The results set forth herein are provided by SGS North America Inc.

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Automated Report

Technical Report for

Kerr-McGee Oil & Gas Onshore LP

GWA_Krumpeck_Water_Well

FID:753144 Reg:Vol. Freq.:SP

SGS Job Number: DA49525

Sampling Date: 09/27/22

Report to:

Kerr-McGee Oil & Gas Onshore LP
112 High Street
Buffalo, WY 82834
tanya.cude@absarokasolutions.com; AnadarkoDataMmgt@ghd.com;
joel.mason@absarokasolutions.com
ATTN: Tanya Cude

Total number of pages in report: 46

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.

Rebecca Nichols
General Manager

Client Service contact: Terri McNulty-Patterson 303-425-6021

Certifications: CO (CO00049), NE (NE-OS-06-04), ND (R-027), UT (NELAP CO00049)
LA (LA150028), TX (T104704511), WY (8TMS-L), HI (CO00049), NJ (CO011), NV (CO00049)

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SGS North America Inc.

Sample Summary

Kerr-McGee Oil & Gas Onshore LP

Job No: DA49525

GWA_Krumpeck_Water_Well
Project No: FID:753144 Reg:Vol. Freq.:SP

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
DA49525-1	09/27/22	11:22	EF	09/28/22	AQ	Ground Water	BW_RISSLER_217161 SESW_36_4N_66W
DA49525-1A	09/27/22	11:22	EF	09/28/22	AQ	Ground Water	BW_RISSLER_217161 SESW_36_4N_66W
DA49525-1B	09/27/22	11:22	EF	09/28/22	AQ	Ground Water	BW_RISSLER_217161 SESW_36_4N_66W
DA49525-1F	09/27/22	11:22	EF	09/28/22	AQ	Groundwater Filtered	BW_RISSLER_217161 SESW_36_4N_66W

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

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	Kerr-McGee Oil & Gas Onshore LP	**Job No:**	DA49525
Site:	GWA_Krumpeck_Water_Well	**Report Date**	11/14/2022 1:00:14 P

On 09/28/2022, 1 sample(s), 0 Trip Blank(s), and 0 Field Blank(s) were received at SGS North America Inc. (SGS) at a temperature of 4.3 °C. The samples were intact and properly preserved, unless noted below. An SGS Job Number of DA49525 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:** V5V3494

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

GC Volatiles By Method RSK175 MOD

Matrix: AQ **Batch ID:** GFK251

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- DA49525-1A: Sample was not preserved to a pH < 2.

GC Volatiles By Method SW846 8015D

Matrix: AQ **Batch ID:** GGA2648

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

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

Matrix: AQ **Batch ID:** OP22545

- 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.
- Sample(s) DA49513-1MS, DA49513-1MSD were used as the QC samples indicated.
- The RPD(s) for the MS and MSD recoveries of TPH-DRO (C10-C28) are outside control limits for sample OP22545-MSD. High RPD due to possible sample nonhomogeneity.
- DA49525-1 for TPH-DRO (C10-C28): Associated CCV outside of control limits high, sample was ND.

Metals Analysis By Method EPA 200.8

Matrix: AQ	Batch ID: MP36177

- 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) DA49516-2FAMS, DA49516-2FAMSD were used as the QC samples for the metals analysis.
- The blank spike (BS) recovery(s) of Sodium are outside control limits.
- MP36177-MB1 for Sodium: Element detected in the MB greater than 1/2 the reporting limit. Reported samples are ND or 10x the result of the MB.
- MP36177-B1 for Sodium: Outside control limits biased high. Reported samples are ND.

Matrix: AQ	Batch ID: MP36363

- 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) DA49648-1MS, DA49648-1MSD were used as the QC samples for the metals analysis.

General Chemistry By Method EPA 300.0

Matrix: AQ	Batch ID: GP32657

- DA49525-1 for Nitrogen, Nitrate + Nitrite: Calculated as: (Nitrogen, Nitrate) + (Nitrogen, Nitrite)

General Chemistry By Method EPA 365.1

Matrix: AQ	Batch ID: GP32775

- 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) DA49480-2DUP, DA49480-2MSD 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 EPA300.0

Matrix: AQ	Batch ID: GP32657

- 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) DA49543-3MS, DA49543-3MSD were used as the QC samples for the Bromide, Chloride, Fluoride, Nitrogen, Nitrate, Nitrogen, Nitrite, Sulfate, Bromide analysis.

General Chemistry By Method HACH IRB-BART

Matrix: AQ	Batch ID: MB1597

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) DA49574-1BDUP were used as the QC samples for the Iron-Related Bacteria analysis.

General Chemistry By Method HACH SLYM-BART

Matrix: AQ **Batch ID:** MB1596

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) DA49574-1BDUP were used as the QC samples for the Slime Forming Bacteria analysis.

General Chemistry By Method HACH SRB-BART

Matrix: AQ **Batch ID:** MB1595

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) DA49574-1BDUP were used as the QC samples for the Sulfate Reducing Bacteria analysis.

General Chemistry By Method SM 2320B-2011

Matrix: AQ **Batch ID:** GN57859

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) DA49525-1DUP, DA49525-1MS, DA49525-1MSD were used as the QC samples for the Alkalinity, Total as CaCO3 analysis.

Matrix: AQ **Batch ID:** GN57862

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

Matrix: AQ **Batch ID:** GN57865

- 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:** GP32651

- Sample(s) DA49542-1DUP were used as the QC samples for the Specific Conductivity analysis.

General Chemistry By Method SM 2540C-2011

Matrix: AQ **Batch ID:** GN57834

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) DA49525-1DUP were used as the QC samples for the Solids, Total Dissolved analysis.

General Chemistry By Method SM1030E-2011

Matrix: AQ **Batch ID:** GN58013

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

General Chemistry By Method SM4500HB+-2011/9040C

Matrix: AQ **Batch ID:** GN57879

- The data for SM4500HB+-2011/9040C meets quality control requirements.
- The following samples were run outside of holding time for method SM4500HB+-2011/9040C: DA49525-1
- DA49525-1 for pH: Field parameter analyzed by the laboratory upon request.

Field Data By Method FIELD

Matrix:	AQ	Batch ID:	R58926

- 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: DA49525
Account: Kerr-McGee Oil & Gas Onshore LP
Project: GWA_Krumpeck_Water_Well
Collected: 09/27/22

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
DA49525-1	**BW_RISSLER_217161 SESW_36_4N_66W**					
Fluoride		0.73	0.10		mg/l	EPA300.0
Chloride		17.4	0.50		mg/l	EPA300.0
Bromide		0.28	0.050		mg/l	EPA300.0
Sulfate		131	5.0		mg/l	EPA300.0
Alkalinity, Bicarbonate as CaCO3		259	5.0		mg/l	SM 2320B-2011
Alkalinity, Total as CaCO3		259	5.0		mg/l	SM 2320B-2011
Cation Anion Balance		3.8			%	SM1030E-2011
Phosphorus, Total		0.023	0.010		mg/l	EPA 365.1
Solids, Total Dissolved		480	10		mg/l	SM 2540C-2011
Specific Conductivity		818	1.0		umhos/cm	SM 2510B-2011
pH [a]		7.40			su	SM4500HB + -2011/9040C
Turbidity		0.02			NTU	FIELD
Oxygen, Dissolved (Field)		0.08			mg/l	FIELD
Temperature (Field)		19.8			Deg. C	FIELD
Specific Conductivity (Field)		723.69	0.50		umhos/cm	FIELD
pH (Field)		6.95			su	FIELD
DA49525-1A	**BW_RISSLER_217161 SESW_36_4N_66W**					
Methane [b]		0.00094	0.00080	0.00070	mg/l	RSK175 MOD
DA49525-1B	**BW_RISSLER_217161 SESW_36_4N_66W**					
Iron-Related Bacteria		150	25		CFU/ml	HACH IRB-BART
Slime Forming Bacteria		< 500	500		CFU/ml	HACH SLYM-BART
Sulfate Reducing Bacteria		< 200	200		CFU/ml	HACH SRB-BART
DA49525-1F	**BW_RISSLER_217161 SESW_36_4N_66W**					
Barium		0.0903	0.0040		mg/l	EPA 200.8
Boron		0.139	0.080		mg/l	EPA 200.8
Calcium		53.5	0.80		mg/l	EPA 200.8
Iron		0.258	0.20		mg/l	EPA 200.8
Magnesium		27.3	0.20		mg/l	EPA 200.8
Manganese		0.0644	0.0020		mg/l	EPA 200.8
Potassium		2.67	0.40		mg/l	EPA 200.8
Sodium		66.8	1.0		mg/l	EPA 200.8
Strontium		0.880	0.040		mg/l	EPA 200.8

(a) Field parameter analyzed by the laboratory upon request.
(b) Sample was not preserved to a pH < 2.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	BW_RISSLER_217161 SESW_36_4N_66W		
Lab Sample ID:	DA49525-1	**Date Sampled:**	09/27/22
Matrix:	AQ - Ground Water	**Date Received:**	09/28/22
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	GWA_Krumpeck_Water_Well		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5V70368.D	1	10/04/22 05:39	MB	n/a	n/a	V5V3494
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	102%		70-130%
17060-07-0	1,2-Dichloroethane-D4	101%		70-130%
2037-26-5	Toluene-D8	98%		70-130%
460-00-4	4-Bromofluorobenzene	106%		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

Client Sample ID:	BW_RISSLER_217161 SESW_36_4N_66W		
Lab Sample ID:	DA49525-1	**Date Sampled:**	09/27/22
Matrix:	AQ - Ground Water	**Date Received:**	09/28/22
Method:	SW846 8015D	**Percent Solids:**	n/a
Project:	GWA_Krumpeck_Water_Well		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GA59128.D	1	10/04/22 03:08	MB	n/a	n/a	GGA2648
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	108%		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

Client Sample ID:	BW_RISSLER_217161 SESW_36_4N_66W		
Lab Sample ID:	DA49525-1	**Date Sampled:**	09/27/22
Matrix:	AQ - Ground Water	**Date Received:**	09/28/22
Method:	SW846-8015D SW846 3510C	**Percent Solids:**	n/a
Project:	GWA_Krumpeck_Water_Well		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LW3556.D	1	10/04/22 01:13	MB	09/30/22 09:45	OP22545	GLW239
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28) [a]	ND	0.19	0.18	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	99%		10-131%

(a) Associated CCV outside of control limits high, sample was ND.

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

Client Sample ID:	BW_RISSLER_217161 SESW_36_4N_66W		
Lab Sample ID:	DA49525-1	**Date Sampled:**	09/27/22
Matrix:	AQ - Ground Water	**Date Received:**	09/28/22
		Percent Solids:	n/a
Project:	GWA_Krumpeck_Water_Well		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
300.0							
Fluoride	0.73	0.10	mg/l	1	09/28/22 19:38	JB	EPA300.0
Chloride	17.4	0.50	mg/l	1	09/28/22 19:38	JB	EPA300.0
Nitrogen, Nitrite	< 0.0040	0.0040	mg/l	1	09/28/22 19:38	JB	EPA300.0
Bromide	0.28	0.050	mg/l	1	09/28/22 19:38	JB	EPA300.0
Nitrogen, Nitrate	< 0.010	0.010	mg/l	1	09/28/22 19:38	JB	EPA300.0
Sulfate	131	5.0	mg/l	10	09/28/22 19:52	JB	EPA300.0
300.0 NO2 + NO3O							
Nitrogen, Nitrate + Nitrite [a]	< 0.014	0.014	mg/l	1	09/28/22 19:38	JB	EPA 300.0
Alkalinity, Bicarbonate as CaC	259	5.0	mg/l	1	09/30/22	TM	SM 2320B-2011
Alkalinity, Carbonate	0.00	5.0	mg/l	1	09/30/22	TM	SM 2320B-2011
Alkalinity, Total as CaCO3	259	5.0	mg/l	1	09/30/22	TM	SM 2320B-2011
Cation Anion Balance	3.8		%	1	10/12/22	JB	SM1030E-2011
Phosphorus, Total	0.023	0.010	mg/l	1	10/12/22 13:51	MB	EPA 365.1
Solids, Total Dissolved	480	10	mg/l	1	09/29/22 10:00	JW	SM 2540C-2011
Specific Conductivity	818	1.0	umhos/cm	1	09/29/22 10:00	JW	SM 2510B-2011
pH [b]	7.40		su	1	10/03/22	TM	SM4500HB+-2011/9040C

Field Parameters

Oxygen, Dissolved (Field)	0.08		mg/l	1	09/29/22	SUB	FIELD
Redox Potential Vs H2	-44.1		mv	1	09/29/22	SUB	FIELD
Specific Conductivity (Field)	723.69	0.50	umhos/cm	1	09/29/22	SUB	FIELD
Temperature (Field)	19.8		Deg. C	1	09/29/22	SUB	FIELD
Turbidity	0.02		NTU	1	09/29/22	SUB	FIELD
pH (Field)	6.95		su	1	09/29/22	SUB	FIELD

(a) Calculated as: (Nitrogen, Nitrate) + (Nitrogen, Nitrite)
(b) Field parameter analyzed by the laboratory upon request.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	BW_RISSLER_217161 SESW_36_4N_66W		
Lab Sample ID:	DA49525-1A	**Date Sampled:**	09/27/22
Matrix:	AQ - Ground Water	**Date Received:**	09/28/22
Method:	RSK175 MOD	**Percent Solids:**	n/a
Project:	GWA_Krumpeck_Water_Well		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	FK3475.D	1	10/03/22 14:44	MM	n/a	n/a	GFK251
Run #2							

	Initial Volume	Headspace Volume	Volume Injected	Temperature
Run #1	39.0 ml	4.0 ml	500 ul	20.3 Deg. C
Run #2				

Methane, Ethane and Propane

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	0.00094	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	

(a) Sample was not preserved to a pH < 2.

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

Client Sample ID:	BW_RISSLER_217161 SESW_36_4N_66W		
Lab Sample ID:	DA49525-1B	**Date Sampled:**	09/27/22
Matrix:	AQ - Ground Water	**Date Received:**	09/28/22
		Percent Solids:	n/a
Project:	GWA_Krumpeck_Water_Well		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Iron-Related Bacteria	150	25	CFU/ml	1	10/03/22	DM	HACH IRB-BART
Slime Forming Bacteria	< 500	500	CFU/ml	1	10/03/22	DM	HACH SLYM-BART
Sulfate Reducing Bacteria	< 200	200	CFU/ml	1	10/03/22	DM	HACH SRB-BART

RL = Reporting Limit

Report of Analysis

Client Sample ID:	BW_RISSLER_217161 SESW_36_4N_66W		
Lab Sample ID:	DA49525-1F	**Date Sampled:**	09/27/22
Matrix:	AQ - Groundwater Filtered	**Date Received:**	09/28/22
		Percent Solids:	n/a
Project:	GWA_Krumpeck_Water_Well		

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Barium	0.0903	0.0040	mg/l	2	10/05/22	10/07/22	DU	EPA 200.8 [1]	EPA 200.8 [3]
Boron	0.139	0.080	mg/l	2	10/05/22	10/07/22	DU	EPA 200.8 [1]	EPA 200.8 [3]
Calcium	53.5	0.80	mg/l	2	10/05/22	10/07/22	DU	EPA 200.8 [1]	EPA 200.8 [3]
Iron	0.258	0.20	mg/l	2	11/02/22	11/08/22	DU	EPA 200.8 [2]	EPA 200.8 [4]
Magnesium	27.3	0.20	mg/l	2	10/05/22	10/07/22	DU	EPA 200.8 [1]	EPA 200.8 [3]
Manganese	0.0644	0.0020	mg/l	2	10/05/22	10/07/22	DU	EPA 200.8 [1]	EPA 200.8 [3]
Potassium	2.67	0.40	mg/l	2	10/05/22	10/07/22	DU	EPA 200.8 [1]	EPA 200.8 [3]
Selenium	< 0.00080	0.00080	mg/l	2	10/05/22	10/07/22	DU	EPA 200.8 [1]	EPA 200.8 [3]
Sodium	66.8	1.0	mg/l	2	10/05/22	10/07/22	DU	EPA 200.8 [1]	EPA 200.8 [3]
Strontium	0.880	0.040	mg/l	2	10/05/22	10/07/22	DU	EPA 200.8 [1]	EPA 200.8 [3]

(1) Instrument QC Batch: MA15738
(2) Instrument QC Batch: MA15849
(3) Prep QC Batch: MP36177
(4) Prep QC Batch: MP36363

RL = Reporting Limit

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

Bottle Order Control #:
FED-EX Tracking #:
SGS Quote #:
SGS Job #: DA49525

Client / Reporting Information

Company: (Report to) Absaroka Solutions
Street: 112 High Street
City, State: Buffalo, WY 82834
Project Contact: Tanya Cude
Phone: 352-318-4034
Email: Tanya.Cude@Absarokasolutions.com
Sampler(s) Name(s): Emily Fitzjohn

Project Information

Project Name: GWA_Krumpeck_Water_Well
Frequency: SP
Regulation: Voluntary
Facility ID: 753144
EQuIS Facility Code: 0089019-AN-GWABWQ
Client Purchase Order #: 4500641679
Project Manager: Joel Mason

Billing Information (If different from Report to)

Company: Occidental Petroleum Corporation (OXY)
Street Address: 1201 Lake Robbins Drive
City, State ZIP: The Woodlands, TX 77380
Attention: Erik Mickelson User ID: fvv451

Requested Analysis (see TEST CODE sheet)

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL- Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB-Field Blank; EB-Equipment Blank; RB- Rinse Blank; TB-Trip Blank

Field ID / Point of Collection	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: NONE	HCl	NaOH	HNO3	H2SO4	DI Water	MEOH	ENCORE	Na2S2O4	Other	PH, SCON, TDS	XCARBICALK	BRO, CHL, F, NO2, XNO3O, NO32, SO4	TPO4	Dissolved Metals - Lab Filtered*	VRSK175DGMEP	V8260BTX	B8015DRO	V8015GRO	IRBAC, SFBAC, SO4RBAC	CABAL	LAB USE ONLY
BW_Rissler_217161	9/27/2022	1122	EF	GW	17	9	6			1					1	X	X	X	X	X	X	X	X	X	X	X	1
SESW_36_4N_66W																											
Temperature, field	19.8	°C																									
pH, field	6.95	s.u.																									
Specific Conductivity, field	72369	uS/cm																									
Oxidation Reduction Potential, field	-44.1	mV																									
Dissolved Oxygen, field	0.08	mg/L																									
Turbidity, field	0.02	NTU																									

Turnaround Time (Business days)

- [X] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day Emergency
- [ ] 2 Day Emergency
- [ ] 1 Day Emergency

Emergency & Rush T/A data available VIA LabLink. RUSH TAT approval needed.

Special Reporting Instructions

- [ ] Report in PPB
- [ ] Report in PPM
- [ ] Report MDLs

Data Deliverable Information

- [ ] Commercial "A" (Level 1, Results Only)
- [ ] Commercial "B" (Level 2, Results + QC Summary)
- [ ] COMMBN (Results/QC/Narrative)
- [ ] COMMBN+ [Results/QC/Narrative (+ chromatograms)]
- [ ] REDT2
- [ ] FULT1
- [x] EDD Format: COGCC Compatible

Comments / Special Instructions

*Dissolved Metals (200.7/200.8): BaMS, B, Ca, Fe,Mg, Mn, K, SeMS, Na, Sr

Please also send reports to Joel.Mason@Absarokasolutions.com and Jordan.Fleming@Absarokasolutions.com

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date/Time:	Received By:	Relinquished By:	Date/Time:	Received By:
1	9/27/22 1800	1	2		2
Relinquished by Sampler:	Date/Time:	Received By:	Relinquished By:	Date/Time:	Received By:
3		3	4		4

Custody Seal # Intact [X] Not Intact [ ] Absent [ ] | Preserved where applicable [X] | Cooler Temp. °C: 4.3 | Therm. ID: [illegible] | On Ice [X]

Form MSQA 064-01, RV 6/19/17

SGS Sample Receipt Summary

Job Number: DA49525 **Client:** ABSAROKA **Project:** BARCLAY

Date / Time Received: 9/28/2022 11:30:00 AM **Delivery Method:** CO **Airbill #'s:**

Cooler Temps (Initial/Adjusted):

Cooler Security	Y or N		Y or N
1. Custody Seals Present:	☑ ☐	3. COC Present:	☑ ☐
2. Custody Seals Intact:	☑ ☐	4. Smpl Dates/Time OK	☑ ☐

Cooler Temperature	Y or N
1. Temp criteria achieved:	☑ ☐
2. Thermometer ID:	
3. Cooler media:	
4. No. Coolers:	0

Quality Control _Preservation	Y or N	N/A
1. Trip Blank present / cooler:	☑ ☐	☐
2. Trip Blank listed on COC:	☑ ☐	☐
3. Samples preserved properly:	☑ ☐	
4. VOCs headspace free:	☑ ☐	☐

Comments

Sample Integrity - Documentation	Y or N
1. Sample labels present on bottles:	☑ ☐
2. Container labeling complete:	☑ ☐
3. Sample container label / COC agree:	☑ ☐

Sample Integrity - Condition	Y or N
1. Sample recvd within HT:	☑ ☐
2. All containers accounted for:	☑ ☐
3. Condition of sample:	Intact

Sample Integrity - Instructions	Y or N	N/A
1. Analysis requested is clear:	☑ ☐	
2. Bottles received for unspecified tests	☐ ☑	
3. Sufficient volume recvd for analysis:	☑ ☐	
4. Compositing instructions clear:	☐ ☐	☑
5. Filtering instructions clear:	☐ ☐	☑

Problem Resolution

Job Number: DA49525

CSR: _____ **Response Date:** _____

Response:

DA49525: Chain of Custody
Page 3 of 3

MS Volatiles

6

QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Job Number: DA49525
Account: ANADACOD Kerr-McGee Oil & Gas Onshore LP
Project: GWA_Krumpeck_Water_Well

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5V3494-MB	5V70358.D	1	10/04/22	MB	n/a	n/a	V5V3494

The QC reported here applies to the following samples: **Method:** SW846 8260B

DA49525-1

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	100%	70-130%
17060-07-0	1,2-Dichloroethane-D4	99%	70-130%
2037-26-5	Toluene-D8	98%	70-130%
460-00-4	4-Bromofluorobenzene	102%	70-130%

Blank Spike/Blank Spike Duplicate Summary

Job Number: DA49525
Account: ANADACOD Kerr-McGee Oil & Gas Onshore LP
Project: GWA_Krumpeck_Water_Well

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5V3494-BS	5V70355.D	1	10/04/22	MB	n/a	n/a	V5V3494
V5V3494-BSD	5V70356.D	1	10/04/22	MB	n/a	n/a	V5V3494

The QC reported here applies to the following samples: **Method:** SW846 8260B

DA49525-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	50	55.6	111	55.2	110	1	70-130/30
100-41-4	Ethylbenzene	50	57.4	115	56.7	113	1	70-130/30
108-88-3	Toluene	50	55.1	110	55.1	110	0	70-130/30
	m,p-Xylene	100	112	112	112	112	0	70-130/30
95-47-6	o-Xylene	50	56.8	114	56.0	112	1	70-130/30
1330-20-7	Xylene (total)	150	169	113	168	112	1	70-130/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	99%	100%	70-130%
17060-07-0	1,2-Dichloroethane-D4	103%	100%	70-130%
2037-26-5	Toluene-D8	98%	99%	70-130%
460-00-4	4-Bromofluorobenzene	99%	99%	70-130%

* = Outside of Control Limits.

GC Volatiles

QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Job Number: DA49525
Account: ANADACOD Kerr-McGee Oil & Gas Onshore LP
Project: GWA_Krumpeck_Water_Well

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGA2648-MB	GA59105.D	1	10/03/22	MB	n/a	n/a	GGA2648

The QC reported here applies to the following samples: **Method:** SW846 8015D

DA49525-1

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	105%	60-140%

Method Blank Summary

Job Number: DA49525
Account: ANADACOD Kerr-McGee Oil & Gas Onshore LP
Project: GWA_Krumpeck_Water_Well

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GFK251-MB	FK3463.D	1	10/03/22	MM	n/a	n/a	GFK251

The QC reported here applies to the following samples: **Method:** RSK175 MOD

DA49525-1A

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/Blank Spike Duplicate Summary

Job Number: DA49525
Account: ANADACOD Kerr-McGee Oil & Gas Onshore LP
Project: GWA_Krumpeck_Water_Well

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGA2648-BS	GA59102.D	1	10/03/22	MB	n/a	n/a	GGA2648
GGA2648-BSD	GA59103.D	1	10/03/22	MB	n/a	n/a	GGA2648

The QC reported here applies to the following samples: **Method:** SW846 8015D

DA49525-1

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	BSD mg/l	BSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	2.2	2.01	91	2.00	91	0	49-130/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
120-82-1	1,2,4-Trichlorobenzene	106%	112%	60-140%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: DA49525
Account: ANADACOD Kerr-McGee Oil & Gas Onshore LP
Project: GWA_Krumpeck_Water_Well

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GFK251-BS	FK3464.D	10	10/03/22	MM	n/a	n/a	GFK251
GFK251-BSD	FK3465.D	10	10/03/22	MM	n/a	n/a	GFK251

The QC reported here applies to the following samples: **Method:** RSK175 MOD

DA49525-1A

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	BSD mg/l	BSD %	RPD	Limits Rec/RPD
74-82-8	Methane	0.512	0.573	112	0.548	107	4	70-130/30
74-84-0	Ethane	0.923	1.12	121	1.07	116	5	70-139/30
74-98-6	Propane	1.38	1.57	114	1.51	110	4	70-134/30

* = Outside of Control Limits.

GC/LC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Job Number: DA49525
Account: ANADACOD Kerr-McGee Oil & Gas Onshore LP
Project: GWA_Krumpeck_Water_Well

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP22545-MB	LW3538.D	1	10/03/22	MB	09/30/22	OP22545	GLW239

The QC reported here applies to the following samples: **Method:** SW846-8015D

DA49525-1

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	ND	0.19	0.18	mg/l	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	85%	10-131%

Blank Spike Summary

Job Number: DA49525
Account: ANADACOD Kerr-McGee Oil & Gas Onshore LP
Project: GWA_Krumpeck_Water_Well

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP22545-BS	LW3539.D	1	10/03/22	MB	09/30/22	OP22545	GLW239

The QC reported here applies to the following samples: **Method:** SW846-8015D

DA49525-1

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	TPH-DRO (C10-C28)	4.76	2.89	61	20-130

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	61%	10-131%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: DA49525
Account: ANADACOD Kerr-McGee Oil & Gas Onshore LP
Project: GWA_Krumpeck_Water_Well

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP22545-MS	LW3540.D	1	10/03/22	MB	09/30/22	OP22545	GLW239
OP22545-MSD	LW3541.D	1	10/03/22	MB	09/30/22	OP22545	GLW239
DA49513-1	LW3549.D	1	10/03/22	MB	09/30/22	OP22545	GLW239

The QC reported here applies to the following samples: **Method:** SW846-8015D

DA49525-1

CAS No.	Compound	DA49513-1 mg/l	Q	Spike mg/l	MS mg/l	MS %	Spike mg/l	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH-DRO (C10-C28)	ND		10	7.67	77	10	4.94	49	43* [a]	20-130/30

CAS No.	Surrogate Recoveries	MS	MSD	DA49513-1	Limits
84-15-1	o-Terphenyl	88%	52%	70%	10-131%

(a) High RPD due to possible sample nonhomogeneity.

* = Outside of Control Limits.

Metals Analysis

QC Data Summaries

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: DA49525
Account: ANADACOD - Kerr-McGee Oil & Gas Onshore LP
Project: GWA_Krumpeck_Water_Well

QC Batch ID: MP36177
Matrix Type: AQUEOUS

Methods: EPA 200.8
Units: ug/l

Prep Date: 10/05/22

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	-0.0086	<2.0
Beryllium	0.20	.077	.1		
Boron	40	18	20	5.9	<40
Cadmium	0.10	.03	.04		
Calcium	400	25	100	0.18	<400
Chromium	2.0	.087	.25		
Cobalt	0.20	.04	.05		
Copper	2.0	.05	.81		
Iron	20	1.6	10	23.6	* (a)
Lead	0.50	.094	.13		
Magnesium	100	10	25	0.13	<100
Manganese	1.0	.079	.51	0.061	<1.0
Molybdenum	1.0	.037	.27		
Nickel	2.0	.098	.35		
Phosphorus	60	7.6	25		
Potassium	200	2	50	-2.9	<200
Selenium	0.40	.05	.1	0.0068	<0.40
Silver	0.10	.0081	.025		
Sodium	500	10	130	1390	* (a)
Strontium	20	.1	5	-0.00078	<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 MP36177: DA49525-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Element detected in the MB greater than 1/2 the reporting limit. Reported samples are ND or 10x the result of the MB.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: DA49525
Account: ANADACOD - Kerr-McGee Oil & Gas Onshore LP
Project: GWA_Krumpeck_Water_Well

QC Batch ID: MP36177
Matrix Type: AQUEOUS

Methods: EPA 200.8
Units: ug/l

Prep Date: 10/05/22

Metal	DA49516-2FA Original	MS	Spikelot ICPMS5	% Rec	QC Limits
Aluminum					
Antimony	anr				
Arsenic	anr				
Barium	43.5	468	400	106.1	70-130
Beryllium	anr				
Boron	41.4	465	400	105.9	70-130
Cadmium	anr				
Calcium	24100	27900	5000	76.0	70-130
Chromium	anr				
Cobalt					
Copper	anr				
Iron	195	1210	1000	101.5	70-130
Lead	anr				
Magnesium	5710	10800	5000	101.8	70-130
Manganese	52.8	242	200	94.6	70-130
Molybdenum					
Nickel	anr				
Phosphorus					
Potassium	2120	7040	5000	98.4	70-130
Selenium	0.21	207	200	103.4	70-130
Silver	anr				
Sodium	13600	17600	5000	80.0	70-130
Strontium	164	268	100	104.0	70-130
Thallium	anr				
Tin					
Titanium					
Uranium	anr				
Vanadium					
Zinc	anr				

Associated samples MP36177: DA49525-1F

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

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: DA49525
Account: ANADACOD - Kerr-McGee Oil & Gas Onshore LP
Project: GWA_Krumpeck_Water_Well

QC Batch ID: MP36177
Matrix Type: AQUEOUS

Methods: EPA 200.8
Units: ug/l

Prep Date: 10/05/22

Metal	DA49516-2FA Original	MSD	Spikelot ICPMS5	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony	anr					
Arsenic	anr					
Barium	43.5	459	400	103.9	1.9	20
Beryllium	anr					
Boron	41.4	473	400	107.9	1.7	20
Cadmium	anr					
Calcium	24100	29700	5000	112.0	6.3	20
Chromium	anr					
Cobalt						
Copper	anr					
Iron	195	1250	1000	105.5	3.3	20
Lead	anr					
Magnesium	5710	10600	5000	97.8	1.9	20
Manganese	52.8	245	200	96.1	1.2	20
Molybdenum						
Nickel	anr					
Phosphorus						
Potassium	2120	7060	5000	98.8	0.3	20
Selenium	0.21	207	200	103.4	0.0	20
Silver	anr					
Sodium	13600	18000	5000	88.0	2.2	20
Strontium	164	265	100	101.0	1.1	20
Thallium	anr					
Tin						
Titanium						
Uranium	anr					
Vanadium						
Zinc	anr					

Associated samples MP36177: DA49525-1F

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

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: DA49525
Account: ANADACOD - Kerr-McGee Oil & Gas Onshore LP
Project: GWA_Krumpeck_Water_Well

QC Batch ID: MP36177
Matrix Type: AQUEOUS

Methods: EPA 200.8
Units: ug/l

Prep Date: 10/05/22

Metal	BSP Result	Spikelot ICPMS5	% Rec	QC Limits
Aluminum				
Antimony	anr			
Arsenic	anr			
Barium	419	400	104.8	85-115
Beryllium	anr			
Boron	425	400	106.3	85-115
Cadmium	anr			
Calcium	4950	5000	99.0	85-115
Chromium	anr			
Cobalt				
Copper	anr			
Iron	1020	1000	102.0	85-115
Lead	anr			
Magnesium	5360	5000	107.2	85-115
Manganese	195	200	97.5	85-115
Molybdenum				
Nickel	anr			
Phosphorus				
Potassium	5170	5000	103.4	85-115
Selenium	200	200	100.0	85-115
Silver	anr			
Sodium	6370	5000	127.4*(a	85-115
Strontium	104	100	104.0	85-115
Thallium	anr			
Tin				
Titanium				
Uranium	anr			
Vanadium				
Zinc	anr			

Associated samples MP36177: DA49525-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Outside control limits biased high. Reported samples are ND.

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: DA49525
Account: ANADACOD - Kerr-McGee Oil & Gas Onshore LP
Project: GWA_Krumpeck_Water_Well

QC Batch ID: MP36363
Matrix Type: AQUEOUS

Methods: EPA 200.8
Units: ug/l

Prep Date: 11/02/22

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		
Beryllium	0.20	.077	.1		
Boron	40	18	20		
Cadmium	0.10	.03	.04		
Calcium	400	25	100		
Chromium	2.0	.087	.25		
Cobalt	0.20	.04	.05		
Copper	2.0	.05	.81		
Iron	20	1.6	10	1.4	<20
Lead	0.50	.094	.13		
Magnesium	100	10	25		
Manganese	1.0	.079	.51		
Molybdenum	1.0	.037	.27		
Nickel	2.0	.098	.35		
Phosphorus	60	7.6	25		
Potassium	200	2	50		
Selenium	0.40	.05	.1		
Silver	0.10	.0081	.025		
Sodium	500	10	130		
Strontium	20	.1	5		
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 MP36363: DA49525-1F

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: DA49525
Account: ANADACOD - Kerr-McGee Oil & Gas Onshore LP
Project: GWA_Krumpeck_Water_Well

QC Batch ID: MP36363
Matrix Type: AQUEOUS

Methods: EPA 200.8
Units: ug/l

Prep Date: 11/02/22

Metal	DA49648-1 Original	MS	Spikelot ICPMS5	% Rec	QC Limits
Aluminum					
Antimony					
Arsenic					
Barium					
Beryllium					
Boron					
Cadmium					
Calcium					
Chromium					
Cobalt					
Copper	anr				
Iron	239	1350	1000	111.1	70-130
Lead	anr				
Magnesium					
Manganese					
Molybdenum					
Nickel					
Phosphorus					
Potassium					
Selenium					
Silver					
Sodium					
Strontium					
Thallium					
Tin					
Titanium					
Uranium					
Vanadium					
Zinc					

Associated samples MP36363: DA49525-1F

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

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: DA49525
Account: ANADACOD - Kerr-McGee Oil & Gas Onshore LP
Project: GWA_Krumpeck_Water_Well

QC Batch ID: MP36363
Matrix Type: AQUEOUS

Methods: EPA 200.8
Units: ug/l

Prep Date: 11/02/22

Metal	DA49648-1 Original	MSD	Spikelot ICPMS5	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic						
Barium						
Beryllium						
Boron						
Cadmium						
Calcium						
Chromium						
Cobalt						
Copper	anr					
Iron	239	1270	1000	103.1	6.1	20
Lead	anr					
Magnesium						
Manganese						
Molybdenum						
Nickel						
Phosphorus						
Potassium						
Selenium						
Silver						
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Uranium						
Vanadium						
Zinc						

Associated samples MP36363: DA49525-1F

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

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: DA49525
Account: ANADACOD - Kerr-McGee Oil & Gas Onshore LP
Project: GWA_Krumpeck_Water_Well

QC Batch ID: MP36363
Matrix Type: AQUEOUS

Methods: EPA 200.8
Units: ug/l

Prep Date: 11/02/22

Metal	BSP Result	Spikelot ICPMS5	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Boron				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper	anr			
Iron	1050	1000	105.0	85-115
Lead	anr			
Magnesium				
Manganese				
Molybdenum				
Nickel				
Phosphorus				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc				

Associated samples MP36363: DA49525-1F

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

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: DA49525
Account: ANADACOD - Kerr-McGee Oil & Gas Onshore LP
Project: GWA_Krumpeck_Water_Well

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Alkalinity, Bicarbonate as CaC	GN57862	5.0	0.0	mg/l	xxxxxxxx	103	102.5	90-110%
Alkalinity, Carbonate	GN57865	5.0	0.0	mg/l	xxxxxxxx	103	102.5	90-110%
Alkalinity, Total as CaCO3	GN57859	5.0	0.0	mg/l	100	103	102.5	90-110%
Bromide	GP32657/GN57853	0.050	0.0	mg/l	0.5	0.497	99.4	90-110%
Chloride	GP32657/GN57853	0.50	0.0	mg/l	5	5.26	105.2	90-110%
Fluoride	GP32657/GN57853	0.10	0.0	mg/l	1	1.01	101.0	90-110%
Iron-Related Bacteria	MB1597	25	<25	CFU/ml				
Nitrogen, Nitrate	GP32657/GN57853	0.010	0.0	mg/l	0.1	0.103	103.0	90-110%
Nitrogen, Nitrite	GP32657/GN57853	0.0040	0.0	mg/l	0.05	0.0484	96.8	90-110%
Phosphorus, Total	GP32775/GN58035	0.010	0.0	mg/l	0.2	0.196	98.0	90-110%
Slime Forming Bacteria	MB1596	500	<500	CFU/ml				
Solids, Total Dissolved	GN57834	10	0.0	mg/l	400	255	102.0	90-110%
Specific Conductivity	GP32651/GN57836			umhos/cm	10000	1020	102.1	90-110%
Sulfate	GP32657/GN57853	0.50	0.0	mg/l	5	5.34	106.8	90-110%
Sulfate Reducing Bacteria	MB1595	200	<200	CFU/ml				

Associated Samples:
Batch MB1595: DA49525-1B
Batch MB1596: DA49525-1B
Batch MB1597: DA49525-1B
Batch GN57834: DA49525-1
Batch GN57859: DA49525-1
Batch GN57862: DA49525-1
Batch GN57865: DA49525-1
Batch GP32651: DA49525-1
Batch GP32657: DA49525-1
Batch GP32775: DA49525-1
(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: DA49525
Account: ANADACOD - Kerr-McGee Oil & Gas Onshore LP
Project: GWA_Krumpeck_Water_Well

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Alkalinity, Total as CaCO3	GN57859	DA49525-1	mg/l	259	260	0.5	0-20%
Iron-Related Bacteria	MB1597	DA49574-1B	CFU/ml	9000	9000	0.0	0-%
Phosphorus, Total	GP32775/GN58035	DA49480-2	mg/l	0.83	0.83	0.0	0-20%
Slime Forming Bacteria	MB1596	DA49574-1B	CFU/ml	<500	<500	0.0	0-%
Solids, Total Dissolved	GN57834	DA49525-1	mg/l	480	491	2.3	0-5.44%
Specific Conductivity	GP32651/GN57836	DA49542-1	umhos/cm	1500	1490	0.6	0-20%
Sulfate Reducing Bacteria	MB1595	DA49574-1B	CFU/ml	<200	<200	0.0	0-%

Associated Samples:
Batch MB1595: DA49525-1B
Batch MB1596: DA49525-1B
Batch MB1597: DA49525-1B
Batch GN57834: DA49525-1
Batch GN57859: DA49525-1
Batch GP32651: DA49525-1
Batch GP32775: DA49525-1
(*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: DA49525
Account: ANADACOD - Kerr-McGee Oil & Gas Onshore LP
Project: GWA_Krumpeck_Water_Well

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Alkalinity, Total as CaCO3	GN57859	DA49525-1	mg/l	259	100	364	105.0	80-120%
Bromide	GP32657/GN57853	DA49543-3	mg/l	0.63 U	12.5	12.3	98.4	80-120%
Chloride	GP32657/GN57853	DA49543-3	mg/l	106	125	240	107.2	80-120%
Fluoride	GP32657/GN57853	DA49543-3	mg/l	1.3 U	25	25.8	103.2	80-120%
Nitrogen, Nitrate	GP32657/GN57853	DA49543-3	mg/l	5.8	2.5	8.5	108.0	80-120%
Nitrogen, Nitrite	GP32657/GN57853	DA49543-3	mg/l	0.33	1.25	1.5	93.6	80-120%
Phosphorus, Total	GP32775/GN58035	DA49480-2	mg/l	0.83	0.2	0.90	35.0(a)	90-110%
Sulfate	GP32657/GN57853	DA49543-3	mg/l	118	125	247	103.2	80-120%

Associated Samples:
Batch GN57859: DA49525-1
Batch GP32657: DA49525-1
Batch GP32775: DA49525-1
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(a) 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: DA49525
Account: ANADACOD - Kerr-McGee Oil & Gas Onshore LP
Project: GWA_Krumpeck_Water_Well

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Alkalinity, Total as CaCO3	GN57859	DA49525-1	mg/l	259	100	344	5.7	20%
Bromide	GP32657/GN57853	DA49543-3	mg/l	0.63 U	12.5	12.5	1.6	20%
Chloride	GP32657/GN57853	DA49543-3	mg/l	106	125	238	0.8	20%
Fluoride	GP32657/GN57853	DA49543-3	mg/l	1.3 U	25	25.5	1.2	20%
Nitrogen, Nitrate	GP32657/GN57853	DA49543-3	mg/l	5.8	2.5	8.4	1.2	20%
Nitrogen, Nitrite	GP32657/GN57853	DA49543-3	mg/l	0.33	1.25	1.5	0.0	20%
Phosphorus, Total	GP32775/GN58035	DA49480-2	mg/l	0.83	0.2	1.0	10.5	20%
Sulfate	GP32657/GN57853	DA49543-3	mg/l	118	125	247	0.0	20%

Associated Samples:
Batch GN57859: DA49525-1
Batch GP32657: DA49525-1
Batch GP32775: DA49525-1
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits