



ANALYTICAL REPORT

Apex Laboratories, LLC

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

Tuesday, September 12, 2023

John Renda  
Anchor QEA, LLC  
6720 SW Macadam Ave. Suite 125  
Portland, OR 97219

RE: A3F1249 - Gasco-MGP Only-Prod. Wells 2Q 2023 Perf. Mon - 000029-02.84 T-01.001E

Thank you for using Apex Laboratories. We greatly appreciate your business and strive to provide the highest quality services to the environmental industry.

Enclosed are the results of analyses for work order A3F1249, which was received by the laboratory on 6/16/2023 at 8:14:00AM.

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	
<u>Acceptable Receipt Temperature is less than, or equal to, 6 degC (not frozen), or received on ice the same day as sampling.</u>	
(See Cooler Receipt Form for details)	
Cooler #1    0.8    degC	Cooler #2    1.3    degC

This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.

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



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Darwin Thomas, Business Development Director



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6720 SW Macadam Ave. Suite 125

Portland, OR 97219

Project: **Gasco-MGP Only-Prod. Wells 2Q 2023 Perf. Mon**

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

**Report ID:**

A3F1249 - 09 12 23 1015

## ANALYTICAL REPORT FOR SAMPLES

### SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
GS-061523-10	A3F1249-01	Water	06/15/23 10:00	06/16/23 08:14
GS-061523-11	A3F1249-02	Water	06/15/23 10:20	06/16/23 08:14
GS-061523-12	A3F1249-03	Water	06/15/23 11:00	06/16/23 08:14
GS-061523-13	A3F1249-04	Water	06/15/23 11:40	06/16/23 08:14
GS-061523-14	A3F1249-05	Water	06/15/23 12:40	06/16/23 08:14
GS-061523-15	A3F1249-06	Water	06/15/23 14:50	06/16/23 08:14
GS-061523-16	A3F1249-07	Water	06/15/23 15:15	06/16/23 08:14
TB-061523	A3F1249-08	Water	06/15/23 16:00	06/16/23 08:14

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ANALYTICAL CASE NARRATIVE

A3F1249

Apex Laboratories

Benzofluoranthene Isomer Reporting:

Due to coelution on the analytical column, the Benzo(b)fluoranthene results represent the concentration of both Benzo(b)fluoranthene and Benzo(j)fluoranthene. Calibration is based on the response of Benzo(b)fluoranthene, and the results represent the combined Benzo(b,j)fluoranthene(s).

David Jack  
Technical Manager  
September 1, 2023

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ANALYTICAL CASE NARRATIVE

23F0457

Analytical Resources, LLC

Apex Laboratories

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Project: **Gasco-MGP Only-Prod. Wells 2Q 2023 Perf. Mon**

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

Project Manager: **John Renda**

**Report ID:**

**A3F1249 - 09 12 23 1015**

**Client:** Apex Laboratories LLC

**Project:** EPH VPH TBT

**Project Number:** A3F1249

**Work Order:** 23F0457

### Sample receipt

Sample(s) as listed on the preceding page were received 20-Jun-2023 10:30 under ARI work order 23F0457. For details regarding sample receipt, please refer to the Cooler Receipt Form.

### Volatile Petroleum Hydrocarbons - WA-Ecology VPH

The sample(s) were analyzed within the recommended holding times.

Initial and continuing calibrations were within method requirements.

The surrogate percent recoveries were within control limits except both surrogates in 23F0457-04. The sample was reanalyzed which resulted in passing surrogates. Both data sets have been reported. Additionally, PID: 2,5-Dibromotoluene which was out of control low in the blank spike BLF06191-BSD. The deviations have been flagged.

The method blank(s) were clean at the reporting limits.

The blank spike and blank spike duplicate (BS/LCS and BSD/LCSD) spike recoveries except surrogate PID: 2,5-Dibromotoluene which was out of control low in BLF06191-BSD. The BS/BSD relative percent difference (RPD) were within control limits except n-Decane. The deviations have been flagged.

Note that per the method, the C12-C13 Aromatic range for the VPH should only be used for evaluating samples when VPH is analyzed without an accompanying EPH method request.

### Extractable Organic Hydrocarbons - WA-Ecology

The sample(s) were extracted and analyzed within the recommended holding times except Aromatics. The original extraction had very low Naphthalene and Acenaphthalene (~10%). Investigation determined that there was excessive blow-down affecting the lower carbon ranges. There was an attempt to re-fractionate the extracts however due to a computer program error the wrong solvents were used and full extracts were lost. The re-extract occurred out of hold and the deviation has been flagged. Both data sets have been reported.

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Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1249 - 09 12 23 1015

The blank spike and blank spike duplicate (BS/LCS and BSD/LCSD) spike recoveries except >C10-12 Aromatics and >C12-16 Aromatics as describe above. The deviations have been flagged.

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SUBCONTRACT LABORATORY ANALYTICAL CASE NARRATIVE

Analytical Resources, LLC

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Portland, OR 97219Project: **Gasco-MGP Only-Prod. Wells 2Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3F1249 - 09 12 23 1015****ANALYTICAL SAMPLE RESULTS****Diesel and/or Oil Hydrocarbons by NWTPH-Dx**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>GS-061523-13 (A3F1249-04)</b>		<b>Matrix: Water</b>			<b>Batch: 23F1082</b>			
Diesel	<b>820</b>	97.1	194	ug/L	1	06/29/23 22:00	NWTPH-Dx	<b>F-13</b>
Oil	ND	194	388	ug/L	1	06/29/23 22:00	NWTPH-Dx	
<i>Surrogate: o-Terphenyl (Surr)</i>		<i>Recovery: 97 %</i>		<i>Limits: 50-150 %</i>	<i>1</i>	<i>06/29/23 22:00</i>	<i>NWTPH-Dx</i>	
<b>GS-061523-14 (A3F1249-05)</b>		<b>Matrix: Water</b>			<b>Batch: 23F1082</b>			
Diesel	<b>1840</b>	99.0	198	ug/L	1	06/29/23 22:21	NWTPH-Dx	<b>F-13</b>
Oil	ND	198	396	ug/L	1	06/29/23 22:21	NWTPH-Dx	
<i>Surrogate: o-Terphenyl (Surr)</i>		<i>Recovery: 98 %</i>		<i>Limits: 50-150 %</i>	<i>1</i>	<i>06/29/23 22:21</i>	<i>NWTPH-Dx</i>	
<b>GS-061523-15 (A3F1249-06)</b>		<b>Matrix: Water</b>			<b>Batch: 23F1082</b>			
Diesel	<b>170</b>	97.1	194	ug/L	1	06/29/23 22:41	NWTPH-Dx	<b>J</b>
Oil	ND	194	388	ug/L	1	06/29/23 22:41	NWTPH-Dx	
<i>Surrogate: o-Terphenyl (Surr)</i>		<i>Recovery: 98 %</i>		<i>Limits: 50-150 %</i>	<i>1</i>	<i>06/29/23 22:41</i>	<i>NWTPH-Dx</i>	
<b>GS-061523-16 (A3F1249-07)</b>		<b>Matrix: Water</b>			<b>Batch: 23F1082</b>			
Diesel	<b>439</b>	93.5	187	ug/L	1	06/29/23 23:02	NWTPH-Dx	<b>F-13</b>
Oil	<b>401</b>	187	374	ug/L	1	06/29/23 23:02	NWTPH-Dx	
<i>Surrogate: o-Terphenyl (Surr)</i>		<i>Recovery: 96 %</i>		<i>Limits: 50-150 %</i>	<i>1</i>	<i>06/29/23 23:02</i>	<i>NWTPH-Dx</i>	

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## ANALYTICAL SAMPLE RESULTS

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

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>GS-061523-13 (A3F1249-04RE1)</b>		<b>Matrix: Water</b>			<b>Batch: 23F0776</b>			
Gasoline Range Organics	ND	50.0	100	ug/L	1	06/21/23 21:10	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 100 %	Limits: 50-150 %	1	06/21/23 21:10	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		109 %	50-150 %	1	06/21/23 21:10	NWTPH-Gx (MS)		
<b>GS-061523-14 (A3F1249-05RE1)</b>		<b>Matrix: Water</b>			<b>Batch: 23F0776</b>			
Gasoline Range Organics	3430	50.0	100	ug/L	1	06/21/23 21:38	NWTPH-Gx (MS)	F-12
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 112 %	Limits: 50-150 %	1	06/21/23 21:38	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		109 %	50-150 %	1	06/21/23 21:38	NWTPH-Gx (MS)		
<b>GS-061523-15 (A3F1249-06RE1)</b>		<b>Matrix: Water</b>			<b>Batch: 23F0776</b>			
Gasoline Range Organics	ND	100	100	ug/L	1	06/21/23 22:05	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 99 %	Limits: 50-150 %	1	06/21/23 22:05	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		107 %	50-150 %	1	06/21/23 22:05	NWTPH-Gx (MS)		
<b>GS-061523-16 (A3F1249-07RE1)</b>		<b>Matrix: Water</b>			<b>Batch: 23F0776</b>			
Gasoline Range Organics	ND	50.0	100	ug/L	1	06/21/23 22:32	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 100 %	Limits: 50-150 %	1	06/21/23 22:32	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		108 %	50-150 %	1	06/21/23 22:32	NWTPH-Gx (MS)		

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Project Manager: John Renda

Report ID:

A3F1249 - 09 12 23 1015

## ANALYTICAL SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-061523-10 (A3F1249-01RE1)				Matrix: Water		Batch: 23F0776		
Acetone	ND	10.0	20.0	ug/L	1	06/21/23 20:16	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	06/21/23 20:16	EPA 8260D	
Benzene	ND	0.100	0.200	ug/L	1	06/21/23 20:16	EPA 8260D	
Bromobenzene	ND	0.250	0.500	ug/L	1	06/21/23 20:16	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	06/21/23 20:16	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	06/21/23 20:16	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	06/21/23 20:16	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	06/21/23 20:16	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	06/21/23 20:16	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	06/21/23 20:16	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	06/21/23 20:16	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	06/21/23 20:16	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	06/21/23 20:16	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	06/21/23 20:16	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	06/21/23 20:16	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	06/21/23 20:16	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	06/21/23 20:16	EPA 8260D	
Chloromethane	ND	2.50	5.00	ug/L	1	06/21/23 20:16	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	06/21/23 20:16	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	06/21/23 20:16	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	06/21/23 20:16	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	06/21/23 20:16	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	06/21/23 20:16	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	06/21/23 20:16	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	06/21/23 20:16	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	06/21/23 20:16	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	06/21/23 20:16	EPA 8260D	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	06/21/23 20:16	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	06/21/23 20:16	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	06/21/23 20:16	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	06/21/23 20:16	EPA 8260D	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	06/21/23 20:16	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	06/21/23 20:16	EPA 8260D	

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Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>GS-061523-10 (A3F1249-01RE1)</b>		<b>Matrix: Water</b>			<b>Batch: 23F0776</b>			
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	06/21/23 20:16	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	06/21/23 20:16	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	06/21/23 20:16	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	06/21/23 20:16	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	06/21/23 20:16	EPA 8260D	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	06/21/23 20:16	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	06/21/23 20:16	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	06/21/23 20:16	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	06/21/23 20:16	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	06/21/23 20:16	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	06/21/23 20:16	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	06/21/23 20:16	EPA 8260D	
4-Methyl-2-pentanone (MIBK)	ND	5.00	10.0	ug/L	1	06/21/23 20:16	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	06/21/23 20:16	EPA 8260D	
Naphthalene	ND	2.00	2.00	ug/L	1	06/21/23 20:16	EPA 8260D	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	06/21/23 20:16	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	06/21/23 20:16	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	06/21/23 20:16	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	06/21/23 20:16	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	06/21/23 20:16	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	06/21/23 20:16	EPA 8260D	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	06/21/23 20:16	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	06/21/23 20:16	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	06/21/23 20:16	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	06/21/23 20:16	EPA 8260D	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	06/21/23 20:16	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	06/21/23 20:16	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	06/21/23 20:16	EPA 8260D	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	06/21/23 20:16	EPA 8260D	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	06/21/23 20:16	EPA 8260D	
Vinyl chloride	ND	0.200	0.400	ug/L	1	06/21/23 20:16	EPA 8260D	
m,p-Xylene	ND	0.500	1.00	ug/L	1	06/21/23 20:16	EPA 8260D	
o-Xylene	ND	0.250	0.500	ug/L	1	06/21/23 20:16	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 2Q 2023 Perf. Mon

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1249 - 09 12 23 1015

## ANALYTICAL SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-061523-10 (A3F1249-01RE1)		Matrix: Water			Batch: 23F0776			
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 109 %	Limits: 80-120 %	1	06/21/23 20:16	EPA 8260D		
Toluene-d8 (Surr)		103 %	80-120 %	1	06/21/23 20:16	EPA 8260D		
4-Bromofluorobenzene (Surr)		109 %	80-120 %	1	06/21/23 20:16	EPA 8260D		
GS-061523-11 (A3F1249-02RE1)		Matrix: Water			Batch: 23F0776			
Acetone	ND	10.0	20.0	ug/L	1	06/21/23 20:43	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	06/21/23 20:43	EPA 8260D	
Benzene	0.120	0.100	0.200	ug/L	1	06/21/23 20:43	EPA 8260D	J
Bromobenzene	ND	0.250	0.500	ug/L	1	06/21/23 20:43	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	06/21/23 20:43	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	06/21/23 20:43	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	06/21/23 20:43	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	06/21/23 20:43	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	06/21/23 20:43	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	06/21/23 20:43	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	06/21/23 20:43	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	06/21/23 20:43	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	06/21/23 20:43	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	06/21/23 20:43	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	06/21/23 20:43	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	06/21/23 20:43	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	06/21/23 20:43	EPA 8260D	
Chloromethane	ND	2.50	5.00	ug/L	1	06/21/23 20:43	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	06/21/23 20:43	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	06/21/23 20:43	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	06/21/23 20:43	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	06/21/23 20:43	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	06/21/23 20:43	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	06/21/23 20:43	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	06/21/23 20:43	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	06/21/23 20:43	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	06/21/23 20:43	EPA 8260D	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	06/21/23 20:43	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	06/21/23 20:43	EPA 8260D	

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Darwin Thomas, Business Development Director



## ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

**Anchor QEA, LLC**

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

Project: **Gasco-MGP Only-Prod. Wells 2Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3F1249 - 09 12 23 1015**

## 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-061523-11 (A3F1249-02RE1)</b>		<b>Matrix: Water</b>			<b>Batch: 23F0776</b>			
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	06/21/23 20:43	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	06/21/23 20:43	EPA 8260D	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	06/21/23 20:43	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	06/21/23 20:43	EPA 8260D	
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	06/21/23 20:43	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	06/21/23 20:43	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	06/21/23 20:43	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	06/21/23 20:43	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	06/21/23 20:43	EPA 8260D	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	06/21/23 20:43	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	06/21/23 20:43	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	06/21/23 20:43	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	06/21/23 20:43	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	06/21/23 20:43	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	06/21/23 20:43	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	06/21/23 20:43	EPA 8260D	
4-Methyl-2-pentanone (MIBK)	ND	5.00	10.0	ug/L	1	06/21/23 20:43	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	06/21/23 20:43	EPA 8260D	
Naphthalene	ND	2.00	2.00	ug/L	1	06/21/23 20:43	EPA 8260D	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	06/21/23 20:43	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	06/21/23 20:43	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	06/21/23 20:43	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	06/21/23 20:43	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	06/21/23 20:43	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	06/21/23 20:43	EPA 8260D	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	06/21/23 20:43	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	06/21/23 20:43	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	06/21/23 20:43	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	06/21/23 20:43	EPA 8260D	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	06/21/23 20:43	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	06/21/23 20:43	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	06/21/23 20:43	EPA 8260D	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	06/21/23 20:43	EPA 8260D	

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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 2Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3F1249 - 09 12 23 1015**

## 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-061523-11 (A3F1249-02RE1)</b>		<b>Matrix: Water</b>			<b>Batch: 23F0776</b>			
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	06/21/23 20:43	EPA 8260D	
Vinyl chloride	ND	0.200	0.400	ug/L	1	06/21/23 20:43	EPA 8260D	
m,p-Xylene	ND	0.500	1.00	ug/L	1	06/21/23 20:43	EPA 8260D	
o-Xylene	ND	0.250	0.500	ug/L	1	06/21/23 20:43	EPA 8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 110 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>06/21/23 20:43</i>	<i>EPA 8260D</i>	
<i>Toluene-d8 (Surr)</i>		<i>101 %</i>		<i>80-120 %</i>	<i>1</i>	<i>06/21/23 20:43</i>	<i>EPA 8260D</i>	
<i>4-Bromofluorobenzene (Surr)</i>		<i>103 %</i>		<i>80-120 %</i>	<i>1</i>	<i>06/21/23 20:43</i>	<i>EPA 8260D</i>	
<b>GS-061523-12 (A3F1249-03RE1)</b>		<b>Matrix: Water</b>			<b>Batch: 23F0776</b>			
Acetone	ND	20.0	40.0	ug/L	2	06/21/23 23:00	EPA 8260D	
Acrylonitrile	ND	2.00	4.00	ug/L	2	06/21/23 23:00	EPA 8260D	
<b>Benzene</b>	<b>101</b>	0.200	0.400	ug/L	2	06/21/23 23:00	EPA 8260D	
Bromobenzene	ND	0.500	1.00	ug/L	2	06/21/23 23:00	EPA 8260D	
Bromochloromethane	ND	1.00	2.00	ug/L	2	06/21/23 23:00	EPA 8260D	
Bromodichloromethane	ND	1.00	2.00	ug/L	2	06/21/23 23:00	EPA 8260D	
Bromoform	ND	1.00	2.00	ug/L	2	06/21/23 23:00	EPA 8260D	
Bromomethane	ND	10.0	10.0	ug/L	2	06/21/23 23:00	EPA 8260D	
2-Butanone (MEK)	ND	10.0	20.0	ug/L	2	06/21/23 23:00	EPA 8260D	
<b>n-Butylbenzene</b>	<b>3.56</b>	1.00	2.00	ug/L	2	06/21/23 23:00	EPA 8260D	
<b>sec-Butylbenzene</b>	<b>7.78</b>	1.00	2.00	ug/L	2	06/21/23 23:00	EPA 8260D	
tert-Butylbenzene	ND	5.40	5.40	ug/L	2	06/21/23 23:00	EPA 8260D	R-02
Carbon disulfide	ND	10.0	20.0	ug/L	2	06/21/23 23:00	EPA 8260D	
Carbon tetrachloride	ND	1.00	2.00	ug/L	2	06/21/23 23:00	EPA 8260D	
Chlorobenzene	ND	0.500	1.00	ug/L	2	06/21/23 23:00	EPA 8260D	
Chloroethane	ND	10.0	10.0	ug/L	2	06/21/23 23:00	EPA 8260D	
Chloroform	ND	1.00	2.00	ug/L	2	06/21/23 23:00	EPA 8260D	
Chloromethane	ND	5.00	10.0	ug/L	2	06/21/23 23:00	EPA 8260D	
2-Chlorotoluene	ND	1.00	2.00	ug/L	2	06/21/23 23:00	EPA 8260D	
4-Chlorotoluene	ND	1.00	2.00	ug/L	2	06/21/23 23:00	EPA 8260D	
Dibromochloromethane	ND	1.00	2.00	ug/L	2	06/21/23 23:00	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	5.00	10.0	ug/L	2	06/21/23 23:00	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.500	1.00	ug/L	2	06/21/23 23:00	EPA 8260D	
Dibromomethane	ND	1.00	2.00	ug/L	2	06/21/23 23:00	EPA 8260D	

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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 2Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3F1249 - 09 12 23 1015**

## 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-061523-12 (A3F1249-03RE1)</b>		<b>Matrix: Water</b>			<b>Batch: 23F0776</b>			
1,2-Dichlorobenzene	ND	0.500	1.00	ug/L	2	06/21/23 23:00	EPA 8260D	
1,3-Dichlorobenzene	ND	0.500	1.00	ug/L	2	06/21/23 23:00	EPA 8260D	
1,4-Dichlorobenzene	ND	0.500	1.00	ug/L	2	06/21/23 23:00	EPA 8260D	
Dichlorodifluoromethane	ND	1.00	2.00	ug/L	2	06/21/23 23:00	EPA 8260D	
1,1-Dichloroethane	ND	0.400	0.800	ug/L	2	06/21/23 23:00	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.400	0.800	ug/L	2	06/21/23 23:00	EPA 8260D	
1,2-Dichloropropane	ND	0.500	1.00	ug/L	2	06/21/23 23:00	EPA 8260D	
1,3-Dichloropropane	ND	1.00	2.00	ug/L	2	06/21/23 23:00	EPA 8260D	
2,2-Dichloropropane	ND	1.00	2.00	ug/L	2	06/21/23 23:00	EPA 8260D	
1,1-Dichloropropene	ND	1.00	2.00	ug/L	2	06/21/23 23:00	EPA 8260D	
cis-1,3-Dichloropropene	ND	1.00	2.00	ug/L	2	06/21/23 23:00	EPA 8260D	
trans-1,3-Dichloropropene	ND	1.00	2.00	ug/L	2	06/21/23 23:00	EPA 8260D	
<b>Ethylbenzene</b>	<b>275</b>	0.500	1.00	ug/L	2	06/21/23 23:00	EPA 8260D	
Hexachlorobutadiene	ND	5.00	10.0	ug/L	2	06/21/23 23:00	EPA 8260D	
2-Hexanone	ND	10.0	20.0	ug/L	2	06/21/23 23:00	EPA 8260D	
<b>Isopropylbenzene</b>	<b>83.7</b>	1.00	2.00	ug/L	2	06/21/23 23:00	EPA 8260D	
<b>4-Isopropyltoluene</b>	<b>12.3</b>	1.00	2.00	ug/L	2	06/21/23 23:00	EPA 8260D	<b>M-02</b>
Methylene chloride	ND	10.0	20.0	ug/L	2	06/21/23 23:00	EPA 8260D	
4-Methyl-2-pentanone (MiBK)	ND	10.0	20.0	ug/L	2	06/21/23 23:00	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	1.00	2.00	ug/L	2	06/21/23 23:00	EPA 8260D	
<b>n-Propylbenzene</b>	<b>36.0</b>	0.500	1.00	ug/L	2	06/21/23 23:00	EPA 8260D	
Styrene	ND	1.00	2.00	ug/L	2	06/21/23 23:00	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.400	0.800	ug/L	2	06/21/23 23:00	EPA 8260D	
1,1,1,2,2-Tetrachloroethane	ND	0.500	1.00	ug/L	2	06/21/23 23:00	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.400	0.800	ug/L	2	06/21/23 23:00	EPA 8260D	
<b>Toluene</b>	<b>2.56</b>	1.00	2.00	ug/L	2	06/21/23 23:00	EPA 8260D	
1,2,3-Trichlorobenzene	ND	2.00	4.00	ug/L	2	06/21/23 23:00	EPA 8260D	
1,2,4-Trichlorobenzene	ND	2.00	4.00	ug/L	2	06/21/23 23:00	EPA 8260D	
1,1,1-Trichloroethane	ND	0.400	0.800	ug/L	2	06/21/23 23:00	EPA 8260D	
1,1,2-Trichloroethane	ND	0.500	1.00	ug/L	2	06/21/23 23:00	EPA 8260D	
Trichlorofluoromethane	ND	2.00	4.00	ug/L	2	06/21/23 23:00	EPA 8260D	
1,2,3-Trichloropropane	ND	1.00	2.00	ug/L	2	06/21/23 23:00	EPA 8260D	
<b>1,2,4-Trimethylbenzene</b>	<b>75.7</b>	1.00	2.00	ug/L	2	06/21/23 23:00	EPA 8260D	

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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 97219Project: **Gasco-MGP Only-Prod. Wells 2Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3F1249 - 09 12 23 1015**

## 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-061523-12 (A3F1249-03RE1)</b>		<b>Matrix: Water</b>				<b>Batch: 23F0776</b>		
<b>1,3,5-Trimethylbenzene</b>	<b>14.4</b>	1.00	2.00	ug/L	2	06/21/23 23:00	EPA 8260D	
<b>m,p-Xylene</b>	<b>30.3</b>	1.00	2.00	ug/L	2	06/21/23 23:00	EPA 8260D	
<b>o-Xylene</b>	<b>91.0</b>	0.500	1.00	ug/L	2	06/21/23 23:00	EPA 8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 101 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>06/21/23 23:00</i>	<i>EPA 8260D</i>	
<i>Toluene-d8 (Surr)</i>		<i>101 %</i>		<i>80-120 %</i>	<i>1</i>	<i>06/21/23 23:00</i>	<i>EPA 8260D</i>	
<i>4-Bromofluorobenzene (Surr)</i>		<i>92 %</i>		<i>80-120 %</i>	<i>1</i>	<i>06/21/23 23:00</i>	<i>EPA 8260D</i>	
<b>GS-061523-12 (A3F1249-03RE2)</b>		<b>Matrix: Water</b>				<b>Batch: 23F0812</b>		
<b>Naphthalene</b>	<b>226</b>	2.00	4.00	ug/L	2	06/25/23 17:06	EPA 8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 99 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>06/25/23 17:06</i>	<i>EPA 8260D</i>	
<i>Toluene-d8 (Surr)</i>		<i>100 %</i>		<i>80-120 %</i>	<i>1</i>	<i>06/25/23 17:06</i>	<i>EPA 8260D</i>	
<i>4-Bromofluorobenzene (Surr)</i>		<i>101 %</i>		<i>80-120 %</i>	<i>1</i>	<i>06/25/23 17:06</i>	<i>EPA 8260D</i>	
<b>GS-061523-13 (A3F1249-04RE1)</b>		<b>Matrix: Water</b>				<b>Batch: 23F0776</b>		
Acetone	ND	10.0	20.0	ug/L	1	06/21/23 21:10	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	06/21/23 21:10	EPA 8260D	
Benzene	ND	0.100	0.200	ug/L	1	06/21/23 21:10	EPA 8260D	
Bromobenzene	ND	0.250	0.500	ug/L	1	06/21/23 21:10	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	06/21/23 21:10	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	06/21/23 21:10	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	06/21/23 21:10	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	06/21/23 21:10	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	06/21/23 21:10	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	06/21/23 21:10	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	06/21/23 21:10	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	06/21/23 21:10	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	06/21/23 21:10	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	06/21/23 21:10	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	06/21/23 21:10	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	06/21/23 21:10	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	06/21/23 21:10	EPA 8260D	
Chloromethane	ND	2.50	5.00	ug/L	1	06/21/23 21:10	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	06/21/23 21:10	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	06/21/23 21:10	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 97219

Project: Gasco-MGP Only-Prod. Wells 2Q 2023 Perf. Mon

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1249 - 09 12 23 1015

## ANALYTICAL SAMPLE RESULTS

### Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-061523-13 (A3F1249-04RE1)		Matrix: Water			Batch: 23F0776			
Dibromochloromethane	ND	0.500	1.00	ug/L	1	06/21/23 21:10	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	06/21/23 21:10	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	06/21/23 21:10	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	06/21/23 21:10	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	06/21/23 21:10	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	06/21/23 21:10	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	06/21/23 21:10	EPA 8260D	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	06/21/23 21:10	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	06/21/23 21:10	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	06/21/23 21:10	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	06/21/23 21:10	EPA 8260D	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	06/21/23 21:10	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	06/21/23 21:10	EPA 8260D	
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	06/21/23 21:10	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	06/21/23 21:10	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	06/21/23 21:10	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	06/21/23 21:10	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	06/21/23 21:10	EPA 8260D	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	06/21/23 21:10	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	06/21/23 21:10	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	06/21/23 21:10	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	06/21/23 21:10	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	06/21/23 21:10	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	06/21/23 21:10	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	06/21/23 21:10	EPA 8260D	
4-Methyl-2-pentanone (MIBK)	ND	5.00	10.0	ug/L	1	06/21/23 21:10	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	06/21/23 21:10	EPA 8260D	
Naphthalene	ND	2.00	2.00	ug/L	1	06/21/23 21:10	EPA 8260D	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	06/21/23 21:10	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	06/21/23 21:10	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	06/21/23 21:10	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	06/21/23 21:10	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	06/21/23 21:10	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 2Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3F1249 - 09 12 23 1015**

## 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-061523-13 (A3F1249-04RE1)</b>		<b>Matrix: Water</b>			<b>Batch: 23F0776</b>			
Toluene	ND	0.500	1.00	ug/L	1	06/21/23 21:10	EPA 8260D	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	06/21/23 21:10	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	06/21/23 21:10	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	06/21/23 21:10	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	06/21/23 21:10	EPA 8260D	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	06/21/23 21:10	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	06/21/23 21:10	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	06/21/23 21:10	EPA 8260D	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	06/21/23 21:10	EPA 8260D	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	06/21/23 21:10	EPA 8260D	
Vinyl chloride	ND	0.200	0.400	ug/L	1	06/21/23 21:10	EPA 8260D	
m,p-Xylene	ND	0.500	1.00	ug/L	1	06/21/23 21:10	EPA 8260D	
o-Xylene	ND	0.250	0.500	ug/L	1	06/21/23 21:10	EPA 8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 109 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>06/21/23 21:10</i>	<i>EPA 8260D</i>	
<i>Toluene-d8 (Surr)</i>		<i>103 %</i>		<i>80-120 %</i>	<i>1</i>	<i>06/21/23 21:10</i>	<i>EPA 8260D</i>	
<i>4-Bromofluorobenzene (Surr)</i>		<i>104 %</i>		<i>80-120 %</i>	<i>1</i>	<i>06/21/23 21:10</i>	<i>EPA 8260D</i>	
<b>GS-061523-14 (A3F1249-05RE1)</b>		<b>Matrix: Water</b>			<b>Batch: 23F0776</b>			
Acetone	ND	10.0	20.0	ug/L	1	06/21/23 21:38	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	06/21/23 21:38	EPA 8260D	
<b>Benzene</b>	<b>0.200</b>	0.100	0.200	ug/L	1	06/21/23 21:38	EPA 8260D	
Bromobenzene	ND	0.250	0.500	ug/L	1	06/21/23 21:38	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	06/21/23 21:38	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	06/21/23 21:38	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	06/21/23 21:38	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	06/21/23 21:38	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	06/21/23 21:38	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	06/21/23 21:38	EPA 8260D	
<b>sec-Butylbenzene</b>	<b>0.570</b>	0.500	1.00	ug/L	1	06/21/23 21:38	EPA 8260D	<b>J</b>
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	06/21/23 21:38	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	06/21/23 21:38	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	06/21/23 21:38	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	06/21/23 21:38	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 97219

Project: **Gasco-MGP Only-Prod. Wells 2Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3F1249 - 09 12 23 1015**

## 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-061523-14 (A3F1249-05RE1)</b>		<b>Matrix: Water</b>			<b>Batch: 23F0776</b>			
Chloroethane	ND	5.00	5.00	ug/L	1	06/21/23 21:38	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	06/21/23 21:38	EPA 8260D	
Chloromethane	ND	2.50	5.00	ug/L	1	06/21/23 21:38	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	06/21/23 21:38	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	06/21/23 21:38	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	06/21/23 21:38	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	06/21/23 21:38	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	06/21/23 21:38	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	06/21/23 21:38	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	06/21/23 21:38	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	06/21/23 21:38	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	06/21/23 21:38	EPA 8260D	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	06/21/23 21:38	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	06/21/23 21:38	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	06/21/23 21:38	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	06/21/23 21:38	EPA 8260D	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	06/21/23 21:38	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	06/21/23 21:38	EPA 8260D	
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	06/21/23 21:38	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	06/21/23 21:38	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	06/21/23 21:38	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	06/21/23 21:38	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	06/21/23 21:38	EPA 8260D	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	06/21/23 21:38	EPA 8260D	
<b>Ethylbenzene</b>	<b>0.490</b>	0.250	0.500	ug/L	1	06/21/23 21:38	EPA 8260D	<b>J</b>
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	06/21/23 21:38	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	06/21/23 21:38	EPA 8260D	
<b>Isopropylbenzene</b>	<b>14.5</b>	0.500	1.00	ug/L	1	06/21/23 21:38	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	06/21/23 21:38	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	06/21/23 21:38	EPA 8260D	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	06/21/23 21:38	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	06/21/23 21:38	EPA 8260D	
Naphthalene	ND	2.00	2.00	ug/L	1	06/21/23 21:38	EPA 8260D	

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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 2Q 2023 Perf. Mon

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

## Report ID:

A3F1249 - 09 12 23 1015

## ANALYTICAL SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-061523-14 (A3F1249-05RE1)		Matrix: Water			Batch: 23F0776			
n-Propylbenzene	4.54	0.250	0.500	ug/L	1	06/21/23 21:38	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	06/21/23 21:38	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	06/21/23 21:38	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	06/21/23 21:38	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	06/21/23 21:38	EPA 8260D	
Toluene	0.540	0.500	1.00	ug/L	1	06/21/23 21:38	EPA 8260D	J
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	06/21/23 21:38	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	06/21/23 21:38	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	06/21/23 21:38	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	06/21/23 21:38	EPA 8260D	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	06/21/23 21:38	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	06/21/23 21:38	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	06/21/23 21:38	EPA 8260D	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	06/21/23 21:38	EPA 8260D	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	06/21/23 21:38	EPA 8260D	
Vinyl chloride	ND	0.200	0.400	ug/L	1	06/21/23 21:38	EPA 8260D	
m,p-Xylene	0.690	0.500	1.00	ug/L	1	06/21/23 21:38	EPA 8260D	J
o-Xylene	0.620	0.250	0.500	ug/L	1	06/21/23 21:38	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 109 %		Limits: 80-120 %	1	06/21/23 21:38	EPA 8260D	
Toluene-d8 (Surr)		101 %		80-120 %	1	06/21/23 21:38	EPA 8260D	
4-Bromofluorobenzene (Surr)		100 %		80-120 %	1	06/21/23 21:38	EPA 8260D	
GS-061523-15 (A3F1249-06RE1)		Matrix: Water			Batch: 23F0776			
Acetone	ND	20.0	20.0	ug/L	1	06/21/23 22:05	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	06/21/23 22:05	EPA 8260D	
Benzene	ND	0.100	0.200	ug/L	1	06/21/23 22:05	EPA 8260D	
Bromobenzene	ND	0.250	0.500	ug/L	1	06/21/23 22:05	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	06/21/23 22:05	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	06/21/23 22:05	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	06/21/23 22:05	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	06/21/23 22:05	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	06/21/23 22:05	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	06/21/23 22:05	EPA 8260D	

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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 97219Project: **Gasco-MGP Only-Prod. Wells 2Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3F1249 - 09 12 23 1015**

## 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-061523-15 (A3F1249-06RE1)</b>				<b>Matrix: Water</b>		<b>Batch: 23F0776</b>		
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	06/21/23 22:05	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	06/21/23 22:05	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	06/21/23 22:05	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	06/21/23 22:05	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	06/21/23 22:05	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	06/21/23 22:05	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	06/21/23 22:05	EPA 8260D	
Chloromethane	ND	2.50	5.00	ug/L	1	06/21/23 22:05	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	06/21/23 22:05	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	06/21/23 22:05	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	06/21/23 22:05	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	06/21/23 22:05	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	06/21/23 22:05	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	06/21/23 22:05	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	06/21/23 22:05	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	06/21/23 22:05	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	06/21/23 22:05	EPA 8260D	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	06/21/23 22:05	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	06/21/23 22:05	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	06/21/23 22:05	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	06/21/23 22:05	EPA 8260D	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	06/21/23 22:05	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	06/21/23 22:05	EPA 8260D	
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	06/21/23 22:05	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	06/21/23 22:05	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	06/21/23 22:05	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	06/21/23 22:05	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	06/21/23 22:05	EPA 8260D	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	06/21/23 22:05	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	06/21/23 22:05	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	06/21/23 22:05	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	06/21/23 22:05	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	06/21/23 22:05	EPA 8260D	

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## ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street  
Tigard, OR 97223  
503-718-2323  
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125  
Portland, OR 97219Project: **Gasco-MGP Only-Prod. Wells 2Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3F1249 - 09 12 23 1015**

## 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-061523-15 (A3F1249-06RE1)</b>		<b>Matrix: Water</b>			<b>Batch: 23F0776</b>			
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	06/21/23 22:05	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	06/21/23 22:05	EPA 8260D	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	06/21/23 22:05	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	06/21/23 22:05	EPA 8260D	
Naphthalene	ND	2.00	2.00	ug/L	1	06/21/23 22:05	EPA 8260D	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	06/21/23 22:05	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	06/21/23 22:05	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	06/21/23 22:05	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	06/21/23 22:05	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	06/21/23 22:05	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	06/21/23 22:05	EPA 8260D	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	06/21/23 22:05	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	06/21/23 22:05	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	06/21/23 22:05	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	06/21/23 22:05	EPA 8260D	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	06/21/23 22:05	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	06/21/23 22:05	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	06/21/23 22:05	EPA 8260D	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	06/21/23 22:05	EPA 8260D	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	06/21/23 22:05	EPA 8260D	
Vinyl chloride	ND	0.200	0.400	ug/L	1	06/21/23 22:05	EPA 8260D	
m,p-Xylene	ND	0.500	1.00	ug/L	1	06/21/23 22:05	EPA 8260D	
o-Xylene	ND	0.250	0.500	ug/L	1	06/21/23 22:05	EPA 8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 107 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>06/21/23 22:05</i>	<i>EPA 8260D</i>	
<i>Toluene-d8 (Surr)</i>		<i>101 %</i>		<i>80-120 %</i>	<i>1</i>	<i>06/21/23 22:05</i>	<i>EPA 8260D</i>	
<i>4-Bromofluorobenzene (Surr)</i>		<i>106 %</i>		<i>80-120 %</i>	<i>1</i>	<i>06/21/23 22:05</i>	<i>EPA 8260D</i>	
<b>GS-061523-16 (A3F1249-07RE1)</b>		<b>Matrix: Water</b>			<b>Batch: 23F0776</b>			
Acetone	ND	10.0	20.0	ug/L	1	06/21/23 22:32	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	06/21/23 22:32	EPA 8260D	
<b>Benzene</b>	<b>0.430</b>	0.100	0.200	ug/L	1	06/21/23 22:32	EPA 8260D	
Bromobenzene	ND	0.250	0.500	ug/L	1	06/21/23 22:32	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	06/21/23 22:32	EPA 8260D	

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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 2Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3F1249 - 09 12 23 1015**

## 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-061523-16 (A3F1249-07RE1)</b>		<b>Matrix: Water</b>			<b>Batch: 23F0776</b>			
Bromodichloromethane	ND	0.500	1.00	ug/L	1	06/21/23 22:32	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	06/21/23 22:32	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	06/21/23 22:32	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	06/21/23 22:32	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	06/21/23 22:32	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	06/21/23 22:32	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	06/21/23 22:32	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	06/21/23 22:32	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	06/21/23 22:32	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	06/21/23 22:32	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	06/21/23 22:32	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	06/21/23 22:32	EPA 8260D	
Chloromethane	ND	2.50	5.00	ug/L	1	06/21/23 22:32	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	06/21/23 22:32	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	06/21/23 22:32	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	06/21/23 22:32	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	06/21/23 22:32	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	06/21/23 22:32	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	06/21/23 22:32	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	06/21/23 22:32	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	06/21/23 22:32	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	06/21/23 22:32	EPA 8260D	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	06/21/23 22:32	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	06/21/23 22:32	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	06/21/23 22:32	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	06/21/23 22:32	EPA 8260D	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	06/21/23 22:32	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	06/21/23 22:32	EPA 8260D	
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	06/21/23 22:32	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	06/21/23 22:32	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	06/21/23 22:32	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	06/21/23 22:32	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	06/21/23 22:32	EPA 8260D	

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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 2Q 2023 Perf. Mon

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1249 - 09 12 23 1015

## ANALYTICAL SAMPLE RESULTS

## Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-061523-16 (A3F1249-07RE1)		Matrix: Water			Batch: 23F0776			
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	06/21/23 22:32	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	06/21/23 22:32	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	06/21/23 22:32	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	06/21/23 22:32	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	06/21/23 22:32	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	06/21/23 22:32	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	06/21/23 22:32	EPA 8260D	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	06/21/23 22:32	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	06/21/23 22:32	EPA 8260D	
Naphthalene	ND	2.00	2.00	ug/L	1	06/21/23 22:32	EPA 8260D	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	06/21/23 22:32	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	06/21/23 22:32	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	06/21/23 22:32	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	06/21/23 22:32	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	06/21/23 22:32	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	06/21/23 22:32	EPA 8260D	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	06/21/23 22:32	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	06/21/23 22:32	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	06/21/23 22:32	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	06/21/23 22:32	EPA 8260D	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	06/21/23 22:32	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	06/21/23 22:32	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	06/21/23 22:32	EPA 8260D	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	06/21/23 22:32	EPA 8260D	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	06/21/23 22:32	EPA 8260D	
Vinyl chloride	ND	0.200	0.400	ug/L	1	06/21/23 22:32	EPA 8260D	
m,p-Xylene	ND	0.500	1.00	ug/L	1	06/21/23 22:32	EPA 8260D	
o-Xylene	ND	0.250	0.500	ug/L	1	06/21/23 22:32	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 109 %		Limits: 80-120 %	1	06/21/23 22:32	EPA 8260D	
Toluene-d8 (Surr)		102 %		80-120 %	1	06/21/23 22:32	EPA 8260D	
4-Bromofluorobenzene (Surr)		104 %		80-120 %	1	06/21/23 22:32	EPA 8260D	

## TB-061523 (A3F1249-08)

Matrix: Water

Batch: 23F0776

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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 2Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3F1249 - 09 12 23 1015****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-061523 (A3F1249-08)</b>		<b>Matrix: Water</b>			<b>Batch: 23F0776</b>			
Acetone	ND	10.0	20.0	ug/L	1	06/21/23 14:49	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	06/21/23 14:49	EPA 8260D	
Benzene	ND	0.100	0.200	ug/L	1	06/21/23 14:49	EPA 8260D	
Bromobenzene	ND	0.250	0.500	ug/L	1	06/21/23 14:49	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	06/21/23 14:49	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	06/21/23 14:49	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	06/21/23 14:49	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	06/21/23 14:49	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	06/21/23 14:49	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	06/21/23 14:49	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	06/21/23 14:49	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	06/21/23 14:49	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	06/21/23 14:49	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	06/21/23 14:49	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	06/21/23 14:49	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	06/21/23 14:49	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	06/21/23 14:49	EPA 8260D	
Chloromethane	ND	2.50	5.00	ug/L	1	06/21/23 14:49	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	06/21/23 14:49	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	06/21/23 14:49	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	06/21/23 14:49	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	06/21/23 14:49	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	06/21/23 14:49	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	06/21/23 14:49	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	06/21/23 14:49	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	06/21/23 14:49	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	06/21/23 14:49	EPA 8260D	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	06/21/23 14:49	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	06/21/23 14:49	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	06/21/23 14:49	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	06/21/23 14:49	EPA 8260D	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	06/21/23 14:49	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	06/21/23 14:49	EPA 8260D	

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**ANALYTICAL REPORT****Apex Laboratories, LLC**6700 S.W. Sandburg Street  
Tigard, OR 97223  
503-718-2323  
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125  
Portland, OR 97219Project: **Gasco-MGP Only-Prod. Wells 2Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3F1249 - 09 12 23 1015****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-061523 (A3F1249-08)</b>		<b>Matrix: Water</b>			<b>Batch: 23F0776</b>			
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	06/21/23 14:49	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	06/21/23 14:49	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	06/21/23 14:49	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	06/21/23 14:49	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	06/21/23 14:49	EPA 8260D	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	06/21/23 14:49	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	06/21/23 14:49	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	06/21/23 14:49	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	06/21/23 14:49	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	06/21/23 14:49	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	06/21/23 14:49	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	06/21/23 14:49	EPA 8260D	
4-Methyl-2-pentanone (MIBK)	ND	5.00	10.0	ug/L	1	06/21/23 14:49	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	06/21/23 14:49	EPA 8260D	
Naphthalene	ND	2.00	2.00	ug/L	1	06/21/23 14:49	EPA 8260D	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	06/21/23 14:49	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	06/21/23 14:49	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	06/21/23 14:49	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	06/21/23 14:49	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	06/21/23 14:49	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	06/21/23 14:49	EPA 8260D	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	06/21/23 14:49	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	06/21/23 14:49	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	06/21/23 14:49	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	06/21/23 14:49	EPA 8260D	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	06/21/23 14:49	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	06/21/23 14:49	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	06/21/23 14:49	EPA 8260D	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	06/21/23 14:49	EPA 8260D	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	06/21/23 14:49	EPA 8260D	
Vinyl chloride	ND	0.200	0.400	ug/L	1	06/21/23 14:49	EPA 8260D	
m,p-Xylene	ND	0.500	1.00	ug/L	1	06/21/23 14:49	EPA 8260D	
o-Xylene	ND	0.250	0.500	ug/L	1	06/21/23 14:49	EPA 8260D	

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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 2Q 2023 Perf. Mon**

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

Project Manager: **John Renda**

**Report ID:**

**A3F1249 - 09 12 23 1015**

### 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-061523 (A3F1249-08)</b>				<b>Matrix: Water</b>		<b>Batch: 23F0776</b>		
Surrogate: 1,4-Difluorobenzene (Surr)			Recovery: 109 %	Limits: 80-120 %	1	06/21/23 14:49	EPA 8260D	
Toluene-d8 (Surr)			104 %	80-120 %	1	06/21/23 14:49	EPA 8260D	
4-Bromofluorobenzene (Surr)			108 %	80-120 %	1	06/21/23 14:49	EPA 8260D	

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Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1249 - 09 12 23 1015

## 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-061523-12 (A3F1249-03)		Matrix: Water			Batch: 23F0902			
1,1-Dichloroethene	ND	0.250	0.500	ug/L	25	06/25/23 19:46	EPA 8260D SIM	
cis-1,2-Dichloroethene	ND	0.250	0.500	ug/L	25	06/25/23 19:46	EPA 8260D SIM	
trans-1,2-Dichloroethene	ND	0.250	0.500	ug/L	25	06/25/23 19:46	EPA 8260D SIM	
Trichloroethene (TCE)	ND	0.250	0.500	ug/L	25	06/25/23 19:46	EPA 8260D SIM	
Vinyl chloride	ND	0.250	0.500	ug/L	25	06/25/23 19:46	EPA 8260D SIM	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery:	106 %	Limits:	80-120 %	1	06/25/23 19:46	EPA 8260D SIM
Toluene-d8 (Surr)			103 %		80-120 %	1	06/25/23 19:46	EPA 8260D SIM
4-Bromofluorobenzene (Surr)			86 %		80-120 %	1	06/25/23 19:46	EPA 8260D SIM

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## ANALYTICAL REPORT

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ORELAP ID: OR100062

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6720 SW Macadam Ave. Suite 125

Portland, OR 97219

Project: Gasco-MGP Only-Prod. Wells 2Q 2023 Perf. Mon

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1249 - 09 12 23 1015

## 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-061523-10 (A3F1249-01)		Matrix: Water			Batch: 23F0693			
Acenaphthene	ND	0.0202	0.0403	ug/L	1	06/20/23 20:30	EPA 8270E LVI	
Acenaphthylene	0.0580	0.0202	0.0403	ug/L	1	06/20/23 20:30	EPA 8270E LVI	
Anthracene	0.139	0.0202	0.0403	ug/L	1	06/20/23 20:30	EPA 8270E LVI	
Benz(a)anthracene	ND	0.0101	0.0202	ug/L	1	06/20/23 20:30	EPA 8270E LVI	
Benzo(a)pyrene	ND	0.0101	0.0202	ug/L	1	06/20/23 20:30	EPA 8270E LVI	
Benzo(b)fluoranthene	ND	0.0101	0.0202	ug/L	1	06/20/23 20:30	EPA 8270E LVI	
Benzo(k)fluoranthene	ND	0.0101	0.0202	ug/L	1	06/20/23 20:30	EPA 8270E LVI	
Benzo(g,h,i)perylene	ND	0.0202	0.0403	ug/L	1	06/20/23 20:30	EPA 8270E LVI	
Chrysene	ND	0.0101	0.0202	ug/L	1	06/20/23 20:30	EPA 8270E LVI	
Dibenz(a,h)anthracene	ND	0.0101	0.0202	ug/L	1	06/20/23 20:30	EPA 8270E LVI	
Fluoranthene	ND	0.0202	0.0403	ug/L	1	06/20/23 20:30	EPA 8270E LVI	
Fluorene	ND	0.0202	0.0403	ug/L	1	06/20/23 20:30	EPA 8270E LVI	
Indeno(1,2,3-cd)pyrene	0.0111	0.0101	0.0202	ug/L	1	06/20/23 20:30	EPA 8270E LVI	J
1-Methylnaphthalene	ND	0.0403	0.0807	ug/L	1	06/20/23 20:30	EPA 8270E LVI	
2-Methylnaphthalene	ND	0.0403	0.0807	ug/L	1	06/20/23 20:30	EPA 8270E LVI	
Naphthalene	ND	0.0403	0.0807	ug/L	1	06/20/23 20:30	EPA 8270E LVI	
Phenanthrene	ND	0.0403	0.0807	ug/L	1	06/20/23 20:30	EPA 8270E LVI	
Pyrene	ND	0.0202	0.0403	ug/L	1	06/20/23 20:30	EPA 8270E LVI	
Carbazole	ND	0.0202	0.0403	ug/L	1	06/20/23 20:30	EPA 8270E LVI	
Dibenzofuran	ND	0.0202	0.0403	ug/L	1	06/20/23 20:30	EPA 8270E LVI	
Surrogate: Acenaphthylene-d8 (Surr)		Recovery: 82 %		Limits: 78-134 %	1	06/20/23 20:30	EPA 8270E LVI	
Benzo(a)pyrene-d12 (Surr)		107 %		80-132 %	1	06/20/23 20:30	EPA 8270E LVI	
GS-061523-11 (A3F1249-02)		Matrix: Water			Batch: 23F0693			
Acenaphthene	23.5	0.188	0.376	ug/L	10	06/20/23 16:42	EPA 8270E LVI	
Acenaphthylene	1.44	0.188	0.376	ug/L	10	06/20/23 16:42	EPA 8270E LVI	
Anthracene	0.353	0.188	0.376	ug/L	10	06/20/23 16:42	EPA 8270E LVI	J
Benz(a)anthracene	ND	0.0941	0.188	ug/L	10	06/20/23 16:42	EPA 8270E LVI	
Benzo(a)pyrene	ND	0.0941	0.188	ug/L	10	06/20/23 16:42	EPA 8270E LVI	
Benzo(b)fluoranthene	ND	0.0941	0.188	ug/L	10	06/20/23 16:42	EPA 8270E LVI	
Benzo(k)fluoranthene	ND	0.0941	0.188	ug/L	10	06/20/23 16:42	EPA 8270E LVI	
Benzo(g,h,i)perylene	ND	0.188	0.376	ug/L	10	06/20/23 16:42	EPA 8270E LVI	
Chrysene	ND	0.0941	0.188	ug/L	10	06/20/23 16:42	EPA 8270E LVI	

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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 2Q 2023 Perf. Mon

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1249 - 09 12 23 1015

## 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-061523-11 (A3F1249-02)		Matrix: Water			Batch: 23F0693			
Dibenz(a,h)anthracene	ND	0.0941	0.188	ug/L	10	06/20/23 16:42	EPA 8270E LVI	
Fluoranthene	0.781	0.188	0.376	ug/L	10	06/20/23 16:42	EPA 8270E LVI	
Fluorene	1.01	0.188	0.376	ug/L	10	06/20/23 16:42	EPA 8270E LVI	
Indeno(1,2,3-cd)pyrene	ND	0.0941	0.188	ug/L	10	06/20/23 16:42	EPA 8270E LVI	
1-Methylnaphthalene	ND	0.376	0.752	ug/L	10	06/20/23 16:42	EPA 8270E LVI	
2-Methylnaphthalene	ND	0.376	0.752	ug/L	10	06/20/23 16:42	EPA 8270E LVI	
Naphthalene	ND	0.376	0.752	ug/L	10	06/20/23 16:42	EPA 8270E LVI	
Phenanthrene	ND	0.376	0.752	ug/L	10	06/20/23 16:42	EPA 8270E LVI	
Pyrene	0.437	0.188	0.376	ug/L	10	06/20/23 16:42	EPA 8270E LVI	
Carbazole	ND	0.188	0.376	ug/L	10	06/20/23 16:42	EPA 8270E LVI	
Dibenzofuran	ND	0.188	0.376	ug/L	10	06/20/23 16:42	EPA 8270E LVI	
Surrogate: Acenaphthylene-d8 (Surr)		Recovery: %		Limits: 78-134 %	10	06/20/23 16:42	EPA 8270E LVI	S-01
Benzo(a)pyrene-d12 (Surr)		82 %		80-132 %	10	06/20/23 16:42	EPA 8270E LVI	S-05
GS-061523-12 (A3F1249-03)		Matrix: Water			Batch: 23F0693			
Acenaphthene	224	0.455	0.910	ug/L	25	06/20/23 16:09	EPA 8270E LVI	
Acenaphthylene	ND	8.53	8.53	ug/L	25	06/20/23 16:09	EPA 8270E LVI	R-02
Anthracene	5.79	0.455	0.910	ug/L	25	06/20/23 16:09	EPA 8270E LVI	
Benz(a)anthracene	ND	0.227	0.455	ug/L	25	06/20/23 16:09	EPA 8270E LVI	
Benzo(a)pyrene	ND	0.227	0.455	ug/L	25	06/20/23 16:09	EPA 8270E LVI	
Benzo(b)fluoranthene	ND	0.227	0.455	ug/L	25	06/20/23 16:09	EPA 8270E LVI	
Benzo(k)fluoranthene	ND	0.227	0.455	ug/L	25	06/20/23 16:09	EPA 8270E LVI	
Benzo(g,h,i)perylene	ND	0.455	0.910	ug/L	25	06/20/23 16:09	EPA 8270E LVI	
Chrysene	ND	0.227	0.455	ug/L	25	06/20/23 16:09	EPA 8270E LVI	
Dibenz(a,h)anthracene	ND	0.227	0.455	ug/L	25	06/20/23 16:09	EPA 8270E LVI	
Fluoranthene	1.22	0.455	0.910	ug/L	25	06/20/23 16:09	EPA 8270E LVI	
Fluorene	62.2	0.455	0.910	ug/L	25	06/20/23 16:09	EPA 8270E LVI	
Indeno(1,2,3-cd)pyrene	ND	0.227	0.455	ug/L	25	06/20/23 16:09	EPA 8270E LVI	
Naphthalene	164	0.910	1.82	ug/L	25	06/20/23 16:09	EPA 8270E LVI	
Phenanthrene	46.6	0.910	1.82	ug/L	25	06/20/23 16:09	EPA 8270E LVI	
Pyrene	1.05	0.455	0.910	ug/L	25	06/20/23 16:09	EPA 8270E LVI	
Carbazole	161	0.455	0.910	ug/L	25	06/20/23 16:09	EPA 8270E LVI	
Dibenzofuran	13.7	0.455	0.910	ug/L	25	06/20/23 16:09	EPA 8270E LVI	

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## ANALYTICAL REPORT

Apex Laboratories, LLC

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503-718-2323  
ORELAP ID: OR100062

## Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125  
Portland, OR 97219

Project: Gasco-MGP Only-Prod. Wells 2Q 2023 Perf. Mon

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

## Report ID:

A3F1249 - 09 12 23 1015

## 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-061523-12 (A3F1249-03)				Matrix: Water		Batch: 23F0693		
Surrogate: Acenaphthylene-d8 (Surr)		Recovery:	%	Limits:	78-134 %	25	06/20/23 16:09	EPA 8270E LVI S-01
Benzo(a)pyrene-d12 (Surr)			74 %		80-132 %	25	06/20/23 16:09	EPA 8270E LVI S-05
GS-061523-12 (A3F1249-03RE1)				Matrix: Water		Batch: 23F0693		
1-Methylnaphthalene	496	7.28	14.6	ug/L	200	06/20/23 22:39	EPA 8270E LVI	
2-Methylnaphthalene	529	7.28	14.6	ug/L	200	06/20/23 22:39	EPA 8270E LVI	
GS-061523-13 (A3F1249-04)				Matrix: Water		Batch: 23F0693		
Acenaphthene	0.325	0.0211	0.0422	ug/L	1	06/20/23 21:02	EPA 8270E LVI	
Acenaphthylene	2.32	0.0211	0.0422	ug/L	1	06/20/23 21:02	EPA 8270E LVI	
Anthracene	2.73	0.0211	0.0422	ug/L	1	06/20/23 21:02	EPA 8270E LVI	
Benz(a)anthracene	0.0670	0.0106	0.0211	ug/L	1	06/20/23 21:02	EPA 8270E LVI	
Benzo(a)pyrene	ND	0.0211	0.0211	ug/L	1	06/20/23 21:02	EPA 8270E LVI	
Benzo(b)fluoranthene	ND	0.0211	0.0211	ug/L	1	06/20/23 21:02	EPA 8270E LVI	
Benzo(k)fluoranthene	ND	0.0792	0.0792	ug/L	1	06/20/23 21:02	EPA 8270E LVI	R-02
Benzo(g,h,i)perylene	ND	0.0211	0.0422	ug/L	1	06/20/23 21:02	EPA 8270E LVI	
Chrysene	0.0121	0.0106	0.0211	ug/L	1	06/20/23 21:02	EPA 8270E LVI	J
Dibenz(a,h)anthracene	ND	0.0106	0.0211	ug/L	1	06/20/23 21:02	EPA 8270E LVI	
Fluoranthene	0.100	0.0211	0.0422	ug/L	1	06/20/23 21:02	EPA 8270E LVI	
Fluorene	0.584	0.0211	0.0422	ug/L	1	06/20/23 21:02	EPA 8270E LVI	
Indeno(1,2,3-cd)pyrene	ND	0.0106	0.0211	ug/L	1	06/20/23 21:02	EPA 8270E LVI	
1-Methylnaphthalene	0.373	0.0422	0.0845	ug/L	1	06/20/23 21:02	EPA 8270E LVI	
2-Methylnaphthalene	0.0839	0.0422	0.0845	ug/L	1	06/20/23 21:02	EPA 8270E LVI	J
Naphthalene	0.183	0.0422	0.0845	ug/L	1	06/20/23 21:02	EPA 8270E LVI	
Phenanthrene	0.962	0.0422	0.0845	ug/L	1	06/20/23 21:02	EPA 8270E LVI	
Pyrene	0.116	0.0211	0.0422	ug/L	1	06/20/23 21:02	EPA 8270E LVI	
Carbazole	0.145	0.0211	0.0422	ug/L	1	06/20/23 21:02	EPA 8270E LVI	
Dibenzofuran	0.214	0.0211	0.0422	ug/L	1	06/20/23 21:02	EPA 8270E LVI	
Surrogate: Acenaphthylene-d8 (Surr)		Recovery:	85 %	Limits:	78-134 %	1	06/20/23 21:02	EPA 8270E LVI
Benzo(a)pyrene-d12 (Surr)			110 %		80-132 %	1	06/20/23 21:02	EPA 8270E LVI
GS-061523-14 (A3F1249-05)				Matrix: Water		Batch: 23F0693		
Acenaphthene	42.1	0.179	0.357	ug/L	10	06/20/23 17:14	EPA 8270E LVI	
Acenaphthylene	1.68	0.179	0.357	ug/L	10	06/20/23 17:14	EPA 8270E LVI	

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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 2Q 2023 Perf. Mon

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1249 - 09 12 23 1015

## 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-061523-14 (A3F1249-05)		Matrix: Water			Batch: 23F0693			
Anthracene	0.934	0.179	0.357	ug/L	10	06/20/23 17:14	EPA 8270E LVI	
Benz(a)anthracene	ND	0.0894	0.179	ug/L	10	06/20/23 17:14	EPA 8270E LVI	
Benzo(a)pyrene	ND	0.0894	0.179	ug/L	10	06/20/23 17:14	EPA 8270E LVI	
Benzo(b)fluoranthene	ND	0.0894	0.179	ug/L	10	06/20/23 17:14	EPA 8270E LVI	
Benzo(k)fluoranthene	ND	0.0894	0.179	ug/L	10	06/20/23 17:14	EPA 8270E LVI	
Benzo(g,h,i)perylene	ND	0.179	0.357	ug/L	10	06/20/23 17:14	EPA 8270E LVI	
Chrysene	0.103	0.0894	0.179	ug/L	10	06/20/23 17:14	EPA 8270E LVI	J
Dibenz(a,h)anthracene	ND	0.0894	0.179	ug/L	10	06/20/23 17:14	EPA 8270E LVI	
Fluoranthene	1.14	0.179	0.357	ug/L	10	06/20/23 17:14	EPA 8270E LVI	
Fluorene	6.88	0.179	0.357	ug/L	10	06/20/23 17:14	EPA 8270E LVI	
Indeno(1,2,3-cd)pyrene	ND	0.0894	0.179	ug/L	10	06/20/23 17:14	EPA 8270E LVI	
1-Methylnaphthalene	25.9	0.357	0.715	ug/L	10	06/20/23 17:14	EPA 8270E LVI	
2-Methylnaphthalene	ND	0.357	0.715	ug/L	10	06/20/23 17:14	EPA 8270E LVI	
Naphthalene	1.18	0.357	0.715	ug/L	10	06/20/23 17:14	EPA 8270E LVI	
Phenanthrene	ND	0.357	0.715	ug/L	10	06/20/23 17:14	EPA 8270E LVI	
Pyrene	1.37	0.179	0.357	ug/L	10	06/20/23 17:14	EPA 8270E LVI	
Carbazole	ND	0.179	0.357	ug/L	10	06/20/23 17:14	EPA 8270E LVI	
Dibenzofuran	ND	0.179	0.357	ug/L	10	06/20/23 17:14	EPA 8270E LVI	
Surrogate: Acenaphthylene-d8 (Surr)		Recovery: %		Limits: 78-134 %	10	06/20/23 17:14	EPA 8270E LVI	S-01
Benzo(a)pyrene-d12 (Surr)		86 %		80-132 %	10	06/20/23 17:14	EPA 8270E LVI	S-05
GS-061523-15 (A3F1249-06)		Matrix: Water			Batch: 23F0693			
Acenaphthene	ND	0.120	0.120	ug/L	1	06/20/23 21:35	EPA 8270E LVI	R-02
Acenaphthylene	ND	0.0349	0.0349	ug/L	1	06/20/23 21:35	EPA 8270E LVI	
Anthracene	ND	0.0175	0.0349	ug/L	1	06/20/23 21:35	EPA 8270E LVI	
Benz(a)anthracene	ND	0.00874	0.0175	ug/L	1	06/20/23 21:35	EPA 8270E LVI	
Benzo(a)pyrene	ND	0.00874	0.0175	ug/L	1	06/20/23 21:35	EPA 8270E LVI	
Benzo(b)fluoranthene	ND	0.00874	0.0175	ug/L	1	06/20/23 21:35	EPA 8270E LVI	
Benzo(k)fluoranthene	ND	0.00874	0.0175	ug/L	1	06/20/23 21:35	EPA 8270E LVI	
Benzo(g,h,i)perylene	ND	0.0175	0.0349	ug/L	1	06/20/23 21:35	EPA 8270E LVI	
Chrysene	ND	0.00874	0.0175	ug/L	1	06/20/23 21:35	EPA 8270E LVI	
Dibenz(a,h)anthracene	ND	0.00874	0.0175	ug/L	1	06/20/23 21:35	EPA 8270E LVI	
Fluoranthene	ND	0.0175	0.0349	ug/L	1	06/20/23 21:35	EPA 8270E LVI	

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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 2Q 2023 Perf. Mon

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1249 - 09 12 23 1015

## 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-061523-15 (A3F1249-06)		Matrix: Water			Batch: 23F0693			
Fluorene	0.0232	0.0175	0.0349	ug/L	1	06/20/23 21:35	EPA 8270E LVI	J
Indeno(1,2,3-cd)pyrene	ND	0.00874	0.0175	ug/L	1	06/20/23 21:35	EPA 8270E LVI	
1-Methylnaphthalene	0.0537	0.0349	0.0699	ug/L	1	06/20/23 21:35	EPA 8270E LVI	J
2-Methylnaphthalene	0.0612	0.0349	0.0699	ug/L	1	06/20/23 21:35	EPA 8270E LVI	J
Naphthalene	0.288	0.0349	0.0699	ug/L	1	06/20/23 21:35	EPA 8270E LVI	
Phenanthrene	ND	0.0349	0.0699	ug/L	1	06/20/23 21:35	EPA 8270E LVI	
Pyrene	ND	0.0175	0.0349	ug/L	1	06/20/23 21:35	EPA 8270E LVI	
Carbazole	ND	0.0175	0.0349	ug/L	1	06/20/23 21:35	EPA 8270E LVI	
Dibenzofuran	ND	0.0175	0.0349	ug/L	1	06/20/23 21:35	EPA 8270E LVI	
Surrogate: Acenaphthylene-d8 (Surr)		Recovery: 83 %		Limits: 78-134 %	1	06/20/23 21:35	EPA 8270E LVI	
Benzo(a)pyrene-d12 (Surr)		107 %		80-132 %	1	06/20/23 21:35	EPA 8270E LVI	
GS-061523-16 (A3F1249-07)		Matrix: Water			Batch: 23F0693			
Acenaphthylene	1.75	0.0188	0.0376	ug/L	1	06/20/23 22:07	EPA 8270E LVI	
Anthracene	1.41	0.0188	0.0376	ug/L	1	06/20/23 22:07	EPA 8270E LVI	
Benz(a)anthracene	0.0798	0.00939	0.0188	ug/L	1	06/20/23 22:07	EPA 8270E LVI	
Benzo(a)pyrene	0.0254	0.00939	0.0188	ug/L	1	06/20/23 22:07	EPA 8270E LVI	
Benzo(b)fluoranthene	0.0193	0.00939	0.0188	ug/L	1	06/20/23 22:07	EPA 8270E LVI	M-05
Benzo(k)fluoranthene	0.0141	0.00939	0.0188	ug/L	1	06/20/23 22:07	EPA 8270E LVI	J
Benzo(g,h,i)perylene	ND	0.0188	0.0376	ug/L	1	06/20/23 22:07	EPA 8270E LVI	
Chrysene	0.0888	0.00939	0.0188	ug/L	1	06/20/23 22:07	EPA 8270E LVI	
Dibenz(a,h)anthracene	ND	0.00939	0.0188	ug/L	1	06/20/23 22:07	EPA 8270E LVI	
Fluoranthene	3.22	0.0188	0.0376	ug/L	1	06/20/23 22:07	EPA 8270E LVI	
Fluorene	8.18	0.0188	0.0376	ug/L	1	06/20/23 22:07	EPA 8270E LVI	
Indeno(1,2,3-cd)pyrene	ND	0.00939	0.0188	ug/L	1	06/20/23 22:07	EPA 8270E LVI	
1-Methylnaphthalene	0.905	0.0376	0.0751	ug/L	1	06/20/23 22:07	EPA 8270E LVI	
2-Methylnaphthalene	0.0564	0.0376	0.0751	ug/L	1	06/20/23 22:07	EPA 8270E LVI	J
Naphthalene	0.933	0.0376	0.0751	ug/L	1	06/20/23 22:07	EPA 8270E LVI	
Phenanthrene	0.665	0.0376	0.0751	ug/L	1	06/20/23 22:07	EPA 8270E LVI	
Pyrene	3.06	0.0188	0.0376	ug/L	1	06/20/23 22:07	EPA 8270E LVI	
Carbazole	0.225	0.0188	0.0376	ug/L	1	06/20/23 22:07	EPA 8270E LVI	
Dibenzofuran	0.113	0.0188	0.0376	ug/L	1	06/20/23 22:07	EPA 8270E LVI	
Surrogate: Acenaphthylene-d8 (Surr)		Recovery: 81 %		Limits: 78-134 %	1	06/20/23 22:07	EPA 8270E LVI	

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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 2Q 2023 Perf. Mon

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1249 - 09 12 23 1015

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-061523-16 (A3F1249-07)				Matrix: Water		Batch: 23F0693		
Surrogate: Benzo(a)pyrene-d12 (Surr)		Recovery: 110 %		Limits: 80-132 %	1	06/20/23 22:07	EPA 8270E LVI	
GS-061523-16 (A3F1249-07RE1)				Matrix: Water		Batch: 23F0693		
Acenaphthene	24.5	0.188	0.376	ug/L	10	06/21/23 21:08	EPA 8270E LVI	

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## ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street  
Tigard, OR 97223  
503-718-2323  
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125  
Portland, OR 97219Project: **Gasco-MGP Only-Prod. Wells 2Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3F1249 - 09 12 23 1015**

## ANALYTICAL SAMPLE RESULTS

## Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-061523-10 (A3F1249-01)		Matrix: Water						
Batch: 23F0834								
Antimony	ND	0.500	1.00	ug/L	1	06/26/23 20:53	EPA 6020B	J
Arsenic	ND	0.500	1.00	ug/L	1	06/26/23 20:53	EPA 6020B	
Barium	30.6	1.00	2.00	ug/L	1	06/26/23 20:53	EPA 6020B	
Cadmium	ND	0.100	0.200	ug/L	1	06/26/23 20:53	EPA 6020B	
Chromium	2.28	1.00	2.00	ug/L	1	06/26/23 20:53	EPA 6020B	
Copper	1.51	1.00	2.00	ug/L	1	06/26/23 20:53	EPA 6020B	
Iron	1300	25.0	50.0	ug/L	1	06/26/23 20:53	EPA 6020B	
Manganese	17.1	0.500	1.00	ug/L	1	06/26/23 20:53	EPA 6020B	
Nickel	35.9	1.00	2.00	ug/L	1	06/26/23 20:53	EPA 6020B	
Selenium	ND	0.500	1.00	ug/L	1	06/26/23 20:53	EPA 6020B	
Silver	ND	0.100	0.200	ug/L	1	06/26/23 20:53	EPA 6020B	
Thallium	ND	0.100	0.200	ug/L	1	06/26/23 20:53	EPA 6020B	
Vanadium	41.8	1.00	2.00	ug/L	1	06/26/23 20:53	EPA 6020B	
Zinc	8.49	2.00	4.00	ug/L	1	06/26/23 20:53	EPA 6020B	
GS-061523-10 (A3F1249-01RE1)		Matrix: Water						
Batch: 23F0834								
Aluminum	214	25.0	50.0	ug/L	1	06/27/23 23:56	EPA 6020B	
Beryllium	ND	0.100	0.200	ug/L	1	06/27/23 23:56	EPA 6020B	
Lead	0.296	0.110	0.200	ug/L	1	06/27/23 23:56	EPA 6020B	
Mercury	ND	0.0400	0.0800	ug/L	1	06/27/23 23:56	EPA 6020B	
GS-061523-11 (A3F1249-02)		Matrix: Water						
Batch: 23F0834								
Antimony	ND	0.500	1.00	ug/L	1	06/26/23 20:59	EPA 6020B	
Arsenic	ND	0.500	1.00	ug/L	1	06/26/23 20:59	EPA 6020B	
Barium	87.5	1.00	2.00	ug/L	1	06/26/23 20:59	EPA 6020B	
Cadmium	ND	0.100	0.200	ug/L	1	06/26/23 20:59	EPA 6020B	
Chromium	ND	1.00	2.00	ug/L	1	06/26/23 20:59	EPA 6020B	
Copper	ND	1.00	2.00	ug/L	1	06/26/23 20:59	EPA 6020B	
Iron	26900	25.0	50.0	ug/L	1	06/26/23 20:59	EPA 6020B	
Nickel	15.5	1.00	2.00	ug/L	1	06/26/23 20:59	EPA 6020B	
Selenium	ND	0.500	1.00	ug/L	1	06/26/23 20:59	EPA 6020B	

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## ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street  
Tigard, OR 97223  
503-718-2323  
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125  
Portland, OR 97219Project: **Gasco-MGP Only-Prod. Wells 2Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3F1249 - 09 12 23 1015**

## ANALYTICAL SAMPLE RESULTS

## Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>GS-061523-11 (A3F1249-02) Matrix: Water</b>								
Silver	ND	0.100	0.200	ug/L	1	06/26/23 20:59	EPA 6020B	
Thallium	ND	0.100	0.200	ug/L	1	06/26/23 20:59	EPA 6020B	
<b>Vanadium</b>	<b>16.3</b>	1.00	2.00	ug/L	1	06/26/23 20:59	EPA 6020B	
<b>Zinc</b>	<b>6.93</b>	2.00	4.00	ug/L	1	06/26/23 20:59	EPA 6020B	
<b>GS-061523-11 (A3F1249-02RE1) Matrix: Water</b>								
Batch: 23F0834								
<b>Aluminum</b>	<b>71.6</b>	25.0	50.0	ug/L	1	06/28/23 00:01	EPA 6020B	
Beryllium	ND	0.100	0.200	ug/L	1	06/28/23 00:01	EPA 6020B	
<b>Lead</b>	<b>0.210</b>	0.110	0.200	ug/L	1	06/28/23 00:01	EPA 6020B	
Mercury	ND	0.0400	0.0800	ug/L	1	06/28/23 00:01	EPA 6020B	
<b>GS-061523-11 (A3F1249-02RE2) Matrix: Water</b>								
Batch: 23F0834								
<b>Manganese</b>	<b>3810</b>	5.00	10.0	ug/L	10	06/28/23 00:06	EPA 6020B	
<b>GS-061523-12 (A3F1249-03) Matrix: Water</b>								
Batch: 23F0834								
Antimony	ND	0.500	1.00	ug/L	1	06/26/23 21:06	EPA 6020B	
<b>Arsenic</b>	<b>5.30</b>	0.500	1.00	ug/L	1	06/26/23 21:06	EPA 6020B	
<b>Barium</b>	<b>30.0</b>	1.00	2.00	ug/L	1	06/26/23 21:06	EPA 6020B	
Cadmium	ND	0.100	0.200	ug/L	1	06/26/23 21:06	EPA 6020B	
Chromium	ND	1.00	2.00	ug/L	1	06/26/23 21:06	EPA 6020B	
Copper	ND	1.00	2.00	ug/L	1	06/26/23 21:06	EPA 6020B	
<b>Iron</b>	<b>32800</b>	25.0	50.0	ug/L	1	06/26/23 21:06	EPA 6020B	
<b>Manganese</b>	<b>1560</b>	0.500	1.00	ug/L	1	06/26/23 21:06	EPA 6020B	
<b>Nickel</b>	<b>1.02</b>	1.00	2.00	ug/L	1	06/26/23 21:06	EPA 6020B	J
Selenium	ND	0.500	1.00	ug/L	1	06/26/23 21:06	EPA 6020B	
Silver	ND	0.100	0.200	ug/L	1	06/26/23 21:06	EPA 6020B	
Thallium	ND	0.100	0.200	ug/L	1	06/26/23 21:06	EPA 6020B	
<b>Vanadium</b>	<b>1.12</b>	1.00	2.00	ug/L	1	06/26/23 21:06	EPA 6020B	J
<b>Zinc</b>	<b>3.40</b>	2.00	4.00	ug/L	1	06/26/23 21:06	EPA 6020B	J
<b>GS-061523-12 (A3F1249-03RE1) Matrix: Water</b>								
Batch: 23F0834								

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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 2Q 2023 Perf. Mon

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1249 - 09 12 23 1015

## ANALYTICAL SAMPLE RESULTS

## Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>GS-061523-12 (A3F1249-03RE1) Matrix: Water</b>								
Aluminum	224	25.0	50.0	ug/L	1	06/28/23 00:11	EPA 6020B	
Beryllium	ND	0.100	0.200	ug/L	1	06/28/23 00:11	EPA 6020B	
Lead	ND	0.110	0.200	ug/L	1	06/28/23 00:11	EPA 6020B	
Mercury	ND	0.0400	0.0800	ug/L	1	06/28/23 00:11	EPA 6020B	
<b>GS-061523-13 (A3F1249-04) Matrix: Water</b>								
Batch: 23F0834								
Aluminum	ND	25.0	50.0	ug/L	1	06/26/23 21:12	EPA 6020B	
Antimony	ND	0.500	1.00	ug/L	1	06/26/23 21:12	EPA 6020B	
Arsenic	0.869	0.500	1.00	ug/L	1	06/26/23 21:12	EPA 6020B	J
Barium	59.6	1.00	2.00	ug/L	1	06/26/23 21:12	EPA 6020B	
Cadmium	ND	0.100	0.200	ug/L	1	06/26/23 21:12	EPA 6020B	
Chromium	ND	1.00	2.00	ug/L	1	06/26/23 21:12	EPA 6020B	
Copper	ND	1.00	2.00	ug/L	1	06/26/23 21:12	EPA 6020B	
Iron	10400	25.0	50.0	ug/L	1	06/26/23 21:12	EPA 6020B	
Nickel	231	1.00	2.00	ug/L	1	06/26/23 21:12	EPA 6020B	
Selenium	ND	0.500	1.00	ug/L	1	06/26/23 21:12	EPA 6020B	
Silver	ND	0.100	0.200	ug/L	1	06/26/23 21:12	EPA 6020B	
Thallium	ND	0.100	0.200	ug/L	1	06/26/23 21:12	EPA 6020B	
Vanadium	103	1.00	2.00	ug/L	1	06/26/23 21:12	EPA 6020B	
Zinc	8.63	2.00	4.00	ug/L	1	06/26/23 21:12	EPA 6020B	
<b>GS-061523-13 (A3F1249-04RE1) Matrix: Water</b>								
Batch: 23F0834								
Beryllium	ND	0.100	0.200	ug/L	1	06/28/23 00:17	EPA 6020B	
Lead	ND	0.110	0.200	ug/L	1	06/28/23 00:17	EPA 6020B	
Mercury	ND	0.0400	0.0800	ug/L	1	06/28/23 00:17	EPA 6020B	
<b>GS-061523-13 (A3F1249-04RE2) Matrix: Water</b>								
Batch: 23F0834								
Manganese	4170	5.00	10.0	ug/L	10	06/28/23 00:22	EPA 6020B	
<b>GS-061523-14 (A3F1249-05) Matrix: Water</b>								
Batch: 23F0834								
Aluminum	ND	25.0	50.0	ug/L	1	06/26/23 21:18	EPA 6020B	

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## ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street  
Tigard, OR 97223  
503-718-2323  
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125  
Portland, OR 97219Project: **Gasco-MGP Only-Prod. Wells 2Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3F1249 - 09 12 23 1015**

## ANALYTICAL SAMPLE RESULTS

## Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-061523-14 (A3F1249-05)		Matrix: Water						
Antimony	ND	0.500	1.00	ug/L	1	06/26/23 21:18	EPA 6020B	
Arsenic	ND	0.500	1.00	ug/L	1	06/26/23 21:18	EPA 6020B	
Barium	45.5	1.00	2.00	ug/L	1	06/26/23 21:18	EPA 6020B	
Cadmium	ND	0.100	0.200	ug/L	1	06/26/23 21:18	EPA 6020B	
Chromium	ND	1.00	2.00	ug/L	1	06/26/23 21:18	EPA 6020B	
Copper	ND	1.00	2.00	ug/L	1	06/26/23 21:18	EPA 6020B	
Iron	21400	25.0	50.0	ug/L	1	06/26/23 21:18	EPA 6020B	
Nickel	1.00	1.00	2.00	ug/L	1	06/26/23 21:18	EPA 6020B	J
Selenium	ND	0.500	1.00	ug/L	1	06/26/23 21:18	EPA 6020B	
Silver	ND	0.100	0.200	ug/L	1	06/26/23 21:18	EPA 6020B	
Thallium	ND	0.100	0.200	ug/L	1	06/26/23 21:18	EPA 6020B	
Vanadium	ND	1.00	2.00	ug/L	1	06/26/23 21:18	EPA 6020B	
Zinc	3.96	2.00	4.00	ug/L	1	06/26/23 21:18	EPA 6020B	J
GS-061523-14 (A3F1249-05RE1)		Matrix: Water						
Batch: 23F0834								
Beryllium	ND	0.100	0.200	ug/L	1	06/28/23 00:27	EPA 6020B	
Lead	ND	0.110	0.200	ug/L	1	06/28/23 00:27	EPA 6020B	
Manganese	2770	0.500	1.00	ug/L	1	06/28/23 00:27	EPA 6020B	
Mercury	ND	0.0400	0.0800	ug/L	1	06/28/23 00:27	EPA 6020B	
GS-061523-15 (A3F1249-06)		Matrix: Water						
Batch: 23F0834								
Aluminum	ND	25.0	50.0	ug/L	1	06/26/23 21:25	EPA 6020B	
Antimony	ND	0.500	1.00	ug/L	1	06/26/23 21:25	EPA 6020B	
Arsenic	ND	0.500	1.00	ug/L	1	06/26/23 21:25	EPA 6020B	
Barium	ND	1.00	2.00	ug/L	1	06/26/23 21:25	EPA 6020B	
Cadmium	ND	0.100	0.200	ug/L	1	06/26/23 21:25	EPA 6020B	
Chromium	ND	1.00	2.00	ug/L	1	06/26/23 21:25	EPA 6020B	
Copper	ND	1.00	2.00	ug/L	1	06/26/23 21:25	EPA 6020B	
Iron	ND	25.0	50.0	ug/L	1	06/26/23 21:25	EPA 6020B	
Manganese	ND	0.500	1.00	ug/L	1	06/26/23 21:25	EPA 6020B	
Nickel	ND	1.00	2.00	ug/L	1	06/26/23 21:25	EPA 6020B	
Selenium	ND	0.500	1.00	ug/L	1	06/26/23 21:25	EPA 6020B	

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## ANALYTICAL REPORT

Apex Laboratories, LLC

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

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125  
Portland, OR 97219

Project: Gasco-MGP Only-Prod. Wells 2Q 2023 Perf. Mon

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1249 - 09 12 23 1015

## ANALYTICAL SAMPLE RESULTS

## Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-061523-15 (A3F1249-06)		Matrix: Water						
Silver	ND	0.100	0.200	ug/L	1	06/26/23 21:25	EPA 6020B	
Thallium	ND	0.100	0.200	ug/L	1	06/26/23 21:25	EPA 6020B	
Vanadium	ND	1.00	2.00	ug/L	1	06/26/23 21:25	EPA 6020B	
Zinc	ND	2.00	4.00	ug/L	1	06/26/23 21:25	EPA 6020B	
GS-061523-15 (A3F1249-06RE1)		Matrix: Water						
Batch: 23F0834								
Beryllium	ND	0.100	0.200	ug/L	1	06/28/23 00:37	EPA 6020B	
Lead	ND	0.110	0.200	ug/L	1	06/28/23 00:37	EPA 6020B	
Mercury	ND	0.0400	0.0800	ug/L	1	06/28/23 00:37	EPA 6020B	
GS-061523-16 (A3F1249-07)		Matrix: Water						
Batch: 23F0834								
Aluminum	ND	25.0	50.0	ug/L	1	06/26/23 21:31	EPA 6020B	
Antimony	ND	0.500	1.00	ug/L	1	06/26/23 21:31	EPA 6020B	
Arsenic	1.78	0.500	1.00	ug/L	1	06/26/23 21:31	EPA 6020B	
Barium	114	1.00	2.00	ug/L	1	06/26/23 21:31	EPA 6020B	
Cadmium	ND	0.100	0.200	ug/L	1	06/26/23 21:31	EPA 6020B	
Chromium	1.12	1.00	2.00	ug/L	1	06/26/23 21:31	EPA 6020B	J
Copper	ND	1.00	2.00	ug/L	1	06/26/23 21:31	EPA 6020B	
Iron	20600	25.0	50.0	ug/L	1	06/26/23 21:31	EPA 6020B	
Nickel	ND	1.00	2.00	ug/L	1	06/26/23 21:31	EPA 6020B	
Selenium	ND	0.500	1.00	ug/L	1	06/26/23 21:31	EPA 6020B	
Silver	ND	0.100	0.200	ug/L	1	06/26/23 21:31	EPA 6020B	
Thallium	ND	0.100	0.200	ug/L	1	06/26/23 21:31	EPA 6020B	
Vanadium	ND	1.00	2.00	ug/L	1	06/26/23 21:31	EPA 6020B	
Zinc	4.20	2.00	4.00	ug/L	1	06/26/23 21:31	EPA 6020B	
GS-061523-16 (A3F1249-07RE1)		Matrix: Water						
Batch: 23F0834								
Beryllium	ND	0.100	0.200	ug/L	1	06/28/23 00:53	EPA 6020B	
Lead	0.161	0.110	0.200	ug/L	1	06/28/23 00:53	EPA 6020B	J
Mercury	ND	0.0400	0.0800	ug/L	1	06/28/23 00:53	EPA 6020B	

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ANALYTICAL REPORT

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Project: Gasco-MGP Only-Prod. Wells 2Q 2023 Perf. Mon

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1249 - 09 12 23 1015

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-061523-16 (A3F1249-07RE2)				Matrix: Water				
Batch: 23F0834								
Manganese	5570	5.00	10.0	ug/L	10	06/28/23 00:58	EPA 6020B	

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# ANALYTICAL REPORT

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Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1249 - 09 12 23 1015

## ANALYTICAL SAMPLE RESULTS

### Total Cyanide by Flow Analysis (Aqueous)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-061523-10 (A3F1249-01)				Matrix: Water		Batch: 23F0720		
Total Cyanide	0.0483	0.00500	0.00500	mg/L	1	06/21/23 13:38	EPA 335.4	
GS-061523-11 (A3F1249-02)				Matrix: Water		Batch: 23F0720		
Total Cyanide	0.0372	0.00500	0.00500	mg/L	1	06/21/23 13:40	EPA 335.4	
GS-061523-12 (A3F1249-03)				Matrix: Water		Batch: 23F0720		
Total Cyanide	0.0387	0.00500	0.00500	mg/L	1	06/21/23 13:44	EPA 335.4	
GS-061523-13 (A3F1249-04)				Matrix: Water		Batch: 23F0720		
Total Cyanide	0.438	0.00500	0.00500	mg/L	1	06/21/23 13:46	EPA 335.4	
GS-061523-14 (A3F1249-05)				Matrix: Water		Batch: 23F0720		
Total Cyanide	0.247	0.00500	0.00500	mg/L	1	06/21/23 13:48	EPA 335.4	
GS-061523-15 (A3F1249-06)				Matrix: Water		Batch: 23F0720		
Total Cyanide	ND	0.00500	0.00500	mg/L	1	06/21/23 13:58	EPA 335.4	
GS-061523-16 (A3F1249-07)				Matrix: Water		Batch: 23F0720		
Total Cyanide	0.112	0.00500	0.00500	mg/L	1	06/21/23 14:00	EPA 335.4	

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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 2Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3F1249 - 09 12 23 1015****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-061523-10 (A3F1249-01)</b>				<b>Matrix: Water</b>		<b>Batch: 23F0918</b>		
Available Cyanide	<b>0.00181</b>	0.00100	0.00200	mg/L	1	06/27/23 11:27	D6888-09	<b>J</b>
<b>GS-061523-11 (A3F1249-02)</b>				<b>Matrix: Water</b>		<b>Batch: 23F0918</b>		
Available Cyanide	ND	0.00100	0.00200	mg/L	1	06/27/23 11:34	D6888-09	
<b>GS-061523-12 (A3F1249-03)</b>				<b>Matrix: Water</b>		<b>Batch: 23F0918</b>		
Available Cyanide	ND	0.00100	0.00200	mg/L	1	06/27/23 11:36	D6888-09	
<b>GS-061523-13 (A3F1249-04)</b>				<b>Matrix: Water</b>		<b>Batch: 23F0918</b>		
Available Cyanide	<b>0.00160</b>	0.00100	0.00200	mg/L	1	06/27/23 11:39	D6888-09	<b>J</b>
<b>GS-061523-14 (A3F1249-05)</b>				<b>Matrix: Water</b>		<b>Batch: 23F0918</b>		
Available Cyanide	<b>0.00139</b>	0.00100	0.00200	mg/L	1	06/27/23 11:45	D6888-09	<b>J</b>
<b>GS-061523-15 (A3F1249-06)</b>				<b>Matrix: Water</b>		<b>Batch: 23F0918</b>		
Available Cyanide	ND	0.00100	0.00200	mg/L	1	06/27/23 11:46	D6888-09	
<b>GS-061523-16 (A3F1249-07)</b>				<b>Matrix: Water</b>		<b>Batch: 23F0918</b>		
Available Cyanide	ND	0.00100	0.00200	mg/L	1	06/27/23 11:49	D6888-09	

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Tigard, OR 97223  
503-718-2323  
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125  
Portland, OR 97219Project: **Gasco-MGP Only-Prod. Wells 2Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3F1249 - 09 12 23 1015****ANALYTICAL SAMPLE RESULTS****Free Cyanide by Microdiffusion/Colorimetric Spectrophotometry**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>GS-061523-10 (A3F1249-01)</b>				<b>Matrix: Water</b>		<b>Batch: 23F0695</b>		
Free Cyanide	ND	0.00250	0.00500	mg/L	1	06/20/23 14:56	D4282-02	
<b>GS-061523-11 (A3F1249-02)</b>				<b>Matrix: Water</b>		<b>Batch: 23F0695</b>		
Free Cyanide	ND	0.00250	0.00500	mg/L	1	06/20/23 15:03	D4282-02	
<b>GS-061523-12 (A3F1249-03)</b>				<b>Matrix: Water</b>		<b>Batch: 23F0695</b>		
Free Cyanide	ND	0.00250	0.00500	mg/L	1	06/20/23 15:03	D4282-02	
<b>GS-061523-13 (A3F1249-04)</b>				<b>Matrix: Water</b>		<b>Batch: 23F0695</b>		
Free Cyanide	ND	0.00250	0.00500	mg/L	1	06/20/23 15:03	D4282-02	
<b>GS-061523-14 (A3F1249-05)</b>				<b>Matrix: Water</b>		<b>Batch: 23F0695</b>		
Free Cyanide	ND	0.00250	0.00500	mg/L	1	06/20/23 15:03	D4282-02	
<b>GS-061523-15 (A3F1249-06)</b>				<b>Matrix: Water</b>		<b>Batch: 23F0695</b>		
Free Cyanide	ND	0.00250	0.00500	mg/L	1	06/20/23 15:10	D4282-02	
<b>GS-061523-16 (A3F1249-07)</b>				<b>Matrix: Water</b>		<b>Batch: 23F0695</b>		
Free Cyanide	ND	0.00250	0.00500	mg/L	1	06/20/23 15:10	D4282-02	

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# ANALYTICAL REPORT

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ORELAP ID: OR100062

**Anchor QEA, LLC**

6720 SW Macadam Ave. Suite 125  
Portland, OR 97219

Project: **Gasco-MGP Only-Prod. Wells 2Q 2023 Perf. Mon**

Project Number: **000029-02.84 T-01.001E**  
Project Manager: **John Renda**

**Report ID:**

**A3F1249 - 09 12 23 1015**

## Analytical Resources, LLC

### ANALYTICAL SAMPLE RESULTS (Subcontracted)

#### Washington Department of Ecology Methods

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-061523-13 (A3F1249-04)				Matrix: Water		Batch: BLF0596		
Batch: BLF0596								
C8-C10 Aliphatics	ND	---	40	ug/L	1	07/11/23 14:02	WA EPH	U
>C10-C12 Aliphatics	ND	---	40	ug/L	1	07/11/23 14:02	WA EPH	U
>C12-C16 Aliphatics	ND	---	40	ug/L	1	07/11/23 14:02	WA EPH	U
>C16-C21 Aliphatics	ND	---	40	ug/L	1	07/11/23 14:02	WA EPH	U
>C21-C34 Aliphatics	ND	---	40	ug/L	1	07/11/23 14:02	WA EPH	U
C8-C10 Aromatics	ND	---	40	ug/L	1	07/12/23 15:03	WA EPH	U
>C10-C12 Aromatics	ND	---	40	ug/L	1	07/12/23 15:03	WA EPH	U
>C12-C16 Aromatics	ND	---	40	ug/L	1	07/12/23 15:03	WA EPH	U
>C16-C21 Aromatics	ND	---	40	ug/L	1	07/12/23 15:03	WA EPH	U
>C21-C34 Aromatics	ND	---	40	ug/L	1	07/12/23 15:03	WA EPH	U
Batch: BLF0691								
C5-C6 Aliphatics	ND	---	50	ug/L	1	06/23/23 17:32	WA VPH	U
>C6-C8 Aliphatics	ND	---	50	ug/L	1	06/23/23 17:32	WA VPH	U
>C8-C10 Aliphatics	ND	---	50	ug/L	1	06/23/23 17:32	WA VPH	U
>C10-C12 Aliphatics	ND	---	50	ug/L	1	06/23/23 17:32	WA VPH	U
C8-C10 Aromatics	ND	---	50	ug/L	1	06/23/23 17:32	WA VPH	U
>C10-C12 Aromatics	ND	---	50	ug/L	1	06/23/23 17:32	WA VPH	U
>C12-C13 Aromatics	ND	---	50	ug/L	1	06/23/23 17:32	WA VPH	U
Methyl tert-butyl Ether	ND	---	5	ug/L	1	06/23/23 17:32	WA VPH	U
Benzene	ND	---	5	ug/L	1	06/23/23 17:32	WA VPH	U
Toluene	ND	---	5	ug/L	1	06/23/23 17:32	WA VPH	U
Ethylbenzene	ND	---	5	ug/L	1	06/23/23 17:32	WA VPH	U
1,2,3-Trimethylbenzene	ND	---	5	ug/L	1	06/23/23 17:32	WA VPH	U
m,p-Xylene	ND	---	10	ug/L	1	06/23/23 17:32	WA VPH	U
Naphthalene	ND	---	5	ug/L	1	06/23/23 17:32	WA VPH	U
1-Methylnaphthalene	ND	---	5	ug/L	1	06/23/23 17:32	WA VPH	U
o-Xylene	ND	---	5	ug/L	1	06/23/23 17:32	WA VPH	U
n-Pentane	ND	---	5	ug/L	1	06/23/23 17:32	WA VPH	U
n-Hexane	ND	---	5	ug/L	1	06/23/23 17:32	WA VPH	U
n-Octane	ND	---	5	ug/L	1	06/23/23 17:32	WA VPH	U
n-Decane	ND	---	5	ug/L	1	06/23/23 17:32	WA VPH	U

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## ANALYTICAL REPORT

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Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-061523-13 (A3F1249-04)			Matrix: Water			Batch: BLF0691		
n-Dodecane	ND	---	5	ug/L	1	06/23/23 17:32	WA VPH	U
Batch: BLF0596								
Surrogate: o-Terphenyl		Recovery:	55.2 %	Limits:	41-120 %	1	07/12/23 15:03	WA EPH
1-Chloro-octadecane			47.6 %		36-120 %	1	07/11/23 14:02	WA EPH
Batch: BLF0691								
PID: 2,5-Dibromotoluene			77.4 %		60-140 %	1	06/23/23 17:32	WA VPH
FID: 2,5-Dibromotoluene			81.1 %		60-140 %	1	06/23/23 17:32	WA VPH
GS-061523-13 (A3F1249-04RE1)			Matrix: Water			Batch: BLG0608		
Batch: BLG0608								
C8-C10 Aliphatics	ND	---	40	ug/L	1	07/28/23 19:02	WA EPH	H, U
>C10-C12 Aliphatics	469	---	40	ug/L	1	07/28/23 19:02	WA EPH	H
>C12-C16 Aliphatics	ND	---	40	ug/L	1	07/28/23 19:02	WA EPH	H, U
>C16-C21 Aliphatics	ND	---	40	ug/L	1	07/28/23 19:02	WA EPH	H, U
>C21-C34 Aliphatics	68	---	40	ug/L	1	07/28/23 19:02	WA EPH	H
C8-C10 Aromatics	86	---	40	ug/L	1	07/28/23 14:18	WA EPH	H
>C10-C12 Aromatics	48	---	40	ug/L	1	07/28/23 14:18	WA EPH	H
>C12-C16 Aromatics	161	---	40	ug/L	1	07/28/23 14:18	WA EPH	H
>C16-C21 Aromatics	91	---	40	ug/L	1	07/28/23 14:18	WA EPH	H
>C21-C34 Aromatics	ND	---	40	ug/L	1	07/28/23 14:18	WA EPH	H, U
Batch: BLG0608								
Surrogate: o-Terphenyl		Recovery:	77.1 %	Limits:	41-120 %	1	07/28/23 14:18	WA EPH
1-Chloro-octadecane			64.9 %		36-120 %	1	07/28/23 19:02	WA EPH
GS-061523-14 (A3F1249-05)			Matrix: Water			Batch: BLF0596		
Batch: BLF0596								
C8-C10 Aliphatics	ND	---	40	ug/L	1	07/11/23 14:27	WA EPH	U
>C10-C12 Aliphatics	491	---	40	ug/L	1	07/11/23 14:27	WA EPH	
>C12-C16 Aliphatics	98	---	40	ug/L	1	07/11/23 14:27	WA EPH	
>C16-C21 Aliphatics	ND	---	40	ug/L	1	07/11/23 14:27	WA EPH	U
>C21-C34 Aliphatics	59	---	40	ug/L	1	07/11/23 14:27	WA EPH	
C8-C10 Aromatics	42	---	40	ug/L	1	07/12/23 15:29	WA EPH	

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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 2Q 2023 Perf. Mon

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1249 - 09 12 23 1015

## Analytical Resources, LLC

## ANALYTICAL SAMPLE RESULTS (Subcontracted)

## Washington Department of Ecology Methods

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>GS-061523-14 (A3F1249-05)</b>		<b>Matrix: Water</b>			<b>Batch: BLF0596</b>			
>C10-C12 Aromatics	ND	---	40	ug/L	1	07/12/23 15:29	WA EPH	U
>C12-C16 Aromatics	79	---	40	ug/L	1	07/12/23 15:29	WA EPH	
>C16-C21 Aromatics	79	---	40	ug/L	1	07/12/23 15:29	WA EPH	
>C21-C34 Aromatics	ND	---	40	ug/L	1	07/12/23 15:29	WA EPH	U
Batch: BLF0691								
C5-C6 Aliphatics	ND	---	50	ug/L	1	06/23/23 18:03	WA VPH	U
>C6-C8 Aliphatics	ND	---	50	ug/L	1	06/23/23 18:03	WA VPH	U
>C8-C10 Aliphatics	ND	---	50	ug/L	1	06/23/23 18:03	WA VPH	U
>C10-C12 Aliphatics	452	---	50	ug/L	1	06/23/23 18:03	WA VPH	
C8-C10 Aromatics	ND	---	50	ug/L	1	06/23/23 18:03	WA VPH	U
>C10-C12 Aromatics	700	---	50	ug/L	1	06/23/23 18:03	WA VPH	
>C12-C13 Aromatics	143	---	50	ug/L	1	06/23/23 18:03	WA VPH	
Methyl tert-butyl Ether	ND	---	5	ug/L	1	06/23/23 18:03	WA VPH	U
Benzene	ND	---	5	ug/L	1	06/23/23 18:03	WA VPH	U
Toluene	ND	---	5	ug/L	1	06/23/23 18:03	WA VPH	U
Ethylbenzene	ND	---	5	ug/L	1	06/23/23 18:03	WA VPH	U
1,2,3-Trimethylbenzene	ND	---	5	ug/L	1	06/23/23 18:03	WA VPH	U
m,p-Xylene	ND	---	10	ug/L	1	06/23/23 18:03	WA VPH	U
Naphthalene	ND	---	5	ug/L	1	06/23/23 18:03	WA VPH	U
1-Methylnaphthalene	28	---	5	ug/L	1	06/23/23 18:03	WA VPH	
o-Xylene	ND	---	5	ug/L	1	06/23/23 18:03	WA VPH	U
n-Pentane	ND	---	5	ug/L	1	06/23/23 18:03	WA VPH	U
n-Hexane	ND	---	5	ug/L	1	06/23/23 18:03	WA VPH	U
n-Octane	ND	---	5	ug/L	1	06/23/23 18:03	WA VPH	U
n-Decane	ND	---	5	ug/L	1	06/23/23 18:03	WA VPH	U
n-Dodecane	ND	---	5	ug/L	1	06/23/23 18:03	WA VPH	U
Batch: BLF0596								
Surrogate: o-Terphenyl		Recovery:	62.3 %	Limits:	41-120 %	1	07/12/23 15:29	WA EPH
1-Chloro-octadecane			51.7 %		36-120 %	1	07/11/23 14:27	WA EPH
Batch: BLF0691								
PID: 2,5-Dibromotoluene			89.1 %		60-140 %	1	06/23/23 18:03	WA VPH
FID: 2,5-Dibromotoluene			93.5 %		60-140 %	1	06/23/23 18:03	WA VPH

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Apex Laboratories, LLC

6700 S.W. Sandburg Street  
Tigard, OR 97223  
503-718-2323  
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125  
Portland, OR 97219Project: **Gasco-MGP Only-Prod. Wells 2Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3F1249 - 09 12 23 1015****Analytical Resources, LLC****ANALYTICAL SAMPLE RESULTS (Subcontracted)****Washington Department of Ecology Methods**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-061523-14 (A3F1249-05RE1)				Matrix: Water		Batch: BLG0608		
Batch: BLG0608								
C8-C10 Aliphatics	ND	---	40	ug/L	1	07/28/23 19:27	WA EPH	H, U
>C10-C12 Aliphatics	ND	---	40	ug/L	1	07/28/23 19:27	WA EPH	H, U
>C12-C16 Aliphatics	ND	---	40	ug/L	1	07/28/23 19:27	WA EPH	H, U
>C16-C21 Aliphatics	ND	---	40	ug/L	1	07/28/23 19:27	WA EPH	H, U
>C21-C34 Aliphatics	118	---	40	ug/L	1	07/28/23 19:27	WA EPH	H
C8-C10 Aromatics	ND	---	40	ug/L	1	07/28/23 14:44	WA EPH	H, U
>C10-C12 Aromatics	ND	---	40	ug/L	1	07/28/23 14:44	WA EPH	H, U
>C12-C16 Aromatics	ND	---	40	ug/L	1	07/28/23 14:44	WA EPH	H, U
>C16-C21 Aromatics	ND	---	40	ug/L	1	07/28/23 14:44	WA EPH	H, U
>C21-C34 Aromatics	ND	---	40	ug/L	1	07/28/23 14:44	WA EPH	H, U
Batch: BLG0608								
Surrogate: o-Terphenyl		Recovery: 68.9 %		Limits: 41-120 %	1	07/28/23 14:44	WA EPH	H
1-Chloro-octadecane		57.9 %		36-120 %	1	07/28/23 19:27	WA EPH	H
GS-061523-15 (A3F1249-06)				Matrix: Water		Batch: BLF0596		
Batch: BLF0596								
C8-C10 Aliphatics	ND	---	40	ug/L	1	07/11/23 14:53	WA EPH	U
>C10-C12 Aliphatics	ND	---	40	ug/L	1	07/11/23 14:53	WA EPH	U
>C12-C16 Aliphatics	ND	---	40	ug/L	1	07/11/23 14:53	WA EPH	U
>C16-C21 Aliphatics	ND	---	40	ug/L	1	07/11/23 14:53	WA EPH	U
>C21-C34 Aliphatics	ND	---	40	ug/L	1	07/11/23 14:53	WA EPH	U
C8-C10 Aromatics	ND	---	40	ug/L	1	07/12/23 16:17	WA EPH	U
>C10-C12 Aromatics	ND	---	40	ug/L	1	07/12/23 16:17	WA EPH	U
>C12-C16 Aromatics	ND	---	40	ug/L	1	07/12/23 16:17	WA EPH	U
>C16-C21 Aromatics	ND	---	40	ug/L	1	07/12/23 16:17	WA EPH	U
>C21-C34 Aromatics	ND	---	40	ug/L	1	07/12/23 16:17	WA EPH	U
Batch: BLF0691								
C5-C6 Aliphatics	ND	---	50	ug/L	1	06/23/23 18:33	WA VPH	U
>C6-C8 Aliphatics	ND	---	50	ug/L	1	06/23/23 18:33	WA VPH	U
>C8-C10 Aliphatics	ND	---	50	ug/L	1	06/23/23 18:33	WA VPH	U

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Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>GS-061523-15 (A3F1249-06)</b>		<b>Matrix: Water</b>			<b>Batch: BLF0691</b>			
>C10-C12 Aliphatics	ND	---	50	ug/L	1	06/23/23 18:33	WA VPH	U
C8-C10 Aromatics	ND	---	50	ug/L	1	06/23/23 18:33	WA VPH	U
>C10-C12 Aromatics	ND	---	50	ug/L	1	06/23/23 18:33	WA VPH	U
>C12-C13 Aromatics	ND	---	50	ug/L	1	06/23/23 18:33	WA VPH	U
Methyl tert-butyl Ether	ND	---	5	ug/L	1	06/23/23 18:33	WA VPH	U
Benzene	ND	---	5	ug/L	1	06/23/23 18:33	WA VPH	U
Toluene	ND	---	5	ug/L	1	06/23/23 18:33	WA VPH	U
Ethylbenzene	ND	---	5	ug/L	1	06/23/23 18:33	WA VPH	U
1,2,3-Trimethylbenzene	ND	---	5	ug/L	1	06/23/23 18:33	WA VPH	U
m,p-Xylene	ND	---	10	ug/L	1	06/23/23 18:33	WA VPH	U
Naphthalene	ND	---	5	ug/L	1	06/23/23 18:33	WA VPH	U
1-Methylnaphthalene	ND	---	5	ug/L	1	06/23/23 18:33	WA VPH	U
o-Xylene	ND	---	5	ug/L	1	06/23/23 18:33	WA VPH	U
n-Pentane	ND	---	5	ug/L	1	06/23/23 18:33	WA VPH	U
n-Hexane	ND	---	5	ug/L	1	06/23/23 18:33	WA VPH	U
n-Octane	ND	---	5	ug/L	1	06/23/23 18:33	WA VPH	U
n-Decane	ND	---	5	ug/L	1	06/23/23 18:33	WA VPH	U
n-Dodecane	ND	---	5	ug/L	1	06/23/23 18:33	WA VPH	U
Batch: BLF0596								
Surrogate: o-Terphenyl		Recovery:	59.9 %	Limits:	41-120 %	1	07/12/23 16:17	WA EPH
1-Chloro-octadecane			51.1 %		36-120 %	1	07/11/23 14:53	WA EPH
Batch: BLF0691								
PID: 2,5-Dibromotoluene			79.8 %		60-140 %	1	06/23/23 18:33	WA VPH
FID: 2,5-Dibromotoluene			83.5 %		60-140 %	1	06/23/23 18:33	WA VPH

**GS-061523-15 (A3F1249-06RE1)****Matrix: Water****Batch: BLG0608**

Batch: BLG0608								
C8-C10 Aliphatics	ND	---	40	ug/L	1	07/28/23 19:53	WA EPH	H, U
>C10-C12 Aliphatics	ND	---	40	ug/L	1	07/28/23 19:53	WA EPH	H, U
>C12-C16 Aliphatics	ND	---	40	ug/L	1	07/28/23 19:53	WA EPH	H, U
>C16-C21 Aliphatics	ND	---	40	ug/L	1	07/28/23 19:53	WA EPH	H, U
>C21-C34 Aliphatics	ND	---	40	ug/L	1	07/28/23 19:53	WA EPH	H, U

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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 2Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3F1249 - 09 12 23 1015****Analytical Resources, LLC****ANALYTICAL SAMPLE RESULTS (Subcontracted)****Washington Department of Ecology Methods**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-061523-15 (A3F1249-06RE1)		Matrix: Water			Batch: BLG0608			
C8-C10 Aromatics	ND	---	40	ug/L	1	07/28/23 15:10	WA EPH	H, U
>C10-C12 Aromatics	ND	---	40	ug/L	1	07/28/23 15:10	WA EPH	H, U
>C12-C16 Aromatics	ND	---	40	ug/L	1	07/28/23 15:10	WA EPH	H, U
>C16-C21 Aromatics	ND	---	40	ug/L	1	07/28/23 15:10	WA EPH	H, U
>C21-C34 Aromatics	ND	---	40	ug/L	1	07/28/23 15:10	WA EPH	H, U
Batch: BLG0608								
Surrogate: o-Terphenyl		Recovery: 78.8 %		Limits: 41-120 %	1	07/28/23 15:10	WA EPH	H
1-Chloro-octadecane		65.3 %		36-120 %	1	07/28/23 19:53	WA EPH	H
GS-061523-16 (A3F1249-07)		Matrix: Water			Batch: BLF0596			
Batch: BLF0596								
C8-C10 Aliphatics	ND	---	40	ug/L	1	07/11/23 15:19	WA EPH	U
>C10-C12 Aliphatics	ND	---	40	ug/L	1	07/11/23 15:19	WA EPH	U
>C12-C16 Aliphatics	ND	---	40	ug/L	1	07/11/23 15:19	WA EPH	U
>C16-C21 Aliphatics	ND	---	40	ug/L	1	07/11/23 15:19	WA EPH	U
>C21-C34 Aliphatics	152	---	40	ug/L	1	07/11/23 15:19	WA EPH	
C8-C10 Aromatics	ND	---	40	ug/L	1	07/12/23 16:43	WA EPH	U
>C10-C12 Aromatics	ND	---	40	ug/L	1	07/12/23 16:43	WA EPH	U
>C12-C16 Aromatics	ND	---	40	ug/L	1	07/12/23 16:43	WA EPH	U
>C16-C21 Aromatics	ND	---	40	ug/L	1	07/12/23 16:43	WA EPH	U
>C21-C34 Aromatics	ND	---	40	ug/L	1	07/12/23 16:43	WA EPH	U
Batch: BLF0691								
C5-C6 Aliphatics	ND	---	50	ug/L	1	06/23/23 19:04	WA VPH	U
>C6-C8 Aliphatics	ND	---	50	ug/L	1	06/23/23 19:04	WA VPH	U
>C8-C10 Aliphatics	ND	---	50	ug/L	1	06/23/23 19:04	WA VPH	U
>C10-C12 Aliphatics	ND	---	50	ug/L	1	06/23/23 19:04	WA VPH	U
C8-C10 Aromatics	ND	---	50	ug/L	1	06/23/23 19:04	WA VPH	U
>C10-C12 Aromatics	ND	---	50	ug/L	1	06/23/23 19:04	WA VPH	U
>C12-C13 Aromatics	ND	---	50	ug/L	1	06/23/23 19:04	WA VPH	U
Methyl tert-butyl Ether	ND	---	5	ug/L	1	06/23/23 19:04	WA VPH	U
Benzene	ND	---	5	ug/L	1	06/23/23 19:04	WA VPH	U
Toluene	ND	---	5	ug/L	1	06/23/23 19:04	WA VPH	U

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Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-061523-16 (A3F1249-07)			Matrix: Water			Batch: BLF0691		
Ethylbenzene	ND	---	5	ug/L	1	06/23/23 19:04	WA VPH	U
1,2,3-Trimethylbenzene	ND	---	5	ug/L	1	06/23/23 19:04	WA VPH	U
m,p-Xylene	ND	---	10	ug/L	1	06/23/23 19:04	WA VPH	U
Naphthalene	ND	---	5	ug/L	1	06/23/23 19:04	WA VPH	U
1-Methylnaphthalene	ND	---	5	ug/L	1	06/23/23 19:04	WA VPH	U
o-Xylene	ND	---	5	ug/L	1	06/23/23 19:04	WA VPH	U
n-Pentane	ND	---	5	ug/L	1	06/23/23 19:04	WA VPH	U
n-Hexane	ND	---	5	ug/L	1	06/23/23 19:04	WA VPH	U
n-Octane	7	---	5	ug/L	1	06/23/23 19:04	WA VPH	
n-Decane	16	---	5	ug/L	1	06/23/23 19:04	WA VPH	
n-Dodecane	7	---	5	ug/L	1	06/23/23 19:04	WA VPH	
Batch: BLF0596								
Surrogate: o-Terphenyl		Recovery:	53.9 %	Limits:	41-120 %	1	07/12/23 16:43	WA EPH
1-Chloro-octadecane			48.6 %		36-120 %	1	07/11/23 15:19	WA EPH
Batch: BLF0691								
PID: 2,5-Dibromotoluene			37.8 %		60-140 %	1	06/23/23 19:04	WA VPH *
FID: 2,5-Dibromotoluene			41.8 %		60-140 %	1	06/23/23 19:04	WA VPH *
GS-061523-16 (A3F1249-07RE1)			Matrix: Water			Batch: BLF0696		
Batch: BLF0696								
C5-C6 Aliphatics	ND	---	50	ug/L	1	06/26/23 11:05	WA VPH	U
>C6-C8 Aliphatics	ND	---	50	ug/L	1	06/26/23 11:05	WA VPH	U
>C8-C10 Aliphatics	ND	---	50	ug/L	1	06/26/23 11:05	WA VPH	U
>C10-C12 Aliphatics	ND	---	50	ug/L	1	06/26/23 11:05	WA VPH	U
C8-C10 Aromatics	ND	---	50	ug/L	1	06/26/23 11:05	WA VPH	U
>C10-C12 Aromatics	ND	---	50	ug/L	1	06/26/23 11:05	WA VPH	U
>C12-C13 Aromatics	ND	---	50	ug/L	1	06/26/23 11:05	WA VPH	U
Methyl tert-butyl Ether	ND	---	5	ug/L	1	06/26/23 11:05	WA VPH	U
Benzene	ND	---	5	ug/L	1	06/26/23 11:05	WA VPH	U
Toluene	ND	---	5	ug/L	1	06/26/23 11:05	WA VPH	U
Ethylbenzene	ND	---	5	ug/L	1	06/26/23 11:05	WA VPH	U
1,2,3-Trimethylbenzene	ND	---	5	ug/L	1	06/26/23 11:05	WA VPH	U

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## Analytical Resources, LLC

## ANALYTICAL SAMPLE RESULTS (Subcontracted)

## Washington Department of Ecology Methods

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-061523-16 (A3F1249-07RE1)				Matrix: Water		Batch: BLF0696		
m,p-Xylene	ND	---	10	ug/L	1	06/26/23 11:05	WA VPH	U
Naphthalene	ND	---	5	ug/L	1	06/26/23 11:05	WA VPH	U
1-Methylnaphthalene	ND	---	5	ug/L	1	06/26/23 11:05	WA VPH	U
o-Xylene	ND	---	5	ug/L	1	06/26/23 11:05	WA VPH	U
n-Pentane	ND	---	5	ug/L	1	06/26/23 11:05	WA VPH	U
n-Hexane	ND	---	5	ug/L	1	06/26/23 11:05	WA VPH	U
n-Octane	ND	---	5	ug/L	1	06/26/23 11:05	WA VPH	U
n-Decane	ND	---	5	ug/L	1	06/26/23 11:05	WA VPH	U
n-Dodecane	ND	---	5	ug/L	1	06/26/23 11:05	WA VPH	U
Batch: BLG0608								
C8-C10 Aliphatics	ND	---	40	ug/L	1	07/28/23 20:18	WA EPH	H, U
>C10-C12 Aliphatics	ND	---	40	ug/L	1	07/28/23 20:18	WA EPH	H, U
>C12-C16 Aliphatics	ND	---	40	ug/L	1	07/28/23 20:18	WA EPH	H, U
>C16-C21 Aliphatics	ND	---	40	ug/L	1	07/28/23 20:18	WA EPH	H, U
>C21-C34 Aliphatics	157	---	40	ug/L	1	07/28/23 20:18	WA EPH	H
C8-C10 Aromatics	ND	---	40	ug/L	1	07/28/23 15:36	WA EPH	H, U
>C10-C12 Aromatics	ND	---	40	ug/L	1	07/28/23 15:36	WA EPH	H, U
>C12-C16 Aromatics	ND	---	40	ug/L	1	07/28/23 15:36	WA EPH	H, U
>C16-C21 Aromatics	42	---	40	ug/L	1	07/28/23 15:36	WA EPH	H
>C21-C34 Aromatics	ND	---	40	ug/L	1	07/28/23 15:36	WA EPH	H, U
Batch: BLF0696								
Surrogate: PID: 2,5-Dibromotoluene		Recovery:	79.1 %	Limits:	60-140 %	1	06/26/23 11:05	WA VPH
FID: 2,5-Dibromotoluene			81.1 %		60-140 %	1	06/26/23 11:05	WA VPH
Batch: BLG0608								
o-Terphenyl			65.1 %		41-120 %	1	07/28/23 15:36	WA EPH H
1-Chloro-octadecane			53.4 %		36-120 %	1	07/28/23 20:18	WA EPH H

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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 97219Project: **Gasco-MGP Only-Prod. Wells 2Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3F1249 - 09 12 23 1015**

## QUALITY CONTROL (QC) SAMPLE RESULTS

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

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes	
Batch 23F1082 - EPA 3510C (Fuels/Acid Ext.)						Water							
Blank (23F1082-BLK1)			Prepared: 06/29/23 07:18    Analyzed: 06/29/23 20:37										
NWTPH-Dx													
Diesel	ND	100	200	ug/L	1	---	---	---	---	---	---		
Oil	ND	200	400	ug/L	1	---	---	---	---	---	---		
Surr: o-Terphenyl (Surr)		Recovery: 99 %		Limits: 50-150 %		Dilution: 1x							
LCS (23F1082-BS1)			Prepared: 06/29/23 07:18    Analyzed: 06/29/23 20:58										
NWTPH-Dx													
Diesel	963	100	200	ug/L	1	1250	---	77	36-132%	---	---		
Surr: o-Terphenyl (Surr)		Recovery: 95 %		Limits: 50-150 %		Dilution: 1x							
LCS Dup (23F1082-BSD1)			Prepared: 06/29/23 07:18    Analyzed: 06/29/23 21:19										Q-19
NWTPH-Dx													
Diesel	907	100	200	ug/L	1	1250	---	73	36-132%	6	30%		
Surr: o-Terphenyl (Surr)		Recovery: 101 %		Limits: 50-150 %		Dilution: 1x							

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## QUALITY CONTROL (QC) SAMPLE RESULTS

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

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23F0776 - EPA 5030C						Water						
Blank (23F0776-BLK1)			Prepared: 06/21/23 11:23   Analyzed: 06/21/23 13:55									
<u>NWTPH-Gx (MS)</u>												
Gasoline Range Organics	ND	50.0	100	ug/L	1	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 97 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		109 %		50-150 %		"						
LCS (23F0776-BS2)			Prepared: 06/21/23 11:23   Analyzed: 06/21/23 13:27									
<u>NWTPH-Gx (MS)</u>												
Gasoline Range Organics	538	50.0	100	ug/L	1	500	---	108	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 96 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		103 %		50-150 %		"						
Duplicate (23F0776-DUP1)			Prepared: 06/21/23 11:23   Analyzed: 06/22/23 00:49									
<u>QC Source Sample: Non-SDG (A3F1221-12)</u>												
Gasoline Range Organics	ND	500	1000	ug/L	10	---	ND	---	---	---	30%	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 96 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		106 %		50-150 %		"						

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Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1249 - 09 12 23 1015

## 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 23F0776 - EPA 5030C						Water						
Blank (23F0776-BLK1)			Prepared: 06/21/23 11:23		Analyzed: 06/21/23 13:55							
EPA 8260D												
Acetone	ND	10.0	20.0	ug/L	1	---	---	---	---	---	---	
Acrylonitrile	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
Benzene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Bromobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Bromochloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Bromoform	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Bromomethane	ND	5.00	5.00	ug/L	1	---	---	---	---	---	---	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Carbon disulfide	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Chlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Chloroethane	ND	5.00	5.00	ug/L	1	---	---	---	---	---	---	
Chloroform	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Chloromethane	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Dibromomethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	

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## 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 2Q 2023 Perf. Mon

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1249 - 09 12 23 1015

## 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 23F0776 - EPA 5030C						Water						
Blank (23F0776-BLK1)						Prepared: 06/21/23 11:23 Analyzed: 06/21/23 13:55						
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Ethylbenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
2-Hexanone	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Methylene chloride	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Naphthalene	ND	2.00	2.00	ug/L	1	---	---	---	---	---	---	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Styrene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
Toluene	ND	0.500	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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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 2Q 2023 Perf. Mon

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1249 - 09 12 23 1015

## 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 23F0776 - EPA 5030C						Water						
Blank (23F0776-BLK1)				Prepared: 06/21/23 11:23		Analyzed: 06/21/23 13:55						
Surr: Toluene-d8 (Surr)		Recovery: 104 %		Limits: 80-120 %		Dilution: 1x						
4-Bromofluorobenzene (Surr)		108 %		80-120 %		"						
LCS (23F0776-BS1)				Prepared: 06/21/23 11:23		Analyzed: 06/21/23 12:53						
EPA 8260D												
Acetone	40.0	10.0	20.0	ug/L	1	40.0	---	100	80-120%	---	---	Q-56
Acrylonitrile	22.2	1.00	2.00	ug/L	1	20.0	---	111	80-120%	---	---	
Benzene	20.3	0.100	0.200	ug/L	1	20.0	---	101	80-120%	---	---	
Bromobenzene	19.7	0.250	0.500	ug/L	1	20.0	---	98	80-120%	---	---	
Bromochloromethane	23.3	0.500	1.00	ug/L	1	20.0	---	116	80-120%	---	---	
Bromodichloromethane	23.9	0.500	1.00	ug/L	1	20.0	---	119	80-120%	---	---	
Bromoform	21.6	0.500	1.00	ug/L	1	20.0	---	108	80-120%	---	---	
Bromomethane	26.3	5.00	5.00	ug/L	1	20.0	---	131	80-120%	---	---	
2-Butanone (MEK)	44.9	5.00	10.0	ug/L	1	40.0	---	112	80-120%	---	---	
n-Butylbenzene	20.2	0.500	1.00	ug/L	1	20.0	---	101	80-120%	---	---	
sec-Butylbenzene	19.0	0.500	1.00	ug/L	1	20.0	---	95	80-120%	---	---	
tert-Butylbenzene	17.4	0.500	1.00	ug/L	1	20.0	---	87	80-120%	---	---	
Carbon disulfide	20.5	5.00	10.0	ug/L	1	20.0	---	103	80-120%	---	---	
Carbon tetrachloride	20.7	0.500	1.00	ug/L	1	20.0	---	103	80-120%	---	---	
Chlorobenzene	19.7	0.250	0.500	ug/L	1	20.0	---	99	80-120%	---	---	
Chloroethane	34.2	5.00	5.00	ug/L	1	20.0	---	171	80-120%	---	---	ICV-01, Q-56
Chloroform	21.0	0.500	1.00	ug/L	1	20.0	---	105	80-120%	---	---	
Chloromethane	18.9	2.50	5.00	ug/L	1	20.0	---	95	80-120%	---	---	
2-Chlorotoluene	18.4	0.500	1.00	ug/L	1	20.0	---	92	80-120%	---	---	
4-Chlorotoluene	18.8	0.500	1.00	ug/L	1	20.0	---	94	80-120%	---	---	
Dibromochloromethane	20.4	0.500	1.00	ug/L	1	20.0	---	102	80-120%	---	---	
1,2-Dibromo-3-chloropropane	19.3	2.50	5.00	ug/L	1	20.0	---	97	80-120%	---	---	
1,2-Dibromoethane (EDB)	20.5	0.250	0.500	ug/L	1	20.0	---	103	80-120%	---	---	
Dibromomethane	22.5	0.500	1.00	ug/L	1	20.0	---	113	80-120%	---	---	
1,2-Dichlorobenzene	20.0	0.250	0.500	ug/L	1	20.0	---	100	80-120%	---	---	
1,3-Dichlorobenzene	20.0	0.250	0.500	ug/L	1	20.0	---	100	80-120%	---	---	
1,4-Dichlorobenzene	19.0	0.250	0.500	ug/L	1	20.0	---	95	80-120%	---	---	
Dichlorodifluoromethane	17.9	0.500	1.00	ug/L	1	20.0	---	89	80-120%	---	---	
1,1-Dichloroethane	21.4	0.200	0.400	ug/L	1	20.0	---	107	80-120%	---	---	

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Report ID:

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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 23F0776 - EPA 5030C						Water						
LCS (23F0776-BS1)						Prepared: 06/21/23 11:23 Analyzed: 06/21/23 12:53						
1,2-Dichloroethane (EDC)	21.8	0.200	0.400	ug/L	1	20.0	---	109	80-120%	---	---	
1,1-Dichloroethene	19.7	0.200	0.400	ug/L	1	20.0	---	98	80-120%	---	---	
cis-1,2-Dichloroethene	20.3	0.200	0.400	ug/L	1	20.0	---	102	80-120%	---	---	
trans-1,2-Dichloroethene	19.6	0.200	0.400	ug/L	1	20.0	---	98	80-120%	---	---	
1,2-Dichloropropane	21.2	0.250	0.500	ug/L	1	20.0	---	106	80-120%	---	---	
1,3-Dichloropropane	20.1	0.500	1.00	ug/L	1	20.0	---	100	80-120%	---	---	
2,2-Dichloropropane	20.2	0.500	1.00	ug/L	1	20.0	---	101	80-120%	---	---	
1,1-Dichloropropene	20.0	0.500	1.00	ug/L	1	20.0	---	100	80-120%	---	---	
cis-1,3-Dichloropropene	21.3	0.500	1.00	ug/L	1	20.0	---	107	80-120%	---	---	
trans-1,3-Dichloropropene	20.8	0.500	1.00	ug/L	1	20.0	---	104	80-120%	---	---	
Ethylbenzene	20.0	0.250	0.500	ug/L	1	20.0	---	100	80-120%	---	---	
Hexachlorobutadiene	21.8	2.50	5.00	ug/L	1	20.0	---	109	80-120%	---	---	
2-Hexanone	43.0	5.00	10.0	ug/L	1	40.0	---	107	80-120%	---	---	
Isopropylbenzene	18.8	0.500	1.00	ug/L	1	20.0	---	94	80-120%	---	---	
4-Isopropyltoluene	19.1	0.500	1.00	ug/L	1	20.0	---	95	80-120%	---	---	
Methylene chloride	20.3	5.00	10.0	ug/L	1	20.0	---	102	80-120%	---	---	
4-Methyl-2-pentanone (MiBK)	43.2	5.00	10.0	ug/L	1	40.0	---	108	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	17.6	0.500	1.00	ug/L	1	20.0	---	88	80-120%	---	---	
Naphthalene	13.6	2.00	2.00	ug/L	1	20.0	---	68	80-120%	---	---	Q-55
n-Propylbenzene	19.3	0.250	0.500	ug/L	1	20.0	---	97	80-120%	---	---	
Styrene	20.1	0.500	1.00	ug/L	1	20.0	---	100	80-120%	---	---	
1,1,1,2-Tetrachloroethane	24.6	0.200	0.400	ug/L	1	20.0	---	123	80-120%	---	---	Q-56
1,1,2,2-Tetrachloroethane	22.2	0.250	0.500	ug/L	1	20.0	---	111	80-120%	---	---	
Tetrachloroethene (PCE)	19.0	0.200	0.400	ug/L	1	20.0	---	95	80-120%	---	---	
Toluene	19.1	0.500	1.00	ug/L	1	20.0	---	96	80-120%	---	---	
1,2,3-Trichlorobenzene	18.4	1.00	2.00	ug/L	1	20.0	---	92	80-120%	---	---	
1,2,4-Trichlorobenzene	18.8	1.00	2.00	ug/L	1	20.0	---	94	80-120%	---	---	
1,1,1-Trichloroethane	20.4	0.200	0.400	ug/L	1	20.0	---	102	80-120%	---	---	
1,1,2-Trichloroethane	20.5	0.250	0.500	ug/L	1	20.0	---	102	80-120%	---	---	
Trichloroethene (TCE)	19.3	0.200	0.400	ug/L	1	20.0	---	96	80-120%	---	---	
Trichlorofluoromethane	28.8	1.00	2.00	ug/L	1	20.0	---	144	80-120%	---	---	Q-56
1,2,3-Trichloropropane	20.1	0.500	1.00	ug/L	1	20.0	---	100	80-120%	---	---	
1,2,4-Trimethylbenzene	20.2	0.500	1.00	ug/L	1	20.0	---	101	80-120%	---	---	
1,3,5-Trimethylbenzene	19.8	0.500	1.00	ug/L	1	20.0	---	99	80-120%	---	---	

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Darwin Thomas, Business Development Director

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## ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

**Anchor QEA, LLC**

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

Project: **Gasco-MGP Only-Prod. Wells 2Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3F1249 - 09 12 23 1015**

## 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 23F0776 - EPA 5030C						Water						
LCS (23F0776-BS1)			Prepared: 06/21/23 11:23		Analyzed: 06/21/23 12:53							
Vinyl chloride	20.4	0.200	0.400	ug/L	1	20.0	---	102	80-120%	---	---	
m,p-Xylene	39.8	0.500	1.00	ug/L	1	40.0	---	99	80-120%	---	---	
o-Xylene	18.0	0.250	0.500	ug/L	1	20.0	---	90	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 102 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		99 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		95 %		80-120 %		"						

**Duplicate (23F0776-DUP1)**

Prepared: 06/21/23 11:23 Analyzed: 06/22/23 00:49

**QC Source Sample: Non-SDG (A3F1221-12)**

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

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**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 2Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3F1249 - 09 12 23 1015****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 23F0776 - EPA 5030C						Water						
Duplicate (23F0776-DUP1)			Prepared: 06/21/23 11:23		Analyzed: 06/22/23 00:49							
QC Source Sample: Non-SDG (A3F1221-12)												
1,3-Dichlorobenzene	ND	2.50	5.00	ug/L	10	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	2.50	5.00	ug/L	10	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	2.50	5.00	ug/L	10	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
Ethylbenzene	ND	2.50	5.00	ug/L	10	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	25.0	50.0	ug/L	10	---	ND	---	---	---	30%	
2-Hexanone	ND	50.0	100	ug/L	10	---	ND	---	---	---	30%	
Isopropylbenzene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
Methylene chloride	ND	50.0	100	ug/L	10	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	50.0	100	ug/L	10	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
Naphthalene	ND	20.0	20.0	ug/L	10	---	ND	---	---	---	30%	
n-Propylbenzene	ND	2.50	5.00	ug/L	10	---	ND	---	---	---	30%	
Styrene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	2.50	5.00	ug/L	10	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	4.00	4.00	ug/L	10	---	ND	---	---	---	30%	
Toluene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	10.0	20.0	ug/L	10	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	10.0	20.0	ug/L	10	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	
1,1,2-Trichloroethane	ND	2.50	5.00	ug/L	10	---	ND	---	---	---	30%	

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## 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 2Q 2023 Perf. Mon

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1249 - 09 12 23 1015

## 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 23F0776 - EPA 5030C						Water						
Duplicate (23F0776-DUP1)			Prepared: 06/21/23 11:23    Analyzed: 06/22/23 00:49									
QC Source Sample: Non-SDG (A3F1221-12)												
Trichloroethene (TCE)	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	10.0	20.0	ug/L	10	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
Vinyl chloride	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	
m,p-Xylene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
o-Xylene	ND	2.50	5.00	ug/L	10	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 110 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		102 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		108 %		80-120 %		"						
Matrix Spike (23F0776-MS1)			Prepared: 06/21/23 11:23    Analyzed: 06/21/23 19:22									
QC Source Sample: Non-SDG (A3F1221-15)												
EPA 8260D												
Acetone	43.6	10.0	20.0	ug/L	1	40.0	ND	59	39-160%	---	---	
Acrylonitrile	22.9	1.00	2.00	ug/L	1	20.0	ND	114	63-135%	---	---	
Benzene	21.7	0.100	0.200	ug/L	1	20.0	ND	109	79-120%	---	---	
Bromobenzene	20.2	0.250	0.500	ug/L	1	20.0	ND	101	80-120%	---	---	
Bromochloromethane	23.9	0.500	1.00	ug/L	1	20.0	ND	119	78-123%	---	---	
Bromodichloromethane	24.9	0.500	1.00	ug/L	1	20.0	ND	125	79-125%	---	---	
Bromoform	21.9	0.500	1.00	ug/L	1	20.0	ND	109	66-130%	---	---	
Bromomethane	29.2	5.00	5.00	ug/L	1	20.0	ND	146	53-141%	---	---	Q-54
2-Butanone (MEK)	45.8	5.00	10.0	ug/L	1	40.0	ND	114	56-143%	---	---	
n-Butylbenzene	20.8	0.500	1.00	ug/L	1	20.0	ND	104	75-128%	---	---	
sec-Butylbenzene	20.0	0.500	1.00	ug/L	1	20.0	ND	100	77-126%	---	---	
tert-Butylbenzene	18.3	0.500	1.00	ug/L	1	20.0	ND	92	78-124%	---	---	
Carbon disulfide	22.4	5.00	10.0	ug/L	1	20.0	ND	112	64-133%	---	---	
Carbon tetrachloride	23.2	0.500	1.00	ug/L	1	20.0	ND	116	72-136%	---	---	
Chlorobenzene	20.5	0.250	0.500	ug/L	1	20.0	ND	102	80-120%	---	---	
Chloroethane	38.9	5.00	5.00	ug/L	1	20.0	ND	194	60-138%	---	---	ICV-01, Q-54c
Chloroform	22.4	0.500	1.00	ug/L	1	20.0	ND	112	79-124%	---	---	

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Tigard, OR 97223

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ORELAP ID: OR100062

## Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

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Project: Gasco-MGP Only-Prod. Wells 2Q 2023 Perf. Mon

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1249 - 09 12 23 1015

## 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 23F0776 - EPA 5030C						Water						
Matrix Spike (23F0776-MS1)			Prepared: 06/21/23 11:23		Analyzed: 06/21/23 19:22							
QC Source Sample: Non-SDG (A3F1221-15)												
Chloromethane	22.6	2.50	5.00	ug/L	1	20.0	ND	113	50-139%	---	---	
2-Chlorotoluene	19.1	0.500	1.00	ug/L	1	20.0	ND	96	79-122%	---	---	
4-Chlorotoluene	19.6	0.500	1.00	ug/L	1	20.0	ND	98	78-122%	---	---	
Dibromochloromethane	20.8	0.500	1.00	ug/L	1	20.0	ND	104	74-126%	---	---	
1,2-Dibromo-3-chloropropane	19.6	2.50	5.00	ug/L	1	20.0	ND	98	62-128%	---	---	
1,2-Dibromoethane (EDB)	20.8	0.250	0.500	ug/L	1	20.0	ND	104	77-121%	---	---	
Dibromomethane	23.2	0.500	1.00	ug/L	1	20.0	ND	116	79-123%	---	---	
1,2-Dichlorobenzene	20.5	0.250	0.500	ug/L	1	20.0	ND	102	80-120%	---	---	
1,3-Dichlorobenzene	20.8	0.250	0.500	ug/L	1	20.0	ND	104	80-120%	---	---	
1,4-Dichlorobenzene	19.9	0.250	0.500	ug/L	1	20.0	ND	100	79-120%	---	---	
Dichlorodifluoromethane	19.9	0.500	1.00	ug/L	1	20.0	ND	99	32-152%	---	---	
1,1-Dichloroethane	30.3	0.200	0.400	ug/L	1	20.0	7.81	112	77-125%	---	---	
1,2-Dichloroethane (EDC)	23.0	0.200	0.400	ug/L	1	20.0	ND	115	73-128%	---	---	
1,1-Dichloroethene	21.9	0.200	0.400	ug/L	1	20.0	0.250	108	71-131%	---	---	
cis-1,2-Dichloroethene	78.2	0.200	0.400	ug/L	1	20.0	56.9	107	78-123%	---	---	
trans-1,2-Dichloroethene	21.6	0.200	0.400	ug/L	1	20.0	0.260	107	75-124%	---	---	
1,2-Dichloropropane	22.4	0.250	0.500	ug/L	1	20.0	0.300	111	78-122%	---	---	
1,3-Dichloropropane	20.4	0.500	1.00	ug/L	1	20.0	ND	102	80-120%	---	---	
2,2-Dichloropropane	20.0	0.500	1.00	ug/L	1	20.0	ND	100	60-139%	---	---	
1,1-Dichloropropene	21.8	0.500	1.00	ug/L	1	20.0	ND	109	79-125%	---	---	
cis-1,3-Dichloropropene	18.7	0.500	1.00	ug/L	1	20.0	ND	93	75-124%	---	---	
trans-1,3-Dichloropropene	20.8	0.500	1.00	ug/L	1	20.0	ND	104	73-127%	---	---	
Ethylbenzene	20.8	0.250	0.500	ug/L	1	20.0	ND	104	79-121%	---	---	
Hexachlorobutadiene	22.6	2.50	5.00	ug/L	1	20.0	ND	113	66-134%	---	---	
2-Hexanone	43.4	5.00	10.0	ug/L	1	40.0	ND	108	57-139%	---	---	
Isopropylbenzene	19.8	0.500	1.00	ug/L	1	20.0	ND	99	72-131%	---	---	
4-Isopropyltoluene	19.9	0.500	1.00	ug/L	1	20.0	ND	99	77-127%	---	---	
Methylene chloride	21.0	5.00	10.0	ug/L	1	20.0	ND	105	74-124%	---	---	
4-Methyl-2-pentanone (MiBK)	42.9	5.00	10.0	ug/L	1	40.0	ND	107	67-130%	---	---	
Methyl tert-butyl ether (MTBE)	18.1	0.500	1.00	ug/L	1	20.0	ND	91	71-124%	---	---	
Naphthalene	14.3	2.00	2.00	ug/L	1	20.0	ND	72	61-128%	---	---	Q-54d
n-Propylbenzene	20.2	0.250	0.500	ug/L	1	20.0	ND	101	76-126%	---	---	
Styrene	20.6	0.500	1.00	ug/L	1	20.0	ND	103	78-123%	---	---	

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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 2Q 2023 Perf. Mon

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1249 - 09 12 23 1015

## 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 23F0776 - EPA 5030C						Water							
Matrix Spike (23F0776-MS1)			Prepared: 06/21/23 11:23		Analyzed: 06/21/23 19:22								
QC Source Sample: Non-SDG (A3F1221-15)													
1,1,1,2-Tetrachloroethane	25.5	0.200	0.400	ug/L	1	20.0	ND	127	78-124%	---	---	Q-54b	
1,1,2,2-Tetrachloroethane	22.4	0.250	0.500	ug/L	1	20.0	ND	112	71-121%	---	---		
Tetrachloroethene (PCE)	20.8	0.200	0.400	ug/L	1	20.0	0.350	102	74-129%	---	---		
Toluene	20.1	0.500	1.00	ug/L	1	20.0	ND	101	80-121%	---	---		
1,2,3-Trichlorobenzene	19.5	1.00	2.00	ug/L	1	20.0	ND	98	69-129%	---	---		
1,2,4-Trichlorobenzene	19.4	1.00	2.00	ug/L	1	20.0	ND	97	69-130%	---	---	Q-54a	
1,1,1-Trichloroethane	22.8	0.200	0.400	ug/L	1	20.0	ND	114	74-131%	---	---		
1,1,2-Trichloroethane	21.0	0.250	0.500	ug/L	1	20.0	ND	105	80-120%	---	---		
Trichloroethene (TCE)	21.1	0.200	0.400	ug/L	1	20.0	ND	105	79-123%	---	---		
Trichlorofluoromethane	32.2	1.00	2.00	ug/L	1	20.0	ND	161	65-141%	---	---		
1,2,3-Trichloropropane	20.5	0.500	1.00	ug/L	1	20.0	ND	102	73-122%	---	---		
1,2,4-Trimethylbenzene	21.0	0.500	1.00	ug/L	1	20.0	ND	105	76-124%	---	---		
1,3,5-Trimethylbenzene	20.8	0.500	1.00	ug/L	1	20.0	ND	104	75-124%	---	---		
Vinyl chloride	106	0.200	0.400	ug/L	1	20.0	92.0	70	58-137%	---	---		
m,p-Xylene	41.4	0.500	1.00	ug/L	1	40.0	ND	104	80-121%	---	---		
o-Xylene	18.8	0.250	0.500	ug/L	1	20.0	ND	94	78-122%	---	---		
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 105 %		Limits: 80-120 %		Dilution: 1x							
Toluene-d8 (Surr)		98 %		80-120 %		"							
4-Bromofluorobenzene (Surr)		95 %		80-120 %		"							

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Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1249 - 09 12 23 1015

## 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 23F0812 - EPA 5030C						Water						
Blank (23F0812-BLK1)			Prepared: 06/25/23 09:18   Analyzed: 06/25/23 11:29									
EPA 8260D												
Naphthalene	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 99 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		101 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		101 %		80-120 %		"						
LCS (23F0812-BS1)			Prepared: 06/25/23 09:18   Analyzed: 06/25/23 10:44									
EPA 8260D												
Naphthalene	19.2	1.00	2.00	ug/L	1	20.0	---	96	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 99 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		99 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		100 %		80-120 %		"						
Duplicate (23F0812-DUP1)			Prepared: 06/25/23 09:18   Analyzed: 06/25/23 12:14									
QC Source Sample: Non-SDG (A3F1414-01)												
Naphthalene	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 100 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		101 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		101 %		80-120 %		"						
Duplicate (23F0812-DUP2)			Prepared: 06/25/23 09:18   Analyzed: 06/25/23 20:28									
QC Source Sample: Non-SDG (A3F1257-10RE1)												
Naphthalene	87.0	10.0	20.0	ug/L	10	---	87.2	---	---	0.2	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 99 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		100 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		102 %		80-120 %		"						
Matrix Spike (23F0812-MS1)			Prepared: 06/25/23 09:18   Analyzed: 06/25/23 21:35									
QC Source Sample: Non-SDG (A3F1414-07)												
EPA 8260D												
Naphthalene	91.8	1.00	2.00	ug/L	1	20.0	71.9	99	61-128%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 98 %		Limits: 80-120 %		Dilution: 1x						

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Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1249 - 09 12 23 1015

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 23F0812 - EPA 5030C						Water						
Matrix Spike (23F0812-MS1)			Prepared: 06/25/23 09:18    Analyzed: 06/25/23 21:35									
QC Source Sample: Non-SDG (A3F1414-07)												
Surr: Toluene-d8 (Surr)		Recovery: 100 %		Limits: 80-120 %		Dilution: 1x						
4-Bromofluorobenzene (Surr)		102 %		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 23F0902 - EPA 5030C						Water						
Blank (23F0902-BLK1)			Prepared: 06/25/23 11:48    Analyzed: 06/25/23 15:16									
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: 109 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		104 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		99 %		80-120 %		"						
LCS (23F0902-BS1)						Prepared: 06/25/23 11:48    Analyzed: 06/25/23 13:46						
EPA 8260D SIM												
1,1-Dichloroethene	0.226	0.0100	0.0200	ug/L	1	0.200	---	113	80-120%	---	---	
cis-1,2-Dichloroethene	0.239	0.0100	0.0200	ug/L	1	0.200	---	120	80-120%	---	---	
trans-1,2-Dichloroethene	0.227	0.0100	0.0200	ug/L	1	0.200	---	114	80-120%	---	---	
Trichloroethene (TCE)	0.189	0.0100	0.0200	ug/L	1	0.200	---	94	80-120%	---	---	
Vinyl chloride	0.235	0.0100	0.0200	ug/L	1	0.200	---	117	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 106 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		104 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		96 %		80-120 %		"						
Duplicate (23F0902-DUP1)						Prepared: 06/25/23 11:48    Analyzed: 06/25/23 20:13						
QC Source Sample: GS-061523-12 (A3F1249-03)												
EPA 8260D SIM												
1,1-Dichloroethene	ND	0.250	0.500	ug/L	25	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	0.250	0.500	ug/L	25	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	0.250	0.500	ug/L	25	---	ND	---	---	---	30%	
Trichloroethene (TCE)	ND	0.250	0.500	ug/L	25	---	ND	---	---	---	30%	
Vinyl chloride	ND	0.250	0.500	ug/L	25	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 107 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		104 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		86 %		80-120 %		"						

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Project: **Gasco-MGP Only-Prod. Wells 2Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3F1249 - 09 12 23 1015**

## 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 23F0902 - EPA 5030C						Water						
Matrix Spike (23F0902-MS1)				Prepared: 06/25/23 11:48   Analyzed: 06/25/23 16:10								
QC Source Sample: Non-SDG (A3F1132-01)												
EPA 8260D SIM												
1,1-Dichloroethene	6.52	0.250	0.500	ug/L	25	5.00	ND	130	71-131%	---	---	
cis-1,2-Dichloroethene	6.70	0.250	0.500	ug/L	25	5.00	ND	134	78-123%	---	---	Q-01
trans-1,2-Dichloroethene	6.41	0.250	0.500	ug/L	25	5.00	ND	128	75-124%	---	---	Q-01
Trichloroethene (TCE)	5.11	0.250	0.500	ug/L	25	5.00	ND	102	79-123%	---	---	
Vinyl chloride	6.88	0.250	0.500	ug/L	25	5.00	ND	138	58-137%	---	---	Q-01
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 98 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		104 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		96 %		80-120 %		"						
Matrix Spike Dup (23F0902-MSD1)				Prepared: 06/25/23 11:48   Analyzed: 06/25/23 16:37								
QC Source Sample: Non-SDG (A3F1132-01)												
1,1-Dichloroethene	6.75	0.250	0.500	ug/L	25	5.00	ND	135	71-131%	3	30%	Q-01
cis-1,2-Dichloroethene	7.00	0.250	0.500	ug/L	25	5.00	ND	140	78-123%	4	30%	Q-01
trans-1,2-Dichloroethene	6.71	0.250	0.500	ug/L	25	5.00	ND	134	75-124%	4	30%	Q-01
Trichloroethene (TCE)	5.19	0.250	0.500	ug/L	25	5.00	ND	104	79-123%	2	30%	
Vinyl chloride	7.02	0.250	0.500	ug/L	25	5.00	ND	140	58-137%	2	30%	Q-01
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 98 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		104 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		97 %		80-120 %		"						

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Project Number: 000029-02.84 T-01.001E

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A3F1249 - 09 12 23 1015

## 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 23F0693 - EPA 3511 (Bottle Extraction)						Water						
Blank (23F0693-BLK1)			Prepared: 06/20/23 07:45    Analyzed: 06/20/23 14:31									
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	---	---	---	---	---	---	
Dibenzofuran	ND	0.0160	0.0320	ug/L	1	---	---	---	---	---	---	
Surr: Acenaphthylene-d8 (Surr)		Recovery: 84 %		Limits: 78-134 %		Dilution: 1x						
Benzo(a)pyrene-d12 (Surr)		100 %		80-132 %		"						

LCS (23F0693-BS1)

Prepared: 06/20/23 07:45 Analyzed: 06/20/23 15:04

EPA 8270E LVI												
Acenaphthene	1.55	0.0160	0.0320	ug/L	1	1.60	---	97	80-120%	---	---	
Acenaphthylene	1.40	0.0160	0.0320	ug/L	1	1.60	---	88	80-124%	---	---	
Anthracene	1.51	0.0160	0.0320	ug/L	1	1.60	---	94	80-123%	---	---	
Benz(a)anthracene	1.50	0.00800	0.0160	ug/L	1	1.60	---	94	80-122%	---	---	
Benzo(a)pyrene	1.53	0.00800	0.0160	ug/L	1	1.60	---	96	80-129%	---	---	
Benzo(b)fluoranthene	1.63	0.00800	0.0160	ug/L	1	1.60	---	102	80-124%	---	---	
Benzo(k)fluoranthene	1.52	0.00800	0.0160	ug/L	1	1.60	---	95	80-125%	---	---	
Benzo(g,h,i)perylene	1.76	0.0160	0.0320	ug/L	1	1.60	---	110	80-120%	---	---	
Chrysene	1.54	0.00800	0.0160	ug/L	1	1.60	---	96	80-120%	---	---	

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## QUALITY CONTROL (QC) SAMPLE RESULTS

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

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23F0693 - EPA 3511 (Bottle Extraction)						Water						
LCS (23F0693-BS1)			Prepared: 06/20/23 07:45    Analyzed: 06/20/23 15:04									
Dibenz(a,h)anthracene	1.49	0.00800	0.0160	ug/L	1	1.60	---	93	80-120%	---	---	
Fluoranthene	1.62	0.0160	0.0320	ug/L	1	1.60	---	101	80-126%	---	---	
Fluorene	1.58	0.0160	0.0320	ug/L	1	1.60	---	99	77-127%	---	---	
Indeno(1,2,3-cd)pyrene	1.51	0.00800	0.0160	ug/L	1	1.60	---	95	80-121%	---	---	
1-Methylnaphthalene	1.48	0.0320	0.0640	ug/L	1	1.60	---	92	53-148%	---	---	
2-Methylnaphthalene	1.45	0.0320	0.0640	ug/L	1	1.60	---	90	48-150%	---	---	
Naphthalene	1.54	0.0320	0.0640	ug/L	1	1.60	---	96	78-120%	---	---	
Phenanthrene	1.48	0.0320	0.0640	ug/L	1	1.60	---	92	80-120%	---	---	
Pyrene	1.62	0.0160	0.0320	ug/L	1	1.60	---	101	80-125%	---	---	
Dibenzofuran	1.41	0.0160	0.0320	ug/L	1	1.60	---	88	76-121%	---	---	
Surr: Acenaphthylene-d8 (Surr)		Recovery: 84 %		Limits: 78-134 %		Dilution: 1x						
Benzo(a)pyrene-d12 (Surr)		102 %		80-132 %		"						
LCS Dup (23F0693-BSD1)						Prepared: 06/20/23 07:45    Analyzed: 06/20/23 15:37						Q-19
EPA 8270E LVI												
Acenaphthene	1.56	0.0160	0.0320	ug/L	1	1.60	---	98	80-120%	1	30%	
Acenaphthylene	1.45	0.0160	0.0320	ug/L	1	1.60	---	91	80-124%	3	30%	
Anthracene	1.53	0.0160	0.0320	ug/L	1	1.60	---	96	80-123%	2	30%	
Benz(a)anthracene	1.53	0.00800	0.0160	ug/L	1	1.60	---	95	80-122%	2	30%	
Benzo(a)pyrene	1.59	0.00800	0.0160	ug/L	1	1.60	---	100	80-129%	4	30%	
Benzo(b)fluoranthene	1.63	0.00800	0.0160	ug/L	1	1.60	---	102	80-124%	0.4	30%	
Benzo(k)fluoranthene	1.56	0.00800	0.0160	ug/L	1	1.60	---	97	80-125%	3	30%	
Benzo(g,h,i)perylene	1.72	0.0160	0.0320	ug/L	1	1.60	---	107	80-120%	3	30%	
Chrysene	1.54	0.00800	0.0160	ug/L	1	1.60	---	96	80-120%	0.2	30%	
Dibenz(a,h)anthracene	1.53	0.00800	0.0160	ug/L	1	1.60	---	96	80-120%	3	30%	
Fluoranthene	1.66	0.0160	0.0320	ug/L	1	1.60	---	104	80-126%	3	30%	
Fluorene	1.65	0.0160	0.0320	ug/L	1	1.60	---	103	77-127%	5	30%	
Indeno(1,2,3-cd)pyrene	1.56	0.00800	0.0160	ug/L	1	1.60	---	97	80-121%	3	30%	
1-Methylnaphthalene	1.56	0.0320	0.0640	ug/L	1	1.60	---	98	53-148%	6	30%	
2-Methylnaphthalene	1.56	0.0320	0.0640	ug/L	1	1.60	---	97	48-150%	7	30%	
Naphthalene	1.55	0.0320	0.0640	ug/L	1	1.60	---	97	78-120%	0.8	30%	
Phenanthrene	1.50	0.0320	0.0640	ug/L	1	1.60	---	94	80-120%	1	30%	
Pyrene	1.66	0.0160	0.0320	ug/L	1	1.60	---	104	80-125%	3	30%	
Dibenzofuran	1.47	0.0160	0.0320	ug/L	1	1.60	---	92	76-121%	4	30%	

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# ANALYTICAL REPORT

Apex Laboratories, LLC

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

**Anchor QEA, LLC**

6720 SW Macadam Ave. Suite 125  
Portland, OR 97219

Project: **Gasco-MGP Only-Prod. Wells 2Q 2023 Perf. Mon**

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

Project Manager: **John Renda**

**Report ID:**

**A3F1249 - 09 12 23 1015**

## 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 23F0693 - EPA 3511 (Bottle Extraction)						Water						
LCS Dup (23F0693-BSD1)			Prepared: 06/20/23 07:45 Analyzed: 06/20/23 15:37								Q-19	
Surr: Acenaphthylene-d8 (Surr)			Recovery: 84 %	Limits: 78-134 %	Dilution: 1x							
Benzo(a)pyrene-d12 (Surr)			103 %	80-132 %								

Apex Laboratories

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## ANALYTICAL REPORT

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Project: Gasco-MGP Only-Prod. Wells 2Q 2023 Perf. Mon

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1249 - 09 12 23 1015

## 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 23F0834 - EPA 3015A						Water						
Blank (23F0834-BLK1)			Prepared: 06/22/23 14:28   Analyzed: 06/26/23 18:46									
EPA 6020B												
Aluminum	ND	25.0	50.0	ug/L	1	---	---	---	---	---	---	
Antimony	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Arsenic	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Barium	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
Beryllium	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Cadmium	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Chromium	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
Copper	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
Iron	ND	25.0	50.0	ug/L	1	---	---	---	---	---	---	
Lead	ND	0.110	0.200	ug/L	1	---	---	---	---	---	---	
Manganese	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Mercury	ND	0.0400	0.0800	ug/L	1	---	---	---	---	---	---	
Nickel	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
Selenium	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Silver	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Thallium	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Vanadium	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
Zinc	ND	2.00	4.00	ug/L	1	---	---	---	---	---	---	

LCS (23F0834-BS1)

Prepared: 06/22/23 14:28 Analyzed: 06/26/23 18:52

EPA 6020B												
Aluminum	2850	25.0	50.0	ug/L	1	2780	---	103	80-120%	---	---	
Antimony	29.6	0.500	1.00	ug/L	1	27.8	---	107	80-120%	---	---	
Arsenic	54.9	0.500	1.00	ug/L	1	55.6	---	99	80-120%	---	---	
Barium	57.9	1.00	2.00	ug/L	1	55.6	---	104	80-120%	---	---	
Beryllium	25.1	0.100	0.200	ug/L	1	27.8	---	91	80-120%	---	---	
Cadmium	56.4	0.100	0.200	ug/L	1	55.6	---	102	80-120%	---	---	
Chromium	52.9	1.00	2.00	ug/L	1	55.6	---	95	80-120%	---	---	
Copper	57.0	1.00	2.00	ug/L	1	55.6	---	103	80-120%	---	---	
Iron	2940	25.0	50.0	ug/L	1	2780	---	106	80-120%	---	---	
Lead	55.7	0.110	0.200	ug/L	1	55.6	---	100	80-120%	---	---	
Manganese	56.4	0.500	1.00	ug/L	1	55.6	---	101	80-120%	---	---	
Mercury	1.04	0.0400	0.0800	ug/L	1	1.11	---	93	80-120%	---	---	

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## ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

**Anchor QEA, LLC**

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

Project: **Gasco-MGP Only-Prod. Wells 2Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3F1249 - 09 12 23 1015**

## 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 23F0834 - EPA 3015A						Water						
LCS (23F0834-BS1)			Prepared: 06/22/23 14:28		Analyzed: 06/26/23 18:52							
Nickel	56.2	1.00	2.00	ug/L	1	55.6	---	101	80-120%	---	---	
Selenium	28.3	0.500	1.00	ug/L	1	27.8	---	102	80-120%	---	---	
Silver	27.4	0.100	0.200	ug/L	1	27.8	---	99	80-120%	---	---	
Thallium	29.6	0.100	0.200	ug/L	1	27.8	---	107	80-120%	---	---	
Vanadium	53.5	1.00	2.00	ug/L	1	55.6	---	96	80-120%	---	---	
Zinc	57.8	2.00	4.00	ug/L	1	55.6	---	104	80-120%	---	---	
Duplicate (23F0834-DUP1)			Prepared: 06/22/23 14:28		Analyzed: 06/26/23 19:31							
QC Source Sample: Non-SDG (A3F1132-01)												
Aluminum	ND	25.0	50.0	ug/L	1	---	ND	---	---	---	20%	
Antimony	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	20%	
Arsenic	0.830	0.500	1.00	ug/L	1	---	0.842	---	---	1	20%	J
Barium	12.0	1.00	2.00	ug/L	1	---	12.0	---	---	0.2	20%	
Cadmium	ND	0.100	0.200	ug/L	1	---	ND	---	---	---	20%	
Chromium	ND	1.00	2.00	ug/L	1	---	2.90	---	---	***	20%	Q-05
Copper	ND	1.00	2.00	ug/L	1	---	1.05	---	---	***	20%	
Iron	4270	25.0	50.0	ug/L	1	---	4380	---	---	3	20%	
Manganese	318	0.500	1.00	ug/L	1	---	325	---	---	2	20%	
Nickel	6.49	1.00	2.00	ug/L	1	---	6.00	---	---	8	20%	
Selenium	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	20%	
Silver	ND	0.100	0.200	ug/L	1	---	ND	---	---	---	20%	
Thallium	ND	0.100	0.200	ug/L	1	---	ND	---	---	---	20%	
Vanadium	1.27	1.00	2.00	ug/L	1	---	1.30	---	---	2	20%	J
Zinc	3.66	2.00	4.00	ug/L	1	---	ND	---	---	---	20%	J
Duplicate (23F0834-DUP2)			Prepared: 06/22/23 14:28		Analyzed: 06/27/23 22:18							
QC Source Sample: Non-SDG (A3F1132-01RE1)												
Beryllium	ND	0.100	0.200	ug/L	1	---	ND	---	---	---	20%	Q-16
Lead	ND	0.110	0.200	ug/L	1	---	ND	---	---	---	20%	Q-16
Mercury	ND	0.0400	0.0800	ug/L	1	---	ND	---	---	---	20%	Q-16

**Matrix Spike (23F0834-MS1)**

Prepared: 06/22/23 14:28 Analyzed: 06/26/23 19:37

**QC Source Sample: Non-SDG (A3F1132-01)**

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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 2Q 2023 Perf. Mon

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1249 - 09 12 23 1015

## 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 23F0834 - EPA 3015A						Water						
Matrix Spike (23F0834-MS1)				Prepared: 06/22/23 14:28		Analyzed: 06/26/23 19:37						
QC Source Sample: Non-SDG (A3F1132-01)												
EPA 6020B												
Aluminum	2950	25.0	50.0	ug/L	1	2780	ND	106	75-125%	---	---	
Antimony	30.5	0.500	1.00	ug/L	1	27.8	ND	110	75-125%	---	---	
Arsenic	57.2	0.500	1.00	ug/L	1	55.6	0.842	101	75-125%	---	---	
Barium	71.0	1.00	2.00	ug/L	1	55.6	12.0	106	75-125%	---	---	
Cadmium	57.4	0.100	0.200	ug/L	1	55.6	ND	103	75-125%	---	---	
Chromium	54.7	1.00	2.00	ug/L	1	55.6	2.90	93	75-125%	---	---	
Copper	58.9	1.00	2.00	ug/L	1	55.6	1.05	104	75-125%	---	---	
Iron	7410	25.0	50.0	ug/L	1	2780	4380	109	75-125%	---	---	
Manganese	375	0.500	1.00	ug/L	1	55.6	325	90	75-125%	---	---	
Nickel	63.9	1.00	2.00	ug/L	1	55.6	6.00	104	75-125%	---	---	
Selenium	29.2	0.500	1.00	ug/L	1	27.8	ND	105	75-125%	---	---	
Silver	27.9	0.100	0.200	ug/L	1	27.8	ND	101	75-125%	---	---	
Thallium	29.7	0.100	0.200	ug/L	1	27.8	ND	107	75-125%	---	---	
Vanadium	56.7	1.00	2.00	ug/L	1	55.6	1.30	100	75-125%	---	---	
Zinc	60.4	2.00	4.00	ug/L	1	55.6	ND	109	75-125%	---	---	
Matrix Spike (23F0834-MS2)				Prepared: 06/22/23 14:28		Analyzed: 06/27/23 22:23						
QC Source Sample: Non-SDG (A3F1132-01RE1)												
EPA 6020B												
Beryllium	27.8	0.100	0.200	ug/L	1	27.8	ND	100	75-125%	---	---	Q-16
Lead	53.7	0.110	0.200	ug/L	1	55.6	ND	97	75-125%	---	---	Q-16
Mercury	1.00	0.0400	0.0800	ug/L	1	1.11	ND	90	75-125%	---	---	Q-16
Matrix Spike Dup (23F0834-MSD1)				Prepared: 06/22/23 14:28		Analyzed: 06/26/23 19:43						
QC Source Sample: Non-SDG (A3F1132-01)												
Aluminum	2970	25.0	50.0	ug/L	1	2780	ND	107	75-125%	0.6	20%	
Antimony	30.8	0.500	1.00	ug/L	1	27.8	ND	111	75-125%	0.9	20%	
Arsenic	56.8	0.500	1.00	ug/L	1	55.6	0.842	101	75-125%	0.7	20%	
Barium	71.6	1.00	2.00	ug/L	1	55.6	12.0	107	75-125%	0.9	20%	
Cadmium	56.5	0.100	0.200	ug/L	1	55.6	ND	102	75-125%	2	20%	
Chromium	54.4	1.00	2.00	ug/L	1	55.6	2.90	93	75-125%	0.6	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 2Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3F1249 - 09 12 23 1015****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 23F0834 - EPA 3015A						Water						
Matrix Spike Dup (23F0834-MSD1)			Prepared: 06/22/23 14:28		Analyzed: 06/26/23 19:43							
QC Source Sample: Non-SDG (A3F1132-01)												
Copper	59.9	1.00	2.00	ug/L	1	55.6	1.05	106	75-125%	2	20%	
Iron	7390	25.0	50.0	ug/L	1	2780	4380	108	75-125%	0.3	20%	
Manganese	390	0.500	1.00	ug/L	1	55.6	325	117	75-125%	4	20%	
Nickel	63.7	1.00	2.00	ug/L	1	55.6	6.00	104	75-125%	0.3	20%	
Selenium	28.9	0.500	1.00	ug/L	1	27.8	ND	104	75-125%	1	20%	
Silver	28.4	0.100	0.200	ug/L	1	27.8	ND	102	75-125%	2	20%	
Thallium	30.4	0.100	0.200	ug/L	1	27.8	ND	109	75-125%	3	20%	
Vanadium	56.9	1.00	2.00	ug/L	1	55.6	1.30	100	75-125%	0.4	20%	
Zinc	61.4	2.00	4.00	ug/L	1	55.6	ND	111	75-125%	2	20%	
Matrix Spike Dup (23F0834-MSD2)			Prepared: 06/22/23 14:28		Analyzed: 06/27/23 22:28							
QC Source Sample: Non-SDG (A3F1132-01RE1)												
Beryllium	28.7	0.100	0.200	ug/L	1	27.8	ND	103	75-125%	3	20%	Q-16
Lead	53.5	0.110	0.200	ug/L	1	55.6	ND	96	75-125%	0.2	20%	Q-16
Mercury	1.02	0.0400	0.0800	ug/L	1	1.11	ND	92	75-125%	2	20%	Q-16

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## ANALYTICAL REPORT

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6700 S.W. Sandburg Street  
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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 2Q 2023 Perf. Mon

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1249 - 09 12 23 1015

## 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 23F0720 - Lachat Micro Dist - aqueous						Water						
Blank (23F0720-BLK1)			Prepared: 06/20/23 12:04   Analyzed: 06/21/23 12:42									
EPA 335.4												
Total Cyanide	ND	0.00500	0.00500	mg/L	1	---	---	---	---	---	---	
LCS (23F0720-BS1)			Prepared: 06/20/23 12:04   Analyzed: 06/21/23 12:44									
EPA 335.4												
Total Cyanide	0.239	0.00500	0.00500	mg/L	1	0.250	---	96	90-110%	---	---	
Duplicate (23F0720-DUP3)			Prepared: 06/20/23 12:04   Analyzed: 06/21/23 14:14									
QC Source Sample: Non-SDG (A3F1178-01RE1)												
Total Cyanide	0.579	0.0100	0.0100	mg/L	2	---	0.587	---	---	1	10%	Q-16
Matrix Spike (23F0720-MS1)			Prepared: 06/20/23 12:04   Analyzed: 06/21/23 12:52									
QC Source Sample: Non-SDG (A3F1132-01)												
EPA 335.4												
Total Cyanide	0.240	0.00500	0.00500	mg/L	1	0.250	0.00690	93	90-110%	---	---	
Matrix Spike (23F0720-MS3)			Prepared: 06/20/23 12:04   Analyzed: 06/21/23 14:16									
QC Source Sample: Non-SDG (A3F1178-01RE1)												
EPA 335.4												
Total Cyanide	0.813	0.0100	0.0100	mg/L	2	0.250	0.587	90	90-110%	---	---	Q-16
Matrix Spike Dup (23F0720-MSD1)			Prepared: 06/20/23 12:04   Analyzed: 06/21/23 12:54									
QC Source Sample: Non-SDG (A3F1132-01)												
Total Cyanide	0.239	0.00500	0.00500	mg/L	1	0.250	0.00690	93	90-110%	0.5	10%	

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Tigard, OR 97223  
503-718-2323  
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125  
Portland, OR 97219Project: **Gasco-MGP Only-Prod. Wells 2Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3F1249 - 09 12 23 1015****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 23F0918 - Method Prep: Aq						Water						
Blank (23F0918-BLK1)			Prepared: 06/26/23 08:35    Analyzed: 06/27/23 11:09									
D6888-09												
Available Cyanide	ND	0.00100	0.00200	mg/L	1	---	---	---	---	---	---	
LCS (23F0918-BS1)			Prepared: 06/26/23 08:35    Analyzed: 06/27/23 11:10									
D6888-09												
Available Cyanide	0.0246	0.00100	0.00200	mg/L	1	0.0250	---	98	90-117%	---	---	
Matrix Spike (23F0918-MS1)			Prepared: 06/26/23 08:35    Analyzed: 06/27/23 11:19									
QC Source Sample: Non-SDG (A3F1178-03)												
D6888-09												
Available Cyanide	0.0254	0.00101	0.00201	mg/L	1	0.0251	0.00164	95	82-130%	---	---	
Matrix Spike (23F0918-MS2)			Prepared: 06/26/23 08:35    Analyzed: 06/27/23 11:40									
QC Source Sample: GS-061523-13 (A3F1249-04)												
D6888-09												
Available Cyanide	0.0253	0.00101	0.00201	mg/L	1	0.0251	0.00160	94	82-130%	---	---	
Matrix Spike Dup (23F0918-MSD1)			Prepared: 06/26/23 08:35    Analyzed: 06/27/23 11:21									
QC Source Sample: Non-SDG (A3F1178-03)												
Available Cyanide	0.0258	0.00101	0.00201	mg/L	1	0.0251	0.00164	96	82-130%	1	11%	
Matrix Spike Dup (23F0918-MSD2)			Prepared: 06/26/23 08:35    Analyzed: 06/27/23 11:42									
QC Source Sample: GS-061523-13 (A3F1249-04)												
D6888-09												
Available Cyanide	0.0252	0.00101	0.00201	mg/L	1	0.0251	0.00160	94	82-130%	0.06	11%	

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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 2Q 2023 Perf. Mon

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1249 - 09 12 23 1015

## 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 23F0695 - Microdiffusion						Water						
Blank (23F0695-BLK1)			Prepared: 06/20/23 09:00		Analyzed: 06/20/23 14:50							
<u>D4282-02</u>												
Free Cyanide	ND	0.00250	0.00500	mg/L	1	---	---	---	---	---	---	
LCS (23F0695-BS1)			Prepared: 06/20/23 09:00		Analyzed: 06/20/23 14:50							
<u>D4282-02</u>												
Free Cyanide	0.0634	0.00250	0.00500	mg/L	1	0.0667	---	95	74-120%	---	---	
LCS Dup (23F0695-BSD1)			Prepared: 06/20/23 09:00		Analyzed: 06/20/23 14:56							
<u>D4282-02</u>												
Free Cyanide	0.0637	0.00250	0.00500	mg/L	1	0.0667	---	96	74-120%	0.4	20%	
Duplicate (23F0695-DUP1)			Prepared: 06/20/23 09:00		Analyzed: 06/20/23 14:57							
<u>QC Source Sample: GS-061523-10 (A3F1249-01)</u>												
<u>D4282-02</u>												
Free Cyanide	ND	0.00250	0.00500	mg/L	1	---	ND	---	---	---	20%	
Matrix Spike (23F0695-MS1)			Prepared: 06/20/23 09:00		Analyzed: 06/20/23 14:57							
<u>QC Source Sample: GS-061523-10 (A3F1249-01)</u>												
<u>D4282-02</u>												
Free Cyanide	0.0669	0.00250	0.00500	mg/L	1	0.0667	ND	100	74-120%	---	---	

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Project Number: **000029-02.84 T-01.001E**  
Project Manager: **John Renda**

**Report ID:**

**A3F1249 - 09 12 23 1015**

## Analytical Resources, LLC

### QUALITY CONTROL (QC) SAMPLE RESULTS

#### Washington Department of Ecology Methods

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch BLF0596 - EPA 3510C SepF						Water						
Blank (BLF0596-BLK1)			Prepared: 06/23/23 10:13    Analyzed: 07/11/23 12:45									
WAEPH												
C8-C10 Aliphatics	ND	---	40	ug/L	1	---	---	---	---	---	---	U
>C10-C12 Aliphatics	ND	---	40	ug/L	1	---	---	---	---	---	---	U
>C12-C16 Aliphatics	ND	---	40	ug/L	1	---	---	---	---	---	---	U
>C16-C21 Aliphatics	ND	---	40	ug/L	1	---	---	---	---	---	---	U
>C21-C34 Aliphatics	ND	---	40	ug/L	1	---	---	---	---	---	---	U
Surr: 1-Chloro-octadecane		Recovery: 46.3 %		Limits: 36-120 %		Dilution: 1x						
Blank (BLF0596-BLK2)			Prepared: 06/23/23 10:13    Analyzed: 07/12/23 13:47									
WAEPH												
C8-C10 Aromatics	ND	---	40	ug/L	1	---	---	---	---	---	---	U
>C10-C12 Aromatics	ND	---	40	ug/L	1	---	---	---	---	---	---	U
>C12-C16 Aromatics	ND	---	40	ug/L	1	---	---	---	---	---	---	U
>C16-C21 Aromatics	ND	---	40	ug/L	1	---	---	---	---	---	---	U
>C21-C34 Aromatics	ND	---	40	ug/L	1	---	---	---	---	---	---	U
Surr: o-Terphenyl		Recovery: 58.1 %		Limits: 41-120 %		Dilution: 1x						
LCS (BLF0596-BS1)			Prepared: 06/23/23 10:13    Analyzed: 07/11/23 13:11									
WAEPH												
C8-C10 Aliphatics	140	---	40	ug/L	1	300.00	---	46.8	12-130%	---	---	
>C10-C12 Aliphatics	353	---	40	ug/L	1	300.00	---	118	10-130%	---	---	
>C12-C16 Aliphatics	358	---	40	ug/L	1	300.00	---	119	35-130%	---	---	
>C16-C21 Aliphatics	240	---	40	ug/L	1	300.00	---	80.1	45-130%	---	---	
>C21-C34 Aliphatics	164	---	40	ug/L	1	300.00	---	54.7	19-130%	---	---	
Surr: 1-Chloro-octadecane		Recovery: 56.4 %		Limits: 36-120 %		Dilution: 1x						
LCS (BLF0596-BS2)			Prepared: 06/23/23 10:13    Analyzed: 07/12/23 14:12									
WAEPH												
>C10-C12 Aromatics	ND	---	40	ug/L	1	300.00	---	7.53	12-130%	---	---	*, U
>C12-C16 Aromatics	40.6	---	40	ug/L	1	300.00	---	13.5	31-130%	---	---	*
>C16-C21 Aromatics	452	---	40	ug/L	1	600.00	---	75.3	48-130%	---	---	

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Darwin Thomas, Business Development Director



# ANALYTICAL REPORT

Apex Laboratories, LLC

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503-718-2323  
ORELAP ID: OR100062

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Project: **Gasco-MGP Only-Prod. Wells 2Q 2023 Perf. Mon**

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

Project Manager: **John Renda**

**Report ID:**

**A3F1249 - 09 12 23 1015**

## Analytical Resources, LLC

### QUALITY CONTROL (QC) SAMPLE RESULTS

#### Washington Department of Ecology Methods

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch BLF0596 - EPA 3510C SepF						Water						
LCS (BLF0596-BS2)			Prepared: 06/23/23 10:13   Analyzed: 07/12/23 14:12									
>C21-C34 Aromatics	214	---	40	ug/L	1	300.00	---	71.5	33-130%	---	---	
Surr: o-Terphenyl		Recovery: 61.9 %		Limits: 41-120 %		Dilution: 1x						
LCS Dup (BLF0596-BSD1)			Prepared: 06/23/23 10:13   Analyzed: 07/11/23 13:36									
WAEPH												
C8-C10 Aliphatics	143	---	40	ug/L	1	300.00	---	47.8	12-130%	2.11	30%	
>C10-C12 Aliphatics	353	---	40	ug/L	1	300.00	---	118	10-130%	0.113	30%	
>C12-C16 Aliphatics	382	---	40	ug/L	1	300.00	---	127	35-130%	6.60	30%	
>C16-C21 Aliphatics	273	---	40	ug/L	1	300.00	---	90.9	45-130%	12.6	30%	
>C21-C34 Aliphatics	183	---	40	ug/L	1	300.00	---	61.1	19-130%	11.0	30%	
Surr: 1-Chloro-octadecane		Recovery: 58.5 %		Limits: 36-120 %		Dilution: 1x						
LCS Dup (BLF0596-BSD2)			Prepared: 06/23/23 10:13   Analyzed: 07/12/23 14:37									
WAEPH												
>C10-C12 Aromatics	ND	---	40	ug/L	1	300.00	---	7.27	12-130%	3.60	30%	*, U
>C12-C16 Aromatics	ND	---	40	ug/L	1	300.00	---	9.93	31-130%	30.7	30%	*, U
>C16-C21 Aromatics	441	---	40	ug/L	1	600.00	---	73.5	48-130%	2.33	30%	
>C21-C34 Aromatics	222	---	40	ug/L	1	300.00	---	73.9	33-130%	3.39	30%	
Surr: o-Terphenyl		Recovery: 64.5 %		Limits: 41-120 %		Dilution: 1x						

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## ANALYTICAL REPORT

Apex Laboratories, LLC

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503-718-2323  
ORELAP ID: OR100062

## Anchor QEA, LLC

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Project: Gasco-MGP Only-Prod. Wells 2Q 2023 Perf. Mon

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1249 - 09 12 23 1015

## Analytical Resources, LLC

## QUALITY CONTROL (QC) SAMPLE RESULTS

## Washington Department of Ecology Methods

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch BLF0691 - EPA 5030C (Purge and Trap)						Water						
Blank (BLF0691-BLK1)			Prepared: 06/23/23 07:16   Analyzed: 06/23/23 17:02									
WAVPH												
C5-C6 Aliphatics	ND	---	50	ug/L	1	---	---	---	---	---	---	U
>C6-C8 Aliphatics	ND	---	50	ug/L	1	---	---	---	---	---	---	U
>C8-C10 Aliphatics	ND	---	50	ug/L	1	---	---	---	---	---	---	U
>C10-C12 Aliphatics	ND	---	50	ug/L	1	---	---	---	---	---	---	U
C8-C10 Aromatics	ND	---	50	ug/L	1	---	---	---	---	---	---	U
>C10-C12 Aromatics	ND	---	50	ug/L	1	---	---	---	---	---	---	U
>C12-C13 Aromatics	ND	---	50	ug/L	1	---	---	---	---	---	---	U
Methyl tert-butyl Ether	ND	---	5	ug/L	1	---	---	---	---	---	---	U
Benzene	ND	---	5	ug/L	1	---	---	---	---	---	---	U
Toluene	ND	---	5	ug/L	1	---	---	---	---	---	---	U
Ethylbenzene	ND	---	5	ug/L	1	---	---	---	---	---	---	U
1,2,3-Trimethylbenzene	ND	---	5	ug/L	1	---	---	---	---	---	---	U
m,p-Xylene	ND	---	10	ug/L	1	---	---	---	---	---	---	U
Naphthalene	ND	---	5	ug/L	1	---	---	---	---	---	---	U
1-Methylnaphthalene	ND	---	5	ug/L	1	---	---	---	---	---	---	U
o-Xylene	ND	---	5	ug/L	1	---	---	---	---	---	---	U
n-Pentane	ND	---	5	ug/L	1	---	---	---	---	---	---	U
n-Hexane	ND	---	5	ug/L	1	---	---	---	---	---	---	U
n-Octane	ND	---	5	ug/L	1	---	---	---	---	---	---	U
n-Decane	ND	---	5	ug/L	1	---	---	---	---	---	---	U
n-Dodecane	ND	---	5	ug/L	1	---	---	---	---	---	---	U
Surr: PID: 2,5-Dibromotoluene		Recovery: 67.6 %		Limits: 60-140 %		Dilution: 1x						
FID: 2,5-Dibromotoluene		72.2 %		60-140 %		"						

## LCS (BLF0691-BS1)

Prepared: 06/23/23 07:16 Analyzed: 06/23/23 16:00

WAVPH												
C5-C6 Aliphatics	98.0	---	50	ug/L	1	---	---	---	---	---	---	
>C6-C8 Aliphatics	53.6	---	50	ug/L	1	---	---	---	---	---	---	
>C8-C10 Aliphatics	75.1	---	50	ug/L	1	---	---	---	---	---	---	
>C10-C12 Aliphatics	84.2	---	50	ug/L	1	---	---	---	---	---	---	
C8-C10 Aromatics	317	---	50	ug/L	1	---	---	---	---	---	---	

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Darwin Thomas, Business Development Director



## ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

**Anchor QEA, LLC**

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

Project: **Gasco-MGP Only-Prod. Wells 2Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3F1249 - 09 12 23 1015****Analytical Resources, LLC****QUALITY CONTROL (QC) SAMPLE RESULTS****Washington Department of Ecology Methods**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch BLF0691 - EPA 5030C (Purge and Trap)</b>						<b>Water</b>						
<b>LCS (BLF0691-BS1)</b>						Prepared: 06/23/23 07:16 Analyzed: 06/23/23 16:00						
>C10-C12 Aromatics	57.7	---	50	ug/L	1	---	---	---	---	---	---	U
>C12-C13 Aromatics	ND	---	50	ug/L	1	---	---	---	---	---	---	U
Methyl tert-butyl Ether	57.7	---	5	ug/L	1	50.000	---	115	80-131%	---	---	
Benzene	59.5	---	5	ug/L	1	50.000	---	119	68-136%	---	---	
Toluene	56.6	---	5	ug/L	1	50.000	---	113	70-145%	---	---	
Ethylbenzene	48.0	---	5	ug/L	1	50.000	---	96.0	70-130%	---	---	
1,2,3-Trimethylbenzene	47.8	---	5	ug/L	1	50.000	---	95.6	70-130%	---	---	
m,p-Xylene	95.3	---	10	ug/L	1	100.00	---	95.3	70-133%	---	---	
Naphthalene	47.4	---	5	ug/L	1	50.000	---	94.8	70-130%	---	---	
1-Methylnaphthalene	44.1	---	5	ug/L	1	50.000	---	88.2	70-130%	---	---	
o-Xylene	51.9	---	5	ug/L	1	50.000	---	104	70-130%	---	---	
n-Pentane	53.5	---	5	ug/L	1	50.000	---	107	70-130%	---	---	
n-Hexane	48.9	---	5	ug/L	1	50.000	---	97.8	70-130%	---	---	
n-Octane	37.6	---	5	ug/L	1	50.000	---	75.2	56-120%	---	---	
n-Decane	39.9	---	5	ug/L	1	50.000	---	79.8	61-120%	---	---	
n-Dodecane	47.6	---	5	ug/L	1	50.000	---	95.2	70-130%	---	---	
Surr: PID: 2,5-Dibromotoluene		Recovery: 78.9 %		Limits: 60-140 %		Dilution: 1x						
FID: 2,5-Dibromotoluene		81.8 %		60-140 %		"						

**LCS Dup (BLF0691-BSD1)**

Prepared: 06/23/23 07:16 Analyzed: 06/23/23 16:31

<b>WAVPH</b>												
C5-C6 Aliphatics	62.8	---	50	ug/L	1	---	---	---	---	<b>43.8</b>	<b>30%</b>	*
>C6-C8 Aliphatics	ND	---	50	ug/L	1	---	---	---	---	17.0	30%	U
>C8-C10 Aliphatics	75.1	---	50	ug/L	1	---	---	---	---	0.00	30%	
>C10-C12 Aliphatics	78.6	---	50	ug/L	1	---	---	---	---	6.88	30%	
C8-C10 Aromatics	273	---	50	ug/L	1	---	---	---	---	15.2	30%	
>C10-C12 Aromatics	52.6	---	50	ug/L	1	---	---	---	---	9.25	30%	
>C12-C13 Aromatics	ND	---	50	ug/L	1	---	---	---	---	16.2	30%	U
Methyl tert-butyl Ether	51.4	---	5	ug/L	1	50.000	---	103	80-131%	11.5	30%	
Benzene	50.6	---	5	ug/L	1	50.000	---	101	68-136%	16.2	30%	
Toluene	46.4	---	5	ug/L	1	50.000	---	92.8	70-145%	19.8	30%	
Ethylbenzene	40.4	---	5	ug/L	1	50.000	---	80.8	70-130%	17.2	30%	

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Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch BLF0691 - EPA 5030C (Purge and Trap)							Water					
LCS Dup (BLF0691-BSD1)			Prepared: 06/23/23 07:16 Analyzed: 06/23/23 16:31									
1,2,3-Trimethylbenzene	40.3	---	5	ug/L	1	50.000	---	80.6	70-130%	17.0	30%	
m,p-Xylene	80.2	---	10	ug/L	1	100.00	---	80.2	70-133%	17.2	30%	
Naphthalene	42.6	---	5	ug/L	1	50.000	---	85.2	70-130%	10.7	30%	
1-Methylnaphthalene	37.5	---	5	ug/L	1	50.000	---	75.0	70-130%	16.2	30%	
o-Xylene	44.3	---	5	ug/L	1	50.000	---	88.6	70-130%	15.8	30%	
n-Pentane	40.2	---	5	ug/L	1	50.000	---	80.4	70-130%	28.4	30%	
n-Hexane	36.7	---	5	ug/L	1	50.000	---	73.4	70-130%	28.5	30%	
n-Octane	36.7	---	5	ug/L	1	50.000	---	73.4	56-120%	2.42	30%	
n-Decane	56.7	---	5	ug/L	1	50.000	---	113	61-120%	34.8	30%	
n-Dodecane	49.5	---	5	ug/L	1	50.000	---	99.0	70-130%	3.91	30%	
Surr: PID: 2,5-Dibromotoluene		Recovery: 59.3 %		Limits: 60-140 %		Dilution: 1x		*				
FID: 2,5-Dibromotoluene		64.0 %		60-140 %		"						

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Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch BLF0696 - EPA 5030C (Purge and Trap)						Water						
Blank (BLF0696-BLK1)			Prepared: 06/26/23 07:19 Analyzed: 06/26/23 10:10									
WAVPH												
C5-C6 Aliphatics	ND	---	50	ug/L	1	---	---	---	---	---	---	U
>C6-C8 Aliphatics	ND	---	50	ug/L	1	---	---	---	---	---	---	U
>C8-C10 Aliphatics	ND	---	50	ug/L	1	---	---	---	---	---	---	U
>C10-C12 Aliphatics	ND	---	50	ug/L	1	---	---	---	---	---	---	U
C8-C10 Aromatics	ND	---	50	ug/L	1	---	---	---	---	---	---	U
>C10-C12 Aromatics	ND	---	50	ug/L	1	---	---	---	---	---	---	U
>C12-C13 Aromatics	ND	---	50	ug/L	1	---	---	---	---	---	---	U
Methyl tert-butyl Ether	ND	---	5	ug/L	1	---	---	---	---	---	---	U
Benzene	ND	---	5	ug/L	1	---	---	---	---	---	---	U
Toluene	ND	---	5	ug/L	1	---	---	---	---	---	---	U
Ethylbenzene	ND	---	5	ug/L	1	---	---	---	---	---	---	U
1,2,3-Trimethylbenzene	ND	---	5	ug/L	1	---	---	---	---	---	---	U
m,p-Xylene	ND	---	10	ug/L	1	---	---	---	---	---	---	U
Naphthalene	ND	---	5	ug/L	1	---	---	---	---	---	---	U
1-Methylnaphthalene	ND	---	5	ug/L	1	---	---	---	---	---	---	U
o-Xylene	ND	---	5	ug/L	1	---	---	---	---	---	---	U
n-Pentane	ND	---	5	ug/L	1	---	---	---	---	---	---	U
n-Hexane	ND	---	5	ug/L	1	---	---	---	---	---	---	U
n-Octane	ND	---	5	ug/L	1	---	---	---	---	---	---	U
n-Decane	ND	---	5	ug/L	1	---	---	---	---	---	---	U
n-Dodecane	ND	---	5	ug/L	1	---	---	---	---	---	---	U
Surr: PID: 2,5-Dibromotoluene		Recovery: 71.7 %		Limits: 60-140 %		Dilution: 1x						
FID: 2,5-Dibromotoluene		75.1 %		60-140 %		"						

**LCS (BLF0696-BS1)**

Prepared: 06/26/23 07:19 Analyzed: 06/26/23 09:09

<b>WAVPH</b>												
C5-C6 Aliphatics	91.6	---	50	ug/L	1	---	---	---	---	---	---	U
>C6-C8 Aliphatics	ND	---	50	ug/L	1	---	---	---	---	---	---	U
>C8-C10 Aliphatics	68.9	---	50	ug/L	1	---	---	---	---	---	---	U
>C10-C12 Aliphatics	81.1	---	50	ug/L	1	---	---	---	---	---	---	U
C8-C10 Aromatics	299	---	50	ug/L	1	---	---	---	---	---	---	U

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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 2Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3F1249 - 09 12 23 1015****Analytical Resources, LLC****QUALITY CONTROL (QC) SAMPLE RESULTS****Washington Department of Ecology Methods**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch BLF0696 - EPA 5030C (Purge and Trap) Water</b>												
<b>LCS (BLF0696-BS1)</b> Prepared: 06/26/23 07:19 Analyzed: 06/26/23 09:09												
>C10-C12 Aromatics	57.4	---	50	ug/L	1	---	---	---	---	---	---	
>C12-C13 Aromatics	ND	---	50	ug/L	1	---	---	---	---	---	---	U
Methyl tert-butyl Ether	54.0	---	5	ug/L	1	50.000	---	108	80-131%	---	---	
Benzene	56.9	---	5	ug/L	1	50.000	---	114	68-136%	---	---	
Toluene	52.4	---	5	ug/L	1	50.000	---	105	70-145%	---	---	
Ethylbenzene	45.0	---	5	ug/L	1	50.000	---	90.0	70-130%	---	---	
1,2,3-Trimethylbenzene	47.2	---	5	ug/L	1	50.000	---	94.4	70-130%	---	---	
m,p-Xylene	87.9	---	10	ug/L	1	100.00	---	87.9	70-133%	---	---	
Naphthalene	47.0	---	5	ug/L	1	50.000	---	94.0	70-130%	---	---	
1-Methylnaphthalene	44.6	---	5	ug/L	1	50.000	---	89.2	70-130%	---	---	
o-Xylene	49.2	---	5	ug/L	1	50.000	---	98.4	70-130%	---	---	
n-Pentane	53.2	---	5	ug/L	1	50.000	---	106	70-130%	---	---	
n-Hexane	46.5	---	5	ug/L	1	50.000	---	93.0	70-130%	---	---	
n-Octane	36.0	---	5	ug/L	1	50.000	---	72.0	56-120%	---	---	
n-Decane	38.9	---	5	ug/L	1	50.000	---	77.8	61-120%	---	---	
n-Dodecane	46.6	---	5	ug/L	1	50.000	---	93.2	70-130%	---	---	
Surr: PID: 2,5-Dibromotoluene Recovery: 81.2 % Limits: 60-140 % Dilution: 1x												
FID: 2,5-Dibromotoluene 84.0 % 60-140 % "												

**LCS Dup (BLF0696-BSD1)**

Prepared: 06/26/23 07:19 Analyzed: 06/26/23 09:39

<b>WAVPH</b>												
C5-C6 Aliphatics	87.9	---	50	ug/L	1	---	---	---	---	4.12	30%	
>C6-C8 Aliphatics	ND	---	50	ug/L	1	---	---	---	---	1.52	30%	U
>C8-C10 Aliphatics	78.4	---	50	ug/L	1	---	---	---	---	12.9	30%	
>C10-C12 Aliphatics	89.6	---	50	ug/L	1	---	---	---	---	9.96	30%	
C8-C10 Aromatics	329	---	50	ug/L	1	---	---	---	---	9.52	30%	
>C10-C12 Aromatics	62.0	---	50	ug/L	1	---	---	---	---	7.71	30%	
>C12-C13 Aromatics	ND	---	50	ug/L	1	---	---	---	---	6.09	30%	U
Methyl tert-butyl Ether	60.4	---	5	ug/L	1	50.000	---	121	80-131%	11.2	30%	
Benzene	62.3	---	5	ug/L	1	50.000	---	125	68-136%	9.06	30%	
Toluene	57.0	---	5	ug/L	1	50.000	---	114	70-145%	8.41	30%	
Ethylbenzene	49.6	---	5	ug/L	1	50.000	---	99.2	70-130%	9.73	30%	

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## ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

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503-718-2323

ORELAP ID: OR100062

**Anchor QEA, LLC**

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

Project: **Gasco-MGP Only-Prod. Wells 2Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3F1249 - 09 12 23 1015****Analytical Resources, LLC****QUALITY CONTROL (QC) SAMPLE RESULTS****Washington Department of Ecology Methods**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch BLF0696 - EPA 5030C (Purge and Trap)						Water						
LCS Dup (BLF0696-BSD1)			Prepared: 06/26/23 07:19		Analyzed: 06/26/23 09:39							
1,2,3-Trimethylbenzene	49.4	---	5	ug/L	1	50.000	---	98.8	70-130%	4.55	30%	
m,p-Xylene	98.4	---	10	ug/L	1	100.00	---	98.4	70-133%	11.3	30%	
Naphthalene	50.4	---	5	ug/L	1	50.000	---	101	70-130%	6.98	30%	
1-Methylnaphthalene	47.4	---	5	ug/L	1	50.000	---	94.8	70-130%	6.09	30%	
o-Xylene	54.3	---	5	ug/L	1	50.000	---	109	70-130%	9.86	30%	
n-Pentane	50.7	---	5	ug/L	1	50.000	---	101	70-130%	4.81	30%	
n-Hexane	44.8	---	5	ug/L	1	50.000	---	89.6	70-130%	3.72	30%	
n-Octane	37.1	---	5	ug/L	1	50.000	---	74.2	56-120%	3.01	30%	
n-Decane	42.1	---	5	ug/L	1	50.000	---	84.2	61-120%	7.90	30%	
n-Dodecane	53.7	---	5	ug/L	1	50.000	---	107	70-130%	14.2	30%	
Surr: PID: 2,5-Dibromotoluene		Recovery: 82.4 %		Limits: 60-140 %		Dilution: 1x						
FID: 2,5-Dibromotoluene		84.9 %		60-140 %		"						

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Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1249 - 09 12 23 1015

## Analytical Resources, LLC

## QUALITY CONTROL (QC) SAMPLE RESULTS

## Washington Department of Ecology Methods

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch BLG0608 - EPA 3510C SepF							Water					
Blank (BLG0608-BLK1)			Prepared: 07/27/23 10:30		Analyzed: 07/28/23 13:00							
WAEPH												
C8-C10 Aromatics	ND	---	40	ug/L	1	---	---	---	---	---	---	U
>C10-C12 Aromatics	ND	---	40	ug/L	1	---	---	---	---	---	---	U
>C12-C16 Aromatics	ND	---	40	ug/L	1	---	---	---	---	---	---	U
>C16-C21 Aromatics	ND	---	40	ug/L	1	---	---	---	---	---	---	U
>C21-C34 Aromatics	ND	---	40	ug/L	1	---	---	---	---	---	---	U
Surr: o-Terphenyl		Recovery: 74.9 %		Limits: 41-120 %		Dilution: 1x						

Blank (BLG0608-BLK2)				Prepared: 07/27/23 10:30   Analyzed: 07/28/23 17:45								
WAEPH												
C8-C10 Aliphatics	ND	---	40	ug/L	1	---	---	---	---	---	---	U
>C10-C12 Aliphatics	ND	---	40	ug/L	1	---	---	---	---	---	---	U
>C12-C16 Aliphatics	ND	---	40	ug/L	1	---	---	---	---	---	---	U
>C16-C21 Aliphatics	ND	---	40	ug/L	1	---	---	---	---	---	---	U
>C21-C34 Aliphatics	ND	---	40	ug/L	1	---	---	---	---	---	---	U
Surr: 1-Chloro-octadecane		Recovery: 63.1 %		Limits: 36-120 %		Dilution: 1x						

LCS (BLG0608-BS1)				Prepared: 07/27/23 10:30   Analyzed: 07/28/23 13:26							
WAEPH											
>C10-C12 Aromatics	104	---	40	ug/L	1	300.00	---	34.5	12-130%	---	---
>C12-C16 Aromatics	175	---	40	ug/L	1	300.00	---	58.2	31-130%	---	---
>C16-C21 Aromatics	462	---	40	ug/L	1	600.00	---	77.1	48-130%	---	---
>C21-C34 Aromatics	220	---	40	ug/L	1	300.00	---	73.2	33-130%	---	---
Surr: o-Terphenyl		Recovery: 68.3 %		Limits: 41-120 %		Dilution: 1x					

LCS (BLG0608-BS2)			Prepared: 07/27/23 10:30   Analyzed: 07/28/23 18:11								
WAEPH											
C8-C10 Aliphatics	69.6	---	40	ug/L	1	300.00	---	23.2	12-130%	---	---
>C10-C12 Aliphatics	155	---	40	ug/L	1	300.00	---	51.7	10-130%	---	---
>C12-C16 Aliphatics	195	---	40	ug/L	1	300.00	---	64.9	35-130%	---	---
>C16-C21 Aliphatics	243	---	40	ug/L	1	300.00	---	81.0	45-130%	---	---

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# ANALYTICAL REPORT

Apex Laboratories, LLC

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ORELAP ID: OR100062

**Anchor QEA, LLC**

6720 SW Macadam Ave. Suite 125  
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Project: **Gasco-MGP Only-Prod. Wells 2Q 2023 Perf. Mon**

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

Project Manager: **John Renda**

**Report ID:**

**A3F1249 - 09 12 23 1015**

## Analytical Resources, LLC

### QUALITY CONTROL (QC) SAMPLE RESULTS

#### Washington Department of Ecology Methods

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch BLG0608 - EPA 3510C SepF						Water						
LCS (BLG0608-BS2)			Prepared: 07/27/23 10:30		Analyzed: 07/28/23 18:11							
>C21-C34 Aliphatics	218	---	40	ug/L	1	300.00	---	72.7	19-130%	---	---	
Surr: 1-Chloro-octadecane		Recovery: 64.8 %		Limits: 36-120 %		Dilution: 1x						
LCS Dup (BLG0608-BSD1)			Prepared: 07/27/23 10:30		Analyzed: 07/28/23 13:52							
WAEPH												
>C10-C12 Aromatics	139	---	40	ug/L	1	300.00	---	46.5	12-130%	29.5	30%	
>C12-C16 Aromatics	191	---	40	ug/L	1	300.00	---	63.7	31-130%	9.08	30%	
>C16-C21 Aromatics	490	---	40	ug/L	1	600.00	---	81.7	48-130%	5.88	30%	
>C21-C34 Aromatics	240	---	40	ug/L	1	300.00	---	80.1	33-130%	8.96	30%	
Surr: o-Terphenyl		Recovery: 72.7 %		Limits: 41-120 %		Dilution: 1x						
LCS Dup (BLG0608-BSD2)			Prepared: 07/27/23 10:30		Analyzed: 07/28/23 18:36							
WAEPH												
C8-C10 Aliphatics	81.0	---	40	ug/L	1	300.00	---	27.0	12-130%	15.1	30%	
>C10-C12 Aliphatics	147	---	40	ug/L	1	300.00	---	49.1	10-130%	5.16	30%	
>C12-C16 Aliphatics	194	---	40	ug/L	1	300.00	---	64.8	35-130%	0.206	30%	
>C16-C21 Aliphatics	234	---	40	ug/L	1	300.00	---	78.0	45-130%	3.77	30%	
>C21-C34 Aliphatics	217	---	40	ug/L	1	300.00	---	72.5	19-130%	0.276	30%	
Surr: 1-Chloro-octadecane		Recovery: 63.3 %		Limits: 36-120 %		Dilution: 1x						

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## ANALYTICAL REPORT

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6720 SW Macadam Ave. Suite 125

Portland, OR 97219

Project: Gasco-MGP Only-Prod. Wells 2Q 2023 Perf. Mon

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1249 - 09 12 23 1015

## SAMPLE PREPARATION INFORMATION

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

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

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23F1082							
A3F1249-04	Water	NWTPH-Dx	06/15/23 11:40	06/29/23 07:21	1030mL/5mL	1000mL/5mL	0.97
A3F1249-05	Water	NWTPH-Dx	06/15/23 12:40	06/29/23 07:18	1010mL/5mL	1000mL/5mL	0.99
A3F1249-06	Water	NWTPH-Dx	06/15/23 14:50	06/29/23 07:18	1030mL/5mL	1000mL/5mL	0.97
A3F1249-07	Water	NWTPH-Dx	06/15/23 15:15	06/29/23 07:18	1070mL/5mL	1000mL/5mL	0.94

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

Prep: EPA 5030C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23F0776							
A3F1249-04RE1	Water	NWTPH-Gx (MS)	06/15/23 11:40	06/21/23 14:05	5mL/5mL	5mL/5mL	1.00
A3F1249-05RE1	Water	NWTPH-Gx (MS)	06/15/23 12:40	06/21/23 14:05	5mL/5mL	5mL/5mL	1.00
A3F1249-06RE1	Water	NWTPH-Gx (MS)	06/15/23 14:50	06/21/23 14:05	5mL/5mL	5mL/5mL	1.00
A3F1249-07RE1	Water	NWTPH-Gx (MS)	06/15/23 15:15	06/21/23 14:05	5mL/5mL	5mL/5mL	1.00

## Volatile Organic Compounds by EPA 8260D

Prep: EPA 5030C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23F0776							
A3F1249-01RE1	Water	EPA 8260D	06/15/23 10:00	06/21/23 14:05	5mL/5mL	5mL/5mL	1.00
A3F1249-02RE1	Water	EPA 8260D	06/15/23 10:20	06/21/23 14:05	5mL/5mL	5mL/5mL	1.00
A3F1249-03RE1	Water	EPA 8260D	06/15/23 11:00	06/21/23 14:05	5mL/5mL	5mL/5mL	1.00
A3F1249-04RE1	Water	EPA 8260D	06/15/23 11:40	06/21/23 14:05	5mL/5mL	5mL/5mL	1.00
A3F1249-05RE1	Water	EPA 8260D	06/15/23 12:40	06/21/23 14:05	5mL/5mL	5mL/5mL	1.00
A3F1249-06RE1	Water	EPA 8260D	06/15/23 14:50	06/21/23 14:05	5mL/5mL	5mL/5mL	1.00
A3F1249-07RE1	Water	EPA 8260D	06/15/23 15:15	06/21/23 14:05	5mL/5mL	5mL/5mL	1.00
A3F1249-08	Water	EPA 8260D	06/15/23 16:00	06/21/23 14:05	5mL/5mL	5mL/5mL	1.00
Batch: 23F0812							
A3F1249-03RE2	Water	EPA 8260D	06/15/23 11:00	06/23/23 14:54	5mL/5mL	5mL/5mL	1.00

## Volatile Organic Compounds by EPA 8260D SIM

Prep: EPA 5030C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23F0902							

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Project: **Gasco-MGP Only-Prod. Wells 2Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3F1249 - 09 12 23 1015**

## SAMPLE PREPARATION INFORMATION

## 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
A3F1249-03	Water	EPA 8260D SIM	06/15/23 11:00	06/25/23 11:49	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
<u>Batch: 23F0693</u>							
A3F1249-01	Water	EPA 8270E LVI	06/15/23 10:00	06/20/23 07:46	99.17mL/5mL	125mL/5mL	1.26
A3F1249-02	Water	EPA 8270E LVI	06/15/23 10:20	06/20/23 07:46	106.32mL/5mL	125mL/5mL	1.18
A3F1249-03	Water	EPA 8270E LVI	06/15/23 11:00	06/20/23 07:46	109.93mL/5mL	125mL/5mL	1.14
A3F1249-03RE1	Water	EPA 8270E LVI	06/15/23 11:00	06/20/23 07:46	109.93mL/5mL	125mL/5mL	1.14
A3F1249-04	Water	EPA 8270E LVI	06/15/23 11:40	06/20/23 07:46	94.72mL/5mL	125mL/5mL	1.32
A3F1249-05	Water	EPA 8270E LVI	06/15/23 12:40	06/20/23 07:46	111.91mL/5mL	125mL/5mL	1.12
A3F1249-06	Water	EPA 8270E LVI	06/15/23 14:50	06/20/23 07:46	114.45mL/5mL	125mL/5mL	1.09
A3F1249-07	Water	EPA 8270E LVI	06/15/23 15:15	06/20/23 07:46	106.47mL/5mL	125mL/5mL	1.17
A3F1249-07RE1	Water	EPA 8270E LVI	06/15/23 15:15	06/20/23 07:46	106.47mL/5mL	125mL/5mL	1.17

## Total Metals by EPA 6020B (ICPMS)

Prep: EPA 3015A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<u>Batch: 23F0834</u>							
A3F1249-01	Water	EPA 6020B	06/15/23 10:00	06/22/23 14:28	45mL/50mL	45mL/50mL	1.00
A3F1249-01RE1	Water	EPA 6020B	06/15/23 10:00	06/22/23 14:28	45mL/50mL	45mL/50mL	1.00
A3F1249-02	Water	EPA 6020B	06/15/23 10:20	06/22/23 14:28	45mL/50mL	45mL/50mL	1.00
A3F1249-02RE1	Water	EPA 6020B	06/15/23 10:20	06/22/23 14:28	45mL/50mL	45mL/50mL	1.00
A3F1249-02RE2	Water	EPA 6020B	06/15/23 10:20	06/22/23 14:28	45mL/50mL	45mL/50mL	1.00
A3F1249-03	Water	EPA 6020B	06/15/23 11:00	06/22/23 14:28	45mL/50mL	45mL/50mL	1.00
A3F1249-03RE1	Water	EPA 6020B	06/15/23 11:00	06/22/23 14:28	45mL/50mL	45mL/50mL	1.00
A3F1249-04	Water	EPA 6020B	06/15/23 11:40	06/22/23 14:28	45mL/50mL	45mL/50mL	1.00
A3F1249-04RE1	Water	EPA 6020B	06/15/23 11:40	06/22/23 14:28	45mL/50mL	45mL/50mL	1.00
A3F1249-04RE2	Water	EPA 6020B	06/15/23 11:40	06/22/23 14:28	45mL/50mL	45mL/50mL	1.00
A3F1249-05	Water	EPA 6020B	06/15/23 12:40	06/22/23 14:28	45mL/50mL	45mL/50mL	1.00
A3F1249-05RE1	Water	EPA 6020B	06/15/23 12:40	06/22/23 14:28	45mL/50mL	45mL/50mL	1.00
A3F1249-06	Water	EPA 6020B	06/15/23 14:50	06/22/23 14:28	45mL/50mL	45mL/50mL	1.00
A3F1249-06RE1	Water	EPA 6020B	06/15/23 14:50	06/22/23 14:28	45mL/50mL	45mL/50mL	1.00
A3F1249-07	Water	EPA 6020B	06/15/23 15:15	06/22/23 14:28	45mL/50mL	45mL/50mL	1.00

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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 97219Project: **Gasco-MGP Only-Prod. Wells 2Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3F1249 - 09 12 23 1015****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
A3F1249-07RE1	Water	EPA 6020B	06/15/23 15:15	06/22/23 14:28	45mL/50mL	45mL/50mL	1.00
A3F1249-07RE2	Water	EPA 6020B	06/15/23 15:15	06/22/23 14:28	45mL/50mL	45mL/50mL	1.00

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

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<b>Batch: 23F0720</b>							
A3F1249-01	Water	EPA 335.4	06/15/23 10:00	06/20/23 12:04	6mL/6mL	6mL/6mL	1.00
A3F1249-02	Water	EPA 335.4	06/15/23 10:20	06/20/23 12:04	6mL/6mL	6mL/6mL	1.00
A3F1249-03	Water	EPA 335.4	06/15/23 11:00	06/20/23 12:04	6mL/6mL	6mL/6mL	1.00
A3F1249-04	Water	EPA 335.4	06/15/23 11:40	06/20/23 12:04	6mL/6mL	6mL/6mL	1.00
A3F1249-05	Water	EPA 335.4	06/15/23 12:40	06/20/23 12:04	6mL/6mL	6mL/6mL	1.00
A3F1249-06	Water	EPA 335.4	06/15/23 14:50	06/20/23 12:04	6mL/6mL	6mL/6mL	1.00
A3F1249-07	Water	EPA 335.4	06/15/23 15:15	06/20/23 12:04	6mL/6mL	6mL/6mL	1.00

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

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<b>Batch: 23F0918</b>							
A3F1249-01	Water	D6888-09	06/15/23 10:00	06/26/23 08:35	5mL/5mL	5mL/5mL	1.00
A3F1249-02	Water	D6888-09	06/15/23 10:20	06/26/23 08:35	5mL/5mL	5mL/5mL	1.00
A3F1249-03	Water	D6888-09	06/15/23 11:00	06/26/23 08:35	5mL/5mL	5mL/5mL	1.00
A3F1249-04	Water	D6888-09	06/15/23 11:40	06/26/23 08:35	5mL/5mL	5mL/5mL	1.00
A3F1249-05	Water	D6888-09	06/15/23 12:40	06/26/23 08:35	5mL/5mL	5mL/5mL	1.00
A3F1249-06	Water	D6888-09	06/15/23 14:50	06/26/23 08:35	5mL/5mL	5mL/5mL	1.00
A3F1249-07	Water	D6888-09	06/15/23 15:15	06/26/23 08:35	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: 23F0695</b>							
A3F1249-01	Water	D4282-02	06/15/23 10:00	06/20/23 09:00	3mL/3mL	3mL/3mL	1.00
A3F1249-02	Water	D4282-02	06/15/23 10:20	06/20/23 09:00	3mL/3mL	3mL/3mL	1.00
A3F1249-03	Water	D4282-02	06/15/23 11:00	06/20/23 09:00	3mL/3mL	3mL/3mL	1.00

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ANALYTICAL REPORT

Apex Laboratories, LLC

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Portland, OR 97219

Project: Gasco-MGP Only-Prod. Wells 2Q 2023 Perf. Mon

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1249 - 09 12 23 1015

SAMPLE PREPARATION INFORMATION

Free Cyanide by Microdiffusion/Colorimetric Spectrophotometry

Prep: Microdiffusion

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
A3F1249-04	Water	D4282-02	06/15/23 11:40	06/20/23 09:00	3mL/3mL	3mL/3mL	1.00
A3F1249-05	Water	D4282-02	06/15/23 12:40	06/20/23 09:00	3mL/3mL	3mL/3mL	1.00
A3F1249-06	Water	D4282-02	06/15/23 14:50	06/20/23 09:00	3mL/3mL	3mL/3mL	1.00
A3F1249-07	Water	D4282-02	06/15/23 15:15	06/20/23 09:00	3mL/3mL	3mL/3mL	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 2Q 2023 Perf. Mon**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3F1249 - 09 12 23 1015****Analytical Resources, LLC****SAMPLE PREPARATION INFORMATION****Washington Department of Ecology Methods****Prep: EPA 3510C SepF**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<b>Batch: BLF0596</b>							
A3F1249-04	Water	WA EPH	06/15/23 11:40	06/23/23 10:12	500mL/1mL	500mL/1mL	1.00
A3F1249-05	Water	WA EPH	06/15/23 12:40	06/23/23 10:12	500mL/1mL	500mL/1mL	1.00
A3F1249-06	Water	WA EPH	06/15/23 14:50	06/23/23 10:12	500mL/1mL	500mL/1mL	1.00
A3F1249-07	Water	WA EPH	06/15/23 15:15	06/23/23 10:12	500mL/1mL	500mL/1mL	1.00
<b>Batch: BLG0608</b>							
A3F1249-04RE1	Water	WA EPH	06/15/23 11:40	07/27/23 10:30	500mL/1mL	500mL/1mL	1.00
A3F1249-05RE1	Water	WA EPH	06/15/23 12:40	07/27/23 10:30	500mL/1mL	500mL/1mL	1.00
A3F1249-06RE1	Water	WA EPH	06/15/23 14:50	07/27/23 10:30	500mL/1mL	500mL/1mL	1.00
A3F1249-07RE1	Water	WA EPH	06/15/23 15:15	07/27/23 10:30	500mL/1mL	500mL/1mL	1.00

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

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<b>Batch: BLF0691</b>							
A3F1249-04	Water	WA VPH	06/15/23 11:40	06/23/23 07:16	10mL/10ml	10mL/10ml	1.00
A3F1249-05	Water	WA VPH	06/15/23 12:40	06/23/23 07:16	10mL/10ml	10mL/10ml	1.00
A3F1249-06	Water	WA VPH	06/15/23 14:50	06/23/23 07:16	10mL/10ml	10mL/10ml	1.00
A3F1249-07	Water	WA VPH	06/15/23 15:15	06/23/23 07:16	10mL/10ml	10mL/10ml	1.00
<b>Batch: BLF0696</b>							
A3F1249-07RE1	Water	WA VPH	06/15/23 15:15	06/26/23 07:19	10mL/10ml	10mL/10ml	1.00

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Project: **Gasco-MGP Only-Prod. Wells 2Q 2023 Perf. Mon**

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

Project Manager: **John Renda**

**Report ID:**

**A3F1249 - 09 12 23 1015**

## QUALIFIER DEFINITIONS

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

#### Apex Laboratories

- F-12** The result for this hydrocarbon range is primarily due to the presence of individual analyte peaks in the quantitation range. No fuel pattern detected.
- F-13** The chromatographic pattern does not resemble the fuel standard used for quantitation
- ICV-01** Estimated Result. Initial Calibration Verification (ICV) failed high. There is no effect on non-detect results.
- J** Estimated Result. Result detected below the lowest point of the calibration curve, but above the specified MDL.
- M-02** Due to matrix interference, this analyte cannot be accurately quantified. The reported result is estimated.
- M-05** Estimated results. Peak separation for structural isomers is insufficient for accurate quantification.
- Q-01** Spike recovery and/or RPD is outside acceptance limits.
- Q-05** Analyses are not controlled on RPD values from sample and duplicate concentrations that are below 5 times the reporting level.
- Q-16** Reanalysis of an original Batch QC sample.
- Q-19** Blank Spike Duplicate (BSD) sample analyzed in place of Matrix Spike/Duplicate samples due to limited sample amount available for analysis.
- Q-54** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +11%. 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 +24%. 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 +3%. 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 +51%. 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 -12%. The results are reported as Estimated Values.
- Q-55** Daily CCV/LCS recovery for this analyte was below the +/-20% criteria listed in EPA 8260, however there is adequate sensitivity to ensure detection at the reporting level.
- Q-56** Daily CCV/LCS recovery for this analyte was above the +/-20% criteria listed in EPA 8260
- R-02** The Reporting Limit for this analyte has been raised to account for interference from coeluting organic compounds present in the sample.
- S-01** Surrogate recovery for this sample is not available due to sample dilution required from high analyte concentration and/or matrix interference.
- S-05** Surrogate recovery is estimated due to sample dilution required for high analyte concentration and/or matrix interference.

#### Analytical Resources, LLC

Apex Laboratories

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A3F1249 - 09 12 23 1015

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

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### REPORTING NOTES AND CONVENTIONS:

**Abbreviations:**

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

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

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

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

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

**Reporting Conventions:**

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

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

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

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

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

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

**QC Source:**

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

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

**Miscellaneous Notes:**

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

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

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Project Manager: **John Renda**

**Report ID:**

**A3F1249 - 09 12 23 1015**

### 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.

Apex Laboratories

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Project Manager: **John Renda**

**Report ID:**

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### LABORATORY ACCREDITATION INFORMATION

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

**EPA ID: OR01039**

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

**Apex Laboratories**

Matrix	Analysis	TNI_ID	Analyte	TNI_ID	Accreditation
--------	----------	--------	---------	--------	---------------

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

**Secondary Accreditations**

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

**Subcontract Laboratory Accreditations**

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

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

**Field Testing Parameters**

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

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Report ID:

A3F1249 - 09 12 23 1015

## APEX LABS COOLER RECEIPT FORM

Client: Anchor QEA Element WO#: A3F1249

Project/Project #: Gasco-MGP only Mon. wells 2Q 2023 Perf. Mon. 006629-02.84 T-01.001E

## Delivery Info:

Date/time received: 6/16/23 @ 814 By: EST

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

Cooler Inspection Date/time inspected: 6/16/23 @ 956 By: EST

Chain of Custody included? Yes ☒ No ☐Signed/dated by client? Yes ☒ No ☐

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	0.8	1.3					
Custody seals? (Y/N)	N	N					
Received on ice? (Y/N)	Y	Y					
Temp. blanks? (Y/N)	Y	Y					
Ice type: (Gel/Real/Other)	gel	gel					
Condition (In/Out):	In	In					

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

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

Sample Inspection: Date/time inspected: 6/16/23 @ 17:26 By: JAM

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

Comments:

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

Comments:

Additional information: TB# 3315

Labeled by:

JAM

Witness:

JHR

Cooler Inspected by:

RHP

Form Y-003 R-00

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