



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Sunday, September 3, 2023

John Renda

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

RE: A3F1178 - Gasco-MGP Only Mon. 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 A3F1178, which was received by the laboratory on 6/15/2023 at 8:16:00AM.

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

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

Cooler Receipt Information

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

(See Cooler Receipt Form for details)

Default Cooler 1.6 degC

This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.

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



Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

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

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125
Portland, OR 97219

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

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

Project Manager: **John Renda**

Report ID:

A3F1178 - 09 03 23 0835

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
GS-061423-05	A3F1178-01	WG	06/14/23 11:40	06/15/23 08:16
GS-061423-06	A3F1178-02	WG	06/14/23 11:45	06/15/23 08:16
GS-061423-07	A3F1178-03	WG	06/14/23 12:50	06/15/23 08:16
GS-061423-08	A3F1178-04	WG	06/14/23 14:20	06/15/23 08:16
GS-061423-09	A3F1178-05	WG	06/14/23 15:20	06/15/23 08:16
TB-061423	A3F1178-06	W	06/14/23 15:45	06/15/23 08:16

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

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

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125
Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1178 - 09 03 23 0835

ANALYTICAL CASE NARRATIVE

A3F1178

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

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director

**ANALYTICAL REPORT****Apex Laboratories, LLC**6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125
Portland, OR 97219Project: **Gasco-MGP Only Mon. Wells 2Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3F1178 - 09 03 23 0835****ANALYTICAL SAMPLE RESULTS****Volatile Organic Compounds by EPA 8260D**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-061423-05 (A3F1178-01RE1)				Matrix: WG		Batch: 23F0604		
Acetone	ND	10.0	20.0	ug/L	1	06/16/23 19:12	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	06/16/23 19:12	EPA 8260D	
Benzene	ND	0.100	0.200	ug/L	1	06/16/23 19:12	EPA 8260D	
Bromobenzene	ND	0.250	0.500	ug/L	1	06/16/23 19:12	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	06/16/23 19:12	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	06/16/23 19:12	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	06/16/23 19:12	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	06/16/23 19:12	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	06/16/23 19:12	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	06/16/23 19:12	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	06/16/23 19:12	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	06/16/23 19:12	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	06/16/23 19:12	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	06/16/23 19:12	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	06/16/23 19:12	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	06/16/23 19:12	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	06/16/23 19:12	EPA 8260D	
Chloromethane	ND	2.50	5.00	ug/L	1	06/16/23 19:12	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	06/16/23 19:12	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	06/16/23 19:12	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	06/16/23 19:12	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	06/16/23 19:12	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	06/16/23 19:12	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	06/16/23 19:12	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	06/16/23 19:12	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	06/16/23 19:12	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	06/16/23 19:12	EPA 8260D	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	06/16/23 19:12	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	06/16/23 19:12	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	06/16/23 19:12	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	06/16/23 19:12	EPA 8260D	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	06/16/23 19:12	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	06/16/23 19:12	EPA 8260D	

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125
Portland, OR 97219Project: **Gasco-MGP Only Mon. Wells 2Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3F1178 - 09 03 23 0835**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-061423-05 (A3F1178-01RE1)		Matrix: WG			Batch: 23F0604			
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	06/16/23 19:12	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	06/16/23 19:12	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	06/16/23 19:12	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	06/16/23 19:12	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	06/16/23 19:12	EPA 8260D	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	06/16/23 19:12	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	06/16/23 19:12	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	06/16/23 19:12	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	06/16/23 19:12	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	06/16/23 19:12	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	06/16/23 19:12	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	06/16/23 19:12	EPA 8260D	
4-Methyl-2-pentanone (MIBK)	ND	5.00	10.0	ug/L	1	06/16/23 19:12	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	06/16/23 19:12	EPA 8260D	
Naphthalene	ND	1.00	2.00	ug/L	1	06/16/23 19:12	EPA 8260D	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	06/16/23 19:12	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	06/16/23 19:12	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	06/16/23 19:12	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	06/16/23 19:12	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	06/16/23 19:12	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	06/16/23 19:12	EPA 8260D	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	06/16/23 19:12	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	06/16/23 19:12	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	06/16/23 19:12	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	06/16/23 19:12	EPA 8260D	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	06/16/23 19:12	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	06/16/23 19:12	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	06/16/23 19:12	EPA 8260D	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	06/16/23 19:12	EPA 8260D	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	06/16/23 19:12	EPA 8260D	
Vinyl chloride	ND	0.200	0.400	ug/L	1	06/16/23 19:12	EPA 8260D	
m,p-Xylene	ND	0.500	1.00	ug/L	1	06/16/23 19:12	EPA 8260D	
o-Xylene	ND	0.250	0.500	ug/L	1	06/16/23 19:12	EPA 8260D	

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1178 - 09 03 23 0835

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-061423-05 (A3F1178-01RE1)		Matrix: WG			Batch: 23F0604			
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 101 %	Limits: 80-120 %	1	06/16/23 19:12	EPA 8260D		
Toluene-d8 (Surr)		101 %	80-120 %	1	06/16/23 19:12	EPA 8260D		
4-Bromofluorobenzene (Surr)		101 %	80-120 %	1	06/16/23 19:12	EPA 8260D		
GS-061423-06 (A3F1178-02RE1)		Matrix: WG			Batch: 23F0604			
Acetone	ND	100	200	ug/L	10	06/16/23 21:28	EPA 8260D	
Acrylonitrile	ND	10.0	20.0	ug/L	10	06/16/23 21:28	EPA 8260D	
Benzene	923	1.00	2.00	ug/L	10	06/16/23 21:28	EPA 8260D	
Bromobenzene	ND	2.50	5.00	ug/L	10	06/16/23 21:28	EPA 8260D	
Bromochloromethane	ND	5.00	10.0	ug/L	10	06/16/23 21:28	EPA 8260D	
Bromodichloromethane	ND	5.00	10.0	ug/L	10	06/16/23 21:28	EPA 8260D	
Bromoform	ND	5.00	10.0	ug/L	10	06/16/23 21:28	EPA 8260D	
Bromomethane	ND	50.0	50.0	ug/L	10	06/16/23 21:28	EPA 8260D	
2-Butanone (MEK)	ND	50.0	100	ug/L	10	06/16/23 21:28	EPA 8260D	
n-Butylbenzene	ND	5.00	10.0	ug/L	10	06/16/23 21:28	EPA 8260D	
sec-Butylbenzene	ND	5.00	10.0	ug/L	10	06/16/23 21:28	EPA 8260D	
tert-Butylbenzene	ND	5.00	10.0	ug/L	10	06/16/23 21:28	EPA 8260D	
Carbon disulfide	ND	50.0	100	ug/L	10	06/16/23 21:28	EPA 8260D	
Carbon tetrachloride	ND	5.00	10.0	ug/L	10	06/16/23 21:28	EPA 8260D	
Chlorobenzene	ND	2.50	5.00	ug/L	10	06/16/23 21:28	EPA 8260D	
Chloroethane	ND	50.0	50.0	ug/L	10	06/16/23 21:28	EPA 8260D	
Chloroform	ND	5.00	10.0	ug/L	10	06/16/23 21:28	EPA 8260D	
Chloromethane	ND	25.0	50.0	ug/L	10	06/16/23 21:28	EPA 8260D	
2-Chlorotoluene	ND	5.00	10.0	ug/L	10	06/16/23 21:28	EPA 8260D	
4-Chlorotoluene	ND	5.00	10.0	ug/L	10	06/16/23 21:28	EPA 8260D	
Dibromochloromethane	ND	5.00	10.0	ug/L	10	06/16/23 21:28	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	25.0	50.0	ug/L	10	06/16/23 21:28	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	2.50	5.00	ug/L	10	06/16/23 21:28	EPA 8260D	
Dibromomethane	ND	5.00	10.0	ug/L	10	06/16/23 21:28	EPA 8260D	
1,2-Dichlorobenzene	ND	2.50	5.00	ug/L	10	06/16/23 21:28	EPA 8260D	
1,3-Dichlorobenzene	ND	2.50	5.00	ug/L	10	06/16/23 21:28	EPA 8260D	
1,4-Dichlorobenzene	ND	2.50	5.00	ug/L	10	06/16/23 21:28	EPA 8260D	
Dichlorodifluoromethane	ND	5.00	10.0	ug/L	10	06/16/23 21:28	EPA 8260D	
1,1-Dichloroethane	ND	2.00	4.00	ug/L	10	06/16/23 21:28	EPA 8260D	

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

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

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125
Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1178 - 09 03 23 0835

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-061423-06 (A3F1178-02RE1)		Matrix: WG			Batch: 23F0604			
1,2-Dichloroethane (EDC)	ND	2.00	4.00	ug/L	10	06/16/23 21:28	EPA 8260D	
1,2-Dichloropropane	ND	2.50	5.00	ug/L	10	06/16/23 21:28	EPA 8260D	
1,3-Dichloropropane	ND	5.00	10.0	ug/L	10	06/16/23 21:28	EPA 8260D	
2,2-Dichloropropane	ND	5.00	10.0	ug/L	10	06/16/23 21:28	EPA 8260D	
1,1-Dichloropropene	ND	5.00	10.0	ug/L	10	06/16/23 21:28	EPA 8260D	
cis-1,3-Dichloropropene	ND	5.00	10.0	ug/L	10	06/16/23 21:28	EPA 8260D	
trans-1,3-Dichloropropene	ND	5.00	10.0	ug/L	10	06/16/23 21:28	EPA 8260D	
Ethylbenzene	3.30	2.50	5.00	ug/L	10	06/16/23 21:28	EPA 8260D	J
Hexachlorobutadiene	ND	25.0	50.0	ug/L	10	06/16/23 21:28	EPA 8260D	
2-Hexanone	ND	50.0	100	ug/L	10	06/16/23 21:28	EPA 8260D	
Isopropylbenzene	12.5	5.00	10.0	ug/L	10	06/16/23 21:28	EPA 8260D	
4-Isopropyltoluene	ND	5.00	10.0	ug/L	10	06/16/23 21:28	EPA 8260D	
Methylene chloride	ND	50.0	100	ug/L	10	06/16/23 21:28	EPA 8260D	
4-Methyl-2-pentanone (MIBK)	ND	50.0	100	ug/L	10	06/16/23 21:28	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	5.00	10.0	ug/L	10	06/16/23 21:28	EPA 8260D	
Naphthalene	17.2	10.0	20.0	ug/L	10	06/16/23 21:28	EPA 8260D	J
n-Propylbenzene	9.30	2.50	5.00	ug/L	10	06/16/23 21:28	EPA 8260D	
Styrene	ND	5.00	10.0	ug/L	10	06/16/23 21:28	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	2.00	4.00	ug/L	10	06/16/23 21:28	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	2.50	5.00	ug/L	10	06/16/23 21:28	EPA 8260D	
Tetrachloroethene (PCE)	12.0	2.00	4.00	ug/L	10	06/16/23 21:28	EPA 8260D	
Toluene	ND	5.00	10.0	ug/L	10	06/16/23 21:28	EPA 8260D	
1,2,3-Trichlorobenzene	ND	10.0	20.0	ug/L	10	06/16/23 21:28	EPA 8260D	
1,2,4-Trichlorobenzene	ND	10.0	20.0	ug/L	10	06/16/23 21:28	EPA 8260D	
1,1,1-Trichloroethane	ND	2.00	4.00	ug/L	10	06/16/23 21:28	EPA 8260D	
1,1,2-Trichloroethane	ND	2.50	5.00	ug/L	10	06/16/23 21:28	EPA 8260D	
Trichlorofluoromethane	ND	10.0	20.0	ug/L	10	06/16/23 21:28	EPA 8260D	
1,2,3-Trichloropropane	ND	5.00	10.0	ug/L	10	06/16/23 21:28	EPA 8260D	
1,2,4-Trimethylbenzene	10.3	5.00	10.0	ug/L	10	06/16/23 21:28	EPA 8260D	
1,3,5-Trimethylbenzene	7.00	5.00	10.0	ug/L	10	06/16/23 21:28	EPA 8260D	J
m,p-Xylene	7.60	5.00	10.0	ug/L	10	06/16/23 21:28	EPA 8260D	J
o-Xylene	7.80	2.50	5.00	ug/L	10	06/16/23 21:28	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 109 %		Limits: 80-120 %	1	06/16/23 21:28	EPA 8260D	

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125
Portland, OR 97219Project: **Gasco-MGP Only Mon. Wells 2Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3F1178 - 09 03 23 0835**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-061423-06 (A3F1178-02RE1)		Matrix: WG			Batch: 23F0604			
<i>Surrogate: Toluene-d8 (Surr)</i>		<i>Recovery: 98 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>06/16/23 21:28</i>	<i>EPA 8260D</i>	
<i>4-Bromofluorobenzene (Surr)</i>		<i>105 %</i>		<i>80-120 %</i>	<i>1</i>	<i>06/16/23 21:28</i>	<i>EPA 8260D</i>	
GS-061423-07 (A3F1178-03RE1)		Matrix: WG			Batch: 23F0604			
					V-25			
Acetone	ND	1000	2000	ug/L	100	06/16/23 22:14	EPA 8260D	
Acrylonitrile	ND	100	200	ug/L	100	06/16/23 22:14	EPA 8260D	
Benzene	14100	10.0	20.0	ug/L	100	06/16/23 22:14	EPA 8260D	
Bromobenzene	ND	25.0	50.0	ug/L	100	06/16/23 22:14	EPA 8260D	
Bromochloromethane	ND	50.0	100	ug/L	100	06/16/23 22:14	EPA 8260D	
Bromodichloromethane	ND	50.0	100	ug/L	100	06/16/23 22:14	EPA 8260D	
Bromoform	ND	50.0	100	ug/L	100	06/16/23 22:14	EPA 8260D	
Bromomethane	ND	500	500	ug/L	100	06/16/23 22:14	EPA 8260D	
2-Butanone (MEK)	ND	500	1000	ug/L	100	06/16/23 22:14	EPA 8260D	
n-Butylbenzene	ND	50.0	100	ug/L	100	06/16/23 22:14	EPA 8260D	
sec-Butylbenzene	ND	50.0	100	ug/L	100	06/16/23 22:14	EPA 8260D	
tert-Butylbenzene	ND	50.0	100	ug/L	100	06/16/23 22:14	EPA 8260D	
Carbon disulfide	ND	500	1000	ug/L	100	06/16/23 22:14	EPA 8260D	
Carbon tetrachloride	ND	50.0	100	ug/L	100	06/16/23 22:14	EPA 8260D	
Chlorobenzene	ND	25.0	50.0	ug/L	100	06/16/23 22:14	EPA 8260D	
Chloroethane	ND	500	500	ug/L	100	06/16/23 22:14	EPA 8260D	
Chloroform	ND	50.0	100	ug/L	100	06/16/23 22:14	EPA 8260D	
Chloromethane	ND	250	500	ug/L	100	06/16/23 22:14	EPA 8260D	
2-Chlorotoluene	ND	50.0	100	ug/L	100	06/16/23 22:14	EPA 8260D	
4-Chlorotoluene	ND	50.0	100	ug/L	100	06/16/23 22:14	EPA 8260D	
Dibromochloromethane	ND	50.0	100	ug/L	100	06/16/23 22:14	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	250	500	ug/L	100	06/16/23 22:14	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	25.0	50.0	ug/L	100	06/16/23 22:14	EPA 8260D	
Dibromomethane	ND	50.0	100	ug/L	100	06/16/23 22:14	EPA 8260D	
1,2-Dichlorobenzene	ND	25.0	50.0	ug/L	100	06/16/23 22:14	EPA 8260D	
1,3-Dichlorobenzene	ND	25.0	50.0	ug/L	100	06/16/23 22:14	EPA 8260D	
1,4-Dichlorobenzene	ND	25.0	50.0	ug/L	100	06/16/23 22:14	EPA 8260D	
Dichlorodifluoromethane	ND	50.0	100	ug/L	100	06/16/23 22:14	EPA 8260D	
1,1-Dichloroethane	ND	20.0	40.0	ug/L	100	06/16/23 22:14	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	20.0	40.0	ug/L	100	06/16/23 22:14	EPA 8260D	

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125
Portland, OR 97219Project: **Gasco-MGP Only Mon. Wells 2Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3F1178 - 09 03 23 0835**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-061423-07 (A3F1178-03RE1)				Matrix: WG		Batch: 23F0604		V-25
1,1-Dichloroethene	ND	20.0	40.0	ug/L	100	06/16/23 22:14	EPA 8260D	
cis-1,2-Dichloroethene	ND	20.0	40.0	ug/L	100	06/16/23 22:14	EPA 8260D	
trans-1,2-Dichloroethene	ND	20.0	40.0	ug/L	100	06/16/23 22:14	EPA 8260D	
1,2-Dichloropropane	ND	25.0	50.0	ug/L	100	06/16/23 22:14	EPA 8260D	
1,3-Dichloropropane	ND	50.0	100	ug/L	100	06/16/23 22:14	EPA 8260D	
2,2-Dichloropropane	ND	50.0	100	ug/L	100	06/16/23 22:14	EPA 8260D	
1,1-Dichloropropene	ND	50.0	100	ug/L	100	06/16/23 22:14	EPA 8260D	
cis-1,3-Dichloropropene	ND	50.0	100	ug/L	100	06/16/23 22:14	EPA 8260D	
trans-1,3-Dichloropropene	ND	50.0	100	ug/L	100	06/16/23 22:14	EPA 8260D	
Ethylbenzene	490	25.0	50.0	ug/L	100	06/16/23 22:14	EPA 8260D	
Hexachlorobutadiene	ND	250	500	ug/L	100	06/16/23 22:14	EPA 8260D	
2-Hexanone	ND	500	1000	ug/L	100	06/16/23 22:14	EPA 8260D	
Isopropylbenzene	ND	50.0	100	ug/L	100	06/16/23 22:14	EPA 8260D	
4-Isopropyltoluene	ND	50.0	100	ug/L	100	06/16/23 22:14	EPA 8260D	
Methylene chloride	ND	500	1000	ug/L	100	06/16/23 22:14	EPA 8260D	
4-Methyl-2-pentanone (MIBK)	ND	500	1000	ug/L	100	06/16/23 22:14	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	50.0	100	ug/L	100	06/16/23 22:14	EPA 8260D	
Naphthalene	6330	100	200	ug/L	100	06/16/23 22:14	EPA 8260D	
n-Propylbenzene	ND	25.0	50.0	ug/L	100	06/16/23 22:14	EPA 8260D	
Styrene	ND	50.0	100	ug/L	100	06/16/23 22:14	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	20.0	40.0	ug/L	100	06/16/23 22:14	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	25.0	50.0	ug/L	100	06/16/23 22:14	EPA 8260D	
Tetrachloroethene (PCE)	ND	20.0	40.0	ug/L	100	06/16/23 22:14	EPA 8260D	
Toluene	180	50.0	100	ug/L	100	06/16/23 22:14	EPA 8260D	
1,2,3-Trichlorobenzene	ND	100	200	ug/L	100	06/16/23 22:14	EPA 8260D	
1,2,4-Trichlorobenzene	ND	100	200	ug/L	100	06/16/23 22:14	EPA 8260D	
1,1,1-Trichloroethane	ND	20.0	40.0	ug/L	100	06/16/23 22:14	EPA 8260D	
1,1,2-Trichloroethane	ND	25.0	50.0	ug/L	100	06/16/23 22:14	EPA 8260D	
Trichloroethene (TCE)	ND	20.0	40.0	ug/L	100	06/16/23 22:14	EPA 8260D	
Trichlorofluoromethane	ND	100	200	ug/L	100	06/16/23 22:14	EPA 8260D	
1,2,3-Trichloropropane	ND	50.0	100	ug/L	100	06/16/23 22:14	EPA 8260D	
1,2,4-Trimethylbenzene	123	50.0	100	ug/L	100	06/16/23 22:14	EPA 8260D	
1,3,5-Trimethylbenzene	ND	50.0	100	ug/L	100	06/16/23 22:14	EPA 8260D	

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

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

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125
Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1178 - 09 03 23 0835

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-061423-07 (A3F1178-03RE1)		Matrix: WG			Batch: 23F0604		V-25	
Vinyl chloride	ND	20.0	40.0	ug/L	100	06/16/23 22:14	EPA 8260D	
m,p-Xylene	575	50.0	100	ug/L	100	06/16/23 22:14	EPA 8260D	
o-Xylene	265	25.0	50.0	ug/L	100	06/16/23 22:14	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 105 %		Limits: 80-120 %	1	06/16/23 22:14	EPA 8260D	
Toluene-d8 (Surr)		98 %		80-120 %	1	06/16/23 22:14	EPA 8260D	
4-Bromofluorobenzene (Surr)		105 %		80-120 %	1	06/16/23 22:14	EPA 8260D	
GS-061423-08 (A3F1178-04RE1)		Matrix: WG			Batch: 23F0604			
Acetone	ND	10.0	20.0	ug/L	1	06/16/23 19:35	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	06/16/23 19:35	EPA 8260D	
Benzene	0.770	0.100	0.200	ug/L	1	06/16/23 19:35	EPA 8260D	
Bromobenzene	ND	0.250	0.500	ug/L	1	06/16/23 19:35	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	06/16/23 19:35	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	06/16/23 19:35	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	06/16/23 19:35	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	06/16/23 19:35	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	06/16/23 19:35	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	06/16/23 19:35	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	06/16/23 19:35	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	06/16/23 19:35	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	06/16/23 19:35	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	06/16/23 19:35	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	06/16/23 19:35	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	06/16/23 19:35	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	06/16/23 19:35	EPA 8260D	
Chloromethane	ND	2.50	5.00	ug/L	1	06/16/23 19:35	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	06/16/23 19:35	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	06/16/23 19:35	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	06/16/23 19:35	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	06/16/23 19:35	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	06/16/23 19:35	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	06/16/23 19:35	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	06/16/23 19:35	EPA 8260D	

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

Project: **Gasco-MGP Only Mon. Wells 2Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3F1178 - 09 03 23 0835**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-061423-08 (A3F1178-04RE1)		Matrix: WG			Batch: 23F0604			
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	06/16/23 19:35	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	06/16/23 19:35	EPA 8260D	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	06/16/23 19:35	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	06/16/23 19:35	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	06/16/23 19:35	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	06/16/23 19:35	EPA 8260D	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	06/16/23 19:35	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	06/16/23 19:35	EPA 8260D	
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	06/16/23 19:35	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	06/16/23 19:35	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	06/16/23 19:35	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	06/16/23 19:35	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	06/16/23 19:35	EPA 8260D	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	06/16/23 19:35	EPA 8260D	
Ethylbenzene	0.670	0.250	0.500	ug/L	1	06/16/23 19:35	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	06/16/23 19:35	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	06/16/23 19:35	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	06/16/23 19:35	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	06/16/23 19:35	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	06/16/23 19:35	EPA 8260D	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	06/16/23 19:35	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	06/16/23 19:35	EPA 8260D	
Naphthalene	17.0	1.00	2.00	ug/L	1	06/16/23 19:35	EPA 8260D	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	06/16/23 19:35	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	06/16/23 19:35	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	06/16/23 19:35	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	06/16/23 19:35	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	06/16/23 19:35	EPA 8260D	
Toluene	0.560	0.500	1.00	ug/L	1	06/16/23 19:35	EPA 8260D	J
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	06/16/23 19:35	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	06/16/23 19:35	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	06/16/23 19:35	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	06/16/23 19:35	EPA 8260D	

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director

Page 11 of 71



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1178 - 09 03 23 0835

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-061423-08 (A3F1178-04RE1)		Matrix: WG			Batch: 23F0604			
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	06/16/23 19:35	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	06/16/23 19:35	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	06/16/23 19:35	EPA 8260D	
1,2,4-Trimethylbenzene	2.64	0.500	1.00	ug/L	1	06/16/23 19:35	EPA 8260D	
1,3,5-Trimethylbenzene	1.23	0.500	1.00	ug/L	1	06/16/23 19:35	EPA 8260D	
Vinyl chloride	ND	0.200	0.400	ug/L	1	06/16/23 19:35	EPA 8260D	
m,p-Xylene	1.13	0.500	1.00	ug/L	1	06/16/23 19:35	EPA 8260D	
o-Xylene	1.16	0.250	0.500	ug/L	1	06/16/23 19:35	EPA 8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 99 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>06/16/23 19:35</i>	<i>EPA 8260D</i>	
<i>Toluene-d8 (Surr)</i>		<i>102 %</i>		<i>80-120 %</i>	<i>1</i>	<i>06/16/23 19:35</i>	<i>EPA 8260D</i>	
<i>4-Bromofluorobenzene (Surr)</i>		<i>98 %</i>		<i>80-120 %</i>	<i>1</i>	<i>06/16/23 19:35</i>	<i>EPA 8260D</i>	
GS-061423-09 (A3F1178-05RE1)		Matrix: WG			Batch: 23F0604			
Acetone	ND	10.0	20.0	ug/L	1	06/16/23 19:58	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	06/16/23 19:58	EPA 8260D	
Benzene	54.5	0.100	0.200	ug/L	1	06/16/23 19:58	EPA 8260D	Q-42
Bromobenzene	ND	0.250	0.500	ug/L	1	06/16/23 19:58	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	06/16/23 19:58	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	06/16/23 19:58	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	06/16/23 19:58	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	06/16/23 19:58	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	06/16/23 19:58	EPA 8260D	
n-Butylbenzene	1.27	0.500	1.00	ug/L	1	06/16/23 19:58	EPA 8260D	
sec-Butylbenzene	1.37	0.500	1.00	ug/L	1	06/16/23 19:58	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	06/16/23 19:58	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	06/16/23 19:58	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	06/16/23 19:58	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	06/16/23 19:58	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	06/16/23 19:58	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	06/16/23 19:58	EPA 8260D	
Chloromethane	ND	2.50	5.00	ug/L	1	06/16/23 19:58	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	06/16/23 19:58	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	06/16/23 19:58	EPA 8260D	

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director

Page 12 of 71



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125
Portland, OR 97219Project: **Gasco-MGP Only Mon. Wells 2Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3F1178 - 09 03 23 0835**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-061423-09 (A3F1178-05RE1)		Matrix: WG			Batch: 23F0604			
Dibromochloromethane	ND	0.500	1.00	ug/L	1	06/16/23 19:58	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	06/16/23 19:58	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	06/16/23 19:58	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	06/16/23 19:58	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	06/16/23 19:58	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	06/16/23 19:58	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	06/16/23 19:58	EPA 8260D	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	06/16/23 19:58	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	06/16/23 19:58	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	06/16/23 19:58	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	06/16/23 19:58	EPA 8260D	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	06/16/23 19:58	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	06/16/23 19:58	EPA 8260D	
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	06/16/23 19:58	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	06/16/23 19:58	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	06/16/23 19:58	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	06/16/23 19:58	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	06/16/23 19:58	EPA 8260D	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	06/16/23 19:58	EPA 8260D	
Ethylbenzene	18.7	0.250	0.500	ug/L	1	06/16/23 19:58	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	06/16/23 19:58	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	06/16/23 19:58	EPA 8260D	
Isopropylbenzene	17.8	0.500	1.00	ug/L	1	06/16/23 19:58	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	06/16/23 19:58	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	06/16/23 19:58	EPA 8260D	
4-Methyl-2-pentanone (MIBK)	ND	5.00	10.0	ug/L	1	06/16/23 19:58	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	06/16/23 19:58	EPA 8260D	
n-Propylbenzene	6.16	0.250	0.500	ug/L	1	06/16/23 19:58	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	06/16/23 19:58	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	06/16/23 19:58	EPA 8260D	
1,1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	06/16/23 19:58	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	06/16/23 19:58	EPA 8260D	
Toluene	0.840	0.500	1.00	ug/L	1	06/16/23 19:58	EPA 8260D	J

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125
Portland, OR 97219Project: **Gasco-MGP Only Mon. Wells 2Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3F1178 - 09 03 23 0835**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-061423-09 (A3F1178-05RE1)		Matrix: WG			Batch: 23F0604			
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	06/16/23 19:58	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	06/16/23 19:58	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	06/16/23 19:58	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	06/16/23 19:58	EPA 8260D	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	06/16/23 19:58	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	06/16/23 19:58	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	06/16/23 19:58	EPA 8260D	
1,2,4-Trimethylbenzene	8.09	0.500	1.00	ug/L	1	06/16/23 19:58	EPA 8260D	
1,3,5-Trimethylbenzene	1.60	0.500	1.00	ug/L	1	06/16/23 19:58	EPA 8260D	
Vinyl chloride	ND	0.200	0.400	ug/L	1	06/16/23 19:58	EPA 8260D	
m,p-Xylene	4.94	0.500	1.00	ug/L	1	06/16/23 19:58	EPA 8260D	
o-Xylene	8.07	0.250	0.500	ug/L	1	06/16/23 19:58	EPA 8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 96 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>06/16/23 19:58</i>	<i>EPA 8260D</i>	
<i>Toluene-d8 (Surr)</i>		<i>100 %</i>		<i>80-120 %</i>	<i>1</i>	<i>06/16/23 19:58</i>	<i>EPA 8260D</i>	
<i>4-Bromofluorobenzene (Surr)</i>		<i>97 %</i>		<i>80-120 %</i>	<i>1</i>	<i>06/16/23 19:58</i>	<i>EPA 8260D</i>	
GS-061423-09 (A3F1178-05RE2)		Matrix: WG			Batch: 23F0649			
Naphthalene	247	10.0	20.0	ug/L	10	06/19/23 15:44	EPA 8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 113 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>06/19/23 15:44</i>	<i>EPA 8260D</i>	
<i>Toluene-d8 (Surr)</i>		<i>97 %</i>		<i>80-120 %</i>	<i>1</i>	<i>06/19/23 15:44</i>	<i>EPA 8260D</i>	
<i>4-Bromofluorobenzene (Surr)</i>		<i>105 %</i>		<i>80-120 %</i>	<i>1</i>	<i>06/19/23 15:44</i>	<i>EPA 8260D</i>	
TB-061423 (A3F1178-06)		Matrix: W			Batch: 23F0604			
Acetone	ND	10.0	20.0	ug/L	1	06/16/23 21:05	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	06/16/23 21:05	EPA 8260D	
Benzene	ND	0.100	0.200	ug/L	1	06/16/23 21:05	EPA 8260D	
Bromobenzene	ND	0.250	0.500	ug/L	1	06/16/23 21:05	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	06/16/23 21:05	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	06/16/23 21:05	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	06/16/23 21:05	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	06/16/23 21:05	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	06/16/23 21:05	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	06/16/23 21:05	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	06/16/23 21:05	EPA 8260D	

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

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

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125
Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1178 - 09 03 23 0835

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
TB-061423 (A3F1178-06)		Matrix: W			Batch: 23F0604			
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	06/16/23 21:05	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	06/16/23 21:05	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	06/16/23 21:05	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	06/16/23 21:05	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	06/16/23 21:05	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	06/16/23 21:05	EPA 8260D	
Chloromethane	ND	2.50	5.00	ug/L	1	06/16/23 21:05	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	06/16/23 21:05	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	06/16/23 21:05	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	06/16/23 21:05	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	06/16/23 21:05	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	06/16/23 21:05	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	06/16/23 21:05	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	06/16/23 21:05	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	06/16/23 21:05	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	06/16/23 21:05	EPA 8260D	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	06/16/23 21:05	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	06/16/23 21:05	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	06/16/23 21:05	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	06/16/23 21:05	EPA 8260D	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	06/16/23 21:05	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	06/16/23 21:05	EPA 8260D	
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	06/16/23 21:05	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	06/16/23 21:05	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	06/16/23 21:05	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	06/16/23 21:05	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	06/16/23 21:05	EPA 8260D	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	06/16/23 21:05	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	06/16/23 21:05	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	06/16/23 21:05	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	06/16/23 21:05	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	06/16/23 21:05	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	06/16/23 21:05	EPA 8260D	

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director

Page 15 of 71



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

Project: **Gasco-MGP Only Mon. Wells 2Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3F1178 - 09 03 23 0835**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
TB-061423 (A3F1178-06)		Matrix: W			Batch: 23F0604			
Methylene chloride	ND	5.00	10.0	ug/L	1	06/16/23 21:05	EPA 8260D	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	06/16/23 21:05	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	06/16/23 21:05	EPA 8260D	
Naphthalene	ND	1.00	2.00	ug/L	1	06/16/23 21:05	EPA 8260D	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	06/16/23 21:05	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	06/16/23 21:05	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	06/16/23 21:05	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	06/16/23 21:05	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	06/16/23 21:05	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	06/16/23 21:05	EPA 8260D	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	06/16/23 21:05	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	06/16/23 21:05	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	06/16/23 21:05	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	06/16/23 21:05	EPA 8260D	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	06/16/23 21:05	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	06/16/23 21:05	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	06/16/23 21:05	EPA 8260D	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	06/16/23 21:05	EPA 8260D	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	06/16/23 21:05	EPA 8260D	
Vinyl chloride	ND	0.200	0.400	ug/L	1	06/16/23 21:05	EPA 8260D	
m,p-Xylene	ND	0.500	1.00	ug/L	1	06/16/23 21:05	EPA 8260D	
o-Xylene	ND	0.250	0.500	ug/L	1	06/16/23 21:05	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery:	117 %	Limits:	80-120 %	1	06/16/23 21:05	EPA 8260D
Toluene-d8 (Surr)			97 %		80-120 %	1	06/16/23 21:05	EPA 8260D
4-Bromofluorobenzene (Surr)			106 %		80-120 %	1	06/16/23 21:05	EPA 8260D

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director

Page 16 of 71



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1178 - 09 03 23 0835

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-061423-06 (A3F1178-02)		Matrix: WG			Batch: 23F0902			
1,1-Dichloroethene	ND	0.250	0.500	ug/L	25	06/25/23 19:19	EPA 8260D SIM	
cis-1,2-Dichloroethene	ND	0.250	0.500	ug/L	25	06/25/23 19:19	EPA 8260D SIM	
trans-1,2-Dichloroethene	ND	0.250	0.500	ug/L	25	06/25/23 19:19	EPA 8260D SIM	
Trichloroethene (TCE)	ND	0.250	0.500	ug/L	25	06/25/23 19:19	EPA 8260D SIM	
Vinyl chloride	ND	0.250	0.500	ug/L	25	06/25/23 19:19	EPA 8260D SIM	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery:	103 %	Limits:	80-120 %	1	06/25/23 19:19	EPA 8260D SIM
Toluene-d8 (Surr)			105 %		80-120 %	1	06/25/23 19:19	EPA 8260D SIM
4-Bromofluorobenzene (Surr)			93 %		80-120 %	1	06/25/23 19:19	EPA 8260D SIM

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1178 - 09 03 23 0835

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-061423-05 (A3F1178-01)		Matrix: WG			Batch: 23F0582			
Acenaphthene	0.0223	0.0171	0.0342	ug/L	1	06/16/23 18:16	EPA 8270E LVI	J
Acenaphthylene	0.124	0.0171	0.0342	ug/L	1	06/16/23 18:16	EPA 8270E LVI	
Anthracene	0.0749	0.0171	0.0342	ug/L	1	06/16/23 18:16	EPA 8270E LVI	
Benz(a)anthracene	ND	0.00856	0.0171	ug/L	1	06/16/23 18:16	EPA 8270E LVI	
Benzo(a)pyrene	ND	0.00856	0.0171	ug/L	1	06/16/23 18:16	EPA 8270E LVI	
Benzo(b)fluoranthene	ND	0.00856	0.0171	ug/L	1	06/16/23 18:16	EPA 8270E LVI	
Benzo(k)fluoranthene	ND	0.00856	0.0171	ug/L	1	06/16/23 18:16	EPA 8270E LVI	
Benzo(g,h,i)perylene	ND	0.0171	0.0342	ug/L	1	06/16/23 18:16	EPA 8270E LVI	
Chrysene	ND	0.00856	0.0171	ug/L	1	06/16/23 18:16	EPA 8270E LVI	
Dibenz(a,h)anthracene	ND	0.00856	0.0171	ug/L	1	06/16/23 18:16	EPA 8270E LVI	
Fluoranthene	ND	0.0171	0.0342	ug/L	1	06/16/23 18:16	EPA 8270E LVI	
Fluorene	ND	0.0171	0.0342	ug/L	1	06/16/23 18:16	EPA 8270E LVI	
Indeno(1,2,3-cd)pyrene	ND	0.00856	0.0171	ug/L	1	06/16/23 18:16	EPA 8270E LVI	
1-Methylnaphthalene	ND	0.0342	0.0685	ug/L	1	06/16/23 18:16	EPA 8270E LVI	
2-Methylnaphthalene	ND	0.0342	0.0685	ug/L	1	06/16/23 18:16	EPA 8270E LVI	
Naphthalene	0.0419	0.0342	0.0685	ug/L	1	06/16/23 18:16	EPA 8270E LVI	J
Phenanthrene	ND	0.0342	0.0685	ug/L	1	06/16/23 18:16	EPA 8270E LVI	
Pyrene	ND	0.0171	0.0342	ug/L	1	06/16/23 18:16	EPA 8270E LVI	
Carbazole	ND	0.0171	0.0342	ug/L	1	06/16/23 18:16	EPA 8270E LVI	
Dibenzofuran	ND	0.0171	0.0342	ug/L	1	06/16/23 18:16	EPA 8270E LVI	
Surrogate: Acenaphthylene-d8 (Surr)		Recovery:	90 %	Limits:	78-134 %	1	06/16/23 18:16	EPA 8270E LVI
Benzo(a)pyrene-d12 (Surr)			106 %		80-132 %	1	06/16/23 18:16	EPA 8270E LVI

GS-061423-06 (A3F1178-02)

Matrix: WG

Batch: 23F0582

Acenaphthene	241	1.77	3.54	ug/L	100	06/16/23 18:48	EPA 8270E LVI
Acenaphthylene	25.0	1.77	3.54	ug/L	100	06/16/23 18:48	EPA 8270E LVI
Anthracene	6.42	1.77	3.54	ug/L	100	06/16/23 18:48	EPA 8270E LVI
Benz(a)anthracene	ND	0.885	1.77	ug/L	100	06/16/23 18:48	EPA 8270E LVI
Benzo(a)pyrene	ND	0.885	1.77	ug/L	100	06/16/23 18:48	EPA 8270E LVI
Benzo(b)fluoranthene	ND	0.885	1.77	ug/L	100	06/16/23 18:48	EPA 8270E LVI
Benzo(k)fluoranthene	ND	0.885	1.77	ug/L	100	06/16/23 18:48	EPA 8270E LVI
Benzo(g,h,i)perylene	ND	1.77	3.54	ug/L	100	06/16/23 18:48	EPA 8270E LVI
Chrysene	ND	0.885	1.77	ug/L	100	06/16/23 18:48	EPA 8270E LVI

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director

Page 18 of 71



ANALYTICAL REPORT

Apex Laboratories, LLC

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

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125
Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1178 - 09 03 23 0835

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-061423-06 (A3F1178-02)		Matrix: WG			Batch: 23F0582			
Dibenz(a,h)anthracene	ND	0.885	1.77	ug/L	100	06/16/23 18:48	EPA 8270E LVI	
Fluoranthene	4.65	1.77	3.54	ug/L	100	06/16/23 18:48	EPA 8270E LVI	
Fluorene	39.9	1.77	3.54	ug/L	100	06/16/23 18:48	EPA 8270E LVI	
Indeno(1,2,3-cd)pyrene	ND	0.885	1.77	ug/L	100	06/16/23 18:48	EPA 8270E LVI	
1-Methylnaphthalene	169	3.54	7.08	ug/L	100	06/16/23 18:48	EPA 8270E LVI	
2-Methylnaphthalene	5.89	3.54	7.08	ug/L	100	06/16/23 18:48	EPA 8270E LVI	J
Naphthalene	18.1	3.54	7.08	ug/L	100	06/16/23 18:48	EPA 8270E LVI	
Phenanthrene	21.8	3.54	7.08	ug/L	100	06/16/23 18:48	EPA 8270E LVI	
Pyrene	4.38	1.77	3.54	ug/L	100	06/16/23 18:48	EPA 8270E LVI	
Carbazole	37.9	1.77	3.54	ug/L	100	06/16/23 18:48	EPA 8270E LVI	
Dibenzofuran	9.12	1.77	3.54	ug/L	100	06/16/23 18:48	EPA 8270E LVI	
Surrogate: Acenaphthylene-d8 (Surr)		Recovery: %		Limits: 78-134 %	100	06/16/23 18:48	EPA 8270E LVI	S-01
Benzo(a)pyrene-d12 (Surr)		126 %		80-132 %	100	06/16/23 18:48	EPA 8270E LVI	S-05
GS-061423-07 (A3F1178-03)		Matrix: WG			Batch: 23F0582			
Acenaphthene	109	1.70	3.39	ug/L	100	06/16/23 19:21	EPA 8270E LVI	
Acenaphthylene	13.3	1.70	3.39	ug/L	100	06/16/23 19:21	EPA 8270E LVI	
Anthracene	4.45	1.70	3.39	ug/L	100	06/16/23 19:21	EPA 8270E LVI	
Benz(a)anthracene	ND	0.848	1.70	ug/L	100	06/16/23 19:21	EPA 8270E LVI	
Benzo(a)pyrene	ND	0.848	1.70	ug/L	100	06/16/23 19:21	EPA 8270E LVI	
Benzo(b)fluoranthene	ND	0.848	1.70	ug/L	100	06/16/23 19:21	EPA 8270E LVI	
Benzo(k)fluoranthene	ND	0.848	1.70	ug/L	100	06/16/23 19:21	EPA 8270E LVI	
Benzo(g,h,i)perylene	ND	1.70	3.39	ug/L	100	06/16/23 19:21	EPA 8270E LVI	
Chrysene	ND	0.848	1.70	ug/L	100	06/16/23 19:21	EPA 8270E LVI	
Dibenz(a,h)anthracene	ND	0.848	1.70	ug/L	100	06/16/23 19:21	EPA 8270E LVI	
Fluoranthene	11.4	1.70	3.39	ug/L	100	06/16/23 19:21	EPA 8270E LVI	
Fluorene	22.3	1.70	3.39	ug/L	100	06/16/23 19:21	EPA 8270E LVI	
Indeno(1,2,3-cd)pyrene	ND	0.848	1.70	ug/L	100	06/16/23 19:21	EPA 8270E LVI	
1-Methylnaphthalene	265	3.39	6.78	ug/L	100	06/16/23 19:21	EPA 8270E LVI	
2-Methylnaphthalene	220	3.39	6.78	ug/L	100	06/16/23 19:21	EPA 8270E LVI	
Phenanthrene	17.2	3.39	6.78	ug/L	100	06/16/23 19:21	EPA 8270E LVI	
Pyrene	13.5	1.70	3.39	ug/L	100	06/16/23 19:21	EPA 8270E LVI	
Carbazole	41.8	1.70	3.39	ug/L	100	06/16/23 19:21	EPA 8270E LVI	

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director

Page 19 of 71



ANALYTICAL REPORT

Apex Laboratories, LLC

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

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125
Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1178 - 09 03 23 0835

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-061423-07 (A3F1178-03)		Matrix: WG			Batch: 23F0582			
Dibenzofuran	4.79	1.70	3.39	ug/L	100	06/16/23 19:21	EPA 8270E LVI	
Surrogate: Acenaphthylene-d8 (Surr)		Recovery: %		Limits: 78-134 %	100	06/16/23 19:21	EPA 8270E LVI	S-01
Benzo(a)pyrene-d12 (Surr)		96 %		80-132 %	100	06/16/23 19:21	EPA 8270E LVI	S-05
GS-061423-07 (A3F1178-03RE1)		Matrix: WG			Batch: 23F0582			
Naphthalene	4840	33.9	67.8	ug/L	1000	06/19/23 16:46	EPA 8270E LVI	
GS-061423-08 (A3F1178-04)		Matrix: WG			Batch: 23F0582			
Acenaphthene	113	2.04	4.08	ug/L	100	06/16/23 19:54	EPA 8270E LVI	
Acenaphthylene	17.0	2.04	4.08	ug/L	100	06/16/23 19:54	EPA 8270E LVI	
Anthracene	9.13	2.04	4.08	ug/L	100	06/16/23 19:54	EPA 8270E LVI	
Benz(a)anthracene	ND	1.02	2.04	ug/L	100	06/16/23 19:54	EPA 8270E LVI	
Benzo(a)pyrene	ND	1.02	2.04	ug/L	100	06/16/23 19:54	EPA 8270E LVI	
Benzo(b)fluoranthene	ND	1.02	2.04	ug/L	100	06/16/23 19:54	EPA 8270E LVI	
Benzo(k)fluoranthene	ND	1.02	2.04	ug/L	100	06/16/23 19:54	EPA 8270E LVI	
Benzo(g,h,i)perylene	ND	2.04	4.08	ug/L	100	06/16/23 19:54	EPA 8270E LVI	
Chrysene	ND	1.02	2.04	ug/L	100	06/16/23 19:54	EPA 8270E LVI	
Dibenz(a,h)anthracene	ND	1.02	2.04	ug/L	100	06/16/23 19:54	EPA 8270E LVI	
Fluoranthene	17.5	2.04	4.08	ug/L	100	06/16/23 19:54	EPA 8270E LVI	
Fluorene	31.8	2.04	4.08	ug/L	100	06/16/23 19:54	EPA 8270E LVI	
Indeno(1,2,3-cd)pyrene	ND	1.02	2.04	ug/L	100	06/16/23 19:54	EPA 8270E LVI	
1-Methylnaphthalene	44.9	4.08	8.16	ug/L	100	06/16/23 19:54	EPA 8270E LVI	
2-Methylnaphthalene	18.9	4.08	8.16	ug/L	100	06/16/23 19:54	EPA 8270E LVI	
Naphthalene	15.8	4.08	8.16	ug/L	100	06/16/23 19:54	EPA 8270E LVI	
Phenanthrene	54.3	4.08	8.16	ug/L	100	06/16/23 19:54	EPA 8270E LVI	
Pyrene	18.8	2.04	4.08	ug/L	100	06/16/23 19:54	EPA 8270E LVI	
Carbazole	5.92	2.04	4.08	ug/L	100	06/16/23 19:54	EPA 8270E LVI	
Dibenzofuran	3.88	2.04	4.08	ug/L	100	06/16/23 19:54	EPA 8270E LVI	J
Surrogate: Acenaphthylene-d8 (Surr)		Recovery: %		Limits: 78-134 %	100	06/16/23 19:54	EPA 8270E LVI	S-01
Benzo(a)pyrene-d12 (Surr)		90 %		80-132 %	100	06/16/23 19:54	EPA 8270E LVI	S-05
GS-061423-09 (A3F1178-05)		Matrix: WG			Batch: 23F0582			
Acenaphthene	168	1.88	3.76	ug/L	100	06/16/23 20:26	EPA 8270E LVI	
Acenaphthylene	22.0	1.88	3.76	ug/L	100	06/16/23 20:26	EPA 8270E LVI	

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

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

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125
Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1178 - 09 03 23 0835

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-061423-09 (A3F1178-05)		Matrix: WG			Batch: 23F0582			
Anthracene	5.92	1.88	3.76	ug/L	100	06/16/23 20:26	EPA 8270E LVI	
Benz(a)anthracene	ND	0.939	1.88	ug/L	100	06/16/23 20:26	EPA 8270E LVI	
Benzo(a)pyrene	ND	0.939	1.88	ug/L	100	06/16/23 20:26	EPA 8270E LVI	
Benzo(b)fluoranthene	ND	0.939	1.88	ug/L	100	06/16/23 20:26	EPA 8270E LVI	
Benzo(k)fluoranthene	ND	0.939	1.88	ug/L	100	06/16/23 20:26	EPA 8270E LVI	
Benzo(g,h,i)perylene	ND	1.88	3.76	ug/L	100	06/16/23 20:26	EPA 8270E LVI	
Chrysene	ND	0.939	1.88	ug/L	100	06/16/23 20:26	EPA 8270E LVI	
Dibenz(a,h)anthracene	ND	0.939	1.88	ug/L	100	06/16/23 20:26	EPA 8270E LVI	
Fluoranthene	2.68	1.88	3.76	ug/L	100	06/16/23 20:26	EPA 8270E LVI	J
Fluorene	37.3	1.88	3.76	ug/L	100	06/16/23 20:26	EPA 8270E LVI	
Indeno(1,2,3-cd)pyrene	ND	0.939	1.88	ug/L	100	06/16/23 20:26	EPA 8270E LVI	
1-Methylnaphthalene	237	3.76	7.51	ug/L	100	06/16/23 20:26	EPA 8270E LVI	
2-Methylnaphthalene	16.5	3.76	7.51	ug/L	100	06/16/23 20:26	EPA 8270E LVI	
Naphthalene	183	3.76	7.51	ug/L	100	06/16/23 20:26	EPA 8270E LVI	
Phenanthrene	20.7	3.76	7.51	ug/L	100	06/16/23 20:26	EPA 8270E LVI	
Pyrene	2.30	1.88	3.76	ug/L	100	06/16/23 20:26	EPA 8270E LVI	J
Carbazole	39.6	1.88	3.76	ug/L	100	06/16/23 20:26	EPA 8270E LVI	
Dibenzofuran	6.95	1.88	3.76	ug/L	100	06/16/23 20:26	EPA 8270E LVI	
Surrogate: Acenaphthylene-d8 (Surr)		Recovery: 66 %		Limits: 78-134 %	100	06/16/23 20:26	EPA 8270E LVI	S-05
Benzo(a)pyrene-d12 (Surr)		82 %		80-132 %	100	06/16/23 20:26	EPA 8270E LVI	S-05

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director

Page 21 of 71



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125
Portland, OR 97219Project: **Gasco-MGP Only Mon. Wells 2Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3F1178 - 09 03 23 0835**

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-061423-05 (A3F1178-01)		Matrix: WG						
Batch: 23F0834								
Aluminum	ND	25.0	50.0	ug/L	1	06/26/23 20:09	EPA 6020B	
Antimony	ND	0.500	1.00	ug/L	1	06/26/23 20:09	EPA 6020B	
Arsenic	0.903	0.500	1.00	ug/L	1	06/26/23 20:09	EPA 6020B	J
Barium	26.0	1.00	2.00	ug/L	1	06/26/23 20:09	EPA 6020B	
Cadmium	ND	0.100	0.200	ug/L	1	06/26/23 20:09	EPA 6020B	
Chromium	ND	1.00	2.00	ug/L	1	06/26/23 20:09	EPA 6020B	
Copper	ND	1.00	2.00	ug/L	1	06/26/23 20:09	EPA 6020B	
Iron	246	25.0	50.0	ug/L	1	06/26/23 20:09	EPA 6020B	
Manganese	2.84	0.500	1.00	ug/L	1	06/26/23 20:09	EPA 6020B	
Nickel	90.2	1.00	2.00	ug/L	1	06/26/23 20:09	EPA 6020B	
Selenium	ND	0.500	1.00	ug/L	1	06/26/23 20:09	EPA 6020B	
Silver	ND	0.100	0.200	ug/L	1	06/26/23 20:09	EPA 6020B	
Thallium	ND	0.100	0.200	ug/L	1	06/26/23 20:09	EPA 6020B	
Vanadium	122	1.00	2.00	ug/L	1	06/26/23 20:09	EPA 6020B	
Zinc	9.63	2.00	4.00	ug/L	1	06/26/23 20:09	EPA 6020B	
GS-061423-05 (A3F1178-01RE1)		Matrix: WG						
Batch: 23F0834								
Beryllium	ND	0.100	0.200	ug/L	1	06/27/23 23:15	EPA 6020B	
Lead	ND	0.110	0.200	ug/L	1	06/27/23 23:15	EPA 6020B	
Mercury	ND	0.0400	0.0800	ug/L	1	06/27/23 23:15	EPA 6020B	
GS-061423-06 (A3F1178-02)		Matrix: WG						
Batch: 23F0834								
Aluminum	ND	25.0	50.0	ug/L	1	06/26/23 20:15	EPA 6020B	
Antimony	ND	0.500	1.00	ug/L	1	06/26/23 20:15	EPA 6020B	
Arsenic	1.16	0.500	1.00	ug/L	1	06/26/23 20:15	EPA 6020B	
Barium	76.6	1.00	2.00	ug/L	1	06/26/23 20:15	EPA 6020B	
Cadmium	ND	0.100	0.200	ug/L	1	06/26/23 20:15	EPA 6020B	
Chromium	ND	1.00	2.00	ug/L	1	06/26/23 20:15	EPA 6020B	
Copper	ND	1.00	2.00	ug/L	1	06/26/23 20:15	EPA 6020B	
Iron	32500	25.0	50.0	ug/L	1	06/26/23 20:15	EPA 6020B	
Nickel	ND	1.00	2.00	ug/L	1	06/26/23 20:15	EPA 6020B	

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125
Portland, OR 97219Project: **Gasco-MGP Only Mon. Wells 2Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3F1178 - 09 03 23 0835**

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-061423-06 (A3F1178-02)		Matrix: WG						
Selenium	ND	0.500	1.00	ug/L	1	06/26/23 20:15	EPA 6020B	
Silver	ND	0.100	0.200	ug/L	1	06/26/23 20:15	EPA 6020B	
Thallium	ND	0.100	0.200	ug/L	1	06/26/23 20:15	EPA 6020B	
Vanadium	1.46	1.00	2.00	ug/L	1	06/26/23 20:15	EPA 6020B	J
Zinc	3.66	2.00	4.00	ug/L	1	06/26/23 20:15	EPA 6020B	J
GS-061423-06 (A3F1178-02RE1)		Matrix: WG						
Batch: 23F0834								
Beryllium	ND	0.100	0.200	ug/L	1	06/27/23 23:20	EPA 6020B	
Lead	ND	0.110	0.200	ug/L	1	06/27/23 23:20	EPA 6020B	
Mercury	ND	0.0400	0.0800	ug/L	1	06/27/23 23:20	EPA 6020B	
GS-061423-06 (A3F1178-02RE2)		Matrix: WG						
Batch: 23F0834								
Manganese	3070	5.00	10.0	ug/L	10	06/27/23 23:25	EPA 6020B	
GS-061423-07 (A3F1178-03)		Matrix: WG						
Batch: 23F0834								
Aluminum	ND	25.0	50.0	ug/L	1	06/26/23 20:21	EPA 6020B	
Antimony	ND	0.500	1.00	ug/L	1	06/26/23 20:21	EPA 6020B	
Arsenic	1.35	0.500	1.00	ug/L	1	06/26/23 20:21	EPA 6020B	
Barium	58.7	1.00	2.00	ug/L	1	06/26/23 20:21	EPA 6020B	
Cadmium	ND	0.100	0.200	ug/L	1	06/26/23 20:21	EPA 6020B	
Chromium	ND	1.00	2.00	ug/L	1	06/26/23 20:21	EPA 6020B	
Copper	ND	1.00	2.00	ug/L	1	06/26/23 20:21	EPA 6020B	
Iron	26100	25.0	50.0	ug/L	1	06/26/23 20:21	EPA 6020B	
Manganese	1790	0.500	1.00	ug/L	1	06/26/23 20:21	EPA 6020B	
Nickel	ND	1.00	2.00	ug/L	1	06/26/23 20:21	EPA 6020B	
Selenium	ND	0.500	1.00	ug/L	1	06/26/23 20:21	EPA 6020B	
Silver	ND	0.100	0.200	ug/L	1	06/26/23 20:21	EPA 6020B	
Thallium	ND	0.100	0.200	ug/L	1	06/26/23 20:21	EPA 6020B	
Vanadium	1.06	1.00	2.00	ug/L	1	06/26/23 20:21	EPA 6020B	J
Zinc	3.10	2.00	4.00	ug/L	1	06/26/23 20:21	EPA 6020B	J

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

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

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125
Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1178 - 09 03 23 0835

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-061423-07 (A3F1178-03RE1)		Matrix: WG						
Batch: 23F0834								
Beryllium	ND	0.100	0.200	ug/L	1	06/27/23 23:30	EPA 6020B	
Lead	ND	0.110	0.200	ug/L	1	06/27/23 23:30	EPA 6020B	
Mercury	ND	0.0400	0.0800	ug/L	1	06/27/23 23:30	EPA 6020B	
GS-061423-08 (A3F1178-04)		Matrix: WG						
Batch: 23F0834								
Aluminum	ND	25.0	50.0	ug/L	1	06/26/23 20:40	EPA 6020B	
Antimony	ND	0.500	1.00	ug/L	1	06/26/23 20:40	EPA 6020B	
Arsenic	5.87	0.500	1.00	ug/L	1	06/26/23 20:40	EPA 6020B	
Barium	89.6	1.00	2.00	ug/L	1	06/26/23 20:40	EPA 6020B	
Cadmium	ND	0.100	0.200	ug/L	1	06/26/23 20:40	EPA 6020B	
Chromium	ND	1.00	2.00	ug/L	1	06/26/23 20:40	EPA 6020B	
Copper	ND	1.00	2.00	ug/L	1	06/26/23 20:40	EPA 6020B	
Iron	23800	25.0	50.0	ug/L	1	06/26/23 20:40	EPA 6020B	
Manganese	1400	0.500	1.00	ug/L	1	06/26/23 20:40	EPA 6020B	
Nickel	2.36	1.00	2.00	ug/L	1	06/26/23 20:40	EPA 6020B	
Selenium	ND	0.500	1.00	ug/L	1	06/26/23 20:40	EPA 6020B	
Silver	ND	0.100	0.200	ug/L	1	06/26/23 20:40	EPA 6020B	
Thallium	ND	0.100	0.200	ug/L	1	06/26/23 20:40	EPA 6020B	
Vanadium	ND	1.00	2.00	ug/L	1	06/26/23 20:40	EPA 6020B	
Zinc	ND	2.00	4.00	ug/L	1	06/26/23 20:40	EPA 6020B	
GS-061423-08 (A3F1178-04RE1)		Matrix: WG						
Batch: 23F0834								
Beryllium	ND	0.100	0.200	ug/L	1	06/27/23 23:35	EPA 6020B	
Lead	ND	0.110	0.200	ug/L	1	06/27/23 23:35	EPA 6020B	
Mercury	ND	0.0400	0.0800	ug/L	1	06/27/23 23:35	EPA 6020B	
GS-061423-09 (A3F1178-05)		Matrix: WG						
Batch: 23F0834								
Aluminum	ND	25.0	50.0	ug/L	1	06/26/23 20:47	EPA 6020B	
Antimony	ND	0.500	1.00	ug/L	1	06/26/23 20:47	EPA 6020B	
Arsenic	3.97	0.500	1.00	ug/L	1	06/26/23 20:47	EPA 6020B	

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125
Portland, OR 97219Project: **Gasco-MGP Only Mon. Wells 2Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3F1178 - 09 03 23 0835**

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-061423-09 (A3F1178-05)		Matrix: WG						
Barium	64.3	1.00	2.00	ug/L	1	06/26/23 20:47	EPA 6020B	
Cadmium	ND	0.100	0.200	ug/L	1	06/26/23 20:47	EPA 6020B	
Chromium	4.97	1.00	2.00	ug/L	1	06/26/23 20:47	EPA 6020B	
Copper	ND	1.00	2.00	ug/L	1	06/26/23 20:47	EPA 6020B	
Iron	29000	25.0	50.0	ug/L	1	06/26/23 20:47	EPA 6020B	
Manganese	1620	0.500	1.00	ug/L	1	06/26/23 20:47	EPA 6020B	
Nickel	7.02	1.00	2.00	ug/L	1	06/26/23 20:47	EPA 6020B	
Selenium	ND	0.500	1.00	ug/L	1	06/26/23 20:47	EPA 6020B	
Silver	ND	0.100	0.200	ug/L	1	06/26/23 20:47	EPA 6020B	
Thallium	ND	0.100	0.200	ug/L	1	06/26/23 20:47	EPA 6020B	
Vanadium	1.02	1.00	2.00	ug/L	1	06/26/23 20:47	EPA 6020B	J
Zinc	2.76	2.00	4.00	ug/L	1	06/26/23 20:47	EPA 6020B	J
GS-061423-09 (A3F1178-05RE1)		Matrix: WG						
Batch: 23F0834								
Beryllium	ND	0.100	0.200	ug/L	1	06/27/23 23:51	EPA 6020B	
Lead	ND	0.110	0.200	ug/L	1	06/27/23 23:51	EPA 6020B	
Mercury	ND	0.0400	0.0800	ug/L	1	06/27/23 23:51	EPA 6020B	

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

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

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125
Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1178 - 09 03 23 0835

ANALYTICAL SAMPLE RESULTS

Total Cyanide by Flow Analysis (Aqueous)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-061423-05 (A3F1178-01RE1)				Matrix: WG		Batch: 23F0720		
Total Cyanide	0.587	0.0100	0.0100	mg/L	2	06/21/23 14:12	EPA 335.4	
GS-061423-06 (A3F1178-02RE1)				Matrix: WG		Batch: 23F0720		
Total Cyanide	0.542	0.0100	0.0100	mg/L	2	06/21/23 14:24	EPA 335.4	
GS-061423-07 (A3F1178-03RE1)				Matrix: WG		Batch: 23F0720		
Total Cyanide	0.0625	0.00500	0.00500	mg/L	1	06/21/23 14:10	EPA 335.4	
GS-061423-08 (A3F1178-04)				Matrix: WG		Batch: 23F0720		
Total Cyanide	0.155	0.00500	0.00500	mg/L	1	06/21/23 13:32	EPA 335.4	
GS-061423-09 (A3F1178-05)				Matrix: WG		Batch: 23F0720		
Total Cyanide	0.127	0.00500	0.00500	mg/L	1	06/21/23 13:34	EPA 335.4	

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1178 - 09 03 23 0835

ANALYTICAL SAMPLE RESULTS

Available Cyanide by FIA, Ligand Exchange and Amperometric Detection

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-061423-05 (A3F1178-01)				Matrix: WG		Batch: 23F0918		
Available Cyanide	0.00757	0.00100	0.00200	mg/L	1	06/27/23 11:13	D6888-09	
GS-061423-06 (A3F1178-02)				Matrix: WG		Batch: 23F0918		
Available Cyanide	0.00252	0.00100	0.00200	mg/L	1	06/27/23 11:15	D6888-09	
GS-061423-07 (A3F1178-03)				Matrix: WG		Batch: 23F0918		
Available Cyanide	0.00164	0.00100	0.00200	mg/L	1	06/27/23 11:18	D6888-09	J
GS-061423-08 (A3F1178-04)				Matrix: WG		Batch: 23F0918		
Available Cyanide	0.00177	0.00100	0.00200	mg/L	1	06/27/23 11:24	D6888-09	J
GS-061423-09 (A3F1178-05)				Matrix: WG		Batch: 23F0918		
Available Cyanide	0.00199	0.00100	0.00200	mg/L	1	06/27/23 11:25	D6888-09	J

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director

Page 27 of 71

**ANALYTICAL REPORT****Apex Laboratories, LLC**6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125
Portland, OR 97219Project: **Gasco-MGP Only Mon. Wells 2Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3F1178 - 09 03 23 0835****ANALYTICAL SAMPLE RESULTS****Free Cyanide by Microdiffusion/Colorimetric Spectrophotometry**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-061423-05 (A3F1178-01)				Matrix: WG		Batch: 23F0590		
Free Cyanide	ND	0.00250	0.00500	mg/L	1	06/16/23 15:27	D4282-02	
GS-061423-06 (A3F1178-02)				Matrix: WG		Batch: 23F0590		
Free Cyanide	ND	0.00250	0.00500	mg/L	1	06/16/23 15:32	D4282-02	
GS-061423-07 (A3F1178-03)				Matrix: WG		Batch: 23F0590		PRES
Free Cyanide	ND	0.00250	0.00500	mg/L	1	06/16/23 15:32	D4282-02	
GS-061423-08 (A3F1178-04)				Matrix: WG		Batch: 23F0590		
Free Cyanide	ND	0.00250	0.00500	mg/L	1	06/16/23 15:37	D4282-02	
GS-061423-09 (A3F1178-05)				Matrix: WG		Batch: 23F0590		
Free Cyanide	ND	0.00250	0.00500	mg/L	1	06/16/23 15:37	D4282-02	

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1178 - 09 03 23 0835

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 23F0604 - EPA 5030C						Water						
Blank (23F0604-BLK1)			Prepared: 06/16/23 10:57 Analyzed: 06/16/23 13:09									
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	---	---	---	---	---	---	

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director

Page 29 of 71



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1178 - 09 03 23 0835

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 23F0604 - EPA 5030C						Water						
Blank (23F0604-BLK1)						Prepared: 06/16/23 10:57 Analyzed: 06/16/23 13:09						
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Ethylbenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
2-Hexanone	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Methylene chloride	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Naphthalene	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Styrene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
Toluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Vinyl chloride	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
m,p-Xylene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
o-Xylene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr) Recovery: 97 % Limits: 80-120 % Dilution: 1x												

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director

Page 30 of 71



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1178 - 09 03 23 0835

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 23F0604 - EPA 5030C						Water						
Blank (23F0604-BLK1)				Prepared: 06/16/23 10:57		Analyzed: 06/16/23 13:09						
Surr: Toluene-d8 (Surr)		Recovery: 99 %		Limits: 80-120 %		Dilution: 1x						
4-Bromofluorobenzene (Surr)		103 %		80-120 %		"						
LCS (23F0604-BS1)				Prepared: 06/16/23 10:57		Analyzed: 06/16/23 12:24						
EPA 8260D												
Acetone	41.4	10.0	20.0	ug/L	1	40.0	---	104	80-120%	---	---	
Acrylonitrile	19.0	1.00	2.00	ug/L	1	20.0	---	95	80-120%	---	---	
Benzene	20.6	0.100	0.200	ug/L	1	20.0	---	103	80-120%	---	---	
Bromobenzene	20.8	0.250	0.500	ug/L	1	20.0	---	104	80-120%	---	---	
Bromochloromethane	23.5	0.500	1.00	ug/L	1	20.0	---	117	80-120%	---	---	
Bromodichloromethane	23.3	0.500	1.00	ug/L	1	20.0	---	117	80-120%	---	---	
Bromoform	23.3	0.500	1.00	ug/L	1	20.0	---	116	80-120%	---	---	
Bromomethane	23.6	5.00	5.00	ug/L	1	20.0	---	118	80-120%	---	---	
2-Butanone (MEK)	40.4	5.00	10.0	ug/L	1	40.0	---	101	80-120%	---	---	
n-Butylbenzene	23.0	0.500	1.00	ug/L	1	20.0	---	115	80-120%	---	---	
sec-Butylbenzene	22.8	0.500	1.00	ug/L	1	20.0	---	114	80-120%	---	---	
tert-Butylbenzene	23.0	0.500	1.00	ug/L	1	20.0	---	115	80-120%	---	---	
Carbon disulfide	19.4	5.00	10.0	ug/L	1	20.0	---	97	80-120%	---	---	
Carbon tetrachloride	22.8	0.500	1.00	ug/L	1	20.0	---	114	80-120%	---	---	
Chlorobenzene	21.0	0.250	0.500	ug/L	1	20.0	---	105	80-120%	---	---	
Chloroethane	23.3	5.00	5.00	ug/L	1	20.0	---	116	80-120%	---	---	
Chloroform	21.2	0.500	1.00	ug/L	1	20.0	---	106	80-120%	---	---	
Chloromethane	19.1	2.50	5.00	ug/L	1	20.0	---	96	80-120%	---	---	
2-Chlorotoluene	20.4	0.500	1.00	ug/L	1	20.0	---	102	80-120%	---	---	
4-Chlorotoluene	24.1	0.500	1.00	ug/L	1	20.0	---	121	80-120%	---	---	Q-56
Dibromochloromethane	22.8	0.500	1.00	ug/L	1	20.0	---	114	80-120%	---	---	
1,2-Dibromo-3-chloropropane	20.7	2.50	5.00	ug/L	1	20.0	---	104	80-120%	---	---	
1,2-Dibromoethane (EDB)	20.6	0.250	0.500	ug/L	1	20.0	---	103	80-120%	---	---	
Dibromomethane	21.2	0.500	1.00	ug/L	1	20.0	---	106	80-120%	---	---	
1,2-Dichlorobenzene	21.8	0.250	0.500	ug/L	1	20.0	---	109	80-120%	---	---	
1,3-Dichlorobenzene	22.0	0.250	0.500	ug/L	1	20.0	---	110	80-120%	---	---	
1,4-Dichlorobenzene	20.9	0.250	0.500	ug/L	1	20.0	---	105	80-120%	---	---	
Dichlorodifluoromethane	18.7	0.500	1.00	ug/L	1	20.0	---	94	80-120%	---	---	
1,1-Dichloroethane	21.7	0.200	0.400	ug/L	1	20.0	---	108	80-120%	---	---	

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director

Page 31 of 71



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1178 - 09 03 23 0835

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 23F0604 - EPA 5030C						Water						
LCS (23F0604-BS1)						Prepared: 06/16/23 10:57 Analyzed: 06/16/23 12:24						
1,2-Dichloroethane (EDC)	22.7	0.200	0.400	ug/L	1	20.0	---	113	80-120%	---	---	
1,1-Dichloroethene	21.2	0.200	0.400	ug/L	1	20.0	---	106	80-120%	---	---	
cis-1,2-Dichloroethene	22.2	0.200	0.400	ug/L	1	20.0	---	111	80-120%	---	---	
trans-1,2-Dichloroethene	20.6	0.200	0.400	ug/L	1	20.0	---	103	80-120%	---	---	
1,2-Dichloropropane	21.2	0.250	0.500	ug/L	1	20.0	---	106	80-120%	---	---	
1,3-Dichloropropane	22.3	0.500	1.00	ug/L	1	20.0	---	112	80-120%	---	---	
2,2-Dichloropropane	24.8	0.500	1.00	ug/L	1	20.0	---	124	80-120%	---	---	Q-56
1,1-Dichloropropene	21.6	0.500	1.00	ug/L	1	20.0	---	108	80-120%	---	---	
cis-1,3-Dichloropropene	23.3	0.500	1.00	ug/L	1	20.0	---	116	80-120%	---	---	
trans-1,3-Dichloropropene	24.1	0.500	1.00	ug/L	1	20.0	---	120	80-120%	---	---	
Ethylbenzene	21.5	0.250	0.500	ug/L	1	20.0	---	107	80-120%	---	---	
Hexachlorobutadiene	21.6	2.50	5.00	ug/L	1	20.0	---	108	80-120%	---	---	
2-Hexanone	37.8	5.00	10.0	ug/L	1	40.0	---	94	80-120%	---	---	
Isopropylbenzene	19.9	0.500	1.00	ug/L	1	20.0	---	100	80-120%	---	---	
4-Isopropyltoluene	20.5	0.500	1.00	ug/L	1	20.0	---	102	80-120%	---	---	
Methylene chloride	19.6	5.00	10.0	ug/L	1	20.0	---	98	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)	21.9	0.500	1.00	ug/L	1	20.0	---	109	80-120%	---	---	
Naphthalene	17.8	1.00	2.00	ug/L	1	20.0	---	89	80-120%	---	---	
n-Propylbenzene	22.2	0.250	0.500	ug/L	1	20.0	---	111	80-120%	---	---	
Styrene	20.2	0.500	1.00	ug/L	1	20.0	---	101	80-120%	---	---	
1,1,1,2-Tetrachloroethane	21.5	0.200	0.400	ug/L	1	20.0	---	107	80-120%	---	---	
1,1,2,2-Tetrachloroethane	22.1	0.250	0.500	ug/L	1	20.0	---	111	80-120%	---	---	
Tetrachloroethene (PCE)	19.7	0.200	0.400	ug/L	1	20.0	---	99	80-120%	---	---	
Toluene	20.6	0.500	1.00	ug/L	1	20.0	---	103	80-120%	---	---	
1,2,3-Trichlorobenzene	20.8	1.00	2.00	ug/L	1	20.0	---	104	80-120%	---	---	
1,2,4-Trichlorobenzene	20.7	1.00	2.00	ug/L	1	20.0	---	103	80-120%	---	---	
1,1,1-Trichloroethane	22.6	0.200	0.400	ug/L	1	20.0	---	113	80-120%	---	---	
1,1,2-Trichloroethane	20.1	0.250	0.500	ug/L	1	20.0	---	101	80-120%	---	---	
Trichloroethene (TCE)	19.7	0.200	0.400	ug/L	1	20.0	---	98	80-120%	---	---	
Trichlorofluoromethane	22.0	1.00	2.00	ug/L	1	20.0	---	110	80-120%	---	---	
1,2,3-Trichloropropane	21.0	0.500	1.00	ug/L	1	20.0	---	105	80-120%	---	---	
1,2,4-Trimethylbenzene	21.4	0.500	1.00	ug/L	1	20.0	---	107	80-120%	---	---	
1,3,5-Trimethylbenzene	23.3	0.500	1.00	ug/L	1	20.0	---	117	80-120%	---	---	

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director

Page 32 of 71



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1178 - 09 03 23 0835

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 23F0604 - EPA 5030C						Water						
LCS (23F0604-BS1)			Prepared: 06/16/23 10:57		Analyzed: 06/16/23 12:24							
Vinyl chloride	19.3	0.200	0.400	ug/L	1	20.0	---	96	80-120%	---	---	
m,p-Xylene	47.2	0.500	1.00	ug/L	1	40.0	---	118	80-120%	---	---	
o-Xylene	23.5	0.250	0.500	ug/L	1	20.0	---	117	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 97 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		97 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		95 %		80-120 %		"						

Duplicate (23F0604-DUP1)

Prepared: 06/16/23 10:57 Analyzed: 06/16/23 13:55

V-01

QC Source Sample: Non-SDG (A3F1166-03)

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

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1178 - 09 03 23 0835

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 23F0604 - EPA 5030C						Water						
Duplicate (23F0604-DUP1)			Prepared: 06/16/23 10:57		Analyzed: 06/16/23 13:55		V-01					
QC Source Sample: Non-SDG (A3F1166-03)												
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Ethylbenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	---	ND	---	---	---	30%	
2-Hexanone	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Methylene chloride	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Naphthalene	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	30%	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Styrene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
Toluene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director

Page 34 of 71



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

Project: **Gasco-MGP Only Mon. Wells 2Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3F1178 - 09 03 23 0835**

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 23F0604 - EPA 5030C						Water						
Duplicate (23F0604-DUP1)			Prepared: 06/16/23 10:57		Analyzed: 06/16/23 13:55		V-01					
QC Source Sample: Non-SDG (A3F1166-03)												
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Vinyl chloride	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
m,p-Xylene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
o-Xylene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 96 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		100 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		105 %		80-120 %		"						

Duplicate (23F0604-DUP2)

Prepared: 06/16/23 10:57 Analyzed: 06/16/23 21:51

QC Source Sample: GS-061423-06 (A3F1178-02RE1)**EPA 8260D**

Acetone	ND	100	200	ug/L	10	---	ND	---	---	---	30%	
Acrylonitrile	ND	10.0	20.0	ug/L	10	---	ND	---	---	---	30%	
Benzene	903	1.00	2.00	ug/L	10	---	923	---	---	2	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%	

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1178 - 09 03 23 0835

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 23F0604 - EPA 5030C						Water						
Duplicate (23F0604-DUP2)			Prepared: 06/16/23 10:57 Analyzed: 06/16/23 21:51									
QC Source Sample: GS-061423-06 (A3F1178-02RE1)												
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%	
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	2.50	2.00	4.00	ug/L	10	---	3.00	---	---	18	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	3.20	2.50	5.00	ug/L	10	---	3.30	---	---	3	30%	
Hexachlorobutadiene	ND	25.0	50.0	ug/L	10	---	ND	---	---	---	30%	
2-Hexanone	ND	50.0	100	ug/L	10	---	ND	---	---	---	30%	
Isopropylbenzene	11.7	5.00	10.0	ug/L	10	---	12.5	---	---	7	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	16.5	10.0	20.0	ug/L	10	---	17.2	---	---	4	30%	
n-Propylbenzene	9.40	2.50	5.00	ug/L	10	---	9.30	---	---	1	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%	

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director

Page 36 of 71



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1178 - 09 03 23 0835

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 23F0604 - EPA 5030C						Water						
Duplicate (23F0604-DUP2)			Prepared: 06/16/23 10:57 Analyzed: 06/16/23 21:51									
QC Source Sample: GS-061423-06 (A3F1178-02RE1)												
1,1,2,2-Tetrachloroethane	ND	2.50	5.00	ug/L	10	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	10.9	2.00	4.00	ug/L	10	---	12.0	---	---	10	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%	
Trichloroethene (TCE)	2.10	2.00	4.00	ug/L	10	---	2.20	---	---	5	30%	J
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	9.90	5.00	10.0	ug/L	10	---	10.3	---	---	4	30%	J
1,3,5-Trimethylbenzene	7.00	5.00	10.0	ug/L	10	---	7.00	---	---	0	30%	J
Vinyl chloride	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	
m,p-Xylene	8.30	5.00	10.0	ug/L	10	---	7.60	---	---	9	30%	J
o-Xylene	7.90	2.50	5.00	ug/L	10	---	7.80	---	---	1	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 108 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		98 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		102 %		80-120 %		"						

Matrix Spike (23F0604-MS1)

Prepared: 06/16/23 10:57 Analyzed: 06/16/23 20:20

QC Source Sample: GS-061423-09 (A3F1178-05RE1)

EPA 8260D												
Acetone	42.8	10.0	20.0	ug/L	1	40.0	ND	107	39-160%	---	---	
Acrylonitrile	25.6	1.00	2.00	ug/L	1	20.0	ND	128	63-135%	---	---	
Benzene	80.6	0.100	0.200	ug/L	1	20.0	54.5	130	79-120%	---	---	Q-01
Bromobenzene	21.1	0.250	0.500	ug/L	1	20.0	ND	105	80-120%	---	---	
Bromochloromethane	24.7	0.500	1.00	ug/L	1	20.0	ND	124	78-123%	---	---	Q-01
Bromodichloromethane	23.0	0.500	1.00	ug/L	1	20.0	ND	115	79-125%	---	---	
Bromoform	21.4	0.500	1.00	ug/L	1	20.0	ND	107	66-130%	---	---	
Bromomethane	21.6	5.00	5.00	ug/L	1	20.0	ND	108	53-141%	---	---	
2-Butanone (MEK)	47.5	5.00	10.0	ug/L	1	40.0	ND	119	56-143%	---	---	
n-Butylbenzene	26.2	0.500	1.00	ug/L	1	20.0	1.27	125	75-128%	---	---	
sec-Butylbenzene	25.8	0.500	1.00	ug/L	1	20.0	1.37	122	77-126%	---	---	

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director

Page 37 of 71



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1178 - 09 03 23 0835

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 23F0604 - EPA 5030C						Water						
Matrix Spike (23F0604-MS1)			Prepared: 06/16/23 10:57		Analyzed: 06/16/23 20:20							
QC Source Sample: GS-061423-09 (A3F1178-05RE1)												
tert-Butylbenzene	22.9	0.500	1.00	ug/L	1	20.0	ND	114	78-124%	---	---	
Carbon disulfide	24.7	5.00	10.0	ug/L	1	20.0	ND	124	64-133%	---	---	
Carbon tetrachloride	24.3	0.500	1.00	ug/L	1	20.0	ND	122	72-136%	---	---	
Chlorobenzene	21.0	0.250	0.500	ug/L	1	20.0	ND	105	80-120%	---	---	
Chloroethane	22.7	5.00	5.00	ug/L	1	20.0	ND	113	60-138%	---	---	
Chloroform	21.4	0.500	1.00	ug/L	1	20.0	ND	107	79-124%	---	---	
Chloromethane	23.8	2.50	5.00	ug/L	1	20.0	ND	119	50-139%	---	---	
2-Chlorotoluene	21.6	0.500	1.00	ug/L	1	20.0	ND	108	79-122%	---	---	
4-Chlorotoluene	22.9	0.500	1.00	ug/L	1	20.0	ND	114	78-122%	---	---	Q-54
Dibromochloromethane	21.1	0.500	1.00	ug/L	1	20.0	ND	105	74-126%	---	---	
1,2-Dibromo-3-chloropropane	22.2	2.50	5.00	ug/L	1	20.0	ND	111	62-128%	---	---	
1,2-Dibromoethane (EDB)	19.7	0.250	0.500	ug/L	1	20.0	ND	99	77-121%	---	---	
Dibromomethane	22.5	0.500	1.00	ug/L	1	20.0	ND	112	79-123%	---	---	
1,2-Dichlorobenzene	22.3	0.250	0.500	ug/L	1	20.0	ND	111	80-120%	---	---	
1,3-Dichlorobenzene	22.0	0.250	0.500	ug/L	1	20.0	ND	110	80-120%	---	---	
1,4-Dichlorobenzene	20.9	0.250	0.500	ug/L	1	20.0	ND	104	79-120%	---	---	
Dichlorodifluoromethane	21.5	0.500	1.00	ug/L	1	20.0	ND	108	32-152%	---	---	
1,1-Dichloroethane	24.4	0.200	0.400	ug/L	1	20.0	ND	122	77-125%	---	---	
1,2-Dichloroethane (EDC)	20.4	0.200	0.400	ug/L	1	20.0	ND	102	73-128%	---	---	
1,1-Dichloroethene	24.7	0.200	0.400	ug/L	1	20.0	ND	124	71-131%	---	---	
cis-1,2-Dichloroethene	24.2	0.200	0.400	ug/L	1	20.0	ND	121	78-123%	---	---	
trans-1,2-Dichloroethene	23.7	0.200	0.400	ug/L	1	20.0	ND	118	75-124%	---	---	
1,2-Dichloropropane	25.1	0.250	0.500	ug/L	1	20.0	ND	126	78-122%	---	---	Q-01
1,3-Dichloropropane	21.2	0.500	1.00	ug/L	1	20.0	ND	106	80-120%	---	---	
2,2-Dichloropropane	23.3	0.500	1.00	ug/L	1	20.0	ND	116	60-139%	---	---	Q-54a
1,1-Dichloropropene	26.1	0.500	1.00	ug/L	1	20.0	ND	131	79-125%	---	---	Q-01
cis-1,3-Dichloropropene	20.4	0.500	1.00	ug/L	1	20.0	ND	102	75-124%	---	---	
trans-1,3-Dichloropropene	20.7	0.500	1.00	ug/L	1	20.0	ND	104	73-127%	---	---	
Ethylbenzene	39.1	0.250	0.500	ug/L	1	20.0	18.7	102	79-121%	---	---	
Hexachlorobutadiene	21.8	2.50	5.00	ug/L	1	20.0	ND	109	66-134%	---	---	
2-Hexanone	37.3	5.00	10.0	ug/L	1	40.0	ND	93	57-139%	---	---	
Isopropylbenzene	39.5	0.500	1.00	ug/L	1	20.0	17.8	109	72-131%	---	---	
4-Isopropyltoluene	23.1	0.500	1.00	ug/L	1	20.0	ND	115	77-127%	---	---	

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director

Page 38 of 71



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1178 - 09 03 23 0835

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 23F0604 - EPA 5030C						Water							
Matrix Spike (23F0604-MS1)			Prepared: 06/16/23 10:57 Analyzed: 06/16/23 20:20										
QC Source Sample: GS-061423-09 (A3F1178-05RE1)													
Methylene chloride	21.8	5.00	10.0	ug/L	1	20.0	ND	109	74-124%	---	---	E, Q-03	
4-Methyl-2-pentanone (MiBK)	42.1	5.00	10.0	ug/L	1	40.0	ND	105	67-130%	---	---		
Methyl tert-butyl ether (MTBE)	22.2	0.500	1.00	ug/L	1	20.0	ND	111	71-124%	---	---		
Naphthalene	240	1.00	2.00	ug/L	1	20.0	270	-147	61-128%	---	---		
n-Propylbenzene	29.2	0.250	0.500	ug/L	1	20.0	6.16	115	76-126%	---	---		
Styrene	20.6	0.500	1.00	ug/L	1	20.0	ND	103	78-123%	---	---		
1,1,1,2-Tetrachloroethane	19.4	0.200	0.400	ug/L	1	20.0	ND	97	78-124%	---	---		
1,1,2,2-Tetrachloroethane	22.3	0.250	0.500	ug/L	1	20.0	ND	111	71-121%	---	---		
Tetrachloroethene (PCE)	21.7	0.200	0.400	ug/L	1	20.0	ND	109	74-129%	---	---		
Toluene	21.8	0.500	1.00	ug/L	1	20.0	0.840	105	80-121%	---	---		
1,2,3-Trichlorobenzene	23.5	1.00	2.00	ug/L	1	20.0	ND	118	69-129%	---	---		
1,2,4-Trichlorobenzene	24.6	1.00	2.00	ug/L	1	20.0	ND	123	69-130%	---	---		
1,1,1-Trichloroethane	23.2	0.200	0.400	ug/L	1	20.0	ND	116	74-131%	---	---		
1,1,2-Trichloroethane	20.4	0.250	0.500	ug/L	1	20.0	ND	102	80-120%	---	---		
Trichloroethene (TCE)	23.3	0.200	0.400	ug/L	1	20.0	ND	116	79-123%	---	---		
Trichlorofluoromethane	23.5	1.00	2.00	ug/L	1	20.0	ND	117	65-141%	---	---		
1,2,3-Trichloropropane	19.3	0.500	1.00	ug/L	1	20.0	ND	97	73-122%	---	---		
1,2,4-Trimethylbenzene	29.9	0.500	1.00	ug/L	1	20.0	8.09	109	76-124%	---	---		
1,3,5-Trimethylbenzene	25.1	0.500	1.00	ug/L	1	20.0	1.60	117	75-124%	---	---		
Vinyl chloride	26.0	0.200	0.400	ug/L	1	20.0	ND	130	58-137%	---	---		
m,p-Xylene	51.4	0.500	1.00	ug/L	1	40.0	4.94	116	80-121%	---	---		
o-Xylene	31.9	0.250	0.500	ug/L	1	20.0	8.07	119	78-122%	---	---		
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 112 %		Limits: 80-120 %		Dilution: 1x							
Toluene-d8 (Surr)		96 %		80-120 %		"							
4-Bromofluorobenzene (Surr)		100 %		80-120 %		"							

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director

Page 39 of 71

**ANALYTICAL REPORT****Apex Laboratories, LLC**6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125
Portland, OR 97219Project: **Gasco-MGP Only Mon. Wells 2Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3F1178 - 09 03 23 0835****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 23F0649 - EPA 5030C						Water						
Blank (23F0649-BLK1)			Prepared: 06/19/23 08:30		Analyzed: 06/19/23 11:11							
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	---	---	---	---	---	---	

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director

Page 40 of 71



ANALYTICAL REPORT

Apex Laboratories, LLC

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

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125
Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1178 - 09 03 23 0835

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 23F0649 - EPA 5030C						Water						
Blank (23F0649-BLK1)						Prepared: 06/19/23 08:30 Analyzed: 06/19/23 11:11						
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Ethylbenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
2-Hexanone	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Methylene chloride	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Naphthalene	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Styrene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
Toluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Vinyl chloride	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
m,p-Xylene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
o-Xylene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr) Recovery: 95 % Limits: 80-120 % Dilution: 1x												

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director

Page 41 of 71



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1178 - 09 03 23 0835

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 23F0649 - EPA 5030C						Water						
Blank (23F0649-BLK1)			Prepared: 06/19/23 08:30		Analyzed: 06/19/23 11:11							
Surr: Toluene-d8 (Surr)		Recovery: 101 %		Limits: 80-120 %		Dilution: 1x						
4-Bromofluorobenzene (Surr)		103 %		80-120 %		"						
LCS (23F0649-BS1)			Prepared: 06/19/23 08:30		Analyzed: 06/19/23 10:18							
EPA 8260D												
Acetone	38.8	10.0	20.0	ug/L	1	40.0	---	97	80-120%	---	---	
Acrylonitrile	17.6	1.00	2.00	ug/L	1	20.0	---	88	80-120%	---	---	
Benzene	17.7	0.100	0.200	ug/L	1	20.0	---	88	80-120%	---	---	
Bromobenzene	19.2	0.250	0.500	ug/L	1	20.0	---	96	80-120%	---	---	
Bromochloromethane	19.3	0.500	1.00	ug/L	1	20.0	---	96	80-120%	---	---	
Bromodichloromethane	21.1	0.500	1.00	ug/L	1	20.0	---	106	80-120%	---	---	
Bromoform	23.0	0.500	1.00	ug/L	1	20.0	---	115	80-120%	---	---	
Bromomethane	19.7	5.00	5.00	ug/L	1	20.0	---	98	80-120%	---	---	
2-Butanone (MEK)	37.7	5.00	10.0	ug/L	1	40.0	---	94	80-120%	---	---	
n-Butylbenzene	21.6	0.500	1.00	ug/L	1	20.0	---	108	80-120%	---	---	
sec-Butylbenzene	21.9	0.500	1.00	ug/L	1	20.0	---	110	80-120%	---	---	
tert-Butylbenzene	22.2	0.500	1.00	ug/L	1	20.0	---	111	80-120%	---	---	
Carbon disulfide	17.1	5.00	10.0	ug/L	1	20.0	---	86	80-120%	---	---	
Carbon tetrachloride	22.7	0.500	1.00	ug/L	1	20.0	---	113	80-120%	---	---	
Chlorobenzene	18.9	0.250	0.500	ug/L	1	20.0	---	94	80-120%	---	---	
Chloroethane	19.3	5.00	5.00	ug/L	1	20.0	---	96	80-120%	---	---	
Chloroform	19.0	0.500	1.00	ug/L	1	20.0	---	95	80-120%	---	---	
Chloromethane	16.3	2.50	5.00	ug/L	1	20.0	---	81	80-120%	---	---	
2-Chlorotoluene	18.9	0.500	1.00	ug/L	1	20.0	---	94	80-120%	---	---	
4-Chlorotoluene	22.3	0.500	1.00	ug/L	1	20.0	---	111	80-120%	---	---	
Dibromochloromethane	21.4	0.500	1.00	ug/L	1	20.0	---	107	80-120%	---	---	
1,2-Dibromo-3-chloropropane	18.9	2.50	5.00	ug/L	1	20.0	---	94	80-120%	---	---	
1,2-Dibromoethane (EDB)	18.7	0.250	0.500	ug/L	1	20.0	---	93	80-120%	---	---	
Dibromomethane	19.1	0.500	1.00	ug/L	1	20.0	---	96	80-120%	---	---	
1,2-Dichlorobenzene	20.2	0.250	0.500	ug/L	1	20.0	---	101	80-120%	---	---	
1,3-Dichlorobenzene	20.8	0.250	0.500	ug/L	1	20.0	---	104	80-120%	---	---	
1,4-Dichlorobenzene	19.6	0.250	0.500	ug/L	1	20.0	---	98	80-120%	---	---	
Dichlorodifluoromethane	18.4	0.500	1.00	ug/L	1	20.0	---	92	80-120%	---	---	
1,1-Dichloroethane	19.2	0.200	0.400	ug/L	1	20.0	---	96	80-120%	---	---	

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director

Page 42 of 71

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

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

Project: **Gasco-MGP Only Mon. Wells 2Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3F1178 - 09 03 23 0835****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 23F0649 - EPA 5030C						Water						
LCS (23F0649-BS1)						Prepared: 06/19/23 08:30 Analyzed: 06/19/23 10:18						
1,2-Dichloroethane (EDC)	21.0	0.200	0.400	ug/L	1	20.0	---	105	80-120%	---	---	
1,1-Dichloroethene	19.9	0.200	0.400	ug/L	1	20.0	---	100	80-120%	---	---	
cis-1,2-Dichloroethene	19.6	0.200	0.400	ug/L	1	20.0	---	98	80-120%	---	---	
trans-1,2-Dichloroethene	18.4	0.200	0.400	ug/L	1	20.0	---	92	80-120%	---	---	
1,2-Dichloropropane	17.8	0.250	0.500	ug/L	1	20.0	---	89	80-120%	---	---	
1,3-Dichloropropane	20.1	0.500	1.00	ug/L	1	20.0	---	101	80-120%	---	---	
2,2-Dichloropropane	22.1	0.500	1.00	ug/L	1	20.0	---	111	80-120%	---	---	
1,1-Dichloropropene	20.1	0.500	1.00	ug/L	1	20.0	---	100	80-120%	---	---	
cis-1,3-Dichloropropene	20.8	0.500	1.00	ug/L	1	20.0	---	104	80-120%	---	---	
trans-1,3-Dichloropropene	22.6	0.500	1.00	ug/L	1	20.0	---	113	80-120%	---	---	
Ethylbenzene	20.3	0.250	0.500	ug/L	1	20.0	---	101	80-120%	---	---	
Hexachlorobutadiene	22.8	2.50	5.00	ug/L	1	20.0	---	114	80-120%	---	---	
2-Hexanone	35.5	5.00	10.0	ug/L	1	40.0	---	89	80-120%	---	---	
Isopropylbenzene	18.4	0.500	1.00	ug/L	1	20.0	---	92	80-120%	---	---	
4-Isopropyltoluene	19.8	0.500	1.00	ug/L	1	20.0	---	99	80-120%	---	---	
Methylene chloride	17.8	5.00	10.0	ug/L	1	20.0	---	89	80-120%	---	---	
4-Methyl-2-pentanone (MiBK)	39.3	5.00	10.0	ug/L	1	40.0	---	98	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	19.0	0.500	1.00	ug/L	1	20.0	---	95	80-120%	---	---	
Naphthalene	17.7	1.00	2.00	ug/L	1	20.0	---	89	80-120%	---	---	
n-Propylbenzene	20.7	0.250	0.500	ug/L	1	20.0	---	104	80-120%	---	---	
Styrene	18.5	0.500	1.00	ug/L	1	20.0	---	93	80-120%	---	---	
1,1,1,2-Tetrachloroethane	20.1	0.200	0.400	ug/L	1	20.0	---	100	80-120%	---	---	
1,1,2,2-Tetrachloroethane	20.2	0.250	0.500	ug/L	1	20.0	---	101	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	20.0	1.00	2.00	ug/L	1	20.0	---	100	80-120%	---	---	
1,2,4-Trichlorobenzene	19.7	1.00	2.00	ug/L	1	20.0	---	98	80-120%	---	---	
1,1,1-Trichloroethane	21.1	0.200	0.400	ug/L	1	20.0	---	106	80-120%	---	---	
1,1,2-Trichloroethane	18.5	0.250	0.500	ug/L	1	20.0	---	93	80-120%	---	---	
Trichloroethene (TCE)	17.4	0.200	0.400	ug/L	1	20.0	---	87	80-120%	---	---	
Trichlorofluoromethane	21.4	1.00	2.00	ug/L	1	20.0	---	107	80-120%	---	---	
1,2,3-Trichloropropane	21.2	0.500	1.00	ug/L	1	20.0	---	106	80-120%	---	---	
1,2,4-Trimethylbenzene	19.9	0.500	1.00	ug/L	1	20.0	---	100	80-120%	---	---	
1,3,5-Trimethylbenzene	22.1	0.500	1.00	ug/L	1	20.0	---	111	80-120%	---	---	

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director

Page 43 of 71



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

Project: **Gasco-MGP Only Mon. Wells 2Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3F1178 - 09 03 23 0835**

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 23F0649 - EPA 5030C						Water						
LCS (23F0649-BS1)			Prepared: 06/19/23 08:30		Analyzed: 06/19/23 10:18							
Vinyl chloride	16.6	0.200	0.400	ug/L	1	20.0	---	83	80-120%	---	---	
m,p-Xylene	44.1	0.500	1.00	ug/L	1	40.0	---	110	80-120%	---	---	
o-Xylene	21.7	0.250	0.500	ug/L	1	20.0	---	109	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 92 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		96 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		99 %		80-120 %		"						
Duplicate (23F0649-DUP1)			Prepared: 06/19/23 10:49		Analyzed: 06/19/23 17:37							
QC Source Sample: Non-SDG (A3F1229-04)												
Acetone	ND	10.0	20.0	ug/L	1	---	ND	---	---	---	30%	
Acrylonitrile	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	30%	
Benzene	ND	0.100	0.200	ug/L	1	---	ND	---	---	---	30%	
Bromobenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Bromochloromethane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Bromoform	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Bromomethane	ND	5.00	5.00	ug/L	1	---	ND	---	---	---	30%	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%	
n-Butylbenzene	2.17	0.500	1.00	ug/L	1	---	2.22	---	---	2	30%	
sec-Butylbenzene	3.55	0.500	1.00	ug/L	1	---	3.67	---	---	3	30%	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Carbon disulfide	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Chlorobenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Chloroethane	ND	5.00	5.00	ug/L	1	---	ND	---	---	---	30%	
Chloroform	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Chloromethane	ND	2.50	5.00	ug/L	1	---	ND	---	---	---	30%	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	---	ND	---	---	---	30%	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Dibromomethane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director

Page 44 of 71



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1178 - 09 03 23 0835

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 23F0649 - EPA 5030C						Water						
Duplicate (23F0649-DUP1)			Prepared: 06/19/23 10:49		Analyzed: 06/19/23 17:37							
QC Source Sample: Non-SDG (A3F1229-04)												
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Ethylbenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	---	ND	---	---	---	30%	
2-Hexanone	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%	
Isopropylbenzene	2.14	0.500	1.00	ug/L	1	---	2.11	---	---	1	30%	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Methylene chloride	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Naphthalene	ND	2.50	2.50	ug/L	1	---	ND	---	---	---	30%	R-02
n-Propylbenzene	4.49	0.250	0.500	ug/L	1	---	4.77	---	---	6	30%	
Styrene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
Toluene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director

Page 45 of 71



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

Project: **Gasco-MGP Only Mon. Wells 2Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3F1178 - 09 03 23 0835**

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 23F0649 - EPA 5030C						Water						
Duplicate (23F0649-DUP1)			Prepared: 06/19/23 10:49		Analyzed: 06/19/23 17:37							
QC Source Sample: Non-SDG (A3F1229-04)												
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Vinyl chloride	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
m,p-Xylene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
o-Xylene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 115 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		97 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		106 %		80-120 %		"						

Duplicate (23F0649-DUP2) Prepared: 06/19/23 10:49 Analyzed: 06/19/23 16:29

QC Source Sample: Non-SDG (A3F1229-12)												
Acetone	ND	10.0	20.0	ug/L	1	---	ND	---	---	---	30%	
Acrylonitrile	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	30%	
Benzene	ND	0.100	0.200	ug/L	1	---	ND	---	---	---	30%	
Bromobenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Bromochloromethane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Bromoform	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Bromomethane	ND	5.00	5.00	ug/L	1	---	ND	---	---	---	30%	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Carbon disulfide	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Chlorobenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Chloroethane	ND	5.00	5.00	ug/L	1	---	ND	---	---	---	30%	
Chloroform	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Chloromethane	ND	2.50	5.00	ug/L	1	---	ND	---	---	---	30%	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

Project: **Gasco-MGP Only Mon. Wells 2Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3F1178 - 09 03 23 0835**

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 23F0649 - EPA 5030C						Water						
Duplicate (23F0649-DUP2)			Prepared: 06/19/23 10:49		Analyzed: 06/19/23 16:29							
QC Source Sample: Non-SDG (A3F1229-12)												
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	---	ND	---	---	---	30%	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Dibromomethane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Ethylbenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	---	ND	---	---	---	30%	
2-Hexanone	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Methylene chloride	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Naphthalene	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	30%	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Styrene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director

Page 47 of 71



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1178 - 09 03 23 0835

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 23F0649 - EPA 5030C						Water						
Duplicate (23F0649-DUP2)			Prepared: 06/19/23 10:49		Analyzed: 06/19/23 16:29							
QC Source Sample: Non-SDG (A3F1229-12)												
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
Toluene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Vinyl chloride	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
m,p-Xylene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
o-Xylene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 105 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		98 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		105 %		80-120 %		"						

Matrix Spike (23F0649-MS1)

Prepared: 06/19/23 10:49 Analyzed: 06/19/23 20:17

V-01

QC Source Sample: Non-SDG (A3F1257-03)

EPA 8260D

Acetone	1420	200	400	ug/L	20	800	511	114	39-160%	---	---	
Acrylonitrile	489	20.0	40.0	ug/L	20	400	ND	122	63-135%	---	---	
Benzene	504	2.00	4.00	ug/L	20	400	22.2	120	79-120%	---	---	
Bromobenzene	442	5.00	10.0	ug/L	20	400	ND	110	80-120%	---	---	
Bromochloromethane	492	10.0	20.0	ug/L	20	400	ND	123	78-123%	---	---	
Bromodichloromethane	495	10.0	20.0	ug/L	20	400	ND	124	79-125%	---	---	
Bromoform	471	10.0	20.0	ug/L	20	400	ND	118	66-130%	---	---	
Bromomethane	491	100	100	ug/L	20	400	ND	123	53-141%	---	---	
2-Butanone (MEK)	968	100	200	ug/L	20	800	ND	121	56-143%	---	---	
n-Butylbenzene	501	10.0	20.0	ug/L	20	400	ND	125	75-128%	---	---	
sec-Butylbenzene	507	10.0	20.0	ug/L	20	400	ND	127	77-126%	---	---	Q-01
tert-Butylbenzene	487	10.0	20.0	ug/L	20	400	ND	122	78-124%	---	---	

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director

Page 48 of 71



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1178 - 09 03 23 0835

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 23F0649 - EPA 5030C						Water						
Matrix Spike (23F0649-MS1)			Prepared: 06/19/23 10:49		Analyzed: 06/19/23 20:17		V-01					
QC Source Sample: Non-SDG (A3F1257-03)												
Carbon disulfide	470	100	200	ug/L	20	400	ND	117	64-133%	---	---	Q-01
Carbon tetrachloride	520	10.0	20.0	ug/L	20	400	ND	130	72-136%	---	---	
Chlorobenzene	434	5.00	10.0	ug/L	20	400	ND	109	80-120%	---	---	
Chloroethane	466	100	100	ug/L	20	400	ND	117	60-138%	---	---	
Chloroform	459	10.0	20.0	ug/L	20	400	ND	115	79-124%	---	---	
Chloromethane	446	50.0	100	ug/L	20	400	ND	111	50-139%	---	---	
2-Chlorotoluene	449	10.0	20.0	ug/L	20	400	ND	112	79-122%	---	---	
4-Chlorotoluene	497	10.0	20.0	ug/L	20	400	ND	124	78-122%	---	---	
Dibromochloromethane	452	10.0	20.0	ug/L	20	400	ND	113	74-126%	---	---	
1,2-Dibromo-3-chloropropane	439	50.0	100	ug/L	20	400	ND	110	62-128%	---	---	
1,2-Dibromoethane (EDB)	420	5.00	10.0	ug/L	20	400	ND	105	77-121%	---	---	
Dibromomethane	459	10.0	20.0	ug/L	20	400	ND	115	79-123%	---	---	
1,2-Dichlorobenzene	470	5.00	10.0	ug/L	20	400	ND	118	80-120%	---	---	
1,3-Dichlorobenzene	467	5.00	10.0	ug/L	20	400	ND	117	80-120%	---	---	
1,4-Dichlorobenzene	448	5.00	10.0	ug/L	20	400	ND	112	79-120%	---	---	
Dichlorodifluoromethane	457	10.0	20.0	ug/L	20	400	ND	114	32-152%	---	---	
1,1-Dichloroethane	488	4.00	8.00	ug/L	20	400	ND	122	77-125%	---	---	
1,2-Dichloroethane (EDC)	453	4.00	8.00	ug/L	20	400	ND	113	73-128%	---	---	
1,1-Dichloroethene	508	4.00	8.00	ug/L	20	400	ND	127	71-131%	---	---	
cis-1,2-Dichloroethene	493	4.00	8.00	ug/L	20	400	ND	123	78-123%	---	---	
trans-1,2-Dichloroethene	478	4.00	8.00	ug/L	20	400	ND	119	75-124%	---	---	
1,2-Dichloropropane	476	5.00	10.0	ug/L	20	400	ND	119	78-122%	---	---	
1,3-Dichloropropane	454	10.0	20.0	ug/L	20	400	ND	114	80-120%	---	---	
2,2-Dichloropropane	486	10.0	20.0	ug/L	20	400	ND	121	60-139%	---	---	
1,1-Dichloropropene	520	10.0	20.0	ug/L	20	400	ND	130	79-125%	---	---	
cis-1,3-Dichloropropene	455	10.0	20.0	ug/L	20	400	ND	114	75-124%	---	---	
trans-1,3-Dichloropropene	456	10.0	20.0	ug/L	20	400	ND	114	73-127%	---	---	
Ethylbenzene	517	5.00	10.0	ug/L	20	400	48.0	117	79-121%	---	---	
Hexachlorobutadiene	495	50.0	100	ug/L	20	400	ND	124	66-134%	---	---	
2-Hexanone	797	100	200	ug/L	20	800	ND	100	57-139%	---	---	
Isopropylbenzene	442	10.0	20.0	ug/L	20	400	ND	111	72-131%	---	---	
4-Isopropyltoluene	448	10.0	20.0	ug/L	20	400	ND	112	77-127%	---	---	
Methylene chloride	450	100	200	ug/L	20	400	ND	113	74-124%	---	---	

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director

Page 49 of 71



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1178 - 09 03 23 0835

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 23F0649 - EPA 5030C						Water						
Matrix Spike (23F0649-MS1)			Prepared: 06/19/23 10:49		Analyzed: 06/19/23 20:17		V-01					
QC Source Sample: Non-SDG (A3F1257-03)												
4-Methyl-2-pentanone (MiBK)	883	100	200	ug/L	20	800	ND	110	67-130%	---	---	
Methyl tert-butyl ether (MTBE)	448	10.0	20.0	ug/L	20	400	ND	112	71-124%	---	---	
Naphthalene	399	20.0	40.0	ug/L	20	400	ND	100	61-128%	---	---	
n-Propylbenzene	485	5.00	10.0	ug/L	20	400	9.20	119	76-126%	---	---	
Styrene	425	10.0	20.0	ug/L	20	400	ND	106	78-123%	---	---	
1,1,1,2-Tetrachloroethane	431	4.00	8.00	ug/L	20	400	ND	108	78-124%	---	---	
1,1,2,2-Tetrachloroethane	471	5.00	10.0	ug/L	20	400	ND	118	71-121%	---	---	
Tetrachloroethene (PCE)	446	4.00	8.00	ug/L	20	400	ND	112	74-129%	---	---	
Toluene	509	10.0	20.0	ug/L	20	400	63.8	111	80-121%	---	---	
1,2,3-Trichlorobenzene	443	20.0	40.0	ug/L	20	400	ND	111	69-129%	---	---	
1,2,4-Trichlorobenzene	457	20.0	40.0	ug/L	20	400	ND	114	69-130%	---	---	
1,1,1-Trichloroethane	501	4.00	8.00	ug/L	20	400	ND	125	74-131%	---	---	
1,1,2-Trichloroethane	415	5.00	10.0	ug/L	20	400	ND	104	80-120%	---	---	
Trichloroethene (TCE)	458	4.00	8.00	ug/L	20	400	ND	115	79-123%	---	---	
Trichlorofluoromethane	527	20.0	40.0	ug/L	20	400	ND	132	65-141%	---	---	
1,2,3-Trichloropropane	439	10.0	20.0	ug/L	20	400	ND	110	73-122%	---	---	
1,2,4-Trimethylbenzene	492	10.0	20.0	ug/L	20	400	30.6	115	76-124%	---	---	
1,3,5-Trimethylbenzene	518	10.0	20.0	ug/L	20	400	15.2	126	75-124%	---	---	Q-01
Vinyl chloride	493	4.00	8.00	ug/L	20	400	ND	123	58-137%	---	---	
m,p-Xylene	1210	10.0	20.0	ug/L	20	800	196	126	80-121%	---	---	Q-01
o-Xylene	540	5.00	10.0	ug/L	20	400	41.8	124	78-122%	---	---	Q-01
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 105 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		96 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		97 %		80-120 %		"						

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director

Page 50 of 71



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

Project: **Gasco-MGP Only Mon. Wells 2Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3F1178 - 09 03 23 0835**

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: Non-SDG (A3F1249-03)												
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 %		"						
Matrix Spike (23F0902-MS1)						Prepared: 06/25/23 11:48 Analyzed: 06/25/23 16:10						

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director

Page 51 of 71



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1178 - 09 03 23 0835

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 %		"						

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director

Page 52 of 71



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1178 - 09 03 23 0835

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 23F0582 - EPA 3511 (Bottle Extraction)						Water						
Blank (23F0582-BLK1)			Prepared: 06/16/23 06:48		Analyzed: 06/16/23 13:22							
EPA 8270E LVI												
Acenaphthene	ND	0.0160	0.0320	ug/L	1	---	---	---	---	---	---	
Acenaphthylene	ND	0.0160	0.0320	ug/L	1	---	---	---	---	---	---	
Anthracene	ND	0.0160	0.0320	ug/L	1	---	---	---	---	---	---	
Benz(a)anthracene	ND	0.00800	0.0160	ug/L	1	---	---	---	---	---	---	
Benzo(a)pyrene	ND	0.00800	0.0160	ug/L	1	---	---	---	---	---	---	
Benzo(b)fluoranthene	ND	0.00800	0.0160	ug/L	1	---	---	---	---	---	---	
Benzo(k)fluoranthene	ND	0.00800	0.0160	ug/L	1	---	---	---	---	---	---	
Benzo(g,h,i)perylene	ND	0.0160	0.0320	ug/L	1	---	---	---	---	---	---	
Chrysene	ND	0.00800	0.0160	ug/L	1	---	---	---	---	---	---	
Dibenz(a,h)anthracene	ND	0.00800	0.0160	ug/L	1	---	---	---	---	---	---	
Fluoranthene	ND	0.0160	0.0320	ug/L	1	---	---	---	---	---	---	
Fluorene	ND	0.0160	0.0320	ug/L	1	---	---	---	---	---	---	
Indeno(1,2,3-cd)pyrene	ND	0.00800	0.0160	ug/L	1	---	---	---	---	---	---	
1-Methylnaphthalene	ND	0.0320	0.0640	ug/L	1	---	---	---	---	---	---	
2-Methylnaphthalene	ND	0.0320	0.0640	ug/L	1	---	---	---	---	---	---	
Naphthalene	ND	0.0320	0.0640	ug/L	1	---	---	---	---	---	---	
Phenanthrene	ND	0.0320	0.0640	ug/L	1	---	---	---	---	---	---	
Pyrene	ND	0.0160	0.0320	ug/L	1	---	---	---	---	---	---	
Carbazole	ND	0.0160	0.0320	ug/L	1	---	---	---	---	---	---	
Dibenzofuran	ND	0.0160	0.0320	ug/L	1	---	---	---	---	---	---	
Surr: Acenaphthylene-d8 (Surr)		Recovery: 89 %		Limits: 78-134 %		Dilution: 1x						
Benzo(a)pyrene-d12 (Surr)		105 %		80-132 %		"						

LCS (23F0582-BS1)

Prepared: 06/16/23 06:48 Analyzed: 06/16/23 13:55

EPA 8270E LVI												
Acenaphthene	1.55	0.0160	0.0320	ug/L	1	1.60	---	97	80-120%	---	---	
Acenaphthylene	1.51	0.0160	0.0320	ug/L	1	1.60	---	94	80-124%	---	---	
Anthracene	1.52	0.0160	0.0320	ug/L	1	1.60	---	95	80-123%	---	---	
Benz(a)anthracene	1.56	0.00800	0.0160	ug/L	1	1.60	---	98	80-122%	---	---	
Benzo(a)pyrene	1.66	0.00800	0.0160	ug/L	1	1.60	---	103	80-129%	---	---	
Benzo(b)fluoranthene	1.64	0.00800	0.0160	ug/L	1	1.60	---	102	80-124%	---	---	
Benzo(k)fluoranthene	1.60	0.00800	0.0160	ug/L	1	1.60	---	100	80-125%	---	---	
Benzo(g,h,i)perylene	1.59	0.0160	0.0320	ug/L	1	1.60	---	99	80-120%	---	---	

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1178 - 09 03 23 0835

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 23F0582 - EPA 3511 (Bottle Extraction)						Water						
LCS (23F0582-BS1)			Prepared: 06/16/23 06:48		Analyzed: 06/16/23 13:55							
Chrysene	1.55	0.00800	0.0160	ug/L	1	1.60	---	97	80-120%	---	---	
Dibenz(a,h)anthracene	1.55	0.00800	0.0160	ug/L	1	1.60	---	97	80-120%	---	---	
Fluoranthene	1.65	0.0160	0.0320	ug/L	1	1.60	---	103	80-126%	---	---	
Fluorene	1.72	0.0160	0.0320	ug/L	1	1.60	---	108	77-127%	---	---	
Indeno(1,2,3-cd)pyrene	1.50	0.00800	0.0160	ug/L	1	1.60	---	94	80-121%	---	---	
1-Methylnaphthalene	1.88	0.0320	0.0640	ug/L	1	1.60	---	118	53-148%	---	---	
2-Methylnaphthalene	1.88	0.0320	0.0640	ug/L	1	1.60	---	117	48-150%	---	---	
Naphthalene	1.62	0.0320	0.0640	ug/L	1	1.60	---	101	78-120%	---	---	
Phenanthrene	1.51	0.0320	0.0640	ug/L	1	1.60	---	94	80-120%	---	---	
Pyrene	1.65	0.0160	0.0320	ug/L	1	1.60	---	103	80-125%	---	---	
Carbazole	1.61	0.0160	0.0320	ug/L	1	1.60	---	100	65-141%	---	---	
Dibenzofuran	1.63	0.0160	0.0320	ug/L	1	1.60	---	102	76-121%	---	---	
Surr: Acenaphthylene-d8 (Surr)		Recovery: 92 %		Limits: 78-134 %		Dilution: 1x						
Benzo(a)pyrene-d12 (Surr)		104 %		80-132 %		"						

LCS Dup (23F0582-BS1)			Prepared: 06/16/23 06:48 Analyzed: 06/16/23 14:27						Q-19		
EPA 8270E LVI											
Acenaphthene	1.54	0.0160	0.0320	ug/L	1	1.60	---	96	80-120%	0.4	30%
Acenaphthylene	1.49	0.0160	0.0320	ug/L	1	1.60	---	93	80-124%	1	30%
Anthracene	1.53	0.0160	0.0320	ug/L	1	1.60	---	95	80-123%	0.2	30%
Benz(a)anthracene	1.58	0.00800	0.0160	ug/L	1	1.60	---	98	80-122%	0.9	30%
Benzo(a)pyrene	1.65	0.00800	0.0160	ug/L	1	1.60	---	103	80-129%	0.5	30%
Benzo(b)fluoranthene	1.63	0.00800	0.0160	ug/L	1	1.60	---	102	80-124%	0.5	30%
Benzo(k)fluoranthene	1.57	0.00800	0.0160	ug/L	1	1.60	---	98	80-125%	2	30%
Benzo(g,h,i)perylene	1.59	0.0160	0.0320	ug/L	1	1.60	---	99	80-120%	0.1	30%
Chrysene	1.56	0.00800	0.0160	ug/L	1	1.60	---	97	80-120%	0.2	30%
Dibenz(a,h)anthracene	1.56	0.00800	0.0160	ug/L	1	1.60	---	98	80-120%	1	30%
Fluoranthene	1.65	0.0160	0.0320	ug/L	1	1.60	---	103	80-126%	0.5	30%
Fluorene	1.66	0.0160	0.0320	ug/L	1	1.60	---	104	77-127%	3	30%
Indeno(1,2,3-cd)pyrene	1.49	0.00800	0.0160	ug/L	1	1.60	---	93	80-121%	0.6	30%
1-Methylnaphthalene	1.86	0.0320	0.0640	ug/L	1	1.60	---	116	53-148%	1	30%
2-Methylnaphthalene	1.84	0.0320	0.0640	ug/L	1	1.60	---	115	48-150%	2	30%
Naphthalene	1.61	0.0320	0.0640	ug/L	1	1.60	---	101	78-120%	0.2	30%
Phenanthrene	1.53	0.0320	0.0640	ug/L	1	1.60	---	96	80-120%	1	30%

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director

Page 54 of 71



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1178 - 09 03 23 0835

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 23F0582 - EPA 3511 (Bottle Extraction)						Water						
LCS Dup (23F0582-BSD1)			Prepared: 06/16/23 06:48 Analyzed: 06/16/23 14:27								Q-19	
Pyrene	1.66	0.0160	0.0320	ug/L	1	1.60	---	104	80-125%	0.5	30%	
Carbazole	1.62	0.0160	0.0320	ug/L	1	1.60	---	102	65-141%	1	30%	
Dibenzofuran	1.58	0.0160	0.0320	ug/L	1	1.60	---	99	76-121%	3	30%	
Surr: Acenaphthylene-d8 (Surr)		Recovery: 92 %		Limits: 78-134 %		Dilution: 1x						
Benzo(a)pyrene-d12 (Surr)		104 %		80-132 %		"						

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director

Page 55 of 71



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1178 - 09 03 23 0835

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%	---	---	

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director

Page 56 of 71



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

Project: **Gasco-MGP Only Mon. Wells 2Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3F1178 - 09 03 23 0835**

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)

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1178 - 09 03 23 0835

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%	

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director

Page 58 of 71



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1178 - 09 03 23 0835

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

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director

Page 59 of 71



ANALYTICAL REPORT

Apex Laboratories, LLC

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

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125
Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1178 - 09 03 23 0835

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: GS-061423-05 (A3F1178-01RE1)												
EPA 335.4												
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: GS-061423-05 (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%	

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director

Page 60 of 71



ANALYTICAL REPORT

Apex Laboratories, LLC

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

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125
Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1178 - 09 03 23 0835

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									
<u>D6888-09</u>												
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									
<u>D6888-09</u>												
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									
<u>QC Source Sample: GS-061423-07 (A3F1178-03)</u>												
<u>D6888-09</u>												
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									
<u>QC Source Sample: Non-SDG (A3F1249-04)</u>												
<u>D6888-09</u>												
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									
<u>QC Source Sample: GS-061423-07 (A3F1178-03)</u>												
<u>D6888-09</u>												
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									
<u>QC Source Sample: Non-SDG (A3F1249-04)</u>												
Available Cyanide	0.0252	0.00101	0.00201	mg/L	1	0.0251	0.00160	94	82-130%	0.06	11%	

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director

Page 61 of 71



ANALYTICAL REPORT

Apex Laboratories, LLC

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

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125
Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1178 - 09 03 23 0835

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 23F0590 - Microdiffusion						Water						
Blank (23F0590-BLK1)			Prepared: 06/16/23 08:50 Analyzed: 06/16/23 15:16									
<u>D4282-02</u>												
Free Cyanide	ND	0.00250	0.00500	mg/L	1	---	---	---	---	---	---	
LCS (23F0590-BS1)			Prepared: 06/16/23 08:50 Analyzed: 06/16/23 15:16									
<u>D4282-02</u>												
Free Cyanide	0.0630	0.00250	0.00500	mg/L	1	0.0667	---	94	74-120%	---	---	
LCS Dup (23F0590-BSD1)			Prepared: 06/16/23 08:50 Analyzed: 06/16/23 15:21									
<u>D4282-02</u>												
Free Cyanide	0.0670	0.00250	0.00500	mg/L	1	0.0667	---	100	74-120%	6	20%	
Matrix Spike (23F0590-MS1)			Prepared: 06/16/23 08:50 Analyzed: 06/16/23 15:21									
<u>QC Source Sample: Non-SDG (A3F1132-01)</u>												
<u>D4282-02</u>												
Free Cyanide	0.0573	0.00250	0.00500	mg/L	1	0.0667	ND	86	74-120%	---	---	
Matrix Spike Dup (23F0590-MSD1)			Prepared: 06/16/23 08:50 Analyzed: 06/16/23 15:21									
<u>QC Source Sample: Non-SDG (A3F1132-01)</u>												
Free Cyanide	0.0630	0.00250	0.00500	mg/L	1	0.0667	ND	94	74-120%	10	20%	

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director

Page 62 of 71



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

Project: **Gasco-MGP Only Mon. Wells 2Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3F1178 - 09 03 23 0835**

SAMPLE PREPARATION INFORMATION

Volatile Organic Compounds by EPA 8260D

Prep: EPA 5030C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23F0604							
A3F1178-01RE1	WG	EPA 8260D	06/14/23 11:40	06/16/23 12:49	5mL/5mL	5mL/5mL	1.00
A3F1178-02RE1	WG	EPA 8260D	06/14/23 11:45	06/16/23 12:49	5mL/5mL	5mL/5mL	1.00
A3F1178-03RE1	WG	EPA 8260D	06/14/23 12:50	06/16/23 12:49	5mL/5mL	5mL/5mL	1.00
A3F1178-04RE1	WG	EPA 8260D	06/14/23 14:20	06/16/23 12:49	5mL/5mL	5mL/5mL	1.00
A3F1178-05RE1	WG	EPA 8260D	06/14/23 15:20	06/16/23 12:49	5mL/5mL	5mL/5mL	1.00
A3F1178-06	W	EPA 8260D	06/14/23 15:45	06/16/23 12:49	5mL/5mL	5mL/5mL	1.00
Batch: 23F0649							
A3F1178-05RE2	WG	EPA 8260D	06/14/23 15:20	06/19/23 10:49	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							
A3F1178-02	WG	EPA 8260D SIM	06/14/23 11:45	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
Batch: 23F0582							
A3F1178-01	WG	EPA 8270E LVI	06/14/23 11:40	06/16/23 06:48	116.82mL/5mL	125mL/5mL	1.07
A3F1178-02	WG	EPA 8270E LVI	06/14/23 11:45	06/16/23 06:48	112.97mL/5mL	125mL/5mL	1.11
A3F1178-03	WG	EPA 8270E LVI	06/14/23 12:50	06/16/23 06:48	117.99mL/5mL	125mL/5mL	1.06
A3F1178-03RE1	WG	EPA 8270E LVI	06/14/23 12:50	06/16/23 06:48	117.99mL/5mL	125mL/5mL	1.06
A3F1178-04	WG	EPA 8270E LVI	06/14/23 14:20	06/16/23 06:48	98.03mL/5mL	125mL/5mL	1.28
A3F1178-05	WG	EPA 8270E LVI	06/14/23 15:20	06/16/23 06:48	106.49mL/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
Batch: 23F0834							
A3F1178-01	WG	EPA 6020B	06/14/23 11:40	06/22/23 14:28	45mL/50mL	45mL/50mL	1.00
A3F1178-01RE1	WG	EPA 6020B	06/14/23 11:40	06/22/23 14:28	45mL/50mL	45mL/50mL	1.00
A3F1178-02	WG	EPA 6020B	06/14/23 11:45	06/22/23 14:28	45mL/50mL	45mL/50mL	1.00

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director

**ANALYTICAL REPORT****Apex Laboratories, LLC**6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125
Portland, OR 97219Project: **Gasco-MGP Only Mon. Wells 2Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3F1178 - 09 03 23 0835****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
A3F1178-02RE1	WG	EPA 6020B	06/14/23 11:45	06/22/23 14:28	45mL/50mL	45mL/50mL	1.00
A3F1178-02RE2	WG	EPA 6020B	06/14/23 11:45	06/22/23 14:28	45mL/50mL	45mL/50mL	1.00
A3F1178-03	WG	EPA 6020B	06/14/23 12:50	06/22/23 14:28	45mL/50mL	45mL/50mL	1.00
A3F1178-03RE1	WG	EPA 6020B	06/14/23 12:50	06/22/23 14:28	45mL/50mL	45mL/50mL	1.00
A3F1178-04	WG	EPA 6020B	06/14/23 14:20	06/22/23 14:28	45mL/50mL	45mL/50mL	1.00
A3F1178-04RE1	WG	EPA 6020B	06/14/23 14:20	06/22/23 14:28	45mL/50mL	45mL/50mL	1.00
A3F1178-05	WG	EPA 6020B	06/14/23 15:20	06/22/23 14:28	45mL/50mL	45mL/50mL	1.00
A3F1178-05RE1	WG	EPA 6020B	06/14/23 15:20	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
Batch: 23F0720							
A3F1178-01RE1	WG	EPA 335.4	06/14/23 11:40	06/20/23 12:04	6mL/6mL	6mL/6mL	1.00
A3F1178-02RE1	WG	EPA 335.4	06/14/23 11:45	06/20/23 12:04	6mL/6mL	6mL/6mL	1.00
A3F1178-03RE1	WG	EPA 335.4	06/14/23 12:50	06/20/23 12:04	6mL/6mL	6mL/6mL	1.00
A3F1178-04	WG	EPA 335.4	06/14/23 14:20	06/20/23 12:04	6mL/6mL	6mL/6mL	1.00
A3F1178-05	WG	EPA 335.4	06/14/23 15:20	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
Batch: 23F0918							
A3F1178-01	WG	D6888-09	06/14/23 11:40	06/26/23 08:35	5mL/5mL	5mL/5mL	1.00
A3F1178-02	WG	D6888-09	06/14/23 11:45	06/26/23 08:35	5mL/5mL	5mL/5mL	1.00
A3F1178-03	WG	D6888-09	06/14/23 12:50	06/26/23 08:35	5mL/5mL	5mL/5mL	1.00
A3F1178-04	WG	D6888-09	06/14/23 14:20	06/26/23 08:35	5mL/5mL	5mL/5mL	1.00
A3F1178-05	WG	D6888-09	06/14/23 15:20	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
Batch: 23F0590							
A3F1178-01	WG	D4282-02	06/14/23 11:40	06/16/23 08:50	3mL/3mL	3mL/3mL	1.00

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

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

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125
Portland, OR 97219

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

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

Project Manager: **John Renda**

Report ID:

A3F1178 - 09 03 23 0835

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
A3F1178-02	WG	D4282-02	06/14/23 11:45	06/16/23 08:50	3mL/3mL	3mL/3mL	1.00
A3F1178-03	WG	D4282-02	06/14/23 12:50	06/16/23 08:50	3mL/3mL	3mL/3mL	1.00
A3F1178-04	WG	D4282-02	06/14/23 14:20	06/16/23 08:50	3mL/3mL	3mL/3mL	1.00
A3F1178-05	WG	D4282-02	06/14/23 15:20	06/16/23 08:50	3mL/3mL	3mL/3mL	1.00

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

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

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125
Portland, OR 97219

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

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

Project Manager: **John Renda**

Report ID:

A3F1178 - 09 03 23 0835

QUALIFIER DEFINITIONS

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

Apex Laboratories

- E** Estimated Value. The result is above the calibration range of the instrument.
- J** Estimated Result. Result detected below the lowest point of the calibration curve, but above the specified MDL.
- PRES** Incomplete field preservation. Additional preservative was added to adjust the pH within the appropriate range for this analysis.
- Q-01** Spike recovery and/or RPD is outside acceptance limits.
- Q-03** Spike recovery and/or RPD is outside control limits due to the high concentration of analyte present in the sample.
- Q-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-42** Matrix Spike and/or Duplicate analysis was performed on this sample. % Recovery or RPD for this analyte is outside laboratory control limits. (Refer to the QC Section of Analytical Report.)
- Q-54** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +1%. The results are reported as Estimated Values.
- Q-54a** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +4%. The results are reported as Estimated Values.
- 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.
- V-01** Sample aliquot taken from VOA vial with headspace (air bubble greater than 6 mm diameter).
- V-25** SIM Analysis was not performed due to the high analyte concentration in this sample.

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

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

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125
Portland, OR 97219

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

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

Project Manager: **John Renda**

Report ID:

A3F1178 - 09 03 23 0835

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).

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

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

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125
Portland, OR 97219

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

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

Project Manager: **John Renda**

Report ID:

A3F1178 - 09 03 23 0835

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

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

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

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125
Portland, OR 97219

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

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

Project Manager: **John Renda**

Report ID:

A3F1178 - 09 03 23 0835

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.

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3F1178 - 09 03 23 0835

APEX LABS COOLER RECEIPT FORM

Client: Anchor QEA Element WO#: A3 F1178Project/Project #: Gasco-MGP only Mon. Wells 2Q 2023 Perf. Mon.

Delivery Info:

Date/time received: 4/15/23 @ 814 By: JSDelivered by: Apex ☒ Client ☐ ESS ☐ FedEx ☐ UPS ☐ Radio ☐ Morgan ☐ SDS ☐ Evergreen ☐ Other ☐Cooler Inspection Date/time inspected: 4/15/23 @ 920 By: JSChain of Custody included? Yes ☒ No ☐Signed/dated by client? Yes ☒ No ☐

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	<u>1.16</u>						
Custody seals? (Y/N)	<u>N</u>						
Received on ice? (Y/N)	<u>y</u>						
Temp. blanks? (Y/N)	<u>y</u>						
Ice type: (Gel/Real/Other)	<u>real</u>						
Condition (In/Out):	<u>In</u>						

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: 4/15/23 @ 944 By: JSAll samples intact? Yes ☒ No ☐ Comments:Bottle labels/COCs agree? Yes ☒ No ☐ Comments:COC/container discrepancies form initiated? Yes ☐ No ☒Containers/volumes received appropriate for analysis? Yes ☒ No ☐ Comments:Do VOA vials have visible headspace? Yes ☐ No ☒ NA ☐

Comments:

Water samples: pH checked: Yes ☒ No ☐ NA ☐ pH appropriate? Yes ☐ No ☒ NA ☐Comments: Ph 9 on GS-07 125 ml brown NADH bottle.Additional information: TB# 3315

Labeled by:

Witness:

Cooler Inspected by:

Form Y-003 R-00

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.