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## Technical Report for

**Occidental Petroleum Corporation**

**GWA\_Buffalo\_Ridge\_Water\_Well**

**FID:753954 Reg:Vol. Freq.:IN**

**SGS Job Number: DA65726**

**Sampling Date: 07/16/24**



### Report to:

tanya.cude@absarokasolutions.com  
joel.mason@absarokasolutions.com  
jordan.fleming@absarokasolutions.com

**ATTN: Distribution6**

**Total number of pages in report: 44**



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**Eric Hoffman**

**Client Service contact: Parna Payandeh 303-425-6021**  
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Test results relate only to samples analyzed.

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## Sample Summary

Occidental Petroleum Corporation

Job No: DA65726

GWA\_Buffalo\_Ridge\_Water\_Well  
Project No: FID:753954 Reg:Vol. Freq.:IN

Sample Number	Collected Date	Time By	Matrix Received	Code Type	Client Sample ID
---------------	----------------	---------	-----------------	-----------	------------------

This report contains results reported as ND = Not detected. The following applies:  
Organics ND = Not detected above the MDL

DA65726-1	07/16/24	09:42 EF	07/17/24	AQ	Ground Water	BW_MARTIN_47218_F NWSW_12_1N_66W
DA65726-1A	07/16/24	09:42 EF	07/17/24	AQ	Ground Water	BW_MARTIN_47218_F NWSW_12_1N_66W
DA65726-1B	07/16/24	09:42 EF	07/17/24	AQ	Ground Water	BW_MARTIN_47218_F NWSW_12_1N_66W
DA65726-1F	07/16/24	09:42 EF	07/17/24	AQ	Groundwater Filtered	BW_MARTIN_47218_F NWSW_12_1N_66W



# CASE NARRATIVE / CONFORMANCE SUMMARY

**Client:** Occidental Petroleum Corporation

**Job No:** DA65726

**Site:** GWA\_Buffalo\_Ridge\_Water\_Well

**Report Date** 8/5/2024 6:49:24 AM

On 07/17/2024, 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 4 °C. The samples were intact and properly preserved, unless noted below. An SGS Job Number of DA65726 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:** V5V4059

- All samples were analyzed within the recommended method holding time.
- Sample(s) DA65379-57MS, DA65379-57MSD 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:** GFK371

- All samples were analyzed within the recommended method holding time.
- Sample(s) DA65726-1AMS, DA65726-1AMSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- DA65726-1A: The pH of the sample was >2 at time of analysis. Bottles marked as unpreserved.

## GC Volatiles By Method SW846 8015D

**Matrix:** AQ

**Batch ID:** GGA2904

- All samples were analyzed within the recommended method holding time.
- Sample(s) DA65379-58MS, DA65379-58MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

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

**Matrix:** AQ

**Batch ID:** OP26067

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) DA65658-1MS, DA65658-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

## Metals Analysis By Method EPA 200.8

<b>Matrix:</b> AQ	<b>Batch ID:</b> MP39789
-------------------	--------------------------

- 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) DA65766-1FMS, DA65766-1FMSD were used as the QC samples for the metals analysis.
- The matrix spike (MS) recovery(s) of Calcium 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 EPA 300.0

<b>Matrix:</b> AQ	<b>Batch ID:</b> GP36995
-------------------	--------------------------

- 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) DA65698-1MS, DA65698-1MSD were used as the QC samples for the Bromide, Chloride, Fluoride, Nitrogen, Nitrate, Nitrogen, Nitrite, Sulfate, Bromide analysis.
- DA65726-1 for Sulfate: Elevated detection limit due to matrix interference.
- DA65726-1 for Nitrogen, Nitrite: Elevated detection limit due to matrix interference.
- DA65726-1 for Nitrogen, Nitrate: Elevated detection limit due to matrix interference.
- DA65726-1 for Bromide: Elevated detection limit due to matrix interference.

<b>Matrix:</b> AQ	<b>Batch ID:</b> R63744
-------------------	-------------------------

- The data for EPA 300.0 meets quality control requirements.
- DA65726-1 for Nitrogen, Nitrate + Nitrite: Calculated as: (Nitrogen, Nitrate) + (Nitrogen, Nitrite)

## General Chemistry By Method EPA 365.1

<b>Matrix:</b> AQ	<b>Batch ID:</b> GP37036
-------------------	--------------------------

- 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) DA65726-1DUP, DA65726-1MS, DA65726-1MSD were used as the QC samples for the Phosphorus, Total analysis.

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

<b>Matrix:</b> AQ	<b>Batch ID:</b> MB1781
-------------------	-------------------------

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) DA65883-1BDUP were used as the QC samples for the Iron-Related Bacteria analysis.

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

<b>Matrix:</b> AQ	<b>Batch ID:</b> MB1782
-------------------	-------------------------

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) DA65883-1BDUP were used as the QC samples for the Slime Forming Bacteria analysis.

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

**Matrix:** AQ

**Batch ID:** MB1783

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) DA65883-1BDUP were used as the QC samples for the Sulfate Reducing Bacteria analysis.

## General Chemistry By Method SM 2320B-2011

**Matrix:** AQ

**Batch ID:** GN64148

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) DA65810-8DUP, DA65810-9MS, DA65810-9MSD were used as the QC samples for the Alkalinity, Total as CaCO<sub>3</sub> analysis.

**Matrix:** AQ

**Batch ID:** GN64149

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

**Matrix:** AQ

**Batch ID:** GN64150

- 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:** GP37001

- Sample(s) DA65726-1DUP were used as the QC samples for the Specific Conductivity analysis.

## General Chemistry By Method SM 2540C-2011

**Matrix:** AQ

**Batch ID:** GN64134

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

## General Chemistry By Method SM1030E-2011

**Matrix:** AQ

**Batch ID:** GN64182

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

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

**Matrix:** AQ

**Batch ID:** GN64115

- The data for SM4500HB+-2011/9040C meets quality control requirements.
- The following samples were run outside of holding time for method SM4500HB+-2011/9040C: DA65726-1 Analysis performed past recommended hold time.

## Field Data By Method FIELD

**Matrix:** AQ

**Batch ID:** R63746

- 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.

**Summary of Hits**

Job Number: DA65726

Account: Occidental Petroleum Corporation

Project: GWA\_Buffalo\_Ridge\_Water\_Well

Collected: 07/16/24

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
<b>DA65726-1 BW_MARTIN_47218_F NWSW_12_1N_66W</b>						
Fluoride	2.4	0.20			mg/l	EPA 300.0
Chloride	76.0	13			mg/l	EPA 300.0
Alkalinity, Bicarbonate as CaCO <sub>3</sub>	500	5.0			mg/l	SM 2320B-2011
Alkalinity, Carbonate	34.1	5.0			mg/l	SM 2320B-2011
Alkalinity, Total as CaCO <sub>3</sub>	534	5.0			mg/l	SM 2320B-2011
Cation Anion Balance	1.6				%	SM1030E-2011
Phosphorus, Total	0.049	0.010			mg/l	EPA 365.1
Solids, Total Dissolved	641	10			mg/l	SM 2540C-2011
Specific Conductivity	1140	1.0			umhos/cm	SM 2510B-2011
pH <sup>a</sup>	8.73				su	SM4500HB+ -2011/9040C
Specific Conductivity (Field)	1082.5	0.50			umhos/cm	FIELD
pH (Field)	8.74				su	FIELD
Temperature (Field)	24.7				Deg. C	FIELD
Oxygen, Dissolved (Field)	0.18				mg/l	FIELD
Turbidity	0.02				NTU	FIELD
<b>DA65726-1A BW_MARTIN_47218_F NWSW_12_1N_66W</b>						
Methane <sup>b</sup>	4.25	0.0080	0.0070		mg/l	RSK175 MOD
Ethane <sup>b</sup>	0.0074	0.0016	0.0010		mg/l	RSK175 MOD
<b>DA65726-1B BW_MARTIN_47218_F NWSW_12_1N_66W</b>						
Iron-Related Bacteria	2200	25			CFU/ml	HACH IRB-BART-NOCERT
Slime Forming Bacteria	< 500	500			CFU/ml	HC SLYM-BART-NO CERT
Sulfate Reducing Bacteria	< 200	200			CFU/ml	HC SRB-BART-NO CERT
<b>DA65726-1F BW_MARTIN_47218_F NWSW_12_1N_66W</b>						
Barium	0.0502	0.0020			mg/l	EPA 200.8
Boron	0.389	0.040			mg/l	EPA 200.8
Calcium	1.50	0.40			mg/l	EPA 200.8
Magnesium	0.433	0.10			mg/l	EPA 200.8
Manganese	0.0056	0.0010			mg/l	EPA 200.8
Potassium	1.23	0.20			mg/l	EPA 200.8
Sodium	285	5.0			mg/l	EPA 200.8
Strontium	0.0645	0.020			mg/l	EPA 200.8

(a) Analysis performed past recommended hold time.

(b) The pH of the sample was &gt; 2 at time of analysis. Bottles marked as unpreserved.



Wheat Ridge, CO

Section 4

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## Sample Results

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### Report of Analysis

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**Report of Analysis**

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<b>Client Sample ID:</b> BW_MARTIN_47218_F NWSW_12_1N_66W	<b>Date Sampled:</b> 07/16/24
<b>Lab Sample ID:</b> DA65726-1	<b>Date Received:</b> 07/17/24
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B	
<b>Project:</b> GWA_Buffalo_Ridge_Water_Well	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5V82935.D	1	07/17/24 23:23	MB	n/a	n/a	V5V4059
Run #2							

	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	104%		70-130%
17060-07-0	1,2-Dichloroethane-D4	99%		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  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	BW_MARTIN_47218_F NWSW_12_1N_66W	<b>Date Sampled:</b>	07/16/24
<b>Lab Sample ID:</b>	DA65726-1	<b>Date Received:</b>	07/17/24
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8015D		
<b>Project:</b>	GWA_Buffalo_Ridge_Water_Well		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GA66123.D	1	07/18/24 17:25	JC	n/a	n/a	GGA2904
Run #2							

	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	105%		60-140%		

ND = Not detected      MDL = Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	BW_MARTIN_47218_F NWSW_12_1N_66W	<b>Date Sampled:</b>	07/16/24
<b>Lab Sample ID:</b>	DA65726-1	<b>Date Received:</b>	07/17/24
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846-8015D SW846 3510C		
<b>Project:</b>	GWA_Buffalo_Ridge_Water_Well		

	File ID	DF	Analyzed By	Prep Date	Prep Batch	Analytical Batch
Run #1	FH077709.D	1	07/24/24 22:42 JB	07/18/24 04:00	OP26067	GFH23924
Run #2						

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	ND	0.20	0.19	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	72%		10-131%		

ND = Not detected      MDL = Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

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Client Sample ID: BW\_MARTIN\_47218\_F NWSW\_12\_1N\_66W

Lab Sample ID: DA65726-1

Matrix: AQ - Ground Water

Date Sampled: 07/16/24

Date Received: 07/17/24

Percent Solids: n/a

Project: GWA\_Buffalo\_Ridge\_Water\_Well

## General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
<b>300.0</b>							
Fluoride	2.4	0.20	mg/l	2	07/17/24 16:45	MB	EPA 300.0
Chloride	76.0	13	mg/l	25	07/17/24 16:54	MB	EPA 300.0
Nitrogen, Nitrite <sup>a</sup>	< 0.0080	0.0080	mg/l	2	07/17/24 16:45	MB	EPA 300.0
Bromide <sup>a</sup>	< 0.10	0.10	mg/l	2	07/17/24 16:45	MB	EPA 300.0
Nitrogen, Nitrate <sup>a</sup>	< 0.020	0.020	mg/l	2	07/17/24 16:45	MB	EPA 300.0
Sulfate <sup>a</sup>	< 1.0	1.0	mg/l	2	07/17/24 16:45	MB	EPA 300.0
<b>300.0 NO2 + NO3O</b>							
Nitrogen, Nitrate + Nitrite <sup>b</sup>	< 0.028	0.028	mg/l	1	07/17/24 16:45	MB	EPA 300.0
Alkalinity, Bicarbonate as CaC	500	5.0	mg/l	1	07/22/24 12:22	JW	SM 2320B-2011
Alkalinity, Carbonate	34.1	5.0	mg/l	1	07/22/24 12:22	JW	SM 2320B-2011
Alkalinity, Total as CaCO3	534	5.0	mg/l	1	07/22/24 12:22	JW	SM 2320B-2011
Cation Anion Balance	1.6	%		1	07/25/24	MB	SM1030E-2011
Phosphorus, Total	0.049	0.010	mg/l	1	07/24/24 10:54	KH	EPA 365.1
Solids, Total Dissolved	641	10	mg/l	1	07/19/24 07:00	JW	SM 2540C-2011
Specific Conductivity	1140	1.0	umhos/cm	1	07/18/24 10:00	JW	SM 2510B-2011
pH <sup>c</sup>	8.73		su	1	07/18/24 11:35	JW	SM4500HB+ -2011/9040C

## Field Parameters

Oxygen, Dissolved (Field)	0.18		mg/l	1	07/16/24 09:42	SUB	FIELD
Redox Potential Vs H2	-40.3		mv	1	07/16/24 09:42	SUB	FIELD
Specific Conductivity (Field)	1082.5	0.50	umhos/cm	1	07/16/24 09:42	SUB	FIELD
Temperature (Field)	24.7		Deg. C	1	07/16/24 09:42	SUB	FIELD
Turbidity	0.02		NTU	1	07/16/24 09:42	SUB	FIELD
pH (Field)	8.74		su	1	07/16/24 09:42	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

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**Report of Analysis**

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Client Sample ID: BW\_MARTIN\_47218\_F NWSW\_12\_1N\_66W

Lab Sample ID: DA65726-1A

Date Sampled: 07/16/24

Matrix: AQ - Ground Water

Date Received: 07/17/24

Method: RSK175 MOD

Percent Solids: n/a

Project: GWA\_Buffalo\_Ridge\_Water\_Well

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	FK5114.D	1	07/19/24 13:52	MB	n/a	n/a	GFK371
Run #2 <sup>a</sup>	FK5115.D	10	07/19/24 13:57	MB	n/a	n/a	GFK371

	Initial Volume	Headspace Volume	Volume Injected	Temperature
Run #1	39.0 ml	4.0 ml	500 ul	22.5 Deg. C
Run #2	39.0 ml	4.0 ml	500 ul	22.5 Deg. C

**Methane, Ethane and Propane**

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	4.25 <sup>b</sup>	0.0080	0.0070	mg/l	
74-84-0	Ethane	0.0074	0.0016	0.0010	mg/l	
74-98-6	Propane	ND	0.0022	0.0017	mg/l	

(a) The pH of the sample was &gt; 2 at time of analysis. Bottles marked as unpreserved.

(b) Result is from Run# 2

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**

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Client Sample ID: BW\_MARTIN\_47218\_F NWSW\_12\_1N\_66W

Lab Sample ID: DA65726-1B

Matrix: AQ - Ground Water

Date Sampled: 07/16/24

Date Received: 07/17/24

Percent Solids: n/a

Project: GWA\_Buffalo\_Ridge\_Water\_Well

**General Chemistry**

Analyte	Result	RL	Units	DF	Analyzed	By	Method
<b>Not certifiable</b>							
Iron-Related Bacteria	2200	25	CFU/ml	1	07/26/24 10:00	TH	HACH IRB-BART-NOCERT
Slime Forming Bacteria	< 500	500	CFU/ml	1	07/26/24 10:00	TH	HC SLYM-BART-NO CERT
Sulfate Reducing Bacteria	< 200	200	CFU/ml	1	07/26/24 10:00	TH	HC SRB-BART-NO CERT

RL = Reporting Limit

4.3

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**Report of Analysis**

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Client Sample ID:	BW_MARTIN_47218_F NWSW_12_1N_66W	Date Sampled:	07/16/24
Lab Sample ID:	DA65726-1F	Date Received:	07/17/24
Matrix:	AQ - Groundwater Filtered	Percent Solids:	n/a
Project:	GWA_Buffalo_Ridge_Water_Well		

**Dissolved Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Barium	0.0502	0.0020	mg/l	1	07/23/24	07/24/24	CDL	EPA 200.8 <sup>1</sup>
Boron	0.389	0.040	mg/l	1	07/23/24	07/24/24	CDL	EPA 200.8 <sup>1</sup>
Calcium	1.50	0.40	mg/l	1	07/23/24	07/24/24	CDL	EPA 200.8 <sup>1</sup>
Iron	< 0.020	0.020	mg/l	1	07/23/24	07/24/24	CDL	EPA 200.8 <sup>1</sup>
Magnesium	0.433	0.10	mg/l	1	07/23/24	07/24/24	CDL	EPA 200.8 <sup>1</sup>
Manganese	0.0056	0.0010	mg/l	1	07/23/24	07/24/24	CDL	EPA 200.8 <sup>1</sup>
Potassium	1.23	0.20	mg/l	1	07/23/24	07/24/24	CDL	EPA 200.8 <sup>1</sup>
Selenium	< 0.00040	0.00040	mg/l	1	07/23/24	07/24/24	CDL	EPA 200.8 <sup>1</sup>
Sodium	285	5.0	mg/l	10	07/23/24	07/24/24	CDL	EPA 200.8 <sup>1</sup>
Strontium	0.0645	0.020	mg/l	1	07/23/24	07/24/24	CDL	EPA 200.8 <sup>1</sup>

(1) Instrument QC Batch: MA18245

(2) Prep QC Batch: MP39789

RL = Reporting Limit

## Misc. Forms

5

### Custody Documents and Other Forms

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**Includes the following where applicable:**

- Chain of Custody



## **CHAIN OF CUSTODY**

Page 1 of 1

4036 Youngfield Street, Wheat Ridge, CO 80033  
TEL: 303-425-6021 FAX: 303-425-6854  
[www.accutest.com](http://www.accutest.com)

Client / Reporting Information		Project Information						Requested Analysis (see TEST CODE sheet)						Matrix Codes					
Company: Kerr-McGee Oil and Gas Onshore LP		Project Name: GWA_Buffalo_Ridge_Water_Well			Frequency: IN														
Street: 1099 18th Street		Regulation: Voluntary			Billing Information (if different from Report to)														
City, State: Denver, CO 80202		Facility ID: 753954			Company: Occidental Petroleum Corporation (OXY)														
Project Contact: Joel Mason		EQuIS Facility Code: 0089019-AN-GWABWQ			Street Address: 1201 Lake Robbins Drive														
Phone: 307-262-8975		Client Purchase Order #			City, State ZIP: The Woodlands, TX 77380														
Email: Joel.Mason@Absorokasolutions.com		4501812370 Line Item 50																	
Sampler(s) Name(s) Emily Fitzjohn		Project Manager: Joel Mason			Attention: Erik Mickelson User ID: fvv451														
Field ID / Point of Collection		Collection			Number of preserved Bottles														
		Date: 7/16/2024	Time: 9:42	Sampled by: EF	Matrix: GW	# of bottles: 17	NONE	HCl	NaOH	HNO3	H2SO4	Di Water	MEOH	ENCORE	Na2SiO4	Other:			
BW_Martin_47218_F					X	X	X	X	X	X	X	X	VRSK175DGMEP	V8260BTX	B8015DRO	V8015GRO	IRBAC, SFBAc, SO4RBAC	CABAL	
NWSW_12_1N_66W																		LAB USE ONLY	
Temperature, field		24.7	°C															C 1	
pH, field		8.74	s.u.																
Specific Conductivity, field		1092.5	uS/cm																
Oxidation Reduction Potential, field		-40.3	mV																
Dissolved Oxygen, field		0.18	mg/L																
Turbidity, field		0.02	NTU																
Turnaround Time (Business days)										Data Deliverable Information						Comments / Special Instructions			
<input checked="" type="checkbox"/> Std. 10 Business Days <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day Emergency <input type="checkbox"/> 2 Day Emergency <input type="checkbox"/> 1 Day Emergency					<input type="checkbox"/> Report in PPB <input type="checkbox"/> Report in PPM <input type="checkbox"/> Report MDLs					<input type="checkbox"/> Commercial "A" (Level 1, Results Only) <input type="checkbox"/> Commercial "B" (Level 2, Results + QC Summary) <input type="checkbox"/> COMMNB (Results/QC/Narrative) <input type="checkbox"/> COMMNB+ [Results/QC/Narrative (+ chromatograms)] <input type="checkbox"/> REDT2 <input type="checkbox"/> FULT1 <input checked="" type="checkbox"/> EDD Format: COGCC Compatible					*Dissolved Metals (200.7/200.8): BaMS, B, Ca, Fe,Mg, Mn, K, SeMS, Na, Sr Please also send reports to Michelle.Henry@absorokasolutions.com and Jordan.Fleming@Absorokasolutions.com				
Sample Custody must be documented below each time samples change possession, including courier delivery.																			
Relinquished by Sampler: 1		Date/Time: 7/16/24 18:00		Received By: JM 7/17/24		Relinquished By: 2		Date/Time: 7/17/24		Received By: 2		Relinquished By: 3		Date/Time: 7/17/24		Received By: 3			
Relinquished by Sampler: 3		Date/Time:		Received By:		Relinquished By: 4		Date/Time:		Received By: 4									
Custody Seal #		Intact <input checked="" type="checkbox"/>		Not intact <input type="checkbox"/>		Absent <input type="checkbox"/>		Preserved where applicable <input type="checkbox"/>		Cooler Temp. °C: 17.0		Therm. ID: 104		On Ice <input type="checkbox"/>		Form MSQA 054-01, RV 6/19/17 http://www.sqs.com/terms-and-conditions			

## **DA65726: Chain of Custody**

Page 1 of 2

## SGS Sample Receipt Summary

Job Number: da65726 Client: ABSAROKA Project: GWA  
 Date / Time Received: 7/17/2024 1:00:00 PM Delivery Method: co Airbill #'s:

Cooler Temps (Raw Measured) °C: Cooler 1: (4.0);

Cooler Temps (Corrected) °C: Cooler 1: (4.0);

### Cooler Information

	<u>Y</u> or <u>N</u>	
1. Custody Seals Present:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Custody Seals Intact:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Temp criteria achieved:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Cooler temp verification:	IR Gun	
5. Cooler media:	Ice (Bag)	

### Trip Blank Information

	<u>Y</u> or <u>N</u>	<u>N/A</u>
1. Trip Blank present / cooler:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Trip Blank listed on COC:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Type of TB Received	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### W or S N/A

### Sample Information

	<u>Y</u> or <u>N</u>	<u>N/A</u>
1. Sample labels present on bottles:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Samples presented properly	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Sufficient volume/containers rec'd for analysis	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Condition of sample:	Intact	
5. Sample rec'd within HT	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Dates/Times/IDs on COC match sample label	<input type="checkbox"/>	<input type="checkbox"/>
7. VOCs have headspace	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8. Bottles received for unspecified tests	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9. Compositing instructions clear	<input type="checkbox"/>	<input type="checkbox"/>
10. VOA Soil Kits/Jars received past 48hrs?	<input type="checkbox"/>	<input type="checkbox"/>
11. % Solids Jar Received?	<input type="checkbox"/>	<input type="checkbox"/>
12. Residual Chlorine Present?	<input type="checkbox"/>	<input type="checkbox"/>

### Misc Information

Number of Enclosures: 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: 7/17/2024 1:14:10 PM Reviewer: \_\_\_\_\_ Date: \_\_\_\_\_

DA65726: Chain of Custody

Page 2 of 2

5.1

**MS Volatiles****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

Page 1 of 1

Job Number: DA65726

Account: ANADACOD Occidental Petroleum Corporation

Project: GWA\_Buffalo\_Ridge\_Water\_Well

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5V4059-MB	5V82924A.D	1	07/17/24	MB	n/a	n/a	V5V4059

The QC reported here applies to the following samples:

Method: SW846 8260B

DA65726-1

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	101%
17060-07-0	1,2-Dichloroethane-D4	70-130%
2037-26-5	Toluene-D8	100%
460-00-4	4-Bromofluorobenzene	70-130%
		101%
		102%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
124-38-9	Carbon dioxide	1.40	5.5	ug/l	JN
	Total TIC, Volatile		0	ug/l	

**Blank Spike Summary**

Job Number: DA65726

Account: ANADACOD Occidental Petroleum Corporation

Project: GWA\_Buffalo\_Ridge\_Water\_Well

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5V4059-BS	5V82922A.D	1	07/17/24	MB	n/a	n/a	V5V4059

The QC reported here applies to the following samples:

Method: SW846 8260B

DA65726-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	50	52.7	105	70-130
100-41-4	Ethylbenzene	50	53.7	107	70-130
108-88-3	Toluene	50	52.9	106	70-130
	m,p-Xylene	100	108	108	70-130
95-47-6	o-Xylene	50	53.4	107	70-130
1330-20-7	Xylene (total)	150	161	107	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	101%	70-130%
17060-07-0	1,2-Dichloroethane-D4	100%	70-130%
2037-26-5	Toluene-D8	98%	70-130%
460-00-4	4-Bromofluorobenzene	95%	70-130%

\* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: DA65726

Account: ANADACOD Occidental Petroleum Corporation

Project: GWA\_Buffalo\_Ridge\_Water\_Well

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
DA65379-57MS	5V82926A.D	1	07/17/24	MB	n/a	n/a	V5V4059
DA65379-57MSD	5V82927A.D	1	07/17/24	MB	n/a	n/a	V5V4059
DA65379-57	5V82925A.D	1	07/17/24	MB	n/a	n/a	V5V4059

The QC reported here applies to the following samples:

Method: SW846 8260B

DA65726-1

CAS No.	Compound	DA65379-57		Spike	MS	MS	Spike	MSD	MSD	RPD	Limits Rec/RPD
		ug/l	Q	ug/l	ug/l	%	ug/l	ug/l	%		
71-43-2	Benzene	ND	50	53.7	107	50	53.2	106	1	1	70-130/30
100-41-4	Ethylbenzene	ND	50	54.2	108	50	53.6	107	1	1	70-130/30
108-88-3	Toluene	ND	50	54.5	109	50	53.4	107	2	2	70-130/30
	m,p-Xylene	ND	100	109	109	100	108	108	1	1	70-130/30
95-47-6	o-Xylene	ND	50	54.1	108	50	53.5	107	1	1	70-130/30
1330-20-7	Xylene (total)	ND	150	164	109	150	161	107	2	2	70-130/30

CAS No.	Surrogate Recoveries	MS	MSD	DA65379-57 Limits
1868-53-7	Dibromofluoromethane	99%	100%	70-130%
17060-07-0	1,2-Dichloroethane-D4	98%	99%	70-130%
2037-26-5	Toluene-D8	99%	99%	70-130%
460-00-4	4-Bromofluorobenzene	98%	97%	70-130%

\* = Outside of Control Limits.

6.3.1  
6

**GC Volatiles****QC Data Summaries**

7

**Includes the following where applicable:**

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

## Method Blank Summary

Page 1 of 1

Job Number: DA65726

Account: ANADACOD Occidental Petroleum Corporation

Project: GWA\_Buffalo\_Ridge\_Water\_Well

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGA2904-MB	GA66116.D	1	07/18/24	JC	n/a	n/a	GGA2904

The QC reported here applies to the following samples:

Method: SW846 8015D

DA65726-1

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	103% 60-140%

7

## Method Blank Summary

Page 1 of 1

Job Number: DA65726

Account: ANADACOD Occidental Petroleum Corporation

Project: GWA\_Buffalo\_Ridge\_Water\_Well

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GFK371-MB	FK5109.D	1	07/19/24	MB	n/a	n/a	GFK371

The QC reported here applies to the following samples:

Method: RSK175 MOD

DA65726-1A

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	

## Blank Spike Summary

Page 1 of 1

Job Number: DA65726

Account: ANADACOD Occidental Petroleum Corporation

Project: GWA\_Buffalo\_Ridge\_Water\_Well

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGA2904-BS	GA66114.D	1	07/18/24	JC	n/a	n/a	GGA2904

The QC reported here applies to the following samples:

Method: SW846 8015D

DA65726-1

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	TPH-GRO (C6-C10)	2.2	2.07	94	64-130

CAS No.	Surrogate Recoveries	BSP	Limits
120-82-1	1,2,4-Trichlorobenzene	130%	60-140%

\* = Outside of Control Limits.

7.2.1

7

## Blank Spike/Blank Spike Duplicate Summary

Page 1 of 1

Job Number: DA65726

Account: ANADACOD Occidental Petroleum Corporation

Project: GWA\_Buffalo\_Ridge\_Water\_Well

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GFK371-BS	FK5113.D	10	07/19/24	MB	n/a	n/a	GFK371
GFK371-BSD	FK5124.D	10	07/19/24	MB	n/a	n/a	GFK371

The QC reported here applies to the following samples:

Method: RSK175 MOD

DA65726-1A

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	BSD mg/l	BSD %	RPD	Limits Rec/RPD
74-82-8	Methane	0.51	0.606	119	0.592	116	2	70-135/30
74-84-0	Ethane	0.956	1.20	126	1.18	123	2	70-150/30
74-98-6	Propane	1.4	1.71	122	1.66	118	3	70-145/30

\* = Outside of Control Limits.

7.3.1

7

# Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: DA65726

Account: ANADACOD Occidental Petroleum Corporation

Project: GWA\_Buffalo\_Ridge\_Water\_Well

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
DA65379-58MS	GA66118.D	1	07/18/24	JC	n/a	n/a	GGA2904
DA65379-58MSD	GA66119.D	1	07/18/24	JC	n/a	n/a	GGA2904
DA65379-58	GA66117.D	1	07/18/24	JC	n/a	n/a	GGA2904

The QC reported here applies to the following samples:

Method: SW846 8015D

DA65726-1

CAS No.	Compound	DA65379-58		Spike	MS	MS	Spike	MSD	MSD	RPD	Limits Rec/RPD
		mg/l	Q	mg/l	mg/l	%	mg/l	mg/l	%		
	TPH-GRO (C6-C10)	ND		2.2	1.85	84	2.2	1.85	84	0	49-130/30
CAS No.	Surrogate Recoveries	MS		MSD	DA65379-58		Limits				
120-82-1	1,2,4-Trichlorobenzene	135%		136%	105%		60-140%				

\* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: DA65726

Account: ANADACOD Occidental Petroleum Corporation

Project: GWA\_Buffalo\_Ridge\_Water\_Well

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
DA65726-1AMS <sup>a</sup>	FK5116.D	10	07/19/24	MB	n/a	n/a	GFK371
DA65726-1AMSD <sup>a</sup>	FK5117.D	10	07/19/24	MB	n/a	n/a	GFK371
DA65726-1A <sup>a</sup>	FK5114.D	1	07/19/24	MB	n/a	n/a	GFK371
DA65726-1A <sup>a</sup>	FK5115.D	10	07/19/24	MB	n/a	n/a	GFK371

The QC reported here applies to the following samples:

Method: RSK175 MOD

DA65726-1A

CAS No.	Compound	DA65726-1A Spike		MS mg/l	MS %	Spike mg/l	MSD mg/l	MSD %	RPD	Limits Rec/RPD
		mg/l	Q							
74-82-8	Methane	4.25 <sup>b</sup>	0.51	4.27	37	0.51	4.25	33	0	20-183/30
74-84-0	Ethane	0.0074	0.956	1.09	113	0.956	1.09	113	0	50-140/30
74-98-6	Propane	ND	1.4	1.54	110	1.4	1.54	110	0	50-140/30

(a) The pH of the sample was > 2 at time of analysis. Bottles marked as unpreserved.

(b) Result is from Run #2.

\* = Outside of Control Limits.

7.4.2

**GC/LC Semi-volatiles****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

Page 1 of 1

Job Number: DA65726

Account: ANADACOD Occidental Petroleum Corporation

Project: GWA\_Buffalo\_Ridge\_Water\_Well

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP26067-MB	FH077698.D	1	07/24/24	JB	07/18/24	OP26067	GFH23924

The QC reported here applies to the following samples:

Method: SW846-8015D

DA65726-1

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	ND	0.20	0.19	mg/l	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	67% 10-131%

8.1.1

8

## Blank Spike Summary

Page 1 of 1

Job Number: DA65726

Account: ANADACOD Occidental Petroleum Corporation

Project: GWA\_Buffalo\_Ridge\_Water\_Well

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP26067-BS	FH077699.D	1	07/24/24	JB	07/18/24	OP26067	GFH23924

The QC reported here applies to the following samples:

Method: SW846-8015D

DA65726-1

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	TPH-DRO (C10-C28)	5	5.90	118	20-130

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	79%	10-131%

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\* = Outside of Control Limits.

8.2.1

8

# Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: DA65726

Account: ANADACOD Occidental Petroleum Corporation

Project: GWA\_Buffalo\_Ridge\_Water\_Well

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP26067-MS	FH077700.D	1	07/24/24	JB	07/18/24	OP26067	GFH23924
OP26067-MSAD	FH077701.D	1	07/24/24	JB	07/18/24	OP26067	GFH23924
DA65658-1	FH077702.D	1	07/24/24	JB	07/18/24	OP26067	GFH23924

The QC reported here applies to the following samples:

Method: SW846-8015D

DA65726-1

CAS No.	Compound	DA65658-1		Spike	MS	MS	Spike	MSD	MSD	RPD	Limits Rec/RPD
		mg/l	Q	mg/l	mg/l	%	mg/l	mg/l	%		
	TPH-DRO (C10-C28)	ND		10	7.68	77	10	9.99	100	26	20-130/30

CAS No.	Surrogate Recoveries	MS	MSD	DA65658-1	Limits
84-15-1	o-Terphenyl	84%	72%	64%	10-131%

8.3.1

8

\* = Outside of Control Limits.

**Metals Analysis****QC Data Summaries**

6

**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: DA65726  
Account: ANADACOD - Occidental Petroleum Corporation  
Project: GWA\_Buffalo\_Ridge\_Water\_Well

QC Batch ID: MP39789  
Matrix Type: AQUEOUS

Methods: EPA 200.8  
Units: ug/l

Prep Date:

07/23/24

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	0.012	<2.0
Beryllium	0.20	.077	.1		
Boron	40	18	20	2.6	<40
Cadmium	0.10	.03	.04		
Calcium	400	25	100	5.3	<400
Chromium	2.0	.087	.25		
Cobalt	0.20	.04	.05		
Copper	2.0	.05	.81		
Iron	20	1.6	10	1.8	<20
Lead	0.50	.094	.13		
Magnesium	100	10	25	5.7	<100
Manganese	1.0	.079	.51	0.036	<1.0
Molybdenum	1.0	.037	.27		
Nickel	2.0	.098	.35		
Phosphorus	60	7.6	25		
Potassium	200	2	50	-17	<200
Selenium	0.40	.05	.1	0.012	<0.40
Silver	0.10	.0081	.025		
Sodium	500	10	130	-13	<500
Strontium	20	.1	5	0.0088	<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 MP39789: DA65726-1F

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

## MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: DA65726

Account: ANADACOD - Occidental Petroleum Corporation  
Project: GWA\_Buffalo\_Ridge\_Water\_WellQC Batch ID: MP39789  
Matrix Type: AQUEOUSMethods: EPA 200.8  
Units: ug/l

Prep Date: 07/23/24

Metal	DA65766-1F Original MS	Spikelot ICPMS5	% Rec	QC Limits
Aluminum	anr			
Antimony	anr			
Arsenic	anr			
Barium	38.8	436	400	99.3 70-130
Beryllium	anr			
Boron	0.00	418	400	104.5 70-130
Cadmium	anr			
Calcium	45500	53100	5000	152.0(a) 70-130
Chromium	anr			
Cobalt				
Copper	anr			
Iron	12.6	1000	1000	98.7 70-130
Lead	anr			
Magnesium	21200	25800	5000	92.0 70-130
Manganese	16.5	210	200	96.8 70-130
Molybdenum	anr			
Nickel	anr			
Phosphorus				
Potassium	894	5800	5000	98.1 70-130
Selenium	2.2	206	200	101.9 70-130
Silver	anr			
Sodium	2020	6790	5000	95.4 70-130
Strontium	99.2	201	100	101.8 70-130
Thallium	anr			
Tin				
Titanium				
Uranium	anr			
Vanadium				
Zinc	anr			

Associated samples MP39789: DA65726-1F

Results &lt; 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) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

9.1.2

9

## MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: DA65726

Account: ANADACOD - Occidental Petroleum Corporation  
Project: GWA\_Buffalo\_Ridge\_Water\_WellQC Batch ID: MP39789  
Matrix Type: AQUEOUSMethods: EPA 200.8  
Units: ug/l

Prep Date:

07/23/24

Metal	DA65766-1F Original	MSD	Spikelot ICPMS5	% Rec	MSD RPD	QC Limit
Aluminum	anr					
Antimony	anr					
Arsenic	anr					
Barium	38.8	442	400	100.8	0.7	20
Beryllium	anr					
Boron	0.00	425	400	106.3	1.2	20
Cadmium	anr					
Calcium	45500	51900	5000	128.0	2.3	20
Chromium	anr					
Cobalt						
Copper	anr					
Iron	12.6	1020	1000	100.7	1.0	20
Lead	anr					
Magnesium	21200	26400	5000	104.0	2.6	20
Manganese	16.5	216	200	99.8	0.0	20
Molybdenum	anr					
Nickel	anr					
Phosphorus						
Potassium	894	5710	5000	96.3	2.3	20
Selenium	2.2	207	200	102.4	0.5	20
Silver	anr					
Sodium	2020	6780	5000	95.2	2.3	20
Strontium	99.2	196	100	96.8	2.0	20
Thallium	anr					
Tin						
Titanium						
Uranium	anr					
Vanadium						
Zinc	anr					

Associated samples MP39789: DA65726-1F

Results &lt; IDL are shown as zero for calculation purposes

(\*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

9.1.2

9

## SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: DA65726

Account: ANADACOD - Occidental Petroleum Corporation  
Project: GWA\_Buffalo\_Ridge\_Water\_WellQC Batch ID: MP39789  
Matrix Type: AQUEOUSMethods: EPA 200.8  
Units: ug/l

Prep Date:

07/23/24

Metal	BSP Result	Spikelot ICPMS5	% Rec	QC Limits
Aluminum	anr			
Antimony	anr			
Arsenic	anr			
Barium	394	400	98.5	85-115
Beryllium	anr			
Boron	413	400	103.3	85-115
Cadmium	anr			
Calcium	5090	5000	101.8	85-115
Chromium	anr			
Cobalt				
Copper	anr			
Iron	1030	1000	103.0	85-115
Lead	anr			
Magnesium	4810	5000	96.2	85-115
Manganese	207	200	103.5	85-115
Molybdenum	anr			
Nickel	anr			
Phosphorus				
Potassium	5160	5000	103.2	85-115
Selenium	207	200	103.5	85-115
Silver	anr			
Sodium	5040	5000	100.8	85-115
Strontium	96.2	100	96.2	85-115
Thallium	anr			
Tin				
Titanium				
Uranium	anr			
Vanadium				
Zinc	anr			

Associated samples MP39789: DA65726-1F

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

9.1.3  
9

**General Chemistry****QC Data Summaries**

**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: DA65726  
Account: ANADACOD - Occidental Petroleum Corporation  
Project: GWA\_Buffalo\_Ridge\_Water\_Well

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Alkalinity, Bicarbonate as CaC	GN64149	5.0	0.0	mg/l	100	108	107.8	90-110%
Alkalinity, Carbonate	GN64150	5.0	0.0	mg/l	100	108	107.8	90-110%
Alkalinity, Total as CaCO <sub>3</sub>	GN64148	5.0	0.0	mg/l	100	108	107.8	90-110%
Bromide	GP36995/GN64102	0.050	0.0	mg/l	0.5	0.514	102.8	90-110%
Chloride	GP36995/GN64102	0.50	0.0	mg/l	5	5.01	100.2	90-110%
Fluoride	GP36995/GN64102	0.10	0.0	mg/l	1	1.03	103.0	90-110%
Iron-Related Bacteria	MB1781	25	<25	CFU/ml				
Nitrogen, Nitrate	GP36995/GN64102	0.010	0.0	mg/l	0.1	0.100	100.0	90-110%
Nitrogen, Nitrite	GP36995/GN64102	0.0040	0.0	mg/l	0.05	0.0512	102.4	90-110%
Phosphate, Ortho	GP36995/GN64102	0.050	0.0	mg/l	0.5	0.502	100.4	90-110%
Phosphorus, Total	GP37036/GN64170	0.010	0.0	mg/l	0.2	0.188	94.0	90-110%
Slime Forming Bacteria	MB1782	500	<500	CFU/ml				
Solids, Total Dissolved	GN64134	10	0.0	mg/l	250	992	99.2	90-110%
Specific Conductivity	GP37001/GN64109			umhos/cm	10000	1430	101.3	90-110%
Sulfate	GP36995/GN64102	0.50	0.0	mg/l	5	5.10	102.0	90-110%
Sulfate Reducing Bacteria	MB1783	200	<200	CFU/ml				

Associated Samples:

Batch MB1781: DA65726-1B  
Batch MB1782: DA65726-1B  
Batch MB1783: DA65726-1B  
Batch GN64134: DA65726-1  
Batch GN64148: DA65726-1  
Batch GN64149: DA65726-1  
Batch GN64150: DA65726-1  
Batch GP36995: DA65726-1  
Batch GP37001: DA65726-1  
Batch GP37036: DA65726-1  
(\*) Outside of QC limits

DUPLICATE RESULTS SUMMARY  
GENERAL CHEMISTRY

Login Number: DA65726  
Account: ANADACOD - Occidental Petroleum Corporation  
Project: GWA\_Buffalo\_Ridge\_Water\_Well

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Alkalinity, Total as CaCO <sub>3</sub>	GN64148	DA65810-8	mg/l	58.8	57.4	2.3	0-20%
Iron-Related Bacteria	MB1781	DA65883-1B	CFU/ml	2200	2200	0.0	0-%
Phosphorus, Total	GP37036/GN64170	DA65726-1	mg/l	0.049	0.049	0.0	0-20%
Slime Forming Bacteria	MB1782	DA65883-1B	CFU/ml	<500	<500	500.0	0-%
Specific Conductivity	GP37001/GN64109	DA65726-1	umhos/cm	1140	1140	0.4	0-20%
Sulfate Reducing Bacteria	MB1783	DA65883-1B	CFU/ml	<200	325	0.0	0-%

Associated Samples:

Batch MB1781: DA65726-1B

Batch MB1782: DA65726-1B

Batch MB1783: DA65726-1B

Batch GN64148: DA65726-1

Batch GP37001: DA65726-1

Batch GP37036: DA65726-1

(\*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY  
GENERAL CHEMISTRY

Login Number: DA65726  
Account: ANADACOD - Occidental Petroleum Corporation  
Project: GWA\_Buffalo\_Ridge\_Water\_Well

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Alkalinity, Total as CaCO <sub>3</sub>	GN64148	DA65810-9	mg/l	56.7	100	159	102.7	80-120%
Bromide	GP36995/GN64102	DA65698-1	mg/l	0.025 U	0.5	0.52	104.0	80-120%
Chloride	GP36995/GN64102	DA65698-1	mg/l	1.1	5	6.1	100.0	80-120%
Fluoride	GP36995/GN64102	DA65698-1	mg/l	0.41	1	1.5	109.0	80-120%
Nitrogen, Nitrate	GP36995/GN64102	DA65698-1	mg/l	0.0060 U	0.1	0.10	100.0	80-120%
Nitrogen, Nitrite	GP36995/GN64102	DA65698-1	mg/l	0.0049	0.05	0.054	98.2	80-120%
Phosphate, Ortho	GP36995/GN64102	DA65698-1	mg/l	0.035 U	0.5	0.46	92.0	80-120%
Phosphorus, Total	GP37036/GN64170	DA65726-1	mg/l	0.049	0.2	0.25	100.5	90-110%
Sulfate	GP36995/GN64102	DA65698-1	mg/l	3.1	5	8.2	102.0	80-120%

Associated Samples:

Batch GN64148: DA65726-1

Batch GP36995: DA65726-1

Batch GP37036: DA65726-1

(\*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

MATRIX SPIKE DUPLICATE RESULTS SUMMARY  
GENERAL CHEMISTRY

Login Number: DA65726  
Account: ANADACOD - Occidental Petroleum Corporation  
Project: GWA\_Buffalo\_Ridge\_Water\_Well

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Alkalinity, Total as CaCO <sub>3</sub>	GN64148	DA65810-9	mg/l	56.7	100	159	0.3	20%
Bromide	GP36995/GN64102	DA65698-1	mg/l	0.025 U	0.5	0.49	5.9	20%
Chloride	GP36995/GN64102	DA65698-1	mg/l	1.1	5	5.9	3.3	20%
Fluoride	GP36995/GN64102	DA65698-1	mg/l	0.41	1	1.4	6.9	20%
Nitrogen, Nitrate	GP36995/GN64102	DA65698-1	mg/l	0.0060 U	0.1	0.096	4.1	20%
Nitrogen, Nitrite	GP36995/GN64102	DA65698-1	mg/l	0.0049	0.05	0.053	1.9	20%
Phosphate, Ortho	GP36995/GN64102	DA65698-1	mg/l	0.035 U	0.5	0.44	4.4	20%
Phosphorus, Total	GP37036/GN64170	DA65726-1	mg/l	0.049	0.2	0.25	0.0	20%
Sulfate	GP36995/GN64102	DA65698-1	mg/l	3.1	5	8.0	2.5	20%

Associated Samples:

Batch GN64148: DA65726-1

Batch GP36995: DA65726-1

Batch GP37036: DA65726-1

(\*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

10.4  
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