



ANALYTICAL REPORT

Apex Laboratories, LLC

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

Friday, May 19, 2023

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

RE: A3C0534 - Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon. - 000029-02.84 T-01.001E

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

Enclosed are the results of analyses for work order A3C0534, which was received by the laboratory on 3/15/2023 at 7:44:00AM.

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

(See Cooler Receipt Form for details)

Default Cooler 1.3 degC

This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.

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



Apex Laboratories

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Darwin Thomas, Business Development Director



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6720 SW Macadam Ave. Suite 125
Portland, OR 97219

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

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

Project Manager: **John Renda**

Report ID:

A3C0534 - 05 19 23 0522

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
GS-031423-12	A3C0534-01	WG	03/14/23 11:10	03/15/23 07:44
GS-031423-13	A3C0534-02	WG	03/14/23 12:15	03/15/23 07:44
GS-031423-14	A3C0534-03	WG	03/14/23 13:30	03/15/23 07:44
GS-031423-15	A3C0534-04	WG	03/14/23 13:50	03/15/23 07:44
GS-031423-16	A3C0534-05	WG	03/14/23 15:00	03/15/23 07:44
GS-031423-17	A3C0534-06	WG	03/14/23 15:15	03/15/23 07:44
TB-031423	A3C0534-07	W	03/14/23 16:00	03/15/23 07:44

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503-718-2323
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125
Portland, OR 97219Project: **Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3C0534 - 05 19 23 0522****ANALYTICAL SAMPLE RESULTS****Volatile Organic Compounds by EPA 8260D**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-031423-12 (A3C0534-01RE1)				Matrix: WG		Batch: 23C0661		
Acetone	ND	10.0	20.0	ug/L	1	03/18/23 03:42	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	03/18/23 03:42	EPA 8260D	
Benzene	ND	0.100	0.200	ug/L	1	03/18/23 03:42	EPA 8260D	
Bromobenzene	ND	0.250	0.500	ug/L	1	03/18/23 03:42	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	03/18/23 03:42	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	03/18/23 03:42	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	03/18/23 03:42	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	03/18/23 03:42	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	03/18/23 03:42	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	03/18/23 03:42	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	03/18/23 03:42	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	03/18/23 03:42	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	03/18/23 03:42	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	03/18/23 03:42	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	03/18/23 03:42	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	03/18/23 03:42	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	03/18/23 03:42	EPA 8260D	
Chloromethane	ND	5.00	5.00	ug/L	1	03/18/23 03:42	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/18/23 03:42	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/18/23 03:42	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	03/18/23 03:42	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	03/18/23 03:42	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	03/18/23 03:42	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	03/18/23 03:42	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/18/23 03:42	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/18/23 03:42	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/18/23 03:42	EPA 8260D	
Dichlorodifluoromethane	ND	1.00	1.00	ug/L	1	03/18/23 03:42	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	03/18/23 03:42	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	03/18/23 03:42	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	03/18/23 03:42	EPA 8260D	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	03/18/23 03:42	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	03/18/23 03:42	EPA 8260D	

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ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125
Portland, OR 97219Project: **Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3C0534 - 05 19 23 0522****ANALYTICAL SAMPLE RESULTS****Volatile Organic Compounds by EPA 8260D**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-031423-12 (A3C0534-01RE1)				Matrix: WG		Batch: 23C0661		
1,2-Dichloropropane	ND	0.500	0.500	ug/L	1	03/18/23 03:42	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	03/18/23 03:42	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	03/18/23 03:42	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	03/18/23 03:42	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/18/23 03:42	EPA 8260D	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/18/23 03:42	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	03/18/23 03:42	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	03/18/23 03:42	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	03/18/23 03:42	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	03/18/23 03:42	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	03/18/23 03:42	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	03/18/23 03:42	EPA 8260D	
4-Methyl-2-pentanone (MIBK)	ND	5.00	10.0	ug/L	1	03/18/23 03:42	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	03/18/23 03:42	EPA 8260D	
Naphthalene	ND	1.00	2.00	ug/L	1	03/18/23 03:42	EPA 8260D	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	03/18/23 03:42	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	03/18/23 03:42	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	03/18/23 03:42	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	03/18/23 03:42	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	03/18/23 03:42	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	03/18/23 03:42	EPA 8260D	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/18/23 03:42	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/18/23 03:42	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	03/18/23 03:42	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	03/18/23 03:42	EPA 8260D	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	03/18/23 03:42	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	03/18/23 03:42	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	03/18/23 03:42	EPA 8260D	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	03/18/23 03:42	EPA 8260D	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	03/18/23 03:42	EPA 8260D	
Vinyl chloride	ND	0.200	0.400	ug/L	1	03/18/23 03:42	EPA 8260D	
m,p-Xylene	ND	0.500	1.00	ug/L	1	03/18/23 03:42	EPA 8260D	
o-Xylene	ND	0.250	0.500	ug/L	1	03/18/23 03:42	EPA 8260D	

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ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-031423-12 (A3C0534-01RE1)		Matrix: WG			Batch: 23C0661			
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 102 %	Limits: 80-120 %	1	03/18/23 03:42	EPA 8260D		
Toluene-d8 (Surr)		102 %	80-120 %	1	03/18/23 03:42	EPA 8260D		
4-Bromofluorobenzene (Surr)		97 %	80-120 %	1	03/18/23 03:42	EPA 8260D		
GS-031423-13 (A3C0534-02RE1)		Matrix: WG			Batch: 23C0661			
Acetone	ND	10.0	20.0	ug/L	1	03/18/23 04:04	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	03/18/23 04:04	EPA 8260D	
Benzene	ND	0.100	0.200	ug/L	1	03/18/23 04:04	EPA 8260D	
Bromobenzene	ND	0.250	0.500	ug/L	1	03/18/23 04:04	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	03/18/23 04:04	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	03/18/23 04:04	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	03/18/23 04:04	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	03/18/23 04:04	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	03/18/23 04:04	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	03/18/23 04:04	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	03/18/23 04:04	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	03/18/23 04:04	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	03/18/23 04:04	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	03/18/23 04:04	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	03/18/23 04:04	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	03/18/23 04:04	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	03/18/23 04:04	EPA 8260D	
Chloromethane	ND	5.00	5.00	ug/L	1	03/18/23 04:04	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/18/23 04:04	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/18/23 04:04	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	03/18/23 04:04	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	03/18/23 04:04	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	03/18/23 04:04	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	03/18/23 04:04	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/18/23 04:04	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/18/23 04:04	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/18/23 04:04	EPA 8260D	
Dichlorodifluoromethane	ND	1.00	1.00	ug/L	1	03/18/23 04:04	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	03/18/23 04:04	EPA 8260D	

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Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-031423-13 (A3C0534-02RE1)				Matrix: WG		Batch: 23C0661		
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	03/18/23 04:04	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	03/18/23 04:04	EPA 8260D	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	03/18/23 04:04	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	03/18/23 04:04	EPA 8260D	
1,2-Dichloropropane	ND	0.500	0.500	ug/L	1	03/18/23 04:04	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	03/18/23 04:04	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	03/18/23 04:04	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	03/18/23 04:04	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/18/23 04:04	EPA 8260D	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/18/23 04:04	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	03/18/23 04:04	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	03/18/23 04:04	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	03/18/23 04:04	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	03/18/23 04:04	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	03/18/23 04:04	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	03/18/23 04:04	EPA 8260D	
4-Methyl-2-pentanone (MIBK)	ND	5.00	10.0	ug/L	1	03/18/23 04:04	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	03/18/23 04:04	EPA 8260D	
Naphthalene	ND	1.00	2.00	ug/L	1	03/18/23 04:04	EPA 8260D	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	03/18/23 04:04	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	03/18/23 04:04	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	03/18/23 04:04	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	03/18/23 04:04	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	03/18/23 04:04	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	03/18/23 04:04	EPA 8260D	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/18/23 04:04	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/18/23 04:04	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	03/18/23 04:04	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	03/18/23 04:04	EPA 8260D	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	03/18/23 04:04	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	03/18/23 04:04	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	03/18/23 04:04	EPA 8260D	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	03/18/23 04:04	EPA 8260D	

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ORELAP ID: OR100062

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Project: **Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3C0534 - 05 19 23 0522**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-031423-13 (A3C0534-02RE1)		Matrix: WG			Batch: 23C0661			
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	03/18/23 04:04	EPA 8260D	
Vinyl chloride	ND	0.200	0.400	ug/L	1	03/18/23 04:04	EPA 8260D	
m,p-Xylene	ND	0.500	1.00	ug/L	1	03/18/23 04:04	EPA 8260D	
o-Xylene	ND	0.250	0.500	ug/L	1	03/18/23 04:04	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 101 %	Limits: 80-120 %	1	03/18/23 04:04	EPA 8260D		
Toluene-d8 (Surr)		106 %	80-120 %	1	03/18/23 04:04	EPA 8260D		
4-Bromofluorobenzene (Surr)		105 %	80-120 %	1	03/18/23 04:04	EPA 8260D		
GS-031423-14 (A3C0534-03RE1)		Matrix: WG			Batch: 23C0661			
Acetone	ND	10.0	20.0	ug/L	1	03/18/23 04:26	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	03/18/23 04:26	EPA 8260D	
Benzene	0.190	0.100	0.200	ug/L	1	03/18/23 04:26	EPA 8260D	J
Bromobenzene	ND	0.250	0.500	ug/L	1	03/18/23 04:26	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	03/18/23 04:26	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	03/18/23 04:26	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	03/18/23 04:26	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	03/18/23 04:26	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	03/18/23 04:26	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	03/18/23 04:26	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	03/18/23 04:26	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	03/18/23 04:26	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	03/18/23 04:26	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	03/18/23 04:26	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	03/18/23 04:26	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	03/18/23 04:26	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	03/18/23 04:26	EPA 8260D	
Chloromethane	ND	5.00	5.00	ug/L	1	03/18/23 04:26	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/18/23 04:26	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/18/23 04:26	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	03/18/23 04:26	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	03/18/23 04:26	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	03/18/23 04:26	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	03/18/23 04:26	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/18/23 04:26	EPA 8260D	

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125
Portland, OR 97219Project: **Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3C0534 - 05 19 23 0522**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-031423-14 (A3C0534-03RE1)				Matrix: WG		Batch: 23C0661		
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/18/23 04:26	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/18/23 04:26	EPA 8260D	
Dichlorodifluoromethane	ND	1.00	1.00	ug/L	1	03/18/23 04:26	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	03/18/23 04:26	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	03/18/23 04:26	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	03/18/23 04:26	EPA 8260D	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	03/18/23 04:26	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	03/18/23 04:26	EPA 8260D	
1,2-Dichloropropane	ND	0.500	0.500	ug/L	1	03/18/23 04:26	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	03/18/23 04:26	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	03/18/23 04:26	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	03/18/23 04:26	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/18/23 04:26	EPA 8260D	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/18/23 04:26	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	03/18/23 04:26	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	03/18/23 04:26	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	03/18/23 04:26	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	03/18/23 04:26	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	03/18/23 04:26	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	03/18/23 04:26	EPA 8260D	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	03/18/23 04:26	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	03/18/23 04:26	EPA 8260D	
Naphthalene	5.11	1.00	2.00	ug/L	1	03/18/23 04:26	EPA 8260D	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	03/18/23 04:26	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	03/18/23 04:26	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	03/18/23 04:26	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	03/18/23 04:26	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	03/18/23 04:26	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	03/18/23 04:26	EPA 8260D	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/18/23 04:26	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/18/23 04:26	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	03/18/23 04:26	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	03/18/23 04:26	EPA 8260D	

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125
Portland, OR 97219Project: **Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3C0534 - 05 19 23 0522**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-031423-14 (A3C0534-03RE1)		Matrix: WG			Batch: 23C0661			
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	03/18/23 04:26	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	03/18/23 04:26	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	03/18/23 04:26	EPA 8260D	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	03/18/23 04:26	EPA 8260D	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	03/18/23 04:26	EPA 8260D	
Vinyl chloride	ND	0.200	0.400	ug/L	1	03/18/23 04:26	EPA 8260D	
m,p-Xylene	ND	0.500	1.00	ug/L	1	03/18/23 04:26	EPA 8260D	
o-Xylene	ND	0.250	0.500	ug/L	1	03/18/23 04:26	EPA 8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 102 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>03/18/23 04:26</i>	<i>EPA 8260D</i>	
<i>Toluene-d8 (Surr)</i>		<i>104 %</i>		<i>80-120 %</i>	<i>1</i>	<i>03/18/23 04:26</i>	<i>EPA 8260D</i>	
<i>4-Bromofluorobenzene (Surr)</i>		<i>99 %</i>		<i>80-120 %</i>	<i>1</i>	<i>03/18/23 04:26</i>	<i>EPA 8260D</i>	
GS-031423-15 (A3C0534-04RE1)		Matrix: WG			Batch: 23C0661			
Acetone	ND	10.0	20.0	ug/L	1	03/18/23 04:48	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	03/18/23 04:48	EPA 8260D	
Benzene	ND	0.100	0.200	ug/L	1	03/18/23 04:48	EPA 8260D	
Bromobenzene	ND	0.250	0.500	ug/L	1	03/18/23 04:48	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	03/18/23 04:48	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	03/18/23 04:48	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	03/18/23 04:48	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	03/18/23 04:48	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	03/18/23 04:48	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	03/18/23 04:48	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	03/18/23 04:48	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	03/18/23 04:48	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	03/18/23 04:48	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	03/18/23 04:48	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	03/18/23 04:48	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	03/18/23 04:48	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	03/18/23 04:48	EPA 8260D	
Chloromethane	ND	5.00	5.00	ug/L	1	03/18/23 04:48	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/18/23 04:48	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/18/23 04:48	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	03/18/23 04:48	EPA 8260D	

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Darwin Thomas, Business Development Director

**ANALYTICAL REPORT****Apex Laboratories, LLC**6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125
Portland, OR 97219Project: **Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3C0534 - 05 19 23 0522****ANALYTICAL SAMPLE RESULTS****Volatile Organic Compounds by EPA 8260D**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-031423-15 (A3C0534-04RE1)				Matrix: WG		Batch: 23C0661		
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	03/18/23 04:48	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	03/18/23 04:48	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	03/18/23 04:48	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/18/23 04:48	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/18/23 04:48	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/18/23 04:48	EPA 8260D	
Dichlorodifluoromethane	ND	1.00	1.00	ug/L	1	03/18/23 04:48	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	03/18/23 04:48	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	03/18/23 04:48	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	03/18/23 04:48	EPA 8260D	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	03/18/23 04:48	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	03/18/23 04:48	EPA 8260D	
1,2-Dichloropropane	ND	0.500	0.500	ug/L	1	03/18/23 04:48	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	03/18/23 04:48	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	03/18/23 04:48	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	03/18/23 04:48	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/18/23 04:48	EPA 8260D	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/18/23 04:48	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	03/18/23 04:48	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	03/18/23 04:48	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	03/18/23 04:48	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	03/18/23 04:48	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	03/18/23 04:48	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	03/18/23 04:48	EPA 8260D	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	03/18/23 04:48	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	03/18/23 04:48	EPA 8260D	
Naphthalene	ND	1.00	2.00	ug/L	1	03/18/23 04:48	EPA 8260D	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	03/18/23 04:48	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	03/18/23 04:48	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	03/18/23 04:48	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	03/18/23 04:48	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	03/18/23 04:48	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	03/18/23 04:48	EPA 8260D	

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125
Portland, OR 97219Project: **Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3C0534 - 05 19 23 0522**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-031423-15 (A3C0534-04RE1)		Matrix: WG			Batch: 23C0661			
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/18/23 04:48	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/18/23 04:48	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	03/18/23 04:48	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	03/18/23 04:48	EPA 8260D	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	03/18/23 04:48	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	03/18/23 04:48	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	03/18/23 04:48	EPA 8260D	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	03/18/23 04:48	EPA 8260D	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	03/18/23 04:48	EPA 8260D	
Vinyl chloride	ND	0.200	0.400	ug/L	1	03/18/23 04:48	EPA 8260D	
m,p-Xylene	ND	0.500	1.00	ug/L	1	03/18/23 04:48	EPA 8260D	
o-Xylene	ND	0.250	0.500	ug/L	1	03/18/23 04:48	EPA 8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>	<i>102 %</i>	<i>Limits:</i>	<i>80-120 %</i>	<i>1</i>	<i>03/18/23 04:48</i>	<i>EPA 8260D</i>
<i>Toluene-d8 (Surr)</i>			<i>103 %</i>		<i>80-120 %</i>	<i>1</i>	<i>03/18/23 04:48</i>	<i>EPA 8260D</i>
<i>4-Bromofluorobenzene (Surr)</i>			<i>98 %</i>		<i>80-120 %</i>	<i>1</i>	<i>03/18/23 04:48</i>	<i>EPA 8260D</i>
GS-031423-16 (A3C0534-05RE1)		Matrix: WG			Batch: 23C0661			
Acetone	ND	10.0	20.0	ug/L	1	03/18/23 05:10	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	03/18/23 05:10	EPA 8260D	
Benzene	ND	0.100	0.200	ug/L	1	03/18/23 05:10	EPA 8260D	
Bromobenzene	ND	0.250	0.500	ug/L	1	03/18/23 05:10	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	03/18/23 05:10	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	03/18/23 05:10	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	03/18/23 05:10	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	03/18/23 05:10	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	03/18/23 05:10	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	03/18/23 05:10	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	03/18/23 05:10	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	03/18/23 05:10	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	03/18/23 05:10	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	03/18/23 05:10	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	03/18/23 05:10	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	03/18/23 05:10	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	03/18/23 05:10	EPA 8260D	

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125
Portland, OR 97219Project: **Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3C0534 - 05 19 23 0522**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-031423-16 (A3C0534-05RE1)		Matrix: WG			Batch: 23C0661			
Chloromethane	ND	5.00	5.00	ug/L	1	03/18/23 05:10	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/18/23 05:10	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/18/23 05:10	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	03/18/23 05:10	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	03/18/23 05:10	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	03/18/23 05:10	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	03/18/23 05:10	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/18/23 05:10	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/18/23 05:10	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/18/23 05:10	EPA 8260D	
Dichlorodifluoromethane	ND	1.00	1.00	ug/L	1	03/18/23 05:10	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	03/18/23 05:10	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	03/18/23 05:10	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	03/18/23 05:10	EPA 8260D	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	03/18/23 05:10	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	03/18/23 05:10	EPA 8260D	
1,2-Dichloropropane	ND	0.500	0.500	ug/L	1	03/18/23 05:10	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	03/18/23 05:10	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	03/18/23 05:10	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	03/18/23 05:10	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/18/23 05:10	EPA 8260D	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/18/23 05:10	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	03/18/23 05:10	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	03/18/23 05:10	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	03/18/23 05:10	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	03/18/23 05:10	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	03/18/23 05:10	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	03/18/23 05:10	EPA 8260D	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	03/18/23 05:10	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	03/18/23 05:10	EPA 8260D	
Naphthalene	ND	1.00	2.00	ug/L	1	03/18/23 05:10	EPA 8260D	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	03/18/23 05:10	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	03/18/23 05:10	EPA 8260D	

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125
Portland, OR 97219Project: **Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3C0534 - 05 19 23 0522**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-031423-16 (A3C0534-05RE1)		Matrix: WG			Batch: 23C0661			
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	03/18/23 05:10	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	03/18/23 05:10	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	03/18/23 05:10	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	03/18/23 05:10	EPA 8260D	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/18/23 05:10	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/18/23 05:10	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	03/18/23 05:10	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	03/18/23 05:10	EPA 8260D	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	03/18/23 05:10	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	03/18/23 05:10	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	03/18/23 05:10	EPA 8260D	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	03/18/23 05:10	EPA 8260D	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	03/18/23 05:10	EPA 8260D	
Vinyl chloride	ND	0.200	0.400	ug/L	1	03/18/23 05:10	EPA 8260D	
m,p-Xylene	ND	0.500	1.00	ug/L	1	03/18/23 05:10	EPA 8260D	
o-Xylene	ND	0.250	0.500	ug/L	1	03/18/23 05:10	EPA 8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 103 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>03/18/23 05:10</i>	<i>EPA 8260D</i>	
<i>Toluene-d8 (Surr)</i>		<i>104 %</i>		<i>80-120 %</i>	<i>1</i>	<i>03/18/23 05:10</i>	<i>EPA 8260D</i>	
<i>4-Bromofluorobenzene (Surr)</i>		<i>100 %</i>		<i>80-120 %</i>	<i>1</i>	<i>03/18/23 05:10</i>	<i>EPA 8260D</i>	
GS-031423-17 (A3C0534-06RE1)		Matrix: WG			Batch: 23C0661			
Acetone	ND	10.0	20.0	ug/L	1	03/18/23 05:33	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	03/18/23 05:33	EPA 8260D	
Benzene	ND	0.100	0.200	ug/L	1	03/18/23 05:33	EPA 8260D	
Bromobenzene	ND	0.250	0.500	ug/L	1	03/18/23 05:33	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	03/18/23 05:33	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	03/18/23 05:33	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	03/18/23 05:33	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	03/18/23 05:33	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	03/18/23 05:33	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	03/18/23 05:33	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	03/18/23 05:33	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	03/18/23 05:33	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	03/18/23 05:33	EPA 8260D	

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125
Portland, OR 97219Project: **Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3C0534 - 05 19 23 0522**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-031423-17 (A3C0534-06RE1)				Matrix: WG		Batch: 23C0661		
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	03/18/23 05:33	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	03/18/23 05:33	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	03/18/23 05:33	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	03/18/23 05:33	EPA 8260D	
Chloromethane	ND	5.00	5.00	ug/L	1	03/18/23 05:33	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/18/23 05:33	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/18/23 05:33	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	03/18/23 05:33	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	03/18/23 05:33	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	03/18/23 05:33	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	03/18/23 05:33	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/18/23 05:33	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/18/23 05:33	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/18/23 05:33	EPA 8260D	
Dichlorodifluoromethane	ND	1.00	1.00	ug/L	1	03/18/23 05:33	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	03/18/23 05:33	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	03/18/23 05:33	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	03/18/23 05:33	EPA 8260D	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	03/18/23 05:33	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	03/18/23 05:33	EPA 8260D	
1,2-Dichloropropane	ND	0.500	0.500	ug/L	1	03/18/23 05:33	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	03/18/23 05:33	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	03/18/23 05:33	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	03/18/23 05:33	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/18/23 05:33	EPA 8260D	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/18/23 05:33	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	03/18/23 05:33	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	03/18/23 05:33	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	03/18/23 05:33	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	03/18/23 05:33	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	03/18/23 05:33	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	03/18/23 05:33	EPA 8260D	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	03/18/23 05:33	EPA 8260D	

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125
Portland, OR 97219Project: **Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3C0534 - 05 19 23 0522**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-031423-17 (A3C0534-06RE1)		Matrix: WG			Batch: 23C0661			
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	03/18/23 05:33	EPA 8260D	
Naphthalene	ND	1.00	2.00	ug/L	1	03/18/23 05:33	EPA 8260D	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	03/18/23 05:33	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	03/18/23 05:33	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	03/18/23 05:33	EPA 8260D	
1,1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	03/18/23 05:33	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	03/18/23 05:33	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	03/18/23 05:33	EPA 8260D	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/18/23 05:33	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/18/23 05:33	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	03/18/23 05:33	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	03/18/23 05:33	EPA 8260D	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	03/18/23 05:33	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	03/18/23 05:33	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	03/18/23 05:33	EPA 8260D	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	03/18/23 05:33	EPA 8260D	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	03/18/23 05:33	EPA 8260D	
Vinyl chloride	ND	0.200	0.400	ug/L	1	03/18/23 05:33	EPA 8260D	
m,p-Xylene	ND	0.500	1.00	ug/L	1	03/18/23 05:33	EPA 8260D	
o-Xylene	ND	0.250	0.500	ug/L	1	03/18/23 05:33	EPA 8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>	<i>103 %</i>	<i>Limits:</i>	<i>80-120 %</i>	<i>1</i>	<i>03/18/23 05:33</i>	<i>EPA 8260D</i>
<i>Toluene-d8 (Surr)</i>			<i>107 %</i>		<i>80-120 %</i>	<i>1</i>	<i>03/18/23 05:33</i>	<i>EPA 8260D</i>
<i>4-Bromofluorobenzene (Surr)</i>			<i>101 %</i>		<i>80-120 %</i>	<i>1</i>	<i>03/18/23 05:33</i>	<i>EPA 8260D</i>

TB-031423 (A3C0534-07)**Matrix: W****Batch: 23C0661**

Acetone	ND	20.0	20.0	ug/L	1	03/18/23 02:57	EPA 8260D
Acrylonitrile	ND	1.00	2.00	ug/L	1	03/18/23 02:57	EPA 8260D
Benzene	ND	0.100	0.200	ug/L	1	03/18/23 02:57	EPA 8260D
Bromobenzene	ND	0.250	0.500	ug/L	1	03/18/23 02:57	EPA 8260D
Bromochloromethane	ND	0.500	1.00	ug/L	1	03/18/23 02:57	EPA 8260D
Bromodichloromethane	ND	0.500	1.00	ug/L	1	03/18/23 02:57	EPA 8260D
Bromoform	ND	0.500	1.00	ug/L	1	03/18/23 02:57	EPA 8260D
Bromomethane	ND	5.00	5.00	ug/L	1	03/18/23 02:57	EPA 8260D
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	03/18/23 02:57	EPA 8260D

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

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

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125
Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3C0534 - 05 19 23 0522

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
TB-031423 (A3C0534-07)		Matrix: W			Batch: 23C0661			
n-Butylbenzene	ND	0.500	1.00	ug/L	1	03/18/23 02:57	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	03/18/23 02:57	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	03/18/23 02:57	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	03/18/23 02:57	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	03/18/23 02:57	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	03/18/23 02:57	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	03/18/23 02:57	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	03/18/23 02:57	EPA 8260D	
Chloromethane	ND	5.00	5.00	ug/L	1	03/18/23 02:57	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/18/23 02:57	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/18/23 02:57	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	03/18/23 02:57	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	03/18/23 02:57	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	03/18/23 02:57	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	03/18/23 02:57	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/18/23 02:57	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/18/23 02:57	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/18/23 02:57	EPA 8260D	
Dichlorodifluoromethane	ND	1.00	1.00	ug/L	1	03/18/23 02:57	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	03/18/23 02:57	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	03/18/23 02:57	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	03/18/23 02:57	EPA 8260D	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	03/18/23 02:57	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	03/18/23 02:57	EPA 8260D	
1,2-Dichloropropane	ND	0.500	0.500	ug/L	1	03/18/23 02:57	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	03/18/23 02:57	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	03/18/23 02:57	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	03/18/23 02:57	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/18/23 02:57	EPA 8260D	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/18/23 02:57	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	03/18/23 02:57	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	03/18/23 02:57	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	03/18/23 02:57	EPA 8260D	

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503-718-2323
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125
Portland, OR 97219Project: **Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3C0534 - 05 19 23 0522**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
TB-031423 (A3C0534-07)		Matrix: W			Batch: 23C0661			
Isopropylbenzene	ND	0.500	1.00	ug/L	1	03/18/23 02:57	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	03/18/23 02:57	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	03/18/23 02:57	EPA 8260D	
4-Methyl-2-pentanone (MIBK)	ND	5.00	10.0	ug/L	1	03/18/23 02:57	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	03/18/23 02:57	EPA 8260D	
Naphthalene	ND	1.00	2.00	ug/L	1	03/18/23 02:57	EPA 8260D	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	03/18/23 02:57	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	03/18/23 02:57	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	03/18/23 02:57	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	03/18/23 02:57	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	03/18/23 02:57	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	03/18/23 02:57	EPA 8260D	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/18/23 02:57	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/18/23 02:57	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	03/18/23 02:57	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	03/18/23 02:57	EPA 8260D	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	03/18/23 02:57	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	03/18/23 02:57	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	03/18/23 02:57	EPA 8260D	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	03/18/23 02:57	EPA 8260D	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	03/18/23 02:57	EPA 8260D	
Vinyl chloride	ND	0.200	0.400	ug/L	1	03/18/23 02:57	EPA 8260D	
m,p-Xylene	ND	0.500	1.00	ug/L	1	03/18/23 02:57	EPA 8260D	
o-Xylene	ND	0.250	0.500	ug/L	1	03/18/23 02:57	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery:	102 %	Limits:	80-120 %	1	03/18/23 02:57	EPA 8260D
Toluene-d8 (Surr)			103 %		80-120 %	1	03/18/23 02:57	EPA 8260D
4-Bromofluorobenzene (Surr)			99 %		80-120 %	1	03/18/23 02:57	EPA 8260D

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

Project: **Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3C0534 - 05 19 23 0522**

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-031423-12 (A3C0534-01)		Matrix: WG			Batch: 23C0614			
Acenaphthene	ND	0.0208	0.0417	ug/L	1	03/16/23 21:16	EPA 8270E LVI	
Acenaphthylene	ND	0.0208	0.0417	ug/L	1	03/16/23 21:16	EPA 8270E LVI	
Anthracene	ND	0.0208	0.0417	ug/L	1	03/16/23 21:16	EPA 8270E LVI	
Benz(a)anthracene	ND	0.0104	0.0208	ug/L	1	03/16/23 21:16	EPA 8270E LVI	
Benzo(a)pyrene	ND	0.0104	0.0208	ug/L	1	03/16/23 21:16	EPA 8270E LVI	
Benzo(b)fluoranthene	ND	0.0104	0.0208	ug/L	1	03/16/23 21:16	EPA 8270E LVI	
Benzo(k)fluoranthene	ND	0.0104	0.0208	ug/L	1	03/16/23 21:16	EPA 8270E LVI	
Benzo(g,h,i)perylene	ND	0.0208	0.0417	ug/L	1	03/16/23 21:16	EPA 8270E LVI	
Chrysene	ND	0.0104	0.0208	ug/L	1	03/16/23 21:16	EPA 8270E LVI	
Dibenz(a,h)anthracene	ND	0.0104	0.0208	ug/L	1	03/16/23 21:16	EPA 8270E LVI	
Fluoranthene	ND	0.0208	0.0417	ug/L	1	03/16/23 21:16	EPA 8270E LVI	
Fluorene	ND	0.0208	0.0417	ug/L	1	03/16/23 21:16	EPA 8270E LVI	
Indeno(1,2,3-cd)pyrene	ND	0.0104	0.0208	ug/L	1	03/16/23 21:16	EPA 8270E LVI	
1-Methylnaphthalene	ND	0.0417	0.0834	ug/L	1	03/16/23 21:16	EPA 8270E LVI	
2-Methylnaphthalene	ND	0.0417	0.0834	ug/L	1	03/16/23 21:16	EPA 8270E LVI	
Naphthalene	ND	0.0417	0.0834	ug/L	1	03/16/23 21:16	EPA 8270E LVI	
Phenanthrene	ND	0.0417	0.0834	ug/L	1	03/16/23 21:16	EPA 8270E LVI	
Pyrene	ND	0.0208	0.0417	ug/L	1	03/16/23 21:16	EPA 8270E LVI	
Carbazole	ND	0.0208	0.0417	ug/L	1	03/16/23 21:16	EPA 8270E LVI	
Dibenzofuran	ND	0.0208	0.0417	ug/L	1	03/16/23 21:16	EPA 8270E LVI	
<i>Surrogate: Acenaphthylene-d8 (Surr)</i>		<i>Recovery:</i>	<i>119 %</i>	<i>Limits:</i>	<i>78-134 %</i>	<i>1</i>	<i>03/16/23 21:16</i>	<i>EPA 8270E LVI</i>
<i>Benzo(a)pyrene-d12 (Surr)</i>			<i>123 %</i>		<i>80-132 %</i>	<i>1</i>	<i>03/16/23 21:16</i>	<i>EPA 8270E LVI</i>

GS-031423-13 (A3C0534-02)**Matrix: WG****Batch: 23C0614**

Acenaphthene	0.0592	0.0202	0.0405	ug/L	1	03/16/23 21:49	EPA 8270E LVI
Acenaphthylene	ND	0.0202	0.0405	ug/L	1	03/16/23 21:49	EPA 8270E LVI
Anthracene	ND	0.0202	0.0405	ug/L	1	03/16/23 21:49	EPA 8270E LVI
Benz(a)anthracene	ND	0.0101	0.0202	ug/L	1	03/16/23 21:49	EPA 8270E LVI
Benzo(a)pyrene	ND	0.0101	0.0202	ug/L	1	03/16/23 21:49	EPA 8270E LVI
Benzo(b)fluoranthene	ND	0.0101	0.0202	ug/L	1	03/16/23 21:49	EPA 8270E LVI
Benzo(k)fluoranthene	ND	0.0101	0.0202	ug/L	1	03/16/23 21:49	EPA 8270E LVI
Benzo(g,h,i)perylene	ND	0.0202	0.0405	ug/L	1	03/16/23 21:49	EPA 8270E LVI
Chrysene	ND	0.0101	0.0202	ug/L	1	03/16/23 21:49	EPA 8270E LVI

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

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6720 SW Macadam Ave. Suite 125

Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3C0534 - 05 19 23 0522

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-031423-13 (A3C0534-02)		Matrix: WG			Batch: 23C0614			
Dibenz(a,h)anthracene	ND	0.0101	0.0202	ug/L	1	03/16/23 21:49	EPA 8270E LVI	
Fluoranthene	ND	0.0202	0.0405	ug/L	1	03/16/23 21:49	EPA 8270E LVI	
Fluorene	0.0248	0.0202	0.0405	ug/L	1	03/16/23 21:49	EPA 8270E LVI	J
Indeno(1,2,3-cd)pyrene	ND	0.0101	0.0202	ug/L	1	03/16/23 21:49	EPA 8270E LVI	
1-Methylnaphthalene	ND	0.0405	0.0810	ug/L	1	03/16/23 21:49	EPA 8270E LVI	
2-Methylnaphthalene	ND	0.0405	0.0810	ug/L	1	03/16/23 21:49	EPA 8270E LVI	
Naphthalene	ND	0.0405	0.0810	ug/L	1	03/16/23 21:49	EPA 8270E LVI	
Phenanthrene	ND	0.0405	0.0810	ug/L	1	03/16/23 21:49	EPA 8270E LVI	
Pyrene	ND	0.0202	0.0405	ug/L	1	03/16/23 21:49	EPA 8270E LVI	
Carbazole	ND	0.0202	0.0405	ug/L	1	03/16/23 21:49	EPA 8270E LVI	
Dibenzofuran	ND	0.0202	0.0405	ug/L	1	03/16/23 21:49	EPA 8270E LVI	
Surrogate: Acenaphthylene-d8 (Surr)		Recovery: 118 %		Limits: 78-134 %	1	03/16/23 21:49	EPA 8270E LVI	
Benzo(a)pyrene-d12 (Surr)		122 %		80-132 %	1	03/16/23 21:49	EPA 8270E LVI	
GS-031423-14 (A3C0534-03)		Matrix: WG			Batch: 23C0614			
Acenaphthene	11.5	0.0217	0.0434	ug/L	1	03/16/23 22:22	EPA 8270E LVI	
Acenaphthylene	0.557	0.0217	0.0434	ug/L	1	03/16/23 22:22	EPA 8270E LVI	
Anthracene	0.636	0.0217	0.0434	ug/L	1	03/16/23 22:22	EPA 8270E LVI	
Benz(a)anthracene	0.0526	0.0108	0.0217	ug/L	1	03/16/23 22:22	EPA 8270E LVI	
Benzo(a)pyrene	0.0141	0.0108	0.0217	ug/L	1	03/16/23 22:22	EPA 8270E LVI	J
Benzo(b)fluoranthene	0.0146	0.0108	0.0217	ug/L	1	03/16/23 22:22	EPA 8270E LVI	J
Benzo(k)fluoranthene	ND	0.0108	0.0217	ug/L	1	03/16/23 22:22	EPA 8270E LVI	
Benzo(g,h,i)perylene	ND	0.0217	0.0434	ug/L	1	03/16/23 22:22	EPA 8270E LVI	
Chrysene	0.0390	0.0108	0.0217	ug/L	1	03/16/23 22:22	EPA 8270E LVI	M-05
Dibenz(a,h)anthracene	ND	0.0108	0.0217	ug/L	1	03/16/23 22:22	EPA 8270E LVI	
Fluoranthene	2.05	0.0217	0.0434	ug/L	1	03/16/23 22:22	EPA 8270E LVI	
Fluorene	3.02	0.0217	0.0434	ug/L	1	03/16/23 22:22	EPA 8270E LVI	
Indeno(1,2,3-cd)pyrene	ND	0.0108	0.0217	ug/L	1	03/16/23 22:22	EPA 8270E LVI	
1-Methylnaphthalene	1.27	0.0434	0.0867	ug/L	1	03/16/23 22:22	EPA 8270E LVI	
2-Methylnaphthalene	0.0786	0.0434	0.0867	ug/L	1	03/16/23 22:22	EPA 8270E LVI	J
Naphthalene	6.40	0.0434	0.0867	ug/L	1	03/16/23 22:22	EPA 8270E LVI	
Phenanthrene	2.06	0.0434	0.0867	ug/L	1	03/16/23 22:22	EPA 8270E LVI	
Pyrene	2.09	0.0217	0.0434	ug/L	1	03/16/23 22:22	EPA 8270E LVI	

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ANALYTICAL REPORT

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503-718-2323
ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125
Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3C0534 - 05 19 23 0522

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-031423-14 (A3C0534-03)		Matrix: WG			Batch: 23C0614			
Carbazole	0.908	0.0217	0.0434	ug/L	1	03/16/23 22:22	EPA 8270E LVI	
Dibenzofuran	0.261	0.0217	0.0434	ug/L	1	03/16/23 22:22	EPA 8270E LVI	
Surrogate: Acenaphthylene-d8 (Surr)		Recovery: 118 %		Limits: 78-134 %	1	03/16/23 22:22	EPA 8270E LVI	
Benzo(a)pyrene-d12 (Surr)		124 %		80-132 %	1	03/16/23 22:22	EPA 8270E LVI	
GS-031423-15 (A3C0534-04)		Matrix: WG			Batch: 23C0614			
Acenaphthene	ND	0.0368	0.0368	ug/L	1	03/16/23 22:55	EPA 8270E LVI	
Acenaphthylene	0.145	0.0184	0.0368	ug/L	1	03/16/23 22:55	EPA 8270E LVI	
Anthracene	0.0759	0.0184	0.0368	ug/L	1	03/16/23 22:55	EPA 8270E LVI	
Benz(a)anthracene	ND	0.00920	0.0184	ug/L	1	03/16/23 22:55	EPA 8270E LVI	
Benzo(a)pyrene	ND	0.00920	0.0184	ug/L	1	03/16/23 22:55	EPA 8270E LVI	
Benzo(b)fluoranthene	ND	0.00920	0.0184	ug/L	1	03/16/23 22:55	EPA 8270E LVI	
Benzo(k)fluoranthene	ND	0.00920	0.0184	ug/L	1	03/16/23 22:55	EPA 8270E LVI	
Benzo(g,h,i)perylene	ND	0.0184	0.0368	ug/L	1	03/16/23 22:55	EPA 8270E LVI	
Chrysene	ND	0.00920	0.0184	ug/L	1	03/16/23 22:55	EPA 8270E LVI	
Dibenz(a,h)anthracene	ND	0.00920	0.0184	ug/L	1	03/16/23 22:55	EPA 8270E LVI	
Fluoranthene	0.0189	0.0184	0.0368	ug/L	1	03/16/23 22:55	EPA 8270E LVI	J
Fluorene	0.0244	0.0184	0.0368	ug/L	1	03/16/23 22:55	EPA 8270E LVI	J
Indeno(1,2,3-cd)pyrene	ND	0.00920	0.0184	ug/L	1	03/16/23 22:55	EPA 8270E LVI	
1-Methylnaphthalene	0.0442	0.0368	0.0736	ug/L	1	03/16/23 22:55	EPA 8270E LVI	J
2-Methylnaphthalene	ND	0.0368	0.0736	ug/L	1	03/16/23 22:55	EPA 8270E LVI	
Naphthalene	ND	0.0368	0.0736	ug/L	1	03/16/23 22:55	EPA 8270E LVI	
Phenanthrene	0.0598	0.0368	0.0736	ug/L	1	03/16/23 22:55	EPA 8270E LVI	J
Pyrene	0.0262	0.0184	0.0368	ug/L	1	03/16/23 22:55	EPA 8270E LVI	J
Carbazole	ND	0.0184	0.0368	ug/L	1	03/16/23 22:55	EPA 8270E LVI	
Dibenzofuran	ND	0.0184	0.0368	ug/L	1	03/16/23 22:55	EPA 8270E LVI	
Surrogate: Acenaphthylene-d8 (Surr)		Recovery: 119 %		Limits: 78-134 %	1	03/16/23 22:55	EPA 8270E LVI	
Benzo(a)pyrene-d12 (Surr)		122 %		80-132 %	1	03/16/23 22:55	EPA 8270E LVI	
GS-031423-16 (A3C0534-05)		Matrix: WG			Batch: 23C0614			
Acenaphthene	ND	0.0181	0.0361	ug/L	1	03/16/23 23:28	EPA 8270E LVI	
Acenaphthylene	0.0488	0.0181	0.0361	ug/L	1	03/16/23 23:28	EPA 8270E LVI	
Anthracene	0.0307	0.0181	0.0361	ug/L	1	03/16/23 23:28	EPA 8270E LVI	J
Benz(a)anthracene	ND	0.00904	0.0181	ug/L	1	03/16/23 23:28	EPA 8270E LVI	

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Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3C0534 - 05 19 23 0522

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-031423-16 (A3C0534-05)		Matrix: WG			Batch: 23C0614			
Benzo(a)pyrene	ND	0.00904	0.0181	ug/L	1	03/16/23 23:28	EPA 8270E LVI	
Benzo(b)fluoranthene	ND	0.00904	0.0181	ug/L	1	03/16/23 23:28	EPA 8270E LVI	
Benzo(k)fluoranthene	ND	0.00904	0.0181	ug/L	1	03/16/23 23:28	EPA 8270E LVI	
Benzo(g,h,i)perylene	ND	0.0181	0.0361	ug/L	1	03/16/23 23:28	EPA 8270E LVI	
Chrysene	ND	0.00904	0.0181	ug/L	1	03/16/23 23:28	EPA 8270E LVI	
Dibenz(a,h)anthracene	ND	0.00904	0.0181	ug/L	1	03/16/23 23:28	EPA 8270E LVI	
Fluoranthene	ND	0.0181	0.0361	ug/L	1	03/16/23 23:28	EPA 8270E LVI	
Fluorene	ND	0.0181	0.0361	ug/L	1	03/16/23 23:28	EPA 8270E LVI	
Indeno(1,2,3-cd)pyrene	ND	0.00904	0.0181	ug/L	1	03/16/23 23:28	EPA 8270E LVI	
1-Methylnaphthalene	ND	0.0361	0.0723	ug/L	1	03/16/23 23:28	EPA 8270E LVI	
2-Methylnaphthalene	ND	0.0361	0.0723	ug/L	1	03/16/23 23:28	EPA 8270E LVI	
Naphthalene	ND	0.0361	0.0723	ug/L	1	03/16/23 23:28	EPA 8270E LVI	
Phenanthrene	ND	0.0361	0.0723	ug/L	1	03/16/23 23:28	EPA 8270E LVI	
Pyrene	0.0271	0.0181	0.0361	ug/L	1	03/16/23 23:28	EPA 8270E LVI	J
Carbazole	ND	0.0181	0.0361	ug/L	1	03/16/23 23:28	EPA 8270E LVI	
Dibenzofuran	ND	0.0181	0.0361	ug/L	1	03/16/23 23:28	EPA 8270E LVI	
Surrogate: Acenaphthylene-d8 (Surr)		Recovery: 120 %		Limits: 78-134 %	1	03/16/23 23:28	EPA 8270E LVI	
Benzo(a)pyrene-d12 (Surr)		121 %		80-132 %	1	03/16/23 23:28	EPA 8270E LVI	
GS-031423-17 (A3C0534-06)		Matrix: WG			Batch: 23C0614			
Acenaphthene	0.0174	0.0174	0.0348	ug/L	1	03/17/23 00:01	EPA 8270E LVI	J
Acenaphthylene	0.0209	0.0174	0.0348	ug/L	1	03/17/23 00:01	EPA 8270E LVI	J
Anthracene	ND	0.0174	0.0348	ug/L	1	03/17/23 00:01	EPA 8270E LVI	
Benz(a)anthracene	0.0157	0.00870	0.0174	ug/L	1	03/17/23 00:01	EPA 8270E LVI	J
Benzo(a)pyrene	0.0217	0.00870	0.0174	ug/L	1	03/17/23 00:01	EPA 8270E LVI	
Benzo(b)fluoranthene	0.0200	0.00870	0.0174	ug/L	1	03/17/23 00:01	EPA 8270E LVI	
Benzo(k)fluoranthene	ND	0.00870	0.0174	ug/L	1	03/17/23 00:01	EPA 8270E LVI	
Benzo(g,h,i)perylene	0.0209	0.0174	0.0348	ug/L	1	03/17/23 00:01	EPA 8270E LVI	J
Chrysene	0.0209	0.00870	0.0174	ug/L	1	03/17/23 00:01	EPA 8270E LVI	
Dibenz(a,h)anthracene	ND	0.00870	0.0174	ug/L	1	03/17/23 00:01	EPA 8270E LVI	
Fluoranthene	0.0330	0.0174	0.0348	ug/L	1	03/17/23 00:01	EPA 8270E LVI	J
Fluorene	ND	0.0174	0.0348	ug/L	1	03/17/23 00:01	EPA 8270E LVI	
Indeno(1,2,3-cd)pyrene	0.0187	0.00870	0.0174	ug/L	1	03/17/23 00:01	EPA 8270E LVI	

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3C0534 - 05 19 23 0522

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-031423-17 (A3C0534-06)		Matrix: WG			Batch: 23C0614			
1-Methylnaphthalene	ND	0.0348	0.0696	ug/L	1	03/17/23 00:01	EPA 8270E LVI	
2-Methylnaphthalene	ND	0.0348	0.0696	ug/L	1	03/17/23 00:01	EPA 8270E LVI	
Naphthalene	0.0578	0.0348	0.0696	ug/L	1	03/17/23 00:01	EPA 8270E LVI	J
Phenanthrene	ND	0.0348	0.0696	ug/L	1	03/17/23 00:01	EPA 8270E LVI	
Pyrene	0.0839	0.0174	0.0348	ug/L	1	03/17/23 00:01	EPA 8270E LVI	
Carbazole	ND	0.0174	0.0348	ug/L	1	03/17/23 00:01	EPA 8270E LVI	
Dibenzofuran	ND	0.0174	0.0348	ug/L	1	03/17/23 00:01	EPA 8270E LVI	
Surrogate: Acenaphthylene-d8 (Surr)		Recovery: 120 %		Limits: 78-134 %	1	03/17/23 00:01	EPA 8270E LVI	
Benzo(a)pyrene-d12 (Surr)		123 %		80-132 %	1	03/17/23 00:01	EPA 8270E LVI	

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Portland, OR 97219Project: **Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3C0534 - 05 19 23 0522**

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-031423-12 (A3C0534-01)		Matrix: WG						
Batch: 23C0858								
Aluminum	73.9	25.0	50.0	ug/L	1	03/23/23 18:22	EPA 6020B	
Antimony	ND	0.500	1.00	ug/L	1	03/23/23 18:22	EPA 6020B	
Arsenic	2.27	0.500	1.00	ug/L	1	03/23/23 18:22	EPA 6020B	
Barium	117	1.00	2.00	ug/L	1	03/23/23 18:22	EPA 6020B	
Beryllium	ND	0.100	0.200	ug/L	1	03/23/23 18:22	EPA 6020B	
Cadmium	ND	0.100	0.200	ug/L	1	03/23/23 18:22	EPA 6020B	
Chromium	ND	1.00	2.00	ug/L	1	03/23/23 18:22	EPA 6020B	
Copper	ND	1.00	2.00	ug/L	1	03/23/23 18:22	EPA 6020B	
Iron	31500	25.0	50.0	ug/L	1	03/23/23 18:22	EPA 6020B	
Lead	0.125	0.110	0.200	ug/L	1	03/23/23 18:22	EPA 6020B	J
Mercury	ND	0.0400	0.0800	ug/L	1	03/23/23 18:22	EPA 6020B	
Nickel	1.85	1.00	2.00	ug/L	1	03/23/23 18:22	EPA 6020B	J
Selenium	ND	0.500	1.00	ug/L	1	03/23/23 18:22	EPA 6020B	
Silver	ND	0.100	0.200	ug/L	1	03/23/23 18:22	EPA 6020B	
Thallium	ND	0.100	0.200	ug/L	1	03/23/23 18:22	EPA 6020B	
Vanadium	ND	1.00	2.00	ug/L	1	03/23/23 18:22	EPA 6020B	
Zinc	11.0	2.00	4.00	ug/L	1	03/23/23 18:22	EPA 6020B	
GS-031423-12 (A3C0534-01RE1)		Matrix: WG						
Batch: 23C0858								
Manganese	6370	25.0	50.0	ug/L	50	03/24/23 14:07	EPA 6020B	
GS-031423-13 (A3C0534-02)		Matrix: WG						
Batch: 23C0858								
Aluminum	56.6	25.0	50.0	ug/L	1	03/23/23 18:27	EPA 6020B	
Antimony	ND	0.500	1.00	ug/L	1	03/23/23 18:27	EPA 6020B	
Arsenic	1.45	0.500	1.00	ug/L	1	03/23/23 18:27	EPA 6020B	
Barium	62.1	1.00	2.00	ug/L	1	03/23/23 18:27	EPA 6020B	
Beryllium	ND	0.100	0.200	ug/L	1	03/23/23 18:27	EPA 6020B	
Cadmium	ND	0.100	0.200	ug/L	1	03/23/23 18:27	EPA 6020B	
Chromium	ND	1.00	2.00	ug/L	1	03/23/23 18:27	EPA 6020B	
Copper	ND	1.00	2.00	ug/L	1	03/23/23 18:27	EPA 6020B	
Iron	7270	25.0	50.0	ug/L	1	03/23/23 18:27	EPA 6020B	

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
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503-718-2323
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125
Portland, OR 97219Project: **Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3C0534 - 05 19 23 0522**

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-031423-13 (A3C0534-02)		Matrix: WG						
Lead	0.124	0.110	0.200	ug/L	1	03/23/23 18:27	EPA 6020B	J
Manganese	1990	0.500	1.00	ug/L	1	03/23/23 18:27	EPA 6020B	
Mercury	ND	0.0400	0.0800	ug/L	1	03/23/23 18:27	EPA 6020B	
Nickel	1.13	1.00	2.00	ug/L	1	03/23/23 18:27	EPA 6020B	J
Selenium	ND	0.500	1.00	ug/L	1	03/23/23 18:27	EPA 6020B	
Silver	ND	0.100	0.200	ug/L	1	03/23/23 18:27	EPA 6020B	
Thallium	ND	0.100	0.200	ug/L	1	03/23/23 18:27	EPA 6020B	
Vanadium	ND	1.00	2.00	ug/L	1	03/23/23 18:27	EPA 6020B	
Zinc	5.94	2.00	4.00	ug/L	1	03/23/23 18:27	EPA 6020B	
GS-031423-14 (A3C0534-03)		Matrix: WG						
Batch: 23C0858								
Aluminum	ND	25.0	50.0	ug/L	1	03/23/23 18:31	EPA 6020B	
Antimony	ND	0.500	1.00	ug/L	1	03/23/23 18:31	EPA 6020B	
Arsenic	1.56	0.500	1.00	ug/L	1	03/23/23 18:31	EPA 6020B	
Barium	67.1	1.00	2.00	ug/L	1	03/23/23 18:31	EPA 6020B	
Cadmium	ND	0.100	0.200	ug/L	1	03/23/23 18:31	EPA 6020B	
Chromium	ND	1.00	2.00	ug/L	1	03/23/23 18:31	EPA 6020B	
Copper	ND	1.00	2.00	ug/L	1	03/23/23 18:31	EPA 6020B	
Iron	6390	25.0	50.0	ug/L	1	03/23/23 18:31	EPA 6020B	
Lead	ND	0.110	0.200	ug/L	1	03/23/23 18:31	EPA 6020B	
Manganese	871	0.500	1.00	ug/L	1	03/23/23 18:31	EPA 6020B	
Mercury	ND	0.0400	0.0800	ug/L	1	03/23/23 18:31	EPA 6020B	
Nickel	19.4	1.00	2.00	ug/L	1	03/23/23 18:31	EPA 6020B	
Selenium	ND	0.500	1.00	ug/L	1	03/23/23 18:31	EPA 6020B	
Silver	ND	0.100	0.200	ug/L	1	03/23/23 18:31	EPA 6020B	
Thallium	ND	0.100	0.200	ug/L	1	03/23/23 18:31	EPA 6020B	
Vanadium	1.87	1.00	2.00	ug/L	1	03/23/23 18:31	EPA 6020B	J
Zinc	3.70	2.00	4.00	ug/L	1	03/23/23 18:31	EPA 6020B	J
GS-031423-14 (A3C0534-03RE1)		Matrix: WG						
Batch: 23C0858								
Beryllium	ND	0.100	0.200	ug/L	1	03/24/23 14:12	EPA 6020B	

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503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

Project: **Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3C0534 - 05 19 23 0522**

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-031423-15 (A3C0534-04)		Matrix: WG						
Batch: 23C0858								
Aluminum	196	25.0	50.0	ug/L	1	03/23/23 18:51	EPA 6020B	
Antimony	ND	0.500	1.00	ug/L	1	03/23/23 18:51	EPA 6020B	
Arsenic	4.21	0.500	1.00	ug/L	1	03/23/23 18:51	EPA 6020B	
Barium	46.8	1.00	2.00	ug/L	1	03/23/23 18:51	EPA 6020B	
Beryllium	ND	0.100	0.200	ug/L	1	03/23/23 18:51	EPA 6020B	
Cadmium	ND	0.100	0.200	ug/L	1	03/23/23 18:51	EPA 6020B	
Chromium	ND	1.00	2.00	ug/L	1	03/23/23 18:51	EPA 6020B	
Copper	ND	1.00	2.00	ug/L	1	03/23/23 18:51	EPA 6020B	
Iron	17100	25.0	50.0	ug/L	1	03/23/23 18:51	EPA 6020B	
Lead	0.155	0.110	0.200	ug/L	1	03/23/23 18:51	EPA 6020B	J
Mercury	ND	0.0400	0.0800	ug/L	1	03/23/23 18:51	EPA 6020B	
Nickel	1.38	1.00	2.00	ug/L	1	03/23/23 18:51	EPA 6020B	J
Selenium	ND	0.500	1.00	ug/L	1	03/23/23 18:51	EPA 6020B	
Silver	ND	0.100	0.200	ug/L	1	03/23/23 18:51	EPA 6020B	
Thallium	ND	0.100	0.200	ug/L	1	03/23/23 18:51	EPA 6020B	
Vanadium	1.11	1.00	2.00	ug/L	1	03/23/23 18:51	EPA 6020B	J
Zinc	7.03	2.00	4.00	ug/L	1	03/23/23 18:51	EPA 6020B	
GS-031423-15 (A3C0534-04RE1)		Matrix: WG						
Batch: 23C0858								
Manganese	2980	5.00	10.0	ug/L	10	03/24/23 14:17	EPA 6020B	
GS-031423-16 (A3C0534-05)		Matrix: WG						
Batch: 23C0858								
Aluminum	157	25.0	50.0	ug/L	1	03/23/23 18:56	EPA 6020B	
Antimony	ND	0.500	1.00	ug/L	1	03/23/23 18:56	EPA 6020B	
Arsenic	ND	0.500	1.00	ug/L	1	03/23/23 18:56	EPA 6020B	
Barium	19.5	1.00	2.00	ug/L	1	03/23/23 18:56	EPA 6020B	
Beryllium	ND	0.100	0.200	ug/L	1	03/23/23 18:56	EPA 6020B	
Cadmium	ND	0.100	0.200	ug/L	1	03/23/23 18:56	EPA 6020B	
Chromium	ND	1.00	2.00	ug/L	1	03/23/23 18:56	EPA 6020B	
Copper	ND	1.00	2.00	ug/L	1	03/23/23 18:56	EPA 6020B	
Iron	1710	25.0	50.0	ug/L	1	03/23/23 18:56	EPA 6020B	

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ANALYTICAL REPORT

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503-718-2323
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125
Portland, OR 97219Project: **Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3C0534 - 05 19 23 0522**

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes	
GS-031423-16 (A3C0534-05)		Matrix: WG							
Lead	0.274	0.110	0.200	ug/L	1	03/23/23 18:56	EPA 6020B	J	
Manganese	642	0.500	1.00	ug/L	1	03/23/23 18:56	EPA 6020B		
Mercury	ND	0.0400	0.0800	ug/L	1	03/23/23 18:56	EPA 6020B		
Nickel	2.54	1.00	2.00	ug/L	1	03/23/23 18:56	EPA 6020B		
Selenium	ND	0.500	1.00	ug/L	1	03/23/23 18:56	EPA 6020B		
Silver	ND	0.100	0.200	ug/L	1	03/23/23 18:56	EPA 6020B		
Thallium	ND	0.100	0.200	ug/L	1	03/23/23 18:56	EPA 6020B		
Vanadium	1.28	1.00	2.00	ug/L	1	03/23/23 18:56	EPA 6020B		
Zinc	5.61	2.00	4.00	ug/L	1	03/23/23 18:56	EPA 6020B		
GS-031423-17 (A3C0534-06)		Matrix: WG							
Batch: 23C0858									
Aluminum	182	25.0	50.0	ug/L	1	03/23/23 19:01	EPA 6020B	J	
Antimony	ND	0.500	1.00	ug/L	1	03/23/23 19:01	EPA 6020B		
Arsenic	ND	0.500	1.00	ug/L	1	03/23/23 19:01	EPA 6020B		
Barium	152	1.00	2.00	ug/L	1	03/23/23 19:01	EPA 6020B		
Beryllium	ND	0.100	0.200	ug/L	1	03/23/23 19:01	EPA 6020B		
Cadmium	ND	0.100	0.200	ug/L	1	03/23/23 19:01	EPA 6020B		
Chromium	ND	1.00	2.00	ug/L	1	03/23/23 19:01	EPA 6020B		
Copper	ND	1.00	2.00	ug/L	1	03/23/23 19:01	EPA 6020B		
Iron	4560	25.0	50.0	ug/L	1	03/23/23 19:01	EPA 6020B		
Lead	0.250	0.110	0.200	ug/L	1	03/23/23 19:01	EPA 6020B		
Mercury	ND	0.0400	0.0800	ug/L	1	03/23/23 19:01	EPA 6020B		
Nickel	9.31	1.00	2.00	ug/L	1	03/23/23 19:01	EPA 6020B		
Selenium	ND	0.500	1.00	ug/L	1	03/23/23 19:01	EPA 6020B		
Silver	ND	0.100	0.200	ug/L	1	03/23/23 19:01	EPA 6020B		
Thallium	ND	0.100	0.200	ug/L	1	03/23/23 19:01	EPA 6020B		
Vanadium	1.10	1.00	2.00	ug/L	1	03/23/23 19:01	EPA 6020B		
Zinc	11.4	2.00	4.00	ug/L	1	03/23/23 19:01	EPA 6020B		
GS-031423-17 (A3C0534-06RE1)		Matrix: WG							
Batch: 23C0858									
Manganese	4560	5.00	10.0	ug/L	10	03/24/23 14:22	EPA 6020B		

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Portland, OR 97219Project: **Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3C0534 - 05 19 23 0522****ANALYTICAL SAMPLE RESULTS****Total Cyanide by Flow Analysis (Aqueous)**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-031423-12 (A3C0534-01)				Matrix: WG		Batch: 23C0732		
Total Cyanide	0.0633	0.00500	0.00500	mg/L	1	03/21/23 13:35	EPA 335.4	B-02
GS-031423-13 (A3C0534-02RE1)				Matrix: WG		Batch: 23C0919		
Total Cyanide	0.0260	0.00500	0.00500	mg/L	1	03/23/23 15:59	EPA 335.4	
GS-031423-14 (A3C0534-03)				Matrix: WG		Batch: 23C0732		
Total Cyanide	0.0473	0.00500	0.00500	mg/L	1	03/21/23 13:39	EPA 335.4	B-02
GS-031423-15 (A3C0534-04)				Matrix: WG		Batch: 23C0732		
Total Cyanide	0.0726	0.00500	0.00500	mg/L	1	03/21/23 13:41	EPA 335.4	B-02
GS-031423-16 (A3C0534-05RE1)				Matrix: WG		Batch: 23C0919		
Total Cyanide	0.0255	0.00500	0.00500	mg/L	1	03/23/23 16:01	EPA 335.4	PRES
GS-031423-17 (A3C0534-06RE1)				Matrix: WG		Batch: 23C0919		
Total Cyanide	0.0241	0.00500	0.00500	mg/L	1	03/23/23 16:03	EPA 335.4	

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Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-031423-12 (A3C0534-01)				Matrix: WG		Batch: 23C0622		
Available Cyanide	ND	0.00100	0.00200	mg/L	1	03/16/23 13:37	D6888-09	
GS-031423-13 (A3C0534-02)				Matrix: WG		Batch: 23C0622		
Available Cyanide	ND	0.00100	0.00200	mg/L	1	03/16/23 13:38	D6888-09	
GS-031423-14 (A3C0534-03)				Matrix: WG		Batch: 23C0622		
Available Cyanide	ND	0.00100	0.00200	mg/L	1	03/16/23 13:40	D6888-09	
GS-031423-15 (A3C0534-04)				Matrix: WG		Batch: 23C0622		
Available Cyanide	ND	0.00100	0.00200	mg/L	1	03/16/23 13:41	D6888-09	
GS-031423-16 (A3C0534-05)				Matrix: WG		Batch: 23C0622		
Available Cyanide	ND	0.00100	0.00200	mg/L	1	03/16/23 13:43	D6888-09	
GS-031423-17 (A3C0534-06)				Matrix: WG		Batch: 23C0622		
Available Cyanide	ND	0.00100	0.00200	mg/L	1	03/16/23 13:44	D6888-09	

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Portland, OR 97219

Project: **Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3C0534 - 05 19 23 0522**

ANALYTICAL SAMPLE RESULTS

Free Cyanide by Microdiffusion/Colorimetric Spectrophotometry

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-031423-12 (A3C0534-01)				Matrix: WG		Batch: 23C0683		
Free Cyanide	ND	0.00250	0.00500	mg/L	1	03/17/23 18:58	D4282-02	
GS-031423-13 (A3C0534-02)				Matrix: WG		Batch: 23C0683		
Free Cyanide	ND	0.00250	0.00500	mg/L	1	03/17/23 18:59	D4282-02	
GS-031423-14 (A3C0534-03)				Matrix: WG		Batch: 23C0683		
Free Cyanide	ND	0.00250	0.00500	mg/L	1	03/17/23 18:59	D4282-02	
GS-031423-15 (A3C0534-04)				Matrix: WG		Batch: 23C0683		
Free Cyanide	ND	0.00250	0.00500	mg/L	1	03/17/23 18:59	D4282-02	
GS-031423-16 (A3C0534-05)				Matrix: WG		Batch: 23C0683		
Free Cyanide	ND	0.00250	0.00500	mg/L	1	03/17/23 19:07	D4282-02	
GS-031423-17 (A3C0534-06)				Matrix: WG		Batch: 23C0726		
Free Cyanide	ND	0.00250	0.00500	mg/L	1	03/20/23 15:19	D4282-02	

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3C0534 - 05 19 23 0522

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 23C0619 - EPA 5030C						Water						
Blank (23C0619-BLK1)			Prepared: 03/16/23 10:10		Analyzed: 03/16/23 11:54							
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	5.00	5.00	ug/L	1	---	---	---	---	---	---	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Dibromomethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	1.00	1.00	ug/L	1	---	---	---	---	---	---	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	

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Project Manager: John Renda

Report ID:

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QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23C0619 - EPA 5030C						Water						
Blank (23C0619-BLK1)						Prepared: 03/16/23 10:10 Analyzed: 03/16/23 11:54						
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: 100 % Limits: 80-120 % Dilution: 1x												

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

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QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23C0619 - EPA 5030C						Water						
Blank (23C0619-BLK1)				Prepared: 03/16/23 10:10		Analyzed: 03/16/23 11:54						
Surr: Toluene-d8 (Surr)		Recovery: 103 %		Limits: 80-120 %		Dilution: 1x						
4-Bromo fluorobenzene (Surr)		101 %		80-120 %		"						
LCS (23C0619-BS1)				Prepared: 03/16/23 10:10		Analyzed: 03/16/23 11:09						
EPA 8260D												
Acetone	35.7	10.0	20.0	ug/L	1	40.0	---	89	80-120%	---	---	
Acrylonitrile	19.8	1.00	2.00	ug/L	1	20.0	---	99	80-120%	---	---	
Benzene	20.6	0.100	0.200	ug/L	1	20.0	---	103	80-120%	---	---	
Bromobenzene	19.3	0.250	0.500	ug/L	1	20.0	---	96	80-120%	---	---	
Bromochloromethane	21.2	0.500	1.00	ug/L	1	20.0	---	106	80-120%	---	---	
Bromodichloromethane	20.7	0.500	1.00	ug/L	1	20.0	---	104	80-120%	---	---	
Bromoform	20.2	0.500	1.00	ug/L	1	20.0	---	101	80-120%	---	---	
Bromomethane	19.0	5.00	5.00	ug/L	1	20.0	---	95	80-120%	---	---	
2-Butanone (MEK)	39.9	5.00	10.0	ug/L	1	40.0	---	100	80-120%	---	---	
n-Butylbenzene	23.8	0.500	1.00	ug/L	1	20.0	---	119	80-120%	---	---	
sec-Butylbenzene	24.5	0.500	1.00	ug/L	1	20.0	---	122	80-120%	---	---	Q-56
tert-Butylbenzene	22.9	0.500	1.00	ug/L	1	20.0	---	114	80-120%	---	---	
Carbon disulfide	19.5	5.00	10.0	ug/L	1	20.0	---	98	80-120%	---	---	
Carbon tetrachloride	22.2	0.500	1.00	ug/L	1	20.0	---	111	80-120%	---	---	
Chlorobenzene	19.4	0.250	0.500	ug/L	1	20.0	---	97	80-120%	---	---	
Chloroethane	18.1	5.00	5.00	ug/L	1	20.0	---	91	80-120%	---	---	
Chloroform	19.6	0.500	1.00	ug/L	1	20.0	---	98	80-120%	---	---	
Chloromethane	15.1	5.00	5.00	ug/L	1	20.0	---	75	80-120%	---	---	Q-55
2-Chlorotoluene	21.1	0.500	1.00	ug/L	1	20.0	---	105	80-120%	---	---	
4-Chlorotoluene	21.8	0.500	1.00	ug/L	1	20.0	---	109	80-120%	---	---	
Dibromochloromethane	20.3	0.500	1.00	ug/L	1	20.0	---	102	80-120%	---	---	
1,2-Dibromo-3-chloropropane	19.5	2.50	5.00	ug/L	1	20.0	---	97	80-120%	---	---	
1,2-Dibromoethane (EDB)	20.5	0.250	0.500	ug/L	1	20.0	---	103	80-120%	---	---	
Dibromomethane	20.0	0.500	1.00	ug/L	1	20.0	---	100	80-120%	---	---	
1,2-Dichlorobenzene	20.4	0.250	0.500	ug/L	1	20.0	---	102	80-120%	---	---	
1,3-Dichlorobenzene	20.6	0.250	0.500	ug/L	1	20.0	---	103	80-120%	---	---	
1,4-Dichlorobenzene	19.0	0.250	0.500	ug/L	1	20.0	---	95	80-120%	---	---	
Dichlorodifluoromethane	12.8	1.00	1.00	ug/L	1	20.0	---	64	80-120%	---	---	Q-55
1,1-Dichloroethane	20.1	0.200	0.400	ug/L	1	20.0	---	100	80-120%	---	---	

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Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23C0619 - EPA 5030C						Water						
LCS (23C0619-BS1)				Prepared: 03/16/23 10:10		Analyzed: 03/16/23 11:09						
1,2-Dichloroethane (EDC)	19.3	0.200	0.400	ug/L	1	20.0	---	96	80-120%	---	---	
1,1-Dichloroethene	20.3	0.200	0.400	ug/L	1	20.0	---	102	80-120%	---	---	
cis-1,2-Dichloroethene	20.6	0.200	0.400	ug/L	1	20.0	---	103	80-120%	---	---	
trans-1,2-Dichloroethene	20.2	0.200	0.400	ug/L	1	20.0	---	101	80-120%	---	---	
1,2-Dichloropropane	19.6	0.250	0.500	ug/L	1	20.0	---	98	80-120%	---	---	
1,3-Dichloropropane	20.1	0.500	1.00	ug/L	1	20.0	---	101	80-120%	---	---	
2,2-Dichloropropane	22.9	0.500	1.00	ug/L	1	20.0	---	114	80-120%	---	---	
1,1-Dichloropropene	22.3	0.500	1.00	ug/L	1	20.0	---	112	80-120%	---	---	
cis-1,3-Dichloropropene	21.7	0.500	1.00	ug/L	1	20.0	---	108	80-120%	---	---	
trans-1,3-Dichloropropene	22.0	0.500	1.00	ug/L	1	20.0	---	110	80-120%	---	---	
Ethylbenzene	21.3	0.250	0.500	ug/L	1	20.0	---	107	80-120%	---	---	
Hexachlorobutadiene	21.1	2.50	5.00	ug/L	1	20.0	---	106	80-120%	---	---	
2-Hexanone	39.9	5.00	10.0	ug/L	1	40.0	---	100	80-120%	---	---	
Isopropylbenzene	23.4	0.500	1.00	ug/L	1	20.0	---	117	80-120%	---	---	
4-Isopropyltoluene	24.3	0.500	1.00	ug/L	1	20.0	---	122	80-120%	---	---	Q-56
Methylene chloride	19.7	5.00	10.0	ug/L	1	20.0	---	98	80-120%	---	---	
4-Methyl-2-pentanone (MiBK)	42.9	5.00	10.0	ug/L	1	40.0	---	107	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	20.4	0.500	1.00	ug/L	1	20.0	---	102	80-120%	---	---	
Naphthalene	18.9	1.00	2.00	ug/L	1	20.0	---	95	80-120%	---	---	
n-Propylbenzene	22.0	0.250	0.500	ug/L	1	20.0	---	110	80-120%	---	---	
Styrene	22.9	0.500	1.00	ug/L	1	20.0	---	114	80-120%	---	---	
1,1,1,2-Tetrachloroethane	18.8	0.200	0.400	ug/L	1	20.0	---	94	80-120%	---	---	
1,1,2,2-Tetrachloroethane	20.7	0.250	0.500	ug/L	1	20.0	---	103	80-120%	---	---	
Tetrachloroethene (PCE)	21.0	0.200	0.400	ug/L	1	20.0	---	105	80-120%	---	---	
Toluene	19.4	0.500	1.00	ug/L	1	20.0	---	97	80-120%	---	---	
1,2,3-Trichlorobenzene	21.8	1.00	2.00	ug/L	1	20.0	---	109	80-120%	---	---	
1,2,4-Trichlorobenzene	21.2	1.00	2.00	ug/L	1	20.0	---	106	80-120%	---	---	
1,1,1-Trichloroethane	21.0	0.200	0.400	ug/L	1	20.0	---	105	80-120%	---	---	
1,1,2-Trichloroethane	19.7	0.250	0.500	ug/L	1	20.0	---	99	80-120%	---	---	
Trichloroethene (TCE)	20.0	0.200	0.400	ug/L	1	20.0	---	100	80-120%	---	---	
Trichlorofluoromethane	21.1	1.00	2.00	ug/L	1	20.0	---	105	80-120%	---	---	
1,2,3-Trichloropropane	20.6	0.500	1.00	ug/L	1	20.0	---	103	80-120%	---	---	
1,2,4-Trimethylbenzene	23.4	0.500	1.00	ug/L	1	20.0	---	117	80-120%	---	---	
1,3,5-Trimethylbenzene	23.1	0.500	1.00	ug/L	1	20.0	---	115	80-120%	---	---	

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Page 33 of 67



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Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23C0619 - EPA 5030C						Water						
LCS (23C0619-BS1)			Prepared: 03/16/23 10:10			Analyzed: 03/16/23 11:09						
Vinyl chloride	18.1	0.200	0.400	ug/L	1	20.0	---	90	80-120%	---	---	
m,p-Xylene	45.4	0.500	1.00	ug/L	1	40.0	---	113	80-120%	---	---	
o-Xylene	22.8	0.250	0.500	ug/L	1	20.0	---	114	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 101 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		100 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		99 %		80-120 %		"						

Duplicate (23C0619-DUP1)

Prepared: 03/16/23 10:10 Analyzed: 03/16/23 18:59

QC Source Sample: Non-SDG (A3C0512-13)

Acetone	ND	50.0	100	ug/L	5	---	ND	---	---	---	30%
Acrylonitrile	ND	5.00	10.0	ug/L	5	---	ND	---	---	---	30%
Benzene	ND	0.500	1.00	ug/L	5	---	ND	---	---	---	30%
Bromobenzene	ND	1.25	2.50	ug/L	5	---	ND	---	---	---	30%
Bromochloromethane	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	30%
Bromodichloromethane	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	30%
Bromoform	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	30%
Bromomethane	ND	25.0	25.0	ug/L	5	---	ND	---	---	---	30%
2-Butanone (MEK)	ND	25.0	50.0	ug/L	5	---	ND	---	---	---	30%
n-Butylbenzene	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	30%
sec-Butylbenzene	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	30%
tert-Butylbenzene	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	30%
Carbon disulfide	ND	25.0	50.0	ug/L	5	---	ND	---	---	---	30%
Carbon tetrachloride	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	30%
Chlorobenzene	ND	1.25	2.50	ug/L	5	---	ND	---	---	---	30%
Chloroethane	ND	25.0	25.0	ug/L	5	---	ND	---	---	---	30%
Chloroform	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	30%
Chloromethane	ND	25.0	25.0	ug/L	5	---	ND	---	---	---	30%
2-Chlorotoluene	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	30%
4-Chlorotoluene	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	30%
Dibromochloromethane	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	30%
1,2-Dibromo-3-chloropropane	ND	12.5	25.0	ug/L	5	---	ND	---	---	---	30%
1,2-Dibromoethane (EDB)	ND	1.25	2.50	ug/L	5	---	ND	---	---	---	30%
Dibromomethane	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	30%
1,2-Dichlorobenzene	ND	1.25	2.50	ug/L	5	---	ND	---	---	---	30%

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3C0534 - 05 19 23 0522

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 23C0619 - EPA 5030C						Water						
Duplicate (23C0619-DUP1)			Prepared: 03/16/23 10:10		Analyzed: 03/16/23 18:59							
QC Source Sample: Non-SDG (A3C0512-13)												
1,3-Dichlorobenzene	ND	1.25	2.50	ug/L	5	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	1.25	2.50	ug/L	5	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	5.00	5.00	ug/L	5	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	1.00	2.00	ug/L	5	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	1.00	2.00	ug/L	5	---	ND	---	---	---	30%	
1,1-Dichloroethene	1.20	1.00	2.00	ug/L	5	---	1.10	---	---	9	30%	J
cis-1,2-Dichloroethene	448	1.00	2.00	ug/L	5	---	408	---	---	9	30%	
trans-1,2-Dichloroethene	13.1	1.00	2.00	ug/L	5	---	12.2	---	---	8	30%	
1,2-Dichloropropane	ND	1.25	2.50	ug/L	5	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	30%	
Ethylbenzene	ND	1.25	2.50	ug/L	5	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	12.5	25.0	ug/L	5	---	ND	---	---	---	30%	
2-Hexanone	ND	25.0	50.0	ug/L	5	---	ND	---	---	---	30%	
Isopropylbenzene	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	30%	
Methylene chloride	ND	25.0	50.0	ug/L	5	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	25.0	50.0	ug/L	5	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	30%	
Naphthalene	ND	5.00	10.0	ug/L	5	---	ND	---	---	---	30%	
n-Propylbenzene	ND	1.25	2.50	ug/L	5	---	ND	---	---	---	30%	
Styrene	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	1.00	2.00	ug/L	5	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	1.25	2.50	ug/L	5	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	1830	1.00	2.00	ug/L	5	---	1690	---	---	8	30%	E
Toluene	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	5.00	10.0	ug/L	5	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	5.00	10.0	ug/L	5	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	1.00	2.00	ug/L	5	---	ND	---	---	---	30%	
1,1,2-Trichloroethane	ND	1.25	2.50	ug/L	5	---	ND	---	---	---	30%	

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Darwin Thomas, Business Development Director



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Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3C0534 - 05 19 23 0522

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 23C0619 - EPA 5030C						Water						
Duplicate (23C0619-DUP1)			Prepared: 03/16/23 10:10		Analyzed: 03/16/23 18:59							
QC Source Sample: Non-SDG (A3C0512-13)												
Trichloroethene (TCE)	442	1.00	2.00	ug/L	5	---	406	---	---	8	30%	
Trichlorofluoromethane	ND	5.00	10.0	ug/L	5	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	30%	
Vinyl chloride	19.0	1.00	2.00	ug/L	5	---	17.4	---	---	8	30%	
m,p-Xylene	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	30%	
o-Xylene	ND	1.25	2.50	ug/L	5	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 106 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		101 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		101 %		80-120 %		"						
Matrix Spike (23C0619-MS1)			Prepared: 03/16/23 10:10		Analyzed: 03/16/23 17:52							
QC Source Sample: Non-SDG (A3C0526-01)												
EPA 8260D												
Acetone	49.0	10.0	20.0	ug/L	1	40.0	ND	90	39-160%	---	---	
Acrylonitrile	20.7	1.00	2.00	ug/L	1	20.0	ND	104	63-135%	---	---	
Benzene	21.4	0.100	0.200	ug/L	1	20.0	ND	107	79-120%	---	---	
Bromobenzene	19.1	0.250	0.500	ug/L	1	20.0	ND	95	80-120%	---	---	
Bromochloromethane	21.9	0.500	1.00	ug/L	1	20.0	ND	109	78-123%	---	---	
Bromodichloromethane	21.7	0.500	1.00	ug/L	1	20.0	ND	108	79-125%	---	---	
Bromoform	20.5	0.500	1.00	ug/L	1	20.0	ND	103	66-130%	---	---	
Bromomethane	23.3	5.00	5.00	ug/L	1	20.0	ND	116	53-141%	---	---	
2-Butanone (MEK)	42.1	5.00	10.0	ug/L	1	40.0	ND	105	56-143%	---	---	
n-Butylbenzene	23.8	0.500	1.00	ug/L	1	20.0	ND	119	75-128%	---	---	
sec-Butylbenzene	24.7	0.500	1.00	ug/L	1	20.0	ND	123	77-126%	---	---	Q-54a
tert-Butylbenzene	23.0	0.500	1.00	ug/L	1	20.0	ND	115	78-124%	---	---	
Carbon disulfide	20.9	5.00	10.0	ug/L	1	20.0	ND	105	64-133%	---	---	
Carbon tetrachloride	24.1	0.500	1.00	ug/L	1	20.0	ND	121	72-136%	---	---	
Chlorobenzene	20.3	0.250	0.500	ug/L	1	20.0	ND	102	80-120%	---	---	
Chloroethane	20.9	5.00	5.00	ug/L	1	20.0	ND	104	60-138%	---	---	
Chloroform	21.0	0.500	1.00	ug/L	1	20.0	0.600	102	79-124%	---	---	
Chloromethane	16.5	5.00	5.00	ug/L	1	20.0	ND	82	50-139%	---	---	Q-54g

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Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3C0534 - 05 19 23 0522

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 23C0619 - EPA 5030C						Water						
Matrix Spike (23C0619-MS1)			Prepared: 03/16/23 10:10		Analyzed: 03/16/23 17:52							
QC Source Sample: Non-SDG (A3C0526-01)												
2-Chlorotoluene	20.7	0.500	1.00	ug/L	1	20.0	ND	104	79-122%	---	---	Q-54d
4-Chlorotoluene	21.7	0.500	1.00	ug/L	1	20.0	ND	108	78-122%	---	---	
Dibromochloromethane	20.6	0.500	1.00	ug/L	1	20.0	ND	103	74-126%	---	---	
1,2-Dibromo-3-chloropropane	20.1	2.50	5.00	ug/L	1	20.0	ND	100	62-128%	---	---	
1,2-Dibromoethane (EDB)	19.8	0.250	0.500	ug/L	1	20.0	ND	99	77-121%	---	---	
Dibromomethane	20.3	0.500	1.00	ug/L	1	20.0	ND	102	79-123%	---	---	
1,2-Dichlorobenzene	20.2	0.250	0.500	ug/L	1	20.0	ND	101	80-120%	---	---	
1,3-Dichlorobenzene	20.7	0.250	0.500	ug/L	1	20.0	ND	103	80-120%	---	---	
1,4-Dichlorobenzene	19.1	0.250	0.500	ug/L	1	20.0	ND	96	79-120%	---	---	
Dichlorodifluoromethane	12.6	1.00	1.00	ug/L	1	20.0	ND	63	32-152%	---	---	
1,1-Dichloroethane	21.2	0.200	0.400	ug/L	1	20.0	ND	106	77-125%	---	---	Q-54a
1,2-Dichloroethane (EDC)	20.4	0.200	0.400	ug/L	1	20.0	ND	102	73-128%	---	---	
1,1-Dichloroethene	21.9	0.200	0.400	ug/L	1	20.0	ND	110	71-131%	---	---	
cis-1,2-Dichloroethene	20.9	0.200	0.400	ug/L	1	20.0	ND	104	78-123%	---	---	
trans-1,2-Dichloroethene	20.7	0.200	0.400	ug/L	1	20.0	ND	104	75-124%	---	---	
1,2-Dichloropropane	20.2	0.250	0.500	ug/L	1	20.0	ND	101	78-122%	---	---	
1,3-Dichloropropane	20.0	0.500	1.00	ug/L	1	20.0	ND	100	80-120%	---	---	
2,2-Dichloropropane	22.0	0.500	1.00	ug/L	1	20.0	ND	110	60-139%	---	---	
1,1-Dichloropropene	23.1	0.500	1.00	ug/L	1	20.0	ND	115	79-125%	---	---	
cis-1,3-Dichloropropene	19.1	0.500	1.00	ug/L	1	20.0	ND	96	75-124%	---	---	
trans-1,3-Dichloropropene	21.8	0.500	1.00	ug/L	1	20.0	ND	109	73-127%	---	---	
Ethylbenzene	22.2	0.250	0.500	ug/L	1	20.0	ND	111	79-121%	---	---	
Hexachlorobutadiene	20.8	2.50	5.00	ug/L	1	20.0	ND	104	66-134%	---	---	
2-Hexanone	41.7	5.00	10.0	ug/L	1	40.0	ND	104	57-139%	---	---	
Isopropylbenzene	24.0	0.500	1.00	ug/L	1	20.0	ND	120	72-131%	---	---	
4-Isopropyltoluene	24.2	0.500	1.00	ug/L	1	20.0	ND	121	77-127%	---	---	
Methylene chloride	19.9	5.00	10.0	ug/L	1	20.0	ND	100	74-124%	---	---	
4-Methyl-2-pentanone (MiBK)	43.8	5.00	10.0	ug/L	1	40.0	ND	109	67-130%	---	---	
Methyl tert-butyl ether (MTBE)	19.8	0.500	1.00	ug/L	1	20.0	ND	99	71-124%	---	---	
Naphthalene	17.9	1.00	2.00	ug/L	1	20.0	ND	89	61-128%	---	---	
n-Propylbenzene	22.1	0.250	0.500	ug/L	1	20.0	ND	110	76-126%	---	---	
Styrene	23.3	0.500	1.00	ug/L	1	20.0	ND	116	78-123%	---	---	
1,1,1,2-Tetrachloroethane	19.3	0.200	0.400	ug/L	1	20.0	ND	96	78-124%	---	---	

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Project Manager: John Renda

Report ID:

A3C0534 - 05 19 23 0522

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 23C0619 - EPA 5030C						Water						
Matrix Spike (23C0619-MS1)			Prepared: 03/16/23 10:10 Analyzed: 03/16/23 17:52									
QC Source Sample: Non-SDG (A3C0526-01)												
1,1,2,2-Tetrachloroethane	20.8	0.250	0.500	ug/L	1	20.0	ND	104	71-121%	---	---	
Tetrachloroethene (PCE)	21.8	0.200	0.400	ug/L	1	20.0	ND	109	74-129%	---	---	
Toluene	20.3	0.500	1.00	ug/L	1	20.0	ND	101	80-121%	---	---	
1,2,3-Trichlorobenzene	20.8	1.00	2.00	ug/L	1	20.0	ND	104	69-129%	---	---	
1,2,4-Trichlorobenzene	20.0	1.00	2.00	ug/L	1	20.0	ND	100	69-130%	---	---	
1,1,1-Trichloroethane	22.3	0.200	0.400	ug/L	1	20.0	ND	111	74-131%	---	---	
1,1,2-Trichloroethane	19.9	0.250	0.500	ug/L	1	20.0	ND	99	80-120%	---	---	
Trichloroethene (TCE)	20.5	0.200	0.400	ug/L	1	20.0	ND	102	79-123%	---	---	
Trichlorofluoromethane	23.0	1.00	2.00	ug/L	1	20.0	ND	115	65-141%	---	---	
1,2,3-Trichloropropane	20.3	0.500	1.00	ug/L	1	20.0	ND	101	73-122%	---	---	
1,2,4-Trimethylbenzene	23.2	0.500	1.00	ug/L	1	20.0	ND	116	76-124%	---	---	
1,3,5-Trimethylbenzene	23.0	0.500	1.00	ug/L	1	20.0	ND	115	75-124%	---	---	
Vinyl chloride	19.2	0.200	0.400	ug/L	1	20.0	ND	96	58-137%	---	---	
m,p-Xylene	47.5	0.500	1.00	ug/L	1	40.0	ND	119	80-121%	---	---	
o-Xylene	23.1	0.250	0.500	ug/L	1	20.0	ND	115	78-122%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 100 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		98 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		94 %		80-120 %		"						

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Project: **Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3C0534 - 05 19 23 0522****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 23C0661 - EPA 5030C						Water						
Blank (23C0661-BLK1)			Prepared: 03/17/23 13:00		Analyzed: 03/18/23 01:50							
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	5.00	5.00	ug/L	1	---	---	---	---	---	---	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Dibromomethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	1.00	1.00	ug/L	1	---	---	---	---	---	---	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

Project: **Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3C0534 - 05 19 23 0522**

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 23C0661 - EPA 5030C						Water						
Blank (23C0661-BLK1)						Prepared: 03/17/23 13:00 Analyzed: 03/18/23 01:50						
1,2-Dichloropropane	ND	0.500	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: 100 % Limits: 80-120 % Dilution: 1x												

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

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Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

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

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3C0534 - 05 19 23 0522

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 23C0661 - EPA 5030C						Water						
Blank (23C0661-BLK1)			Prepared: 03/17/23 13:00		Analyzed: 03/18/23 01:50							
Surr: Toluene-d8 (Surr)		Recovery: 103 %		Limits: 80-120 %		Dilution: 1x						
4-Bromofluorobenzene (Surr)		99 %		80-120 %		"						
LCS (23C0661-BS1)			Prepared: 03/17/23 13:00		Analyzed: 03/18/23 01:05							
EPA 8260D												
Acetone	44.1	10.0	20.0	ug/L	1	40.0	---	110	80-120%	---	---	
Acrylonitrile	22.5	1.00	2.00	ug/L	1	20.0	---	113	80-120%	---	---	
Benzene	21.0	0.100	0.200	ug/L	1	20.0	---	105	80-120%	---	---	
Bromobenzene	19.3	0.250	0.500	ug/L	1	20.0	---	96	80-120%	---	---	
Bromochloromethane	24.6	0.500	1.00	ug/L	1	20.0	---	123	80-120%	---	---	Q-56
Bromodichloromethane	18.0	0.500	1.00	ug/L	1	20.0	---	90	80-120%	---	---	
Bromoform	21.5	0.500	1.00	ug/L	1	20.0	---	107	80-120%	---	---	
Bromomethane	18.0	5.00	5.00	ug/L	1	20.0	---	90	80-120%	---	---	
2-Butanone (MEK)	47.5	5.00	10.0	ug/L	1	40.0	---	119	80-120%	---	---	
n-Butylbenzene	22.7	0.500	1.00	ug/L	1	20.0	---	113	80-120%	---	---	
sec-Butylbenzene	23.8	0.500	1.00	ug/L	1	20.0	---	119	80-120%	---	---	
tert-Butylbenzene	22.5	0.500	1.00	ug/L	1	20.0	---	112	80-120%	---	---	
Carbon disulfide	19.2	5.00	10.0	ug/L	1	20.0	---	96	80-120%	---	---	
Carbon tetrachloride	22.0	0.500	1.00	ug/L	1	20.0	---	110	80-120%	---	---	
Chlorobenzene	20.4	0.250	0.500	ug/L	1	20.0	---	102	80-120%	---	---	
Chloroethane	23.2	5.00	5.00	ug/L	1	20.0	---	116	80-120%	---	---	
Chloroform	20.3	0.500	1.00	ug/L	1	20.0	---	101	80-120%	---	---	
Chloromethane	13.6	5.00	5.00	ug/L	1	20.0	---	68	80-120%	---	---	Q-55
2-Chlorotoluene	20.3	0.500	1.00	ug/L	1	20.0	---	101	80-120%	---	---	
4-Chlorotoluene	21.7	0.500	1.00	ug/L	1	20.0	---	108	80-120%	---	---	
Dibromochloromethane	21.5	0.500	1.00	ug/L	1	20.0	---	107	80-120%	---	---	
1,2-Dibromo-3-chloropropane	19.9	2.50	5.00	ug/L	1	20.0	---	100	80-120%	---	---	
1,2-Dibromoethane (EDB)	21.4	0.250	0.500	ug/L	1	20.0	---	107	80-120%	---	---	
Dibromomethane	17.7	0.500	1.00	ug/L	1	20.0	---	89	80-120%	---	---	
1,2-Dichlorobenzene	20.4	0.250	0.500	ug/L	1	20.0	---	102	80-120%	---	---	
1,3-Dichlorobenzene	20.7	0.250	0.500	ug/L	1	20.0	---	104	80-120%	---	---	
1,4-Dichlorobenzene	19.5	0.250	0.500	ug/L	1	20.0	---	97	80-120%	---	---	
Dichlorodifluoromethane	9.66	1.00	1.00	ug/L	1	20.0	---	48	80-120%	---	---	Q-55
1,1-Dichloroethane	21.4	0.200	0.400	ug/L	1	20.0	---	107	80-120%	---	---	

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Darwin Thomas, Business Development Director

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503-718-2323

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Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3C0534 - 05 19 23 0522

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 23C0661 - EPA 5030C						Water						
LCS (23C0661-BS1)			Prepared: 03/17/23 13:00		Analyzed: 03/18/23 01:05							
1,2-Dichloroethane (EDC)	21.6	0.200	0.400	ug/L	1	20.0	---	108	80-120%	---	---	Q-55
1,1-Dichloroethene	20.7	0.200	0.400	ug/L	1	20.0	---	104	80-120%	---	---	
cis-1,2-Dichloroethene	21.3	0.200	0.400	ug/L	1	20.0	---	106	80-120%	---	---	
trans-1,2-Dichloroethene	20.5	0.200	0.400	ug/L	1	20.0	---	102	80-120%	---	---	
1,2-Dichloropropane	15.1	0.500	0.500	ug/L	1	20.0	---	76	80-120%	---	---	
1,3-Dichloropropane	21.4	0.500	1.00	ug/L	1	20.0	---	107	80-120%	---	---	
2,2-Dichloropropane	18.5	0.500	1.00	ug/L	1	20.0	---	92	80-120%	---	---	
1,1-Dichloropropene	21.6	0.500	1.00	ug/L	1	20.0	---	108	80-120%	---	---	
cis-1,3-Dichloropropene	20.0	0.500	1.00	ug/L	1	20.0	---	100	80-120%	---	---	
trans-1,3-Dichloropropene	22.9	0.500	1.00	ug/L	1	20.0	---	114	80-120%	---	---	
Ethylbenzene	21.9	0.250	0.500	ug/L	1	20.0	---	109	80-120%	---	---	Q-56
Hexachlorobutadiene	19.7	2.50	5.00	ug/L	1	20.0	---	98	80-120%	---	---	
2-Hexanone	42.9	5.00	10.0	ug/L	1	40.0	---	107	80-120%	---	---	
Isopropylbenzene	23.2	0.500	1.00	ug/L	1	20.0	---	116	80-120%	---	---	
4-Isopropyltoluene	23.0	0.500	1.00	ug/L	1	20.0	---	115	80-120%	---	---	
Methylene chloride	19.9	5.00	10.0	ug/L	1	20.0	---	100	80-120%	---	---	
4-Methyl-2-pentanone (MiBK)	48.4	5.00	10.0	ug/L	1	40.0	---	121	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	20.8	0.500	1.00	ug/L	1	20.0	---	104	80-120%	---	---	
Naphthalene	17.8	1.00	2.00	ug/L	1	20.0	---	89	80-120%	---	---	
n-Propylbenzene	21.6	0.250	0.500	ug/L	1	20.0	---	108	80-120%	---	---	
Styrene	23.4	0.500	1.00	ug/L	1	20.0	---	117	80-120%	---	---	
1,1,1,2-Tetrachloroethane	19.8	0.200	0.400	ug/L	1	20.0	---	99	80-120%	---	---	
1,1,2,2-Tetrachloroethane	22.6	0.250	0.500	ug/L	1	20.0	---	113	80-120%	---	---	
Tetrachloroethene (PCE)	20.7	0.200	0.400	ug/L	1	20.0	---	103	80-120%	---	---	
Toluene	19.8	0.500	1.00	ug/L	1	20.0	---	99	80-120%	---	---	
1,2,3-Trichlorobenzene	21.4	1.00	2.00	ug/L	1	20.0	---	107	80-120%	---	---	
1,2,4-Trichlorobenzene	19.6	1.00	2.00	ug/L	1	20.0	---	98	80-120%	---	---	
1,1,1-Trichloroethane	21.0	0.200	0.400	ug/L	1	20.0	---	105	80-120%	---	---	
1,1,2-Trichloroethane	21.2	0.250	0.500	ug/L	1	20.0	---	106	80-120%	---	---	
Trichloroethene (TCE)	19.2	0.200	0.400	ug/L	1	20.0	---	96	80-120%	---	---	
Trichlorofluoromethane	20.3	1.00	2.00	ug/L	1	20.0	---	102	80-120%	---	---	
1,2,3-Trichloropropane	21.8	0.500	1.00	ug/L	1	20.0	---	109	80-120%	---	---	
1,2,4-Trimethylbenzene	23.2	0.500	1.00	ug/L	1	20.0	---	116	80-120%	---	---	
1,3,5-Trimethylbenzene	23.0	0.500	1.00	ug/L	1	20.0	---	115	80-120%	---	---	

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ANALYTICAL REPORT

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Project: **Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3C0534 - 05 19 23 0522**

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 23C0661 - EPA 5030C						Water						
LCS (23C0661-BS1)			Prepared: 03/17/23 13:00		Analyzed: 03/18/23 01:05							
Vinyl chloride	17.6	0.200	0.400	ug/L	1	20.0	---	88	80-120%	---	---	
m,p-Xylene	47.3	0.500	1.00	ug/L	1	40.0	---	118	80-120%	---	---	
o-Xylene	22.8	0.250	0.500	ug/L	1	20.0	---	114	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 98 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		99 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		94 %		80-120 %		"						

Duplicate (23C0661-DUP1)

Prepared: 03/17/23 13:00 Analyzed: 03/18/23 06:17

QC Source Sample: Non-SDG (A3C0512-11)

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

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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 23C0661 - EPA 5030C						Water						
Duplicate (23C0661-DUP1)			Prepared: 03/17/23 13:00		Analyzed: 03/18/23 06:17							
QC Source Sample: Non-SDG (A3C0512-11)												
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	1.00	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	2.53	0.200	0.400	ug/L	1	---	2.72	---	---	7	30%	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	0.500	0.500	ug/L	1	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Ethylbenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	---	ND	---	---	---	30%	
2-Hexanone	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Methylene chloride	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Naphthalene	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	30%	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Styrene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
Toluene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3C0534 - 05 19 23 0522

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 23C0661 - EPA 5030C							Water					
Duplicate (23C0661-DUP1)			Prepared: 03/17/23 13:00		Analyzed: 03/18/23 06:17							
QC Source Sample: Non-SDG (A3C0512-11)												
Trichloroethene (TCE)	0.330	0.200	0.400	ug/L	1	---	0.350	---	---	6	30%	J
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	0.860	0.200	0.400	ug/L	1	---	0.860	---	---	0	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: 103 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		104 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		100 %		80-120 %		"						

Matrix Spike (23C0661-MS1)

Prepared: 03/17/23 13:00 Analyzed: 03/18/23 09:38

QC Source Sample: Non-SDG (A3C0505-10)

EPA 8260D

Acetone	48.0	10.0	20.0	ug/L	1	40.0	ND	89	39-160%	---	---	
Acrylonitrile	20.2	1.00	2.00	ug/L	1	20.0	ND	101	63-135%	---	---	
Benzene	20.1	0.100	0.200	ug/L	1	20.0	ND	101	79-120%	---	---	
Bromobenzene	18.1	0.250	0.500	ug/L	1	20.0	ND	90	80-120%	---	---	
Bromochloromethane	23.5	0.500	1.00	ug/L	1	20.0	ND	118	78-123%	---	---	Q-54b
Bromodichloromethane	20.5	0.500	1.00	ug/L	1	20.0	ND	103	79-125%	---	---	
Bromoform	20.1	0.500	1.00	ug/L	1	20.0	ND	100	66-130%	---	---	
Bromomethane	20.6	5.00	5.00	ug/L	1	20.0	ND	103	53-141%	---	---	
2-Butanone (MEK)	42.0	5.00	10.0	ug/L	1	40.0	ND	105	56-143%	---	---	
n-Butylbenzene	22.0	0.500	1.00	ug/L	1	20.0	ND	110	75-128%	---	---	
sec-Butylbenzene	23.1	0.500	1.00	ug/L	1	20.0	ND	116	77-126%	---	---	
tert-Butylbenzene	21.6	0.500	1.00	ug/L	1	20.0	ND	108	78-124%	---	---	
Carbon disulfide	19.5	5.00	10.0	ug/L	1	20.0	ND	97	64-133%	---	---	
Carbon tetrachloride	22.5	0.500	1.00	ug/L	1	20.0	ND	112	72-136%	---	---	
Chlorobenzene	19.3	0.250	0.500	ug/L	1	20.0	ND	97	80-120%	---	---	
Chloroethane	22.1	5.00	5.00	ug/L	1	20.0	ND	110	60-138%	---	---	
Chloroform	20.9	0.500	1.00	ug/L	1	20.0	1.42	97	79-124%	---	---	
Chloromethane	14.8	5.00	5.00	ug/L	1	20.0	ND	74	50-139%	---	---	Q-54c

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Project Manager: John Renda

Report ID:

A3C0534 - 05 19 23 0522

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 23C0661 - EPA 5030C						Water						
Matrix Spike (23C0661-MS1)			Prepared: 03/17/23 13:00		Analyzed: 03/18/23 09:38							
QC Source Sample: Non-SDG (A3C0505-10)												
2-Chlorotoluene	19.6	0.500	1.00	ug/L	1	20.0	ND	98	79-122%	---	---	Q-54e
4-Chlorotoluene	20.6	0.500	1.00	ug/L	1	20.0	ND	103	78-122%	---	---	
Dibromochloromethane	19.8	0.500	1.00	ug/L	1	20.0	ND	99	74-126%	---	---	
1,2-Dibromo-3-chloropropane	18.0	2.50	5.00	ug/L	1	20.0	ND	90	62-128%	---	---	
1,2-Dibromoethane (EDB)	19.1	0.250	0.500	ug/L	1	20.0	ND	96	77-121%	---	---	
Dibromomethane	19.2	0.500	1.00	ug/L	1	20.0	ND	96	79-123%	---	---	Q-54f
1,2-Dichlorobenzene	19.5	0.250	0.500	ug/L	1	20.0	ND	97	80-120%	---	---	
1,3-Dichlorobenzene	19.8	0.250	0.500	ug/L	1	20.0	ND	99	80-120%	---	---	
1,4-Dichlorobenzene	18.5	0.250	0.500	ug/L	1	20.0	ND	93	79-120%	---	---	
Dichlorodifluoromethane	9.87	1.00	1.00	ug/L	1	20.0	ND	49	32-152%	---	---	
1,1-Dichloroethane	21.0	0.200	0.400	ug/L	1	20.0	ND	105	77-125%	---	---	Q-54f
1,2-Dichloroethane (EDC)	20.8	0.200	0.400	ug/L	1	20.0	ND	104	73-128%	---	---	
1,1-Dichloroethene	20.8	0.200	0.400	ug/L	1	20.0	ND	104	71-131%	---	---	
cis-1,2-Dichloroethene	20.9	0.200	0.400	ug/L	1	20.0	0.920	100	78-123%	---	---	
trans-1,2-Dichloroethene	20.1	0.200	0.400	ug/L	1	20.0	ND	101	75-124%	---	---	
1,2-Dichloropropane	19.1	0.500	0.500	ug/L	1	20.0	ND	95	78-122%	---	---	Q-54f
1,3-Dichloropropane	19.5	0.500	1.00	ug/L	1	20.0	ND	97	80-120%	---	---	
2,2-Dichloropropane	15.6	0.500	1.00	ug/L	1	20.0	ND	78	60-139%	---	---	
1,1-Dichloropropene	20.8	0.500	1.00	ug/L	1	20.0	ND	104	79-125%	---	---	
cis-1,3-Dichloropropene	16.7	0.500	1.00	ug/L	1	20.0	ND	84	75-124%	---	---	
trans-1,3-Dichloropropene	20.3	0.500	1.00	ug/L	1	20.0	ND	102	73-127%	---	---	Q-54f
Ethylbenzene	20.8	0.250	0.500	ug/L	1	20.0	ND	104	79-121%	---	---	
Hexachlorobutadiene	18.6	2.50	5.00	ug/L	1	20.0	ND	93	66-134%	---	---	
2-Hexanone	37.7	5.00	10.0	ug/L	1	40.0	ND	94	57-139%	---	---	
Isopropylbenzene	22.0	0.500	1.00	ug/L	1	20.0	ND	110	72-131%	---	---	
4-Isopropyltoluene	22.2	0.500	1.00	ug/L	1	20.0	ND	111	77-127%	---	---	Q-54f
Methylene chloride	19.0	5.00	10.0	ug/L	1	20.0	ND	95	74-124%	---	---	
4-Methyl-2-pentanone (MiBK)	42.8	5.00	10.0	ug/L	1	40.0	ND	107	67-130%	---	---	
Methyl tert-butyl ether (MTBE)	19.1	0.500	1.00	ug/L	1	20.0	ND	96	71-124%	---	---	
Naphthalene	15.8	1.00	2.00	ug/L	1	20.0	ND	79	61-128%	---	---	
n-Propylbenzene	21.1	0.250	0.500	ug/L	1	20.0	ND	105	76-126%	---	---	Q-54f
Styrene	21.6	0.500	1.00	ug/L	1	20.0	ND	108	78-123%	---	---	
1,1,1,2-Tetrachloroethane	18.7	0.200	0.400	ug/L	1	20.0	ND	93	78-124%	---	---	

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Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3C0534 - 05 19 23 0522

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 23C0661 - EPA 5030C						Water						
Matrix Spike (23C0661-MS1)			Prepared: 03/17/23 13:00 Analyzed: 03/18/23 09:38									
QC Source Sample: Non-SDG (A3C0505-10)												
1,1,2,2-Tetrachloroethane	21.0	0.250	0.500	ug/L	1	20.0	ND	105	71-121%	---	---	
Tetrachloroethene (PCE)	45.7	0.200	0.400	ug/L	1	20.0	26.9	94	74-129%	---	---	
Toluene	19.1	0.500	1.00	ug/L	1	20.0	ND	95	80-121%	---	---	
1,2,3-Trichlorobenzene	19.4	1.00	2.00	ug/L	1	20.0	ND	97	69-129%	---	---	
1,2,4-Trichlorobenzene	18.1	1.00	2.00	ug/L	1	20.0	ND	90	69-130%	---	---	
1,1,1-Trichloroethane	21.6	0.200	0.400	ug/L	1	20.0	0.590	105	74-131%	---	---	
1,1,2-Trichloroethane	19.6	0.250	0.500	ug/L	1	20.0	ND	98	80-120%	---	---	
Trichloroethene (TCE)	25.6	0.200	0.400	ug/L	1	20.0	7.84	89	79-123%	---	---	
Trichlorofluoromethane	21.2	1.00	2.00	ug/L	1	20.0	ND	106	65-141%	---	---	
1,2,3-Trichloropropane	19.8	0.500	1.00	ug/L	1	20.0	ND	99	73-122%	---	---	
1,2,4-Trimethylbenzene	22.0	0.500	1.00	ug/L	1	20.0	ND	110	76-124%	---	---	
1,3,5-Trimethylbenzene	22.1	0.500	1.00	ug/L	1	20.0	ND	110	75-124%	---	---	
Vinyl chloride	18.4	0.200	0.400	ug/L	1	20.0	ND	92	58-137%	---	---	
m,p-Xylene	44.8	0.500	1.00	ug/L	1	40.0	ND	112	80-121%	---	---	
o-Xylene	20.8	0.250	0.500	ug/L	1	20.0	ND	104	78-122%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 97 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		98 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		94 %		80-120 %		"						

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Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3C0534 - 05 19 23 0522

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 23C0614 - EPA 3511 (Bottle Extraction)						Water						
Blank (23C0614-BLK1)			Prepared: 03/16/23 09:18 Analyzed: 03/16/23 16:53									
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: 116 %		Limits: 78-134 %		Dilution: 1x						
Benzo(a)pyrene-d12 (Surr)		123 %		80-132 %		"						

LCS (23C0614-BS1)

Prepared: 03/16/23 09:18 Analyzed: 03/16/23 17:26

EPA 8270E LVI												
Acenaphthene	1.58	0.0160	0.0320	ug/L	1	1.60	---	99	80-120%	---	---	
Acenaphthylene	1.71	0.0160	0.0320	ug/L	1	1.60	---	107	80-124%	---	---	
Anthracene	1.69	0.0160	0.0320	ug/L	1	1.60	---	106	80-123%	---	---	
Benz(a)anthracene	1.74	0.00800	0.0160	ug/L	1	1.60	---	109	80-122%	---	---	
Benzo(a)pyrene	2.01	0.00800	0.0160	ug/L	1	1.60	---	126	80-129%	---	---	
Benzo(b)fluoranthene	1.87	0.00800	0.0160	ug/L	1	1.60	---	117	80-124%	---	---	
Benzo(k)fluoranthene	2.02	0.00800	0.0160	ug/L	1	1.60	---	126	80-125%	---	---	Q-29
Benzo(g,h,i)perylene	1.47	0.0160	0.0320	ug/L	1	1.60	---	92	80-120%	---	---	

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Report ID:

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QUALITY CONTROL (QC) SAMPLE RESULTS

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

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes	
Batch 23C0614 - EPA 3511 (Bottle Extraction)						Water							
LCS (23C0614-BS1)			Prepared: 03/16/23 09:18		Analyzed: 03/16/23 17:26								
Chrysene	1.69	0.00800	0.0160	ug/L	1	1.60	---	105	80-120%	---	---		
Dibenz(a,h)anthracene	1.68	0.00800	0.0160	ug/L	1	1.60	---	105	80-120%	---	---		
Fluoranthene	1.51	0.0160	0.0320	ug/L	1	1.60	---	95	80-126%	---	---		
Fluorene	1.61	0.0160	0.0320	ug/L	1	1.60	---	101	77-127%	---	---		
Indeno(1,2,3-cd)pyrene	1.81	0.00800	0.0160	ug/L	1	1.60	---	113	80-121%	---	---		
1-Methylnaphthalene	1.46	0.0320	0.0640	ug/L	1	1.60	---	91	53-148%	---	---		
2-Methylnaphthalene	1.48	0.0320	0.0640	ug/L	1	1.60	---	92	48-150%	---	---		
Naphthalene	1.56	0.0320	0.0640	ug/L	1	1.60	---	97	78-120%	---	---		
Phenanthrene	1.53	0.0320	0.0640	ug/L	1	1.60	---	95	80-120%	---	---		
Pyrene	1.50	0.0160	0.0320	ug/L	1	1.60	---	94	80-125%	---	---		
Carbazole	1.91	0.0160	0.0320	ug/L	1	1.60	---	120	65-141%	---	---		
Dibenzofuran	1.69	0.0160	0.0320	ug/L	1	1.60	---	105	76-121%	---	---		
Surr: Acenaphthylene-d8 (Surr)		Recovery: 116 %		Limits: 78-134 %		Dilution: 1x							
Benzo(a)pyrene-d12 (Surr)		127 %		80-132 %		"							
LCS Dup (23C0614-BSD1)			Prepared: 03/16/23 09:18		Analyzed: 03/16/23 17:59								Q-19
EPA 8270E LVI													
Acenaphthene	1.62	0.0160	0.0320	ug/L	1	1.60	---	101	80-120%	2	30%		
Acenaphthylene	1.77	0.0160	0.0320	ug/L	1	1.60	---	111	80-124%	3	30%		
Anthracene	1.66	0.0160	0.0320	ug/L	1	1.60	---	103	80-123%	2	30%		
Benz(a)anthracene	1.71	0.00800	0.0160	ug/L	1	1.60	---	107	80-122%	1	30%		
Benzo(a)pyrene	1.92	0.00800	0.0160	ug/L	1	1.60	---	120	80-129%	5	30%		
Benzo(b)fluoranthene	1.88	0.00800	0.0160	ug/L	1	1.60	---	117	80-124%	0.5	30%		
Benzo(k)fluoranthene	2.03	0.00800	0.0160	ug/L	1	1.60	---	127	80-125%	0.6	30%	Q-29	
Benzo(g,h,i)perylene	1.54	0.0160	0.0320	ug/L	1	1.60	---	96	80-120%	5	30%		
Chrysene	1.68	0.00800	0.0160	ug/L	1	1.60	---	105	80-120%	0.3	30%		
Dibenz(a,h)anthracene	1.69	0.00800	0.0160	ug/L	1	1.60	---	106	80-120%	1	30%		
Fluoranthene	1.48	0.0160	0.0320	ug/L	1	1.60	---	93	80-126%	2	30%		
Fluorene	1.59	0.0160	0.0320	ug/L	1	1.60	---	99	77-127%	2	30%		
Indeno(1,2,3-cd)pyrene	1.80	0.00800	0.0160	ug/L	1	1.60	---	112	80-121%	0.7	30%		
1-Methylnaphthalene	1.43	0.0320	0.0640	ug/L	1	1.60	---	89	53-148%	2	30%		
2-Methylnaphthalene	1.41	0.0320	0.0640	ug/L	1	1.60	---	88	48-150%	4	30%		
Naphthalene	1.62	0.0320	0.0640	ug/L	1	1.60	---	102	78-120%	4	30%		
Phenanthrene	1.56	0.0320	0.0640	ug/L	1	1.60	---	97	80-120%	2	30%		

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3C0534 - 05 19 23 0522

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 23C0614 - EPA 3511 (Bottle Extraction)						Water						
LCS Dup (23C0614-BSD1)			Prepared: 03/16/23 09:18 Analyzed: 03/16/23 17:59								Q-19	
Pyrene	1.48	0.0160	0.0320	ug/L	1	1.60	---	92	80-125%	2	30%	
Carbazole	1.81	0.0160	0.0320	ug/L	1	1.60	---	113	65-141%	6	30%	
Dibenzofuran	1.67	0.0160	0.0320	ug/L	1	1.60	---	104	76-121%	0.8	30%	
Surr: Acenaphthylene-d8 (Surr)		Recovery: 117 %		Limits: 78-134 %		Dilution: 1x						
Benzo(a)pyrene-d12 (Surr)		121 %		80-132 %		"						

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QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23C0858 - EPA 3015A						Water						
Blank (23C0858-BLK1)			Prepared: 03/22/23 10:14		Analyzed: 03/23/23 18:12							
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	0.104	0.100	0.200	ug/L	1	---	---	---	---	---	---	B-02, J
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 (23C0858-BS1)

Prepared: 03/22/23 10:14 Analyzed: 03/23/23 18:17

EPA 6020B												
Aluminum	2650	25.0	50.0	ug/L	1	2780	---	95	80-120%	---	---	
Antimony	27.8	0.500	1.00	ug/L	1	27.8	---	100	80-120%	---	---	
Arsenic	53.5	0.500	1.00	ug/L	1	55.6	---	96	80-120%	---	---	
Barium	55.6	1.00	2.00	ug/L	1	55.6	---	100	80-120%	---	---	
Beryllium	24.6	0.100	0.200	ug/L	1	27.8	---	89	80-120%	---	---	
Cadmium	55.0	0.100	0.200	ug/L	1	55.6	---	99	80-120%	---	---	
Chromium	51.4	1.00	2.00	ug/L	1	55.6	---	93	80-120%	---	---	
Copper	53.9	1.00	2.00	ug/L	1	55.6	---	97	80-120%	---	---	
Iron	2720	25.0	50.0	ug/L	1	2780	---	98	80-120%	---	---	
Lead	55.3	0.110	0.200	ug/L	1	55.6	---	100	80-120%	---	---	
Manganese	53.8	0.500	1.00	ug/L	1	55.6	---	97	80-120%	---	---	
Mercury	1.02	0.0400	0.0800	ug/L	1	1.11	---	92	80-120%	---	---	

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ANALYTICAL REPORT

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

Anchor QEA, LLC

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

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3C0534 - 05 19 23 0522

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 23C0858 - EPA 3015A						Water						
LCS (23C0858-BS1)			Prepared: 03/22/23 10:14		Analyzed: 03/23/23 18:17							
Nickel	54.2	1.00	2.00	ug/L	1	55.6	---	98	80-120%	---	---	B-02
Selenium	27.4	0.500	1.00	ug/L	1	27.8	---	99	80-120%	---	---	
Silver	27.0	0.100	0.200	ug/L	1	27.8	---	97	80-120%	---	---	
Thallium	27.0	0.100	0.200	ug/L	1	27.8	---	97	80-120%	---	---	
Vanadium	52.4	1.00	2.00	ug/L	1	55.6	---	94	80-120%	---	---	
Zinc	54.5	2.00	4.00	ug/L	1	55.6	---	98	80-120%	---	---	
Duplicate (23C0858-DUP1)			Prepared: 03/22/23 10:14		Analyzed: 03/23/23 20:04							
QC Source Sample: Non-SDG (A3C0565-09)												
Aluminum	2980	25.0	50.0	ug/L	1	---	2890	---	---	3	20%	
Antimony	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	20%	
Arsenic	1.22	0.500	1.00	ug/L	1	---	1.26	---	---	3	20%	
Barium	9.72	1.00	2.00	ug/L	1	---	9.52	---	---	2	20%	
Beryllium	ND	0.100	0.200	ug/L	1	---	ND	---	---	---	20%	
Cadmium	ND	0.100	0.200	ug/L	1	---	ND	---	---	---	20%	
Chromium	2.84	1.00	2.00	ug/L	1	---	2.79	---	---	2	20%	
Copper	6.21	1.00	2.00	ug/L	1	---	6.09	---	---	2	20%	
Iron	3030	25.0	50.0	ug/L	1	---	2920	---	---	4	20%	
Lead	0.639	0.110	0.200	ug/L	1	---	0.613	---	---	4	20%	
Manganese	70.7	0.500	1.00	ug/L	1	---	69.5	---	---	2	20%	
Mercury	ND	0.0400	0.0800	ug/L	1	---	ND	---	---	---	20%	
Nickel	2.75	1.00	2.00	ug/L	1	---	3.05	---	---	10	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	8.08	1.00	2.00	ug/L	1	---	7.96	---	---	1	20%	
Zinc	7.51	2.00	4.00	ug/L	1	---	7.62	---	---	1	20%	
Matrix Spike (23C0858-MS1)			Prepared: 03/22/23 10:14		Analyzed: 03/23/23 20:08							
QC Source Sample: Non-SDG (A3C0565-09)												
EPA 6020B												
Aluminum	7210	25.0	50.0	ug/L	1	2780	2890	155	75-125%	---	---	Q-01
Antimony	27.2	0.500	1.00	ug/L	1	27.8	ND	98	75-125%	---	---	
Arsenic	54.1	0.500	1.00	ug/L	1	55.6	1.26	95	75-125%	---	---	

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Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3C0534 - 05 19 23 0522

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 23C0858 - EPA 3015A						Water						
Matrix Spike (23C0858-MS1)				Prepared: 03/22/23 10:14		Analyzed: 03/23/23 20:08						
QC Source Sample: Non-SDG (A3C0565-09)												
Barium	63.5	1.00	2.00	ug/L	1	55.6	9.52	97	75-125%	---	---	Q-01
Beryllium	24.3	0.100	0.200	ug/L	1	27.8	ND	88	75-125%	---	---	
Cadmium	54.2	0.100	0.200	ug/L	1	55.6	ND	98	75-125%	---	---	
Chromium	53.8	1.00	2.00	ug/L	1	55.6	2.79	92	75-125%	---	---	
Copper	59.2	1.00	2.00	ug/L	1	55.6	6.09	96	75-125%	---	---	
Iron	6700	25.0	50.0	ug/L	1	2780	2920	136	75-125%	---	---	B-02
Lead	54.7	0.110	0.200	ug/L	1	55.6	0.613	97	75-125%	---	---	
Manganese	124	0.500	1.00	ug/L	1	55.6	69.5	99	75-125%	---	---	
Mercury	0.990	0.0400	0.0800	ug/L	1	1.11	ND	89	75-125%	---	---	
Nickel	56.0	1.00	2.00	ug/L	1	55.6	3.05	95	75-125%	---	---	
Selenium	27.2	0.500	1.00	ug/L	1	27.8	ND	98	75-125%	---	---	B-02
Silver	26.7	0.100	0.200	ug/L	1	27.8	ND	96	75-125%	---	---	
Thallium	26.4	0.100	0.200	ug/L	1	27.8	ND	95	75-125%	---	---	
Vanadium	60.4	1.00	2.00	ug/L	1	55.6	7.96	94	75-125%	---	---	
Zinc	63.7	2.00	4.00	ug/L	1	55.6	7.62	101	75-125%	---	---	

Matrix Spike Dup (23C0858-MSD1)

Prepared: 03/22/23 10:14 Analyzed: 03/23/23 20:13

QC Source Sample: Non-SDG (A3C0565-09)												
Aluminum	4550	25.0	50.0	ug/L	1	2780	2890	60	75-125%	45	20%	Q-01
Antimony	28.0	0.500	1.00	ug/L	1	27.8	ND	101	75-125%	3	20%	
Arsenic	54.0	0.500	1.00	ug/L	1	55.6	1.26	95	75-125%	0.2	20%	
Barium	62.5	1.00	2.00	ug/L	1	55.6	9.52	95	75-125%	2	20%	
Beryllium	25.2	0.100	0.200	ug/L	1	27.8	ND	91	75-125%	3	20%	
Cadmium	54.8	0.100	0.200	ug/L	1	55.6	ND	99	75-125%	1	20%	
Chromium	52.3	1.00	2.00	ug/L	1	55.6	2.79	89	75-125%	3	20%	
Copper	58.8	1.00	2.00	ug/L	1	55.6	6.09	95	75-125%	0.7	20%	
Iron	4330	25.0	50.0	ug/L	1	2780	2920	51	75-125%	43	20%	Q-01
Lead	55.8	0.110	0.200	ug/L	1	55.6	0.613	99	75-125%	2	20%	
Manganese	118	0.500	1.00	ug/L	1	55.6	69.5	87	75-125%	6	20%	
Mercury	1.01	0.0400	0.0800	ug/L	1	1.11	ND	91	75-125%	2	20%	
Nickel	55.4	1.00	2.00	ug/L	1	55.6	3.05	94	75-125%	1	20%	
Selenium	27.7	0.500	1.00	ug/L	1	27.8	ND	100	75-125%	2	20%	
Silver	27.3	0.100	0.200	ug/L	1	27.8	ND	98	75-125%	2	20%	B-02

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Project Manager: John Renda

Report ID:

A3C0534 - 05 19 23 0522

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 23C0858 - EPA 3015A						Water						
Matrix Spike Dup (23C0858-MSD1)			Prepared: 03/22/23 10:14 Analyzed: 03/23/23 20:13									
QC Source Sample: Non-SDG (A3C0565-09)												
Thallium	27.2	0.100	0.200	ug/L	1	27.8	ND	98	75-125%	3	20%	
Vanadium	57.8	1.00	2.00	ug/L	1	55.6	7.96	90	75-125%	4	20%	
Zinc	59.3	2.00	4.00	ug/L	1	55.6	7.62	93	75-125%	7	20%	

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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 23C0732 - Lachat Micro Dist - aqueous						Water						
Blank (23C0732-BLK1)			Prepared: 03/20/23 09:32 Analyzed: 03/21/23 13:07									
<u>EPA 335.4</u>												
Total Cyanide	ND	0.00500	0.00500	mg/L	1	---	---	---	---	---	---	B-02
LCS (23C0732-BS1)			Prepared: 03/20/23 09:32 Analyzed: 03/21/23 13:09									
<u>EPA 335.4</u>												
Total Cyanide	0.245	0.00500	0.00500	mg/L	1	0.250	---	98	90-110%	---	---	B-02
Duplicate (23C0732-DUP2)			Prepared: 03/20/23 09:32 Analyzed: 03/21/23 13:57									
<u>QC Source Sample: Non-SDG (A3C0634-01)</u>												
Total Cyanide	ND	0.00500	0.00500	mg/L	1	---	0.00570	---	---	***	10%	B-02, Q-05
Matrix Spike (23C0732-MS1)			Prepared: 03/20/23 09:32 Analyzed: 03/21/23 13:15									
<u>QC Source Sample: Non-SDG (A3C0365-01RE2)</u>												
<u>EPA 335.4</u>												
Total Cyanide	0.415	0.00500	0.00500	mg/L	1	0.250	0.148	107	90-110%	---	---	B-02
Matrix Spike (23C0732-MS2)			Prepared: 03/20/23 09:32 Analyzed: 03/21/23 13:59									
<u>QC Source Sample: Non-SDG (A3C0634-01)</u>												
<u>EPA 335.4</u>												
Total Cyanide	0.250	0.00500	0.00500	mg/L	1	0.250	0.00570	98	90-110%	---	---	B-02
Matrix Spike Dup (23C0732-MSD1)			Prepared: 03/20/23 09:32 Analyzed: 03/21/23 13:17									
<u>QC Source Sample: Non-SDG (A3C0365-01RE2)</u>												
Total Cyanide	0.417	0.00500	0.00500	mg/L	1	0.250	0.148	107	90-110%	0.5	10%	B-02

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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 23C0919 - Lachat Micro Dist - aqueous						Water						
Blank (23C0919-BLK1)			Prepared: 03/23/23 12:08 Analyzed: 03/23/23 15:31									
EPA 335.4												
Total Cyanide	ND	0.00500	0.00500	mg/L	1	---	---	---	---	---	---	
LCS (23C0919-BS1)			Prepared: 03/23/23 12:08 Analyzed: 03/23/23 15:33									
EPA 335.4												
Total Cyanide	0.269	0.00500	0.00500	mg/L	1	0.250	---	108	90-110%	---	---	
Duplicate (23C0919-DUP1)			Prepared: 03/23/23 12:08 Analyzed: 03/23/23 15:39									
QC Source Sample: Non-SDG (A3C0492-02RE1)												
Total Cyanide	0.0118	0.00500	0.00500	mg/L	1	---	0.0123	---	---	4	10%	
Duplicate (23C0919-DUP2)			Prepared: 03/23/23 12:08 Analyzed: 03/23/23 15:53									
QC Source Sample: Non-SDG (A3C0492-03RE1)												
Total Cyanide	0.0154	0.00500	0.00500	mg/L	1	---	0.0154	---	---	0	10%	
Matrix Spike (23C0919-MS1)			Prepared: 03/23/23 12:08 Analyzed: 03/23/23 15:41									
QC Source Sample: Non-SDG (A3C0492-02RE1)												
EPA 335.4												
Total Cyanide	0.285	0.00500	0.00500	mg/L	1	0.250	0.0123	109	90-110%	---	---	
Matrix Spike (23C0919-MS2)			Prepared: 03/23/23 12:08 Analyzed: 03/23/23 15:55									
QC Source Sample: Non-SDG (A3C0492-03RE1)												
EPA 335.4												
Total Cyanide	0.288	0.00500	0.00500	mg/L	1	0.250	0.0154	109	90-110%	---	---	

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

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

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125
Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3C0534 - 05 19 23 0522

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 23C0622 - Method Prep: Aq						Water						
Blank (23C0622-BLK1)			Prepared: 03/16/23 10:48 Analyzed: 03/16/23 12:52									
<u>D6888-09</u>												
Available Cyanide	ND	0.00100	0.00200	mg/L	1	---	---	---	---	---	---	
LCS (23C0622-BS1)			Prepared: 03/16/23 10:48 Analyzed: 03/16/23 12:53									
<u>D6888-09</u>												
Available Cyanide	0.0237	0.00100	0.00200	mg/L	1	0.0250	---	95	90-117%	---	---	
Matrix Spike (23C0622-MS1)			Prepared: 03/16/23 10:48 Analyzed: 03/16/23 13:07									
<u>QC Source Sample: Non-SDG (A3C0365-01)</u>												
<u>D6888-09</u>												
Available Cyanide	0.0250	0.00101	0.00201	mg/L	1	0.0251	ND	100	82-130%	---	---	
Matrix Spike (23C0622-MS2)			Prepared: 03/16/23 10:48 Analyzed: 03/16/23 13:22									
<u>QC Source Sample: Non-SDG (A3C0390-01)</u>												
<u>D6888-09</u>												
Available Cyanide	0.0263	0.00101	0.00201	mg/L	1	0.0251	ND	105	82-130%	---	---	
Matrix Spike Dup (23C0622-MSD1)			Prepared: 03/16/23 10:48 Analyzed: 03/16/23 13:08									
<u>QC Source Sample: Non-SDG (A3C0365-01)</u>												
Available Cyanide	0.0263	0.00101	0.00201	mg/L	1	0.0251	ND	105	82-130%	5	11%	
Matrix Spike Dup (23C0622-MSD2)			Prepared: 03/16/23 10:48 Analyzed: 03/16/23 13:23									
<u>QC Source Sample: Non-SDG (A3C0390-01)</u>												
Available Cyanide	0.0265	0.00101	0.00201	mg/L	1	0.0251	ND	106	82-130%	1	11%	

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Project Manager: John Renda

Report ID:

A3C0534 - 05 19 23 0522

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 23C0683 - Microdiffusion						Water						
Blank (23C0683-BLK1)			Prepared: 03/17/23 13:59 Analyzed: 03/17/23 18:20									
<u>D4282-02</u>												
Free Cyanide	ND	0.00250	0.00500	mg/L	1	---	---	---	---	---	---	
LCS (23C0683-BS1)			Prepared: 03/17/23 13:59 Analyzed: 03/17/23 18:27									
<u>D4282-02</u>												
Free Cyanide	0.0628	0.00250	0.00500	mg/L	1	0.0667	---	94	74-120%	---	---	
LCS Dup (23C0683-BSD1)			Prepared: 03/17/23 13:59 Analyzed: 03/17/23 18:28									
<u>D4282-02</u>												
Free Cyanide	0.0645	0.00250	0.00500	mg/L	1	0.0667	---	97	74-120%	3	20%	
Matrix Spike (23C0683-MS1)			Prepared: 03/17/23 13:59 Analyzed: 03/17/23 18:35									
<u>QC Source Sample: Non-SDG (A3C0365-01)</u>												
<u>D4282-02</u>												
Free Cyanide	0.0628	0.00250	0.00500	mg/L	1	0.0667	ND	94	74-120%	---	---	
Matrix Spike Dup (23C0683-MSD1)			Prepared: 03/17/23 13:59 Analyzed: 03/17/23 18:35									
<u>QC Source Sample: Non-SDG (A3C0365-01)</u>												
Free Cyanide	0.0640	0.00250	0.00500	mg/L	1	0.0667	ND	96	74-120%	2	20%	

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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 23C0726 - Microdiffusion						Water						
Blank (23C0726-BLK1)			Prepared: 03/20/23 09:54 Analyzed: 03/20/23 15:13									
<u>D4282-02</u>												
Free Cyanide	ND	0.00250	0.00500	mg/L	1	---	---	---	---	---	---	
LCS (23C0726-BS1)			Prepared: 03/20/23 09:54 Analyzed: 03/20/23 15:13									
<u>D4282-02</u>												
Free Cyanide	0.0638	0.00250	0.00500	mg/L	1	0.0667	---	96	74-120%	---	---	
LCS Dup (23C0726-BSD1)			Prepared: 03/20/23 09:54 Analyzed: 03/20/23 15:19									
<u>D4282-02</u>												
Free Cyanide	0.0618	0.00250	0.00500	mg/L	1	0.0667	---	93	74-120%	3	20%	
Duplicate (23C0726-DUP1)			Prepared: 03/20/23 09:54 Analyzed: 03/20/23 15:19									
<u>QC Source Sample: Non-SDG (A3C0601-01)</u>												
Free Cyanide	0.00412	0.00250	0.00500	mg/L	1	---	0.00493	---	---	18	20%	J
Matrix Spike (23C0726-MS1)			Prepared: 03/20/23 09:54 Analyzed: 03/20/23 15:19									
<u>QC Source Sample: Non-SDG (A3C0601-01)</u>												
<u>D4282-02</u>												
Free Cyanide	0.0657	0.00250	0.00500	mg/L	1	0.0667	0.00493	91	74-120%	---	---	

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Page 59 of 67

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503-718-2323
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125
Portland, OR 97219Project: **Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3C0534 - 05 19 23 0522****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: 23C0661							
A3C0534-01RE1	WG	EPA 8260D	03/14/23 11:10	03/17/23 13:00	5mL/5mL	5mL/5mL	1.00
A3C0534-02RE1	WG	EPA 8260D	03/14/23 12:15	03/17/23 13:00	5mL/5mL	5mL/5mL	1.00
A3C0534-03RE1	WG	EPA 8260D	03/14/23 13:30	03/17/23 13:00	5mL/5mL	5mL/5mL	1.00
A3C0534-04RE1	WG	EPA 8260D	03/14/23 13:50	03/17/23 13:00	5mL/5mL	5mL/5mL	1.00
A3C0534-05RE1	WG	EPA 8260D	03/14/23 15:00	03/17/23 13:00	5mL/5mL	5mL/5mL	1.00
A3C0534-06RE1	WG	EPA 8260D	03/14/23 15:15	03/17/23 13:00	5mL/5mL	5mL/5mL	1.00
A3C0534-07	W	EPA 8260D	03/14/23 16:00	03/17/23 13:00	5mL/5mL	5mL/5mL	1.00

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E (Large Volume Injection)**Prep: EPA 3511 (Bottle Extraction)**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23C0614							
A3C0534-01	WG	EPA 8270E LVI	03/14/23 11:10	03/16/23 09:18	95.95mL/5mL	125mL/5mL	1.30
A3C0534-02	WG	EPA 8270E LVI	03/14/23 12:15	03/16/23 09:18	98.8mL/5mL	125mL/5mL	1.27
A3C0534-03	WG	EPA 8270E LVI	03/14/23 13:30	03/16/23 09:18	92.24mL/5mL	125mL/5mL	1.36
A3C0534-04	WG	EPA 8270E LVI	03/14/23 13:50	03/16/23 09:18	108.7mL/5mL	125mL/5mL	1.15
A3C0534-05	WG	EPA 8270E LVI	03/14/23 15:00	03/16/23 09:18	110.66mL/5mL	125mL/5mL	1.13
A3C0534-06	WG	EPA 8270E LVI	03/14/23 15:15	03/16/23 09:18	114.98mL/5mL	125mL/5mL	1.09

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: 23C0858							
A3C0534-01	WG	EPA 6020B	03/14/23 11:10	03/22/23 10:14	45mL/50mL	45mL/50mL	1.00
A3C0534-01RE1	WG	EPA 6020B	03/14/23 11:10	03/22/23 10:14	45mL/50mL	45mL/50mL	1.00
A3C0534-02	WG	EPA 6020B	03/14/23 12:15	03/22/23 10:14	45mL/50mL	45mL/50mL	1.00
A3C0534-03	WG	EPA 6020B	03/14/23 13:30	03/22/23 10:14	45mL/50mL	45mL/50mL	1.00
A3C0534-03RE1	WG	EPA 6020B	03/14/23 13:30	03/22/23 10:14	45mL/50mL	45mL/50mL	1.00
A3C0534-04	WG	EPA 6020B	03/14/23 13:50	03/22/23 10:14	45mL/50mL	45mL/50mL	1.00
A3C0534-04RE1	WG	EPA 6020B	03/14/23 13:50	03/22/23 10:14	45mL/50mL	45mL/50mL	1.00
A3C0534-05	WG	EPA 6020B	03/14/23 15:00	03/22/23 10:14	45mL/50mL	45mL/50mL	1.00
A3C0534-06	WG	EPA 6020B	03/14/23 15:15	03/22/23 10:14	45mL/50mL	45mL/50mL	1.00
A3C0534-06RE1	WG	EPA 6020B	03/14/23 15:15	03/22/23 10:14	45mL/50mL	45mL/50mL	1.00

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

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

Project: **Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3C0534 - 05 19 23 0522****SAMPLE PREPARATION INFORMATION****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: 23C0732							
A3C0534-01	WG	EPA 335.4	03/14/23 11:10	03/20/23 09:32	6mL/6mL	6mL/6mL	1.00
A3C0534-03	WG	EPA 335.4	03/14/23 13:30	03/20/23 09:32	6mL/6mL	6mL/6mL	1.00
A3C0534-04	WG	EPA 335.4	03/14/23 13:50	03/20/23 09:32	6mL/6mL	6mL/6mL	1.00
Batch: 23C0919							
A3C0534-02RE1	WG	EPA 335.4	03/14/23 12:15	03/23/23 12:08	6mL/6mL	6mL/6mL	1.00
A3C0534-05RE1	WG	EPA 335.4	03/14/23 15:00	03/23/23 12:08	6mL/6mL	6mL/6mL	1.00
A3C0534-06RE1	WG	EPA 335.4	03/14/23 15:15	03/23/23 12:08	6mL/6mL	6mL/6mL	1.00

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

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23C0622							
A3C0534-01	WG	D6888-09	03/14/23 11:10	03/16/23 10:48	5mL/5mL	5mL/5mL	1.00
A3C0534-02	WG	D6888-09	03/14/23 12:15	03/16/23 10:48	5mL/5mL	5mL/5mL	1.00
A3C0534-03	WG	D6888-09	03/14/23 13:30	03/16/23 10:48	5mL/5mL	5mL/5mL	1.00
A3C0534-04	WG	D6888-09	03/14/23 13:50	03/16/23 10:48	5mL/5mL	5mL/5mL	1.00
A3C0534-05	WG	D6888-09	03/14/23 15:00	03/16/23 10:48	5mL/5mL	5mL/5mL	1.00
A3C0534-06	WG	D6888-09	03/14/23 15:15	03/16/23 10:48	5mL/5mL	5mL/5mL	1.00

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

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23C0683							
A3C0534-01	WG	D4282-02	03/14/23 11:10	03/17/23 13:59	3mL/3mL	3mL/3mL	1.00
A3C0534-02	WG	D4282-02	03/14/23 12:15	03/17/23 13:59	3mL/3mL	3mL/3mL	1.00
A3C0534-03	WG	D4282-02	03/14/23 13:30	03/17/23 13:59	3mL/3mL	3mL/3mL	1.00
A3C0534-04	WG	D4282-02	03/14/23 13:50	03/17/23 13:59	3mL/3mL	3mL/3mL	1.00
A3C0534-05	WG	D4282-02	03/14/23 15:00	03/17/23 13:59	3mL/3mL	3mL/3mL	1.00
Batch: 23C0726							
A3C0534-06	WG	D4282-02	03/14/23 15:15	03/20/23 09:54	3mL/3mL	3mL/3mL	1.00

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

Project Manager: **John Renda**

Report ID:

A3C0534 - 05 19 23 0522

QUALIFIER DEFINITIONS

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

Apex Laboratories

- B-02** Analyte detected in an associated blank at a level between one-half the MRL and the MRL. (See Notes and Conventions below.)
- E** Estimated Value. The result is above the calibration range of the instrument.
- J** Estimated Result. Result detected below the lowest point of the calibration curve, but above the specified MDL.
- M-05** Estimated results. Peak separation for structural isomers is insufficient for accurate quantification.
- PRES** Incomplete field preservation. Additional preservative was added to adjust the pH within the appropriate range for this analysis.
- Q-01** Spike recovery and/or RPD is outside acceptance limits.
- Q-05** Analyses are not controlled on RPD values from sample and duplicate concentrations that are below 5 times the reporting level.
- Q-19** Blank Spike Duplicate (BSD) sample analyzed in place of Matrix Spike/Duplicate samples due to limited sample amount available for analysis.
- Q-29** Recovery for Lab Control Spike (LCS) is above the upper control limit. Data may be biased high.
- Q-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 +2%. The results are reported as Estimated Values.
- Q-54b** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +3%. The results are reported as Estimated Values.
- Q-54c** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -12%. The results are reported as Estimated Values.
- Q-54d** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -16%. The results are reported as Estimated Values.
- Q-54e** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -32%. The results are reported as Estimated Values.
- Q-54f** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -4%. The results are reported as Estimated Values.
- Q-54g** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -5%. The results are reported as Estimated Values.
- Q-55** Daily CCV/LCS recovery for this analyte was below the +/-20% criteria listed in EPA 8260, however there is adequate sensitivity to ensure detection at the reporting level.
- Q-56** Daily CCV/LCS recovery for this analyte was above the +/-20% criteria listed in EPA 8260

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

Project Manager: **John Renda**

Report ID:

A3C0534 - 05 19 23 0522

REPORTING NOTES AND CONVENTIONS:

Abbreviations:

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

Detection Limits: Limit of Detection (LOD)

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

Reporting Limits: Limit of Quantitation (LOQ)

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

Reporting Conventions:

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

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

"dry" Sample results and Reporting Limits are reported on a dry weight basis. (i.e. "ug/kg dry")

See Percent Solids section for details of dry weight analysis.

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

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

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

QC Source:

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

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

Miscellaneous Notes:

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

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

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Report ID:

A3C0534 - 05 19 23 0522

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. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

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

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125
Portland, OR 97219

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

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

Project Manager: **John Renda**

Report ID:

A3C0534 - 05 19 23 0522

LABORATORY ACCREDITATION INFORMATION

ORELAP Certification ID: OR100062 (Primary Accreditation) -

EPA ID: OR01039

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

Apex Laboratories

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

Secondary Accreditations

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

Subcontract Laboratory Accreditations

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

Field Testing Parameters

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

Apex Laboratories

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APEX LABS COOLER RECEIPT FORM

Client: Anchor QEA Element WO#: A3 C0534Project/Project #: Gasco-MGP only Mon. Wells 1Q 2023 Perf. Mon.
000029-02.84 T-01.001E

Delivery Info:

Date/time received: 3/15/23 @ 744 By: RKDelivered by: Apex ☒ Client ☐ ESS ☐ FedEx ☐ UPS ☐ Radio ☐ Morgan ☐ SDS ☐ Evergreen ☐ Other ☐Cooler Inspection Date/time inspected: 3/15/23 @ 1000 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>1.3</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) N Possible reason why:Green dots applied to out of temperature samples? Yes ☒ No ☐Out of temperature samples form initiated? Yes ☒ No ☐Sample Inspection: Date/time inspected: 3/15/23 @ 1400 By: JSAll samples intact? Yes ☒ No ☐ Comments:Bottle labels/COCs agree? Yes ☒ No ☐ Comments: 1/6 VOA's for GS-03142-13has no sample ID listed. Date on GS-031423-15 NaOH poly
reads 3/4/23COC/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 ☒ NAComments: GS-031423-15 = GS-031423 pH of ~7

Additional information:

Labeled by:

JS

Witness:

JS

Cooler Inspected by:

JS

Form Y-003 R-00

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Darwin Thomas

Darwin Thomas, Business Development Director

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