<b>Matrix: WG</b>		<b>Batch: 23D0831</b>		
1,3-Dichlorobenzene	ND	12.5	25.0	ug/L	50	04/21/23 00:28	EPA 8260D	
1,4-Dichlorobenzene	ND	12.5	25.0	ug/L	50	04/21/23 00:28	EPA 8260D	
Dichlorodifluoromethane	ND	25.0	50.0	ug/L	50	04/21/23 00:28	EPA 8260D	
1,1-Dichloroethane	ND	10.0	20.0	ug/L	50	04/21/23 00:28	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	10.0	20.0	ug/L	50	04/21/23 00:28	EPA 8260D	
1,2-Dichloropropane	ND	12.5	25.0	ug/L	50	04/21/23 00:28	EPA 8260D	
1,3-Dichloropropane	ND	25.0	50.0	ug/L	50	04/21/23 00:28	EPA 8260D	
2,2-Dichloropropane	ND	25.0	50.0	ug/L	50	04/21/23 00:28	EPA 8260D	
1,1-Dichloropropene	ND	25.0	50.0	ug/L	50	04/21/23 00:28	EPA 8260D	
cis-1,3-Dichloropropene	ND	25.0	50.0	ug/L	50	04/21/23 00:28	EPA 8260D	
trans-1,3-Dichloropropene	ND	25.0	50.0	ug/L	50	04/21/23 00:28	EPA 8260D	
Ethylbenzene	ND	12.5	25.0	ug/L	50	04/21/23 00:28	EPA 8260D	
Hexachlorobutadiene	ND	125	250	ug/L	50	04/21/23 00:28	EPA 8260D	
2-Hexanone	ND	250	500	ug/L	50	04/21/23 00:28	EPA 8260D	
Isopropylbenzene	ND	25.0	50.0	ug/L	50	04/21/23 00:28	EPA 8260D	
4-Isopropyltoluene	ND	25.0	50.0	ug/L	50	04/21/23 00:28	EPA 8260D	
Methylene chloride	ND	250	500	ug/L	50	04/21/23 00:28	EPA 8260D	
4-Methyl-2-pentanone (MiBK)	ND	250	500	ug/L	50	04/21/23 00:28	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	25.0	50.0	ug/L	50	04/21/23 00:28	EPA 8260D	
n-Propylbenzene	ND	12.5	25.0	ug/L	50	04/21/23 00:28	EPA 8260D	
Styrene	ND	25.0	50.0	ug/L	50	04/21/23 00:28	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	10.0	20.0	ug/L	50	04/21/23 00:28	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	12.5	25.0	ug/L	50	04/21/23 00:28	EPA 8260D	
Toluene	ND	25.0	50.0	ug/L	50	04/21/23 00:28	EPA 8260D	
1,2,3-Trichlorobenzene	ND	50.0	100	ug/L	50	04/21/23 00:28	EPA 8260D	
1,2,4-Trichlorobenzene	ND	50.0	100	ug/L	50	04/21/23 00:28	EPA 8260D	
1,1,1-Trichloroethane	ND	10.0	20.0	ug/L	50	04/21/23 00:28	EPA 8260D	
1,1,2-Trichloroethane	ND	12.5	25.0	ug/L	50	04/21/23 00:28	EPA 8260D	
Trichlorofluoromethane	ND	50.0	100	ug/L	50	04/21/23 00:28	EPA 8260D	
1,2,3-Trichloropropane	ND	25.0	50.0	ug/L	50	04/21/23 00:28	EPA 8260D	
1,2,4-Trimethylbenzene	ND	25.0	50.0	ug/L	50	04/21/23 00:28	EPA 8260D	
1,3,5-Trimethylbenzene	ND	25.0	50.0	ug/L	50	04/21/23 00:28	EPA 8260D	
m,p-Xylene	ND	25.0	50.0	ug/L	50	04/21/23 00:28	EPA 8260D	

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Darwin Thomas, Business Development Director





## ANALYTICAL REPORT

Apex Laboratories, LLC

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

## Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125  
Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001G

Project Manager: John Renda

Report ID:

A3D1354 - 05 19 23 1322

## ANALYTICAL SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-041823-82 (A3D1354-03)				Matrix: WG		Batch: 23D0831		
o-Xylene	ND	12.5	25.0	ug/L	50	04/21/23 00:28	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 91 %		Limits: 80-120 %	1	04/21/23 00:28	EPA 8260D	
Toluene-d8 (Surr)		102 %		80-120 %	1	04/21/23 00:28	EPA 8260D	
4-Bromofluorobenzene (Surr)		111 %		80-120 %	1	04/21/23 00:28	EPA 8260D	
GS-041823-82 (A3D1354-03RE1)				Matrix: WG		Batch: 23D0866		
Naphthalene	58.0	50.0	100	ug/L	50	04/22/23 02:48	EPA 8260D	J
Tetrachloroethene (PCE)	ND	20.0	20.0	ug/L	50	04/22/23 02:48	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 92 %		Limits: 80-120 %	1	04/22/23 02:48	EPA 8260D	
Toluene-d8 (Surr)		102 %		80-120 %	1	04/22/23 02:48	EPA 8260D	
4-Bromofluorobenzene (Surr)		100 %		80-120 %	1	04/22/23 02:48	EPA 8260D	
GS-041823-83 (A3D1354-04RE1)				Matrix: WG		Batch: 23D0866		
Acetone	22.0	10.0	20.0	ug/L	1	04/22/23 00:32	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	04/22/23 00:32	EPA 8260D	
Benzene	11.4	0.100	0.200	ug/L	1	04/22/23 00:32	EPA 8260D	
Bromobenzene	ND	0.250	0.500	ug/L	1	04/22/23 00:32	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	04/22/23 00:32	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	04/22/23 00:32	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	04/22/23 00:32	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	04/22/23 00:32	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	04/22/23 00:32	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	04/22/23 00:32	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	04/22/23 00:32	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	04/22/23 00:32	EPA 8260D	
Carbon disulfide	ND	10.0	10.0	ug/L	1	04/22/23 00:32	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	04/22/23 00:32	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	04/22/23 00:32	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	04/22/23 00:32	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	04/22/23 00:32	EPA 8260D	
Chloromethane	ND	5.00	5.00	ug/L	1	04/22/23 00:32	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	04/22/23 00:32	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	04/22/23 00:32	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	04/22/23 00:32	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-Prod. Wells 1Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001G**Project Manager: **John Renda****Report ID:****A3D1354 - 05 19 23 1322**

## 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-041823-83 (A3D1354-04RE1)</b>				<b>Matrix: WG</b>		<b>Batch: 23D0866</b>		
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	04/22/23 00:32	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	04/22/23 00:32	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	04/22/23 00:32	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	04/22/23 00:32	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	04/22/23 00:32	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	04/22/23 00:32	EPA 8260D	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	04/22/23 00:32	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	04/22/23 00:32	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	04/22/23 00:32	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	04/22/23 00:32	EPA 8260D	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	04/22/23 00:32	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	04/22/23 00:32	EPA 8260D	
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	04/22/23 00:32	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	04/22/23 00:32	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	04/22/23 00:32	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	04/22/23 00:32	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	04/22/23 00:32	EPA 8260D	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	04/22/23 00:32	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	04/22/23 00:32	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	04/22/23 00:32	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	04/22/23 00:32	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	04/22/23 00:32	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	04/22/23 00:32	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	04/22/23 00:32	EPA 8260D	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	04/22/23 00:32	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	04/22/23 00:32	EPA 8260D	
Naphthalene	ND	1.00	2.00	ug/L	1	04/22/23 00:32	EPA 8260D	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	04/22/23 00:32	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	04/22/23 00:32	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	04/22/23 00:32	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	04/22/23 00:32	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.400	0.400	ug/L	1	04/22/23 00:32	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	04/22/23 00:32	EPA 8260D	

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Darwin Thomas, Business Development Director



## ANALYTICAL REPORT

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503-718-2323  
ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125  
Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001G

Project Manager: John Renda

Report ID:

A3D1354 - 05 19 23 1322

## ANALYTICAL SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-041823-83 (A3D1354-04RE1)		Matrix: WG			Batch: 23D0866			
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	04/22/23 00:32	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	04/22/23 00:32	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	04/22/23 00:32	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	04/22/23 00:32	EPA 8260D	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	04/22/23 00:32	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	04/22/23 00:32	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	04/22/23 00:32	EPA 8260D	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	04/22/23 00:32	EPA 8260D	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	04/22/23 00:32	EPA 8260D	
Vinyl chloride	ND	0.200	0.400	ug/L	1	04/22/23 00:32	EPA 8260D	
m,p-Xylene	ND	0.500	1.00	ug/L	1	04/22/23 00:32	EPA 8260D	
o-Xylene	ND	0.250	0.500	ug/L	1	04/22/23 00:32	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 93 %		Limits: 80-120 %	1	04/22/23 00:32	EPA 8260D	
Toluene-d8 (Surr)		101 %		80-120 %	1	04/22/23 00:32	EPA 8260D	
4-Bromofluorobenzene (Surr)		98 %		80-120 %	1	04/22/23 00:32	EPA 8260D	
GS-041823-84 (A3D1354-05RE1)		Matrix: WG			Batch: 23D0866			
Acetone	ND	20.0	20.0	ug/L	1	04/22/23 00:59	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	04/22/23 00:59	EPA 8260D	
<b>Benzene</b>	<b>20.5</b>	0.100	0.200	ug/L	1	04/22/23 00:59	EPA 8260D	
Bromobenzene	ND	0.250	0.500	ug/L	1	04/22/23 00:59	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	04/22/23 00:59	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	04/22/23 00:59	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	04/22/23 00:59	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	04/22/23 00:59	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	04/22/23 00:59	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	04/22/23 00:59	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	04/22/23 00:59	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	04/22/23 00:59	EPA 8260D	
Carbon disulfide	ND	10.0	10.0	ug/L	1	04/22/23 00:59	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	04/22/23 00:59	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	04/22/23 00:59	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	04/22/23 00:59	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	04/22/23 00:59	EPA 8260D	

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Darwin Thomas, Business Development Director



## ANALYTICAL REPORT

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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-Prod. Wells 1Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001G**Project Manager: **John Renda****Report ID:****A3D1354 - 05 19 23 1322**

## 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-041823-84 (A3D1354-05RE1)</b>				<b>Matrix: WG</b>		<b>Batch: 23D0866</b>		
Chloromethane	ND	5.00	5.00	ug/L	1	04/22/23 00:59	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	04/22/23 00:59	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	04/22/23 00:59	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	04/22/23 00:59	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	04/22/23 00:59	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	04/22/23 00:59	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	04/22/23 00:59	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	04/22/23 00:59	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	04/22/23 00:59	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	04/22/23 00:59	EPA 8260D	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	04/22/23 00:59	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	04/22/23 00:59	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	04/22/23 00:59	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	04/22/23 00:59	EPA 8260D	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	04/22/23 00:59	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	04/22/23 00:59	EPA 8260D	
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	04/22/23 00:59	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	04/22/23 00:59	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	04/22/23 00:59	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	04/22/23 00:59	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	04/22/23 00:59	EPA 8260D	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	04/22/23 00:59	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	04/22/23 00:59	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	04/22/23 00:59	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	04/22/23 00:59	EPA 8260D	
<b>Isopropylbenzene</b>	<b>1.04</b>	0.500	1.00	ug/L	1	04/22/23 00:59	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	04/22/23 00:59	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	04/22/23 00:59	EPA 8260D	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	04/22/23 00:59	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	04/22/23 00:59	EPA 8260D	
Naphthalene	ND	1.00	2.00	ug/L	1	04/22/23 00:59	EPA 8260D	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	04/22/23 00:59	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	04/22/23 00:59	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-Prod. Wells 1Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001G**Project Manager: **John Renda****Report ID:****A3D1354 - 05 19 23 1322**

## 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-041823-84 (A3D1354-05RE1)</b>		<b>Matrix: WG</b>			<b>Batch: 23D0866</b>			
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	04/22/23 00:59	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	04/22/23 00:59	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.400	0.400	ug/L	1	04/22/23 00:59	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	04/22/23 00:59	EPA 8260D	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	04/22/23 00:59	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	04/22/23 00:59	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	04/22/23 00:59	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	04/22/23 00:59	EPA 8260D	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	04/22/23 00:59	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	04/22/23 00:59	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	04/22/23 00:59	EPA 8260D	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	04/22/23 00:59	EPA 8260D	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	04/22/23 00:59	EPA 8260D	
Vinyl chloride	ND	0.200	0.400	ug/L	1	04/22/23 00:59	EPA 8260D	
m,p-Xylene	ND	0.500	1.00	ug/L	1	04/22/23 00:59	EPA 8260D	
o-Xylene	ND	0.250	0.500	ug/L	1	04/22/23 00:59	EPA 8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 92 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>04/22/23 00:59</i>	<i>EPA 8260D</i>	
<i>Toluene-d8 (Surr)</i>		<i>101 %</i>		<i>80-120 %</i>	<i>1</i>	<i>04/22/23 00:59</i>	<i>EPA 8260D</i>	
<i>4-Bromofluorobenzene (Surr)</i>		<i>93 %</i>		<i>80-120 %</i>	<i>1</i>	<i>04/22/23 00:59</i>	<i>EPA 8260D</i>	
<b>GS-041823-85 (A3D1354-06RE1)</b>		<b>Matrix: WG</b>			<b>Batch: 23D0866</b>			
Acetone	ND	10.0	20.0	ug/L	1	04/22/23 01:26	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	04/22/23 01:26	EPA 8260D	
<b>Benzene</b>	<b>86.0</b>	0.100	0.200	ug/L	1	04/22/23 01:26	EPA 8260D	
Bromobenzene	ND	0.250	0.500	ug/L	1	04/22/23 01:26	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	04/22/23 01:26	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	04/22/23 01:26	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	04/22/23 01:26	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	04/22/23 01:26	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	04/22/23 01:26	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	04/22/23 01:26	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	04/22/23 01:26	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	04/22/23 01:26	EPA 8260D	
Carbon disulfide	ND	10.0	10.0	ug/L	1	04/22/23 01:26	EPA 8260D	

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Darwin Thomas, Business Development Director



## ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street  
Tigard, OR 97223  
503-718-2323  
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125  
Portland, OR 97219Project: **Gasco-MGP Only-Prod. Wells 1Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001G**Project Manager: **John Renda****Report ID:****A3D1354 - 05 19 23 1322**

## 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-041823-85 (A3D1354-06RE1)</b>		<b>Matrix: WG</b>			<b>Batch: 23D0866</b>			
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	04/22/23 01:26	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	04/22/23 01:26	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	04/22/23 01:26	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	04/22/23 01:26	EPA 8260D	
Chloromethane	ND	5.00	5.00	ug/L	1	04/22/23 01:26	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	04/22/23 01:26	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	04/22/23 01:26	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	04/22/23 01:26	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	04/22/23 01:26	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	04/22/23 01:26	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	04/22/23 01:26	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	04/22/23 01:26	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	04/22/23 01:26	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	04/22/23 01:26	EPA 8260D	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	04/22/23 01:26	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	04/22/23 01:26	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	04/22/23 01:26	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	04/22/23 01:26	EPA 8260D	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	04/22/23 01:26	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	04/22/23 01:26	EPA 8260D	
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	04/22/23 01:26	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	04/22/23 01:26	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	04/22/23 01:26	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	04/22/23 01:26	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	04/22/23 01:26	EPA 8260D	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	04/22/23 01:26	EPA 8260D	
<b>Ethylbenzene</b>	<b>0.510</b>	0.250	0.500	ug/L	1	04/22/23 01:26	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	04/22/23 01:26	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	04/22/23 01:26	EPA 8260D	
<b>Isopropylbenzene</b>	<b>1.24</b>	0.500	1.00	ug/L	1	04/22/23 01:26	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	04/22/23 01:26	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	04/22/23 01:26	EPA 8260D	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	04/22/23 01:26	EPA 8260D	

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Darwin Thomas, Business Development Director



## ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street  
Tigard, OR 97223  
503-718-2323  
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125  
Portland, OR 97219Project: **Gasco-MGP Only-Prod. Wells 1Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001G**Project Manager: **John Renda****Report ID:****A3D1354 - 05 19 23 1322**

## 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-041823-85 (A3D1354-06RE1)</b>		<b>Matrix: WG</b>			<b>Batch: 23D0866</b>			
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	04/22/23 01:26	EPA 8260D	
<b>Naphthalene</b>	<b>72.6</b>	1.00	2.00	ug/L	1	04/22/23 01:26	EPA 8260D	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	04/22/23 01:26	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	04/22/23 01:26	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	04/22/23 01:26	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	04/22/23 01:26	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.400	0.400	ug/L	1	04/22/23 01:26	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	04/22/23 01:26	EPA 8260D	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	04/22/23 01:26	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	04/22/23 01:26	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	04/22/23 01:26	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	04/22/23 01:26	EPA 8260D	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	04/22/23 01:26	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	04/22/23 01:26	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	04/22/23 01:26	EPA 8260D	
<b>1,2,4-Trimethylbenzene</b>	<b>1.46</b>	0.500	1.00	ug/L	1	04/22/23 01:26	EPA 8260D	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	04/22/23 01:26	EPA 8260D	
Vinyl chloride	ND	0.200	0.400	ug/L	1	04/22/23 01:26	EPA 8260D	
<b>m,p-Xylene</b>	<b>0.760</b>	0.500	1.00	ug/L	1	04/22/23 01:26	EPA 8260D	<b>J</b>
<b>o-Xylene</b>	<b>0.460</b>	0.250	0.500	ug/L	1	04/22/23 01:26	EPA 8260D	<b>J</b>
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 92 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>04/22/23 01:26</i>	<i>EPA 8260D</i>	
<i>Toluene-d8 (Surr)</i>		<i>100 %</i>		<i>80-120 %</i>	<i>1</i>	<i>04/22/23 01:26</i>	<i>EPA 8260D</i>	
<i>4-Bromofluorobenzene (Surr)</i>		<i>91 %</i>		<i>80-120 %</i>	<i>1</i>	<i>04/22/23 01:26</i>	<i>EPA 8260D</i>	

**GS-041823-86 (A3D1354-07RE1)****Matrix: WG****Batch: 23D0866**

Acetone	ND	10.0	20.0	ug/L	1	04/22/23 01:53	EPA 8260D
Acrylonitrile	ND	1.00	2.00	ug/L	1	04/22/23 01:53	EPA 8260D
Benzene	ND	0.200	0.200	ug/L	1	04/22/23 01:53	EPA 8260D
Bromobenzene	ND	0.250	0.500	ug/L	1	04/22/23 01:53	EPA 8260D
Bromochloromethane	ND	0.500	1.00	ug/L	1	04/22/23 01:53	EPA 8260D
Bromodichloromethane	ND	0.500	1.00	ug/L	1	04/22/23 01:53	EPA 8260D
Bromoform	ND	0.500	1.00	ug/L	1	04/22/23 01:53	EPA 8260D
Bromomethane	ND	5.00	5.00	ug/L	1	04/22/23 01:53	EPA 8260D
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	04/22/23 01:53	EPA 8260D

Apex Laboratories

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Darwin Thomas, Business Development Director



**ANALYTICAL REPORT****Apex Laboratories, LLC**6700 S.W. Sandburg Street  
Tigard, OR 97223  
503-718-2323  
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125  
Portland, OR 97219Project: **Gasco-MGP Only-Prod. Wells 1Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001G**Project Manager: **John Renda****Report ID:****A3D1354 - 05 19 23 1322****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-041823-86 (A3D1354-07RE1)</b>		<b>Matrix: WG</b>			<b>Batch: 23D0866</b>			
n-Butylbenzene	ND	0.500	1.00	ug/L	1	04/22/23 01:53	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	04/22/23 01:53	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	04/22/23 01:53	EPA 8260D	
Carbon disulfide	ND	10.0	10.0	ug/L	1	04/22/23 01:53	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	04/22/23 01:53	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	04/22/23 01:53	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	04/22/23 01:53	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	04/22/23 01:53	EPA 8260D	
Chloromethane	ND	5.00	5.00	ug/L	1	04/22/23 01:53	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	04/22/23 01:53	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	04/22/23 01:53	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	04/22/23 01:53	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	04/22/23 01:53	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	04/22/23 01:53	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	04/22/23 01:53	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	04/22/23 01:53	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	04/22/23 01:53	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	04/22/23 01:53	EPA 8260D	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	04/22/23 01:53	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	04/22/23 01:53	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	04/22/23 01:53	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	04/22/23 01:53	EPA 8260D	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	04/22/23 01:53	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	04/22/23 01:53	EPA 8260D	
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	04/22/23 01:53	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	04/22/23 01:53	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	04/22/23 01:53	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	04/22/23 01:53	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	04/22/23 01:53	EPA 8260D	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	04/22/23 01:53	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	04/22/23 01:53	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	04/22/23 01:53	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	04/22/23 01:53	EPA 8260D	

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Darwin Thomas, Business Development Director



## ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street  
Tigard, OR 97223  
503-718-2323  
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125  
Portland, OR 97219Project: **Gasco-MGP Only-Prod. Wells 1Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001G**Project Manager: **John Renda****Report ID:****A3D1354 - 05 19 23 1322**

## 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-041823-86 (A3D1354-07RE1)</b>		<b>Matrix: WG</b>			<b>Batch: 23D0866</b>			
Isopropylbenzene	ND	0.500	1.00	ug/L	1	04/22/23 01:53	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	04/22/23 01:53	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	04/22/23 01:53	EPA 8260D	
4-Methyl-2-pentanone (MIBK)	ND	5.00	10.0	ug/L	1	04/22/23 01:53	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	04/22/23 01:53	EPA 8260D	
Naphthalene	ND	1.00	2.00	ug/L	1	04/22/23 01:53	EPA 8260D	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	04/22/23 01:53	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	04/22/23 01:53	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	04/22/23 01:53	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	04/22/23 01:53	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.400	0.400	ug/L	1	04/22/23 01:53	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	04/22/23 01:53	EPA 8260D	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	04/22/23 01:53	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	04/22/23 01:53	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	04/22/23 01:53	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	04/22/23 01:53	EPA 8260D	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	04/22/23 01:53	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	04/22/23 01:53	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	04/22/23 01:53	EPA 8260D	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	04/22/23 01:53	EPA 8260D	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	04/22/23 01:53	EPA 8260D	
Vinyl chloride	ND	0.200	0.400	ug/L	1	04/22/23 01:53	EPA 8260D	
m,p-Xylene	ND	0.500	1.00	ug/L	1	04/22/23 01:53	EPA 8260D	
o-Xylene	ND	0.250	0.500	ug/L	1	04/22/23 01:53	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 94 %		Limits: 80-120 %	1	04/22/23 01:53	EPA 8260D	
Toluene-d8 (Surr)		101 %		80-120 %	1	04/22/23 01:53	EPA 8260D	
4-Bromofluorobenzene (Surr)		99 %		80-120 %	1	04/22/23 01:53	EPA 8260D	

**TB-041823 (A3D1354-08)****Matrix: W****Batch: 23D0859**

Acetone	ND	20.0	20.0	ug/L	1	04/21/23 11:09	EPA 8260D
Acrylonitrile	ND	1.00	2.00	ug/L	1	04/21/23 11:09	EPA 8260D
Benzene	ND	0.100	0.200	ug/L	1	04/21/23 11:09	EPA 8260D
Bromobenzene	ND	0.250	0.500	ug/L	1	04/21/23 11:09	EPA 8260D
Bromochloromethane	ND	0.500	1.00	ug/L	1	04/21/23 11:09	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-Prod. Wells 1Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001G**Project Manager: **John Renda****Report ID:****A3D1354 - 05 19 23 1322**

## 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-041823 (A3D1354-08)</b>		<b>Matrix: W</b>			<b>Batch: 23D0859</b>			
Bromodichloromethane	ND	0.500	1.00	ug/L	1	04/21/23 11:09	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	04/21/23 11:09	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	04/21/23 11:09	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	04/21/23 11:09	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	04/21/23 11:09	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	04/21/23 11:09	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	04/21/23 11:09	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	04/21/23 11:09	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	04/21/23 11:09	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	04/21/23 11:09	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	04/21/23 11:09	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	04/21/23 11:09	EPA 8260D	
Chloromethane	ND	2.50	5.00	ug/L	1	04/21/23 11:09	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	04/21/23 11:09	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	04/21/23 11:09	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	04/21/23 11:09	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	5.00	5.00	ug/L	1	04/21/23 11:09	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	04/21/23 11:09	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	04/21/23 11:09	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	04/21/23 11:09	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	04/21/23 11:09	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	04/21/23 11:09	EPA 8260D	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	04/21/23 11:09	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	04/21/23 11:09	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	04/21/23 11:09	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	04/21/23 11:09	EPA 8260D	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	04/21/23 11:09	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	04/21/23 11:09	EPA 8260D	
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	04/21/23 11:09	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	04/21/23 11:09	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	04/21/23 11:09	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	04/21/23 11:09	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	04/21/23 11:09	EPA 8260D	

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Darwin Thomas, Business Development Director



## ANALYTICAL REPORT

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503-718-2323  
ORELAP ID: OR100062

## Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125  
Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001G

Project Manager: John Renda

Report ID:

A3D1354 - 05 19 23 1322

## ANALYTICAL SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
TB-041823 (A3D1354-08)		Matrix: W			Batch: 23D0859			
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	04/21/23 11:09	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	04/21/23 11:09	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	04/21/23 11:09	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	04/21/23 11:09	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	04/21/23 11:09	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	04/21/23 11:09	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	04/21/23 11:09	EPA 8260D	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	04/21/23 11:09	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	04/21/23 11:09	EPA 8260D	
Naphthalene	ND	1.00	2.00	ug/L	1	04/21/23 11:09	EPA 8260D	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	04/21/23 11:09	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	04/21/23 11:09	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	04/21/23 11:09	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	04/21/23 11:09	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	04/21/23 11:09	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	04/21/23 11:09	EPA 8260D	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	04/21/23 11:09	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	04/21/23 11:09	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	04/21/23 11:09	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	04/21/23 11:09	EPA 8260D	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	04/21/23 11:09	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	04/21/23 11:09	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	04/21/23 11:09	EPA 8260D	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	04/21/23 11:09	EPA 8260D	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	04/21/23 11:09	EPA 8260D	
Vinyl chloride	ND	0.200	0.400	ug/L	1	04/21/23 11:09	EPA 8260D	
m,p-Xylene	ND	0.500	1.00	ug/L	1	04/21/23 11:09	EPA 8260D	
o-Xylene	ND	0.250	0.500	ug/L	1	04/21/23 11:09	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 106 %		Limits: 80-120 %	1	04/21/23 11:09	EPA 8260D	
Toluene-d8 (Surr)		106 %		80-120 %	1	04/21/23 11:09	EPA 8260D	
4-Bromofluorobenzene (Surr)		98 %		80-120 %	1	04/21/23 11:09	EPA 8260D	

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# ANALYTICAL REPORT

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Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001G

Project Manager: John Renda

Report ID:

A3D1354 - 05 19 23 1322

## ANALYTICAL SAMPLE RESULTS

### Volatile Organic Compounds by EPA 8260D SIM

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-041823-82 (A3D1354-03)		Matrix: WG			Batch: 23D0991			
1,1-Dichloroethene	ND	0.250	0.500	ug/L	25	04/25/23 21:38	EPA 8260D SIM	
cis-1,2-Dichloroethene	ND	0.250	0.500	ug/L	25	04/25/23 21:38	EPA 8260D SIM	
trans-1,2-Dichloroethene	ND	0.250	0.500	ug/L	25	04/25/23 21:38	EPA 8260D SIM	
Trichloroethene (TCE)	ND	0.250	0.500	ug/L	25	04/25/23 21:38	EPA 8260D SIM	
Vinyl chloride	ND	0.250	0.500	ug/L	25	04/25/23 21:38	EPA 8260D SIM	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 100 %		Limits: 80-120 %	1	04/25/23 21:38	EPA 8260D SIM	
Toluene-d8 (Surr)		101 %		80-120 %	1	04/25/23 21:38	EPA 8260D SIM	
4-Bromofluorobenzene (Surr)		98 %		80-120 %	1	04/25/23 21:38	EPA 8260D SIM	

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## ANALYTICAL REPORT

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Project Number: 000029-02.84 T-01.001G

Project Manager: John Renda

Report ID:

A3D1354 - 05 19 23 1322

## 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-041823-80 (A3D1354-01)		Matrix: WG			Batch: 23D0846			
Acenaphthene	3.73	0.0197	0.0395	ug/L	1	04/21/23 22:17	EPA 8270E LVI	
Acenaphthylene	0.308	0.0197	0.0395	ug/L	1	04/21/23 22:17	EPA 8270E LVI	
Anthracene	0.0266	0.0197	0.0395	ug/L	1	04/21/23 22:17	EPA 8270E LVI	J
Benz(a)anthracene	ND	0.00986	0.0197	ug/L	1	04/21/23 22:17	EPA 8270E LVI	
Benzo(a)pyrene	ND	0.00986	0.0197	ug/L	1	04/21/23 22:17	EPA 8270E LVI	
Benzo(b)fluoranthene	ND	0.00986	0.0197	ug/L	1	04/21/23 22:17	EPA 8270E LVI	
Benzo(k)fluoranthene	ND	0.00986	0.0197	ug/L	1	04/21/23 22:17	EPA 8270E LVI	
Benzo(g,h,i)perylene	ND	0.0197	0.0395	ug/L	1	04/21/23 22:17	EPA 8270E LVI	
Chrysene	ND	0.00986	0.0197	ug/L	1	04/21/23 22:17	EPA 8270E LVI	
Dibenz(a,h)anthracene	ND	0.00986	0.0197	ug/L	1	04/21/23 22:17	EPA 8270E LVI	
Fluoranthene	ND	0.0197	0.0395	ug/L	1	04/21/23 22:17	EPA 8270E LVI	
Fluorene	0.0434	0.0197	0.0395	ug/L	1	04/21/23 22:17	EPA 8270E LVI	
Indeno(1,2,3-cd)pyrene	ND	0.00986	0.0197	ug/L	1	04/21/23 22:17	EPA 8270E LVI	
1-Methylnaphthalene	0.571	0.0395	0.0789	ug/L	1	04/21/23 22:17	EPA 8270E LVI	
2-Methylnaphthalene	ND	0.0395	0.0789	ug/L	1	04/21/23 22:17	EPA 8270E LVI	
Naphthalene	0.532	0.0395	0.0789	ug/L	1	04/21/23 22:17	EPA 8270E LVI	
Phenanthrene	ND	0.0395	0.0789	ug/L	1	04/21/23 22:17	EPA 8270E LVI	
Pyrene	ND	0.0197	0.0395	ug/L	1	04/21/23 22:17	EPA 8270E LVI	
Carbazole	0.0478	0.0197	0.0395	ug/L	1	04/21/23 22:17	EPA 8270E LVI	
Dibenzofuran	ND	0.0197	0.0395	ug/L	1	04/21/23 22:17	EPA 8270E LVI	
Surrogate: Acenaphthylene-d8 (Surr)		Recovery:	125 %	Limits:	78-134 %	1	04/21/23 22:17	EPA 8270E LVI Q-41
Benzo(a)pyrene-d12 (Surr)			125 %		80-132 %	1	04/21/23 22:17	EPA 8270E LVI
GS-041823-81 (A3D1354-02)		Matrix: WG			Batch: 23D0846			
Acenaphthene	1.47	0.0214	0.0428	ug/L	1	04/21/23 22:50	EPA 8270E LVI	
Acenaphthylene	0.164	0.0214	0.0428	ug/L	1	04/21/23 22:50	EPA 8270E LVI	
Anthracene	ND	0.0214	0.0428	ug/L	1	04/21/23 22:50	EPA 8270E LVI	
Benz(a)anthracene	ND	0.0107	0.0214	ug/L	1	04/21/23 22:50	EPA 8270E LVI	
Benzo(a)pyrene	ND	0.0107	0.0214	ug/L	1	04/21/23 22:50	EPA 8270E LVI	
Benzo(b)fluoranthene	ND	0.0107	0.0214	ug/L	1	04/21/23 22:50	EPA 8270E LVI	
Benzo(k)fluoranthene	ND	0.0107	0.0214	ug/L	1	04/21/23 22:50	EPA 8270E LVI	
Benzo(g,h,i)perylene	ND	0.0214	0.0428	ug/L	1	04/21/23 22:50	EPA 8270E LVI	
Chrysene	ND	0.0107	0.0214	ug/L	1	04/21/23 22:50	EPA 8270E LVI	

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Project Number: 000029-02.84 T-01.001G

Project Manager: John Renda

Report ID:

A3D1354 - 05 19 23 1322

## 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-041823-81 (A3D1354-02)		Matrix: WG			Batch: 23D0846			
Dibenz(a,h)anthracene	ND	0.0107	0.0214	ug/L	1	04/21/23 22:50	EPA 8270E LVI	
Fluoranthene	ND	0.0214	0.0428	ug/L	1	04/21/23 22:50	EPA 8270E LVI	
Fluorene	0.0268	0.0214	0.0428	ug/L	1	04/21/23 22:50	EPA 8270E LVI	J
Indeno(1,2,3-cd)pyrene	ND	0.0107	0.0214	ug/L	1	04/21/23 22:50	EPA 8270E LVI	
1-Methylnaphthalene	1.21	0.0428	0.0857	ug/L	1	04/21/23 22:50	EPA 8270E LVI	
2-Methylnaphthalene	ND	0.0428	0.0857	ug/L	1	04/21/23 22:50	EPA 8270E LVI	
Naphthalene	0.991	0.0428	0.0857	ug/L	1	04/21/23 22:50	EPA 8270E LVI	
Phenanthrene	ND	0.0428	0.0857	ug/L	1	04/21/23 22:50	EPA 8270E LVI	
Pyrene	ND	0.0214	0.0428	ug/L	1	04/21/23 22:50	EPA 8270E LVI	
Carbazole	0.0225	0.0214	0.0428	ug/L	1	04/21/23 22:50	EPA 8270E LVI	J
Dibenzofuran	ND	0.0214	0.0428	ug/L	1	04/21/23 22:50	EPA 8270E LVI	
Surrogate: Acenaphthylene-d8 (Surr)		Recovery:	126 %	Limits:	78-134 %	1	04/21/23 22:50	EPA 8270E LVI Q-41
Benzo(a)pyrene-d12 (Surr)			126 %		80-132 %	1	04/21/23 22:50	EPA 8270E LVI
GS-041823-82 (A3D1354-03)		Matrix: WG			Batch: 23D0846			
Acenaphthene	58.2	0.976	1.95	ug/L	50	04/21/23 16:08	EPA 8270E LVI	
Acenaphthylene	ND	5.49	5.49	ug/L	50	04/21/23 16:08	EPA 8270E LVI	R-02
Anthracene	ND	1.95	1.95	ug/L	50	04/21/23 16:08	EPA 8270E LVI	
Benz(a)anthracene	ND	0.488	0.976	ug/L	50	04/21/23 16:08	EPA 8270E LVI	
Benzo(a)pyrene	ND	0.488	0.976	ug/L	50	04/21/23 16:08	EPA 8270E LVI	
Benzo(b)fluoranthene	ND	0.488	0.976	ug/L	50	04/21/23 16:08	EPA 8270E LVI	
Benzo(k)fluoranthene	ND	0.488	0.976	ug/L	50	04/21/23 16:08	EPA 8270E LVI	Q-42
Benzo(g,h,i)perylene	ND	0.976	1.95	ug/L	50	04/21/23 16:08	EPA 8270E LVI	Q-42
Chrysene	ND	0.488	0.976	ug/L	50	04/21/23 16:08	EPA 8270E LVI	
Dibenz(a,h)anthracene	ND	0.488	0.976	ug/L	50	04/21/23 16:08	EPA 8270E LVI	
Fluoranthene	ND	0.976	1.95	ug/L	50	04/21/23 16:08	EPA 8270E LVI	
Fluorene	14.3	0.976	1.95	ug/L	50	04/21/23 16:08	EPA 8270E LVI	
Indeno(1,2,3-cd)pyrene	ND	0.488	0.976	ug/L	50	04/21/23 16:08	EPA 8270E LVI	
1-Methylnaphthalene	38.5	1.95	3.90	ug/L	50	04/21/23 16:08	EPA 8270E LVI	
2-Methylnaphthalene	39.4	1.95	3.90	ug/L	50	04/21/23 16:08	EPA 8270E LVI	
Naphthalene	110	1.95	3.90	ug/L	50	04/21/23 16:08	EPA 8270E LVI	
Phenanthrene	11.8	1.95	3.90	ug/L	50	04/21/23 16:08	EPA 8270E LVI	
Pyrene	ND	0.976	1.95	ug/L	50	04/21/23 16:08	EPA 8270E LVI	

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Darwin Thomas, Business Development Director





## ANALYTICAL REPORT

Apex Laboratories, LLC

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

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125  
Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001G

Project Manager: John Renda

Report ID:

A3D1354 - 05 19 23 1322

## 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-041823-82 (A3D1354-03)		Matrix: WG			Batch: 23D0846			
Carbazole	10.2	0.976	1.95	ug/L	50	04/21/23 16:08	EPA 8270E LVI	
Dibenzofuran	14.7	0.976	1.95	ug/L	50	04/21/23 16:08	EPA 8270E LVI	
Surrogate: Acenaphthylene-d8 (Surr)		Recovery: 335 %		Limits: 78-134 %	50	04/21/23 16:08	EPA 8270E LVI	S-05
Benzo(a)pyrene-d12 (Surr)		86 %		80-132 %	50	04/21/23 16:08	EPA 8270E LVI	S-05
GS-041823-83 (A3D1354-04)		Matrix: WG			Batch: 23D0846			
Acenaphthene	1.37	0.0193	0.0387	ug/L	1	04/21/23 23:23	EPA 8270E LVI	
Acenaphthylene	0.149	0.0193	0.0387	ug/L	1	04/21/23 23:23	EPA 8270E LVI	
Anthracene	0.0367	0.0193	0.0387	ug/L	1	04/21/23 23:23	EPA 8270E LVI	J
Benz(a)anthracene	0.0126	0.00966	0.0193	ug/L	1	04/21/23 23:23	EPA 8270E LVI	J
Benzo(a)pyrene	ND	0.00966	0.0193	ug/L	1	04/21/23 23:23	EPA 8270E LVI	
Benzo(b)fluoranthene	ND	0.00966	0.0193	ug/L	1	04/21/23 23:23	EPA 8270E LVI	
Benzo(k)fluoranthene	ND	0.00966	0.0193	ug/L	1	04/21/23 23:23	EPA 8270E LVI	
Benzo(g,h,i)perylene	ND	0.0193	0.0387	ug/L	1	04/21/23 23:23	EPA 8270E LVI	
Chrysene	ND	0.00966	0.0193	ug/L	1	04/21/23 23:23	EPA 8270E LVI	
Dibenz(a,h)anthracene	ND	0.00966	0.0193	ug/L	1	04/21/23 23:23	EPA 8270E LVI	
Fluoranthene	0.0744	0.0193	0.0387	ug/L	1	04/21/23 23:23	EPA 8270E LVI	
Fluorene	0.203	0.0193	0.0387	ug/L	1	04/21/23 23:23	EPA 8270E LVI	
Indeno(1,2,3-cd)pyrene	ND	0.00966	0.0193	ug/L	1	04/21/23 23:23	EPA 8270E LVI	
1-Methylnaphthalene	0.115	0.0387	0.0773	ug/L	1	04/21/23 23:23	EPA 8270E LVI	
2-Methylnaphthalene	ND	0.0387	0.0773	ug/L	1	04/21/23 23:23	EPA 8270E LVI	
Naphthalene	0.0773	0.0387	0.0773	ug/L	1	04/21/23 23:23	EPA 8270E LVI	
Phenanthrene	ND	0.0387	0.0773	ug/L	1	04/21/23 23:23	EPA 8270E LVI	
Pyrene	0.0517	0.0193	0.0387	ug/L	1	04/21/23 23:23	EPA 8270E LVI	
Carbazole	0.121	0.0193	0.0387	ug/L	1	04/21/23 23:23	EPA 8270E LVI	
Dibenzofuran	0.0396	0.0193	0.0387	ug/L	1	04/21/23 23:23	EPA 8270E LVI	
Surrogate: Acenaphthylene-d8 (Surr)		Recovery: 126 %		Limits: 78-134 %	1	04/21/23 23:23	EPA 8270E LVI	Q-41
Benzo(a)pyrene-d12 (Surr)		125 %		80-132 %	1	04/21/23 23:23	EPA 8270E LVI	
GS-041823-84 (A3D1354-05)		Matrix: WG			Batch: 23D0846			
Acenaphthene	13.3	0.0214	0.0427	ug/L	1	04/21/23 23:56	EPA 8270E LVI	
Acenaphthylene	0.931	0.0214	0.0427	ug/L	1	04/21/23 23:56	EPA 8270E LVI	
Anthracene	0.341	0.0214	0.0427	ug/L	1	04/21/23 23:56	EPA 8270E LVI	

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Project Number: 000029-02.84 T-01.001G

Project Manager: John Renda

Report ID:

A3D1354 - 05 19 23 1322

## 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-041823-84 (A3D1354-05)		Matrix: WG			Batch: 23D0846			
Benz(a)anthracene	0.0812	0.0107	0.0214	ug/L	1	04/21/23 23:56	EPA 8270E LVI	
Benzo(a)pyrene	ND	0.0107	0.0214	ug/L	1	04/21/23 23:56	EPA 8270E LVI	
Benzo(b)fluoranthene	0.0235	0.0107	0.0214	ug/L	1	04/21/23 23:56	EPA 8270E LVI	
Benzo(k)fluoranthene	0.0118	0.0107	0.0214	ug/L	1	04/21/23 23:56	EPA 8270E LVI	J
Benzo(g,h,i)perylene	ND	0.0214	0.0427	ug/L	1	04/21/23 23:56	EPA 8270E LVI	
Chrysene	0.0956	0.0107	0.0214	ug/L	1	04/21/23 23:56	EPA 8270E LVI	
Dibenz(a,h)anthracene	ND	0.0107	0.0214	ug/L	1	04/21/23 23:56	EPA 8270E LVI	
Fluoranthene	0.806	0.0214	0.0427	ug/L	1	04/21/23 23:56	EPA 8270E LVI	
Fluorene	1.25	0.0214	0.0427	ug/L	1	04/21/23 23:56	EPA 8270E LVI	
Indeno(1,2,3-cd)pyrene	ND	0.0107	0.0214	ug/L	1	04/21/23 23:56	EPA 8270E LVI	
1-Methylnaphthalene	0.798	0.0427	0.0855	ug/L	1	04/21/23 23:56	EPA 8270E LVI	
2-Methylnaphthalene	0.0668	0.0427	0.0855	ug/L	1	04/21/23 23:56	EPA 8270E LVI	J
Naphthalene	ND	0.307	0.307	ug/L	1	04/21/23 23:56	EPA 8270E LVI	R-02
Phenanthrene	0.397	0.0427	0.0855	ug/L	1	04/21/23 23:56	EPA 8270E LVI	
Pyrene	0.992	0.0214	0.0427	ug/L	1	04/21/23 23:56	EPA 8270E LVI	
Carbazole	0.0689	0.0214	0.0427	ug/L	1	04/21/23 23:56	EPA 8270E LVI	
Dibenzofuran	ND	0.107	0.107	ug/L	1	04/21/23 23:56	EPA 8270E LVI	R-02
Surrogate: Acenaphthylene-d8 (Surr)		Recovery: 124 %		Limits: 78-134 %	1	04/21/23 23:56	EPA 8270E LVI	Q-41
Benzo(a)pyrene-d12 (Surr)		126 %		80-132 %	1	04/21/23 23:56	EPA 8270E LVI	
GS-041823-85 (A3D1354-06)		Matrix: WG			Batch: 23D0846			
Acenaphthylene	ND	1.83	1.83	ug/L	1	04/22/23 00:29	EPA 8270E LVI	R-02
Anthracene	3.41	0.0209	0.0418	ug/L	1	04/22/23 00:29	EPA 8270E LVI	
Benz(a)anthracene	0.390	0.0105	0.0209	ug/L	1	04/22/23 00:29	EPA 8270E LVI	
Benzo(a)pyrene	0.0230	0.0105	0.0209	ug/L	1	04/22/23 00:29	EPA 8270E LVI	
Benzo(b)fluoranthene	0.0622	0.0105	0.0209	ug/L	1	04/22/23 00:29	EPA 8270E LVI	
Benzo(k)fluoranthene	0.0272	0.0105	0.0209	ug/L	1	04/22/23 00:29	EPA 8270E LVI	M-05
Benzo(g,h,i)perylene	ND	0.0209	0.0418	ug/L	1	04/22/23 00:29	EPA 8270E LVI	
Chrysene	0.191	0.0105	0.0209	ug/L	1	04/22/23 00:29	EPA 8270E LVI	
Dibenz(a,h)anthracene	ND	0.0105	0.0209	ug/L	1	04/22/23 00:29	EPA 8270E LVI	
Fluoranthene	6.92	0.0209	0.0418	ug/L	1	04/22/23 00:29	EPA 8270E LVI	
Indeno(1,2,3-cd)pyrene	ND	0.0105	0.0209	ug/L	1	04/22/23 00:29	EPA 8270E LVI	
Pyrene	4.27	0.0209	0.0418	ug/L	1	04/22/23 00:29	EPA 8270E LVI	

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Darwin Thomas, Business Development Director



## ANALYTICAL REPORT

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Tigard, OR 97223  
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ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125  
Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001G

Project Manager: John Renda

Report ID:

A3D1354 - 05 19 23 1322

## 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-041823-85 (A3D1354-06)		Matrix: WG			Batch: 23D0846			
Carbazole	18.3	0.0209	0.0418	ug/L	1	04/22/23 00:29	EPA 8270E LVI	
Surrogate: Acenaphthylene-d8 (Surr)		Recovery: 117 %		Limits: 78-134 %	1	04/22/23 00:29	EPA 8270E LVI	Q-41
Benzo(a)pyrene-d12 (Surr)		128 %		80-132 %	1	04/22/23 00:29	EPA 8270E LVI	
GS-041823-85 (A3D1354-06RE1)		Matrix: WG			Batch: 23D0846			
Acenaphthene	76.7	0.418	0.836	ug/L	20	04/25/23 13:54	EPA 8270E LVI	
Fluorene	37.1	0.418	0.836	ug/L	20	04/25/23 13:54	EPA 8270E LVI	
1-Methylnaphthalene	60.7	0.836	1.67	ug/L	20	04/25/23 13:54	EPA 8270E LVI	
2-Methylnaphthalene	93.4	0.836	1.67	ug/L	20	04/25/23 13:54	EPA 8270E LVI	
Naphthalene	150	0.836	1.67	ug/L	20	04/25/23 13:54	EPA 8270E LVI	
Phenanthrene	42.9	0.836	1.67	ug/L	20	04/25/23 13:54	EPA 8270E LVI	
Dibenzofuran	34.3	0.418	0.836	ug/L	20	04/25/23 13:54	EPA 8270E LVI	
GS-041823-86 (A3D1354-07)		Matrix: WG			Batch: 23D0846			
Acenaphthene	0.0773	0.0192	0.0384	ug/L	1	04/22/23 01:03	EPA 8270E LVI	
Acenaphthylene	0.0816	0.0192	0.0384	ug/L	1	04/22/23 01:03	EPA 8270E LVI	
Anthracene	0.0226	0.0192	0.0384	ug/L	1	04/22/23 01:03	EPA 8270E LVI	J
Benz(a)anthracene	ND	0.00960	0.0192	ug/L	1	04/22/23 01:03	EPA 8270E LVI	
Benzo(a)pyrene	ND	0.00960	0.0192	ug/L	1	04/22/23 01:03	EPA 8270E LVI	
Benzo(b)fluoranthene	ND	0.00960	0.0192	ug/L	1	04/22/23 01:03	EPA 8270E LVI	
Benzo(k)fluoranthene	ND	0.00960	0.0192	ug/L	1	04/22/23 01:03	EPA 8270E LVI	
Benzo(g,h,i)perylene	ND	0.0192	0.0384	ug/L	1	04/22/23 01:03	EPA 8270E LVI	
Chrysene	ND	0.00960	0.0192	ug/L	1	04/22/23 01:03	EPA 8270E LVI	
Dibenz(a,h)anthracene	ND	0.00960	0.0192	ug/L	1	04/22/23 01:03	EPA 8270E LVI	
Fluoranthene	0.0302	0.0192	0.0384	ug/L	1	04/22/23 01:03	EPA 8270E LVI	J
Fluorene	0.0422	0.0192	0.0384	ug/L	1	04/22/23 01:03	EPA 8270E LVI	
Indeno(1,2,3-cd)pyrene	ND	0.00960	0.0192	ug/L	1	04/22/23 01:03	EPA 8270E LVI	
1-Methylnaphthalene	ND	0.0384	0.0768	ug/L	1	04/22/23 01:03	EPA 8270E LVI	
2-Methylnaphthalene	ND	0.0384	0.0768	ug/L	1	04/22/23 01:03	EPA 8270E LVI	
Naphthalene	0.0869	0.0384	0.0768	ug/L	1	04/22/23 01:03	EPA 8270E LVI	
Phenanthrene	0.0389	0.0384	0.0768	ug/L	1	04/22/23 01:03	EPA 8270E LVI	J
Pyrene	0.0226	0.0192	0.0384	ug/L	1	04/22/23 01:03	EPA 8270E LVI	J
Carbazole	ND	0.0192	0.0384	ug/L	1	04/22/23 01:03	EPA 8270E LVI	

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ANALYTICAL REPORT

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Project Number: 000029-02.84 T-01.001G

Project Manager: John Renda

Report ID:

A3D1354 - 05 19 23 1322

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-041823-86 (A3D1354-07)</b>		<b>Matrix: WG</b>			<b>Batch: 23D0846</b>			
<b>Dibenzofuran</b>	<b>0.0302</b>	0.0192	0.0384	ug/L	1	04/22/23 01:03	EPA 8270E LVI	<b>J</b>
<i>Surrogate: Acenaphthylene-d8 (Surr)</i>		<i>Recovery:</i>	125 %	<i>Limits:</i>	78-134 %	1	04/22/23 01:03	EPA 8270E LVI
<i>Benzo(a)pyrene-d12 (Surr)</i>			126 %		80-132 %	1	04/22/23 01:03	EPA 8270E LVI

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## ANALYTICAL REPORT

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ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125  
Portland, OR 97219Project: **Gasco-MGP Only-Prod. Wells 1Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001G**Project Manager: **John Renda****Report ID:****A3D1354 - 05 19 23 1322**

## ANALYTICAL SAMPLE RESULTS

## Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-041823-80 (A3D1354-01)		Matrix: WG						
Batch: 23D1156								
Aluminum	ND	25.0	50.0	ug/L	1	04/28/23 22:53	EPA 6020B	
Antimony	ND	0.500	1.00	ug/L	1	04/28/23 22:53	EPA 6020B	
Arsenic	2.19	0.500	1.00	ug/L	1	04/28/23 22:53	EPA 6020B	
Barium	101	1.00	2.00	ug/L	1	04/28/23 22:53	EPA 6020B	
Beryllium	ND	0.100	0.200	ug/L	1	04/28/23 22:53	EPA 6020B	
Cadmium	ND	0.100	0.200	ug/L	1	04/28/23 22:53	EPA 6020B	
Chromium	ND	1.00	2.00	ug/L	1	04/28/23 22:53	EPA 6020B	
Copper	ND	1.00	2.00	ug/L	1	04/28/23 22:53	EPA 6020B	
Lead	ND	0.110	0.200	ug/L	1	04/28/23 22:53	EPA 6020B	
Magnesium	43400	75.0	150	ug/L	1	04/28/23 22:53	EPA 6020B	
Mercury	ND	0.0400	0.0800	ug/L	1	04/28/23 22:53	EPA 6020B	
Nickel	ND	1.00	2.00	ug/L	1	04/28/23 22:53	EPA 6020B	
Potassium	5210	50.0	100	ug/L	1	04/28/23 22:53	EPA 6020B	
Selenium	ND	0.500	1.00	ug/L	1	04/28/23 22:53	EPA 6020B	
Silver	ND	0.100	0.200	ug/L	1	04/28/23 22:53	EPA 6020B	
Thallium	ND	0.100	0.200	ug/L	1	04/28/23 22:53	EPA 6020B	
Vanadium	ND	1.00	2.00	ug/L	1	04/28/23 22:53	EPA 6020B	
Zinc	ND	2.00	4.00	ug/L	1	04/28/23 22:53	EPA 6020B	
GS-041823-80 (A3D1354-01RE1)		Matrix: WG						
Batch: 23D1156								
Calcium	97600	7500	15000	ug/L	25	05/02/23 18:07	EPA 6020B	
Iron	95500	625	1250	ug/L	25	05/02/23 18:07	EPA 6020B	
Manganese	4180	12.5	25.0	ug/L	25	05/02/23 18:07	EPA 6020B	
Sodium	79700	1250	2500	ug/L	25	05/02/23 18:07	EPA 6020B	
GS-041823-81 (A3D1354-02)		Matrix: WG						
Batch: 23D1156								
Aluminum	ND	25.0	50.0	ug/L	1	04/28/23 22:58	EPA 6020B	
Antimony	ND	0.500	1.00	ug/L	1	04/28/23 22:58	EPA 6020B	
Arsenic	7.44	0.500	1.00	ug/L	1	04/28/23 22:58	EPA 6020B	
Barium	185	1.00	2.00	ug/L	1	04/28/23 22:58	EPA 6020B	
Beryllium	ND	0.100	0.200	ug/L	1	04/28/23 22:58	EPA 6020B	

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-Prod. Wells 1Q 2023 Perf. Mon

Project Number: 000029-02.84 T-01.001G

Project Manager: John Renda

Report ID:

A3D1354 - 05 19 23 1322

## ANALYTICAL SAMPLE RESULTS

## Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-041823-81 (A3D1354-02)		Matrix: WG						
Cadmium	ND	0.100	0.200	ug/L	1	04/28/23 22:58	EPA 6020B	
Chromium	ND	1.00	2.00	ug/L	1	04/28/23 22:58	EPA 6020B	
Copper	1.20	1.00	2.00	ug/L	1	04/28/23 22:58	EPA 6020B	J
Iron	47000	25.0	50.0	ug/L	1	04/28/23 22:58	EPA 6020B	
Lead	ND	0.110	0.200	ug/L	1	04/28/23 22:58	EPA 6020B	
Magnesium	43900	75.0	150	ug/L	1	04/28/23 22:58	EPA 6020B	
Mercury	ND	0.0400	0.0800	ug/L	1	04/28/23 22:58	EPA 6020B	
Nickel	ND	1.00	2.00	ug/L	1	04/28/23 22:58	EPA 6020B	
Potassium	7110	50.0	100	ug/L	1	04/28/23 22:58	EPA 6020B	
Selenium	ND	0.500	1.00	ug/L	1	04/28/23 22:58	EPA 6020B	
Silver	ND	0.100	0.200	ug/L	1	04/28/23 22:58	EPA 6020B	
Thallium	ND	0.100	0.200	ug/L	1	04/28/23 22:58	EPA 6020B	
Vanadium	ND	1.00	2.00	ug/L	1	04/28/23 22:58	EPA 6020B	
Zinc	7.44	2.00	4.00	ug/L	1	04/28/23 22:58	EPA 6020B	
GS-041823-81 (A3D1354-02RE1)		Matrix: WG						
Batch: 23D1156								
Calcium	124000	7500	15000	ug/L	25	05/02/23 18:12	EPA 6020B	
Manganese	4450	12.5	25.0	ug/L	25	05/02/23 18:12	EPA 6020B	
Sodium	156000	1250	2500	ug/L	25	05/02/23 18:12	EPA 6020B	
GS-041823-82 (A3D1354-03)		Matrix: WG						
Batch: 23D1156								
Aluminum	ND	25.0	50.0	ug/L	1	04/28/23 23:03	EPA 6020B	
Antimony	ND	0.500	1.00	ug/L	1	04/28/23 23:03	EPA 6020B	
Arsenic	9.06	0.500	1.00	ug/L	1	04/28/23 23:03	EPA 6020B	
Barium	59.2	1.00	2.00	ug/L	1	04/28/23 23:03	EPA 6020B	
Beryllium	ND	0.100	0.200	ug/L	1	04/28/23 23:03	EPA 6020B	
Cadmium	ND	0.100	0.200	ug/L	1	04/28/23 23:03	EPA 6020B	
Chromium	ND	1.00	2.00	ug/L	1	04/28/23 23:03	EPA 6020B	
Copper	1.46	1.00	2.00	ug/L	1	04/28/23 23:03	EPA 6020B	J
Iron	21000	25.0	50.0	ug/L	1	04/28/23 23:03	EPA 6020B	
Lead	ND	0.110	0.200	ug/L	1	04/28/23 23:03	EPA 6020B	
Magnesium	47100	75.0	150	ug/L	1	04/28/23 23:03	EPA 6020B	

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Darwin Thomas, Business Development Director



## ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street  
Tigard, OR 97223  
503-718-2323  
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125  
Portland, OR 97219Project: **Gasco-MGP Only-Prod. Wells 1Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001G**Project Manager: **John Renda****Report ID:****A3D1354 - 05 19 23 1322**

## ANALYTICAL SAMPLE RESULTS

## Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-041823-82 (A3D1354-03)		Matrix: WG						
Mercury	ND	0.0400	0.0800	ug/L	1	04/28/23 23:03	EPA 6020B	
Nickel	3.15	1.00	2.00	ug/L	1	04/28/23 23:03	EPA 6020B	
Potassium	2490	50.0	100	ug/L	1	04/28/23 23:03	EPA 6020B	
Selenium	ND	0.500	1.00	ug/L	1	04/28/23 23:03	EPA 6020B	
Silver	ND	0.100	0.200	ug/L	1	04/28/23 23:03	EPA 6020B	
Sodium	43900	50.0	100	ug/L	1	04/28/23 23:03	EPA 6020B	
Thallium	ND	0.100	0.200	ug/L	1	04/28/23 23:03	EPA 6020B	
Vanadium	ND	1.00	2.00	ug/L	1	04/28/23 23:03	EPA 6020B	
Zinc	9.27	2.00	4.00	ug/L	1	04/28/23 23:03	EPA 6020B	
GS-041823-82 (A3D1354-03RE1)		Matrix: WG						
Batch: 23D1156								
Calcium	82300	7500	15000	ug/L	25	05/02/23 18:17	EPA 6020B	
Manganese	4560	12.5	25.0	ug/L	25	05/02/23 18:17	EPA 6020B	
GS-041823-83 (A3D1354-04)		Matrix: WG						
Batch: 23D1156								
Aluminum	ND	25.0	50.0	ug/L	1	04/28/23 23:33	EPA 6020B	
Antimony	ND	0.500	1.00	ug/L	1	04/28/23 23:33	EPA 6020B	
Arsenic	9.89	0.500	1.00	ug/L	1	04/28/23 23:33	EPA 6020B	
Barium	228	1.00	2.00	ug/L	1	04/28/23 23:33	EPA 6020B	
Beryllium	ND	0.100	0.200	ug/L	1	04/28/23 23:33	EPA 6020B	
Cadmium	ND	0.100	0.200	ug/L	1	04/28/23 23:33	EPA 6020B	
Chromium	ND	1.00	2.00	ug/L	1	04/28/23 23:33	EPA 6020B	
Copper	2.21	1.00	2.00	ug/L	1	04/28/23 23:33	EPA 6020B	
Lead	0.111	0.110	0.200	ug/L	1	04/28/23 23:33	EPA 6020B	J
Magnesium	46100	75.0	150	ug/L	1	04/28/23 23:33	EPA 6020B	
Mercury	ND	0.0400	0.0800	ug/L	1	04/28/23 23:33	EPA 6020B	
Nickel	1.03	1.00	2.00	ug/L	1	04/28/23 23:33	EPA 6020B	J
Potassium	8510	50.0	100	ug/L	1	04/28/23 23:33	EPA 6020B	
Selenium	ND	0.500	1.00	ug/L	1	04/28/23 23:33	EPA 6020B	
Silver	ND	0.100	0.200	ug/L	1	04/28/23 23:33	EPA 6020B	
Thallium	ND	0.100	0.200	ug/L	1	04/28/23 23:33	EPA 6020B	
Vanadium	ND	1.00	2.00	ug/L	1	04/28/23 23:33	EPA 6020B	

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## ANALYTICAL REPORT

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Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125  
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Project: Gasco-MGP Only-Prod. Wells 1Q 2023 Perf. Mon

Project Number: 000029-02.84 T-01.001G

Project Manager: John Renda

Report ID:

A3D1354 - 05 19 23 1322

## ANALYTICAL SAMPLE RESULTS

## Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-041823-83 (A3D1354-04)				Matrix: WG				
Zinc	6.24	2.00	4.00	ug/L	1	04/28/23 23:33	EPA 6020B	
GS-041823-83 (A3D1354-04RE1)				Matrix: WG				
Batch: 23D1156								
Calcium	136000	7500	15000	ug/L	25	05/02/23 18:36	EPA 6020B	
Iron	69600	625	1250	ug/L	25	05/02/23 18:36	EPA 6020B	
Manganese	6980	12.5	25.0	ug/L	25	05/02/23 18:36	EPA 6020B	
Sodium	151000	1250	2500	ug/L	25	05/02/23 18:36	EPA 6020B	
GS-041823-84 (A3D1354-05)				Matrix: WG				
Batch: 23D1156								
Aluminum	ND	25.0	50.0	ug/L	1	04/28/23 23:37	EPA 6020B	
Antimony	ND	0.500	1.00	ug/L	1	04/28/23 23:37	EPA 6020B	
Arsenic	2.19	0.500	1.00	ug/L	1	04/28/23 23:37	EPA 6020B	
Barium	61.9	1.00	2.00	ug/L	1	04/28/23 23:37	EPA 6020B	
Beryllium	ND	0.100	0.200	ug/L	1	04/28/23 23:37	EPA 6020B	
Cadmium	ND	0.100	0.200	ug/L	1	04/28/23 23:37	EPA 6020B	
Chromium	ND	1.00	2.00	ug/L	1	04/28/23 23:37	EPA 6020B	
Copper	ND	1.00	2.00	ug/L	1	04/28/23 23:37	EPA 6020B	
Iron	40700	25.0	50.0	ug/L	1	04/28/23 23:37	EPA 6020B	
Lead	ND	0.110	0.200	ug/L	1	04/28/23 23:37	EPA 6020B	
Magnesium	40100	75.0	150	ug/L	1	04/28/23 23:37	EPA 6020B	
Mercury	ND	0.0400	0.0800	ug/L	1	04/28/23 23:37	EPA 6020B	
Nickel	ND	1.00	2.00	ug/L	1	04/28/23 23:37	EPA 6020B	
Potassium	2470	50.0	100	ug/L	1	04/28/23 23:37	EPA 6020B	
Selenium	ND	0.500	1.00	ug/L	1	04/28/23 23:37	EPA 6020B	
Silver	ND	0.100	0.200	ug/L	1	04/28/23 23:37	EPA 6020B	
Sodium	28000	50.0	100	ug/L	1	04/28/23 23:37	EPA 6020B	
Thallium	ND	0.100	0.200	ug/L	1	04/28/23 23:37	EPA 6020B	
Vanadium	ND	1.00	2.00	ug/L	1	04/28/23 23:37	EPA 6020B	
Zinc	2.93	2.00	4.00	ug/L	1	04/28/23 23:37	EPA 6020B	J
GS-041823-84 (A3D1354-05RE1)				Matrix: WG				
Batch: 23D1156								

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## ANALYTICAL REPORT

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Portland, OR 97219

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Project Number: 000029-02.84 T-01.001G

Project Manager: John Renda

Report ID:

A3D1354 - 05 19 23 1322

## ANALYTICAL SAMPLE RESULTS

## Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-041823-84 (A3D1354-05RE1)				Matrix: WG				
Calcium	68100	7500	15000	ug/L	25	05/02/23 18:41	EPA 6020B	
Manganese	2830	12.5	25.0	ug/L	25	05/02/23 18:41	EPA 6020B	
GS-041823-85 (A3D1354-06)				Matrix: WG				
Batch: 23D1156								
Aluminum	ND	25.0	50.0	ug/L	1	04/29/23 00:36	EPA 6020B	
Antimony	ND	0.500	1.00	ug/L	1	04/29/23 00:36	EPA 6020B	
Arsenic	4.18	0.500	1.00	ug/L	1	04/29/23 00:36	EPA 6020B	
Barium	42.5	1.00	2.00	ug/L	1	04/29/23 00:36	EPA 6020B	
Beryllium	ND	0.100	0.200	ug/L	1	04/29/23 00:36	EPA 6020B	
Cadmium	ND	0.100	0.200	ug/L	1	04/29/23 00:36	EPA 6020B	
Calcium	50000	300	600	ug/L	1	04/29/23 00:36	EPA 6020B	
Chromium	ND	1.00	2.00	ug/L	1	04/29/23 00:36	EPA 6020B	
Copper	ND	1.00	2.00	ug/L	1	04/29/23 00:36	EPA 6020B	
Iron	18100	25.0	50.0	ug/L	1	04/29/23 00:36	EPA 6020B	
Lead	ND	0.110	0.200	ug/L	1	04/29/23 00:36	EPA 6020B	
Magnesium	35700	75.0	150	ug/L	1	04/29/23 00:36	EPA 6020B	
Manganese	1020	0.500	1.00	ug/L	1	04/29/23 00:36	EPA 6020B	
Mercury	ND	0.0400	0.0800	ug/L	1	04/29/23 00:36	EPA 6020B	
Nickel	ND	1.00	2.00	ug/L	1	04/29/23 00:36	EPA 6020B	
Potassium	2640	50.0	100	ug/L	1	04/29/23 00:36	EPA 6020B	
Selenium	ND	0.500	1.00	ug/L	1	04/29/23 00:36	EPA 6020B	
Silver	ND	0.100	0.200	ug/L	1	04/29/23 00:36	EPA 6020B	
Sodium	19500	50.0	100	ug/L	1	04/29/23 00:36	EPA 6020B	
Thallium	ND	0.100	0.200	ug/L	1	04/29/23 00:36	EPA 6020B	
Vanadium	ND	1.00	2.00	ug/L	1	04/29/23 00:36	EPA 6020B	
Zinc	12.2	2.00	4.00	ug/L	1	04/29/23 00:36	EPA 6020B	
GS-041823-86 (A3D1354-07)				Matrix: WG				
Batch: 23D1156								
Aluminum	ND	25.0	50.0	ug/L	1	04/29/23 00:41	EPA 6020B	
Antimony	ND	0.500	1.00	ug/L	1	04/29/23 00:41	EPA 6020B	
Arsenic	12.3	0.500	1.00	ug/L	1	04/29/23 00:41	EPA 6020B	
Barium	220	1.00	2.00	ug/L	1	04/29/23 00:41	EPA 6020B	

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## ANALYTICAL REPORT

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Tigard, OR 97223

503-718-2323

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Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001G

Project Manager: John Renda

Report ID:

A3D1354 - 05 19 23 1322

## ANALYTICAL SAMPLE RESULTS

## Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-041823-86 (A3D1354-07)		Matrix: WG						
Beryllium	ND	0.100	0.200	ug/L	1	04/29/23 00:41	EPA 6020B	
Cadmium	ND	0.100	0.200	ug/L	1	04/29/23 00:41	EPA 6020B	
Chromium	ND	1.00	2.00	ug/L	1	04/29/23 00:41	EPA 6020B	
Copper	1.96	1.00	2.00	ug/L	1	04/29/23 00:41	EPA 6020B	J
Lead	ND	0.110	0.200	ug/L	1	04/29/23 00:41	EPA 6020B	
Magnesium	44500	75.0	150	ug/L	1	04/29/23 00:41	EPA 6020B	
Mercury	ND	0.0400	0.0800	ug/L	1	04/29/23 00:41	EPA 6020B	
Nickel	ND	1.00	2.00	ug/L	1	04/29/23 00:41	EPA 6020B	
Potassium	9430	50.0	100	ug/L	1	04/29/23 00:41	EPA 6020B	
Selenium	ND	0.500	1.00	ug/L	1	04/29/23 00:41	EPA 6020B	
Silver	ND	0.100	0.200	ug/L	1	04/29/23 00:41	EPA 6020B	
Thallium	ND	0.100	0.200	ug/L	1	04/29/23 00:41	EPA 6020B	
Vanadium	ND	1.00	2.00	ug/L	1	04/29/23 00:41	EPA 6020B	
Zinc	16.0	2.00	4.00	ug/L	1	04/29/23 00:41	EPA 6020B	
GS-041823-86 (A3D1354-07RE1)		Matrix: WG						
Batch: 23D1156								
Calcium	138000	7500	15000	ug/L	25	05/02/23 18:46	EPA 6020B	
Iron	61800	625	1250	ug/L	25	05/02/23 18:46	EPA 6020B	
Manganese	5900	12.5	25.0	ug/L	25	05/02/23 18:46	EPA 6020B	
Sodium	131000	1250	2500	ug/L	25	05/02/23 18:46	EPA 6020B	

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Darwin Thomas, Business Development Director



## ANALYTICAL REPORT

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503-718-2323  
ORELAP ID: OR100062Anchor QEA, LLC6720 SW Macadam Ave. Suite 125  
Portland, OR 97219Project: Gasco-MGP Only-Prod. Wells 1Q 2023 Perf. Mon

Project Number: 000029-02.84 T-01.001G

Project Manager: John Renda

Report ID:

A3D1354 - 05 19 23 1322

## ANALYTICAL SAMPLE RESULTS

## Dissolved Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-041823-80 (A3D1354-01)				Matrix: WG				
Batch: 23E0028								
Magnesium	44500	75.0	150	ug/L	1	05/02/23 02:22	EPA 6020B (Diss)	
GS-041823-80 (A3D1354-01RE1)				Matrix: WG				
Batch: 23E0028								
Iron	11200	25.0	50.0	ug/L	1	05/02/23 18:33	EPA 6020B (Diss)	
GS-041823-81 (A3D1354-02)				Matrix: WG				
Batch: 23E0028								
Iron	44500	25.0	50.0	ug/L	1	05/02/23 02:27	EPA 6020B (Diss)	
Magnesium	45500	75.0	150	ug/L	1	05/02/23 02:27	EPA 6020B (Diss)	
GS-041823-82 (A3D1354-03)				Matrix: WG				
Batch: 23E0028								
Iron	19400	25.0	50.0	ug/L	1	05/02/23 02:44	EPA 6020B (Diss)	
Magnesium	49800	75.0	150	ug/L	1	05/02/23 02:44	EPA 6020B (Diss)	
GS-041823-83 (A3D1354-04)				Matrix: WG				
Batch: 23E0028								
Magnesium	49200	75.0	150	ug/L	1	05/02/23 03:06	EPA 6020B (Diss)	
GS-041823-83 (A3D1354-04RE1)				Matrix: WG				
Batch: 23E0028								
Iron	7790	25.0	50.0	ug/L	1	05/02/23 18:39	EPA 6020B (Diss)	
GS-041823-84 (A3D1354-05)				Matrix: WG				
Batch: 23E0028								
Iron	35500	25.0	50.0	ug/L	1	05/02/23 03:12	EPA 6020B (Diss)	
Magnesium	38600	75.0	150	ug/L	1	05/02/23 03:12	EPA 6020B (Diss)	
GS-041823-85 (A3D1354-06)				Matrix: WG				
Batch: 23E0028								
Iron	21800	25.0	50.0	ug/L	1	05/02/23 03:17	EPA 6020B (Diss)	
Magnesium	35900	75.0	150	ug/L	1	05/02/23 03:17	EPA 6020B (Diss)	
GS-041823-86 (A3D1354-07)				Matrix: WG				

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ANALYTICAL REPORT

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Project Number: 000029-02.84 T-01.001G

Project Manager: John Renda

Report ID:

A3D1354 - 05 19 23 1322

ANALYTICAL SAMPLE RESULTS

Dissolved Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-041823-86 (A3D1354-07)				Matrix: WG				
Batch: 23E0028								
Magnesium	47200	75.0	150	ug/L	1	05/02/23 03:23	EPA 6020B (Diss)	
GS-041823-86 (A3D1354-07RE1)				Matrix: WG				
Batch: 23E0028								
Iron	6400	25.0	50.0	ug/L	1	05/02/23 18:44	EPA 6020B (Diss)	

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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-Prod. Wells 1Q 2023 Perf. Mon

Project Number: 000029-02.84 T-01.001G

Project Manager: John Renda

Report ID:

A3D1354 - 05 19 23 1322

## ANALYTICAL SAMPLE RESULTS

## Anions by Ion Chromatography

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-041823-80 (A3D1354-01)		Matrix: WG						
Batch: 23D0757								
Chloride	197	5.00	10.0	mg/L	10	04/19/23 18:18	EPA 300.0	
Sulfate	262	5.00	10.0	mg/L	10	04/19/23 18:18	EPA 300.0	
GS-041823-80 (A3D1354-01RE1)		Matrix: WG						
Batch: 23D0757								
Nitrate-Nitrogen	ND	0.125	0.250	mg/L	1	04/19/23 18:39	EPA 300.0	
GS-041823-81 (A3D1354-02)		Matrix: WG						
Batch: 23D0757								
Chloride	414	10.0	20.0	mg/L	20	04/19/23 19:01	EPA 300.0	
Sulfate	232	10.0	20.0	mg/L	20	04/19/23 19:01	EPA 300.0	
GS-041823-81 (A3D1354-02RE1)		Matrix: WG						
Batch: 23D0757								
Nitrate-Nitrogen	ND	0.125	0.250	mg/L	1	04/19/23 19:22	EPA 300.0	
GS-041823-82 (A3D1354-03)		Matrix: WG						
Batch: 23D0757								
Chloride	111	2.50	5.00	mg/L	5	04/19/23 20:27	EPA 300.0	
GS-041823-82 (A3D1354-03RE1)		Matrix: WG						
Batch: 23D0757								
Nitrate-Nitrogen	ND	0.125	0.250	mg/L	1	04/19/23 21:32	EPA 300.0	
Sulfate	7.30	0.500	1.00	mg/L	1	04/19/23 21:32	EPA 300.0	
GS-041823-83 (A3D1354-04)		Matrix: WG						
Batch: 23D0757								
Chloride	439	10.0	20.0	mg/L	20	04/19/23 22:36	EPA 300.0	
Sulfate	179	10.0	20.0	mg/L	20	04/19/23 22:36	EPA 300.0	
GS-041823-83 (A3D1354-04RE1)		Matrix: WG						
Batch: 23D0757								
Nitrate-Nitrogen	ND	0.125	0.250	mg/L	1	04/19/23 22:58	EPA 300.0	
GS-041823-84 (A3D1354-05)		Matrix: WG						

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Darwin Thomas, Business Development Director

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Project: **Gasco-MGP Only-Prod. Wells 1Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001G**Project Manager: **John Renda****Report ID:****A3D1354 - 05 19 23 1322****ANALYTICAL SAMPLE RESULTS****Anions by Ion Chromatography**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-041823-84 (A3D1354-05)				Matrix: WG				
Batch: 23D0757								
Chloride	69.2	1.00	2.00	mg/L	2	04/19/23 23:19	EPA 300.0	
GS-041823-84 (A3D1354-05RE1)				Matrix: WG				
Batch: 23D0757								
Nitrate-Nitrogen	ND	0.125	0.250	mg/L	1	04/19/23 23:41	EPA 300.0	
Sulfate	27.9	0.500	1.00	mg/L	1	04/19/23 23:41	EPA 300.0	
GS-041823-85 (A3D1354-06)				Matrix: WG				
Batch: 23D0757								
Chloride	23.5	0.500	1.00	mg/L	1	04/20/23 00:46	EPA 300.0	
Nitrate-Nitrogen	ND	0.125	0.250	mg/L	1	04/20/23 00:46	EPA 300.0	
Sulfate	8.84	0.500	1.00	mg/L	1	04/20/23 00:46	EPA 300.0	
GS-041823-86 (A3D1354-07)				Matrix: WG				
Batch: 23D0757								
Chloride	368	5.00	10.0	mg/L	10	04/20/23 01:07	EPA 300.0	
Sulfate	165	5.00	10.0	mg/L	10	04/20/23 01:07	EPA 300.0	
GS-041823-86 (A3D1354-07RE1)				Matrix: WG				
Batch: 23D0757								
Nitrate-Nitrogen	ND	0.125	0.250	mg/L	1	04/20/23 01:29	EPA 300.0	

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## ANALYTICAL SAMPLE RESULTS

## Total Cyanide by Flow Analysis (Aqueous)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-041823-80 (A3D1354-01)				Matrix: WG		Batch: 23D0915		
Total Cyanide	0.145	0.00500	0.00500	mg/L	1	04/25/23 11:46	EPA 335.4	
GS-041823-81 (A3D1354-02)				Matrix: WG		Batch: 23D0915		
Total Cyanide	0.0693	0.00500	0.00500	mg/L	1	04/25/23 11:48	EPA 335.4	
GS-041823-82 (A3D1354-03)				Matrix: WG		Batch: 23D0915		
Total Cyanide	0.0623	0.00500	0.00500	mg/L	1	04/25/23 10:34	EPA 335.4	Q-42
GS-041823-83 (A3D1354-04)				Matrix: WG		Batch: 23E0036		
Total Cyanide	0.0539	0.00500	0.00500	mg/L	1	05/01/23 17:43	EPA 335.4	
GS-041823-84 (A3D1354-05)				Matrix: WG		Batch: 23E0036		
Total Cyanide	0.177	0.00500	0.00500	mg/L	1	05/01/23 18:41	EPA 335.4	
GS-041823-85 (A3D1354-06)				Matrix: WG		Batch: 23E0036		
Total Cyanide	0.0627	0.00500	0.00500	mg/L	1	05/01/23 18:43	EPA 335.4	
GS-041823-86 (A3D1354-07)				Matrix: WG		Batch: 23E0036		
Total Cyanide	0.0656	0.00500	0.00500	mg/L	1	05/01/23 18:45	EPA 335.4	

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Project Manager: **John Renda**

**Report ID:**

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### ANALYTICAL SAMPLE RESULTS

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

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>GS-041823-80 (A3D1354-01)</b>				<b>Matrix: WG</b>		<b>Batch: 23D1057</b>		
Available Cyanide	ND	0.00100	0.00200	mg/L	1	04/26/23 14:11	D6888-09	
<b>GS-041823-81 (A3D1354-02)</b>				<b>Matrix: WG</b>		<b>Batch: 23D1057</b>		
Available Cyanide	ND	0.00100	0.00200	mg/L	1	04/26/23 14:12	D6888-09	
<b>GS-041823-82 (A3D1354-03)</b>				<b>Matrix: WG</b>		<b>Batch: 23D1057</b>		
Available Cyanide	ND	0.00100	0.00200	mg/L	1	04/26/23 14:14	D6888-09	
<b>GS-041823-83 (A3D1354-04)</b>				<b>Matrix: WG</b>		<b>Batch: 23D1057</b>		
Available Cyanide	ND	0.00100	0.00200	mg/L	1	04/26/23 14:20	D6888-09	
<b>GS-041823-84 (A3D1354-05)</b>				<b>Matrix: WG</b>		<b>Batch: 23D1057</b>		
Available Cyanide	ND	0.00100	0.00200	mg/L	1	04/26/23 14:21	D6888-09	
<b>GS-041823-85 (A3D1354-06)</b>				<b>Matrix: WG</b>		<b>Batch: 23D1057</b>		
Available Cyanide	ND	0.00100	0.00200	mg/L	1	04/26/23 14:29	D6888-09	
<b>GS-041823-86 (A3D1354-07)</b>				<b>Matrix: WG</b>		<b>Batch: 23D1057</b>		
Available Cyanide	ND	0.00100	0.00200	mg/L	1	04/26/23 14:30	D6888-09	

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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-041823-80 (A3D1354-01)				Matrix: WG		Batch: 23D0922		PRES
Free Cyanide	ND	0.00250	0.00500	mg/L	1	04/24/23 15:26	D4282-02	
GS-041823-81 (A3D1354-02)				Matrix: WG		Batch: 23D0922		
Free Cyanide	ND	0.00250	0.00500	mg/L	1	04/24/23 15:26	D4282-02	
GS-041823-82 (A3D1354-03)				Matrix: WG		Batch: 23D0922		
Free Cyanide	ND	0.00250	0.00500	mg/L	1	04/24/23 15:26	D4282-02	
GS-041823-83 (A3D1354-04)				Matrix: WG		Batch: 23D0922		
Free Cyanide	ND	0.00250	0.00500	mg/L	1	04/24/23 15:33	D4282-02	
GS-041823-84 (A3D1354-05)				Matrix: WG		Batch: 23D0922		
Free Cyanide	ND	0.00250	0.00500	mg/L	1	04/24/23 15:41	D4282-02	
GS-041823-85 (A3D1354-06)				Matrix: WG		Batch: 23D0922		
Free Cyanide	ND	0.00250	0.00500	mg/L	1	04/24/23 15:41	D4282-02	
GS-041823-86 (A3D1354-07)				Matrix: WG		Batch: 23D0922		
Free Cyanide	ND	0.00250	0.00500	mg/L	1	04/24/23 15:42	D4282-02	

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Portland, OR 97219Project: **Gasco-MGP Only-Prod. Wells 1Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001G**Project Manager: **John Renda****Report ID:****A3D1354 - 05 19 23 1322****ANALYTICAL SAMPLE RESULTS****Conventional Chemistry Parameters**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>GS-041823-80 (A3D1354-01) Matrix: WG</b>								
Batch: 23D1098								
<b>Total Alkalinity</b>	<b>140</b>	20.0	20.0	mg CaCO <sub>3</sub> /L	1	04/27/23 11:44	SM 2320 B	
<b>Bicarbonate Alkalinity</b>	<b>140</b>	20.0	20.0	mg CaCO <sub>3</sub> /L	1	04/27/23 11:44	SM 2320 B	
Carbonate Alkalinity	ND	20.0	20.0	mg CaCO <sub>3</sub> /L	1	04/27/23 11:44	SM 2320 B	
Hydroxide Alkalinity	ND	20.0	20.0	mg CaCO <sub>3</sub> /L	1	04/27/23 11:44	SM 2320 B	
<b>GS-041823-81 (A3D1354-02) Matrix: WG</b>								
Batch: 23D1098								
<b>Total Alkalinity</b>	<b>125</b>	20.0	20.0	mg CaCO <sub>3</sub> /L	1	04/27/23 12:36	SM 2320 B	
<b>Bicarbonate Alkalinity</b>	<b>125</b>	20.0	20.0	mg CaCO <sub>3</sub> /L	1	04/27/23 12:36	SM 2320 B	
Carbonate Alkalinity	ND	20.0	20.0	mg CaCO <sub>3</sub> /L	1	04/27/23 12:36	SM 2320 B	
Hydroxide Alkalinity	ND	20.0	20.0	mg CaCO <sub>3</sub> /L	1	04/27/23 12:36	SM 2320 B	
<b>GS-041823-82 (A3D1354-03) Matrix: WG</b>								
Batch: 23D1098								
<b>Total Alkalinity</b>	<b>339</b>	20.0	20.0	mg CaCO <sub>3</sub> /L	1	04/27/23 12:45	SM 2320 B	
<b>Bicarbonate Alkalinity</b>	<b>339</b>	20.0	20.0	mg CaCO <sub>3</sub> /L	1	04/27/23 12:45	SM 2320 B	
Carbonate Alkalinity	ND	20.0	20.0	mg CaCO <sub>3</sub> /L	1	04/27/23 12:45	SM 2320 B	
Hydroxide Alkalinity	ND	20.0	20.0	mg CaCO <sub>3</sub> /L	1	04/27/23 12:45	SM 2320 B	
<b>GS-041823-83 (A3D1354-04) Matrix: WG</b>								
Batch: 23D1098								
<b>Total Alkalinity</b>	<b>126</b>	20.0	20.0	mg CaCO <sub>3</sub> /L	1	04/27/23 14:38	SM 2320 B	
<b>Bicarbonate Alkalinity</b>	<b>126</b>	20.0	20.0	mg CaCO <sub>3</sub> /L	1	04/27/23 14:38	SM 2320 B	
Carbonate Alkalinity	ND	20.0	20.0	mg CaCO <sub>3</sub> /L	1	04/27/23 14:38	SM 2320 B	
Hydroxide Alkalinity	ND	20.0	20.0	mg CaCO <sub>3</sub> /L	1	04/27/23 14:38	SM 2320 B	
<b>GS-041823-84 (A3D1354-05) Matrix: WG</b>								
Batch: 23D1098								
<b>Total Alkalinity</b>	<b>271</b>	20.0	20.0	mg CaCO <sub>3</sub> /L	1	04/27/23 14:45	SM 2320 B	
<b>Bicarbonate Alkalinity</b>	<b>271</b>	20.0	20.0	mg CaCO <sub>3</sub> /L	1	04/27/23 14:45	SM 2320 B	
Carbonate Alkalinity	ND	20.0	20.0	mg CaCO <sub>3</sub> /L	1	04/27/23 14:45	SM 2320 B	
Hydroxide Alkalinity	ND	20.0	20.0	mg CaCO <sub>3</sub> /L	1	04/27/23 14:45	SM 2320 B	
<b>GS-041823-85 (A3D1354-06) Matrix: WG</b>								

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Project Manager: John Renda

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A3D1354 - 05 19 23 1322

## ANALYTICAL SAMPLE RESULTS

### Conventional Chemistry Parameters

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-041823-85 (A3D1354-06)				Matrix: WG				
Batch: 23D0861								
Total Alkalinity	281	20.0	20.0	mg CaCO3/L	1	04/21/23 13:59	SM 2320 B	
Bicarbonate Alkalinity	281	20.0	20.0	mg CaCO3/L	1	04/21/23 13:59	SM 2320 B	
Carbonate Alkalinity	ND	20.0	20.0	mg CaCO3/L	1	04/21/23 13:59	SM 2320 B	
Hydroxide Alkalinity	ND	20.0	20.0	mg CaCO3/L	1	04/21/23 13:59	SM 2320 B	
GS-041823-86 (A3D1354-07)				Matrix: WG				
Batch: 23D0861								
Total Alkalinity	145	20.0	20.0	mg CaCO3/L	1	04/21/23 14:39	SM 2320 B	
Bicarbonate Alkalinity	145	20.0	20.0	mg CaCO3/L	1	04/21/23 14:39	SM 2320 B	
Carbonate Alkalinity	ND	20.0	20.0	mg CaCO3/L	1	04/21/23 14:39	SM 2320 B	
Hydroxide Alkalinity	ND	20.0	20.0	mg CaCO3/L	1	04/21/23 14:39	SM 2320 B	

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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 23D0831 - EPA 5030C						Water						
Blank (23D0831-BLK1)			Prepared: 04/20/23 13:00		Analyzed: 04/20/23 16:21							
EPA 8260D												
Acetone	ND	10.0	20.0	ug/L	1	---	---	---	---	---	---	
Acrylonitrile	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
Benzene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Bromobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Bromochloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Bromoform	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Bromomethane	ND	5.00	5.00	ug/L	1	---	---	---	---	---	---	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Carbon disulfide	ND	10.0	10.0	ug/L	1	---	---	---	---	---	---	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Chlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Chloroethane	ND	5.00	5.00	ug/L	1	---	---	---	---	---	---	
Chloroform	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Chloromethane	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Dibromomethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	

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## QUALITY CONTROL (QC) SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23D0831 - EPA 5030C						Water						
Blank (23D0831-BLK1)						Prepared: 04/20/23 13:00 Analyzed: 04/20/23 16:21						
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Ethylbenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
2-Hexanone	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Methylene chloride	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Naphthalene	ND	2.00	2.00	ug/L	1	---	---	---	---	---	---	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Styrene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Tetrachloroethene (PCE)	0.860	0.200	0.400	ug/L	1	---	---	---	---	---	---	B
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	---	---	---	---	---	---	
trans-1,4-Dichloro-2-butene	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	ICV-02

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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-Prod. Wells 1Q 2023 Perf. Mon

Project Number: 000029-02.84 T-01.001G

Project Manager: John Renda

Report ID:

A3D1354 - 05 19 23 1322

## 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 23D0831 - EPA 5030C						Water						
Blank (23D0831-BLK1)			Prepared: 04/20/23 13:00		Analyzed: 04/20/23 16:21							
n-Hexane	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
1,1,2-Trichloro-1,2,2-trifluoroet hane (Freon-113)	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 95 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		102 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		113 %		80-120 %		"						
LCS (23D0831-BS1)						Prepared: 04/20/23 13:00		Analyzed: 04/20/23 15:27				
EPA 8260D												
Acetone	39.6	10.0	20.0	ug/L	1	40.0	---	99	80-120%	---	---	
Acrylonitrile	18.9	1.00	2.00	ug/L	1	20.0	---	94	80-120%	---	---	
Benzene	18.4	0.100	0.200	ug/L	1	20.0	---	92	80-120%	---	---	
Bromobenzene	17.7	0.250	0.500	ug/L	1	20.0	---	88	80-120%	---	---	
Bromochloromethane	19.9	0.500	1.00	ug/L	1	20.0	---	100	80-120%	---	---	
Bromodichloromethane	19.2	0.500	1.00	ug/L	1	20.0	---	96	80-120%	---	---	
Bromoform	16.4	0.500	1.00	ug/L	1	20.0	---	82	80-120%	---	---	
Bromomethane	18.6	5.00	5.00	ug/L	1	20.0	---	93	80-120%	---	---	
2-Butanone (MEK)	40.3	5.00	10.0	ug/L	1	40.0	---	101	80-120%	---	---	
n-Butylbenzene	22.0	0.500	1.00	ug/L	1	20.0	---	110	80-120%	---	---	
sec-Butylbenzene	20.5	0.500	1.00	ug/L	1	20.0	---	102	80-120%	---	---	
tert-Butylbenzene	19.2	0.500	1.00	ug/L	1	20.0	---	96	80-120%	---	---	
Carbon disulfide	14.2	10.0	10.0	ug/L	1	20.0	---	71	80-120%	---	---	Q-55
Carbon tetrachloride	20.9	0.500	1.00	ug/L	1	20.0	---	104	80-120%	---	---	
Chlorobenzene	19.9	0.250	0.500	ug/L	1	20.0	---	100	80-120%	---	---	
Chloroethane	24.4	5.00	5.00	ug/L	1	20.0	---	122	80-120%	---	---	ICV-01, Q-56
Chloroform	18.9	0.500	1.00	ug/L	1	20.0	---	94	80-120%	---	---	
Chloromethane	16.2	2.50	5.00	ug/L	1	20.0	---	81	80-120%	---	---	
2-Chlorotoluene	17.9	0.500	1.00	ug/L	1	20.0	---	90	80-120%	---	---	
4-Chlorotoluene	19.5	0.500	1.00	ug/L	1	20.0	---	98	80-120%	---	---	
Dibromochloromethane	19.2	0.500	1.00	ug/L	1	20.0	---	96	80-120%	---	---	
1,2-Dibromo-3-chloropropane	16.4	2.50	5.00	ug/L	1	20.0	---	82	80-120%	---	---	
1,2-Dibromoethane (EDB)	19.8	0.250	0.500	ug/L	1	20.0	---	99	80-120%	---	---	
Dibromomethane	18.9	0.500	1.00	ug/L	1	20.0	---	95	80-120%	---	---	
1,2-Dichlorobenzene	19.5	0.250	0.500	ug/L	1	20.0	---	97	80-120%	---	---	

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Darwin Thomas, Business Development Director



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A3D1354 - 05 19 23 1322

## 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 23D0831 - EPA 5030C						Water						
LCS (23D0831-BS1)						Prepared: 04/20/23 13:00 Analyzed: 04/20/23 15:27						
1,3-Dichlorobenzene	19.0	0.250	0.500	ug/L	1	20.0	---	95	80-120%	---	---	
1,4-Dichlorobenzene	19.4	0.250	0.500	ug/L	1	20.0	---	97	80-120%	---	---	
Dichlorodifluoromethane	20.2	0.500	1.00	ug/L	1	20.0	---	101	80-120%	---	---	
1,1-Dichloroethane	19.2	0.200	0.400	ug/L	1	20.0	---	96	80-120%	---	---	
1,2-Dichloroethane (EDC)	21.6	0.200	0.400	ug/L	1	20.0	---	108	80-120%	---	---	
1,1-Dichloroethene	20.6	0.200	0.400	ug/L	1	20.0	---	103	80-120%	---	---	
cis-1,2-Dichloroethene	19.9	0.200	0.400	ug/L	1	20.0	---	99	80-120%	---	---	
trans-1,2-Dichloroethene	19.4	0.200	0.400	ug/L	1	20.0	---	97	80-120%	---	---	
1,2-Dichloropropane	19.1	0.250	0.500	ug/L	1	20.0	---	96	80-120%	---	---	
1,3-Dichloropropane	20.4	0.500	1.00	ug/L	1	20.0	---	102	80-120%	---	---	
2,2-Dichloropropane	19.7	0.500	1.00	ug/L	1	20.0	---	98	80-120%	---	---	
1,1-Dichloropropene	19.8	0.500	1.00	ug/L	1	20.0	---	99	80-120%	---	---	
cis-1,3-Dichloropropene	19.7	0.500	1.00	ug/L	1	20.0	---	98	80-120%	---	---	
trans-1,3-Dichloropropene	20.8	0.500	1.00	ug/L	1	20.0	---	104	80-120%	---	---	
Ethylbenzene	20.2	0.250	0.500	ug/L	1	20.0	---	101	80-120%	---	---	
Hexachlorobutadiene	22.7	2.50	5.00	ug/L	1	20.0	---	113	80-120%	---	---	
2-Hexanone	41.2	5.00	10.0	ug/L	1	40.0	---	103	80-120%	---	---	
Isopropylbenzene	21.1	0.500	1.00	ug/L	1	20.0	---	106	80-120%	---	---	
4-Isopropyltoluene	21.0	0.500	1.00	ug/L	1	20.0	---	105	80-120%	---	---	
Methylene chloride	18.2	5.00	10.0	ug/L	1	20.0	---	91	80-120%	---	---	
4-Methyl-2-pentanone (MiBK)	41.9	5.00	10.0	ug/L	1	40.0	---	105	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	17.7	0.500	1.00	ug/L	1	20.0	---	88	80-120%	---	---	
Naphthalene	13.9	2.00	2.00	ug/L	1	20.0	---	70	80-120%	---	---	Q-55
n-Propylbenzene	18.9	0.250	0.500	ug/L	1	20.0	---	95	80-120%	---	---	
Styrene	20.6	0.500	1.00	ug/L	1	20.0	---	103	80-120%	---	---	
1,1,1,2-Tetrachloroethane	20.7	0.200	0.400	ug/L	1	20.0	---	104	80-120%	---	---	
1,1,2,2-Tetrachloroethane	17.8	0.250	0.500	ug/L	1	20.0	---	89	80-120%	---	---	
Tetrachloroethene (PCE)	20.6	0.200	0.400	ug/L	1	20.0	---	103	80-120%	---	---	B
Toluene	18.7	0.500	1.00	ug/L	1	20.0	---	94	80-120%	---	---	
1,2,3-Trichlorobenzene	16.7	1.00	2.00	ug/L	1	20.0	---	84	80-120%	---	---	
1,2,4-Trichlorobenzene	18.5	1.00	2.00	ug/L	1	20.0	---	93	80-120%	---	---	
1,1,1-Trichloroethane	20.3	0.200	0.400	ug/L	1	20.0	---	102	80-120%	---	---	
1,1,2-Trichloroethane	19.1	0.250	0.500	ug/L	1	20.0	---	96	80-120%	---	---	
Trichloroethene (TCE)	18.9	0.200	0.400	ug/L	1	20.0	---	94	80-120%	---	---	

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A3D1354 - 05 19 23 1322

## 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 23D0831 - EPA 5030C						Water						
LCS (23D0831-BS1)						Prepared: 04/20/23 13:00 Analyzed: 04/20/23 15:27						
Trichlorofluoromethane	25.0	1.00	2.00	ug/L	1	20.0	---	125	80-120%	---	---	Q-56
1,2,3-Trichloropropane	19.1	0.500	1.00	ug/L	1	20.0	---	95	80-120%	---	---	
1,2,4-Trimethylbenzene	21.2	0.500	1.00	ug/L	1	20.0	---	106	80-120%	---	---	
1,3,5-Trimethylbenzene	20.5	0.500	1.00	ug/L	1	20.0	---	103	80-120%	---	---	
Vinyl chloride	18.3	0.200	0.400	ug/L	1	20.0	---	91	80-120%	---	---	
m,p-Xylene	41.4	0.500	1.00	ug/L	1	40.0	---	104	80-120%	---	---	
o-Xylene	20.0	0.250	0.500	ug/L	1	20.0	---	100	80-120%	---	---	
trans-1,4-Dichloro-2-butene	20.4	10.0	10.0	ug/L	1	20.0	---	102	80-120%	---	---	ICV-02
n-Hexane	19.7	5.00	10.0	ug/L	1	20.0	---	98	80-120%	---	---	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113)	21.7	1.00	2.00	ug/L	1	20.0	---	108	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr) Recovery: 95 % Limits: 80-120 % Dilution: 1x												
Toluene-d8 (Surr) 98 % 80-120 % "												
4-Bromofluorobenzene (Surr) 91 % 80-120 % "												

## Duplicate (23D0831-DUP1)

Prepared: 04/20/23 15:27 Analyzed: 04/20/23 19:58

## QC Source Sample: Non-SDG (A3D1371-10)

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	10.0	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%

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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 23D0831 - EPA 5030C						Water						
Duplicate (23D0831-DUP1)			Prepared: 04/20/23 15:27   Analyzed: 04/20/23 19:58									
QC Source Sample: Non-SDG (A3D1371-10)												
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%	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Ethylbenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	---	ND	---	---	---	30%	
2-Hexanone	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Methylene chloride	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Naphthalene	ND	2.00	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%	

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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-Prod. Wells 1Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001G**Project Manager: **John Renda****Report ID:****A3D1354 - 05 19 23 1322**

## 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 23D0831 - EPA 5030C						Water						
Duplicate (23D0831-DUP1)			Prepared: 04/20/23 15:27 Analyzed: 04/20/23 19:58									
QC Source Sample: Non-SDG (A3D1371-10)												
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	R-06
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	1.00	1.00	ug/L	1	---	ND	---	---	---	30%	
Toluene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	ICV-02
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Vinyl chloride	ND	0.200	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%	
trans-1,4-Dichloro-2-butene	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%	
n-Hexane	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113)	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 96 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		102 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		113 %		80-120 %		"						

**Matrix Spike (23D0831-MS1)**

Prepared: 04/20/23 15:27 Analyzed: 04/21/23 02:44

**QC Source Sample: GS-041823-82 (A3D1354-03)****EPA 8260D**

Acetone	2120	500	1000	ug/L	50	2000	ND	106	39-160%	---	---
Acrylonitrile	978	50.0	100	ug/L	50	1000	ND	98	63-135%	---	---
Benzene	4290	5.00	10.0	ug/L	50	1000	3300	99	79-120%	---	---
Bromobenzene	916	12.5	25.0	ug/L	50	1000	ND	92	80-120%	---	---
Bromochloromethane	1050	25.0	50.0	ug/L	50	1000	ND	105	78-123%	---	---
Bromodichloromethane	1020	25.0	50.0	ug/L	50	1000	ND	102	79-125%	---	---

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Project Number: 000029-02.84 T-01.001G

Project Manager: John Renda

Report ID:

A3D1354 - 05 19 23 1322

## 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 23D0831 - EPA 5030C						Water						
Matrix Spike (23D0831-MS1)				Prepared: 04/20/23 15:27   Analyzed: 04/21/23 02:44								
QC Source Sample: GS-041823-82 (A3D1354-03)												
Bromoform	874	25.0	50.0	ug/L	50	1000	ND	87	66-130%	---	---	
Bromomethane	1040	250	250	ug/L	50	1000	ND	104	53-141%	---	---	
2-Butanone (MEK)	2050	250	500	ug/L	50	2000	ND	102	56-143%	---	---	
n-Butylbenzene	1110	25.0	50.0	ug/L	50	1000	ND	111	75-128%	---	---	
sec-Butylbenzene	1060	25.0	50.0	ug/L	50	1000	ND	106	77-126%	---	---	
tert-Butylbenzene	1010	25.0	50.0	ug/L	50	1000	ND	101	78-124%	---	---	
Carbon disulfide	776	500	500	ug/L	50	1000	ND	78	64-133%	---	---	Q-54m
Carbon tetrachloride	1120	25.0	50.0	ug/L	50	1000	ND	112	72-136%	---	---	
Chlorobenzene	1050	12.5	25.0	ug/L	50	1000	ND	105	80-120%	---	---	
Chloroethane	1370	250	250	ug/L	50	1000	ND	137	60-138%	---	---	ICV-01, Q-54c
Chloroform	999	25.0	50.0	ug/L	50	1000	ND	100	79-124%	---	---	
Chloromethane	883	125	250	ug/L	50	1000	ND	88	50-139%	---	---	
2-Chlorotoluene	932	25.0	50.0	ug/L	50	1000	ND	93	79-122%	---	---	
4-Chlorotoluene	1010	25.0	50.0	ug/L	50	1000	ND	101	78-122%	---	---	
Dibromochloromethane	1020	25.0	50.0	ug/L	50	1000	ND	102	74-126%	---	---	
1,2-Dibromo-3-chloropropane	870	125	250	ug/L	50	1000	ND	87	62-128%	---	---	
1,2-Dibromoethane (EDB)	1040	12.5	25.0	ug/L	50	1000	ND	104	77-121%	---	---	
Dibromomethane	994	25.0	50.0	ug/L	50	1000	ND	99	79-123%	---	---	
1,2-Dichlorobenzene	1010	12.5	25.0	ug/L	50	1000	ND	101	80-120%	---	---	
1,3-Dichlorobenzene	986	12.5	25.0	ug/L	50	1000	ND	99	80-120%	---	---	
1,4-Dichlorobenzene	1010	12.5	25.0	ug/L	50	1000	ND	101	79-120%	---	---	
Dichlorodifluoromethane	1110	25.0	50.0	ug/L	50	1000	ND	111	32-152%	---	---	
1,1-Dichloroethane	1010	10.0	20.0	ug/L	50	1000	ND	101	77-125%	---	---	
1,2-Dichloroethane (EDC)	1140	10.0	20.0	ug/L	50	1000	ND	114	73-128%	---	---	
1,1-Dichloroethene	1090	10.0	20.0	ug/L	50	1000	ND	109	71-131%	---	---	
cis-1,2-Dichloroethene	1040	10.0	20.0	ug/L	50	1000	ND	104	78-123%	---	---	
trans-1,2-Dichloroethene	1010	10.0	20.0	ug/L	50	1000	ND	101	75-124%	---	---	
1,2-Dichloropropane	995	12.5	25.0	ug/L	50	1000	ND	100	78-122%	---	---	
1,3-Dichloropropane	1070	25.0	50.0	ug/L	50	1000	ND	107	80-120%	---	---	
2,2-Dichloropropane	830	25.0	50.0	ug/L	50	1000	ND	83	60-139%	---	---	
1,1-Dichloropropene	1050	25.0	50.0	ug/L	50	1000	ND	105	79-125%	---	---	
cis-1,3-Dichloropropene	936	25.0	50.0	ug/L	50	1000	ND	94	75-124%	---	---	
trans-1,3-Dichloropropene	1050	25.0	50.0	ug/L	50	1000	ND	105	73-127%	---	---	

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Project Number: 000029-02.84 T-01.001G

Project Manager: John Renda

Report ID:

A3D1354 - 05 19 23 1322

## 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 23D0831 - EPA 5030C						Water						
Matrix Spike (23D0831-MS1)			Prepared: 04/20/23 15:27    Analyzed: 04/21/23 02:44									
QC Source Sample: GS-041823-82 (A3D1354-03)												
Ethylbenzene	1100	12.5	25.0	ug/L	50	1000	ND	110	79-121%	---	---	
Hexachlorobutadiene	1090	125	250	ug/L	50	1000	ND	109	66-134%	---	---	
2-Hexanone	2170	250	500	ug/L	50	2000	ND	108	57-139%	---	---	
Isopropylbenzene	1130	25.0	50.0	ug/L	50	1000	ND	113	72-131%	---	---	
4-Isopropyltoluene	1060	25.0	50.0	ug/L	50	1000	ND	106	77-127%	---	---	
Methylene chloride	968	250	500	ug/L	50	1000	ND	97	74-124%	---	---	
4-Methyl-2-pentanone (MiBK)	2200	250	500	ug/L	50	2000	ND	110	67-130%	---	---	
Methyl tert-butyl ether (MTBE)	888	25.0	50.0	ug/L	50	1000	ND	89	71-124%	---	---	
Naphthalene	833	100	100	ug/L	50	1000	ND	83	61-128%	---	---	Q-54h
n-Propylbenzene	986	12.5	25.0	ug/L	50	1000	ND	99	76-126%	---	---	
Styrene	1090	25.0	50.0	ug/L	50	1000	ND	109	78-123%	---	---	
1,1,1,2-Tetrachloroethane	1100	10.0	20.0	ug/L	50	1000	ND	110	78-124%	---	---	
1,1,2,2-Tetrachloroethane	948	12.5	25.0	ug/L	50	1000	ND	95	71-121%	---	---	
Tetrachloroethene (PCE)	1050	10.0	20.0	ug/L	50	1000	ND	103	74-129%	---	---	B
Toluene	1000	25.0	50.0	ug/L	50	1000	ND	100	80-121%	---	---	
1,2,3-Trichlorobenzene	883	50.0	100	ug/L	50	1000	ND	88	69-129%	---	---	
1,2,4-Trichlorobenzene	960	50.0	100	ug/L	50	1000	ND	96	69-130%	---	---	
1,1,1-Trichloroethane	1070	10.0	20.0	ug/L	50	1000	ND	107	74-131%	---	---	
1,1,2-Trichloroethane	1000	12.5	25.0	ug/L	50	1000	ND	100	80-120%	---	---	
Trichloroethene (TCE)	954	10.0	20.0	ug/L	50	1000	ND	95	79-123%	---	---	
Trichlorofluoromethane	1360	50.0	100	ug/L	50	1000	ND	136	65-141%	---	---	Q-54f
1,2,3-Trichloropropane	1000	25.0	50.0	ug/L	50	1000	ND	100	73-122%	---	---	
1,2,4-Trimethylbenzene	1090	25.0	50.0	ug/L	50	1000	ND	109	76-124%	---	---	
1,3,5-Trimethylbenzene	1060	25.0	50.0	ug/L	50	1000	ND	106	75-124%	---	---	
Vinyl chloride	994	10.0	20.0	ug/L	50	1000	ND	99	58-137%	---	---	
m,p-Xylene	2210	25.0	50.0	ug/L	50	2000	ND	110	80-121%	---	---	
o-Xylene	1070	12.5	25.0	ug/L	50	1000	ND	107	78-122%	---	---	
trans-1,4-Dichloro-2-butene	924	500	500	ug/L	50	1000	ND	92	43-140%	---	---	ICV-02
n-Hexane	884	250	500	ug/L	50	1000	ND	88	48-143%	---	---	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113)	1110	50.0	100	ug/L	50	1000	ND	111	70-136%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 92 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		98 %		80-120 %		"						

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Page 50 of 103





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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 23D0831 - EPA 5030C						Water						
Matrix Spike (23D0831-MS1)				Prepared: 04/20/23 15:27   Analyzed: 04/21/23 02:44								
QC Source Sample: GS-041823-82 (A3D1354-03)												
Surr: 4-Bromofluorobenzene (Surr)		Recovery: 90 %		Limits: 80-120 %		Dilution: 1x						
Matrix Spike Dup (23D0831-MSD1)				Prepared: 04/20/23 15:27   Analyzed: 04/21/23 03:11								
QC Source Sample: GS-041823-82 (A3D1354-03)												
EPA 8260D												
Acetone	2150	500	1000	ug/L	50	2000	ND	108	39-160%	2	30%	Q-54m
Acrylonitrile	966	50.0	100	ug/L	50	1000	ND	97	63-135%	1	30%	
Benzene	4320	5.00	10.0	ug/L	50	1000	3300	102	79-120%	0.7	30%	
Bromobenzene	910	12.5	25.0	ug/L	50	1000	ND	91	80-120%	0.7	30%	
Bromochloromethane	1060	25.0	50.0	ug/L	50	1000	ND	106	78-123%	0.4	30%	ICV-01, Q-54c
Bromodichloromethane	1020	25.0	50.0	ug/L	50	1000	ND	102	79-125%	0.2	30%	
Bromoform	862	25.0	50.0	ug/L	50	1000	ND	86	66-130%	1	30%	
Bromomethane	1030	250	250	ug/L	50	1000	ND	103	53-141%	2	30%	
2-Butanone (MEK)	2060	250	500	ug/L	50	2000	ND	103	56-143%	0.5	30%	
n-Butylbenzene	1140	25.0	50.0	ug/L	50	1000	ND	114	75-128%	3	30%	
sec-Butylbenzene	1060	25.0	50.0	ug/L	50	1000	ND	106	77-126%	0.9	30%	
tert-Butylbenzene	1010	25.0	50.0	ug/L	50	1000	ND	101	78-124%	0.3	30%	
Carbon disulfide	820	500	500	ug/L	50	1000	ND	82	64-133%	5	30%	
Carbon tetrachloride	1120	25.0	50.0	ug/L	50	1000	ND	112	72-136%	0.3	30%	
Chlorobenzene	1040	12.5	25.0	ug/L	50	1000	ND	104	80-120%	1	30%	
Chloroethane	1360	250	250	ug/L	50	1000	ND	136	60-138%	1	30%	
Chloroform	999	25.0	50.0	ug/L	50	1000	ND	100	79-124%	0	30%	
Chloromethane	912	125	250	ug/L	50	1000	ND	91	50-139%	3	30%	
2-Chlorotoluene	939	25.0	50.0	ug/L	50	1000	ND	94	79-122%	0.7	30%	
4-Chlorotoluene	1020	25.0	50.0	ug/L	50	1000	ND	102	78-122%	0.8	30%	
Dibromochloromethane	1020	25.0	50.0	ug/L	50	1000	ND	102	74-126%	0.1	30%	
1,2-Dibromo-3-chloropropane	876	125	250	ug/L	50	1000	ND	88	62-128%	0.6	30%	
1,2-Dibromoethane (EDB)	1020	12.5	25.0	ug/L	50	1000	ND	102	77-121%	1	30%	
Dibromomethane	992	25.0	50.0	ug/L	50	1000	ND	99	79-123%	0.2	30%	
1,2-Dichlorobenzene	1020	12.5	25.0	ug/L	50	1000	ND	102	80-120%	0.1	30%	
1,3-Dichlorobenzene	984	12.5	25.0	ug/L	50	1000	ND	98	80-120%	0.3	30%	
1,4-Dichlorobenzene	1000	12.5	25.0	ug/L	50	1000	ND	100	79-120%	0.5	30%	

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## QUALITY CONTROL (QC) SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23D0831 - EPA 5030C						Water						
Matrix Spike Dup (23D0831-MSD1)			Prepared: 04/20/23 15:27   Analyzed: 04/21/23 03:11									
QC Source Sample: GS-041823-82 (A3D1354-03)												
Dichlorodifluoromethane	1130	25.0	50.0	ug/L	50	1000	ND	113	32-152%	1	30%	
1,1-Dichloroethane	1000	10.0	20.0	ug/L	50	1000	ND	100	77-125%	0.7	30%	
1,2-Dichloroethane (EDC)	1140	10.0	20.0	ug/L	50	1000	ND	114	73-128%	0.4	30%	
1,1-Dichloroethene	1100	10.0	20.0	ug/L	50	1000	ND	110	71-131%	0.5	30%	
cis-1,2-Dichloroethene	1040	10.0	20.0	ug/L	50	1000	ND	104	78-123%	0.05	30%	
trans-1,2-Dichloroethene	1020	10.0	20.0	ug/L	50	1000	ND	102	75-124%	1	30%	
1,2-Dichloropropane	982	12.5	25.0	ug/L	50	1000	ND	98	78-122%	1	30%	
1,3-Dichloropropane	1040	25.0	50.0	ug/L	50	1000	ND	104	80-120%	2	30%	
2,2-Dichloropropane	812	25.0	50.0	ug/L	50	1000	ND	81	60-139%	2	30%	
1,1-Dichloropropene	1040	25.0	50.0	ug/L	50	1000	ND	104	79-125%	1	30%	
cis-1,3-Dichloropropene	937	25.0	50.0	ug/L	50	1000	ND	94	75-124%	0.1	30%	
trans-1,3-Dichloropropene	1040	25.0	50.0	ug/L	50	1000	ND	104	73-127%	0.4	30%	
Ethylbenzene	1070	12.5	25.0	ug/L	50	1000	ND	107	79-121%	2	30%	
Hexachlorobutadiene	1150	125	250	ug/L	50	1000	ND	115	66-134%	5	30%	
2-Hexanone	2150	250	500	ug/L	50	2000	ND	107	57-139%	1	30%	
Isopropylbenzene	1110	25.0	50.0	ug/L	50	1000	ND	111	72-131%	1	30%	
4-Isopropyltoluene	1080	25.0	50.0	ug/L	50	1000	ND	108	77-127%	2	30%	
Methylene chloride	974	250	500	ug/L	50	1000	ND	97	74-124%	0.6	30%	
4-Methyl-2-pentanone (MiBK)	2170	250	500	ug/L	50	2000	ND	108	67-130%	1	30%	
Methyl tert-butyl ether (MTBE)	894	25.0	50.0	ug/L	50	1000	ND	89	71-124%	0.7	30%	
Naphthalene	852	100	100	ug/L	50	1000	ND	85	61-128%	2	30%	Q-54h
n-Propylbenzene	988	12.5	25.0	ug/L	50	1000	ND	99	76-126%	0.3	30%	
Styrene	1070	25.0	50.0	ug/L	50	1000	ND	107	78-123%	1	30%	
1,1,1,2-Tetrachloroethane	1080	10.0	20.0	ug/L	50	1000	ND	108	78-124%	2	30%	
1,1,2,2-Tetrachloroethane	945	12.5	25.0	ug/L	50	1000	ND	94	71-121%	0.3	30%	
Tetrachloroethene (PCE)	1040	10.0	20.0	ug/L	50	1000	ND	102	74-129%	1	30%	B
Toluene	976	25.0	50.0	ug/L	50	1000	ND	98	80-121%	3	30%	
1,2,3-Trichlorobenzene	916	50.0	100	ug/L	50	1000	ND	92	69-129%	4	30%	
1,2,4-Trichlorobenzene	990	50.0	100	ug/L	50	1000	ND	99	69-130%	3	30%	
1,1,1-Trichloroethane	1060	10.0	20.0	ug/L	50	1000	ND	106	74-131%	0.6	30%	
1,1,2-Trichloroethane	988	12.5	25.0	ug/L	50	1000	ND	99	80-120%	1	30%	
Trichloroethene (TCE)	958	10.0	20.0	ug/L	50	1000	ND	96	79-123%	0.4	30%	
Trichlorofluoromethane	1340	50.0	100	ug/L	50	1000	ND	134	65-141%	1	30%	Q-54f

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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-Prod. Wells 1Q 2023 Perf. Mon

Project Number: 000029-02.84 T-01.001G

Project Manager: John Renda

Report ID:

A3D1354 - 05 19 23 1322

## 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 23D0831 - EPA 5030C						Water						
Matrix Spike Dup (23D0831-MSD1)			Prepared: 04/20/23 15:27   Analyzed: 04/21/23 03:11									
QC Source Sample: GS-041823-82 (A3D1354-03)												
1,2,3-Trichloropropane	994	25.0	50.0	ug/L	50	1000	ND	99	73-122%	1	30%	ICV-02
1,2,4-Trimethylbenzene	1100	25.0	50.0	ug/L	50	1000	ND	110	76-124%	1	30%	
1,3,5-Trimethylbenzene	1070	25.0	50.0	ug/L	50	1000	ND	107	75-124%	0.7	30%	
Vinyl chloride	1050	10.0	20.0	ug/L	50	1000	ND	105	58-137%	6	30%	
m,p-Xylene	2170	25.0	50.0	ug/L	50	2000	ND	108	80-121%	2	30%	
o-Xylene	1050	12.5	25.0	ug/L	50	1000	ND	105	78-122%	1	30%	
trans-1,4-Dichloro-2-butene	940	250	500	ug/L	50	1000	ND	94	43-140%	2	30%	
n-Hexane	940	250	500	ug/L	50	1000	ND	94	48-143%	6	30%	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113)	1120	50.0	100	ug/L	50	1000	ND	112	70-136%	1	30%	
Surr: 1,4-Difluorobenzene (Surr)												
			Recovery:	94 %	Limits:	80-120 %	Dilution: 1x					
Toluene-d8 (Surr)				98 %		80-120 %	"					
4-Bromofluorobenzene (Surr)				91 %		80-120 %	"					

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Page 53 of 103

**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-Prod. Wells 1Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001G**Project Manager: **John Renda****Report ID:****A3D1354 - 05 19 23 1322****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 23D0859 - EPA 5030C						Water						
Blank (23D0859-BLK1)			Prepared: 04/21/23 09:00		Analyzed: 04/21/23 10:46							
EPA 8260D												
Acetone	ND	10.0	20.0	ug/L	1	---	---	---	---	---	---	
Acrylonitrile	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
Benzene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Bromobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Bromochloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Bromoform	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Bromomethane	ND	5.00	5.00	ug/L	1	---	---	---	---	---	---	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Carbon disulfide	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Chlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Chloroethane	ND	5.00	5.00	ug/L	1	---	---	---	---	---	---	
Chloroform	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Chloromethane	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	5.00	5.00	ug/L	1	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Dibromomethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	

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Darwin Thomas, Business Development Director



## ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

## Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001G

Project Manager: John Renda

Report ID:

A3D1354 - 05 19 23 1322

## 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 23D0859 - EPA 5030C						Water						
Blank (23D0859-BLK1)						Prepared: 04/21/23 09:00 Analyzed: 04/21/23 10:46						
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Ethylbenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
2-Hexanone	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Methylene chloride	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Naphthalene	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Styrene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
Toluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Vinyl chloride	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
m,p-Xylene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
o-Xylene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr) Recovery: 109 % Limits: 80-120 % Dilution: 1x												

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Darwin Thomas, Business Development Director



## ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001G

Project Manager: John Renda

Report ID:

A3D1354 - 05 19 23 1322

## 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 23D0859 - EPA 5030C						Water						
Blank (23D0859-BLK1)			Prepared: 04/21/23 09:00		Analyzed: 04/21/23 10:46							
Surr: Toluene-d8 (Surr)		Recovery: 110 %		Limits: 80-120 %		Dilution: 1x						
4-Bromofluorobenzene (Surr)		97 %		80-120 %		"						
LCS (23D0859-BS1)			Prepared: 04/21/23 09:00		Analyzed: 04/21/23 09:51							
EPA 8260D												
Acetone	47.1	10.0	20.0	ug/L	1	40.0	---	118	80-120%	---	---	
Acrylonitrile	23.7	1.00	2.00	ug/L	1	20.0	---	119	80-120%	---	---	
Benzene	21.4	0.100	0.200	ug/L	1	20.0	---	107	80-120%	---	---	
Bromobenzene	18.1	0.250	0.500	ug/L	1	20.0	---	90	80-120%	---	---	
Bromochloromethane	30.8	0.500	1.00	ug/L	1	20.0	---	154	80-120%	---	---	Q-56
Bromodichloromethane	20.6	0.500	1.00	ug/L	1	20.0	---	103	80-120%	---	---	
Bromoform	17.7	0.500	1.00	ug/L	1	20.0	---	88	80-120%	---	---	
Bromomethane	29.3	5.00	5.00	ug/L	1	20.0	---	147	80-120%	---	---	Q-56
2-Butanone (MEK)	51.3	5.00	10.0	ug/L	1	40.0	---	128	80-120%	---	---	Q-56
n-Butylbenzene	21.6	0.500	1.00	ug/L	1	20.0	---	108	80-120%	---	---	
sec-Butylbenzene	20.8	0.500	1.00	ug/L	1	20.0	---	104	80-120%	---	---	
tert-Butylbenzene	17.4	0.500	1.00	ug/L	1	20.0	---	87	80-120%	---	---	
Carbon disulfide	24.3	5.00	10.0	ug/L	1	20.0	---	122	80-120%	---	---	Q-56
Carbon tetrachloride	19.1	0.500	1.00	ug/L	1	20.0	---	95	80-120%	---	---	
Chlorobenzene	19.3	0.250	0.500	ug/L	1	20.0	---	97	80-120%	---	---	
Chloroethane	27.1	5.00	5.00	ug/L	1	20.0	---	135	80-120%	---	---	Q-56
Chloroform	20.8	0.500	1.00	ug/L	1	20.0	---	104	80-120%	---	---	
Chloromethane	23.9	2.50	5.00	ug/L	1	20.0	---	120	80-120%	---	---	
2-Chlorotoluene	18.4	0.500	1.00	ug/L	1	20.0	---	92	80-120%	---	---	
4-Chlorotoluene	19.2	0.500	1.00	ug/L	1	20.0	---	96	80-120%	---	---	
Dibromochloromethane	19.0	0.500	1.00	ug/L	1	20.0	---	95	80-120%	---	---	
1,2-Dibromo-3-chloropropane	15.6	5.00	5.00	ug/L	1	20.0	---	78	80-120%	---	---	Q-55
1,2-Dibromoethane (EDB)	19.4	0.250	0.500	ug/L	1	20.0	---	97	80-120%	---	---	
Dibromomethane	21.6	0.500	1.00	ug/L	1	20.0	---	108	80-120%	---	---	
1,2-Dichlorobenzene	19.4	0.250	0.500	ug/L	1	20.0	---	97	80-120%	---	---	
1,3-Dichlorobenzene	19.1	0.250	0.500	ug/L	1	20.0	---	96	80-120%	---	---	
1,4-Dichlorobenzene	19.0	0.250	0.500	ug/L	1	20.0	---	95	80-120%	---	---	
Dichlorodifluoromethane	21.6	0.500	1.00	ug/L	1	20.0	---	108	80-120%	---	---	
1,1-Dichloroethane	23.8	0.200	0.400	ug/L	1	20.0	---	119	80-120%	---	---	

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

6700 S.W. Sandburg Street

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6720 SW Macadam Ave. Suite 125

Portland, OR 97219

Project: **Gasco-MGP Only-Prod. Wells 1Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001G**Project Manager: **John Renda****Report ID:****A3D1354 - 05 19 23 1322****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 23D0859 - EPA 5030C						Water						
LCS (23D0859-BS1)			Prepared: 04/21/23 09:00		Analyzed: 04/21/23 09:51							
1,2-Dichloroethane (EDC)	21.1	0.200	0.400	ug/L	1	20.0	---	105	80-120%	---	---	
1,1-Dichloroethene	24.5	0.200	0.400	ug/L	1	20.0	---	122	80-120%	---	---	Q-56
cis-1,2-Dichloroethene	22.0	0.200	0.400	ug/L	1	20.0	---	110	80-120%	---	---	
trans-1,2-Dichloroethene	23.3	0.200	0.400	ug/L	1	20.0	---	116	80-120%	---	---	
1,2-Dichloropropane	24.3	0.250	0.500	ug/L	1	20.0	---	121	80-120%	---	---	Q-56
1,3-Dichloropropane	21.1	0.500	1.00	ug/L	1	20.0	---	105	80-120%	---	---	
2,2-Dichloropropane	21.3	0.500	1.00	ug/L	1	20.0	---	107	80-120%	---	---	
1,1-Dichloropropene	21.7	0.500	1.00	ug/L	1	20.0	---	109	80-120%	---	---	
cis-1,3-Dichloropropene	20.4	0.500	1.00	ug/L	1	20.0	---	102	80-120%	---	---	
trans-1,3-Dichloropropene	20.7	0.500	1.00	ug/L	1	20.0	---	104	80-120%	---	---	
Ethylbenzene	19.4	0.250	0.500	ug/L	1	20.0	---	97	80-120%	---	---	
Hexachlorobutadiene	17.2	2.50	5.00	ug/L	1	20.0	---	86	80-120%	---	---	
2-Hexanone	43.5	5.00	10.0	ug/L	1	40.0	---	109	80-120%	---	---	
Isopropylbenzene	19.2	0.500	1.00	ug/L	1	20.0	---	96	80-120%	---	---	
4-Isopropyltoluene	19.5	0.500	1.00	ug/L	1	20.0	---	97	80-120%	---	---	
Methylene chloride	22.6	5.00	10.0	ug/L	1	20.0	---	113	80-120%	---	---	
4-Methyl-2-pentanone (MiBK)	46.2	5.00	10.0	ug/L	1	40.0	---	116	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	20.7	0.500	1.00	ug/L	1	20.0	---	103	80-120%	---	---	
Naphthalene	17.2	1.00	2.00	ug/L	1	20.0	---	86	80-120%	---	---	
n-Propylbenzene	20.5	0.250	0.500	ug/L	1	20.0	---	103	80-120%	---	---	
Styrene	19.6	0.500	1.00	ug/L	1	20.0	---	98	80-120%	---	---	
1,1,1,2-Tetrachloroethane	17.6	0.200	0.400	ug/L	1	20.0	---	88	80-120%	---	---	
1,1,2,2-Tetrachloroethane	21.3	0.250	0.500	ug/L	1	20.0	---	106	80-120%	---	---	
Tetrachloroethene (PCE)	17.4	0.200	0.400	ug/L	1	20.0	---	87	80-120%	---	---	
Toluene	19.9	0.500	1.00	ug/L	1	20.0	---	100	80-120%	---	---	
1,2,3-Trichlorobenzene	16.9	1.00	2.00	ug/L	1	20.0	---	84	80-120%	---	---	
1,2,4-Trichlorobenzene	17.0	1.00	2.00	ug/L	1	20.0	---	85	80-120%	---	---	
1,1,1-Trichloroethane	19.3	0.200	0.400	ug/L	1	20.0	---	97	80-120%	---	---	
1,1,2-Trichloroethane	18.9	0.250	0.500	ug/L	1	20.0	---	94	80-120%	---	---	
Trichloroethene (TCE)	20.2	0.200	0.400	ug/L	1	20.0	---	101	80-120%	---	---	
Trichlorofluoromethane	20.1	1.00	2.00	ug/L	1	20.0	---	101	80-120%	---	---	
1,2,3-Trichloropropane	19.4	0.500	1.00	ug/L	1	20.0	---	97	80-120%	---	---	
1,2,4-Trimethylbenzene	19.4	0.500	1.00	ug/L	1	20.0	---	97	80-120%	---	---	
1,3,5-Trimethylbenzene	19.7	0.500	1.00	ug/L	1	20.0	---	98	80-120%	---	---	

Apex Laboratories

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Darwin Thomas, Business Development Director



## ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001G

Project Manager: John Renda

Report ID:

A3D1354 - 05 19 23 1322

## 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 23D0859 - EPA 5030C												
Water												
LCS (23D0859-BS1)			Prepared: 04/21/23 09:00		Analyzed: 04/21/23 09:51							
Vinyl chloride	25.9	0.200	0.400	ug/L	1	20.0	---	130	80-120%	---	---	Q-56
m,p-Xylene	39.2	0.500	1.00	ug/L	1	40.0	---	98	80-120%	---	---	
o-Xylene	18.1	0.250	0.500	ug/L	1	20.0	---	91	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 109 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		106 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		89 %		80-120 %		"						
Duplicate (23D0859-DUP1)												
Prepared: 04/21/23 09:00 Analyzed: 04/21/23 14:06												
QC Source Sample: Non-SDG (A3D1358-01)												
Acetone	ND	20.0	20.0	ug/L	1	---	ND	---	---	---	30%	J
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	0.870	0.500	1.00	ug/L	1	---	0.830	---	---	5	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	5.00	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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Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

**Anchor QEA, LLC**

6720 SW Macadam Ave. Suite 125

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Project: **Gasco-MGP Only-Prod. Wells 1Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001G**Project Manager: **John Renda****Report ID:****A3D1354 - 05 19 23 1322**

## 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 23D0859 - EPA 5030C						Water						
Duplicate (23D0859-DUP1)			Prepared: 04/21/23 09:00		Analyzed: 04/21/23 14:06							
QC Source Sample: Non-SDG (A3D1358-01)												
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Ethylbenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	---	ND	---	---	---	30%	
2-Hexanone	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Methylene chloride	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Naphthalene	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	30%	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Styrene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
Toluene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	

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Darwin Thomas, Business Development Director



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Project Number: 000029-02.84 T-01.001G

Project Manager: John Renda

Report ID:

A3D1354 - 05 19 23 1322

## 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 23D0859 - EPA 5030C						Water						
Duplicate (23D0859-DUP1)			Prepared: 04/21/23 09:00   Analyzed: 04/21/23 14:06									
QC Source Sample: Non-SDG (A3D1358-01)												
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Vinyl chloride	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
m,p-Xylene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
o-Xylene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 108 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		106 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		99 %		80-120 %		"						

## Matrix Spike (23D0859-MS1)

Prepared: 04/21/23 09:00 Analyzed: 04/21/23 14:51

QC Source Sample: Non-SDG (A3D1437-02)

## EPA 8260D

Acetone	56.4	10.0	20.0	ug/L	1	40.0	ND	141	39-160%	---	---	
Acrylonitrile	25.2	1.00	2.00	ug/L	1	20.0	ND	126	63-135%	---	---	
Benzene	25.5	0.100	0.200	ug/L	1	20.0	ND	128	79-120%	---	---	Q-01
Bromobenzene	20.8	0.250	0.500	ug/L	1	20.0	ND	104	80-120%	---	---	
Bromochloromethane	33.0	0.500	1.00	ug/L	1	20.0	ND	165	78-123%	---	---	Q-54e
Bromodichloromethane	23.2	0.500	1.00	ug/L	1	20.0	ND	116	79-125%	---	---	
Bromoform	18.7	0.500	1.00	ug/L	1	20.0	ND	93	66-130%	---	---	
Bromomethane	33.5	5.00	5.00	ug/L	1	20.0	ND	167	53-141%	---	---	Q-54d
2-Butanone (MEK)	54.8	5.00	10.0	ug/L	1	40.0	ND	137	56-143%	---	---	Q-54g
n-Butylbenzene	24.5	0.500	1.00	ug/L	1	20.0	ND	123	75-128%	---	---	
sec-Butylbenzene	24.0	0.500	1.00	ug/L	1	20.0	ND	120	77-126%	---	---	
tert-Butylbenzene	20.7	0.500	1.00	ug/L	1	20.0	ND	103	78-124%	---	---	
Carbon disulfide	28.3	5.00	10.0	ug/L	1	20.0	ND	142	64-133%	---	---	Q-54c
Carbon tetrachloride	22.9	0.500	1.00	ug/L	1	20.0	ND	114	72-136%	---	---	
Chlorobenzene	21.8	0.250	0.500	ug/L	1	20.0	ND	109	80-120%	---	---	
Chloroethane	32.8	5.00	5.00	ug/L	1	20.0	ND	164	60-138%	---	---	Q-54b
Chloroform	23.8	0.500	1.00	ug/L	1	20.0	ND	119	79-124%	---	---	
Chloromethane	27.4	2.50	5.00	ug/L	1	20.0	ND	137	50-139%	---	---	

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Project Manager: John Renda

Report ID:

A3D1354 - 05 19 23 1322

## 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 23D0859 - EPA 5030C						Water						
Matrix Spike (23D0859-MS1)			Prepared: 04/21/23 09:00		Analyzed: 04/21/23 14:51							
QC Source Sample: Non-SDG (A3D1437-02)												
2-Chlorotoluene	21.8	0.500	1.00	ug/L	1	20.0	ND	109	79-122%	---	---	Q-54j
4-Chlorotoluene	22.0	0.500	1.00	ug/L	1	20.0	ND	110	78-122%	---	---	
Dibromochloromethane	20.7	0.500	1.00	ug/L	1	20.0	ND	103	74-126%	---	---	
1,2-Dibromo-3-chloropropane	17.8	5.00	5.00	ug/L	1	20.0	ND	89	62-128%	---	---	
1,2-Dibromoethane (EDB)	21.7	0.250	0.500	ug/L	1	20.0	ND	108	77-121%	---	---	
Dibromomethane	24.5	0.500	1.00	ug/L	1	20.0	ND	123	79-123%	---	---	Q-01
1,2-Dichlorobenzene	22.0	0.250	0.500	ug/L	1	20.0	ND	110	80-120%	---	---	
1,3-Dichlorobenzene	22.0	0.250	0.500	ug/L	1	20.0	ND	110	80-120%	---	---	
1,4-Dichlorobenzene	22.0	0.250	0.500	ug/L	1	20.0	ND	110	79-120%	---	---	
Dichlorodifluoromethane	26.0	0.500	1.00	ug/L	1	20.0	ND	130	32-152%	---	---	
1,1-Dichloroethane	27.4	0.200	0.400	ug/L	1	20.0	ND	137	77-125%	---	---	Q-54c
1,2-Dichloroethane (EDC)	22.8	0.200	0.400	ug/L	1	20.0	ND	114	73-128%	---	---	
1,1-Dichloroethene	28.4	0.200	0.400	ug/L	1	20.0	ND	142	71-131%	---	---	Q-01
cis-1,2-Dichloroethene	26.5	0.200	0.400	ug/L	1	20.0	ND	133	78-123%	---	---	
trans-1,2-Dichloroethene	27.1	0.200	0.400	ug/L	1	20.0	ND	136	75-124%	---	---	Q-54
1,2-Dichloropropane	28.3	0.250	0.500	ug/L	1	20.0	ND	141	78-122%	---	---	
1,3-Dichloropropane	23.5	0.500	1.00	ug/L	1	20.0	ND	117	80-120%	---	---	Q-01
2,2-Dichloropropane	24.1	0.500	1.00	ug/L	1	20.0	ND	120	60-139%	---	---	
1,1-Dichloropropene	26.5	0.500	1.00	ug/L	1	20.0	ND	133	79-125%	---	---	
cis-1,3-Dichloropropene	22.8	0.500	1.00	ug/L	1	20.0	ND	114	75-124%	---	---	
trans-1,3-Dichloropropene	22.9	0.500	1.00	ug/L	1	20.0	ND	114	73-127%	---	---	
Ethylbenzene	22.6	0.250	0.500	ug/L	1	20.0	ND	113	79-121%	---	---	
Hexachlorobutadiene	19.1	2.50	5.00	ug/L	1	20.0	ND	95	66-134%	---	---	
2-Hexanone	46.6	5.00	10.0	ug/L	1	40.0	ND	116	57-139%	---	---	
Isopropylbenzene	22.7	0.500	1.00	ug/L	1	20.0	ND	114	72-131%	---	---	
4-Isopropyltoluene	22.6	0.500	1.00	ug/L	1	20.0	ND	113	77-127%	---	---	
Methylene chloride	24.6	5.00	10.0	ug/L	1	20.0	ND	123	74-124%	---	---	
4-Methyl-2-pentanone (MiBK)	48.2	5.00	10.0	ug/L	1	40.0	ND	121	67-130%	---	---	
Methyl tert-butyl ether (MTBE)	23.1	0.500	1.00	ug/L	1	20.0	ND	115	71-124%	---	---	
Naphthalene	19.8	1.00	2.00	ug/L	1	20.0	ND	99	61-128%	---	---	
n-Propylbenzene	23.8	0.250	0.500	ug/L	1	20.0	ND	119	76-126%	---	---	
Styrene	21.8	0.500	1.00	ug/L	1	20.0	ND	109	78-123%	---	---	
1,1,1,2-Tetrachloroethane	18.6	0.200	0.400	ug/L	1	20.0	ND	93	78-124%	---	---	

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Page 61 of 103



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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 23D0859 - EPA 5030C						Water						
Matrix Spike (23D0859-MS1)			Prepared: 04/21/23 09:00		Analyzed: 04/21/23 14:51							
QC Source Sample: Non-SDG (A3D1437-02)												
1,1,2,2-Tetrachloroethane	23.0	0.250	0.500	ug/L	1	20.0	ND	115	71-121%	---	---	Q-01
Tetrachloroethene (PCE)	21.5	0.200	0.400	ug/L	1	20.0	ND	107	74-129%	---	---	
Toluene	23.0	0.500	1.00	ug/L	1	20.0	ND	115	80-121%	---	---	
1,2,3-Trichlorobenzene	19.7	1.00	2.00	ug/L	1	20.0	ND	99	69-129%	---	---	
1,2,4-Trichlorobenzene	19.6	1.00	2.00	ug/L	1	20.0	ND	98	69-130%	---	---	
1,1,1-Trichloroethane	23.2	0.200	0.400	ug/L	1	20.0	ND	116	74-131%	---	---	Q-54a
1,1,2-Trichloroethane	21.2	0.250	0.500	ug/L	1	20.0	ND	106	80-120%	---	---	
Trichloroethene (TCE)	25.1	0.200	0.400	ug/L	1	20.0	ND	125	79-123%	---	---	
Trichlorofluoromethane	24.0	1.00	2.00	ug/L	1	20.0	ND	120	65-141%	---	---	
1,2,3-Trichloropropane	20.7	0.500	1.00	ug/L	1	20.0	ND	103	73-122%	---	---	
1,2,4-Trimethylbenzene	22.2	0.500	1.00	ug/L	1	20.0	ND	111	76-124%	---	---	Q-54a
1,3,5-Trimethylbenzene	22.4	0.500	1.00	ug/L	1	20.0	ND	112	75-124%	---	---	
Vinyl chloride	32.1	0.200	0.400	ug/L	1	20.0	ND	160	58-137%	---	---	
m,p-Xylene	44.7	0.500	1.00	ug/L	1	40.0	ND	112	80-121%	---	---	
o-Xylene	20.9	0.250	0.500	ug/L	1	20.0	ND	105	78-122%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 109 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		103 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		93 %		80-120 %		"						

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ORELAP ID: OR100062

**Anchor QEA, LLC**

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

Project: **Gasco-MGP Only-Prod. Wells 1Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001G**Project Manager: **John Renda****Report ID:****A3D1354 - 05 19 23 1322**

## 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 23D0866 - EPA 5030C						Water						
Blank (23D0866-BLK1)			Prepared: 04/21/23 09:31		Analyzed: 04/21/23 18:13							
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	10.0	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	5.00	5.00	ug/L	1	---	---	---	---	---	---	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Dibromomethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	

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Darwin Thomas, Business Development Director



## ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

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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 23D0866 - EPA 5030C						Water						
Blank (23D0866-BLK1)			Prepared: 04/21/23 09:31		Analyzed: 04/21/23 18:13							
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)	0.290	0.200	0.400	ug/L	1	---	---	---	---	---	---	B-02, J
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	---	---	---	---	---	---	
n-Hexane	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	

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Darwin Thomas, Business Development Director



## ANALYTICAL REPORT

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503-718-2323

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Project Manager: John Renda

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A3D1354 - 05 19 23 1322

## 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 23D0866 - EPA 5030C						Water						
Blank (23D0866-BLK1)			Prepared: 04/21/23 09:31		Analyzed: 04/21/23 18:13							
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113)	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 95 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		101 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		100 %		80-120 %		"						
LCS (23D0866-BS1)			Prepared: 04/21/23 09:31		Analyzed: 04/21/23 17:09							
EPA 8260D												
Acetone	42.0	10.0	20.0	ug/L	1	40.0	---	105	80-120%	---	---	
Acrylonitrile	19.2	1.00	2.00	ug/L	1	20.0	---	96	80-120%	---	---	
Benzene	18.4	0.100	0.200	ug/L	1	20.0	---	92	80-120%	---	---	
Bromobenzene	17.0	0.250	0.500	ug/L	1	20.0	---	85	80-120%	---	---	
Bromochloromethane	20.1	0.500	1.00	ug/L	1	20.0	---	101	80-120%	---	---	
Bromodichloromethane	19.7	0.500	1.00	ug/L	1	20.0	---	98	80-120%	---	---	
Bromoform	17.1	0.500	1.00	ug/L	1	20.0	---	86	80-120%	---	---	
Bromomethane	11.2	5.00	5.00	ug/L	1	20.0	---	56	80-120%	---	---	Q-55
2-Butanone (MEK)	42.1	5.00	10.0	ug/L	1	40.0	---	105	80-120%	---	---	
n-Butylbenzene	22.1	0.500	1.00	ug/L	1	20.0	---	111	80-120%	---	---	
sec-Butylbenzene	20.0	0.500	1.00	ug/L	1	20.0	---	100	80-120%	---	---	
tert-Butylbenzene	18.5	0.500	1.00	ug/L	1	20.0	---	93	80-120%	---	---	
Carbon disulfide	14.9	10.0	10.0	ug/L	1	20.0	---	75	80-120%	---	---	Q-55
Carbon tetrachloride	21.2	0.500	1.00	ug/L	1	20.0	---	106	80-120%	---	---	
Chlorobenzene	19.7	0.250	0.500	ug/L	1	20.0	---	98	80-120%	---	---	
Chloroethane	20.5	5.00	5.00	ug/L	1	20.0	---	102	80-120%	---	---	ICV-01
Chloroform	19.3	0.500	1.00	ug/L	1	20.0	---	97	80-120%	---	---	
Chloromethane	12.5	5.00	5.00	ug/L	1	20.0	---	63	80-120%	---	---	Q-55
2-Chlorotoluene	17.3	0.500	1.00	ug/L	1	20.0	---	87	80-120%	---	---	
4-Chlorotoluene	19.0	0.500	1.00	ug/L	1	20.0	---	95	80-120%	---	---	
Dibromochloromethane	20.0	0.500	1.00	ug/L	1	20.0	---	100	80-120%	---	---	
1,2-Dibromo-3-chloropropane	18.6	2.50	5.00	ug/L	1	20.0	---	93	80-120%	---	---	
1,2-Dibromoethane (EDB)	19.8	0.250	0.500	ug/L	1	20.0	---	99	80-120%	---	---	
Dibromomethane	19.3	0.500	1.00	ug/L	1	20.0	---	97	80-120%	---	---	
1,2-Dichlorobenzene	19.1	0.250	0.500	ug/L	1	20.0	---	96	80-120%	---	---	
1,3-Dichlorobenzene	18.7	0.250	0.500	ug/L	1	20.0	---	93	80-120%	---	---	

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A3D1354 - 05 19 23 1322

## 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 23D0866 - EPA 5030C						Water						
LCS (23D0866-BS1)			Prepared: 04/21/23 09:31		Analyzed: 04/21/23 17:09							
1,4-Dichlorobenzene	19.2	0.250	0.500	ug/L	1	20.0	---	96	80-120%	---	---	
Dichlorodifluoromethane	17.2	0.500	1.00	ug/L	1	20.0	---	86	80-120%	---	---	
1,1-Dichloroethane	19.2	0.200	0.400	ug/L	1	20.0	---	96	80-120%	---	---	
1,2-Dichloroethane (EDC)	21.8	0.200	0.400	ug/L	1	20.0	---	109	80-120%	---	---	
1,1-Dichloroethene	20.1	0.200	0.400	ug/L	1	20.0	---	101	80-120%	---	---	
cis-1,2-Dichloroethene	19.9	0.200	0.400	ug/L	1	20.0	---	100	80-120%	---	---	
trans-1,2-Dichloroethene	19.2	0.200	0.400	ug/L	1	20.0	---	96	80-120%	---	---	
1,2-Dichloropropane	19.1	0.250	0.500	ug/L	1	20.0	---	95	80-120%	---	---	
1,3-Dichloropropane	20.2	0.500	1.00	ug/L	1	20.0	---	101	80-120%	---	---	
2,2-Dichloropropane	19.7	0.500	1.00	ug/L	1	20.0	---	99	80-120%	---	---	
1,1-Dichloropropene	19.3	0.500	1.00	ug/L	1	20.0	---	96	80-120%	---	---	
cis-1,3-Dichloropropene	19.8	0.500	1.00	ug/L	1	20.0	---	99	80-120%	---	---	
trans-1,3-Dichloropropene	21.2	0.500	1.00	ug/L	1	20.0	---	106	80-120%	---	---	
Ethylbenzene	20.0	0.250	0.500	ug/L	1	20.0	---	100	80-120%	---	---	
Hexachlorobutadiene	22.6	2.50	5.00	ug/L	1	20.0	---	113	80-120%	---	---	
2-Hexanone	44.3	5.00	10.0	ug/L	1	40.0	---	111	80-120%	---	---	
Isopropylbenzene	20.9	0.500	1.00	ug/L	1	20.0	---	104	80-120%	---	---	
4-Isopropyltoluene	20.9	0.500	1.00	ug/L	1	20.0	---	105	80-120%	---	---	
Methylene chloride	17.6	5.00	10.0	ug/L	1	20.0	---	88	80-120%	---	---	
4-Methyl-2-pentanone (MiBK)	43.6	5.00	10.0	ug/L	1	40.0	---	109	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	17.7	0.500	1.00	ug/L	1	20.0	---	88	80-120%	---	---	
Naphthalene	17.4	1.00	2.00	ug/L	1	20.0	---	87	80-120%	---	---	
n-Propylbenzene	18.3	0.250	0.500	ug/L	1	20.0	---	91	80-120%	---	---	
Styrene	20.6	0.500	1.00	ug/L	1	20.0	---	103	80-120%	---	---	
1,1,1,2-Tetrachloroethane	20.6	0.200	0.400	ug/L	1	20.0	---	103	80-120%	---	---	
1,1,2,2-Tetrachloroethane	18.5	0.250	0.500	ug/L	1	20.0	---	92	80-120%	---	---	
Tetrachloroethene (PCE)	19.1	0.200	0.400	ug/L	1	20.0	---	96	80-120%	---	---	B-02
Toluene	18.4	0.500	1.00	ug/L	1	20.0	---	92	80-120%	---	---	
1,2,3-Trichlorobenzene	19.6	1.00	2.00	ug/L	1	20.0	---	98	80-120%	---	---	
1,2,4-Trichlorobenzene	20.6	1.00	2.00	ug/L	1	20.0	---	103	80-120%	---	---	
1,1,1-Trichloroethane	19.9	0.200	0.400	ug/L	1	20.0	---	100	80-120%	---	---	
1,1,2-Trichloroethane	18.8	0.250	0.500	ug/L	1	20.0	---	94	80-120%	---	---	
Trichloroethene (TCE)	18.0	0.200	0.400	ug/L	1	20.0	---	90	80-120%	---	---	
Trichlorofluoromethane	23.8	1.00	2.00	ug/L	1	20.0	---	119	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 23D0866 - EPA 5030C						Water							
LCS (23D0866-BS1)			Prepared: 04/21/23 09:31		Analyzed: 04/21/23 17:09								
1,2,3-Trichloropropane	18.8	0.500	1.00	ug/L	1	20.0	---	94	80-120%	---	---	ICV-02	
1,2,4-Trimethylbenzene	20.4	0.500	1.00	ug/L	1	20.0	---	102	80-120%	---	---		
1,3,5-Trimethylbenzene	19.7	0.500	1.00	ug/L	1	20.0	---	98	80-120%	---	---		
Vinyl chloride	16.0	0.200	0.400	ug/L	1	20.0	---	80	80-120%	---	---		
m,p-Xylene	40.9	0.500	1.00	ug/L	1	40.0	---	102	80-120%	---	---		
o-Xylene	19.8	0.250	0.500	ug/L	1	20.0	---	99	80-120%	---	---		
trans-1,4-Dichloro-2-butene	21.7	10.0	10.0	ug/L	1	20.0	---	108	80-120%	---	---		
n-Hexane	18.2	5.00	10.0	ug/L	1	20.0	---	91	80-120%	---	---		
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113)	20.3	1.00	2.00	ug/L	1	20.0	---	102	80-120%	---	---		
Surr: 1,4-Difluorobenzene (Surr)												Recovery: 95 %	
Toluene-d8 (Surr)													Limits: 80-120 %
4-Bromofluorobenzene (Surr)													Dilution: 1x
												"	
												"	

## Duplicate (23D0866-DUP1)

Prepared: 04/21/23 09:31 Analyzed: 04/21/23 22:17

## QC Source Sample: Non-SDG (A3D1466-01)

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	10.0	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	5.00	5.00	ug/L	1	---	ND	---	---	---	30%

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Darwin Thomas, Business Development Director



## ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

**Anchor QEA, LLC**

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

Project: **Gasco-MGP Only-Prod. Wells 1Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001G**Project Manager: **John Renda****Report ID:****A3D1354 - 05 19 23 1322**

## 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 23D0866 - EPA 5030C						Water						
Duplicate (23D0866-DUP1)			Prepared: 04/21/23 09:31		Analyzed: 04/21/23 22:17							
QC Source Sample: Non-SDG (A3D1466-01)												
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%	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Ethylbenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	---	ND	---	---	---	30%	
2-Hexanone	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Methylene chloride	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Naphthalene	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	30%	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Styrene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	

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Darwin Thomas, Business Development Director



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503-718-2323

ORELAP ID: OR100062

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6720 SW Macadam Ave. Suite 125

Portland, OR 97219

Project: **Gasco-MGP Only-Prod. Wells 1Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001G**Project Manager: **John Renda****Report ID:****A3D1354 - 05 19 23 1322**

## 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 23D0866 - EPA 5030C						Water						
Duplicate (23D0866-DUP1)			Prepared: 04/21/23 09:31   Analyzed: 04/21/23 22:17									
QC Source Sample: Non-SDG (A3D1466-01)												
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	0.400	0.400	ug/L	1	---	ND	---	---	---	30%	
Toluene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Vinyl chloride	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
m,p-Xylene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
o-Xylene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
n-Hexane	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113)	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 94 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		103 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		101 %		80-120 %		"						

## Matrix Spike (23D0866-MS1)

Prepared: 04/21/23 09:31 Analyzed: 04/22/23 06:51

T-02

## QC Source Sample: GS-041823-82 (A3D1354-03RE1)

## EPA 8260D

Acetone	2200	500	1000	ug/L	50	2000	ND	110	39-160%	---	---	
Acrylonitrile	952	50.0	100	ug/L	50	1000	ND	95	63-135%	---	---	
Benzene	4200	5.00	10.0	ug/L	50	1000	3250	95	79-120%	---	---	
Bromobenzene	872	12.5	25.0	ug/L	50	1000	ND	87	80-120%	---	---	
Bromochloromethane	973	25.0	50.0	ug/L	50	1000	ND	97	78-123%	---	---	
Bromodichloromethane	992	25.0	50.0	ug/L	50	1000	ND	99	79-125%	---	---	
Bromoform	874	25.0	50.0	ug/L	50	1000	ND	87	66-130%	---	---	
Bromomethane	804	250	250	ug/L	50	1000	ND	80	53-141%	---	---	Q-54k

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Darwin Thomas, Business Development Director



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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-Prod. Wells 1Q 2023 Perf. Mon

Project Number: 000029-02.84 T-01.001G

Project Manager: John Renda

Report ID:

A3D1354 - 05 19 23 1322

## 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 23D0866 - EPA 5030C						Water						
Matrix Spike (23D0866-MS1)			Prepared: 04/21/23 09:31    Analyzed: 04/22/23 06:51					T-02				
QC Source Sample: GS-041823-82 (A3D1354-03RE1)												
2-Butanone (MEK)	2050	250	500	ug/L	50	2000	ND	102	56-143%	---	---	Q-54i
n-Butylbenzene	1130	25.0	50.0	ug/L	50	1000	ND	113	75-128%	---	---	
sec-Butylbenzene	1040	25.0	50.0	ug/L	50	1000	ND	104	77-126%	---	---	
tert-Butylbenzene	972	25.0	50.0	ug/L	50	1000	ND	97	78-124%	---	---	
Carbon disulfide	736	500	500	ug/L	50	1000	ND	74	64-133%	---	---	
Carbon tetrachloride	1140	25.0	50.0	ug/L	50	1000	ND	114	72-136%	---	---	ICV-01
Chlorobenzene	1020	12.5	25.0	ug/L	50	1000	ND	102	80-120%	---	---	
Chloroethane	1260	250	250	ug/L	50	1000	ND	126	60-138%	---	---	
Chloroform	978	25.0	50.0	ug/L	50	1000	ND	98	79-124%	---	---	Q-54i
Chloromethane	826	250	250	ug/L	50	1000	ND	83	50-139%	---	---	
2-Chlorotoluene	897	25.0	50.0	ug/L	50	1000	ND	90	79-122%	---	---	
4-Chlorotoluene	967	25.0	50.0	ug/L	50	1000	ND	97	78-122%	---	---	
Dibromochloromethane	1010	25.0	50.0	ug/L	50	1000	ND	101	74-126%	---	---	
1,2-Dibromo-3-chloropropane	926	125	250	ug/L	50	1000	ND	93	62-128%	---	---	
1,2-Dibromoethane (EDB)	990	12.5	25.0	ug/L	50	1000	ND	99	77-121%	---	---	
Dibromomethane	942	25.0	50.0	ug/L	50	1000	ND	94	79-123%	---	---	
1,2-Dichlorobenzene	984	12.5	25.0	ug/L	50	1000	ND	98	80-120%	---	---	
1,3-Dichlorobenzene	954	12.5	25.0	ug/L	50	1000	ND	95	80-120%	---	---	
1,4-Dichlorobenzene	982	12.5	25.0	ug/L	50	1000	ND	98	79-120%	---	---	
Dichlorodifluoromethane	949	25.0	50.0	ug/L	50	1000	ND	95	32-152%	---	---	
1,1-Dichloroethane	982	10.0	20.0	ug/L	50	1000	ND	98	77-125%	---	---	
1,2-Dichloroethane (EDC)	1110	10.0	20.0	ug/L	50	1000	ND	111	73-128%	---	---	
1,1-Dichloroethene	1060	10.0	20.0	ug/L	50	1000	ND	106	71-131%	---	---	
cis-1,2-Dichloroethene	999	10.0	20.0	ug/L	50	1000	ND	100	78-123%	---	---	
trans-1,2-Dichloroethene	987	10.0	20.0	ug/L	50	1000	ND	99	75-124%	---	---	
1,2-Dichloropropane	956	12.5	25.0	ug/L	50	1000	ND	96	78-122%	---	---	
1,3-Dichloropropane	1030	25.0	50.0	ug/L	50	1000	ND	103	80-120%	---	---	
2,2-Dichloropropane	692	25.0	50.0	ug/L	50	1000	ND	69	60-139%	---	---	
1,1-Dichloropropene	1020	25.0	50.0	ug/L	50	1000	ND	102	79-125%	---	---	
cis-1,3-Dichloropropene	879	25.0	50.0	ug/L	50	1000	ND	88	75-124%	---	---	
trans-1,3-Dichloropropene	990	25.0	50.0	ug/L	50	1000	ND	99	73-127%	---	---	
Ethylbenzene	1060	12.5	25.0	ug/L	50	1000	ND	106	79-121%	---	---	
Hexachlorobutadiene	1150	125	250	ug/L	50	1000	ND	115	66-134%	---	---	

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Darwin Thomas, Business Development Director

Page 70 of 103



## ANALYTICAL REPORT

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Project Number: 000029-02.84 T-01.001G

Project Manager: John Renda

Report ID:

A3D1354 - 05 19 23 1322

## 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 23D0866 - EPA 5030C						Water						
Matrix Spike (23D0866-MS1)			Prepared: 04/21/23 09:31		Analyzed: 04/22/23 06:51		T-02					
QC Source Sample: GS-041823-82 (A3D1354-03RE1)												
2-Hexanone	2210	250	500	ug/L	50	2000	ND	111	57-139%	---	---	
Isopropylbenzene	1110	25.0	50.0	ug/L	50	1000	ND	111	72-131%	---	---	
4-Isopropyltoluene	1070	25.0	50.0	ug/L	50	1000	ND	107	77-127%	---	---	
Methylene chloride	900	250	500	ug/L	50	1000	ND	90	74-124%	---	---	
4-Methyl-2-pentanone (MiBK)	2200	250	500	ug/L	50	2000	ND	110	67-130%	---	---	
Methyl tert-butyl ether (MTBE)	856	25.0	50.0	ug/L	50	1000	ND	86	71-124%	---	---	
Naphthalene	974	50.0	100	ug/L	50	1000	58.0	92	61-128%	---	---	
n-Propylbenzene	956	12.5	25.0	ug/L	50	1000	ND	96	76-126%	---	---	
Styrene	1070	25.0	50.0	ug/L	50	1000	ND	107	78-123%	---	---	
1,1,1,2-Tetrachloroethane	1070	10.0	20.0	ug/L	50	1000	ND	107	78-124%	---	---	
1,1,2,2-Tetrachloroethane	933	12.5	25.0	ug/L	50	1000	ND	93	71-121%	---	---	
Tetrachloroethene (PCE)	1010	10.0	20.0	ug/L	50	1000	ND	99	74-129%	---	---	B-02
Toluene	959	25.0	50.0	ug/L	50	1000	ND	96	80-121%	---	---	
1,2,3-Trichlorobenzene	958	50.0	100	ug/L	50	1000	ND	96	69-129%	---	---	
1,2,4-Trichlorobenzene	1010	50.0	100	ug/L	50	1000	ND	101	69-130%	---	---	
1,1,1-Trichloroethane	1050	10.0	20.0	ug/L	50	1000	ND	105	74-131%	---	---	
1,1,2-Trichloroethane	965	12.5	25.0	ug/L	50	1000	ND	96	80-120%	---	---	
Trichloroethene (TCE)	910	10.0	20.0	ug/L	50	1000	ND	91	79-123%	---	---	
Trichlorofluoromethane	1330	50.0	100	ug/L	50	1000	ND	133	65-141%	---	---	
1,2,3-Trichloropropane	959	25.0	50.0	ug/L	50	1000	ND	96	73-122%	---	---	
1,2,4-Trimethylbenzene	1060	25.0	50.0	ug/L	50	1000	ND	106	76-124%	---	---	
1,3,5-Trimethylbenzene	1020	25.0	50.0	ug/L	50	1000	ND	102	75-124%	---	---	
Vinyl chloride	888	10.0	20.0	ug/L	50	1000	ND	89	58-137%	---	---	
m,p-Xylene	2140	25.0	50.0	ug/L	50	2000	ND	107	80-121%	---	---	
o-Xylene	1040	12.5	25.0	ug/L	50	1000	ND	104	78-122%	---	---	
trans-1,4-Dichloro-2-butene	893	500	500	ug/L	50	1000	ND	89	43-140%	---	---	ICV-02
n-Hexane	905	250	500	ug/L	50	1000	ND	90	48-143%	---	---	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113)	1110	50.0	100	ug/L	50	1000	ND	111	70-136%	---	---	
Surr: 1,4-Difluorobenzene (Surr)												
			Recovery: 93 %	Limits: 80-120 %	Dilution: 1x							
Toluene-d8 (Surr)			97 %	80-120 %	"							
4-Bromofluorobenzene (Surr)			88 %	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 23D0866 - EPA 5030C						Water						
Matrix Spike Dup (23D0866-MSD1)			Prepared: 04/21/23 09:31			Analyzed: 04/22/23 07:18			T-02			
QC Source Sample: GS-041823-82 (A3D1354-03RE1)												
EPA 8260D												
Acetone	2240	500	1000	ug/L	50	2000	ND	112	39-160%	2	30%	
Acrylonitrile	1000	50.0	100	ug/L	50	1000	ND	100	63-135%	5	30%	
Benzene	4440	5.00	10.0	ug/L	50	1000	3250	120	79-120%	6	30%	
Bromobenzene	912	12.5	25.0	ug/L	50	1000	ND	91	80-120%	4	30%	
Bromochloromethane	1050	25.0	50.0	ug/L	50	1000	ND	105	78-123%	7	30%	
Bromodichloromethane	1060	25.0	50.0	ug/L	50	1000	ND	106	79-125%	7	30%	
Bromoform	938	25.0	50.0	ug/L	50	1000	ND	94	66-130%	7	30%	
Bromomethane	858	250	250	ug/L	50	1000	ND	86	53-141%	6	30%	Q-54k
2-Butanone (MEK)	2160	250	500	ug/L	50	2000	ND	108	56-143%	5	30%	
n-Butylbenzene	1190	25.0	50.0	ug/L	50	1000	ND	119	75-128%	5	30%	
sec-Butylbenzene	1090	25.0	50.0	ug/L	50	1000	ND	109	77-126%	4	30%	
tert-Butylbenzene	1020	25.0	50.0	ug/L	50	1000	ND	102	78-124%	5	30%	
Carbon disulfide	836	500	500	ug/L	50	1000	ND	84	64-133%	13	30%	Q-54l
Carbon tetrachloride	1200	25.0	50.0	ug/L	50	1000	ND	120	72-136%	5	30%	
Chlorobenzene	1070	12.5	25.0	ug/L	50	1000	ND	107	80-120%	5	30%	
Chloroethane	1360	250	250	ug/L	50	1000	ND	136	60-138%	7	30%	ICV-01
Chloroform	1040	25.0	50.0	ug/L	50	1000	ND	104	79-124%	6	30%	
Chloromethane	976	250	250	ug/L	50	1000	ND	98	50-139%	17	30%	Q-54i
2-Chlorotoluene	922	25.0	50.0	ug/L	50	1000	ND	92	79-122%	3	30%	
4-Chlorotoluene	1000	25.0	50.0	ug/L	50	1000	ND	100	78-122%	4	30%	
Dibromochloromethane	1080	25.0	50.0	ug/L	50	1000	ND	108	74-126%	7	30%	
1,2-Dibromo-3-chloropropane	968	125	250	ug/L	50	1000	ND	97	62-128%	4	30%	
1,2-Dibromoethane (EDB)	1050	12.5	25.0	ug/L	50	1000	ND	105	77-121%	6	30%	
Dibromomethane	1010	25.0	50.0	ug/L	50	1000	ND	101	79-123%	7	30%	
1,2-Dichlorobenzene	1040	12.5	25.0	ug/L	50	1000	ND	104	80-120%	5	30%	
1,3-Dichlorobenzene	1010	12.5	25.0	ug/L	50	1000	ND	101	80-120%	6	30%	
1,4-Dichlorobenzene	1030	12.5	25.0	ug/L	50	1000	ND	103	79-120%	5	30%	
Dichlorodifluoromethane	1090	25.0	50.0	ug/L	50	1000	ND	109	32-152%	14	30%	
1,1-Dichloroethane	1030	10.0	20.0	ug/L	50	1000	ND	103	77-125%	5	30%	
1,2-Dichloroethane (EDC)	1160	10.0	20.0	ug/L	50	1000	ND	116	73-128%	4	30%	
1,1-Dichloroethene	1130	10.0	20.0	ug/L	50	1000	ND	113	71-131%	6	30%	
cis-1,2-Dichloroethene	1060	10.0	20.0	ug/L	50	1000	ND	106	78-123%	6	30%	

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Darwin Thomas, Business Development Director

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## ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

## Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001G

Project Manager: John Renda

Report ID:

A3D1354 - 05 19 23 1322

## 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 23D0866 - EPA 5030C						Water						
Matrix Spike Dup (23D0866-MSD1)			Prepared: 04/21/23 09:31		Analyzed: 04/22/23 07:18		T-02					
QC Source Sample: GS-041823-82 (A3D1354-03RE1)												
trans-1,2-Dichloroethene	1040	10.0	20.0	ug/L	50	1000	ND	104	75-124%	5	30%	
1,2-Dichloropropane	1010	12.5	25.0	ug/L	50	1000	ND	101	78-122%	6	30%	
1,3-Dichloropropane	1080	25.0	50.0	ug/L	50	1000	ND	108	80-120%	4	30%	
2,2-Dichloropropane	730	25.0	50.0	ug/L	50	1000	ND	73	60-139%	5	30%	
1,1-Dichloropropene	1080	25.0	50.0	ug/L	50	1000	ND	108	79-125%	6	30%	
cis-1,3-Dichloropropene	937	25.0	50.0	ug/L	50	1000	ND	94	75-124%	6	30%	
trans-1,3-Dichloropropene	1050	25.0	50.0	ug/L	50	1000	ND	105	73-127%	5	30%	
Ethylbenzene	1110	12.5	25.0	ug/L	50	1000	ND	111	79-121%	5	30%	
Hexachlorobutadiene	1220	125	250	ug/L	50	1000	ND	122	66-134%	6	30%	
2-Hexanone	2290	250	500	ug/L	50	2000	ND	115	57-139%	4	30%	
Isopropylbenzene	1160	25.0	50.0	ug/L	50	1000	ND	116	72-131%	5	30%	
4-Isopropyltoluene	1130	25.0	50.0	ug/L	50	1000	ND	113	77-127%	5	30%	
Methylene chloride	962	250	500	ug/L	50	1000	ND	96	74-124%	7	30%	
4-Methyl-2-pentanone (MiBK)	2280	250	500	ug/L	50	2000	ND	114	67-130%	4	30%	
Methyl tert-butyl ether (MTBE)	918	25.0	50.0	ug/L	50	1000	ND	92	71-124%	7	30%	
Napthalene	1020	50.0	100	ug/L	50	1000	58.0	96	61-128%	5	30%	
n-Propylbenzene	995	12.5	25.0	ug/L	50	1000	ND	100	76-126%	4	30%	
Styrene	1120	25.0	50.0	ug/L	50	1000	ND	112	78-123%	5	30%	
1,1,1,2-Tetrachloroethane	1140	10.0	20.0	ug/L	50	1000	ND	114	78-124%	7	30%	
1,1,2,2-Tetrachloroethane	956	12.5	25.0	ug/L	50	1000	ND	96	71-121%	2	30%	
Tetrachloroethene (PCE)	1060	10.0	20.0	ug/L	50	1000	ND	105	74-129%	6	30%	B-02
Toluene	1010	25.0	50.0	ug/L	50	1000	ND	101	80-121%	6	30%	
1,2,3-Trichlorobenzene	1030	50.0	100	ug/L	50	1000	ND	103	69-129%	7	30%	
1,2,4-Trichlorobenzene	1080	50.0	100	ug/L	50	1000	ND	108	69-130%	7	30%	
1,1,1-Trichloroethane	1110	10.0	20.0	ug/L	50	1000	ND	111	74-131%	5	30%	
1,1,2-Trichloroethane	1010	12.5	25.0	ug/L	50	1000	ND	101	80-120%	5	30%	
Trichloroethene (TCE)	977	10.0	20.0	ug/L	50	1000	ND	98	79-123%	7	30%	
Trichlorofluoromethane	1420	50.0	100	ug/L	50	1000	ND	142	65-141%	6	30%	Q-01
1,2,3-Trichloropropane	990	25.0	50.0	ug/L	50	1000	ND	99	73-122%	3	30%	
1,2,4-Trimethylbenzene	1110	25.0	50.0	ug/L	50	1000	ND	111	76-124%	4	30%	
1,3,5-Trimethylbenzene	1080	25.0	50.0	ug/L	50	1000	ND	108	75-124%	5	30%	
Vinyl chloride	1040	10.0	20.0	ug/L	50	1000	ND	104	58-137%	16	30%	
m,p-Xylene	2260	25.0	50.0	ug/L	50	2000	ND	113	80-121%	5	30%	

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# ANALYTICAL REPORT

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

Project Number: 000029-02.84 T-01.001G

Project Manager: John Renda

Report ID:

A3D1354 - 05 19 23 1322

## 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 23D0866 - EPA 5030C							Water					
Matrix Spike Dup (23D0866-MSD1)			Prepared: 04/21/23 09:31		Analyzed: 04/22/23 07:18		T-02					
QC Source Sample: GS-041823-82 (A3D1354-03RE1)												
o-Xylene	1100	12.5	25.0	ug/L	50	1000	ND	110	78-122%	6	30%	
n-Hexane	984	250	500	ug/L	50	1000	ND	98	48-143%	8	30%	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113)	1170	50.0	100	ug/L	50	1000	ND	117	70-136%	5	30%	
Surr: 1,4-Difluorobenzene (Surr)												
			Recovery:	94 %	Limits:	80-120 %	Dilution: 1x					
Toluene-d8 (Surr)				97 %		80-120 %	"					
4-Bromofluorobenzene (Surr)				88 %		80-120 %	"					

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## QUALITY CONTROL (QC) SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D SIM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes	
Batch 23D0991 - EPA 5030C						Water							
Blank (23D0991-BLK1)			Prepared: 04/25/23 11:00		Analyzed: 04/25/23 14:00								
EPA 8260D SIM													
1,1-Dichloroethene	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---		
cis-1,2-Dichloroethene	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---		
trans-1,2-Dichloroethene	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---		
Trichloroethene (TCE)	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---		
Vinyl chloride	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---		
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 106 %		Limits: 80-120 %		Dilution: 1x							
Toluene-d8 (Surr)		103 %		80-120 %		"							
4-Bromofluorobenzene (Surr)		101 %		80-120 %		"							
LCS (23D0991-BS1)						Prepared: 04/25/23 11:00		Analyzed: 04/25/23 13:03					
EPA 8260D SIM													
1,1-Dichloroethene	0.204	0.0100	0.0200	ug/L	1	0.200	---	102	80-120%	---	---		
cis-1,2-Dichloroethene	0.222	0.0100	0.0200	ug/L	1	0.200	---	111	80-120%	---	---		
trans-1,2-Dichloroethene	0.205	0.0100	0.0200	ug/L	1	0.200	---	102	80-120%	---	---		
Trichloroethene (TCE)	0.191	0.0100	0.0200	ug/L	1	0.200	---	96	80-120%	---	---		
Vinyl chloride	0.197	0.0100	0.0200	ug/L	1	0.200	---	98	80-120%	---	---		
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 106 %		Limits: 80-120 %		Dilution: 1x							
Toluene-d8 (Surr)		102 %		80-120 %		"							
4-Bromofluorobenzene (Surr)		98 %		80-120 %		"							
Duplicate (23D0991-DUP1)						Prepared: 04/25/23 11:00		Analyzed: 04/25/23 18:56					
QC Source Sample: Non-SDG (A3D1208-01)													
1,1-Dichloroethene	ND	0.250	0.500	ug/L	25	---	ND	---	---	---	30%		
cis-1,2-Dichloroethene	ND	0.500	0.500	ug/L	25	---	ND	---	---	---	30%		
trans-1,2-Dichloroethene	ND	0.250	0.500	ug/L	25	---	ND	---	---	---	30%		
Trichloroethene (TCE)	ND	1.00	1.00	ug/L	25	---	ND	---	---	---	30%	R-06	
Vinyl chloride	ND	0.250	0.500	ug/L	25	---	ND	---	---	---	30%		
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 103 %		Limits: 80-120 %		Dilution: 1x							
Toluene-d8 (Surr)		101 %		80-120 %		"							
4-Bromofluorobenzene (Surr)		96 %		80-120 %		"							
Matrix Spike (23D0991-MS1)						Prepared: 04/25/23 11:00		Analyzed: 04/26/23 01:13					T-02

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Project Number: 000029-02.84 T-01.001G

Project Manager: John Renda

Report ID:

A3D1354 - 05 19 23 1322

## QUALITY CONTROL (QC) SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D SIM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23D0991 - EPA 5030C						Water						
Matrix Spike (23D0991-MS1)			Prepared: 04/25/23 11:00   Analyzed: 04/26/23 01:13						T-02			
QC Source Sample: GS-041823-82 (A3D1354-03)												
EPA 8260D SIM												
1,1-Dichloroethene	5.64	0.250	0.500	ug/L	25	5.00	ND	113	71-131%	---	---	
cis-1,2-Dichloroethene	5.78	0.250	0.500	ug/L	25	5.00	ND	116	78-123%	---	---	
trans-1,2-Dichloroethene	5.49	0.250	0.500	ug/L	25	5.00	ND	110	75-124%	---	---	
Trichloroethene (TCE)	5.81	0.250	0.500	ug/L	25	5.00	ND	116	79-123%	---	---	
Vinyl chloride	5.54	0.250	0.500	ug/L	25	5.00	ND	111	58-137%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 101 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		101 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		98 %		80-120 %		"						
Matrix Spike Dup (23D0991-MSD1)			Prepared: 04/25/23 11:00   Analyzed: 04/26/23 01:40						T-02			
QC Source Sample: GS-041823-82 (A3D1354-03)												
EPA 8260D SIM												
1,1-Dichloroethene	5.54	0.250	0.500	ug/L	25	5.00	ND	111	71-131%	2	30%	
cis-1,2-Dichloroethene	5.48	0.250	0.500	ug/L	25	5.00	ND	110	78-123%	5	30%	
trans-1,2-Dichloroethene	5.39	0.250	0.500	ug/L	25	5.00	ND	108	75-124%	2	30%	
Trichloroethene (TCE)	5.57	0.250	0.500	ug/L	25	5.00	ND	111	79-123%	4	30%	
Vinyl chloride	5.48	0.250	0.500	ug/L	25	5.00	ND	110	58-137%	1	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 101 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		101 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		97 %		80-120 %		"						

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Project Number: 000029-02.84 T-01.001G

Project Manager: John Renda

Report ID:

A3D1354 - 05 19 23 1322

## 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 23D0846 - EPA 3511 (Bottle Extraction)						Water						
Blank (23D0846-BLK1)			Prepared: 04/21/23 06:01		Analyzed: 04/21/23 15:02							
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: 127 %		Limits: 78-134 %		Dilution: 1x		Q-41				
Benzo(a)pyrene-d12 (Surr)		126 %		80-132 %		"						

LCS (23D0846-BS1)

Prepared: 04/21/23 06:01 Analyzed: 04/21/23 15:35

EPA 8270E LVI												
Acenaphthene	1.56	0.0160	0.0320	ug/L	1	1.60	---	98	80-120%	---	---	
Acenaphthylene	1.79	0.0160	0.0320	ug/L	1	1.60	---	112	80-124%	---	---	
Anthracene	1.61	0.0160	0.0320	ug/L	1	1.60	---	100	80-123%	---	---	
Benz(a)anthracene	1.81	0.00800	0.0160	ug/L	1	1.60	---	113	80-122%	---	---	
Benzo(a)pyrene	1.97	0.00800	0.0160	ug/L	1	1.60	---	123	80-129%	---	---	
Benzo(b)fluoranthene	1.94	0.00800	0.0160	ug/L	1	1.60	---	121	80-124%	---	---	
Benzo(k)fluoranthene	1.79	0.00800	0.0160	ug/L	1	1.60	---	112	80-125%	---	---	
Benzo(g,h,i)perylene	1.63	0.0160	0.0320	ug/L	1	1.60	---	102	80-120%	---	---	

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Report ID:

A3D1354 - 05 19 23 1322

## 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 23D0846 - EPA 3511 (Bottle Extraction)						Water						
LCS (23D0846-BS1)				Prepared: 04/21/23 06:01		Analyzed: 04/21/23 15:35						
Chrysene	1.65	0.00800	0.0160	ug/L	1	1.60	---	103	80-120%	---	---	
Dibenz(a,h)anthracene	1.63	0.00800	0.0160	ug/L	1	1.60	---	102	80-120%	---	---	
Fluoranthene	1.59	0.0160	0.0320	ug/L	1	1.60	---	100	80-126%	---	---	
Fluorene	1.56	0.0160	0.0320	ug/L	1	1.60	---	97	77-127%	---	---	
Indeno(1,2,3-cd)pyrene	1.61	0.00800	0.0160	ug/L	1	1.60	---	100	80-121%	---	---	
1-Methylnaphthalene	1.33	0.0320	0.0640	ug/L	1	1.60	---	83	53-148%	---	---	
2-Methylnaphthalene	1.31	0.0320	0.0640	ug/L	1	1.60	---	82	48-150%	---	---	
Naphthalene	1.55	0.0320	0.0640	ug/L	1	1.60	---	97	78-120%	---	---	
Phenanthrene	1.55	0.0320	0.0640	ug/L	1	1.60	---	97	80-120%	---	---	
Pyrene	1.60	0.0160	0.0320	ug/L	1	1.60	---	100	80-125%	---	---	
Carbazole	1.87	0.0160	0.0320	ug/L	1	1.60	---	117	65-141%	---	---	
Dibenzofuran	1.66	0.0160	0.0320	ug/L	1	1.60	---	104	76-121%	---	---	
Surr: Acenaphthylene-d8 (Surr)		Recovery: 123 %		Limits: 78-134 %		Dilution: 1x		Q-41				
Benzo(a)pyrene-d12 (Surr)		124 %		80-132 %		"						

## Matrix Spike (23D0846-MS1)

Prepared: 04/21/23 06:02 Analyzed: 04/21/23 16:47

QC Source Sample: GS-041823-82 (A3D1354-03)

## EPA 8270E LVI

Acenaphthene	59.1	1.08	2.16	ug/L	50	2.16	58.2	41	80-120%	---	---	Q-03
Acenaphthylene	7.54	6.08	6.08	ug/L	50	2.16	ND	349	80-124%	---	---	Q-02
Anthracene	3.13	2.16	2.16	ug/L	50	2.16	ND	145	80-123%	---	---	Q-02
Benz(a)anthracene	2.38	0.540	1.08	ug/L	50	2.16	ND	110	80-122%	---	---	
Benzo(a)pyrene	1.86	0.540	1.08	ug/L	50	2.16	ND	86	80-129%	---	---	
Benzo(b)fluoranthene	1.86	0.540	1.08	ug/L	50	2.16	ND	86	80-124%	---	---	
Benzo(k)fluoranthene	1.70	0.540	1.08	ug/L	50	2.16	ND	79	80-125%	---	---	Q-01
Benzo(g,h,i)perylene	1.70	1.08	2.16	ug/L	50	2.16	ND	79	80-120%	---	---	Q-01, J
Chrysene	2.22	0.540	1.08	ug/L	50	2.16	ND	102	80-120%	---	---	
Dibenz(a,h)anthracene	2.19	0.540	1.08	ug/L	50	2.16	ND	101	80-120%	---	---	
Fluoranthene	2.51	1.08	2.16	ug/L	50	2.16	ND	116	80-126%	---	---	
Fluorene	16.5	1.08	2.16	ug/L	50	2.16	14.3	101	77-127%	---	---	
Indeno(1,2,3-cd)pyrene	2.38	0.540	1.08	ug/L	50	2.16	ND	110	80-121%	---	---	
1-Methylnaphthalene	40.6	2.16	4.32	ug/L	50	2.16	38.5	97	53-148%	---	---	Q-03
2-Methylnaphthalene	39.9	2.16	4.32	ug/L	50	2.16	39.4	24	48-150%	---	---	Q-03
Naphthalene	106	2.16	4.32	ug/L	50	2.16	110	-187	78-120%	---	---	Q-03

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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-Prod. Wells 1Q 2023 Perf. Mon

Project Number: 000029-02.84 T-01.001G

Project Manager: John Renda

Report ID:

A3D1354 - 05 19 23 1322

## 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 23D0846 - EPA 3511 (Bottle Extraction)						Water						
Matrix Spike (23D0846-MS1)			Prepared: 04/21/23 06:02    Analyzed: 04/21/23 16:47									
QC Source Sample: GS-041823-82 (A3D1354-03)												
Phenanthrene	12.9	2.16	4.32	ug/L	50	2.16	11.8	51	80-120%	---	---	Q-03
Pyrene	2.57	1.08	2.16	ug/L	50	2.16	ND	119	80-125%	---	---	
Carbazole	12.2	1.08	2.16	ug/L	50	2.16	10.2	93	65-141%	---	---	
Dibenzofuran	16.2	1.08	2.16	ug/L	50	2.16	14.7	68	76-121%	---	---	Q-03
Surr: Acenaphthylene-d8 (Surr)		Recovery: 457 %		Limits: 78-134 %		Dilution: 50x						S-05
Benzo(a)pyrene-d12 (Surr)		87 %		80-132 %		"						S-05

## Matrix Spike Dup (23D0846-MSD1)

Prepared: 04/21/23 06:02 Analyzed: 04/21/23 17:20

QC Source Sample: GS-041823-82 (A3D1354-03)												
EPA 8270E LVI												
Acenaphthene	67.9	1.07	2.14	ug/L	50	2.14	58.2	451	80-120%	14	30%	Q-03
Acenaphthylene	7.85	6.03	6.03	ug/L	50	2.14	ND	366	80-124%	4	30%	Q-02
Anthracene	3.32	2.14	2.14	ug/L	50	2.14	ND	155	80-123%	6	30%	Q-02
Benz(a)anthracene	2.44	0.536	1.07	ug/L	50	2.14	ND	114	80-122%	3	30%	
Benzo(a)pyrene	2.06	0.536	1.07	ug/L	50	2.14	ND	96	80-129%	10	30%	
Benzo(b)fluoranthene	2.20	0.536	1.07	ug/L	50	2.14	ND	102	80-124%	16	30%	
Benzo(k)fluoranthene	2.12	0.536	1.07	ug/L	50	2.14	ND	99	80-125%	22	30%	
Benzo(g,h,i)perylene	2.04	1.07	2.14	ug/L	50	2.14	ND	95	80-120%	18	30%	J
Chrysene	2.33	0.536	1.07	ug/L	50	2.14	ND	109	80-120%	5	30%	
Dibenz(a,h)anthracene	2.44	0.536	1.07	ug/L	50	2.14	ND	114	80-120%	11	30%	
Fluoranthene	2.81	1.07	2.14	ug/L	50	2.14	ND	131	80-126%	11	30%	Q-01
Fluorene	17.7	1.07	2.14	ug/L	50	2.14	14.3	157	77-127%	7	30%	Q-03
Indeno(1,2,3-cd)pyrene	2.97	0.536	1.07	ug/L	50	2.14	ND	139	80-121%	22	30%	Q-01
1-Methylnaphthalene	42.0	2.14	4.29	ug/L	50	2.14	38.5	161	53-148%	3	30%	Q-03
2-Methylnaphthalene	41.1	2.14	4.29	ug/L	50	2.14	39.4	80	48-150%	3	30%	
Naphthalene	117	2.14	4.29	ug/L	50	2.14	110	307	78-120%	10	30%	Q-03
Phenanthrene	14.5	2.14	4.29	ug/L	50	2.14	11.8	124	80-120%	11	30%	Q-03
Pyrene	2.63	1.07	2.14	ug/L	50	2.14	ND	122	80-125%	2	30%	
Carbazole	13.4	1.07	2.14	ug/L	50	2.14	10.2	148	65-141%	9	30%	Q-03
Dibenzofuran	17.3	1.07	2.14	ug/L	50	2.14	14.7	120	76-121%	7	30%	
Surr: Acenaphthylene-d8 (Surr)		Recovery: 436 %		Limits: 78-134 %		Dilution: 50x		S-05				
Benzo(a)pyrene-d12 (Surr)		91 %		80-132 %		"		S-05				

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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-Prod. Wells 1Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001G**Project Manager: **John Renda****Report ID:****A3D1354 - 05 19 23 1322**

## 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 23D1156 - EPA 3015A						Water						
Blank (23D1156-BLK1)			Prepared: 04/28/23 10:20		Analyzed: 04/28/23 22:19							
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	---	---	---	---	---	---	
Calcium	ND	300	600	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	---	---	---	---	---	---	
Magnesium	ND	75.0	150	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	---	---	---	---	---	---	
Potassium	ND	50.0	100	ug/L	1	---	---	---	---	---	---	
Selenium	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Silver	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Sodium	ND	50.0	100	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 (23D1156-BS1)

Prepared: 04/28/23 10:20 Analyzed: 04/28/23 22:24

EPA 6020B												
Aluminum	2900	25.0	50.0	ug/L	1	2780	---	104	80-120%	---	---	
Antimony	28.7	0.500	1.00	ug/L	1	27.8	---	103	80-120%	---	---	
Arsenic	55.3	0.500	1.00	ug/L	1	55.6	---	99	80-120%	---	---	
Barium	57.4	1.00	2.00	ug/L	1	55.6	---	103	80-120%	---	---	
Beryllium	27.2	0.100	0.200	ug/L	1	27.8	---	98	80-120%	---	---	
Cadmium	54.7	0.100	0.200	ug/L	1	55.6	---	98	80-120%	---	---	
Calcium	2880	300	600	ug/L	1	2780	---	104	80-120%	---	---	
Chromium	56.0	1.00	2.00	ug/L	1	55.6	---	101	80-120%	---	---	

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## ANALYTICAL REPORT

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503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001G

Project Manager: John Renda

Report ID:

A3D1354 - 05 19 23 1322

## 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 23D1156 - EPA 3015A						Water						
LCS (23D1156-BS1)						Prepared: 04/28/23 10:20 Analyzed: 04/28/23 22:24						
Copper	58.6	1.00	2.00	ug/L	1	55.6	---	105	80-120%	---	---	
Iron	2900	25.0	50.0	ug/L	1	2780	---	104	80-120%	---	---	
Lead	59.8	0.110	0.200	ug/L	1	55.6	---	108	80-120%	---	---	
Magnesium	2970	75.0	150	ug/L	1	2780	---	107	80-120%	---	---	
Manganese	57.7	0.500	1.00	ug/L	1	55.6	---	104	80-120%	---	---	
Mercury	1.08	0.0400	0.0800	ug/L	1	1.11	---	97	80-120%	---	---	
Nickel	57.8	1.00	2.00	ug/L	1	55.6	---	104	80-120%	---	---	
Potassium	2900	50.0	100	ug/L	1	2780	---	104	80-120%	---	---	
Selenium	27.1	0.500	1.00	ug/L	1	27.8	---	98	80-120%	---	---	
Silver	26.7	0.100	0.200	ug/L	1	27.8	---	96	80-120%	---	---	
Sodium	2920	50.0	100	ug/L	1	2780	---	105	80-120%	---	---	
Thallium	27.1	0.100	0.200	ug/L	1	27.8	---	97	80-120%	---	---	
Vanadium	56.0	1.00	2.00	ug/L	1	55.6	---	101	80-120%	---	---	
Zinc	55.4	2.00	4.00	ug/L	1	55.6	---	100	80-120%	---	---	

## Duplicate (23D1156-DUP1)

Prepared: 04/28/23 10:20 Analyzed: 04/28/23 23:18

QC Source Sample: GS-041823-82 (A3D1354-03)

## 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	9.32	0.500	1.00	ug/L	1	---	9.06	---	---	3	20%
Barium	60.0	1.00	2.00	ug/L	1	---	59.2	---	---	1	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	---	1.46	---	---	***	20%
Iron	21100	25.0	50.0	ug/L	1	---	21000	---	---	0.4	20%
Lead	ND	0.110	0.200	ug/L	1	---	ND	---	---	---	20%
Magnesium	47500	75.0	150	ug/L	1	---	47100	---	---	0.8	20%
Mercury	ND	0.0400	0.0800	ug/L	1	---	ND	---	---	---	20%
Nickel	3.50	1.00	2.00	ug/L	1	---	3.15	---	---	11	20%
Potassium	2520	50.0	100	ug/L	1	---	2490	---	---	1	20%
Selenium	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	20%
Silver	ND	0.100	0.200	ug/L	1	---	ND	---	---	---	20%

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Project Number: 000029-02.84 T-01.001G

Project Manager: John Renda

Report ID:

A3D1354 - 05 19 23 1322

## 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 23D1156 - EPA 3015A						Water						
Duplicate (23D1156-DUP1)			Prepared: 04/28/23 10:20		Analyzed: 04/28/23 23:18							
QC Source Sample: GS-041823-82 (A3D1354-03)												
Sodium	44200	50.0	100	ug/L	1	---	43900	---	---	0.6	20%	
Thallium	ND	0.100	0.200	ug/L	1	---	ND	---	---	---	20%	
Vanadium	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	20%	
Zinc	9.25	2.00	4.00	ug/L	1	---	9.27	---	---	0.2	20%	
Duplicate (23D1156-DUP2)			Prepared: 04/28/23 10:20		Analyzed: 05/02/23 18:31							
QC Source Sample: GS-041823-82 (A3D1354-03RE1)												
EPA 6020B												
Calcium	81000	7500	15000	ug/L	25	---	82300	---	---	2	20%	Q-16
Manganese	4540	12.5	25.0	ug/L	25	---	4560	---	---	0.5	20%	Q-16
Matrix Spike (23D1156-MS1)			Prepared: 04/28/23 10:20		Analyzed: 04/28/23 23:23							
QC Source Sample: GS-041823-82 (A3D1354-03)												
EPA 6020B												
Aluminum	2850	25.0	50.0	ug/L	1	2780	ND	103	75-125%	---	---	
Antimony	29.2	0.500	1.00	ug/L	1	27.8	ND	105	75-125%	---	---	
Arsenic	64.4	0.500	1.00	ug/L	1	55.6	9.06	100	75-125%	---	---	
Barium	124	1.00	2.00	ug/L	1	55.6	59.2	116	75-125%	---	---	
Beryllium	27.6	0.100	0.200	ug/L	1	27.8	ND	99	75-125%	---	---	
Cadmium	54.4	0.100	0.200	ug/L	1	55.6	ND	98	75-125%	---	---	
Calcium	75800	300	600	ug/L	1	2780	74800	35	75-125%	---	---	E, Q-65
Chromium	56.1	1.00	2.00	ug/L	1	55.6	ND	101	75-125%	---	---	
Copper	55.3	1.00	2.00	ug/L	1	55.6	1.46	97	75-125%	---	---	
Iron	23500	25.0	50.0	ug/L	1	2780	21000	87	75-125%	---	---	
Lead	55.7	0.110	0.200	ug/L	1	55.6	ND	100	75-125%	---	---	
Magnesium	49200	75.0	150	ug/L	1	2780	47100	75	75-125%	---	---	
Manganese	4520	0.500	1.00	ug/L	1	55.6	4540	-34	75-125%	---	---	E, Q-65
Mercury	1.04	0.0400	0.0800	ug/L	1	1.11	ND	93	75-125%	---	---	
Nickel	57.9	1.00	2.00	ug/L	1	55.6	3.15	98	75-125%	---	---	
Potassium	5260	50.0	100	ug/L	1	2780	2490	100	75-125%	---	---	
Selenium	27.3	0.500	1.00	ug/L	1	27.8	ND	98	75-125%	---	---	
Silver	26.1	0.100	0.200	ug/L	1	27.8	ND	94	75-125%	---	---	

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Project Manager: John Renda

Report ID:

A3D1354 - 05 19 23 1322

## 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 23D1156 - EPA 3015A						Water						
Matrix Spike (23D1156-MS1)				Prepared: 04/28/23 10:20		Analyzed: 04/28/23 23:23						
QC Source Sample: GS-041823-82 (A3D1354-03)												
Sodium	45600	50.0	100	ug/L	1	2780	43900	62	75-125%	---	---	Q-65
Thallium	25.9	0.100	0.200	ug/L	1	27.8	ND	93	75-125%	---	---	
Vanadium	56.9	1.00	2.00	ug/L	1	55.6	ND	102	75-125%	---	---	
Zinc	61.0	2.00	4.00	ug/L	1	55.6	9.27	93	75-125%	---	---	
Matrix Spike Dup (23D1156-MSD1)				Prepared: 04/28/23 10:20		Analyzed: 04/28/23 23:28						
QC Source Sample: GS-041823-82 (A3D1354-03)												
EPA 6020B												
Aluminum	2810	25.0	50.0	ug/L	1	2780	ND	101	75-125%	1	20%	
Antimony	28.9	0.500	1.00	ug/L	1	27.8	ND	104	75-125%	1	20%	
Arsenic	63.2	0.500	1.00	ug/L	1	55.6	9.06	98	75-125%	2	20%	
Barium	122	1.00	2.00	ug/L	1	55.6	59.2	113	75-125%	1	20%	
Beryllium	27.9	0.100	0.200	ug/L	1	27.8	ND	100	75-125%	1	20%	
Cadmium	53.0	0.100	0.200	ug/L	1	55.6	ND	95	75-125%	3	20%	
Calcium	76800	300	600	ug/L	1	2780	74800	71	75-125%	1	20%	E, Q-65
Chromium	54.8	1.00	2.00	ug/L	1	55.6	ND	99	75-125%	2	20%	
Copper	54.2	1.00	2.00	ug/L	1	55.6	1.46	95	75-125%	2	20%	
Iron	23300	25.0	50.0	ug/L	1	2780	21000	80	75-125%	0.8	20%	
Lead	55.5	0.110	0.200	ug/L	1	55.6	ND	100	75-125%	0.3	20%	
Magnesium	49000	75.0	150	ug/L	1	2780	47100	67	75-125%	0.4	20%	Q-65
Manganese	4500	0.500	1.00	ug/L	1	55.6	4540	-84	75-125%	0.6	20%	E, Q-65
Mercury	1.05	0.0400	0.0800	ug/L	1	1.11	ND	94	75-125%	1	20%	
Nickel	56.7	1.00	2.00	ug/L	1	55.6	3.15	96	75-125%	2	20%	
Potassium	5230	50.0	100	ug/L	1	2780	2490	99	75-125%	0.6	20%	
Selenium	26.8	0.500	1.00	ug/L	1	27.8	ND	96	75-125%	2	20%	
Silver	25.8	0.100	0.200	ug/L	1	27.8	ND	93	75-125%	1	20%	
Sodium	45800	50.0	100	ug/L	1	2780	43900	70	75-125%	0.5	20%	Q-65
Thallium	25.8	0.100	0.200	ug/L	1	27.8	ND	93	75-125%	0.3	20%	
Vanadium	56.1	1.00	2.00	ug/L	1	55.6	ND	101	75-125%	1	20%	
Zinc	60.0	2.00	4.00	ug/L	1	55.6	9.27	91	75-125%	2	20%	

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## ANALYTICAL REPORT

Apex Laboratories, LLC

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

## Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125  
Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001G

Project Manager: John Renda

Report ID:

A3D1354 - 05 19 23 1322

## QUALITY CONTROL (QC) SAMPLE RESULTS

## Dissolved 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 23E0028 - Matrix Matched Direct Inject						Water						
Blank (23E0028-BLK1)			Prepared: 05/01/23 10:06    Analyzed: 05/02/23 01:43									
EPA 6020B (Diss)												
Iron	ND	25.0	50.0	ug/L	1	---	---	---	---	---	---	
Magnesium	ND	75.0	150	ug/L	1	---	---	---	---	---	---	
LCS (23E0028-BS1)			Prepared: 05/01/23 10:06    Analyzed: 05/02/23 01:49									
EPA 6020B (Diss)												
Iron	2700	25.0	50.0	ug/L	1	2780	---	97	80-120%	---	---	
Magnesium	2830	75.0	150	ug/L	1	2780	---	102	80-120%	---	---	
Duplicate (23E0028-DUP1)			Prepared: 05/01/23 10:06    Analyzed: 05/02/23 02:50									
QC Source Sample: GS-041823-82 (A3D1354-03)												
EPA 6020B (Diss)												
Iron	18700	25.0	50.0	ug/L	1	---	19400	---	---	4	20%	
Magnesium	48300	75.0	150	ug/L	1	---	49800	---	---	3	20%	
Matrix Spike (23E0028-MS1)			Prepared: 05/01/23 10:06    Analyzed: 05/02/23 02:55									
QC Source Sample: GS-041823-82 (A3D1354-03)												
EPA 6020B (Diss)												
Iron	22000	25.0	50.0	ug/L	1	2780	19400	95	75-125%	---	---	
Magnesium	53200	75.0	150	ug/L	1	2780	49800	123	75-125%	---	---	
Matrix Spike Dup (23E0028-MSD1)			Prepared: 05/01/23 10:06    Analyzed: 05/02/23 03:01									
QC Source Sample: GS-041823-82 (A3D1354-03)												
EPA 6020B (Diss)												
Iron	21400	25.0	50.0	ug/L	1	2780	19400	75	75-125%	3	20%	
Magnesium	52300	75.0	150	ug/L	1	2780	49800	91	75-125%	2	20%	

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Project Number: 000029-02.84 T-01.001G

Project Manager: John Renda

Report ID:

A3D1354 - 05 19 23 1322

## QUALITY CONTROL (QC) SAMPLE RESULTS

## Anions by Ion Chromatography

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23D0757 - Method Prep: Aq						Water						
Blank (23D0757-BLK1)			Prepared: 04/19/23 11:11		Analyzed: 04/19/23 16:08							
EPA 300.0												
Chloride	ND	0.500	1.00	mg/L	1	---	---	---	---	---	---	
Nitrate-Nitrogen	ND	0.125	0.250	mg/L	1	---	---	---	---	---	---	
Sulfate	ND	0.500	1.00	mg/L	1	---	---	---	---	---	---	
LCS (23D0757-BS1)			Prepared: 04/19/23 11:11		Analyzed: 04/19/23 16:30							
EPA 300.0												
Chloride	7.72	0.500	1.00	mg/L	1	8.00	---	96	90-110%	---	---	
Nitrate-Nitrogen	2.10	0.125	0.250	mg/L	1	2.00	---	105	90-110%	---	---	
Sulfate	8.16	0.500	1.00	mg/L	1	8.00	---	102	90-110%	---	---	
Duplicate (23D0757-DUP3)			Prepared: 04/19/23 11:11		Analyzed: 04/20/23 02:55							
QC Source Sample: Non-SDG (A3D1365-01)												
Chloride	6.02	0.500	1.00	mg/L	1	---	5.99	---	---	0.5	3%	
Nitrate-Nitrogen	4.89	0.125	0.250	mg/L	1	---	4.86	---	---	0.5	3%	
Sulfate	12.6	0.500	1.00	mg/L	1	---	12.6	---	---	0.4	4%	
Matrix Spike (23D0757-MS1)			Prepared: 04/19/23 11:11		Analyzed: 04/19/23 20:48							
QC Source Sample: GS-041823-82 (A3D1354-03)												
EPA 300.0												
Chloride	150	2.50	5.00	mg/L	5	40.0	111	97	90-113%	---	---	
Matrix Spike (23D0757-MS2)			Prepared: 04/19/23 11:11		Analyzed: 04/19/23 21:53							
QC Source Sample: GS-041823-82 (A3D1354-03RE1)												
EPA 300.0												
Nitrate-Nitrogen	2.57	0.156	0.312	mg/L	1	2.50	ND	103	87-112%	---	---	Q-16
Sulfate	17.5	0.625	1.25	mg/L	1	10.0	7.30	102	88-115%	---	---	Q-16
Matrix Spike (23D0757-MS3)			Prepared: 04/19/23 11:11		Analyzed: 04/20/23 03:17							
QC Source Sample: Non-SDG (A3D1365-01)												
EPA 300.0												
Chloride	16.0	0.625	1.25	mg/L	1	10.0	5.99	100	90-113%	---	---	
Nitrate-Nitrogen	7.43	0.156	0.312	mg/L	1	2.50	4.86	102	87-112%	---	---	

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Project Manager: John Renda

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A3D1354 - 05 19 23 1322

## QUALITY CONTROL (QC) SAMPLE RESULTS

## Anions by Ion Chromatography

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23D0757 - Method Prep: Aq						Water						
Matrix Spike (23D0757-MS3)			Prepared: 04/19/23 11:11		Analyzed: 04/20/23 03:17							
QC Source Sample: Non-SDG (A3D1365-01)												
Sulfate	22.8	0.625	1.25	mg/L	1	10.0	12.6	102	88-115%	---	---	
Matrix Spike Dup (23D0757-MSD1)			Prepared: 04/19/23 11:11		Analyzed: 04/19/23 21:10							
QC Source Sample: GS-041823-82 (A3D1354-03)												
EPA 300.0												
Chloride	151	2.50	5.00	mg/L	5	40.0	111	98	90-113%	0.2	3%	
Matrix Spike Dup (23D0757-MSD2)			Prepared: 04/19/23 11:11		Analyzed: 04/19/23 22:15							
QC Source Sample: GS-041823-82 (A3D1354-03RE1)												
EPA 300.0												
Nitrate-Nitrogen	2.57	0.156	0.312	mg/L	1	2.50	ND	103	87-112%	0.3	3%	Q-16
Sulfate	17.5	0.625	1.25	mg/L	1	10.0	7.30	102	88-115%	0.03	4%	Q-16

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A3D1354 - 05 19 23 1322

## 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 23D0915 - Lachat Micro Dist - aqueous						Water						
Blank (23D0915-BLK1)			Prepared: 04/24/23 08:16   Analyzed: 04/25/23 10:24									
EPA 335.4												
Total Cyanide	ND	0.00500	0.00500	mg/L	1	---	---	---	---	---	---	
LCS (23D0915-BS1)			Prepared: 04/24/23 08:16   Analyzed: 04/25/23 10:26									
EPA 335.4												
Total Cyanide	0.250	0.00500	0.00500	mg/L	1	0.250	---	100	90-110%	---	---	
Matrix Spike (23D0915-MS1)			Prepared: 04/24/23 08:16   Analyzed: 04/25/23 10:30									
QC Source Sample: Non-SDG (A3D1208-05)												
EPA 335.4												
Total Cyanide	0.488	0.00500	0.00500	mg/L	1	0.250	0.260	91	90-110%	---	---	
Matrix Spike (23D0915-MS2)			Prepared: 04/24/23 08:16   Analyzed: 04/25/23 10:38									
QC Source Sample: GS-041823-82 (A3D1354-03)												
EPA 335.4												
Total Cyanide	0.303	0.00500	0.00500	mg/L	1	0.250	0.0623	96	90-110%	---	---	
Matrix Spike Dup (23D0915-MSD1)			Prepared: 04/24/23 08:16   Analyzed: 04/25/23 10:32									
QC Source Sample: Non-SDG (A3D1208-05)												
Total Cyanide	0.481	0.00500	0.00500	mg/L	1	0.250	0.260	88	90-110%	1	10%	Q-01
Matrix Spike Dup (23D0915-MSD2)			Prepared: 04/24/23 08:16   Analyzed: 04/25/23 10:48									
QC Source Sample: GS-041823-82 (A3D1354-03)												
EPA 335.4												
Total Cyanide	0.275	0.00500	0.00500	mg/L	1	0.250	0.0623	85	90-110%	10	10%	Q-01

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Project Number: 000029-02.84 T-01.001G

Project Manager: John Renda

Report ID:

A3D1354 - 05 19 23 1322

## 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 23E0036 - Lachat Micro Dist - aqueous						Water						
Blank (23E0036-BLK1)			Prepared: 05/01/23 10:59   Analyzed: 05/01/23 17:29									
EPA 335.4												
Total Cyanide	ND	0.00500	0.00500	mg/L	1	---	---	---	---	---	---	
LCS (23E0036-BS1)			Prepared: 05/01/23 10:59   Analyzed: 05/01/23 17:39									
EPA 335.4												
Total Cyanide	0.240	0.00500	0.00500	mg/L	1	0.250	---	96	90-110%	---	---	
Duplicate (23E0036-DUP1)			Prepared: 05/01/23 10:59   Analyzed: 05/01/23 17:45									
QC Source Sample: GS-041823-83 (A3D1354-04)												
EPA 335.4												
Total Cyanide	0.0571	0.00500	0.00500	mg/L	1	---	0.0539	---	---	6	10%	
Duplicate (23E0036-DUP2)			Prepared: 05/01/23 10:59   Analyzed: 05/01/23 18:09									
QC Source Sample: Non-SDG (A3D1399-02)												
Total Cyanide	0.0388	0.00500	0.00500	mg/L	1	---	0.0415	---	---	7	10%	
Matrix Spike (23E0036-MS1)			Prepared: 05/01/23 10:59   Analyzed: 05/01/23 17:47									
QC Source Sample: GS-041823-83 (A3D1354-04)												
EPA 335.4												
Total Cyanide	0.291	0.00500	0.00500	mg/L	1	0.250	0.0539	95	90-110%	---	---	
Matrix Spike (23E0036-MS2)			Prepared: 05/01/23 10:59   Analyzed: 05/01/23 18:11									
QC Source Sample: Non-SDG (A3D1399-02)												
EPA 335.4												
Total Cyanide	0.263	0.00500	0.00500	mg/L	1	0.250	0.0415	89	90-110%	---	---	Q-01

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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-Prod. Wells 1Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001G**Project Manager: **John Renda****Report ID:****A3D1354 - 05 19 23 1322****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 23D1057 - Method Prep: Aq						Water						
Blank (23D1057-BLK1)			Prepared: 04/26/23 12:42   Analyzed: 04/26/23 14:05									
D6888-09												
Available Cyanide	ND	0.00100	0.00200	mg/L	1	---	---	---	---	---	---	
LCS (23D1057-BS1)			Prepared: 04/26/23 12:42   Analyzed: 04/26/23 14:06									
D6888-09												
Available Cyanide	0.0243	0.00100	0.00200	mg/L	1	0.0250	---	97	90-117%	---	---	
Matrix Spike (23D1057-MS1)			Prepared: 04/26/23 12:42   Analyzed: 04/26/23 14:17									
QC Source Sample: GS-041823-82 (A3D1354-03)												
D6888-09												
Available Cyanide	0.0240	0.00101	0.00201	mg/L	1	0.0251	ND	96	82-130%	---	---	
Matrix Spike (23D1057-MS2)			Prepared: 04/26/23 12:42   Analyzed: 04/26/23 14:42									
QC Source Sample: Non-SDG (A3D1399-05)												
D6888-09												
Available Cyanide	0.0254	0.00101	0.00201	mg/L	1	0.0251	0.00111	97	82-130%	---	---	
Matrix Spike Dup (23D1057-MSD1)			Prepared: 04/26/23 12:42   Analyzed: 04/26/23 14:18									
QC Source Sample: GS-041823-82 (A3D1354-03)												
D6888-09												
Available Cyanide	0.0238	0.00101	0.00201	mg/L	1	0.0251	ND	95	82-130%	0.9	11%	
Matrix Spike Dup (23D1057-MSD2)			Prepared: 04/26/23 12:42   Analyzed: 04/26/23 14:44									
QC Source Sample: Non-SDG (A3D1399-05)												
Available Cyanide	0.0242	0.00101	0.00201	mg/L	1	0.0251	0.00111	92	82-130%	5	11%	

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A3D1354 - 05 19 23 1322

## 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 23D0922 - Microdiffusion						Water						
Blank (23D0922-BLK1)			Prepared: 04/24/23 09:55		Analyzed: 04/24/23 15:20							
<u>D4282-02</u>												
Free Cyanide	ND	0.00250	0.00500	mg/L	1	---	---	---	---	---	---	
LCS (23D0922-BS1)			Prepared: 04/24/23 09:55		Analyzed: 04/24/23 15:20							
<u>D4282-02</u>												
Free Cyanide	0.0654	0.00250	0.00500	mg/L	1	0.0667	---	98	74-120%	---	---	
LCS Dup (23D0922-BSD1)			Prepared: 04/24/23 09:55		Analyzed: 04/24/23 15:26							
<u>D4282-02</u>												
Free Cyanide	0.0644	0.00250	0.00500	mg/L	1	0.0667	---	97	74-120%	2	20%	
Matrix Spike (23D0922-MS1)			Prepared: 04/24/23 09:55		Analyzed: 04/24/23 15:32							
<u>QC Source Sample: GS-041823-82 (A3D1354-03)</u>												
<u>D4282-02</u>												
Free Cyanide	0.0644	0.00250	0.00500	mg/L	1	0.0667	ND	97	74-120%	---	---	
Matrix Spike Dup (23D0922-MSD1)			Prepared: 04/24/23 09:55		Analyzed: 04/24/23 15:33							
<u>QC Source Sample: GS-041823-82 (A3D1354-03)</u>												
<u>D4282-02</u>												
Free Cyanide	0.0683	0.00250	0.00500	mg/L	1	0.0667	ND	102	74-120%	6	20%	

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Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23D0861 - Method Prep: Aq						Water						
Blank (23D0861-BLK1)			Prepared: 04/21/23 08:38		Analyzed: 04/21/23 09:55							
SM 2320 B												
Total Alkalinity	ND	20.0	20.0	mg CaCO3/L	1	---	---	---	---	---	---	
Bicarbonate Alkalinity	ND	20.0	20.0	mg CaCO3/L	1	---	---	---	---	---	---	
Carbonate Alkalinity	ND	20.0	20.0	mg CaCO3/L	1	---	---	---	---	---	---	
Hydroxide Alkalinity	ND	20.0	20.0	mg CaCO3/L	1	---	---	---	---	---	---	
LCS (23D0861-BS1)			Prepared: 04/21/23 08:38		Analyzed: 04/21/23 10:02							
SM 2320 B												
Total Alkalinity	105	20.0	20.0	mg CaCO3/L	1	100	---	105	90-115%	---	---	
Duplicate (23D0861-DUP1)			Prepared: 04/21/23 08:38		Analyzed: 04/21/23 11:25							
QC Source Sample: Non-SDG (A3D1208-05)												
Total Alkalinity	233	20.0	20.0	mg CaCO3/L	1	---	232	---	---	0.5	5%	
Bicarbonate Alkalinity	233	20.0	20.0	mg CaCO3/L	1	---	232	---	---	0.5	5%	
Carbonate Alkalinity	ND	20.0	20.0	mg CaCO3/L	1	---	ND	---	---	---	5%	
Hydroxide Alkalinity	ND	20.0	20.0	mg CaCO3/L	1	---	ND	---	---	---	5%	

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Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23D1098 - Method Prep: Aq						Water						
Blank (23D1098-BLK1)			Prepared: 04/27/23 09:12		Analyzed: 04/27/23 09:52							
SM 2320 B												
Total Alkalinity	ND	20.0	20.0	mg CaCO3/L	1	---	---	---	---	---	---	
Bicarbonate Alkalinity	ND	20.0	20.0	mg CaCO3/L	1	---	---	---	---	---	---	
Carbonate Alkalinity	ND	20.0	20.0	mg CaCO3/L	1	---	---	---	---	---	---	
Hydroxide Alkalinity	ND	20.0	20.0	mg CaCO3/L	1	---	---	---	---	---	---	
LCS (23D1098-BS1)			Prepared: 04/27/23 09:12		Analyzed: 04/27/23 10:00							
SM 2320 B												
Total Alkalinity	112	20.0	20.0	mg CaCO3/L	1	100	---	112	90-115%	---	---	
Duplicate (23D1098-DUP1)			Prepared: 04/27/23 09:12		Analyzed: 04/27/23 13:51							
QC Source Sample: GS-041823-82 (A3D1354-03)												
SM 2320 B												
Total Alkalinity	334	20.0	20.0	mg CaCO3/L	1	---	339	---	---	1	5%	
Bicarbonate Alkalinity	334	20.0	20.0	mg CaCO3/L	1	---	339	---	---	1	5%	
Carbonate Alkalinity	ND	20.0	20.0	mg CaCO3/L	1	---	ND	---	---	---	5%	
Hydroxide Alkalinity	ND	20.0	20.0	mg CaCO3/L	1	---	ND	---	---	---	5%	

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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-Prod. Wells 1Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001G**Project Manager: **John Renda****Report ID:****A3D1354 - 05 19 23 1322**

## SAMPLE PREPARATION INFORMATION

## Volatile Organic Compounds by EPA 8260D

Prep: EPA 5030C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<b>Batch: 23D0831</b>							
A3D1354-03	WG	EPA 8260D	04/18/23 10:45	04/20/23 15:27	5mL/5mL	5mL/5mL	1.00
<b>Batch: 23D0859</b>							
A3D1354-08	W	EPA 8260D	04/18/23 15:05	04/21/23 09:00	5mL/5mL	5mL/5mL	1.00
<b>Batch: 23D0866</b>							
A3D1354-01RE1	WG	EPA 8260D	04/18/23 09:45	04/21/23 12:21	5mL/5mL	5mL/5mL	1.00
A3D1354-02RE1	WG	EPA 8260D	04/18/23 10:20	04/21/23 12:21	5mL/5mL	5mL/5mL	1.00
A3D1354-03RE1	WG	EPA 8260D	04/18/23 10:45	04/21/23 12:21	5mL/5mL	5mL/5mL	1.00
A3D1354-04RE1	WG	EPA 8260D	04/18/23 12:00	04/21/23 12:21	5mL/5mL	5mL/5mL	1.00
A3D1354-05RE1	WG	EPA 8260D	04/18/23 13:20	04/21/23 12:21	5mL/5mL	5mL/5mL	1.00
A3D1354-06RE1	WG	EPA 8260D	04/18/23 14:00	04/21/23 12:21	5mL/5mL	5mL/5mL	1.00
A3D1354-07RE1	WG	EPA 8260D	04/18/23 14:45	04/21/23 12:21	5mL/5mL	5mL/5mL	1.00

## Volatile Organic Compounds by EPA 8260D SIM

Prep: EPA 5030C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<b>Batch: 23D0991</b>							
A3D1354-03	WG	EPA 8260D SIM	04/18/23 10:45	04/25/23 11:00	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: 23D0846</b>							
A3D1354-01	WG	EPA 8270E LVI	04/18/23 09:45	04/21/23 06:01	101.39mL/5mL	125mL/5mL	1.23
A3D1354-02	WG	EPA 8270E LVI	04/18/23 10:20	04/21/23 06:01	93.38mL/5mL	125mL/5mL	1.34
A3D1354-03	WG	EPA 8270E LVI	04/18/23 10:45	04/21/23 06:01	102.45mL/5mL	125mL/5mL	1.22
A3D1354-04	WG	EPA 8270E LVI	04/18/23 12:00	04/21/23 06:01	103.49mL/5mL	125mL/5mL	1.21
A3D1354-05	WG	EPA 8270E LVI	04/18/23 13:20	04/21/23 06:01	93.58mL/5mL	125mL/5mL	1.34
A3D1354-06	WG	EPA 8270E LVI	04/18/23 14:00	04/21/23 06:01	95.68mL/5mL	125mL/5mL	1.31
A3D1354-06RE1	WG	EPA 8270E LVI	04/18/23 14:00	04/21/23 06:01	95.68mL/5mL	125mL/5mL	1.31
A3D1354-07	WG	EPA 8270E LVI	04/18/23 14:45	04/21/23 06:01	104.2mL/5mL	125mL/5mL	1.20

## Total Metals by EPA 6020B (ICPMS)

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ORELAP ID: OR100062

**Anchor QEA, LLC**

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Portland, OR 97219

Project: **Gasco-MGP Only-Prod. Wells 1Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001G**Project Manager: **John Renda****Report ID:****A3D1354 - 05 19 23 1322****SAMPLE PREPARATION INFORMATION****Total Metals by EPA 6020B (ICPMS)****Prep: EPA 3015A**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<b>Batch: 23D1156</b>							
A3D1354-01	WG	EPA 6020B	04/18/23 09:45	04/28/23 10:20	45mL/50mL	45mL/50mL	1.00
A3D1354-01RE1	WG	EPA 6020B	04/18/23 09:45	04/28/23 10:20	45mL/50mL	45mL/50mL	1.00
A3D1354-02	WG	EPA 6020B	04/18/23 10:20	04/28/23 10:20	45mL/50mL	45mL/50mL	1.00
A3D1354-02RE1	WG	EPA 6020B	04/18/23 10:20	04/28/23 10:20	45mL/50mL	45mL/50mL	1.00
A3D1354-03	WG	EPA 6020B	04/18/23 10:45	04/28/23 10:20	45mL/50mL	45mL/50mL	1.00
A3D1354-03RE1	WG	EPA 6020B	04/18/23 10:45	04/28/23 10:20	45mL/50mL	45mL/50mL	1.00
A3D1354-04	WG	EPA 6020B	04/18/23 12:00	04/28/23 10:20	45mL/50mL	45mL/50mL	1.00
A3D1354-04RE1	WG	EPA 6020B	04/18/23 12:00	04/28/23 10:20	45mL/50mL	45mL/50mL	1.00
A3D1354-05	WG	EPA 6020B	04/18/23 13:20	04/28/23 10:20	45mL/50mL	45mL/50mL	1.00
A3D1354-05RE1	WG	EPA 6020B	04/18/23 13:20	04/28/23 10:20	45mL/50mL	45mL/50mL	1.00
A3D1354-06	WG	EPA 6020B	04/18/23 14:00	04/28/23 10:20	45mL/50mL	45mL/50mL	1.00
A3D1354-07	WG	EPA 6020B	04/18/23 14:45	04/28/23 10:20	45mL/50mL	45mL/50mL	1.00
A3D1354-07RE1	WG	EPA 6020B	04/18/23 14:45	04/28/23 10:20	45mL/50mL	45mL/50mL	1.00

**Dissolved Metals by EPA 6020B (ICPMS)****Prep: Matrix Matched Direct Inject**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<b>Batch: 23E0028</b>							
A3D1354-01	WG	EPA 6020B (Diss)	04/18/23 09:45	05/01/23 10:06	45mL/50mL	45mL/50mL	1.00
A3D1354-01RE1	WG	EPA 6020B (Diss)	04/18/23 09:45	05/01/23 10:06	45mL/50mL	45mL/50mL	1.00
A3D1354-02	WG	EPA 6020B (Diss)	04/18/23 10:20	05/01/23 10:06	45mL/50mL	45mL/50mL	1.00
A3D1354-03	WG	EPA 6020B (Diss)	04/18/23 10:45	05/01/23 10:06	45mL/50mL	45mL/50mL	1.00
A3D1354-04	WG	EPA 6020B (Diss)	04/18/23 12:00	05/01/23 10:06	45mL/50mL	45mL/50mL	1.00
A3D1354-04RE1	WG	EPA 6020B (Diss)	04/18/23 12:00	05/01/23 10:06	45mL/50mL	45mL/50mL	1.00
A3D1354-05	WG	EPA 6020B (Diss)	04/18/23 13:20	05/01/23 10:06	45mL/50mL	45mL/50mL	1.00
A3D1354-06	WG	EPA 6020B (Diss)	04/18/23 14:00	05/01/23 10:06	45mL/50mL	45mL/50mL	1.00
A3D1354-07	WG	EPA 6020B (Diss)	04/18/23 14:45	05/01/23 10:06	45mL/50mL	45mL/50mL	1.00
A3D1354-07RE1	WG	EPA 6020B (Diss)	04/18/23 14:45	05/01/23 10:06	45mL/50mL	45mL/50mL	1.00

**Anions by Ion Chromatography****Prep: Method Prep: Ag**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<b>Batch: 23D0757</b>							
A3D1354-01	WG	EPA 300.0	04/18/23 09:45	04/19/23 11:11	5mL/5mL	5mL/5mL	1.00

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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-Prod. Wells 1Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001G**Project Manager: **John Renda****Report ID:****A3D1354 - 05 19 23 1322****SAMPLE PREPARATION INFORMATION****Anions by Ion Chromatography****Prep: Method Prep: Aq**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
A3D1354-01RE1	WG	EPA 300.0	04/18/23 09:45	04/19/23 11:11	5mL/5mL	5mL/5mL	1.00
A3D1354-02	WG	EPA 300.0	04/18/23 10:20	04/19/23 11:11	5mL/5mL	5mL/5mL	1.00
A3D1354-02RE1	WG	EPA 300.0	04/18/23 10:20	04/19/23 11:11	5mL/5mL	5mL/5mL	1.00
A3D1354-03	WG	EPA 300.0	04/18/23 10:45	04/19/23 11:11	5mL/5mL	5mL/5mL	1.00
A3D1354-03RE1	WG	EPA 300.0	04/18/23 10:45	04/19/23 11:11	5mL/5mL	5mL/5mL	1.00
A3D1354-04	WG	EPA 300.0	04/18/23 12:00	04/19/23 11:11	5mL/5mL	5mL/5mL	1.00
A3D1354-04RE1	WG	EPA 300.0	04/18/23 12:00	04/19/23 11:11	5mL/5mL	5mL/5mL	1.00
A3D1354-05	WG	EPA 300.0	04/18/23 13:20	04/19/23 11:11	5mL/5mL	5mL/5mL	1.00
A3D1354-05RE1	WG	EPA 300.0	04/18/23 13:20	04/19/23 11:11	5mL/5mL	5mL/5mL	1.00
A3D1354-06	WG	EPA 300.0	04/18/23 14:00	04/19/23 11:11	5mL/5mL	5mL/5mL	1.00
A3D1354-07	WG	EPA 300.0	04/18/23 14:45	04/19/23 11:11	5mL/5mL	5mL/5mL	1.00
A3D1354-07RE1	WG	EPA 300.0	04/18/23 14:45	04/19/23 11:11	5mL/5mL	5mL/5mL	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: 23D0915</b>							
A3D1354-01	WG	EPA 335.4	04/18/23 09:45	04/24/23 08:16	6mL/6mL	6mL/6mL	1.00
A3D1354-02	WG	EPA 335.4	04/18/23 10:20	04/24/23 08:16	6mL/6mL	6mL/6mL	1.00
A3D1354-03	WG	EPA 335.4	04/18/23 10:45	04/24/23 08:16	6mL/6mL	6mL/6mL	1.00
<b>Batch: 23E0036</b>							
A3D1354-04	WG	EPA 335.4	04/18/23 12:00	05/01/23 10:59	6mL/6mL	6mL/6mL	1.00
A3D1354-05	WG	EPA 335.4	04/18/23 13:20	05/01/23 10:59	6mL/6mL	6mL/6mL	1.00
A3D1354-06	WG	EPA 335.4	04/18/23 14:00	05/01/23 10:59	6mL/6mL	6mL/6mL	1.00
A3D1354-07	WG	EPA 335.4	04/18/23 14:45	05/01/23 10:59	6mL/6mL	6mL/6mL	1.00

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

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<b>Batch: 23D1057</b>							
A3D1354-01	WG	D6888-09	04/18/23 09:45	04/26/23 12:42	5mL/5mL	5mL/5mL	1.00
A3D1354-02	WG	D6888-09	04/18/23 10:20	04/26/23 12:42	5mL/5mL	5mL/5mL	1.00
A3D1354-03	WG	D6888-09	04/18/23 10:45	04/26/23 12:42	5mL/5mL	5mL/5mL	1.00
A3D1354-04	WG	D6888-09	04/18/23 12:00	04/26/23 12:42	5mL/5mL	5mL/5mL	1.00
A3D1354-05	WG	D6888-09	04/18/23 13:20	04/26/23 12:42	5mL/5mL	5mL/5mL	1.00

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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-Prod. Wells 1Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001G**Project Manager: **John Renda****Report ID:****A3D1354 - 05 19 23 1322****SAMPLE PREPARATION INFORMATION****Available Cyanide by FIA, Ligand Exchange and Amperometric Detection****Prep: Method Prep: Ag**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
A3D1354-06	WG	D6888-09	04/18/23 14:00	04/26/23 12:42	5mL/5mL	5mL/5mL	1.00
A3D1354-07	WG	D6888-09	04/18/23 14:45	04/26/23 12:42	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: 23D0922</b>							
A3D1354-01	WG	D4282-02	04/18/23 09:45	04/24/23 09:55	3mL/3mL	3mL/3mL	1.00
A3D1354-02	WG	D4282-02	04/18/23 10:20	04/24/23 09:55	3mL/3mL	3mL/3mL	1.00
A3D1354-03	WG	D4282-02	04/18/23 10:45	04/24/23 09:55	3mL/3mL	3mL/3mL	1.00
A3D1354-04	WG	D4282-02	04/18/23 12:00	04/24/23 09:55	3mL/3mL	3mL/3mL	1.00
A3D1354-05	WG	D4282-02	04/18/23 13:20	04/24/23 09:55	3mL/3mL	3mL/3mL	1.00
A3D1354-06	WG	D4282-02	04/18/23 14:00	04/24/23 09:55	3mL/3mL	3mL/3mL	1.00
A3D1354-07	WG	D4282-02	04/18/23 14:45	04/24/23 09:55	3mL/3mL	3mL/3mL	1.00

**Conventional Chemistry Parameters****Prep: Method Prep: Ag**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<b>Batch: 23D0861</b>							
A3D1354-06	WG	SM 2320 B	04/18/23 14:00	04/21/23 08:38	60mL/60mL	60mL/60mL	NA
A3D1354-07	WG	SM 2320 B	04/18/23 14:45	04/21/23 08:38	60mL/60mL	60mL/60mL	NA
<b>Batch: 23D1098</b>							
A3D1354-01	WG	SM 2320 B	04/18/23 09:45	04/27/23 09:12	60mL/60mL	60mL/60mL	NA
A3D1354-02	WG	SM 2320 B	04/18/23 10:20	04/27/23 09:12	60mL/60mL	60mL/60mL	NA
A3D1354-03	WG	SM 2320 B	04/18/23 10:45	04/27/23 09:12	60mL/60mL	60mL/60mL	NA
A3D1354-04	WG	SM 2320 B	04/18/23 12:00	04/27/23 09:12	60mL/60mL	60mL/60mL	NA
A3D1354-05	WG	SM 2320 B	04/18/23 13:20	04/27/23 09:12	60mL/60mL	60mL/60mL	NA

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## ANALYTICAL REPORT

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

Project Manager: **John Renda**

**Report ID:**

**A3D1354 - 05 19 23 1322**

## QUALIFIER DEFINITIONS

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

#### Apex Laboratories

- B** Analyte detected in an associated blank at a level above the MRL. (See Notes and Conventions below.)
- B-02** Analyte detected in an associated blank at a level between one-half the MRL and the MRL. (See Notes and Conventions below.)
- E** Estimated Value. The result is above the calibration range of the instrument.
- ICV-01** Estimated Result. Initial Calibration Verification (ICV) failed high. There is no effect on non-detect results.
- ICV-02** Estimated Result. Initial Calibration Verification (ICV) failed low.
- J** Estimated Result. Result detected below the lowest point of the calibration curve, but above the specified MDL.
- M-05** Estimated results. Peak separation for structural isomers is insufficient for accurate quantification.
- PRES** Incomplete field preservation. Additional preservative was added to adjust the pH within the appropriate range for this analysis.
- Q-01** Spike recovery and/or RPD is outside acceptance limits.
- Q-02** Spike recovery is outside of established control limits due to matrix interference.
- Q-03** Spike recovery and/or RPD is outside control limits due to the high concentration of analyte present in the sample.
- Q-16** Reanalysis of an original Batch QC sample.
- Q-41** Estimated Results. Recovery of Continuing Calibration Verification sample above upper control limit for this analyte. Results are likely biased high.
- Q-42** Matrix Spike and/or Duplicate analysis was performed on this sample. % Recovery or RPD for this analyte is outside laboratory control limits. (Refer to the QC Section of Analytical Report.)
- Q-54** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +1%. The results are reported as Estimated Values.
- Q-54a** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +10%. The results are reported as Estimated Values.
- Q-54b** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +15%. 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 +2%. 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 +27%. 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 +34%. 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 +5%. The results are reported as Estimated Values.

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## ANALYTICAL REPORT

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

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

Project Manager: **John Renda**

**Report ID:**

**A3D1354 - 05 19 23 1322**

- Q-54g** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +8%. The results are reported as Estimated Values.
- Q-54h** 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-54i** 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-54j** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -2%. The results are reported as Estimated Values.
- Q-54k** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -24%. 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 -5%. 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 -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
- Q-65** Spike recovery is estimated due to the high analyte concentration of the source sample.
- R-02** The Reporting Limit for this analyte has been raised to account for interference from coeluting organic compounds present in the sample.
- R-06** Reporting level raised due to possible carryover from a previous sample.
- S-05** Surrogate recovery is estimated due to sample dilution required for high analyte concentration and/or matrix interference.
- T-02** This Batch QC sample was analyzed outside of the method specified 12 hour analysis window. Results are estimated.

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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-Prod. Wells 1Q 2023 Perf. Mon**

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

Project Manager: **John Renda**

**Report ID:**

**A3D1354 - 05 19 23 1322**

### 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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Darwin Thomas, Business Development Director



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

**Secondary Accreditations**

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

**Subcontract Laboratory Accreditations**

Subcontracted data falls outside of Apex Laboratories' Scope of Accreditation.

Please see the Subcontract Laboratory report for full details, or contact your Project Manager for more information.

**Field Testing Parameters**

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

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## APEX LABS COOLER RECEIPT FORM

Client: Anchor QEA Element WO#: A3 D1354Project/Project #: Gasco-MGP only Prod. Wells 1Q 2023 Perf Mon.  
000029-02.84 T-01.001G

## Delivery Info:

Date/time received: 4/19/23 @ 750 By: BKDelivered by: Apex ☒ Client ☐ ESS ☐ FedEx ☐ UPS ☐ Radio ☐ Morgan ☐ SDS ☐ Evergreen ☐ Other ☐Cooler Inspection Date/time inspected: 4/19/23 @ 805 By: JSChain of Custody included? Yes ☒ No ☐Signed/dated by client? Yes ☒ No ☐

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	<u>1.6</u>	<u>3.1</u>					
Custody seals? (Y/N)	<u>N</u>	<u>N</u>					
Received on ice? (Y/N)	<u>y</u>	<u>y</u>					
Temp. blanks? (Y/N)	<u>y</u>	<u>y</u>					
Ice type: (Gel/Real/Other)	<u>Real</u>	<u>Real</u>					
Condition (In/Out):	<u>In</u>	<u>In</u>					

Cooler out of temp? (Y/N) Possible reason why: 6Green dots applied to out of temperature samples? Yes ☒ No ☐Out of temperature samples form initiated? Yes ☒ No ☐Sample Inspection: Date/time inspected: 4.19.23 @ 930 By: DJSAll 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: 655-041823-80 cyanide bottle pH=8Additional information: # 3255Labeled by: DJSWitness: HAWCooler Inspected by: DJS

Form Y-003 R-00

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