



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: A3C0492 - 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 A3C0492, which was received by the laboratory on 3/14/2023 at 7:56:00AM.

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 3.8 degC

This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.

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



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Darwin Thomas, Business Development Director



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

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

Project Manager: **John Renda**

Report ID:

A3C0492 - 05 19 23 0514

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
GS-031323-09	A3C0492-01	WG	03/13/23 10:15	03/14/23 07:56
GS-031323-10	A3C0492-02	WG	03/13/23 11:55	03/14/23 07:56
GS-031323-11	A3C0492-03	WG	03/13/23 15:00	03/14/23 07:56
TB-031323	A3C0492-04	W	03/13/23 15:30	03/14/23 07:56

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ANALYTICAL SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-031323-11 (A3C0492-03)		Matrix: WG			Batch: 23C0978			
Diesel	ND	94.3	189	ug/L	1	03/24/23 21:52	NWTPH-Dx	
Oil	ND	189	377	ug/L	1	03/24/23 21:52	NWTPH-Dx	
<i>Surrogate: o-Terphenyl (Surr)</i>		<i>Recovery: 101 %</i>		<i>Limits: 50-150 %</i>		<i>1</i>	<i>03/24/23 21:52</i>	<i>NWTPH-Dx</i>

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ANALYTICAL SAMPLE RESULTS

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

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-031323-11 (A3C0492-03RE1)		Matrix: WG			Batch: 23C0660			
Gasoline Range Organics	ND	50.0	100	ug/L	1	03/17/23 19:53	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	98 %	Limits:	50-150 %	1	03/17/23 19:53	NWTPH-Gx (MS)
1,4-Difluorobenzene (Sur)			98 %		50-150 %	1	03/17/23 19:53	NWTPH-Gx (MS)

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Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-031323-09 (A3C0492-01RE1)		Matrix: WG			Batch: 23C0660			
Acetone	20.3	10.0	20.0	ug/L	1	03/17/23 19:31	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	03/17/23 19:31	EPA 8260D	
Benzene	1.85	0.100	0.200	ug/L	1	03/17/23 19:31	EPA 8260D	
Bromobenzene	ND	0.250	0.500	ug/L	1	03/17/23 19:31	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	03/17/23 19:31	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	03/17/23 19:31	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	03/17/23 19:31	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	03/17/23 19:31	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	03/17/23 19:31	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	03/17/23 19:31	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	03/17/23 19:31	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	03/17/23 19:31	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	03/17/23 19:31	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	03/17/23 19:31	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	03/17/23 19:31	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	03/17/23 19:31	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	03/17/23 19:31	EPA 8260D	
Chloromethane	ND	5.00	5.00	ug/L	1	03/17/23 19:31	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/17/23 19:31	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/17/23 19:31	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	03/17/23 19:31	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	03/17/23 19:31	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	03/17/23 19:31	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	03/17/23 19:31	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/17/23 19:31	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/17/23 19:31	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/17/23 19:31	EPA 8260D	
Dichlorodifluoromethane	ND	1.00	1.00	ug/L	1	03/17/23 19:31	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	03/17/23 19:31	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	03/17/23 19:31	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	03/17/23 19:31	EPA 8260D	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	03/17/23 19:31	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	03/17/23 19:31	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-031323-09 (A3C0492-01RE1)		Matrix: WG		Batch: 23C0660				
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	03/17/23 19:31	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	03/17/23 19:31	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	03/17/23 19:31	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	03/17/23 19:31	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/17/23 19:31	EPA 8260D	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/17/23 19:31	EPA 8260D	
Ethylbenzene	1.33	0.250	0.500	ug/L	1	03/17/23 19:31	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	03/17/23 19:31	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	03/17/23 19:31	EPA 8260D	
Isopropylbenzene	0.770	0.500	1.00	ug/L	1	03/17/23 19:31	EPA 8260D	J
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	03/17/23 19:31	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	03/17/23 19:31	EPA 8260D	
4-Methyl-2-pentanone (MIBK)	ND	5.00	10.0	ug/L	1	03/17/23 19:31	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	03/17/23 19:31	EPA 8260D	
Naphthalene	44.8	1.00	2.00	ug/L	1	03/17/23 19:31	EPA 8260D	
n-Propylbenzene	0.450	0.250	0.500	ug/L	1	03/17/23 19:31	EPA 8260D	J
Styrene	ND	0.500	1.00	ug/L	1	03/17/23 19:31	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	03/17/23 19:31	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	03/17/23 19:31	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	03/17/23 19:31	EPA 8260D	
Toluene	0.670	0.500	1.00	ug/L	1	03/17/23 19:31	EPA 8260D	J
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/17/23 19:31	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/17/23 19:31	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	03/17/23 19:31	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	03/17/23 19:31	EPA 8260D	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	03/17/23 19:31	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	03/17/23 19:31	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	03/17/23 19:31	EPA 8260D	
1,2,4-Trimethylbenzene	6.84	0.500	1.00	ug/L	1	03/17/23 19:31	EPA 8260D	
1,3,5-Trimethylbenzene	2.51	0.500	1.00	ug/L	1	03/17/23 19:31	EPA 8260D	
Vinyl chloride	ND	0.200	0.400	ug/L	1	03/17/23 19:31	EPA 8260D	
m,p-Xylene	1.77	0.500	1.00	ug/L	1	03/17/23 19:31	EPA 8260D	
o-Xylene	1.69	0.250	0.500	ug/L	1	03/17/23 19:31	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-031323-09 (A3C0492-01RE1)		Matrix: WG			Batch: 23C0660			
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 99 %	Limits: 80-120 %	1	03/17/23 19:31	EPA 8260D		
Toluene-d8 (Surr)		98 %	80-120 %	1	03/17/23 19:31	EPA 8260D		
4-Bromofluorobenzene (Surr)		94 %	80-120 %	1	03/17/23 19:31	EPA 8260D		
GS-031323-10 (A3C0492-02RE1)		Matrix: WG			Batch: 23C0660			V-25
Acetone	ND	1000	2000	ug/L	100	03/17/23 22:52	EPA 8260D	
Acrylonitrile	ND	100	200	ug/L	100	03/17/23 22:52	EPA 8260D	
Benzene	10200	10.0	20.0	ug/L	100	03/17/23 22:52	EPA 8260D	
Bromobenzene	ND	25.0	50.0	ug/L	100	03/17/23 22:52	EPA 8260D	
Bromochloromethane	ND	50.0	100	ug/L	100	03/17/23 22:52	EPA 8260D	
Bromodichloromethane	ND	50.0	100	ug/L	100	03/17/23 22:52	EPA 8260D	
Bromoform	ND	50.0	100	ug/L	100	03/17/23 22:52	EPA 8260D	
Bromomethane	ND	500	500	ug/L	100	03/17/23 22:52	EPA 8260D	
2-Butanone (MEK)	ND	500	1000	ug/L	100	03/17/23 22:52	EPA 8260D	
n-Butylbenzene	ND	50.0	100	ug/L	100	03/17/23 22:52	EPA 8260D	
sec-Butylbenzene	ND	50.0	100	ug/L	100	03/17/23 22:52	EPA 8260D	
tert-Butylbenzene	ND	50.0	100	ug/L	100	03/17/23 22:52	EPA 8260D	
Carbon disulfide	ND	500	1000	ug/L	100	03/17/23 22:52	EPA 8260D	
Carbon tetrachloride	ND	50.0	100	ug/L	100	03/17/23 22:52	EPA 8260D	
Chlorobenzene	ND	25.0	50.0	ug/L	100	03/17/23 22:52	EPA 8260D	
Chloroethane	ND	500	500	ug/L	100	03/17/23 22:52	EPA 8260D	
Chloroform	ND	50.0	100	ug/L	100	03/17/23 22:52	EPA 8260D	
Chloromethane	ND	500	500	ug/L	100	03/17/23 22:52	EPA 8260D	
2-Chlorotoluene	ND	50.0	100	ug/L	100	03/17/23 22:52	EPA 8260D	
4-Chlorotoluene	ND	50.0	100	ug/L	100	03/17/23 22:52	EPA 8260D	
Dibromochloromethane	ND	50.0	100	ug/L	100	03/17/23 22:52	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	250	500	ug/L	100	03/17/23 22:52	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	25.0	50.0	ug/L	100	03/17/23 22:52	EPA 8260D	
Dibromomethane	ND	50.0	100	ug/L	100	03/17/23 22:52	EPA 8260D	
1,2-Dichlorobenzene	ND	25.0	50.0	ug/L	100	03/17/23 22:52	EPA 8260D	
1,3-Dichlorobenzene	ND	25.0	50.0	ug/L	100	03/17/23 22:52	EPA 8260D	
1,4-Dichlorobenzene	ND	25.0	50.0	ug/L	100	03/17/23 22:52	EPA 8260D	
Dichlorodifluoromethane	ND	100	100	ug/L	100	03/17/23 22:52	EPA 8260D	
1,1-Dichloroethane	ND	20.0	40.0	ug/L	100	03/17/23 22:52	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-031323-10 (A3C0492-02RE1)		Matrix: WG		Batch: 23C0660		V-25		
1,2-Dichloroethane (EDC)	ND	20.0	40.0	ug/L	100	03/17/23 22:52	EPA 8260D	
1,1-Dichloroethene	ND	20.0	40.0	ug/L	100	03/17/23 22:52	EPA 8260D	
cis-1,2-Dichloroethene	ND	20.0	40.0	ug/L	100	03/17/23 22:52	EPA 8260D	
trans-1,2-Dichloroethene	ND	20.0	40.0	ug/L	100	03/17/23 22:52	EPA 8260D	
1,2-Dichloropropane	ND	25.0	50.0	ug/L	100	03/17/23 22:52	EPA 8260D	
1,3-Dichloropropane	ND	50.0	100	ug/L	100	03/17/23 22:52	EPA 8260D	
2,2-Dichloropropane	ND	50.0	100	ug/L	100	03/17/23 22:52	EPA 8260D	
1,1-Dichloropropene	ND	50.0	100	ug/L	100	03/17/23 22:52	EPA 8260D	
cis-1,3-Dichloropropene	ND	50.0	100	ug/L	100	03/17/23 22:52	EPA 8260D	
trans-1,3-Dichloropropene	ND	50.0	100	ug/L	100	03/17/23 22:52	EPA 8260D	
Ethylbenzene	38.0	25.0	50.0	ug/L	100	03/17/23 22:52	EPA 8260D	J
Hexachlorobutadiene	ND	250	500	ug/L	100	03/17/23 22:52	EPA 8260D	
2-Hexanone	ND	500	1000	ug/L	100	03/17/23 22:52	EPA 8260D	
Isopropylbenzene	ND	50.0	100	ug/L	100	03/17/23 22:52	EPA 8260D	
4-Isopropyltoluene	ND	50.0	100	ug/L	100	03/17/23 22:52	EPA 8260D	
Methylene chloride	ND	500	1000	ug/L	100	03/17/23 22:52	EPA 8260D	
4-Methyl-2-pentanone (MIBK)	ND	500	1000	ug/L	100	03/17/23 22:52	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	50.0	100	ug/L	100	03/17/23 22:52	EPA 8260D	
Naphthalene	199	100	200	ug/L	100	03/17/23 22:52	EPA 8260D	J
n-Propylbenzene	ND	25.0	50.0	ug/L	100	03/17/23 22:52	EPA 8260D	
Styrene	ND	50.0	100	ug/L	100	03/17/23 22:52	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	20.0	40.0	ug/L	100	03/17/23 22:52	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	25.0	50.0	ug/L	100	03/17/23 22:52	EPA 8260D	
Tetrachloroethene (PCE)	ND	20.0	40.0	ug/L	100	03/17/23 22:52	EPA 8260D	
Toluene	965	50.0	100	ug/L	100	03/17/23 22:52	EPA 8260D	
1,2,3-Trichlorobenzene	ND	100	200	ug/L	100	03/17/23 22:52	EPA 8260D	
1,2,4-Trichlorobenzene	ND	100	200	ug/L	100	03/17/23 22:52	EPA 8260D	
1,1,1-Trichloroethane	ND	20.0	40.0	ug/L	100	03/17/23 22:52	EPA 8260D	
1,1,2-Trichloroethane	ND	25.0	50.0	ug/L	100	03/17/23 22:52	EPA 8260D	
Trichloroethene (TCE)	ND	20.0	40.0	ug/L	100	03/17/23 22:52	EPA 8260D	
Trichlorofluoromethane	ND	100	200	ug/L	100	03/17/23 22:52	EPA 8260D	
1,2,3-Trichloropropane	ND	50.0	100	ug/L	100	03/17/23 22:52	EPA 8260D	
1,2,4-Trimethylbenzene	ND	50.0	100	ug/L	100	03/17/23 22:52	EPA 8260D	

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

Project: **Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3C0492 - 05 19 23 0514**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-031323-10 (A3C0492-02RE1)		Matrix: WG			Batch: 23C0660		V-25	
1,3,5-Trimethylbenzene	ND	50.0	100	ug/L	100	03/17/23 22:52	EPA 8260D	
Vinyl chloride	ND	20.0	40.0	ug/L	100	03/17/23 22:52	EPA 8260D	
m,p-Xylene	132	50.0	100	ug/L	100	03/17/23 22:52	EPA 8260D	
o-Xylene	59.0	25.0	50.0	ug/L	100	03/17/23 22:52	EPA 8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>	98 %	<i>Limits:</i>	80-120 %	1	03/17/23 22:52	EPA 8260D
<i>Toluene-d8 (Surr)</i>			98 %		80-120 %	1	03/17/23 22:52	EPA 8260D
<i>4-Bromofluorobenzene (Surr)</i>			99 %		80-120 %	1	03/17/23 22:52	EPA 8260D
GS-031323-11 (A3C0492-03RE1)		Matrix: WG			Batch: 23C0660			
Acetone	ND	10.0	20.0	ug/L	1	03/17/23 19:53	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	03/17/23 19:53	EPA 8260D	
Benzene	ND	0.100	0.200	ug/L	1	03/17/23 19:53	EPA 8260D	
Bromobenzene	ND	0.250	0.500	ug/L	1	03/17/23 19:53	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	03/17/23 19:53	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	03/17/23 19:53	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	03/17/23 19:53	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	03/17/23 19:53	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	03/17/23 19:53	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	03/17/23 19:53	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	03/17/23 19:53	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	03/17/23 19:53	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	03/17/23 19:53	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	03/17/23 19:53	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	03/17/23 19:53	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	03/17/23 19:53	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	03/17/23 19:53	EPA 8260D	
Chloromethane	ND	5.00	5.00	ug/L	1	03/17/23 19:53	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/17/23 19:53	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/17/23 19:53	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	03/17/23 19:53	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	03/17/23 19:53	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	03/17/23 19:53	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	03/17/23 19:53	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/17/23 19:53	EPA 8260D	

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Darwin Thomas, Business Development Director



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503-718-2323
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125
Portland, OR 97219Project: **Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3C0492 - 05 19 23 0514**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-031323-11 (A3C0492-03RE1)		Matrix: WG			Batch: 23C0660			
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/17/23 19:53	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/17/23 19:53	EPA 8260D	
Dichlorodifluoromethane	ND	1.00	1.00	ug/L	1	03/17/23 19:53	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	03/17/23 19:53	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	03/17/23 19:53	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	03/17/23 19:53	EPA 8260D	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	03/17/23 19:53	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	03/17/23 19:53	EPA 8260D	
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	03/17/23 19:53	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	03/17/23 19:53	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	03/17/23 19:53	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	03/17/23 19:53	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/17/23 19:53	EPA 8260D	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/17/23 19:53	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	03/17/23 19:53	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	03/17/23 19:53	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	03/17/23 19:53	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	03/17/23 19:53	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	03/17/23 19:53	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	03/17/23 19:53	EPA 8260D	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	03/17/23 19:53	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	03/17/23 19:53	EPA 8260D	
Naphthalene	ND	1.00	2.00	ug/L	1	03/17/23 19:53	EPA 8260D	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	03/17/23 19:53	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	03/17/23 19:53	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	03/17/23 19:53	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	03/17/23 19:53	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	03/17/23 19:53	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	03/17/23 19:53	EPA 8260D	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/17/23 19:53	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/17/23 19:53	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	03/17/23 19:53	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	03/17/23 19:53	EPA 8260D	

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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:****A3C0492 - 05 19 23 0514**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-031323-11 (A3C0492-03RE1)		Matrix: WG			Batch: 23C0660			
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	03/17/23 19:53	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	03/17/23 19:53	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	03/17/23 19:53	EPA 8260D	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	03/17/23 19:53	EPA 8260D	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	03/17/23 19:53	EPA 8260D	
Vinyl chloride	ND	0.200	0.400	ug/L	1	03/17/23 19:53	EPA 8260D	
m,p-Xylene	ND	0.500	1.00	ug/L	1	03/17/23 19:53	EPA 8260D	
o-Xylene	ND	0.250	0.500	ug/L	1	03/17/23 19:53	EPA 8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 104 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>03/17/23 19:53</i>	<i>EPA 8260D</i>	
<i>Toluene-d8 (Surr)</i>		<i>101 %</i>		<i>80-120 %</i>	<i>1</i>	<i>03/17/23 19:53</i>	<i>EPA 8260D</i>	
<i>4-Bromofluorobenzene (Surr)</i>		<i>100 %</i>		<i>80-120 %</i>	<i>1</i>	<i>03/17/23 19:53</i>	<i>EPA 8260D</i>	
TB-031323 (A3C0492-04)		Matrix: W			Batch: 23C0660			V-01
Acetone	28.6	10.0	20.0	ug/L	1	03/17/23 14:18	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	03/17/23 14:18	EPA 8260D	
Benzene	ND	0.100	0.200	ug/L	1	03/17/23 14:18	EPA 8260D	
Bromobenzene	ND	0.250	0.500	ug/L	1	03/17/23 14:18	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	03/17/23 14:18	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	03/17/23 14:18	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	03/17/23 14:18	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	03/17/23 14:18	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	03/17/23 14:18	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	03/17/23 14:18	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	03/17/23 14:18	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	03/17/23 14:18	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	03/17/23 14:18	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	03/17/23 14:18	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	03/17/23 14:18	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	03/17/23 14:18	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	03/17/23 14:18	EPA 8260D	
Chloromethane	ND	5.00	5.00	ug/L	1	03/17/23 14:18	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/17/23 14:18	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	03/17/23 14:18	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	03/17/23 14:18	EPA 8260D	

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ANALYTICAL REPORT

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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:****A3C0492 - 05 19 23 0514**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
TB-031323 (A3C0492-04)		Matrix: W			Batch: 23C0660		V-01	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	03/17/23 14:18	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	03/17/23 14:18	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	03/17/23 14:18	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/17/23 14:18	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/17/23 14:18	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	03/17/23 14:18	EPA 8260D	
Dichlorodifluoromethane	ND	1.00	1.00	ug/L	1	03/17/23 14:18	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	03/17/23 14:18	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	03/17/23 14:18	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	03/17/23 14:18	EPA 8260D	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	03/17/23 14:18	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	03/17/23 14:18	EPA 8260D	
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	03/17/23 14:18	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	03/17/23 14:18	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	03/17/23 14:18	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	03/17/23 14:18	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/17/23 14:18	EPA 8260D	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	03/17/23 14:18	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	03/17/23 14:18	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	03/17/23 14:18	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	03/17/23 14:18	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	03/17/23 14:18	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	03/17/23 14:18	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	03/17/23 14:18	EPA 8260D	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	03/17/23 14:18	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	03/17/23 14:18	EPA 8260D	
Naphthalene	ND	1.00	2.00	ug/L	1	03/17/23 14:18	EPA 8260D	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	03/17/23 14:18	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	03/17/23 14:18	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	03/17/23 14:18	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	03/17/23 14:18	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	03/17/23 14:18	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	03/17/23 14:18	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
TB-031323 (A3C0492-04)		Matrix: W			Batch: 23C0660		V-01	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/17/23 14:18	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	03/17/23 14:18	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	03/17/23 14:18	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	03/17/23 14:18	EPA 8260D	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	03/17/23 14:18	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	03/17/23 14:18	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	03/17/23 14:18	EPA 8260D	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	03/17/23 14:18	EPA 8260D	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	03/17/23 14:18	EPA 8260D	
Vinyl chloride	ND	0.200	0.400	ug/L	1	03/17/23 14:18	EPA 8260D	
m,p-Xylene	ND	0.500	1.00	ug/L	1	03/17/23 14:18	EPA 8260D	
o-Xylene	ND	0.250	0.500	ug/L	1	03/17/23 14:18	EPA 8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>	<i>100 %</i>	<i>Limits:</i>	<i>80-120 %</i>	<i>1</i>	<i>03/17/23 14:18</i>	<i>EPA 8260D</i>
<i>Toluene-d8 (Surr)</i>			<i>103 %</i>		<i>80-120 %</i>	<i>1</i>	<i>03/17/23 14:18</i>	<i>EPA 8260D</i>
<i>4-Bromofluorobenzene (Surr)</i>			<i>100 %</i>		<i>80-120 %</i>	<i>1</i>	<i>03/17/23 14:18</i>	<i>EPA 8260D</i>

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Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3C0492 - 05 19 23 0514

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-031323-09 (A3C0492-01)		Matrix: WG			Batch: 23C0614			
Acenaphthene	122	0.222	0.445	ug/L	10	03/16/23 19:38	EPA 8270E LVI	
Acenaphthylene	5.51	0.222	0.445	ug/L	10	03/16/23 19:38	EPA 8270E LVI	
Anthracene	8.94	0.222	0.445	ug/L	10	03/16/23 19:38	EPA 8270E LVI	
Benz(a)anthracene	0.517	0.111	0.222	ug/L	10	03/16/23 19:38	EPA 8270E LVI	
Benzo(a)pyrene	ND	0.111	0.222	ug/L	10	03/16/23 19:38	EPA 8270E LVI	
Benzo(b)fluoranthene	ND	0.111	0.222	ug/L	10	03/16/23 19:38	EPA 8270E LVI	
Benzo(k)fluoranthene	ND	0.111	0.222	ug/L	10	03/16/23 19:38	EPA 8270E LVI	
Benzo(g,h,i)perylene	ND	0.222	0.445	ug/L	10	03/16/23 19:38	EPA 8270E LVI	
Chrysene	0.384	0.111	0.222	ug/L	10	03/16/23 19:38	EPA 8270E LVI	
Dibenz(a,h)anthracene	ND	0.111	0.222	ug/L	10	03/16/23 19:38	EPA 8270E LVI	
Fluoranthene	14.2	0.222	0.445	ug/L	10	03/16/23 19:38	EPA 8270E LVI	
Fluorene	31.7	0.222	0.445	ug/L	10	03/16/23 19:38	EPA 8270E LVI	
Indeno(1,2,3-cd)pyrene	ND	0.111	0.222	ug/L	10	03/16/23 19:38	EPA 8270E LVI	
1-Methylnaphthalene	51.1	0.445	0.889	ug/L	10	03/16/23 19:38	EPA 8270E LVI	
2-Methylnaphthalene	27.7	0.445	0.889	ug/L	10	03/16/23 19:38	EPA 8270E LVI	
Naphthalene	21.8	0.445	0.889	ug/L	10	03/16/23 19:38	EPA 8270E LVI	
Phenanthrene	54.6	0.445	0.889	ug/L	10	03/16/23 19:38	EPA 8270E LVI	
Pyrene	14.7	0.222	0.445	ug/L	10	03/16/23 19:38	EPA 8270E LVI	
Carbazole	10.0	0.222	0.445	ug/L	10	03/16/23 19:38	EPA 8270E LVI	
Dibenzofuran	4.34	0.222	0.445	ug/L	10	03/16/23 19:38	EPA 8270E LVI	
Surrogate: Acenaphthylene-d8 (Surr)		Recovery:	80 %	Limits:	78-134 %	10	03/16/23 19:38	EPA 8270E LVI S-05
Benzo(a)pyrene-d12 (Surr)			87 %		80-132 %	10	03/16/23 19:38	EPA 8270E LVI S-05
GS-031323-10 (A3C0492-02)		Matrix: WG			Batch: 23C0614			
Acenaphthene	4.73	0.893	1.79	ug/L	50	03/16/23 20:11	EPA 8270E LVI	
Acenaphthylene	1.59	0.893	1.79	ug/L	50	03/16/23 20:11	EPA 8270E LVI	J
Anthracene	2.05	0.893	1.79	ug/L	50	03/16/23 20:11	EPA 8270E LVI	
Benz(a)anthracene	ND	0.447	0.893	ug/L	50	03/16/23 20:11	EPA 8270E LVI	
Benzo(a)pyrene	ND	0.447	0.893	ug/L	50	03/16/23 20:11	EPA 8270E LVI	
Benzo(b)fluoranthene	ND	0.893	0.893	ug/L	50	03/16/23 20:11	EPA 8270E LVI	
Benzo(k)fluoranthene	ND	0.893	0.893	ug/L	50	03/16/23 20:11	EPA 8270E LVI	
Benzo(g,h,i)perylene	1.21	0.893	1.79	ug/L	50	03/16/23 20:11	EPA 8270E LVI	J
Chrysene	ND	0.447	0.893	ug/L	50	03/16/23 20:11	EPA 8270E LVI	

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

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6700 S.W. Sandburg Street
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503-718-2323
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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:

A3C0492 - 05 19 23 0514

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-031323-10 (A3C0492-02)		Matrix: WG			Batch: 23C0614			
Dibenz(a,h)anthracene	ND	0.447	0.893	ug/L	50	03/16/23 20:11	EPA 8270E LVI	
Fluoranthene	1.34	0.893	1.79	ug/L	50	03/16/23 20:11	EPA 8270E LVI	J
Fluorene	1.99	0.893	1.79	ug/L	50	03/16/23 20:11	EPA 8270E LVI	
Indeno(1,2,3-cd)pyrene	0.782	0.447	0.893	ug/L	50	03/16/23 20:11	EPA 8270E LVI	J
1-Methylnaphthalene	4.64	1.79	3.57	ug/L	50	03/16/23 20:11	EPA 8270E LVI	
2-Methylnaphthalene	3.80	1.79	3.57	ug/L	50	03/16/23 20:11	EPA 8270E LVI	
Naphthalene	207	1.79	3.57	ug/L	50	03/16/23 20:11	EPA 8270E LVI	
Phenanthrene	4.02	1.79	3.57	ug/L	50	03/16/23 20:11	EPA 8270E LVI	
Pyrene	1.32	0.893	1.79	ug/L	50	03/16/23 20:11	EPA 8270E LVI	J
Carbazole	8.08	0.893	1.79	ug/L	50	03/16/23 20:11	EPA 8270E LVI	
Dibenzofuran	1.12	0.893	1.79	ug/L	50	03/16/23 20:11	EPA 8270E LVI	J
Surrogate: Acenaphthylene-d8 (Surr)		Recovery: 87 %		Limits: 78-134 %	50	03/16/23 20:11	EPA 8270E LVI	S-05
Benzo(a)pyrene-d12 (Surr)		76 %		80-132 %	50	03/16/23 20:11	EPA 8270E LVI	S-05
GS-031323-11 (A3C0492-03)		Matrix: WG			Batch: 23C0614			
Acenaphthene	0.215	0.0175	0.0349	ug/L	1	03/16/23 20:43	EPA 8270E LVI	
Acenaphthylene	ND	0.0349	0.0349	ug/L	1	03/16/23 20:43	EPA 8270E LVI	
Anthracene	ND	0.0818	0.0818	ug/L	1	03/16/23 20:43	EPA 8270E LVI	R-02
Benz(a)anthracene	ND	0.00873	0.0175	ug/L	1	03/16/23 20:43	EPA 8270E LVI	
Benzo(a)pyrene	ND	0.00873	0.0175	ug/L	1	03/16/23 20:43	EPA 8270E LVI	
Benzo(b)fluoranthene	ND	0.00873	0.0175	ug/L	1	03/16/23 20:43	EPA 8270E LVI	
Benzo(k)fluoranthene	ND	0.00873	0.0175	ug/L	1	03/16/23 20:43	EPA 8270E LVI	
Benzo(g,h,i)perylene	ND	0.0175	0.0349	ug/L	1	03/16/23 20:43	EPA 8270E LVI	
Chrysene	ND	0.00873	0.0175	ug/L	1	03/16/23 20:43	EPA 8270E LVI	
Dibenz(a,h)anthracene	ND	0.00873	0.0175	ug/L	1	03/16/23 20:43	EPA 8270E LVI	
Fluoranthene	0.124	0.0175	0.0349	ug/L	1	03/16/23 20:43	EPA 8270E LVI	
Fluorene	0.208	0.0175	0.0349	ug/L	1	03/16/23 20:43	EPA 8270E LVI	
Indeno(1,2,3-cd)pyrene	ND	0.00873	0.0175	ug/L	1	03/16/23 20:43	EPA 8270E LVI	
1-Methylnaphthalene	ND	0.0349	0.0698	ug/L	1	03/16/23 20:43	EPA 8270E LVI	
2-Methylnaphthalene	ND	0.0349	0.0698	ug/L	1	03/16/23 20:43	EPA 8270E LVI	
Naphthalene	0.0402	0.0349	0.0698	ug/L	1	03/16/23 20:43	EPA 8270E LVI	J
Phenanthrene	ND	0.0349	0.0698	ug/L	1	03/16/23 20:43	EPA 8270E LVI	
Pyrene	0.0611	0.0175	0.0349	ug/L	1	03/16/23 20:43	EPA 8270E LVI	

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Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3C0492 - 05 19 23 0514

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-031323-11 (A3C0492-03)		Matrix: WG			Batch: 23C0614			
Carbazole	0.0175	0.0175	0.0349	ug/L	1	03/16/23 20:43	EPA 8270E LVI	J
Dibenzofuran	ND	0.0175	0.0349	ug/L	1	03/16/23 20:43	EPA 8270E LVI	
Surrogate: Acenaphthylene-d8 (Surr)		Recovery: 117 %		Limits: 78-134 %	1	03/16/23 20:43	EPA 8270E LVI	
Benzo(a)pyrene-d12 (Surr)		123 %		80-132 %	1	03/16/23 20:43	EPA 8270E LVI	

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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:****A3C0492 - 05 19 23 0514**

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-031323-09 (A3C0492-01)		Matrix: WG						
Batch: 23C0809								
Aluminum	ND	25.0	50.0	ug/L	1	03/22/23 02:20	EPA 6020B	
Antimony	ND	0.500	1.00	ug/L	1	03/22/23 02:20	EPA 6020B	
Arsenic	5.18	0.500	1.00	ug/L	1	03/22/23 02:20	EPA 6020B	
Barium	91.2	1.00	2.00	ug/L	1	03/22/23 02:20	EPA 6020B	
Beryllium	ND	0.100	0.200	ug/L	1	03/22/23 02:20	EPA 6020B	
Cadmium	ND	0.100	0.200	ug/L	1	03/22/23 02:20	EPA 6020B	
Chromium	ND	1.00	2.00	ug/L	1	03/22/23 02:20	EPA 6020B	
Copper	ND	1.00	2.00	ug/L	1	03/22/23 02:20	EPA 6020B	
Lead	ND	0.110	0.200	ug/L	1	03/22/23 02:20	EPA 6020B	
Manganese	1460	0.500	1.00	ug/L	1	03/22/23 02:20	EPA 6020B	
Mercury	ND	0.0400	0.0800	ug/L	1	03/22/23 02:20	EPA 6020B	
Nickel	1.62	1.00	2.00	ug/L	1	03/22/23 02:20	EPA 6020B	J
Silver	ND	0.100	0.200	ug/L	1	03/22/23 02:20	EPA 6020B	
Thallium	ND	0.100	0.200	ug/L	1	03/22/23 02:20	EPA 6020B	
Vanadium	ND	1.00	2.00	ug/L	1	03/22/23 02:20	EPA 6020B	
Zinc	3.77	2.00	4.00	ug/L	1	03/22/23 02:20	EPA 6020B	J
GS-031323-09 (A3C0492-01RE1)		Matrix: WG						
Batch: 23C0809								
Iron	22700	25.0	50.0	ug/L	1	03/22/23 17:45	EPA 6020B	
Selenium	ND	0.500	1.00	ug/L	1	03/22/23 17:45	EPA 6020B	
GS-031323-10 (A3C0492-02)		Matrix: WG						
Batch: 23C0809								
Aluminum	204	25.0	50.0	ug/L	1	03/22/23 02:25	EPA 6020B	
Antimony	ND	0.500	1.00	ug/L	1	03/22/23 02:25	EPA 6020B	
Arsenic	0.839	0.500	1.00	ug/L	1	03/22/23 02:25	EPA 6020B	J
Barium	8.87	1.00	2.00	ug/L	1	03/22/23 02:25	EPA 6020B	
Beryllium	ND	0.100	0.200	ug/L	1	03/22/23 02:25	EPA 6020B	
Cadmium	ND	0.100	0.200	ug/L	1	03/22/23 02:25	EPA 6020B	
Chromium	ND	1.00	2.00	ug/L	1	03/22/23 02:25	EPA 6020B	
Copper	1.38	1.00	2.00	ug/L	1	03/22/23 02:25	EPA 6020B	J
Lead	0.345	0.110	0.200	ug/L	1	03/22/23 02:25	EPA 6020B	

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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:****A3C0492 - 05 19 23 0514**

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-031323-10 (A3C0492-02)		Matrix: WG						
Manganese	289	0.500	1.00	ug/L	1	03/22/23 02:25	EPA 6020B	
Mercury	ND	0.0400	0.0800	ug/L	1	03/22/23 02:25	EPA 6020B	
Nickel	3.65	1.00	2.00	ug/L	1	03/22/23 02:25	EPA 6020B	
Silver	ND	0.100	0.200	ug/L	1	03/22/23 02:25	EPA 6020B	
Thallium	ND	0.100	0.200	ug/L	1	03/22/23 02:25	EPA 6020B	
Vanadium	2.42	1.00	2.00	ug/L	1	03/22/23 02:25	EPA 6020B	
Zinc	2.39	2.00	4.00	ug/L	1	03/22/23 02:25	EPA 6020B	J
GS-031323-10 (A3C0492-02RE1)		Matrix: WG						
Batch: 23C0809								
Iron	5100	25.0	50.0	ug/L	1	03/22/23 17:49	EPA 6020B	
Selenium	ND	0.500	1.00	ug/L	1	03/22/23 17:49	EPA 6020B	
GS-031323-11 (A3C0492-03)		Matrix: WG						
Batch: 23C0809								
Aluminum	ND	25.0	50.0	ug/L	1	03/22/23 02:30	EPA 6020B	
Antimony	ND	0.500	1.00	ug/L	1	03/22/23 02:30	EPA 6020B	
Arsenic	ND	0.500	1.00	ug/L	1	03/22/23 02:30	EPA 6020B	
Barium	20.1	1.00	2.00	ug/L	1	03/22/23 02:30	EPA 6020B	
Beryllium	ND	0.100	0.200	ug/L	1	03/22/23 02:30	EPA 6020B	
Cadmium	ND	0.100	0.200	ug/L	1	03/22/23 02:30	EPA 6020B	
Chromium	ND	1.00	2.00	ug/L	1	03/22/23 02:30	EPA 6020B	
Copper	ND	1.00	2.00	ug/L	1	03/22/23 02:30	EPA 6020B	
Lead	ND	0.110	0.200	ug/L	1	03/22/23 02:30	EPA 6020B	
Manganese	23.1	0.500	1.00	ug/L	1	03/22/23 02:30	EPA 6020B	
Mercury	ND	0.0400	0.0800	ug/L	1	03/22/23 02:30	EPA 6020B	
Nickel	ND	1.00	2.00	ug/L	1	03/22/23 02:30	EPA 6020B	
Silver	ND	0.100	0.200	ug/L	1	03/22/23 02:30	EPA 6020B	
Thallium	ND	0.100	0.200	ug/L	1	03/22/23 02:30	EPA 6020B	
Vanadium	ND	1.00	2.00	ug/L	1	03/22/23 02:30	EPA 6020B	
Zinc	ND	2.00	4.00	ug/L	1	03/22/23 02:30	EPA 6020B	
GS-031323-11 (A3C0492-03RE1)		Matrix: WG						
Batch: 23C0809								

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Project Manager: **John Renda**

Report ID:

A3C0492 - 05 19 23 0514

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-031323-11 (A3C0492-03RE1)				Matrix: WG				
Iron	348	25.0	50.0	ug/L	1	03/22/23 18:04	EPA 6020B	
Selenium	ND	0.500	1.00	ug/L	1	03/22/23 18:04	EPA 6020B	

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ANALYTICAL SAMPLE RESULTS

Total Cyanide by Flow Analysis (Aqueous)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-031323-09 (A3C0492-01)				Matrix: WG		Batch: 23C0732		
Total Cyanide	0.304	0.00500	0.00500	mg/L	1	03/21/23 13:21	EPA 335.4	B-02
GS-031323-10 (A3C0492-02RE1)				Matrix: WG		Batch: 23C0919		
Total Cyanide	0.0123	0.00500	0.00500	mg/L	1	03/23/23 15:37	EPA 335.4	
GS-031323-11 (A3C0492-03RE1)				Matrix: WG		Batch: 23C0919		
Total Cyanide	0.0154	0.00500	0.00500	mg/L	1	03/23/23 15:51	EPA 335.4	

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ANALYTICAL SAMPLE RESULTS

Available Cyanide by FIA, Ligand Exchange and Amperometric Detection

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-031323-09 (A3C0492-01)				Matrix: WG		Batch: 23C0622		
Available Cyanide	ND	0.00100	0.00200	mg/L	1	03/16/23 13:26	D6888-09	
GS-031323-10 (A3C0492-02)				Matrix: WG		Batch: 23C0622		
Available Cyanide	ND	0.00100	0.00200	mg/L	1	03/16/23 13:28	D6888-09	
GS-031323-11 (A3C0492-03)				Matrix: WG		Batch: 23C0622		
Available Cyanide	ND	0.00100	0.00200	mg/L	1	03/16/23 13:29	D6888-09	

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ANALYTICAL SAMPLE RESULTS

Free Cyanide by Microdiffusion/Colorimetric Spectrophotometry

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-031323-09 (A3C0492-01)				Matrix: WG		Batch: 23C0683		
Free Cyanide	ND	0.00250	0.00500	mg/L	1	03/17/23 18:43	D4282-02	
GS-031323-10 (A3C0492-02)				Matrix: WG		Batch: 23C0683		
Free Cyanide	ND	0.00250	0.00500	mg/L	1	03/17/23 18:43	D4282-02	
GS-031323-11 (A3C0492-03)				Matrix: WG		Batch: 23C0683		
Free Cyanide	ND	0.00250	0.00500	mg/L	1	03/17/23 18:51	D4282-02	

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Analytical Resources, LLC

ANALYTICAL SAMPLE RESULTS (Subcontracted)

Washington Department of Ecology Methods

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-031323-11 (A3C0492-03)		Matrix: WG			Batch: BLC0560			
Batch: BLC0560								
C5-C6 Aliphatics	ND	---	50	ug/L	1	03/27/23 17:20	WA VPH	U
>C6-C8 Aliphatics	ND	---	50	ug/L	1	03/27/23 17:20	WA VPH	U
>C8-C10 Aliphatics	ND	---	50	ug/L	1	03/27/23 17:20	WA VPH	U
>C10-C12 Aliphatics	ND	---	50	ug/L	1	03/27/23 17:20	WA VPH	U
C8-C10 Aromatics	ND	---	50	ug/L	1	03/27/23 17:20	WA VPH	U
>C10-C12 Aromatics	ND	---	50	ug/L	1	03/27/23 17:20	WA VPH	U
>C12-C13 Aromatics	ND	---	50	ug/L	1	03/27/23 17:20	WA VPH	U
Methyl tert-butyl Ether	ND	---	5	ug/L	1	03/27/23 17:20	WA VPH	U
Benzene	ND	---	5	ug/L	1	03/27/23 17:20	WA VPH	U
Toluene	ND	---	5	ug/L	1	03/27/23 17:20	WA VPH	U
Ethylbenzene	ND	---	5	ug/L	1	03/27/23 17:20	WA VPH	U
1,2,3-Trimethylbenzene	ND	---	5	ug/L	1	03/27/23 17:20	WA VPH	U
m,p-Xylene	ND	---	10	ug/L	1	03/27/23 17:20	WA VPH	U
Naphthalene	ND	---	5	ug/L	1	03/27/23 17:20	WA VPH	U
1-Methylnaphthalene	ND	---	5	ug/L	1	03/27/23 17:20	WA VPH	U
o-Xylene	ND	---	5	ug/L	1	03/27/23 17:20	WA VPH	U
n-Pentane	ND	---	5	ug/L	1	03/27/23 17:20	WA VPH	U
n-Hexane	ND	---	5	ug/L	1	03/27/23 17:20	WA VPH	U
n-Octane	ND	---	5	ug/L	1	03/27/23 17:20	WA VPH	U
n-Decane	ND	---	5	ug/L	1	03/27/23 17:20	WA VPH	U
n-Dodecane	ND	---	5	ug/L	1	03/27/23 17:20	WA VPH	U
Batch: BLC0560								
Surrogate: PID: 2,5-Dibromotoluene		Recovery: 79.5 %		Limits: 60-140 %	1	03/27/23 17:20	WA VPH	
FID: 2,5-Dibromotoluene		81.1 %		60-140 %	1	03/27/23 17:20	WA VPH	

GS-031323-11 (A3C0492-03RE1)

Matrix: WG

Batch: BLC0706

Batch: BLC0706								
C8-C10 Aliphatics	ND	---	40	ug/L	1	03/30/23 22:35	WA EPH	U
>C10-C12 Aliphatics	ND	---	40	ug/L	1	03/30/23 22:35	WA EPH	U
>C12-C16 Aliphatics	ND	---	40	ug/L	1	03/30/23 22:35	WA EPH	U
>C16-C21 Aliphatics	ND	---	40	ug/L	1	03/30/23 22:35	WA EPH	U

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ANALYTICAL REPORT

Apex Laboratories, LLC

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

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125
Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

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Analytical Resources, LLC

ANALYTICAL SAMPLE RESULTS (Subcontracted)

Washington Department of Ecology Methods

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GS-031323-11 (A3C0492-03RE1)		Matrix: WG			Batch: BLC0706			
>C21-C34 Aliphatics	ND	---	40	ug/L	1	03/30/23 22:35	WA EPH	U
C8-C10 Aromatics	ND	---	40	ug/L	1	03/30/23 15:19	WA EPH	U
>C10-C12 Aromatics	ND	---	40	ug/L	1	03/30/23 15:19	WA EPH	U
>C12-C16 Aromatics	ND	---	40	ug/L	1	03/30/23 15:19	WA EPH	U
>C16-C21 Aromatics	ND	---	40	ug/L	1	03/30/23 15:19	WA EPH	U
>C21-C34 Aromatics	ND	---	40	ug/L	1	03/30/23 15:19	WA EPH	U
Batch: BLC0706								
Surrogate: o-Terphenyl		Recovery: 77.3 %		Limits: 41-120 %	1	03/30/23 15:19	WA EPH	
1-Chloro-octadecane		54.8 %		36-120 %	1	03/30/23 22:35	WA EPH	

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QUALITY CONTROL (QC) SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes	
Batch 23C0978 - EPA 3510C (Fuels/Acid Ext.)						Water							
Blank (23C0978-BLK1)			Prepared: 03/24/23 11:47 Analyzed: 03/24/23 20:09										
NWTPH-Dx													
Diesel	ND	100	200	ug/L	1	---	---	---	---	---	---		
Oil	ND	200	400	ug/L	1	---	---	---	---	---	---		
Surr: o-Terphenyl (Surr)		Recovery: 95 %		Limits: 50-150 %		Dilution: 1x							
LCS (23C0978-BS1)			Prepared: 03/24/23 11:47 Analyzed: 03/24/23 20:30										
NWTPH-Dx													
Diesel	709	100	200	ug/L	1	1250	---	57	36-132%	---	---		
Surr: o-Terphenyl (Surr)		Recovery: 95 %		Limits: 50-150 %		Dilution: 1x							
LCS Dup (23C0978-BSD1)			Prepared: 03/24/23 11:47 Analyzed: 03/24/23 20:50										Q-19
NWTPH-Dx													
Diesel	749	100	200	ug/L	1	1250	---	60	36-132%	5	30%		
Surr: o-Terphenyl (Surr)		Recovery: 94 %		Limits: 50-150 %		Dilution: 1x							

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Portland, OR 97219Project: **Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3C0492 - 05 19 23 0514****QUALITY CONTROL (QC) SAMPLE RESULTS****Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23C0498 - EPA 5030C						Water						
Blank (23C0498-BLK1)			Prepared: 03/14/23 09:00 Analyzed: 03/15/23 10:58									
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	50.0	100	ug/L	1	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 102 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		117 %		50-150 %		"						
LCS (23C0498-BS2)			Prepared: 03/14/23 09:00 Analyzed: 03/15/23 10:31									
NWTPH-Gx (MS)												
Gasoline Range Organics	456	50.0	100	ug/L	1	500	---	91	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 99 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		107 %		50-150 %		"						
Duplicate (23C0498-DUP1)			Prepared: 03/14/23 10:44 Analyzed: 03/15/23 14:08									
QC Source Sample: Non-SDG (A3C0414-01)												
Gasoline Range Organics	953	50.0	100	ug/L	1	---	925	---	---	3	30%	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 102 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		111 %		50-150 %		"						
Duplicate (23C0498-DUP2)			Prepared: 03/14/23 10:44 Analyzed: 03/15/23 15:03									
QC Source Sample: Non-SDG (A3C0414-02)												
Gasoline Range Organics	765	50.0	100	ug/L	1	---	681	---	---	12	30%	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 101 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		110 %		50-150 %		"						

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QUALITY CONTROL (QC) SAMPLE RESULTS

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

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23C0660 - EPA 5030C						Water						
Blank (23C0660-BLK1)			Prepared: 03/17/23 06:34 Analyzed: 03/17/23 13:11									
<u>NWTPH-Gx (MS)</u>												
Gasoline Range Organics	ND	50.0	100	ug/L	1	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 94 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		103 %		50-150 %		"						
LCS (23C0660-BS2)			Prepared: 03/17/23 06:34 Analyzed: 03/17/23 12:49									
<u>NWTPH-Gx (MS)</u>												
Gasoline Range Organics	516	50.0	100	ug/L	1	500	---	103	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 96 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		98 %		50-150 %		"						
Duplicate (23C0660-DUP1)			Prepared: 03/17/23 06:34 Analyzed: 03/17/23 15:03									
<u>QC Source Sample: Non-SDG (A3C0657-01)</u>												
Gasoline Range Organics	ND	50.0	100	ug/L	1	---	ND	---	---	---	30%	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 95 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		105 %		50-150 %		"						

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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 23C0498 - EPA 5030C						Water							
Blank (23C0498-BLK1)			Prepared: 03/14/23 09:00		Analyzed: 03/15/23 10:58								
EPA 8260D													
Benzene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---		
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 112 %		Limits: 80-120 %		Dilution: 1x							
Toluene-d8 (Surr)		101 %		80-120 %		"							
4-Bromofluorobenzene (Surr)		106 %		80-120 %		"							
LCS (23C0498-BS1)			Prepared: 03/14/23 09:00		Analyzed: 03/15/23 10:04								
EPA 8260D													
Benzene	19.8	0.100	0.200	ug/L	1	20.0	---	99	80-120%	---	---		
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 103 %		Limits: 80-120 %		Dilution: 1x							
Toluene-d8 (Surr)		98 %		80-120 %		"							
4-Bromofluorobenzene (Surr)		89 %		80-120 %		"							
Duplicate (23C0498-DUP1)			Prepared: 03/14/23 10:44		Analyzed: 03/15/23 14:08								
QC Source Sample: Non-SDG (A3C0414-01)													
Benzene	ND	0.100	0.200	ug/L	1	---	ND	---	---	---	30%		
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 107 %		Limits: 80-120 %		Dilution: 1x							
Toluene-d8 (Surr)		101 %		80-120 %		"							
4-Bromofluorobenzene (Surr)		94 %		80-120 %		"							
Duplicate (23C0498-DUP2)			Prepared: 03/14/23 10:44		Analyzed: 03/15/23 15:03								
QC Source Sample: Non-SDG (A3C0414-02)													
Benzene	ND	0.100	0.200	ug/L	1	---	ND	---	---	---	30%		
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 106 %		Limits: 80-120 %		Dilution: 1x							
Toluene-d8 (Surr)		101 %		80-120 %		"							
4-Bromofluorobenzene (Surr)		95 %		80-120 %		"							
Matrix Spike (23C0498-MS1)			Prepared: 03/14/23 10:44		Analyzed: 03/15/23 16:51								CONT
QC Source Sample: Non-SDG (A3C0272-03)													
EPA 8260D													
Benzene	20.2	0.100	0.200	ug/L	1	20.0	ND	101	79-120%	---	---		
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 102 %		Limits: 80-120 %		Dilution: 1x							

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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 23C0498 - EPA 5030C							Water					
Matrix Spike (23C0498-MS1)			Prepared: 03/14/23 10:44 Analyzed: 03/15/23 16:51								CONT	
QC Source Sample: Non-SDG (A3C0272-03)												
Surr: Toluene-d8 (Surr)		Recovery: 95 %		Limits: 80-120 %		Dilution: 1x						
4-Bromofluorobenzene (Surr)		89 %		80-120 %		"						

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QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23C0660 - EPA 5030C						Water						
Blank (23C0660-BLK1)			Prepared: 03/17/23 06:34		Analyzed: 03/17/23 13:11							
EPA 8260D												
Acetone	ND	10.0	20.0	ug/L	1	---	---	---	---	---	---	
Acrylonitrile	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
Benzene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Bromobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Bromochloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Bromoform	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Bromomethane	ND	5.00	5.00	ug/L	1	---	---	---	---	---	---	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Carbon disulfide	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Chlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Chloroethane	ND	5.00	5.00	ug/L	1	---	---	---	---	---	---	
Chloroform	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Chloromethane	ND	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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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 23C0660 - EPA 5030C						Water						
Blank (23C0660-BLK1)						Prepared: 03/17/23 06:34 Analyzed: 03/17/23 13:11						
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Ethylbenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
2-Hexanone	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Methylene chloride	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Naphthalene	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Styrene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
Toluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Vinyl chloride	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
m,p-Xylene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
o-Xylene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr) Recovery: 99 % Limits: 80-120 % Dilution: 1x												

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3C0492 - 05 19 23 0514

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 23C0660 - EPA 5030C						Water						
Blank (23C0660-BLK1)			Prepared: 03/17/23 06:34		Analyzed: 03/17/23 13:11							
Surr: Toluene-d8 (Surr)		Recovery: 103 %		Limits: 80-120 %		Dilution: 1x						
4-Bromofluorobenzene (Surr)		100 %		80-120 %		"						
LCS (23C0660-BS1)			Prepared: 03/17/23 06:34		Analyzed: 03/17/23 12:18							
EPA 8260D												
Acetone	36.7	10.0	20.0	ug/L	1	40.0	---	92	80-120%	---	---	
Acrylonitrile	20.7	1.00	2.00	ug/L	1	20.0	---	103	80-120%	---	---	
Benzene	20.3	0.100	0.200	ug/L	1	20.0	---	102	80-120%	---	---	
Bromobenzene	18.4	0.250	0.500	ug/L	1	20.0	---	92	80-120%	---	---	
Bromochloromethane	20.0	0.500	1.00	ug/L	1	20.0	---	100	80-120%	---	---	
Bromodichloromethane	21.2	0.500	1.00	ug/L	1	20.0	---	106	80-120%	---	---	
Bromoform	19.3	0.500	1.00	ug/L	1	20.0	---	96	80-120%	---	---	
Bromomethane	18.5	5.00	5.00	ug/L	1	20.0	---	92	80-120%	---	---	
2-Butanone (MEK)	41.1	5.00	10.0	ug/L	1	40.0	---	103	80-120%	---	---	
n-Butylbenzene	21.4	0.500	1.00	ug/L	1	20.0	---	107	80-120%	---	---	
sec-Butylbenzene	21.9	0.500	1.00	ug/L	1	20.0	---	110	80-120%	---	---	
tert-Butylbenzene	20.7	0.500	1.00	ug/L	1	20.0	---	104	80-120%	---	---	
Carbon disulfide	18.0	5.00	10.0	ug/L	1	20.0	---	90	80-120%	---	---	
Carbon tetrachloride	19.4	0.500	1.00	ug/L	1	20.0	---	97	80-120%	---	---	
Chlorobenzene	18.8	0.250	0.500	ug/L	1	20.0	---	94	80-120%	---	---	
Chloroethane	19.6	5.00	5.00	ug/L	1	20.0	---	98	80-120%	---	---	
Chloroform	18.7	0.500	1.00	ug/L	1	20.0	---	93	80-120%	---	---	
Chloromethane	13.6	5.00	5.00	ug/L	1	20.0	---	68	80-120%	---	---	Q-55
2-Chlorotoluene	19.7	0.500	1.00	ug/L	1	20.0	---	98	80-120%	---	---	
4-Chlorotoluene	20.9	0.500	1.00	ug/L	1	20.0	---	105	80-120%	---	---	
Dibromochloromethane	19.8	0.500	1.00	ug/L	1	20.0	---	99	80-120%	---	---	
1,2-Dibromo-3-chloropropane	18.0	2.50	5.00	ug/L	1	20.0	---	90	80-120%	---	---	
1,2-Dibromoethane (EDB)	19.6	0.250	0.500	ug/L	1	20.0	---	98	80-120%	---	---	
Dibromomethane	19.7	0.500	1.00	ug/L	1	20.0	---	99	80-120%	---	---	
1,2-Dichlorobenzene	19.4	0.250	0.500	ug/L	1	20.0	---	97	80-120%	---	---	
1,3-Dichlorobenzene	19.7	0.250	0.500	ug/L	1	20.0	---	99	80-120%	---	---	
1,4-Dichlorobenzene	18.2	0.250	0.500	ug/L	1	20.0	---	91	80-120%	---	---	
Dichlorodifluoromethane	7.08	1.00	1.00	ug/L	1	20.0	---	35	80-120%	---	---	Q-55
1,1-Dichloroethane	20.3	0.200	0.400	ug/L	1	20.0	---	101	80-120%	---	---	

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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:

A3C0492 - 05 19 23 0514

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 23C0660 - EPA 5030C						Water						
LCS (23C0660-BS1)						Prepared: 03/17/23 06:34 Analyzed: 03/17/23 12:18						
1,2-Dichloroethane (EDC)	19.2	0.200	0.400	ug/L	1	20.0	---	96	80-120%	---	---	
1,1-Dichloroethene	19.0	0.200	0.400	ug/L	1	20.0	---	95	80-120%	---	---	
cis-1,2-Dichloroethene	18.9	0.200	0.400	ug/L	1	20.0	---	95	80-120%	---	---	
trans-1,2-Dichloroethene	19.6	0.200	0.400	ug/L	1	20.0	---	98	80-120%	---	---	
1,2-Dichloropropane	20.3	0.250	0.500	ug/L	1	20.0	---	101	80-120%	---	---	
1,3-Dichloropropane	20.1	0.500	1.00	ug/L	1	20.0	---	101	80-120%	---	---	
2,2-Dichloropropane	20.7	0.500	1.00	ug/L	1	20.0	---	104	80-120%	---	---	
1,1-Dichloropropene	19.6	0.500	1.00	ug/L	1	20.0	---	98	80-120%	---	---	
cis-1,3-Dichloropropene	21.2	0.500	1.00	ug/L	1	20.0	---	106	80-120%	---	---	
trans-1,3-Dichloropropene	22.3	0.500	1.00	ug/L	1	20.0	---	112	80-120%	---	---	
Ethylbenzene	20.2	0.250	0.500	ug/L	1	20.0	---	101	80-120%	---	---	
Hexachlorobutadiene	17.9	2.50	5.00	ug/L	1	20.0	---	90	80-120%	---	---	
2-Hexanone	40.1	5.00	10.0	ug/L	1	40.0	---	100	80-120%	---	---	
Isopropylbenzene	21.1	0.500	1.00	ug/L	1	20.0	---	106	80-120%	---	---	
4-Isopropyltoluene	21.9	0.500	1.00	ug/L	1	20.0	---	109	80-120%	---	---	
Methylene chloride	19.2	5.00	10.0	ug/L	1	20.0	---	96	80-120%	---	---	
4-Methyl-2-pentanone (MiBK)	44.7	5.00	10.0	ug/L	1	40.0	---	112	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	20.1	0.500	1.00	ug/L	1	20.0	---	100	80-120%	---	---	
Naphthalene	16.8	1.00	2.00	ug/L	1	20.0	---	84	80-120%	---	---	
n-Propylbenzene	20.4	0.250	0.500	ug/L	1	20.0	---	102	80-120%	---	---	
Styrene	21.8	0.500	1.00	ug/L	1	20.0	---	109	80-120%	---	---	
1,1,1,2-Tetrachloroethane	18.1	0.200	0.400	ug/L	1	20.0	---	90	80-120%	---	---	
1,1,2,2-Tetrachloroethane	20.6	0.250	0.500	ug/L	1	20.0	---	103	80-120%	---	---	
Tetrachloroethene (PCE)	18.6	0.200	0.400	ug/L	1	20.0	---	93	80-120%	---	---	
Toluene	18.6	0.500	1.00	ug/L	1	20.0	---	93	80-120%	---	---	
1,2,3-Trichlorobenzene	19.9	1.00	2.00	ug/L	1	20.0	---	100	80-120%	---	---	
1,2,4-Trichlorobenzene	19.0	1.00	2.00	ug/L	1	20.0	---	95	80-120%	---	---	
1,1,1-Trichloroethane	18.7	0.200	0.400	ug/L	1	20.0	---	94	80-120%	---	---	
1,1,2-Trichloroethane	19.4	0.250	0.500	ug/L	1	20.0	---	97	80-120%	---	---	
Trichloroethene (TCE)	18.4	0.200	0.400	ug/L	1	20.0	---	92	80-120%	---	---	
Trichlorofluoromethane	17.7	1.00	2.00	ug/L	1	20.0	---	88	80-120%	---	---	
1,2,3-Trichloropropane	19.9	0.500	1.00	ug/L	1	20.0	---	100	80-120%	---	---	
1,2,4-Trimethylbenzene	21.9	0.500	1.00	ug/L	1	20.0	---	110	80-120%	---	---	
1,3,5-Trimethylbenzene	21.8	0.500	1.00	ug/L	1	20.0	---	109	80-120%	---	---	

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Darwin Thomas, Business Development Director

Page 33 of 62



ANALYTICAL REPORT

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Tigard, OR 97223

503-718-2323

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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:

A3C0492 - 05 19 23 0514

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 23C0660 - EPA 5030C						Water						
LCS (23C0660-BS1)			Prepared: 03/17/23 06:34		Analyzed: 03/17/23 12:18							
Vinyl chloride	15.9	0.200	0.400	ug/L	1	20.0	---	80	80-120%	---	---	
m,p-Xylene	43.6	0.500	1.00	ug/L	1	40.0	---	109	80-120%	---	---	
o-Xylene	21.4	0.250	0.500	ug/L	1	20.0	---	107	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 102 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		101 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		96 %		80-120 %		"						
Duplicate (23C0660-DUP1)						Prepared: 03/17/23 06:34		Analyzed: 03/17/23 15:03				
QC Source Sample: Non-SDG (A3C0657-01)												
Acetone	ND	10.0	20.0	ug/L	1	---	ND	---	---	---	30%	
Acrylonitrile	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	30%	
Benzene	ND	0.100	0.200	ug/L	1	---	ND	---	---	---	30%	
Bromobenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Bromochloromethane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Bromoform	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Bromomethane	ND	5.00	5.00	ug/L	1	---	ND	---	---	---	30%	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Carbon disulfide	ND	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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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:****A3C0492 - 05 19 23 0514**

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 23C0660 - EPA 5030C						Water						
Duplicate (23C0660-DUP1)			Prepared: 03/17/23 06:34		Analyzed: 03/17/23 15:03							
QC Source Sample: Non-SDG (A3C0657-01)												
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	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	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Ethylbenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	---	ND	---	---	---	30%	
2-Hexanone	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Methylene chloride	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Naphthalene	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	30%	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Styrene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
Toluene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	

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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 23C0660 - EPA 5030C						Water						
Duplicate (23C0660-DUP1)			Prepared: 03/17/23 06:34 Analyzed: 03/17/23 15:03									
QC Source Sample: Non-SDG (A3C0657-01)												
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Vinyl chloride	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
m,p-Xylene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
o-Xylene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 102 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		103 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		100 %		80-120 %		"						
Matrix Spike (23C0660-MS1)						Prepared: 03/17/23 06:34 Analyzed: 03/17/23 16:10						
QC Source Sample: Non-SDG (A3C0478-04)												
EPA 8260D												
Acetone	47.9	10.0	20.0	ug/L	1	40.0	ND	120	39-160%	---	---	
Acrylonitrile	24.6	1.00	2.00	ug/L	1	20.0	ND	123	63-135%	---	---	
Benzene	20.4	0.100	0.200	ug/L	1	20.0	ND	102	79-120%	---	---	
Bromobenzene	19.2	0.250	0.500	ug/L	1	20.0	ND	96	80-120%	---	---	
Bromochloromethane	28.4	0.500	1.00	ug/L	1	20.0	ND	142	78-123%	---	---	Q-01
Bromodichloromethane	26.2	0.500	1.00	ug/L	1	20.0	ND	131	79-125%	---	---	Q-01
Bromoform	21.1	0.500	1.00	ug/L	1	20.0	ND	105	66-130%	---	---	
Bromomethane	24.5	5.00	5.00	ug/L	1	20.0	ND	123	53-141%	---	---	
2-Butanone (MEK)	31.3	5.00	10.0	ug/L	1	40.0	ND	78	56-143%	---	---	
n-Butylbenzene	24.6	0.500	1.00	ug/L	1	20.0	ND	123	75-128%	---	---	
sec-Butylbenzene	25.4	0.500	1.00	ug/L	1	20.0	ND	127	77-126%	---	---	Q-01
tert-Butylbenzene	24.1	0.500	1.00	ug/L	1	20.0	ND	120	78-124%	---	---	
Carbon disulfide	24.1	5.00	10.0	ug/L	1	20.0	ND	120	64-133%	---	---	
Carbon tetrachloride	25.1	0.500	1.00	ug/L	1	20.0	ND	125	72-136%	---	---	
Chlorobenzene	20.8	0.250	0.500	ug/L	1	20.0	ND	104	80-120%	---	---	
Chloroethane	25.8	5.00	5.00	ug/L	1	20.0	ND	129	60-138%	---	---	
Chloroform	24.2	0.500	1.00	ug/L	1	20.0	ND	121	79-124%	---	---	
Chloromethane	17.4	5.00	5.00	ug/L	1	20.0	ND	87	50-139%	---	---	Q-54

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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:

A3C0492 - 05 19 23 0514

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 23C0660 - EPA 5030C						Water						
Matrix Spike (23C0660-MS1)				Prepared: 03/17/23 06:34 Analyzed: 03/17/23 16:10								
QC Source Sample: Non-SDG (A3C0478-04)												
2-Chlorotoluene	21.3	0.500	1.00	ug/L	1	20.0	ND	106	79-122%	---	---	
4-Chlorotoluene	22.8	0.500	1.00	ug/L	1	20.0	ND	114	78-122%	---	---	
Dibromochloromethane	21.2	0.500	1.00	ug/L	1	20.0	ND	106	74-126%	---	---	
1,2-Dibromo-3-chloropropane	18.4	2.50	5.00	ug/L	1	20.0	ND	92	62-128%	---	---	
1,2-Dibromoethane (EDB)	20.7	0.250	0.500	ug/L	1	20.0	ND	104	77-121%	---	---	
Dibromomethane	24.3	0.500	1.00	ug/L	1	20.0	ND	121	79-123%	---	---	
1,2-Dichlorobenzene	20.8	0.250	0.500	ug/L	1	20.0	ND	104	80-120%	---	---	
1,3-Dichlorobenzene	21.4	0.250	0.500	ug/L	1	20.0	ND	107	80-120%	---	---	
1,4-Dichlorobenzene	19.8	0.250	0.500	ug/L	1	20.0	ND	99	79-120%	---	---	
Dichlorodifluoromethane	10.4	1.00	1.00	ug/L	1	20.0	ND	52	32-152%	---	---	Q-54a
1,1-Dichloroethane	25.7	0.200	0.400	ug/L	1	20.0	ND	128	77-125%	---	---	Q-01
1,2-Dichloroethane (EDC)	19.3	0.200	0.400	ug/L	1	20.0	ND	96	73-128%	---	---	
1,1-Dichloroethene	25.9	0.200	0.400	ug/L	1	20.0	ND	130	71-131%	---	---	
cis-1,2-Dichloroethene	25.2	0.200	0.400	ug/L	1	20.0	ND	126	78-123%	---	---	Q-01
trans-1,2-Dichloroethene	25.0	0.200	0.400	ug/L	1	20.0	ND	125	75-124%	---	---	Q-01
1,2-Dichloropropane	25.0	0.250	0.500	ug/L	1	20.0	ND	125	78-122%	---	---	Q-01
1,3-Dichloropropane	21.4	0.500	1.00	ug/L	1	20.0	ND	107	80-120%	---	---	
2,2-Dichloropropane	27.8	0.500	1.00	ug/L	1	20.0	ND	139	60-139%	---	---	
1,1-Dichloropropene	21.3	0.500	1.00	ug/L	1	20.0	ND	107	79-125%	---	---	
cis-1,3-Dichloropropene	20.3	0.500	1.00	ug/L	1	20.0	ND	101	75-124%	---	---	
trans-1,3-Dichloropropene	23.4	0.500	1.00	ug/L	1	20.0	ND	117	73-127%	---	---	
Ethylbenzene	22.9	0.250	0.500	ug/L	1	20.0	ND	114	79-121%	---	---	
Hexachlorobutadiene	20.2	2.50	5.00	ug/L	1	20.0	ND	101	66-134%	---	---	
2-Hexanone	42.0	5.00	10.0	ug/L	1	40.0	ND	105	57-139%	---	---	
Isopropylbenzene	24.2	0.500	1.00	ug/L	1	20.0	ND	121	72-131%	---	---	
4-Isopropyltoluene	24.7	0.500	1.00	ug/L	1	20.0	ND	123	77-127%	---	---	
Methylene chloride	23.4	5.00	10.0	ug/L	1	20.0	ND	117	74-124%	---	---	
4-Methyl-2-pentanone (MiBK)	46.6	5.00	10.0	ug/L	1	40.0	ND	116	67-130%	---	---	
Methyl tert-butyl ether (MTBE)	23.9	0.500	1.00	ug/L	1	20.0	ND	119	71-124%	---	---	
Naphthalene	17.4	1.00	2.00	ug/L	1	20.0	ND	87	61-128%	---	---	
n-Propylbenzene	23.3	0.250	0.500	ug/L	1	20.0	ND	117	76-126%	---	---	
Styrene	23.6	0.500	1.00	ug/L	1	20.0	ND	118	78-123%	---	---	
1,1,1,2-Tetrachloroethane	20.0	0.200	0.400	ug/L	1	20.0	ND	100	78-124%	---	---	

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Darwin Thomas, Business Development Director

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ANALYTICAL REPORT

Apex Laboratories, LLC

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

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125
Portland, OR 97219Project: Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3C0492 - 05 19 23 0514

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 23C0660 - EPA 5030C						Water						
Matrix Spike (23C0660-MS1)			Prepared: 03/17/23 06:34		Analyzed: 03/17/23 16:10							
QC Source Sample: Non-SDG (A3C0478-04)												
1,1,2,2-Tetrachloroethane	22.2	0.250	0.500	ug/L	1	20.0	ND	111	71-121%	---	---	
Tetrachloroethene (PCE)	22.1	0.200	0.400	ug/L	1	20.0	ND	110	74-129%	---	---	
Toluene	21.0	0.500	1.00	ug/L	1	20.0	ND	105	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	19.8	1.00	2.00	ug/L	1	20.0	ND	99	69-130%	---	---	
1,1,1-Trichloroethane	22.4	0.200	0.400	ug/L	1	20.0	ND	112	74-131%	---	---	
1,1,2-Trichloroethane	20.8	0.250	0.500	ug/L	1	20.0	ND	104	80-120%	---	---	
Trichloroethene (TCE)	22.2	0.200	0.400	ug/L	1	20.0	ND	111	79-123%	---	---	
Trichlorofluoromethane	25.8	1.00	2.00	ug/L	1	20.0	ND	129	65-141%	---	---	
1,2,3-Trichloropropane	20.4	0.500	1.00	ug/L	1	20.0	ND	102	73-122%	---	---	
1,2,4-Trimethylbenzene	24.2	0.500	1.00	ug/L	1	20.0	ND	121	76-124%	---	---	
1,3,5-Trimethylbenzene	24.0	0.500	1.00	ug/L	1	20.0	ND	120	75-124%	---	---	
Vinyl chloride	21.3	0.200	0.400	ug/L	1	20.0	ND	107	58-137%	---	---	
m,p-Xylene	49.2	0.500	1.00	ug/L	1	40.0	ND	123	80-121%	---	---	Q-01
o-Xylene	23.4	0.250	0.500	ug/L	1	20.0	ND	117	78-122%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 107 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		100 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		94 %		80-120 %		"						

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Page 38 of 62



ANALYTICAL REPORT

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6700 S.W. Sandburg Street

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503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3C0492 - 05 19 23 0514

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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ANALYTICAL REPORT

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503-718-2323

ORELAP ID: OR100062

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6720 SW Macadam Ave. Suite 125

Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3C0492 - 05 19 23 0514

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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Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3C0492 - 05 19 23 0514

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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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:

A3C0492 - 05 19 23 0514

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 23C0809 - EPA 3015A						Water						
Blank (23C0809-BLK1)			Prepared: 03/21/23 12:08		Analyzed: 03/22/23 01:32							
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	0.118	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 (23C0809-BS1)

Prepared: 03/21/23 12:08 Analyzed: 03/22/23 01:37

EPA 6020B												
Aluminum	2750	25.0	50.0	ug/L	1	2780	---	99	80-120%	---	---	
Antimony	26.2	0.500	1.00	ug/L	1	27.8	---	94	80-120%	---	---	
Arsenic	53.5	0.500	1.00	ug/L	1	55.6	---	96	80-120%	---	---	
Barium	56.0	1.00	2.00	ug/L	1	55.6	---	101	80-120%	---	---	
Beryllium	25.4	0.100	0.200	ug/L	1	27.8	---	92	80-120%	---	---	
Cadmium	53.2	0.100	0.200	ug/L	1	55.6	---	96	80-120%	---	---	
Chromium	53.4	1.00	2.00	ug/L	1	55.6	---	96	80-120%	---	---	
Copper	55.3	1.00	2.00	ug/L	1	55.6	---	99	80-120%	---	---	
Iron	2770	25.0	50.0	ug/L	1	2780	---	100	80-120%	---	---	
Lead	50.4	0.110	0.200	ug/L	1	55.6	---	91	80-120%	---	---	
Manganese	54.1	0.500	1.00	ug/L	1	55.6	---	97	80-120%	---	---	
Mercury	0.934	0.0400	0.0800	ug/L	1	1.11	---	84	80-120%	---	---	

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125
Portland, OR 97219Project: **Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3C0492 - 05 19 23 0514**

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 23C0809 - EPA 3015A						Water						
LCS (23C0809-BS1)			Prepared: 03/21/23 12:08			Analyzed: 03/22/23 01:37						
Nickel	56.1	1.00	2.00	ug/L	1	55.6	---	101	80-120%	---	---	B-02
Selenium	26.6	0.500	1.00	ug/L	1	27.8	---	96	80-120%	---	---	
Silver	25.7	0.100	0.200	ug/L	1	27.8	---	92	80-120%	---	---	
Thallium	26.3	0.100	0.200	ug/L	1	27.8	---	95	80-120%	---	---	
Vanadium	52.9	1.00	2.00	ug/L	1	55.6	---	95	80-120%	---	---	
Zinc	53.6	2.00	4.00	ug/L	1	55.6	---	96	80-120%	---	---	
Duplicate (23C0809-DUP1)			Prepared: 03/21/23 12:08			Analyzed: 03/22/23 02:01						
QC Source Sample: Non-SDG (A3C0365-01)												
Aluminum	ND	25.0	50.0	ug/L	1	---	25.8	---	---	***	20%	J
Antimony	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	20%	
Arsenic	4.40	0.500	1.00	ug/L	1	---	4.45	---	---	1	20%	
Barium	68.1	1.00	2.00	ug/L	1	---	68.5	---	---	0.5	20%	
Beryllium	ND	0.100	0.200	ug/L	1	---	ND	---	---	---	20%	
Cadmium	ND	0.100	0.200	ug/L	1	---	ND	---	---	---	20%	
Chromium	5.06	1.00	2.00	ug/L	1	---	5.35	---	---	6	20%	
Copper	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	20%	
Lead	ND	0.110	0.200	ug/L	1	---	ND	---	---	---	20%	
Manganese	1880	0.500	1.00	ug/L	1	---	1890	---	---	0.3	20%	
Mercury	ND	0.0400	0.0800	ug/L	1	---	ND	---	---	---	20%	
Nickel	3.52	1.00	2.00	ug/L	1	---	3.52	---	---	0.07	20%	
Silver	ND	0.100	0.200	ug/L	1	---	ND	---	---	---	20%	
Thallium	ND	0.100	0.200	ug/L	1	---	ND	---	---	---	20%	
Vanadium	1.04	1.00	2.00	ug/L	1	---	1.09	---	---	4	20%	
Zinc	ND	2.00	4.00	ug/L	1	---	ND	---	---	---	20%	
Duplicate (23C0809-DUP2)			Prepared: 03/21/23 12:08			Analyzed: 03/22/23 17:25						
QC Source Sample: Non-SDG (A3C0365-01RE1)												
Iron	33200	25.0	50.0	ug/L	1	---	33600	---	---	1	20%	Q-16
Selenium	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	20%	Q-16

Matrix Spike (23C0809-MS1)

Prepared: 03/21/23 12:08 Analyzed: 03/22/23 02:06

QC Source Sample: Non-SDG (A3C0365-01)

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

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503-718-2323

ORELAP ID: OR100062

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6720 SW Macadam Ave. Suite 125

Portland, OR 97219

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

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3C0492 - 05 19 23 0514

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 23C0809 - EPA 3015A						Water						
Matrix Spike (23C0809-MS1)			Prepared: 03/21/23 12:08		Analyzed: 03/22/23 02:06							
QC Source Sample: Non-SDG (A3C0365-01)												
EPA 6020B												
Aluminum	2740	25.0	50.0	ug/L	1	2780	25.8	98	75-125%	---	---	
Antimony	28.0	0.500	1.00	ug/L	1	27.8	ND	101	75-125%	---	---	
Arsenic	59.0	0.500	1.00	ug/L	1	55.6	4.45	98	75-125%	---	---	
Barium	127	1.00	2.00	ug/L	1	55.6	68.5	105	75-125%	---	---	
Beryllium	27.8	0.100	0.200	ug/L	1	27.8	ND	100	75-125%	---	---	
Cadmium	55.0	0.100	0.200	ug/L	1	55.6	ND	99	75-125%	---	---	
Chromium	58.1	1.00	2.00	ug/L	1	55.6	5.35	95	75-125%	---	---	
Copper	53.8	1.00	2.00	ug/L	1	55.6	ND	97	75-125%	---	---	
Lead	49.6	0.110	0.200	ug/L	1	55.6	ND	89	75-125%	---	---	
Manganese	1960	0.500	1.00	ug/L	1	55.6	1890	135	75-125%	---	---	Q-65
Mercury	0.924	0.0400	0.0800	ug/L	1	1.11	ND	83	75-125%	---	---	
Nickel	58.4	1.00	2.00	ug/L	1	55.6	3.52	99	75-125%	---	---	
Silver	25.3	0.100	0.200	ug/L	1	27.8	ND	91	75-125%	---	---	B-02
Thallium	25.0	0.100	0.200	ug/L	1	27.8	ND	90	75-125%	---	---	
Vanadium	55.9	1.00	2.00	ug/L	1	55.6	1.09	99	75-125%	---	---	
Zinc	55.1	2.00	4.00	ug/L	1	55.6	ND	99	75-125%	---	---	
Matrix Spike (23C0809-MS2)			Prepared: 03/21/23 12:08		Analyzed: 03/22/23 17:30							
QC Source Sample: Non-SDG (A3C0365-01RE1)												
EPA 6020B												
Iron	35200	25.0	50.0	ug/L	1	2780	33600	59	75-125%	---	---	Q-16, Q-65
Selenium	25.2	0.500	1.00	ug/L	1	27.8	ND	91	75-125%	---	---	Q-16

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ANALYTICAL REPORT

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

Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

Report ID:

A3C0492 - 05 19 23 0514

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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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:

A3C0492 - 05 19 23 0514

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: GS-031323-10 (A3C0492-02RE1)												
EPA 335.4												
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: GS-031323-11 (A3C0492-03RE1)												
EPA 335.4												
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: GS-031323-10 (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: GS-031323-11 (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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**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:****A3C0492 - 05 19 23 0514****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									
D6888-09												
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									
D6888-09												
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									
QC Source Sample: Non-SDG (A3C0365-01)												
D6888-09												
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									
QC Source Sample: Non-SDG (A3C0390-01)												
D6888-09												
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									
QC Source Sample: Non-SDG (A3C0365-01)												
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									
QC Source Sample: Non-SDG (A3C0390-01)												
Available Cyanide	0.0265	0.00101	0.00201	mg/L	1	0.0251	ND	106	82-130%	1	11%	

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ANALYTICAL REPORT

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6720 SW Macadam Ave. Suite 125
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Project Number: 000029-02.84 T-01.001E

Project Manager: John Renda

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A3C0492 - 05 19 23 0514

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%	

Apex Laboratories

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ANALYTICAL REPORT

Apex Laboratories, LLC

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Project Number: 000029-02.84 T-01.001E

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Analytical Resources, LLC

QUALITY CONTROL (QC) SAMPLE RESULTS

Washington Department of Ecology Methods

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch BLC0560 - EPA 5030C (Purge and Trap)						Water						
Blank (BLC0560-BLK1)			Prepared: 03/27/23 12:21 Analyzed: 03/27/23 16:49									
WAVPH												
C5-C6 Aliphatics	ND	---	50	ug/L	1	---	---	---	---	---	---	U
>C6-C8 Aliphatics	ND	---	50	ug/L	1	---	---	---	---	---	---	U
>C8-C10 Aliphatics	ND	---	50	ug/L	1	---	---	---	---	---	---	U
>C10-C12 Aliphatics	ND	---	50	ug/L	1	---	---	---	---	---	---	U
C8-C10 Aromatics	ND	---	50	ug/L	1	---	---	---	---	---	---	U
>C10-C12 Aromatics	ND	---	50	ug/L	1	---	---	---	---	---	---	U
>C12-C13 Aromatics	ND	---	50	ug/L	1	---	---	---	---	---	---	U
Methyl tert-butyl Ether	ND	---	5	ug/L	1	---	---	---	---	---	---	U
Benzene	ND	---	5	ug/L	1	---	---	---	---	---	---	U
Toluene	ND	---	5	ug/L	1	---	---	---	---	---	---	U
Ethylbenzene	ND	---	5	ug/L	1	---	---	---	---	---	---	U
1,2,3-Trimethylbenzene	ND	---	5	ug/L	1	---	---	---	---	---	---	U
m,p-Xylene	ND	---	10	ug/L	1	---	---	---	---	---	---	U
Naphthalene	ND	---	5	ug/L	1	---	---	---	---	---	---	U
1-Methylnaphthalene	ND	---	5	ug/L	1	---	---	---	---	---	---	U
o-Xylene	ND	---	5	ug/L	1	---	---	---	---	---	---	U
n-Pentane	ND	---	5	ug/L	1	---	---	---	---	---	---	U
n-Hexane	ND	---	5	ug/L	1	---	---	---	---	---	---	U
n-Octane	ND	---	5	ug/L	1	---	---	---	---	---	---	U
n-Decane	ND	---	5	ug/L	1	---	---	---	---	---	---	U
n-Dodecane	ND	---	5	ug/L	1	---	---	---	---	---	---	U
Surr: PID: 2,5-Dibromotoluene		Recovery: 70.6 %		Limits: 60-140 %		Dilution: 1x						
FID: 2,5-Dibromotoluene		71.6 %		60-140 %		"						

LCS (BLC0560-BS1)

Prepared: 03/27/23 12:21 Analyzed: 03/27/23 15:48

WAVPH												
C5-C6 Aliphatics	99.7	---	50	ug/L	1	---	---	---	---	---	---	
>C6-C8 Aliphatics	95.5	---	50	ug/L	1	---	---	---	---	---	---	
>C8-C10 Aliphatics	177	---	50	ug/L	1	---	---	---	---	---	---	
>C10-C12 Aliphatics	116	---	50	ug/L	1	---	---	---	---	---	---	
C8-C10 Aromatics	303	---	50	ug/L	1	---	---	---	---	---	---	

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Darwin Thomas, Business Development Director

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

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125

Portland, OR 97219

Project: **Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3C0492 - 05 19 23 0514****Analytical Resources, LLC****QUALITY CONTROL (QC) SAMPLE RESULTS****Washington Department of Ecology Methods**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch BLC0560 - EPA 5030C (Purge and Trap)						Water						
LCS (BLC0560-BS1)			Prepared: 03/27/23 12:21		Analyzed: 03/27/23 15:48							
>C10-C12 Aromatics	59.4	---	50	ug/L	1		---			---	---	U
>C12-C13 Aromatics	ND	---	50	ug/L	1		---			---	---	
Methyl tert-butyl Ether	63.1	---	5	ug/L	1	50.000	---	126	80-131%	---	---	
Benzene	49.3	---	5	ug/L	1	50.000	---	98.6	68-136%	---	---	
Toluene	56.2	---	5	ug/L	1	50.000	---	112	70-145%	---	---	
Ethylbenzene	46.7	---	5	ug/L	1	50.000	---	93.4	70-130%	---	---	
1,2,3-Trimethylbenzene	49.9	---	5	ug/L	1	50.000	---	99.8	70-130%	---	---	
m,p-Xylene	92.9	---	10	ug/L	1	100.00	---	92.9	70-133%	---	---	
Naphthalene	48.8	---	5	ug/L	1	50.000	---	97.6	70-130%	---	---	
1-Methylnaphthalene	44.3	---	5	ug/L	1	50.000	---	88.6	70-130%	---	---	
o-Xylene	51.0	---	5	ug/L	1	50.000	---	102	70-130%	---	---	
n-Pentane	55.5	---	5	ug/L	1	50.000	---	111	70-130%	---	---	
n-Hexane	52.4	---	5	ug/L	1	50.000	---	105	70-130%	---	---	
n-Octane	41.2	---	5	ug/L	1	50.000	---	82.4	56-120%	---	---	
n-Decane	47.5	---	5	ug/L	1	50.000	---	95.0	61-120%	---	---	
n-Dodecane	57.7	---	5	ug/L	1	50.000	---	115	70-130%	---	---	
Surr: PID: 2,5-Dibromotoluene		Recovery: 84.7 %		Limits: 60-140 %		Dilution: 1x						
FID: 2,5-Dibromotoluene		84.9 %		60-140 %		"						

LCS Dup (BLC0560-BSD1)

Prepared: 03/27/23 12:21 Analyzed: 03/27/23 16:18

WAVPH												
C5-C6 Aliphatics	88.9	---	50	ug/L	1	---	---	---	---	11.5	30%	
>C6-C8 Aliphatics	77.5	---	50	ug/L	1	---	---	---	---	20.8	30%	
>C8-C10 Aliphatics	168	---	50	ug/L	1	---	---	---	---	5.17	30%	
>C10-C12 Aliphatics	121	---	50	ug/L	1	---	---	---	---	3.63	30%	
C8-C10 Aromatics	330	---	50	ug/L	1	---	---	---	---	8.46	30%	
>C10-C12 Aromatics	64.1	---	50	ug/L	1	---	---	---	---	7.61	30%	
>C12-C13 Aromatics	ND	---	50	ug/L	1	---	---	---	---	11.9	30%	U
Methyl tert-butyl Ether	66.9	---	5	ug/L	1	50.000	---	134	80-131%	5.85	30%	*
Benzene	53.3	---	5	ug/L	1	50.000	---	107	68-136%	7.80	30%	
Toluene	60.0	---	5	ug/L	1	50.000	---	120	70-145%	6.54	30%	
Ethylbenzene	51.1	---	5	ug/L	1	50.000	---	102	70-130%	9.00	30%	

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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:

A3C0492 - 05 19 23 0514

Analytical Resources, LLC

QUALITY CONTROL (QC) SAMPLE RESULTS

Washington Department of Ecology Methods

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch BLC0560 - EPA 5030C (Purge and Trap)						Water						
LCS Dup (BLC0560-BSD1)			Prepared: 03/27/23 12:21		Analyzed: 03/27/23 16:18							
1,2,3-Trimethylbenzene	50.8	---	5	ug/L	1	50.000	---	102	70-130%	1.79	30%	
m,p-Xylene	103	---	10	ug/L	1	100.00	---	103	70-133%	10.7	30%	
Naphthalene	52.9	---	5	ug/L	1	50.000	---	106	70-130%	8.06	30%	
1-Methylnaphthalene	49.9	---	5	ug/L	1	50.000	---	99.8	70-130%	11.9	30%	
o-Xylene	56.0	---	5	ug/L	1	50.000	---	112	70-130%	9.35	30%	
n-Pentane	52.6	---	5	ug/L	1	50.000	---	105	70-130%	5.37	30%	
n-Hexane	49.2	---	5	ug/L	1	50.000	---	98.4	70-130%	6.30	30%	
n-Octane	40.9	---	5	ug/L	1	50.000	---	81.8	56-120%	0.731	30%	
n-Decane	48.1	---	5	ug/L	1	50.000	---	96.2	61-120%	1.26	30%	
n-Dodecane	62.7	---	5	ug/L	1	50.000	---	125	70-130%	8.31	30%	
Surr: PID: 2,5-Dibromotoluene		Recovery: 87.0 %		Limits: 60-140 %		Dilution: 1x						
FID: 2,5-Dibromotoluene		86.0 %		60-140 %		"						

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Analytical Resources, LLC

QUALITY CONTROL (QC) SAMPLE RESULTS

Washington Department of Ecology Methods

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch BLC0706 - EPA 3510C SepF						Water						
Blank (BLC0706-BLK1)			Prepared: 03/27/23 15:48		Analyzed: 03/30/23 21:23							
WAEPH												
C8-C10 Aliphatics	ND	---	40	ug/L	1	---	---	---	---	---	---	U
>C10-C12 Aliphatics	ND	---	40	ug/L	1	---	---	---	---	---	---	U
>C12-C16 Aliphatics	ND	---	40	ug/L	1	---	---	---	---	---	---	U
>C16-C21 Aliphatics	ND	---	40	ug/L	1	---	---	---	---	---	---	U
>C21-C34 Aliphatics	ND	---	40	ug/L	1	---	---	---	---	---	---	U
Surr: 1-Chloro-octadecane		Recovery: 51.8 %		Limits: 36-120 %		Dilution: 1x						

Blank (BLC0706-BLK2)				Prepared: 03/27/23 15:48 Analyzed: 03/30/23 14:06								
WAEPH												
C8-C10 Aromatics	ND	---	40	ug/L	1	---	---	---	---	---	---	U
>C10-C12 Aromatics	ND	---	40	ug/L	1	---	---	---	---	---	---	U
>C12-C16 Aromatics	ND	---	40	ug/L	1	---	---	---	---	---	---	U
>C16-C21 Aromatics	ND	---	40	ug/L	1	---	---	---	---	---	---	U
>C21-C34 Aromatics	ND	---	40	ug/L	1	---	---	---	---	---	---	U
Surr: o-Terphenyl		Recovery: 80.4 %		Limits: 41-120 %		Dilution: 1x						

LCS (BLC0706-BS1)				Prepared: 03/27/23 15:48 Analyzed: 03/30/23 21:47							
WAEPH											
C8-C10 Aliphatics	92.8	---	40	ug/L	1	300.00	---	30.9	12-130%	---	---
>C10-C12 Aliphatics	119	---	40	ug/L	1	300.00	---	39.7	10-130%	---	---
>C12-C16 Aliphatics	177	---	40	ug/L	1	300.00	---	58.9	35-130%	---	---
>C16-C21 Aliphatics	235	---	40	ug/L	1	300.00	---	78.3	45-130%	---	---
>C21-C34 Aliphatics	231	---	40	ug/L	1	300.00	---	76.9	19-130%	---	---
Surr: 1-Chloro-octadecane		Recovery: 49.5 %		Limits: 36-120 %		Dilution: 1x					

LCS (BLC0706-BS2)				Prepared: 03/27/23 15:48 Analyzed: 03/30/23 14:31							
<u>WA EPH</u>											
>C10-C12 Aromatics	163	---	40	ug/L	1	300.00	---	54.3	12-130%	---	---
>C12-C16 Aromatics	147	---	40	ug/L	1	300.00	---	49.1	31-130%	---	---
>C16-C21 Aromatics	419	---	40	ug/L	1	600.00	---	69.8	48-130%	---	---

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Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062**Anchor QEA, LLC**6720 SW Macadam Ave. Suite 125
Portland, OR 97219Project: **Gasco-MGP Only Mon. Wells 1Q 2023 Perf. Mon.**Project Number: **000029-02.84 T-01.001E**Project Manager: **John Renda****Report ID:****A3C0492 - 05 19 23 0514****Analytical Resources, LLC****QUALITY CONTROL (QC) SAMPLE RESULTS****Washington Department of Ecology Methods**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch BLC0706 - EPA 3510C SepF						Water						
LCS (BLC0706-BS2)			Prepared: 03/27/23 15:48		Analyzed: 03/30/23 14:31							
>C21-C34 Aromatics	172	---	40	ug/L	1	300.00	---	57.3	33-130%	---	---	
Surr: o-Terphenyl		Recovery: 68.1 %		Limits: 41-120 %		Dilution: 1x						
LCS Dup (BLC0706-BSD1)			Prepared: 03/27/23 15:48		Analyzed: 03/30/23 22:11							
WAEPH												
C8-C10 Aliphatics	95.2	---	40	ug/L	1	300.00	---	31.7	12-130%	2.55	30%	
>C10-C12 Aliphatics	152	---	40	ug/L	1	300.00	---	50.8	10-130%	24.4	30%	
>C12-C16 Aliphatics	192	---	40	ug/L	1	300.00	---	64.1	35-130%	8.35	30%	
>C16-C21 Aliphatics	252	---	40	ug/L	1	300.00	---	84.1	45-130%	7.14	30%	
>C21-C34 Aliphatics	259	---	40	ug/L	1	300.00	---	86.2	19-130%	11.4	30%	
Surr: 1-Chloro-octadecane		Recovery: 57.7 %		Limits: 36-120 %		Dilution: 1x						
LCS Dup (BLC0706-BSD2)			Prepared: 03/27/23 15:48		Analyzed: 03/30/23 14:55							
WAEPH												
>C10-C12 Aromatics	128	---	40	ug/L	1	300.00	---	42.7	12-130%	23.9	30%	
>C12-C16 Aromatics	163	---	40	ug/L	1	300.00	---	54.5	31-130%	10.4	30%	
>C16-C21 Aromatics	512	---	40	ug/L	1	600.00	---	85.3	48-130%	20.0	30%	
>C21-C34 Aromatics	218	---	40	ug/L	1	300.00	---	72.7	33-130%	23.8	30%	
Surr: o-Terphenyl		Recovery: 82.7 %		Limits: 41-120 %		Dilution: 1x						

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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:****A3C0492 - 05 19 23 0514****SAMPLE PREPARATION INFORMATION****Diesel and/or Oil Hydrocarbons by NWTPH-Dx**

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

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23C0978							
A3C0492-03	WG	NWTPH-Dx	03/13/23 15:00	03/24/23 11:47	1060mL/5mL	1000mL/5mL	0.94

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

Prep: EPA 5030C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23C0660							
A3C0492-03RE1	WG	NWTPH-Gx (MS)	03/13/23 15:00	03/17/23 11:43	5mL/5mL	5mL/5mL	1.00

Volatile Organic Compounds by EPA 8260D

Prep: EPA 5030C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23C0660							
A3C0492-01RE1	WG	EPA 8260D	03/13/23 10:15	03/17/23 11:43	5mL/5mL	5mL/5mL	1.00
A3C0492-02RE1	WG	EPA 8260D	03/13/23 11:55	03/17/23 11:43	5mL/5mL	5mL/5mL	1.00
A3C0492-03RE1	WG	EPA 8260D	03/13/23 15:00	03/17/23 11:43	5mL/5mL	5mL/5mL	1.00
A3C0492-04	W	EPA 8260D	03/13/23 15:30	03/17/23 11:43	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							
A3C0492-01	WG	EPA 8270E LVI	03/13/23 10:15	03/16/23 09:18	89.96mL/5mL	125mL/5mL	1.39
A3C0492-02	WG	EPA 8270E LVI	03/13/23 11:55	03/16/23 09:18	111.96mL/5mL	125mL/5mL	1.12
A3C0492-03	WG	EPA 8270E LVI	03/13/23 15:00	03/16/23 09:18	114.57mL/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: 23C0809							
A3C0492-01	WG	EPA 6020B	03/13/23 10:15	03/21/23 12:08	45mL/50mL	45mL/50mL	1.00
A3C0492-01RE1	WG	EPA 6020B	03/13/23 10:15	03/21/23 12:08	45mL/50mL	45mL/50mL	1.00
A3C0492-02	WG	EPA 6020B	03/13/23 11:55	03/21/23 12:08	45mL/50mL	45mL/50mL	1.00

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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:****A3C0492 - 05 19 23 0514****SAMPLE PREPARATION INFORMATION****Total Metals by EPA 6020B (ICPMS)****Prep: EPA 3015A**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
A3C0492-02RE1	WG	EPA 6020B	03/13/23 11:55	03/21/23 12:08	45mL/50mL	45mL/50mL	1.00
A3C0492-03	WG	EPA 6020B	03/13/23 15:00	03/21/23 12:08	45mL/50mL	45mL/50mL	1.00
A3C0492-03RE1	WG	EPA 6020B	03/13/23 15:00	03/21/23 12:08	45mL/50mL	45mL/50mL	1.00

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

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23C0732							
A3C0492-01	WG	EPA 335.4	03/13/23 10:15	03/20/23 09:32	6mL/6mL	6mL/6mL	1.00
Batch: 23C0919							
A3C0492-02RE1	WG	EPA 335.4	03/13/23 11:55	03/23/23 12:08	6mL/6mL	6mL/6mL	1.00
A3C0492-03RE1	WG	EPA 335.4	03/13/23 15:00	03/23/23 12:08	6mL/6mL	6mL/6mL	1.00

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

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23C0622							
A3C0492-01	WG	D6888-09	03/13/23 10:15	03/16/23 10:48	5mL/5mL	5mL/5mL	1.00
A3C0492-02	WG	D6888-09	03/13/23 11:55	03/16/23 10:48	5mL/5mL	5mL/5mL	1.00
A3C0492-03	WG	D6888-09	03/13/23 15:00	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							
A3C0492-01	WG	D4282-02	03/13/23 10:15	03/17/23 13:59	3mL/3mL	3mL/3mL	1.00
A3C0492-02	WG	D4282-02	03/13/23 11:55	03/17/23 13:59	3mL/3mL	3mL/3mL	1.00
A3C0492-03	WG	D4282-02	03/13/23 15:00	03/17/23 13:59	3mL/3mL	3mL/3mL	1.00

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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:

A3C0492 - 05 19 23 0514

Analytical Resources, LLC

SAMPLE PREPARATION INFORMATION

Washington Department of Ecology Methods

Prep: EPA 3510C SepF

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<u>Batch: BLC0706</u>							
A3C0492-03RE1	WG	WA EPH	03/13/23 15:00	03/27/23 15:48	500mL/1mL	500mL/1mL	1.00

Prep: EPA 5030C (Purge and Trap)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<u>Batch: BLC0560</u>							
A3C0492-03	WG	WA VPH	03/13/23 15:00	03/27/23 12:21	10mL/10ml	10mL/10ml	1.00

Apex Laboratories

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

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

Anchor QEA, LLC

6720 SW Macadam Ave. Suite 125
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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.)
- CONT** The Sample Container provided for this analysis was not provided by Apex Laboratories, and has not been verified as part of the Quality System.
- J** Estimated Result. Result detected below the lowest point of the calibration curve, but above the specified MDL.
- Q-01** Spike recovery and/or RPD is outside acceptance limits.
- Q-05** Analyses are not controlled on RPD values from sample and duplicate concentrations that are below 5 times the reporting level.
- Q-16** Reanalysis of an original Batch QC sample.
- Q-19** Blank Spike Duplicate (BSD) sample analyzed in place of Matrix Spike/Duplicate samples due to limited sample amount available for analysis.
- Q-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 -12%. 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 -45%. 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-65** Spike recovery is estimated due to the high analyte concentration of the source sample.
- R-02** The Reporting Limit for this analyte has been raised to account for interference from coeluting organic compounds present in the sample.
- S-05** Surrogate recovery is estimated due to sample dilution required for high analyte concentration and/or matrix interference.
- V-01** Sample aliquot taken from VOA vial with headspace (air bubble greater than 6 mm diameter).
- V-25** SIM Analysis was not performed due to the high analyte concentration in this sample.

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

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REPORTING NOTES AND CONVENTIONS:

Abbreviations:

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

Detection Limits: Limit of Detection (LOD)

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

Reporting Limits: Limit of Quantitation (LOQ)

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

Reporting Conventions:

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

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

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

See Percent Solids section for details of dry weight analysis.

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

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

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

QC Source:

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

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

Miscellaneous Notes:

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

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

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REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks:

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

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

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

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

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

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

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

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

Soil and Sediment Samples:

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

Sampling and Preservation Notes:

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

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

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

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

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LABORATORY ACCREDITATION INFORMATION

ORELAP Certification ID: OR100062 (Primary Accreditation) -

EPA ID: OR01039

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

Apex Laboratories

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

Secondary Accreditations

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

Subcontract Laboratory Accreditations

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

Field Testing Parameters

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

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CHAIN OF CUSTODY

APEX LABS

6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323

Lab # 830042 COC 1 of 1

Company: <u>Anchor QEA</u>	Project Mgr: <u>John Renda</u>	Project Name: <u>Gasco - MGP Only Mon. Wells 1Q 2023 Perf. Mon.</u>	Project #: <u>000029-02.84</u>																			
Address: <u>6720 S. Macadam Av. #25 Portland, OR</u>		Phone: <u>503-670-1108</u>	Email: <u>renda@anchor-qea.com</u>																			
Sampled by: <u>Doug Lifforn</u>																						
Site Location: <u>OR WA CA</u>	AK ID <u>---</u>																					
SAMPLE ID	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-RCID	NWTPH-GX	8260 BTEX	8260 RBDM VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIM PAHs EXT	8270 Semi-Volat. Full List	8082 PCBs	8081 Pesticides	RCRA Metals (8)	Priority Metals (13)	TOTAL DISC. (8)	TCLP Metals (8)	TOTAL ANAL.	Hold Sample	Frozen Archive	
<u>GS-031323-09</u>	<u>3/13/23</u>	<u>1015</u>	<u>WG</u>	<u>10</u>																		
<u>GS-031323-10</u>	<u>1155</u>	<u>10</u>																				
<u>GS-031323-11</u>	<u>1500</u>	<u>17</u>																				
<u>TS-031323</u>	<u>1530</u>	<u>W</u>		<u>1</u>																		
<p>SPECIAL INSTRUCTIONS: <u>Short hold time -> Free On</u></p> <p>Standard Turn Around Time (TAT) = 10 Business Days</p> <p>TAT Requested (circle): 1 Day 2 Day 3 Day 5 Day <u>Standard</u> Other: _____</p>																						
<p>RELINQUISHED BY: Signature: <u>Doug Lifforn</u> Date: <u>3/14/23</u></p> <p>Printed Name: <u>Doug Lifforn</u> Time: <u>07:56</u></p> <p>Company: <u>Anchor QEA</u></p>												<p>RECEIVED BY: Signature: <u>[Signature]</u> Date: <u>3/14/23</u></p> <p>Printed Name: <u>[Name]</u> Time: <u>[Time]</u></p> <p>Company: <u>APEX</u></p>										

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Report ID:

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APEX LABS COOLER RECEIPT FORM

Client: Anchor QEA Element WO#: A3 C0492
Project/Project #: Gasco-MGP only Mon. Wells 1Q 2023 Perf. Mon.
000029-02.84 T-01.001E

Delivery Info:

Date/time received: 3/14/23 @ 756 By: RK
Delivered by: Apex ☒ Client ☐ ESS ☐ FedEx ☐ UPS ☐ Radio ☐ Morgan ☐ SDS ☐ Evergreen ☐ Other ☐

Cooler Inspection Date/time inspected: 3/14/23 @ 845 By: JS

Chain of Custody included? Yes ☒ No ☐

Signed/dated by client? Yes ☒ No ☐

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	<u>3.8</u>						
Custody seals? (Y/N)	<u>N</u>						
Received on ice? (Y/N)	<u>Y</u>						
Temp. blanks? (Y/N)	<u>Y</u>						
Ice type: (Gel/Real/Other)	<u>real</u>						
Condition (In/Out):	<u>In</u>						

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

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

Out of temperature samples form initiated? Yes ☒ No ☐

Sample Inspection: Date/time inspected: 3/14/23 @ 1428 By: ARK

All samples intact? Yes ☒ No ☐ Comments: _____

Bottle labels/COCs agree? Yes ☒ No ☐ Comments: _____

COC/container discrepancies form initiated? Yes ☐ No ☒

Containers/volumes received appropriate for analysis? Yes ☒ No ☐ Comments: _____

Do VOA vials have visible headspace? Yes ☒ No ☐ NA ☐

Comments TB #3176 11.45

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

Comments: -09 NaOH Poly pH=7

Additional information:

Labeled by:

ARK

Witness:

JS

Cooler Inspected by:

ARK

Form Y-003 R-00

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