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## Technical Report for

### Occidental Petroleum Corporation

Kerr-McGee: GWA\_Griswold\_27N\_11HZ

FID:753915 Reg:Vol. Freq.:IN

SGS Job Number: DA62528

Sampling Date: 02/29/24

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Total number of pages in report: 50



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable unless noted in the narrative, comments or footnotes.

A handwritten signature in black ink, appearing to read 'Eric Hoffman'.

Eric Hoffman

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Certifications: CO (CO00049), ND (R-027), UT (NELAP CO00049), LA (LA150028), TX (T104704511), WY (8TMS-L) HI (CO00049), NJ (CO011), NV (CO00049), AK (CO00049), CA (3076), and NC (08701)

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Test results relate only to samples analyzed.

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## Sample Summary

**Occidental Petroleum Corporation**

**Job No: DA62528**

**Kerr-McGee: GWA\_Griswold\_27N\_11HZ**  
**Project No: FID:753915 Reg:Vol. Freq.:IN**

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
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**This report contains results reported as ND = Not detected. The following applies:**  
**Organics ND = Not detected above the MDL**

DA62528-1	02/29/24	11:20 MH	03/01/24	AQ	Ground Water	BW_AUSTIN_258678 SWSW_11_1N_66W
DA62528-1A	02/29/24	11:20 MH	03/01/24	AQ	Ground Water	BW_AUSTIN_258678 SWSW_11_1N_66W
DA62528-1B	02/29/24	11:20 MH	03/01/24	AQ	Ground Water	BW_AUSTIN_258678 SWSW_11_1N_66W
DA62528-1F	02/29/24	11:20 MH	03/01/24	AQ	Groundwater Filtered	BW_AUSTIN_258678 SWSW_11_1N_66W

## CASE NARRATIVE / CONFORMANCE SUMMARY

**Client:** Occidental Petroleum Corporation

**Job No:** DA62528

**Site:** Kerr-McGee: GWA\_Griswold\_27N\_11HZ

**Report Date** 3/26/2024 1:41:19 AM

On 03/01/2024, 1 sample(s), 0 Trip Blank(s), 0 Equip. Blanks and 0 Field Blank(s) were received at SGS North America Inc. (SGS) at a temperature of 2 °C. The samples were intact and properly preserved, unless noted below. An SGS Job Number of DA62528 was assigned to the project. The lab sample ID, client sample ID, and date of sample collection are detailed in the report's Results Summary.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

### MS Volatiles By Method SW846 8260B

**Matrix:** AQ

**Batch ID:** V5V3929

- All samples were analyzed within the recommended method holding time.
- Sample(s) DA62445-19MS, DA62445-19MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

### GC Volatiles By Method RSK175 MOD

**Matrix:** AQ

**Batch ID:** GFK339

- All samples were analyzed within the recommended method holding time.
- Sample(s) DA62528-1AMS, DA62528-1AMSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

### GC Volatiles By Method SW846 8015D

**Matrix:** AQ

**Batch ID:** GGA2846

- All samples were analyzed within the recommended method holding time.
- Sample(s) DA62445-14MS, DA62445-14MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

### GC/LC Semi-volatiles By Method SW846 8015C

**Matrix:** AQ

**Batch ID:** L:OP24714

- The data for SW846 8015C meets quality control requirements.
- DA62528-1: Analysis performed at SGS Scott, LA.

### Metals Analysis By Method EPA 200.8

**Matrix:** AQ

**Batch ID:** MP39010

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) DA62528-1FMS, DA62528-1FMDS were used as the QC samples for the metals analysis.
- The matrix spike (MS) recovery(s) of Sodium are outside control limits. Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.
- DA62528-1F for Potassium: Internal standard out of range at lower dilutions.

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## General Chemistry By Method EPA 300.0

**Matrix:** AQ                      **Batch ID:** GP36124

- All samples were prepared within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) DA62422-1MS, DA62422-1MSD were used as the QC samples for the Bromide, Chloride, Fluoride, Nitrogen, Nitrate, Nitrogen, Nitrite, Sulfate, Bromide analysis.
- DA62528-1 for Nitrogen, Nitrite: Elevated detection limit due to matrix interference.

**Matrix:** AQ                      **Batch ID:** R62690

- The data for EPA 300.0 meets quality control requirements.
- DA62528-1 for Nitrogen, Nitrate + Nitrite: Calculated as: (Nitrogen, Nitrate) + (Nitrogen, Nitrite)

## General Chemistry By Method EPA 365.1

**Matrix:** AQ                      **Batch ID:** GP36147

- All samples were prepared within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) DA62663-1DUP, DA62663-1MSD were used as the QC samples for the Phosphorus, Total analysis.
- The matrix spike (MS) recovery(s) of Phosphorus, Total are outside control limits. Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

## General Chemistry By Method HACH IRB-BART-NOCERT

**Matrix:** AQ                      **Batch ID:** MB1743

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) DA62528-1BDUP were used as the QC samples for the Iron-Related Bacteria analysis.
- DA62528-1B for Iron-Related Bacteria: Certification for this test is not offered.

## General Chemistry By Method HC SLYM-BART-NO CERT

**Matrix:** AQ                      **Batch ID:** MB1739

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) DA62528-1BDUP were used as the QC samples for the Slime Forming Bacteria analysis.
- DA62528-1B for Slime Forming Bacteria: Certification for this test is not offered.

## General Chemistry By Method HC SRB-BART-NO CERT

**Matrix:** AQ                      **Batch ID:** MB1741

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) DA62528-1BDUP were used as the QC samples for the Sulfate Reducing Bacteria analysis.
- DA62528-1B for Sulfate Reducing Bacteria: Certification for this test is not offered.

### General Chemistry By Method SM 2320B-2011

**Matrix:** AQ                      **Batch ID:** GN62813

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) DA62528-1DUP, DA62528-1MS, DA62528-1MSD were used as the QC samples for the Alkalinity, Total as CaCO<sub>3</sub> analysis.

**Matrix:** AQ                      **Batch ID:** GN62814

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

**Matrix:** AQ                      **Batch ID:** GN62815

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

### General Chemistry By Method SM 2510B-2011

**Matrix:** AQ                      **Batch ID:** GP36170

- Sample(s) DA62766-1DUP were used as the QC samples for the Specific Conductivity analysis.

### General Chemistry By Method SM 2540C-2011

**Matrix:** AQ                      **Batch ID:** GN62770

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) DA62542-6DUP were used as the QC samples for the Solids, Total Dissolved analysis.

### General Chemistry By Method SM1030E-2011

**Matrix:** AQ                      **Batch ID:** GN62851

- The data for SM1030E-2011 meets quality control requirements.

### General Chemistry By Method SM4500HB+-2011/9040C

**Matrix:** AQ                      **Batch ID:** GN62831

- The data for SM4500HB+-2011/9040C meets quality control requirements.
- The following samples were run outside of holding time for method SM4500HB+-2011/9040C: DA62528-1 Analysis performed past recommended hold time.

### Field Data By Method FIELD

**Matrix:** AQ                      **Batch ID:** R62702

- The data for FIELD meets quality control requirements.

SGS certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting SGS's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. This report is authorized by SGS indicated via signature on the report cover.

Tuesday, March 26, 2024

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## CASE NARRATIVE / CONFORMANCE SUMMARY

**Client:** SGS Wheat Ridge, CO

**Job No:** DA62528

**Site:** ANADACOD: Kerr-McGee: GWA\_Griswold\_27N\_11HZ

**Report Date** 3/21/2024 10:16:00 A

On 03/05/2024, 1 sample was received at SGS North America Inc. (SGS) at a temperature of 3.6 °C. The sample was intact and properly preserved, unless noted below. An SGS Job Number of DA62528 was assigned to the project. The lab sample ID, client sample ID, and date of sample collection are detailed in the report's Results Summary.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

### GC/LC Semi-volatiles By Method SW846 8015C

**Matrix:** AQ

**Batch ID:** OP24714

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

SGS certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting SGS's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. This report is authorized by SGS indicated via signature on the report cover.

Thursday, March 21, 2024

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# Summary of Hits

Job Number: DA62528  
 Account: Occidental Petroleum Corporation  
 Project: Kerr-McGee: GWA\_Griswold\_27N\_11HZ  
 Collected: 02/29/24



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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DA62528-1 BW\_AUSTIN\_258678 SWSW\_11\_1N\_66W

Fluoride	2.2	0.50			mg/l	EPA 300.0
Chloride	271	13			mg/l	EPA 300.0
Bromide	1.4	0.25			mg/l	EPA 300.0
Nitrogen, Nitrate	0.15	0.050			mg/l	EPA 300.0
Sulfate	338	13			mg/l	EPA 300.0
Nitrogen, Nitrate + Nitrite <sup>a</sup>	0.15	0.070			mg/l	EPA 300.0
Alkalinity, Bicarbonate as CaCO <sub>3</sub>	198	5.0			mg/l	SM 2320B-2011
Alkalinity, Carbonate	10.0	5.0			mg/l	SM 2320B-2011
Alkalinity, Total as CaCO <sub>3</sub>	208	5.0			mg/l	SM 2320B-2011
Cation Anion Balance	1.2				%	SM1030E-2011
Phosphorus, Total	0.013	0.010			mg/l	EPA 365.1
Solids, Total Dissolved	1150	10			mg/l	SM 2540C-2011
Specific Conductivity	2000	1.0			umhos/cm	SM 2510B-2011
pH <sup>b</sup>	8.45				su	SM4500HB+ -2011/9040C
Specific Conductivity (Field)	1983.8	0.50			umhos/cm	FIELD
pH (Field)	8.73				su	FIELD
Temperature (Field)	11.4				Deg. C	FIELD
Turbidity	0.05				NTU	FIELD
Oxygen, Dissolved (Field)	0.27				mg/l	FIELD

DA62528-1A BW\_AUSTIN\_258678 SWSW\_11\_1N\_66W

Methane	0.160	0.00080	0.00070		mg/l	RSK175 MOD
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DA62528-1B BW\_AUSTIN\_258678 SWSW\_11\_1N\_66W

Iron-Related Bacteria <sup>c</sup>	2200	25			CFU/ml	HACH IRB-BART-NOCERT
Slime Forming Bacteria <sup>c</sup>	< 500	500			CFU/ml	HC SLYM-BART-NO CERT
Sulfate Reducing Bacteria <sup>c</sup>	325	200			CFU/ml	HC SRB-BART-NO CERT

DA62528-1F BW\_AUSTIN\_258678 SWSW\_11\_1N\_66W

Barium	0.0258	0.0020			mg/l	EPA 200.8
Boron	0.106	0.040			mg/l	EPA 200.8
Calcium	16.3	0.40			mg/l	EPA 200.8
Magnesium	2.77	0.10			mg/l	EPA 200.8
Manganese	0.0192	0.0010			mg/l	EPA 200.8
Potassium <sup>d</sup>	2.76	1.0			mg/l	EPA 200.8
Sodium	405 HH	2.5			mg/l	EPA 200.8
Strontium	0.384	0.020			mg/l	EPA 200.8

(a) Calculated as: (Nitrogen, Nitrate) + (Nitrogen, Nitrite)

(b) Analysis performed past recommended hold time.

## Summary of Hits

**Job Number:** DA62528  
**Account:** Occidental Petroleum Corporation  
**Project:** Kerr-McGee: GWA\_Griswold\_27N\_11HZ  
**Collected:** 02/29/24



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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- (c) Certification for this test is not offered.
- (d) Internal standard out of range at lower dilutions.

**Sample Results**

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**Report of Analysis**

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## Report of Analysis

<b>Client Sample ID:</b> BW_AUSTIN_258678 SWSW_11_1N_66W <b>Lab Sample ID:</b> DA62528-1 <b>Matrix:</b> AQ - Ground Water <b>Method:</b> SW846 8260B <b>Project:</b> Kerr-McGee: GWA_Griswold_27N_11HZ	<b>Date Sampled:</b> 02/29/24 <b>Date Received:</b> 03/01/24 <b>Percent Solids:</b> n/a
--	---

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5V79951.D	1	03/03/24 05:24	MB	n/a	n/a	V5V3929
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

**Purgeable Aromatics**

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.60	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
1330-20-7	Xylene (total)	ND	1.0	1.0	ug/l	
	m,p-Xylene	ND	1.0	0.96	ug/l	
95-47-6	o-Xylene	ND	1.0	0.60	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		70-130%
17060-07-0	1,2-Dichloroethane-D4	98%		70-130%
2037-26-5	Toluene-D8	100%		70-130%
460-00-4	4-Bromofluorobenzene	101%		70-130%

ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> BW_AUSTIN_258678 SWSW_11_1N_66W <b>Lab Sample ID:</b> DA62528-1 <b>Matrix:</b> AQ - Ground Water <b>Method:</b> SW846 8015D <b>Project:</b> Kerr-McGee: GWA_Griswold_27N_11HZ	<b>Date Sampled:</b> 02/29/24 <b>Date Received:</b> 03/01/24 <b>Percent Solids:</b> n/a
--	---

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GA64292.D	1	03/07/24 03:02	MB	n/a	n/a	GGA2846
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.050	0.040	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	118%		60-140%		

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ND = Not detected RL = Reporting Limit E = Indicates value exceeds calibration range	MDL = Method Detection Limit J = Indicates an estimated value B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound
--	--

4.1  
4

## Report of Analysis

<b>Client Sample ID:</b> BW_AUSTIN_258678 SWSW_11_1N_66W <b>Lab Sample ID:</b> DA62528-1 <b>Matrix:</b> AQ - Ground Water <b>Method:</b> SW846 8015C SW846 3510C <b>Project:</b> Kerr-McGee: GWA_Griswold_27N_11HZ	<b>Date Sampled:</b> 02/29/24 <b>Date Received:</b> 03/01/24 <b>Percent Solids:</b> n/a
--	---

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	X0027341.D	1	03/06/24 05:57	ALA	03/05/24 08:30	L:OP24714	L:GLB2648
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1030 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	ND	0.19	0.016	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	92%		51-122%		

(a) Analysis performed at SGS Scott, LA.

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ND = Not detected RL = Reporting Limit E = Indicates value exceeds calibration range	MDL = Method Detection Limit J = Indicates an estimated value B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound
--	--

4.1  
4

## Report of Analysis

<b>Client Sample ID:</b> BW_AUSTIN_258678 SWSW_11_1N_66W	<b>Date Sampled:</b> 02/29/24
<b>Lab Sample ID:</b> DA62528-1	<b>Date Received:</b> 03/01/24
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Project:</b> Kerr-McGee: GWA_Griswold_27N_11HZ	

### General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
<b>300.0</b>							
Fluoride	2.2	0.50	mg/l	5	03/01/24 17:47	MB	EPA 300.0
Chloride	271	13	mg/l	25	03/01/24 18:01	MB	EPA 300.0
Nitrogen, Nitrite <sup>a</sup>	< 0.020	0.020	mg/l	5	03/01/24 17:47	MB	EPA 300.0
Bromide	1.4	0.25	mg/l	5	03/01/24 17:47	MB	EPA 300.0
Nitrogen, Nitrate	0.15	0.050	mg/l	5	03/01/24 17:47	MB	EPA 300.0
Sulfate	338	13	mg/l	25	03/01/24 18:01	MB	EPA 300.0
<b>300.0 NO2 + NO3O</b>							
Nitrogen, Nitrate + Nitrite <sup>b</sup>	0.15	0.070	mg/l	1	03/01/24 17:47	MB	EPA 300.0
Alkalinity, Bicarbonate as CaC	198	5.0	mg/l	1	03/07/24 12:00	JW	SM 2320B-2011
Alkalinity, Carbonate	10.0	5.0	mg/l	1	03/07/24 12:00	JW	SM 2320B-2011
Alkalinity, Total as CaCO3	208	5.0	mg/l	1	03/07/24 12:00	JW	SM 2320B-2011
Cation Anion Balance	1.2		%	1	03/15/24	JB	SM1030E-2011
Phosphorus, Total	0.013	0.010	mg/l	1	03/07/24 17:13	KH	EPA 365.1
Solids, Total Dissolved	1150	10	mg/l	1	03/04/24 07:00	JW	SM 2540C-2011
Specific Conductivity	2000	1.0	umhos/cm	1	03/11/24 13:00	JW	SM 2510B-2011
pH <sup>c</sup>	8.45		su	1	03/08/24 12:00	JW	SM4500HB+ -2011/9040C

### Field Parameters

Oxygen, Dissolved (Field)	0.27		mg/l	1	02/29/24 11:20	SUB	FIELD
Redox Potential Vs H2	-114.4		mv	1	02/29/24 11:20	SUB	FIELD
Specific Conductivity (Field)	1983.8	0.50	umhos/cm	1	02/29/24 11:20	SUB	FIELD
Temperature (Field)	11.4		Deg. C	1	02/29/24 11:20	SUB	FIELD
Turbidity	0.05		NTU	1	02/29/24 11:20	SUB	FIELD
pH (Field)	8.73		su	1	02/29/24 11:20	SUB	FIELD

- (a) Elevated detection limit due to matrix interference.
- (b) Calculated as: (Nitrogen, Nitrate) + (Nitrogen, Nitrite)
- (c) Analysis performed past recommended hold time.

RL = Reporting Limit

4.1  
4

## Report of Analysis

<b>Client Sample ID:</b> BW_AUSTIN_258678 SWSW_11_1N_66W	<b>Date Sampled:</b> 02/29/24
<b>Lab Sample ID:</b> DA62528-1A	<b>Date Received:</b> 03/01/24
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Method:</b> RSK175 MOD	
<b>Project:</b> Kerr-McGee: GWA_Griswold_27N_11HZ	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FK4641.D	1	03/02/24 16:01	JC	n/a	n/a	GFK339
Run #2							

Run #	Initial Volume	Headspace Volume	Volume Injected	Temperature
Run #1	39.0 ml	4.0 ml	500 ul	21.6 Deg. C
Run #2				

**Methane, Ethane and Propane**

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	0.160	0.00080	0.00070	mg/l	
74-84-0	Ethane	ND	0.0016	0.0010	mg/l	
74-98-6	Propane	ND	0.0022	0.0017	mg/l	

---

ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

4.2  
4

## Report of Analysis

<b>Client Sample ID:</b> BW_AUSTIN_258678 SWSW_11_1N_66W	<b>Date Sampled:</b> 02/29/24
<b>Lab Sample ID:</b> DA62528-1B	<b>Date Received:</b> 03/01/24
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Project:</b> Kerr-McGee: GWA_Griswold_27N_11HZ	

### General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Not certifiable							
Iron-Related Bacteria <sup>a</sup>	2200	25	CFU/ml	1	03/14/24 08:00	CS	HACH IRB-BART-NOCERT
Slime Forming Bacteria <sup>a</sup>	< 500	500	CFU/ml	1	03/14/24 08:00	CS	HC SLYM-BART-NO CERT
Sulfate Reducing Bacteria <sup>a</sup>	325	200	CFU/ml	1	03/14/24 08:00	CS	HC SRB-BART-NO CERT

(a) Certification for this test is not offered.

---

RL = Reporting Limit

4.3  
4

## Report of Analysis

<b>Client Sample ID:</b> BW_AUSTIN_258678 SWSW_11_1N_66W <b>Lab Sample ID:</b> DA62528-1F <b>Matrix:</b> AQ - Groundwater Filtered <b>Project:</b> Kerr-McGee: GWA_Griswold_27N_11HZ	<b>Date Sampled:</b> 02/29/24 <b>Date Received:</b> 03/01/24 <b>Percent Solids:</b> n/a
---	---

### Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Antimony	< 0.00040	0.00040	mg/l	1	03/05/24	03/07/24 DU	EPA 200.8 <sup>1</sup>	EPA 200.8 <sup>2</sup>
Barium	0.0258	0.0020	mg/l	1	03/05/24	03/07/24 DU	EPA 200.8 <sup>1</sup>	EPA 200.8 <sup>2</sup>
Boron	0.106	0.040	mg/l	1	03/05/24	03/07/24 DU	EPA 200.8 <sup>1</sup>	EPA 200.8 <sup>2</sup>
Calcium	16.3	0.40	mg/l	1	03/05/24	03/07/24 DU	EPA 200.8 <sup>1</sup>	EPA 200.8 <sup>2</sup>
Iron	< 0.020	0.020	mg/l	1	03/05/24	03/07/24 DU	EPA 200.8 <sup>1</sup>	EPA 200.8 <sup>2</sup>
Magnesium	2.77	0.10	mg/l	1	03/05/24	03/07/24 DU	EPA 200.8 <sup>1</sup>	EPA 200.8 <sup>2</sup>
Manganese	0.0192	0.0010	mg/l	1	03/05/24	03/07/24 DU	EPA 200.8 <sup>1</sup>	EPA 200.8 <sup>2</sup>
Potassium <sup>a</sup>	2.76	1.0	mg/l	5	03/05/24	03/07/24 DU	EPA 200.8 <sup>1</sup>	EPA 200.8 <sup>2</sup>
Selenium	< 0.00040	0.00040	mg/l	1	03/05/24	03/07/24 DU	EPA 200.8 <sup>1</sup>	EPA 200.8 <sup>2</sup>
Sodium	405 HH	2.5	mg/l	5	03/05/24	03/07/24 DU	EPA 200.8 <sup>1</sup>	EPA 200.8 <sup>2</sup>
Strontium	0.384	0.020	mg/l	1	03/05/24	03/07/24 DU	EPA 200.8 <sup>1</sup>	EPA 200.8 <sup>2</sup>

(1) Instrument QC Batch: MA17735

(2) Prep QC Batch: MP39010

(a) Internal standard out of range at lower dilutions.

---

RL = Reporting Limit

4.4  
4

**Misc. Forms**

**Custody Documents and Other Forms**

---

**Includes the following where applicable:**

- Chain of Custody



CHAIN OF CUSTODY

4036 Youngfield Street, Wheat Ridge, CO 80033
TEL: 303-425-6021 FAX: 303-425-6854
www.accutest.com

Header section containing Bottle Order Control #, FED-EX Tracking #, SGS Quote #, and SGS Job # DA62528.

Main body of the Chain of Custody form, including Client/Reporting Information, Project Information, Requested Analysis, Matrix Codes, Collection data table, Turnaround Time, Data Deliverable Information, and Sample Custody tracking table.

5.1
5



## SGS Sample Receipt Summary

Job Number: da62528

Client: ABSAROKA

Project: GWA

Date / Time Received: 3/1/2024 11:30:00 AM

Delivery Method: co

Airbill #'s: \_\_\_\_\_

Cooler Temps (Raw Measured) °C: Cooler 1: (2.0);

Cooler Temps (Corrected) °C: Cooler 1: (2.0);

**Cooler Information**

Y or N

- 1. Custody Seals Present:
- 2. Custody Seals Intact:
- 3. Temp criteria achieved:
- 4. Cooler temp verification: IR Gun
- 5. Cooler media: Ice (Bag)

**Trip Blank Information**

Y or N N/A

- 1. Trip Blank present / cooler:
- 2. Trip Blank listed on COC:

W or S N/A

- 3. Type of TB Received

**Sample Information**

Y or N N/A

- 1. Sample labels present on bottles:
- 2. Samples presented properly:
- 3. Sufficient volume/containers recv'd for analysis:
- 4. Condition of sample: Intact
- 5. Sample recv'd within HT:
- 6. Dates/Times/IDs on COC match sample label:
- 7. VOCs have headspace:
- 8. Bottles received for unspecified tests:
- 9. Compositing instructions clear:
- 10. Voa Soil Kits/Jars received past 48hrs?:
- 11. % Solids Jar Received?:
- 12. Residual Chlorine Present?:

**Misc Information**

Number of Encores: 25 Gram 5 Gram

Number of Lab Filtered Metals: \_\_\_\_\_

Test Strip Lot #: pH 0-3: \_\_\_\_\_

pH 10-12: \_\_\_\_\_ Other: (Specify) \_\_\_\_\_

Residual Chlorine Test Strip Lot #: \_\_\_\_\_

Comments

SM001

Rev. Date 05/04/17

Technician: JEREMYD

Date: 3/1/2024 11:47:28 AM

Reviewer: \_\_\_\_\_

Date: \_\_\_\_\_

DA62528: Chain of Custody

Page 2 of 2

5.1  
5

## MS Volatiles

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## QC Data Summaries

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### Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

# Method Blank Summary

Job Number: DA62528  
 Account: ANADACOD Occidental Petroleum Corporation  
 Project: Kerr-McGee: GWA\_Griswold\_27N\_11HZ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5V3929-MB	5V79934A.D	1	03/02/24	MB	n/a	n/a	V5V3929

The QC reported here applies to the following samples:

Method: SW846 8260B

DA62528-1

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.60	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
	m,p-Xylene	ND	1.0	0.96	ug/l	
95-47-6	o-Xylene	ND	1.0	0.60	ug/l	
1330-20-7	Xylene (total)	ND	1.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	104% 70-130%
17060-07-0	1,2-Dichloroethane-D4	98% 70-130%
2037-26-5	Toluene-D8	98% 70-130%
460-00-4	4-Bromofluorobenzene	102% 70-130%

6.1.1  
6

# Blank Spike Summary

Job Number: DA62528  
 Account: ANADACOD Occidental Petroleum Corporation  
 Project: Kerr-McGee: GWA\_Griswold\_27N\_11HZ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5V3929-BS	5V79932A.D	1	03/02/24	MB	n/a	n/a	V5V3929

The QC reported here applies to the following samples:

Method: SW846 8260B

DA62528-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	50	50.4	101	70-130
100-41-4	Ethylbenzene	50	49.7	99	70-130
108-88-3	Toluene	50	47.6	95	70-130
	m,p-Xylene	100	98.8	99	70-130
95-47-6	o-Xylene	50	49.2	98	70-130
1330-20-7	Xylene (total)	150	148	99	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	100%	70-130%
17060-07-0	1,2-Dichloroethane-D4	100%	70-130%
2037-26-5	Toluene-D8	96%	70-130%
460-00-4	4-Bromofluorobenzene	97%	70-130%

\* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

Job Number: DA62528  
 Account: ANADACOD Occidental Petroleum Corporation  
 Project: Kerr-McGee: GWA\_Griswold\_27N\_11HZ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
DA62445-19MS <sup>a</sup>	5V79942A.D	10	03/03/24	MB	n/a	n/a	V5V3929
DA62445-19MSD <sup>a</sup>	5V79943A.D	10	03/03/24	MB	n/a	n/a	V5V3929
DA62445-19 <sup>a</sup>	5V79941A.D	10	03/03/24	MB	n/a	n/a	V5V3929

The QC reported here applies to the following samples:

Method: SW846 8260B

DA62528-1

CAS No.	Compound	DA62445-19 Spike		MS	MS	Spike	MSD	MSD	RPD	Limits
		ug/l	Q ug/l	ug/l	%	ug/l	ug/l	%		Rec/RPD
71-43-2	Benzene	ND	500	507	101	500	502	100	1	70-130/30
100-41-4	Ethylbenzene	ND	500	499	100	500	500	100	0	70-130/30
108-88-3	Toluene	6.7	J 500	487	96	500	499	98	2	70-130/30
	m,p-Xylene	13.7	1000	1000	99	1000	1000	99	0	70-130/30
95-47-6	o-Xylene	8.5	J 500	487	96	500	498	98	2	70-130/30
1330-20-7	Xylene (total)	22.2	1500	1490	98	1500	1500	99	1	70-130/30

CAS No.	Surrogate Recoveries	MS	MSD	DA62445-19 Limits	
1868-53-7	Dibromofluoromethane	102%	101%	105%	70-130%
17060-07-0	1,2-Dichloroethane-D4	97%	94%	98%	70-130%
2037-26-5	Toluene-D8	97%	97%	99%	70-130%
460-00-4	4-Bromofluorobenzene	100%	100%	98%	70-130%

(a) Dilution required due to matrix interference (sample foamed).

\* = Outside of Control Limits.

## GC Volatiles

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## QC Data Summaries

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**Includes the following where applicable:**

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

# Method Blank Summary

**Job Number:** DA62528  
**Account:** ANADACOD Occidental Petroleum Corporation  
**Project:** Kerr-McGee: GWA\_Griswold\_27N\_11HZ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGA2846-MB	GA64275.D	1	03/06/24	MB	n/a	n/a	GGA2846

The QC reported here applies to the following samples:

Method: SW846 8015D

DA62528-1

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.050	0.040	mg/l	

CAS No.	Surrogate Recoveries	Limits
120-82-1	1,2,4-Trichlorobenzene	118% 60-140%

7.1.1  
7

# Method Blank Summary

Job Number: DA62528  
Account: ANADACOD Occidental Petroleum Corporation  
Project: Kerr-McGee: GWA\_Griswold\_27N\_11HZ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GFK339-MB	FK4630.D	1	03/02/24	JC	n/a	n/a	GFK339

The QC reported here applies to the following samples:

Method: RSK175 MOD

DA62528-1A

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	ND	0.00080	0.00070	mg/l	
74-84-0	Ethane	ND	0.0016	0.0010	mg/l	
74-98-6	Propane	ND	0.0022	0.0017	mg/l	

7.1.2  
7

# Blank Spike Summary

Job Number: DA62528  
 Account: ANADACOD Occidental Petroleum Corporation  
 Project: Kerr-McGee: GWA\_Griswold\_27N\_11HZ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGA2846-BS	GA64273.D	1	03/06/24	MB	n/a	n/a	GGA2846

The QC reported here applies to the following samples:

Method: SW846 8015D

DA62528-1

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	TPH-GRO (C6-C10)	2.2	2.15	98	64-130

CAS No.	Surrogate Recoveries	BSP	Limits
120-82-1	1,2,4-Trichlorobenzene	118%	60-140%

\* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary

Job Number: DA62528  
 Account: ANADACOD Occidental Petroleum Corporation  
 Project: Kerr-McGee: GWA\_Griswold\_27N\_11HZ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GFK339-BS	FK4631.D	10	03/02/24	JC	n/a	n/a	GFK339
GFK339-BSD	FK4632.D	10	03/02/24	JC	n/a	n/a	GFK339

The QC reported here applies to the following samples:

Method: RSK175 MOD

DA62528-1A

CAS No.	Compound	Spike	BSP	BSP	BSD	BSD	RPD	Limits
		mg/l	mg/l	%	mg/l	%		Rec/RPD
74-82-8	Methane	0.512	0.574	112	0.557	109	3	70-135/30
74-84-0	Ethane	0.923	1.13	122	1.10	119	3	70-147/30
74-98-6	Propane	1.38	1.61	117	1.57	114	3	70-140/30

\* = Outside of Control Limits.

7.3.1  
7

# Matrix Spike/Matrix Spike Duplicate Summary

Job Number: DA62528  
 Account: ANADACOD Occidental Petroleum Corporation  
 Project: Kerr-McGee: GWA\_Griswold\_27N\_11HZ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
DA62445-14MS	GA64276.D	1	03/06/24	MB	n/a	n/a	GGA2846
DA62445-14MSD	GA64277.D	1	03/06/24	MB	n/a	n/a	GGA2846
DA62445-14	GA64278.D	1	03/06/24	MB	n/a	n/a	GGA2846

The QC reported here applies to the following samples:

Method: SW846 8015D

DA62528-1

CAS No.	Compound	DA62445-14 Spike mg/l	MS Q	MS mg/l	MS %	Spike mg/l	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND	2.2	2.06	94	2.2	2.05	93	0	49-130/30

CAS No.	Surrogate Recoveries	MS	MSD	DA62445-14 Limits
120-82-1	1,2,4-Trichlorobenzene	120%	123%	123% 60-140%

\* = Outside of Control Limits.

7.4.1  
7

# Matrix Spike/Matrix Spike Duplicate Summary

Job Number: DA62528  
 Account: ANADACOD Occidental Petroleum Corporation  
 Project: Kerr-McGee: GWA\_Griswold\_27N\_11HZ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
DA62528-1AMS	FK4642.D	10	03/02/24	JC	n/a	n/a	GFK339
DA62528-1AMSD	FK4643.D	10	03/02/24	JC	n/a	n/a	GFK339
DA62528-1A	FK4641.D	1	03/02/24	JC	n/a	n/a	GFK339

The QC reported here applies to the following samples:

Method: RSK175 MOD

DA62528-1A

CAS No.	Compound	DA62528-1A Spike		MS	MS	Spike	MSD	MSD	RPD	Limits
		mg/l	Q mg/l	mg/l	%		mg/l	%		Rec/RPD
74-82-8	Methane	0.160	0.512	0.649	96	0.512	0.676	101	4	15-200/30
74-84-0	Ethane	ND	0.923	0.999	108	0.923	1.05	114	5	64-147/30
74-98-6	Propane	ND	1.38	1.43	104	1.38	1.50	109	5	63-140/30

7.4.2  
7

\* = Outside of Control Limits.

## Metals Analysis

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## QC Data Summaries

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**Includes the following where applicable:**

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY  
Part 2 - Method Blanks

Login Number: DA62528  
Account: ANADACOD - Occidental Petroleum Corporation  
Project: Kerr-McGee: GWA\_Griswold\_27N\_11HZ

QC Batch ID: MP39010  
Matrix Type: AQUEOUS

Methods: EPA 200.8  
Units: ug/l

Prep Date: 03/05/24

Metal	RL	IDL	MDL	MB raw	final
Aluminum	50	.52	13		
Antimony	0.40	.01	.3		
Arsenic	0.20	.05	.05		
Barium	2.0	.096	.25	0.050	<2.0
Beryllium	0.20	.077	.1		
Boron	40	18	20	4.2	<40
Cadmium	0.10	.03	.04		
Calcium	400	25	100	27.0	<400
Chromium	2.0	.087	.25		
Cobalt	0.20	.04	.05		
Copper	2.0	.05	.81		
Iron	20	1.6	10	1.9	<20
Lead	0.50	.094	.13		
Magnesium	100	10	25	7.9	<100
Manganese	1.0	.079	.51	0.074	<1.0
Molybdenum	1.0	.037	.27		
Nickel	2.0	.098	.35		
Phosphorus	60	7.6	25		
Potassium	200	2	50	-4.9	<200
Selenium	0.40	.05	.1	-0.0088	<0.40
Silver	0.10	.0081	.025		
Sodium	500	10	130	25.6	<500
Strontium	20	.1	5	0.032	<20
Thallium	0.20	.032	.05		
Tin	10	.22	2.5		
Titanium	2.0	.05	.37		
Uranium	0.20	.015	.05		
Vanadium	1.0	.14	.2		
Zinc	10	.05	2.1		

Associated samples MP39010: DA62528-1F

Results < IDL are shown as zero for calculation purposes  
(\* ) Outside of QC limits  
(anr) Analyte not requested

8.1.1  
8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: DA62528  
 Account: ANADACOD - Occidental Petroleum Corporation  
 Project: Kerr-McGee: GWA\_Griswold\_27N\_11HZ

QC Batch ID: MP39010  
 Matrix Type: AQUEOUS

Methods: EPA 200.8  
 Units: ug/l

Prep Date: 03/05/24

Metal	DA62528-1F Original MS		Spike/lot ICPMS5	% Rec	QC Limits
Aluminum					
Antimony					
Arsenic	anr				
Barium	24.1	426	400	100.1	70-130
Beryllium					
Boron	106	508	400	100.5	70-130
Cadmium					
Calcium					
Chromium					
Cobalt					
Copper					
Iron	9.6	966	1000	95.3	70-130
Lead					
Magnesium	3020	7130	5000	87.2	70-130
Manganese	18.9	217	200	98.9	70-130
Molybdenum					
Nickel					
Phosphorus					
Potassium	2530	7870 (a)	5000	106.8(a)	70-130
Selenium	0.0	206	200	102.9	70-130
Silver					
Sodium	378000	362000	5000	-320.0(b)	70-130
Strontium	379	487	100	103.0	70-130
Thallium					
Tin					
Titanium					
Uranium					
Vanadium					
Zinc					

Associated samples MP39010: DA62528-1F

Results < IDL are shown as zero for calculation purposes

(\*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) Internal standard out of range at lower dilutions.

(b) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: DA62528  
Account: ANADACOD - Occidental Petroleum Corporation  
Project: Kerr-McGee: GWA\_Griswold\_27N\_11HZ

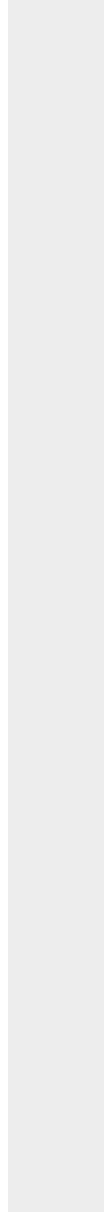
QC Batch ID: MP39010  
Matrix Type: AQUEOUS

Methods: EPA 200.8  
Units: ug/l

Prep Date: 03/05/24

Metal	DA62528-1F Original MS	SpikeLot ICPMS5	% Rec	QC Limits
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information.



8.1.2  
8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: DA62528  
 Account: ANADACOD - Occidental Petroleum Corporation  
 Project: Kerr-McGee: GWA\_Griswold\_27N\_11HZ

QC Batch ID: MP39010  
 Matrix Type: AQUEOUS

Methods: EPA 200.8  
 Units: ug/l

Prep Date: 03/05/24

Metal	DA62528-1F Original MSD		SpikeLot ICPMS5	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic	anr					
Barium	24.1	422	400	99.1	0.9	20
Beryllium						
Boron	106	497	400	97.8	2.2	20
Cadmium						
Calcium						
Chromium						
Cobalt						
Copper						
Iron	9.6	992	1000	97.9	2.7	20
Lead						
Magnesium	3020	7320	5000	91.0	3.8	20
Manganese	18.9	221	200	100.9	1.8	20
Molybdenum						
Nickel						
Phosphorus						
Potassium	2530	7860 (a)	5000	106.6(a)	16.2 (a)	20
Selenium	0.0	198	200	98.9	4.0	20
Silver						
Sodium	378000	377000	5000	-20.0(b)	4.0	20
Strontium	379	481	100	97.0	1.2	20
Thallium						
Tin						
Titanium						
Uranium						
Vanadium						
Zinc						

Associated samples MP39010: DA62528-1F

Results < IDL are shown as zero for calculation purposes

(\*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) Internal standard out of range at lower dilutions.

(b) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: DA62528  
Account: ANADACOD - Occidental Petroleum Corporation  
Project: Kerr-McGee: GWA\_Griswold\_27N\_11HZ

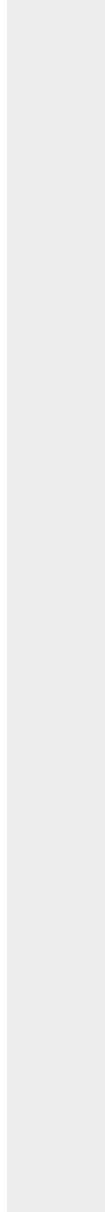
QC Batch ID: MP39010  
Matrix Type: AQUEOUS

Methods: EPA 200.8  
Units: ug/l

Prep Date: 03/05/24

Metal	DA62528-1F Original MSD	SpikeLot ICPMS5	% Rec	MSD RPD	QC Limit
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information.



8.1.2  
8

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: DA62528  
 Account: ANADACOD - Occidental Petroleum Corporation  
 Project: Kerr-McGee: GWA\_Griswold\_27N\_11HZ

QC Batch ID: MP39010  
 Matrix Type: AQUEOUS

Methods: EPA 200.8  
 Units: ug/l

Prep Date: 03/05/24

Metal	BSP Result	Spikelot ICPMS5	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic	anr			
Barium	396	400	99.0	85-115
Beryllium				
Boron	398	400	99.5	85-115
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron	1020	1000	102.0	85-115
Lead				
Magnesium	5060	5000	101.2	85-115
Manganese	204	200	102.0	85-115
Molybdenum				
Nickel				
Phosphorus				
Potassium	4920	5000	98.4	85-115
Selenium	203	200	101.5	85-115
Silver				
Sodium	5180	5000	103.6	85-115
Strontium	98.7	100	98.7	85-115
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc				

Associated samples MP39010: DA62528-1F

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits  
 (anr) Analyte not requested

8.1.3  
8

## General Chemistry

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### QC Data Summaries

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#### Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY  
GENERAL CHEMISTRY

Login Number: DA62528  
Account: ANADACOD - Occidental Petroleum Corporation  
Project: Kerr-McGee: GWA\_Griswold\_27N\_11HZ

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Alkalinity, Bicarbonate as CaC	GN62814	5.0	0.0	mg/l	100	101	101.3	90-110%
Alkalinity, Carbonate	GN62815	5.0	0.0	mg/l	100	101	101.3	90-110%
Alkalinity, Total as CaCO3	GN62813	5.0	0.0	mg/l	100	101	101.3	90-110%
Bromide	GP36124/GN62778	0.050	0.0	mg/l	0.5	0.474	94.8	90-110%
Chloride	GP36124/GN62778	0.50	0.0	mg/l	5	4.71	94.2	90-110%
Fluoride	GP36124/GN62778	0.10	0.0	mg/l	1	0.951	95.1	90-110%
Iron-Related Bacteria	MB1743	25	0	CFU/ml				
Nitrogen, Nitrate	GP36124/GN62778	0.010	0.0	mg/l	0.1	0.0923	92.3	90-110%
Nitrogen, Nitrite	GP36124/GN62778	0.0040	0.0	mg/l	0.05	0.0508	101.6	90-110%
Phosphorus, Total	GP36147/GN62804	0.010	0.0	mg/l	0.2	0.202	101.0	90-110%
Slime Forming Bacteria	MB1739	500	0	CFU/ml				
Solids, Total Dissolved	GN62770	10	0.0	mg/l	250	241	96.4	90-110%
Specific Conductivity	GP36170/GN62833			umhos/cm	10000	1080	108.4	90-110%
Sulfate	GP36124/GN62778	0.50	0.0	mg/l	5	4.75	95.0	90-110%
Sulfate Reducing Bacteria	MB1741	200	0	CFU/ml				

Associated Samples:

Batch MB1739: DA62528-1B  
Batch MB1741: DA62528-1B  
Batch MB1743: DA62528-1B  
Batch GN62770: DA62528-1  
Batch GN62813: DA62528-1  
Batch GN62814: DA62528-1  
Batch GN62815: DA62528-1  
Batch GP36124: DA62528-1  
Batch GP36147: DA62528-1  
Batch GP36170: DA62528-1  
(\* ) Outside of QC limits

9.1  
9

DUPLICATE RESULTS SUMMARY  
GENERAL CHEMISTRY

Login Number: DA62528  
Account: ANADACOD - Occidental Petroleum Corporation  
Project: Kerr-McGee: GWA\_Griswold\_27N\_11HZ

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Alkalinity, Total as CaCO3	GN62813	DA62528-1	mg/l	208	210	1.2	0-20%
Iron-Related Bacteria	MB1743	DA62528-1B	CFU/ml	2200	2200	0.0	0-%
Phosphorus, Total	GP36147/GN62804	DA62663-1	mg/l	464	471	1.5	0-20%
Slime Forming Bacteria	MB1739	DA62528-1B	CFU/ml	<500	<500	0.0	0-%
Solids, Total Dissolved	GN62770	DA62542-6	mg/l	723	748	3.4	0-5.44%
Specific Conductivity	GP36170/GN62833	DA62766-1	umhos/cm	1200	1200	0.4	0-20%
Sulfate Reducing Bacteria	MB1741	DA62528-1B	CFU/ml	325	<200	47.6	0-%

Associated Samples:

Batch MB1739: DA62528-1B  
Batch MB1741: DA62528-1B  
Batch MB1743: DA62528-1B  
Batch GN62770: DA62528-1  
Batch GN62813: DA62528-1  
Batch GP36147: DA62528-1  
Batch GP36170: DA62528-1  
(\* ) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY  
GENERAL CHEMISTRY

Login Number: DA62528  
Account: ANADACOD - Occidental Petroleum Corporation  
Project: Kerr-McGee: GWA\_Griswold\_27N\_11HZ

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Alkalinity, Total as CaCO3	GN62813	DA62528-1	mg/l	208	100	308	100.0	80-120%
Bromide	GP36124/GN62778	DA62422-1	mg/l	0.0	12.5	12.0	96.0	80-120%
Chloride	GP36124/GN62778	DA62422-1	mg/l	302	125	416	91.2	80-120%
Fluoride	GP36124/GN62778	DA62422-1	mg/l	0.0	25	24.5	98.0	80-120%
Nitrogen, Nitrate	GP36124/GN62778	DA62422-1	mg/l	1.7	2.5	3.9	88.0	80-120%
Nitrogen, Nitrite	GP36124/GN62778	DA62422-1	mg/l	0.0	1.25	1.0	80.0	80-120%
Phosphorus, Total	GP36147/GN62804	DA62663-1	mg/l	464	0.2	468(a)	2000.0(b)	90-110%
Sulfate	GP36124/GN62778	DA62422-1	mg/l	287	125	405	94.4	80-120%

Associated Samples:

Batch GN62813: DA62528-1

Batch GP36124: DA62528-1

Batch GP36147: DA62528-1

(\*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(a) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.

(b) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

MATRIX SPIKE DUPLICATE RESULTS SUMMARY  
GENERAL CHEMISTRY

Login Number: DA62528  
Account: ANADACOD - Occidental Petroleum Corporation  
Project: Kerr-McGee: GWA\_Griswold\_27N\_11HZ

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Alkalinity, Total as CaCO3	GN62813	DA62528-1	mg/l	208	100	310	0.8	20%
Bromide	GP36124/GN62778	DA62422-1	mg/l	0.0	12.5	12.1	0.8	20%
Chloride	GP36124/GN62778	DA62422-1	mg/l	302	125	418	0.5	20%
Fluoride	GP36124/GN62778	DA62422-1	mg/l	0.0	25	24.8	1.2	20%
Nitrogen, Nitrate	GP36124/GN62778	DA62422-1	mg/l	1.7	2.5	4.0	2.5	20%
Nitrogen, Nitrite	GP36124/GN62778	DA62422-1	mg/l	0.0	1.25	1.0	0.0	20%
Phosphorus, Total	GP36147/GN62804	DA62663-1	mg/l	464	0.2	439(a)	6.4	20%
Sulfate	GP36124/GN62778	DA62422-1	mg/l	287	125	407	0.5	20%

Associated Samples:

Batch GN62813: DA62528-1

Batch GP36124: DA62528-1

Batch GP36147: DA62528-1

(\*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(a) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.

**Misc. Forms**

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**Custody Documents and Other Forms**

(SGS Scott, LA)

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**Includes the following where applicable:**

- Chain of Custody



ORIGIN ID:DEMA (303) 425-8021  
565 TERR. McNULTY  
4036 YOUNGFELD STREET  
WHEAT RIDGE CO. 80033  
UNITED STATES US

SHIP DATE: 04MAR24  
ACTING: 50.00 TMSAN  
CHD: 0859493/CAFE3755

TO  
SAMPLE RECEIVING  
ACCUTEST LOUISIANA  
500 AMBASSADOR CAFFERY DRIVE

SCOTT LA 70583

INU: REF:  
DE: DEPT:



TUE - 05 MAR 10:30A  
PRIORITY OVERNIGHT

TRK# 6466 4897 7174  
DEPT

XH LFTA

70583  
LA-US LFT



Part # 356148-494 MTW EXP 04/23 \*\*

58522/8538/4E97

## SGS Sample Receipt Summary

Job Number: DA62528

Client: SGS NORTH AMERICA

Project: KERR-MCGEE: GWA\_GRISWOLD\_27N\_1

Date / Time Received: 3/5/2024 9:15:00 AM

Delivery Method: FEDEX

Airbill #'s: 646648977174

Cooler Temps (Raw Measured) °C: Cooler 1: (3.6);

Cooler Temps (Corrected) °C: Cooler 1: (3.6);

**Cooler Security**

Y or N

Y or N

- |                           |                                     |                          |                       |                                     |                          |
|---------------------------|-------------------------------------|--------------------------|-----------------------|-------------------------------------|--------------------------|
| 1. Custody Seals Present: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3. COC Present:       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Custody Seals Intact:  | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 4. SmpI Dates/Time OK | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

**Cooler Temperature**

Y or N

- |                              |                                     |                          |
|------------------------------|-------------------------------------|--------------------------|
| 1. Temp criteria achieved:   | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Cooler temp verification: | _____                               |                          |
| 3. Cooler media:             | <u>Ice (direct contact)</u>         |                          |
| 4. No. Coolers:              | <u>1</u>                            |                          |

**Quality Control Preservatio**

Y or N

N/A

- |                                 |                                     |                          |                                     |
|---------------------------------|-------------------------------------|--------------------------|-------------------------------------|
| 1. Trip Blank present / cooler: | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 2. Trip Blank listed on COC:    | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3. Samples preserved properly:  | <input checked="" type="checkbox"/> | <input type="checkbox"/> |                                     |
| 4. VOCs headspace free:         | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

**Sample Integrity - Documentation**

Y or N

- |  |                                     |                          |
|--|-------------------------------------|--------------------------|
| 1. Sample labels present on bottles:   | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Container labeling complete:        | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Sample container label / COC agree: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

**Sample Integrity - Condition**

Y or N

- |                                  |                                     |                          |
|----------------------------------|-------------------------------------|--------------------------|
| 1. Sample recvd within HT:       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. All containers accounted for: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Condition of sample:          | <u>Intact</u>                       |                          |

**Sample Integrity - Instructions**

Y or N

N/A

- |   |                                     |                                     |                                     |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Analysis requested is clear:           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |                                     |
| 2. Bottles received for unspecified tests | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |                                     |
| 3. Sufficient volume recvd for analysis:  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |                                     |
| 4. Compositing instructions clear:        | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 5. Filtering instructions clear:          | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

Test Strip Lot #s:	pH 1-12: _____	pH 12+: _____	Other: (Specify) _____
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Comments

SM089-03  
Rev. Date 12/7/17

DA62528: Chain of Custody

Page 3 of 3

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## GC/LC Semi-volatiles

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### QC Data Summaries

(SGS Scott, LA)

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**Includes the following where applicable:**

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

# Method Blank Summary

Job Number: DA62528  
Account: ALMS SGS Wheat Ridge, CO  
Project: ANADACOD: Kerr-McGee: GWA\_Griswold\_27N\_11HZ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP24714-MB	X0027325.D	1	03/05/24	JT	03/05/24	OP24714	GLB2648

The QC reported here applies to the following samples:

Method: SW846 8015C

DA62528-1

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	ND	0.10	0.017	mg/l	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	86% 51-122%

11.1.1  
11

# Blank Spike/Blank Spike Duplicate Summary

Job Number: DA62528

Account: ALMS SGS Wheat Ridge, CO

Project: ANADACOD: Kerr-McGee: GWA\_Griswold\_27N\_11HZ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP24714-BS	X0027326.D	1	03/05/24	JT	03/05/24	OP24714	GLB2648
OP24714-BSD	X0027327.D	1	03/05/24	JT	03/05/24	OP24714	GLB2648

The QC reported here applies to the following samples:

Method: SW846 8015C

DA62528-1

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	BSD mg/l	BSD %	RPD	Limits Rec/RPD
	TPH-DRO (C10-C28)	3	3.01	100	3.11	104* a	3	49-103/24

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
84-15-1	o-Terphenyl	108%	114%	51-122%

(a) Outside control limits but within reasonable method limits.

\* = Outside of Control Limits.

11.2.1  
11