ORIGINS LABORATORY

Absaroka
Max Dahlgren
112 High St.
Buffalo WY 82834

October 14, 2025

Project Name - KMG - McDonald 2-4A Wellhead **Project Number -** [none]

Attached are your analytical results for KMG - McDonald 2-4A Wellhead received by Origins Laboratory September 18, 2025. This project is associated with Origins project number E5I0453-01.

The analytical results in the following report were analyzed under the guidelines of EPA Methods. These methods are identified as follows; "SW" are defined in SW-846, "EPA" are defined in 40CFR part 136 and "SM" are defined in the most current revision of Standard Methods For the Examination of Water and Wastewater.

The analytical results apply specifically to the samples and analyses specified per the attached Chain of Custody. As such, this report shall not be reproduced except in full, without the written approval of Origin's laboratory.

The laboratory is TNI accredited by the Utah DHHS ELAP under certificate number CO010822024.

Any holding time exceedances, deviations from the method specifications or deviations from Origins Laboratory's Standard Operating Procedures are outlined in the case narrative.

Thank you for selecting Origins for your analytical needs. Please contact us with any questions concerning this report, or if we can help with anything at all.

Origins Laboratory
303.433.1322
projectmanager@originslab.com

ORIGINS LABORATORY

Absaroka
112 High St.
Buffalo WY 82834

Max Dahlgren
Project Number: [none]
Project: KMG - McDonald 2-4A Wellhead

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
FL-B10@4'	E5I0453-01	Soil	September 18, 2025 9:15	09/18/2025 15:07

Origins Laboratory

Kayla Kenyon For Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

ORIGINS LABORATORY

ESI0453

Client: OXY / Absaroka

Address:

Telephone Number: 970-481-6909

Email Address: ae2oxyreports@absarokasolutions.com

Project Manager: Max Dahlgren

Project Name: McDonald 2-4A Wellhead

Project Number:

Collected By: CK

Invoice/Billing Info: On File - Oxy

Key:
W= Water
GW=Groundwater
SW=Surface Water
WW=Waste Water

S=Soil | SO=Solid | O=Oil | A=Air | G=Gas || UNP=Unpres | HCL= Hydrochloric | HNO3=Nitric | H2SO4=Sulfuric | NAOH=Sodium Hydroxide

#	Sample ID	Date Sampled	Time Sampled	# of Containers	Matrix	Preservative	Analysis: Full 915	Boron	pH, SAR, EC	915 Metals								Comments
	FL-B10@4'	9/18/25	9:15	3	S	UNP	X											
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		

Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Shannon Nilsen	9/18/25	15:05	NKM	09/18/25	15:07
Relinquished By:	Date:	Time:	Received By:	Date:	Time:

Turnaround Time
- [ ] SAME DAY
- [ ] 24
- [ ] 48 Hr
- [ ] 72
- [x] Standard

Temp Received- 5.2°C

Received On Ice? [x] Yes [ ] No

Origins Laboratory

F-012207-01-R1
Effective Date: 01/09/12

Sample Receipt Checklist

Origins Work Order: ESI0453

Client: Absaroka

Client Project ID: McDonald

Checklist Completed by: SMC / NB

Shipped Via: HD
(UPS, FedEx, Hand Delivered, Pick-up, etc.)

Date/time completed: 9/19/25

Airbill #: N/A

Matrix(s) Received: (Check all that apply): X Soil/Solid ____Water ____Other: ____
(Describe)

Cooler Number/Temperature: 1 / 5.2 °c

Thermometer ID: T-004

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C[(1)]?	X			
Is there ice present (document if blue ice is used)	X			
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)		X		
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)		X		
Were all samples received intact[(1)]?	X			
Was adequate sample volume provided[(1)]?	X			
Are short holding time analytes or samples with HTs due within 48 hours present[(1)]?		X		
Is a chain-of-custody (COC) present and filled out completely[(1)]?	X			
Does the COC agree with the number and type of sample bottles received[(1)]?	X			
Do the sample IDs on the bottle labels match the COC[(1)]?	X			
Is the COC properly relinquished by the client with date and time recorded[(1)]?	X			
For volatiles in water – is there headspace (> ¼ inch bubble) present? **If yes, contact client and note in narrative.**			X	
Are samples preserved that require preservation and was it checked [(1)]? *(note ID of confirmation instrument used in comments) / (preservation is not confirmed for subcontracted analyses in order to insure sample integrity)/(pH <2 for samples preserved with HNO3, HCL, H2SO4) / (pH >10 for samples preserved with NaAsO2+NaOH, ZnAc+NaOH)*			X	
Additional Comments (if any):				

[(1)]If NO, then contact the client before proceeding with analysis and note date/time and person contacted as well as the corrective action to in the additional comments (above) and the case narrative.

SH — Reviewed by (Project Manager)

9/22/25 — Date/Time Reviewed

ORIGINS LABORATORY

Absaroka
112 High St.
Buffalo WY 82834

Max Dahlgren
Project Number: [none]
Project: KMG - McDonald 2-4A Wellhead

FL-B10@4'
9/18/2025 9:15:00AM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
E5I0453-01 (Soil)									
Enthalpy Orange									
Total Metals by 7199									
Hexavalent Chromium	ND		0.31	mg/Kg dry	1	382921	09/25/2025	09/26/2025	ND
Origins Laboratory									
Boron (DTPA Sorbitol)									
(DTPA Sorbitol) Boron	0.357		0.106	mg/L dry	1	B5I1935	09/19/2025	09/23/2025	
DRO/ORO by EPA 8015D									
Diesel (C10-C28)	ND		26.5	mg/kg dry	1	B5I1921	09/19/2025	09/19/2025	U
Residual Range Organics (C28-C36)	ND		106	"	"	"	"	"	U
Surrogate: o-Terphenyl	*145 %*			*50-150*		"	"	"	
GBTEX+TMBs by 8260D									
1,2,4-Trimethylbenzene	ND		0.002	mg/kg dry	1	B5I1942	09/19/2025	09/22/2025	U
1,3,5-Trimethylbenzene	ND		0.002	"	"	"	"	"	U
Benzene	ND		0.002	"	"	"	"	"	U
Ethylbenzene	ND		0.002	"	"	"	"	"	U
Toluene	ND		0.002	"	"	"	"	"	U
Xylenes, total	ND		0.002	"	"	"	"	"	U

Origins Laboratory

Kayla Kenyon For Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

ORIGINS LABORATORY

Absaroka
112 High St.
Buffalo WY 82834

Max Dahlgren
Project Number: [none]
Project: KMG - McDonald 2-4A Wellhead

FL-B10@4'
9/18/2025 9:15:00AM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
E5I0453-01 (Soil)									
Origins Laboratory									
GBTEX+TMBs by 8260D									
Gasoline Range Hydrocarbons	ND		0.212	mg/kg dry	1	B5I1942	09/19/2025	09/22/2025	U
Surrogate: 1,2-Dichloroethane-d4	*124 %*			*70-130*		"	"	"	
Surrogate: Toluene-d8	*94.4 %*			*70-130*		"	"	"	
Surrogate: 4-Bromofluorobenzene	*92.8 %*			*70-130*		"	"	"	
Metals by Saturated Paste by EPA 6010									
Calcium	4.10		0.499	meq/L	10	[CALC]	09/19/2025	09/23/2025	
Magnesium	1.30		0.823	"	"	"	"	"	
Sodium	1.16		0.435	"	"	"	"	"	
PAH by EPA 8270E extracted via 3580A									
1-Methylnaphthalene	ND		0.002	mg/kg dry	1	B5I1956	09/19/2025	09/20/2025	U
2-Methylnaphthalene	ND		0.002	"	"	"	"	"	U
Acenaphthene	ND		0.021	"	"	"	"	"	U
Anthracene	ND		0.021	"	"	"	"	"	U
Benzo (a) anthracene	ND		0.005	"	"	"	"	"	U
Benzo (a) pyrene	ND		0.021	"	"	"	"	"	U
Benzo (b) fluoranthene	ND		0.021	"	"	"	"	"	U
Benzo (k) fluoranthene	ND		0.021	"	"	"	"	"	U

Origins Laboratory

Kayla Kenyon For Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

ORIGINS LABORATORY

Absaroka
112 High St.
Buffalo WY 82834

Max Dahlgren
Project Number: [none]
Project: KMG - McDonald 2-4A Wellhead

FL-B10@4'
9/18/2025 9:15:00AM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
E5I0453-01 (Soil)									
Origins Laboratory									
PAH by EPA 8270E extracted via 3580A									
Chrysene	ND		0.021	mg/kg dry	1	B5I1956	09/19/2025	09/20/2025	U
Dibenz (a,h) anthracene	ND		0.021	"	"	"	"	"	U
Fluoranthene	ND		0.021	"	"	"	"	"	U
Fluorene	ND		0.021	"	"	"	"	"	U
Indeno (1,2,3-cd) pyrene	ND		0.021	"	"	"	"	"	U
Naphthalene	ND		0.002	"	"	"	"	"	U
Pyrene	ND		0.021	"	"	"	"	"	U
Surrogate: Fluorene-d10	*100 %*			*60-130*		"	"	"	
Surrogate: Anthracene-d10	*96.0 %*			*60-130*		"	"	"	
Surrogate: Pyrene-d10	*99.6 %*			*60-130*		"	"	"	
Surrogate: Benzo (a) pyrene-d12	*106 %*			*60-130*		"	"	"	
Percent Solids									
Total Solids, Percent	94.4			mass percent	1	B5I2541	09/25/2025	09/25/2025	
pH in Soil by 9045D									
pH	7.89			pH Units	1	B5I1938	09/19/2025	09/23/2025	
SAR by 20B Saturated Paste									

Origins Laboratory

Kayla Kenyon For Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

ORIGINS LABORATORY

Absaroka
112 High St.
Buffalo WY 82834

Max Dahlgren
Project Number: [none]
Project: KMG - McDonald 2-4A Wellhead

FL-B10@4'
9/18/2025 9:15:00AM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
E5I0453-01 (Soil)									
Origins Laboratory									
SAR by 20B Saturated Paste									
SAR	0.704		0.0100	SAR	1	B5I1932	09/19/2025	09/23/2025	
Specific Conductance Mod. 9050A									
Specific Conductance (EC)	0.664		0.00500	mmhos/cm	1	B5I1938	09/19/2025	09/23/2025	
Table 915 metals by EPA 6020B									
Arsenic	7.14		0.217	mg/kg dry	10	B5I1923	09/19/2025	09/22/2025	
Barium	168		61.1	"	"	"	"	"	
Cadmium	ND		0.283	"	"	"	"	"	U
Copper	ND		34.3	"	"	"	"	"	U
Lead	ND		10.4	"	"	"	"	"	U
Nickel	ND		19.4	"	"	"	"	"	U
Selenium	0.250		0.183	"	"	"	"	"	
Silver	ND		0.597	"	"	"	"	"	U
Zinc	ND		276	"	"	"	"	"	U

Origins Laboratory

Kayla Kenyon For Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

ORIGINS LABORATORY

Absaroka
112 High St.
Buffalo WY 82834

Max Dahlgren
Project Number: [none]
Project: KMG - McDonald 2-4A Wellhead

*** DEFAULT GENERAL METHOD *** - Quality Control
Origins Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B5I2541 - % Solids										
Duplicate (B5I2541-DUP1)		**Source: E5I0417-01**		Prepared: 09/25/2025 Analyzed: 09/25/2025						
Total Solids, Percent	95.5		mass percent		95.5			0.00482	20	
Duplicate (B5I2541-DUP2)		**Source: E5I0417-02**		Prepared: 09/25/2025 Analyzed: 09/25/2025						
Total Solids, Percent	97.3		mass percent		97.4			0.136	20	

Origins Laboratory

Kayla Kenyon For Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

ORIGINS LABORATORY

Absaroka
112 High St.
Buffalo WY 82834

Max Dahlgren
Project Number: [none]
Project: KMG - McDonald 2-4A Wellhead

Classical Chemistry Parameters - Quality Control
Origins Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B5I1932 - Saturated Paste Metals										
Blank (B5I1932-BLK1)					Prepared: 09/19/2025 Analyzed: 09/23/2025					
SAR	ND	0.0100	SAR							U
Calcium PPM	ND	10.0	mg/L							U
Magnesium PPM	ND	10.0	"							U
Sodium PPM	ND	10.0	"							U
Duplicate (B5I1932-DUP1)		**Source: E5I0453-01**			Prepared: 09/19/2025 Analyzed: 09/23/2025					
Calcium PPM	82.1	10.0	mg/L		82.1			0.0244	50	
SAR	ND	0.0100	SAR		0.704				200	U
Magnesium PPM	16.0	10.0	mg/L		15.8			1.07	50	
Sodium PPM	26.7	10.0	"		26.6			0.375	50	
Batch B5I1935 - DTPA Sorbitol Preparation										
Blank (B5I1935-BLK1)					Prepared: 09/19/2025 Analyzed: 09/23/2025					
(DTPA Sorbitol) Boron	ND	0.100	mg/L wet							U
Duplicate (B5I1935-DUP1)		**Source: E5I0453-01**			Prepared: 09/19/2025 Analyzed: 09/23/2025					
(DTPA Sorbitol) Boron	0.289	0.106	mg/L dry		0.357			20.9	50	

Origins Laboratory

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Kayla Kenyon For Jen Pellegrini, Project Manager

ORIGINS LABORATORY

Absaroka
112 High St.
Buffalo WY 82834

Max Dahlgren
Project Number: [none]
Project: KMG - McDonald 2-4A Wellhead

EPA 8270E (SW846) - Semivolatile Organic Compounds - Quality Control
Origins Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B5I1956 - EPA 3580										
Blank (B5I1956-BLK1)				Prepared: 09/19/2025 Analyzed: 09/20/2025						
1-Methylnaphthalene	ND	0.002	mg/kg wet							U
2-Methylnaphthalene	ND	0.002	"							U
Acenaphthene	ND	0.020	"							U
Anthracene	ND	0.020	"							U
Benzo (a) anthracene	ND	0.005	"							U
Benzo (a) pyrene	ND	0.020	"							U
Benzo (b) fluoranthene	ND	0.020	"							U
Benzo (k) fluoranthene	ND	0.020	"							U
Chrysene	ND	0.020	"							U
Dibenz (a,h) anthracene	ND	0.020	"							U
Fluoranthene	ND	0.020	"							U
Fluorene	ND	0.020	"							U
Indeno (1,2,3-cd) pyrene	ND	0.020	"							U
Naphthalene	ND	0.002	"							U
Pyrene	ND	0.020	"							U
Surrogate: Fluorene-d10	*200*		*ug/kg*	*200*		*102*	*60-130*			
Surrogate: Anthracene-d10	*180*		*"*	*200*		*91.3*	*60-130*			
Surrogate: Pyrene-d10	*190*		*"*	*200*		*97.1*	*60-130*			
Surrogate: Benzo (a) pyrene-d12	*210*		*"*	*200*		*105*	*60-130*			
LCS (B5I1956-BS1)				Prepared: 09/19/2025 Analyzed: 09/20/2025						
1-Methylnaphthalene	0.227	0.002	mg/kg wet	0.200		114	70-130			
2-Methylnaphthalene	0.251	0.002	"	0.200		125	70-130			
Acenaphthene	0.211	0.020	"	0.200		106	70-130			
Anthracene	0.194	0.020	"	0.200		97.2	70-130			
Benzo (a) anthracene	0.199	0.005	"	0.200		99.7	70-130			
Benzo (a) pyrene	0.210	0.020	"	0.200		105	70-130			

Origins Laboratory

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Kayla Kenyon For Jen Pellegrini, Project Manager

ORIGINS LABORATORY

Absaroka
112 High St.
Buffalo WY 82834

Max Dahlgren
Project Number: [none]
Project: KMG - McDonald 2-4A Wellhead

EPA 8270E (SW846) - Semivolatile Organic Compounds - Quality Control
Origins Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B5I1956 - EPA 3580										
LCS (B5I1956-BS1)						Prepared: 09/19/2025 Analyzed: 09/20/2025				
Benzo (b) fluoranthene	0.222	0.020	mg/kg wet	0.200		111	70-130			
Benzo (k) fluoranthene	0.220	0.020	"	0.200		110	70-130			
Chrysene	0.205	0.020	"	0.200		103	70-130			
Dibenz (a,h) anthracene	0.215	0.020	"	0.200		108	70-130			
Fluoranthene	0.212	0.020	"	0.200		106	70-130			
Fluorene	0.210	0.020	"	0.200		105	70-130			
Indeno (1,2,3-cd) pyrene	0.215	0.020	"	0.200		108	70-130			
Naphthalene	0.219	0.002	"	0.200		109	70-130			
Pyrene	0.211	0.020	"	0.200		106	70-130			
Surrogate: Fluorene-d10	*210*		*ug/kg*	*200*		*103*	*60-130*			
Surrogate: Anthracene-d10	*190*		*"*	*200*		*95.6*	*60-130*			
Surrogate: Pyrene-d10	*200*		*"*	*200*		*98.1*	*60-130*			
Surrogate: Benzo (a) pyrene-d12	*210*		*"*	*200*		*107*	*60-130*			
Matrix Spike (B5I1956-MS1)			**Source: E5I0425-05**			Prepared: 09/19/2025 Analyzed: 09/20/2025				
1-Methylnaphthalene	0.214	0.002	mg/kg dry	0.225	ND	95.3	70-130			
2-Methylnaphthalene	0.235	0.002	"	0.225	ND	105	70-130			
Acenaphthene	0.202	0.022	"	0.225	ND	89.8	70-130			
Anthracene	0.178	0.022	"	0.225	ND	79.4	70-130			
Benzo (a) anthracene	0.192	0.006	"	0.225	ND	85.4	70-130			
Benzo (a) pyrene	0.208	0.022	"	0.225	0.001	92.1	70-130			
Benzo (b) fluoranthene	0.222	0.022	"	0.225	ND	99.0	70-130			
Benzo (k) fluoranthene	0.203	0.022	"	0.225	ND	90.2	70-130			
Chrysene	0.202	0.022	"	0.225	0.0008	89.4	70-130			
Dibenz (a,h) anthracene	0.208	0.022	"	0.225	0.002	92.1	70-130			
Fluoranthene	0.203	0.022	"	0.225	ND	90.2	70-130			
Fluorene	0.200	0.022	"	0.225	0.0005	88.8	70-130			

Origins Laboratory

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Kayla Kenyon For Jen Pellegrini, Project Manager

ORIGINS LABORATORY

Absaroka
112 High St.
Buffalo WY 82834

Max Dahlgren
Project Number: [none]
Project: KMG - McDonald 2-4A Wellhead

EPA 8270E (SW846) - Semivolatile Organic Compounds - Quality Control
Origins Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B5I1956 - EPA 3580										
Matrix Spike (B5I1956-MS1)		**Source: E5I0425-05**			Prepared: 09/19/2025 Analyzed: 09/20/2025					
Indeno (1,2,3-cd) pyrene	0.206	0.022	mg/kg dry	0.225	0.001	91.4	70-130			
Naphthalene	0.208	0.002	"	0.225	ND	92.7	70-130			
Pyrene	0.201	0.022	"	0.225	ND	89.5	70-130			
Surrogate: Fluorene-d10	*200*		*ug/kg*	*200*		*102*	*60-130*			
Surrogate: Anthracene-d10	*180*		*"*	*200*		*91.1*	*60-130*			
Surrogate: Pyrene-d10	*190*		*"*	*200*		*97.2*	*60-130*			
Surrogate: Benzo (a) pyrene-d12	*210*		*"*	*200*		*107*	*60-130*			
Matrix Spike Dup (B5I1956-MSD1)		**Source: E5I0425-05**			Prepared: 09/19/2025 Analyzed: 09/20/2025					
1-Methylnaphthalene	0.216	0.002	mg/kg dry	0.225	ND	96.2	70-130	0.983	20	
2-Methylnaphthalene	0.237	0.002	"	0.225	ND	105	70-130	0.621	20	
Acenaphthene	0.204	0.022	"	0.225	ND	90.6	70-130	0.916	20	
Anthracene	0.184	0.022	"	0.225	ND	81.9	70-130	3.11	20	
Benzo (a) anthracene	0.189	0.006	"	0.225	ND	84.1	70-130	1.45	20	
Benzo (a) pyrene	0.214	0.022	"	0.225	0.001	94.7	70-130	2.72	20	
Benzo (b) fluoranthene	0.214	0.022	"	0.225	ND	95.5	70-130	3.66	20	
Benzo (k) fluoranthene	0.189	0.022	"	0.225	ND	84.0	70-130	7.13	20	
Chrysene	0.200	0.022	"	0.225	0.0008	88.9	70-130	0.511	20	
Dibenz (a,h) anthracene	0.211	0.022	"	0.225	0.002	93.2	70-130	1.13	20	
Fluoranthene	0.205	0.022	"	0.225	ND	91.4	70-130	1.30	20	
Fluorene	0.197	0.022	"	0.225	0.0005	87.5	70-130	1.43	20	
Indeno (1,2,3-cd) pyrene	0.209	0.022	"	0.225	0.001	92.6	70-130	1.30	20	
Naphthalene	0.209	0.002	"	0.225	ND	92.9	70-130	0.252	20	
Pyrene	0.202	0.022	"	0.225	ND	90.0	70-130	0.583	20	
Surrogate: Fluorene-d10	*200*		*ug/kg*	*200*		*101*	*60-130*			
Surrogate: Anthracene-d10	*190*		*"*	*200*		*95.5*	*60-130*			
Surrogate: Pyrene-d10	*200*		*"*	*200*		*97.7*	*60-130*			

Origins Laboratory

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Kayla Kenyon For Jen Pellegrini, Project Manager

ORIGINS LABORATORY

Absaroka
112 High St.
Buffalo WY 82834

Max Dahlgren
Project Number: [none]
Project: KMG - McDonald 2-4A Wellhead

EPA 8270E (SW846) - Semivolatile Organic Compounds - Quality Control
Origins Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B5I1956 - EPA 3580										
Matrix Spike Dup (B5I1956-MSD1)		**Source: E5I0425-05**			Prepared: 09/19/2025 Analyzed: 09/20/2025					
Surrogate: Benzo (a) pyrene-d12	*210*		*ug/kg*	*200*		*106*	*60-130*			

Origins Laboratory

Kayla Kenyon For Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

ORIGINS LABORATORY

Absaroka
112 High St.
Buffalo WY 82834

Max Dahlgren
Project Number: [none]
Project: KMG - McDonald 2-4A Wellhead

Extractable Petroleum Hydrocarbons by 8015D - Quality Control
Origins Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B5I1921 - EPA 3550B										
Blank (B5I1921-BLK1)					Prepared: 09/19/2025 Analyzed: 09/19/2025					
Diesel (C10-C28)	ND	25.0	mg/kg wet							U
Residual Range Organics (C28-C36)	ND	100	"							U
Surrogate: o-Terphenyl	*23*		"	*24.9*		*91.0*	*50-150*			
LCS (B5I1921-BS1)					Prepared: 09/19/2025 Analyzed: 09/19/2025					
Diesel (C10-C28)	918	50.0	mg/kg wet	1000		91.8	70-130			
Residual Range Organics (C28-C36)	1030	200	"	1000		103	70-130			
Surrogate: o-Terphenyl	*47*		"	*49.8*		*94.5*	*50-150*			
Matrix Spike (B5I1921-MS1)		**Source: E5I0426-01**			Prepared: 09/19/2025 Analyzed: 09/19/2025					
Diesel (C10-C28)	1040	54.9	mg/kg dry	1100	ND	94.8	70-130			
Residual Range Organics (C28-C36)	1120	220	"	1100	ND	102	70-130			
Surrogate: o-Terphenyl	*51*		"	*54.6*		*93.8*	*50-150*			
Matrix Spike Dup (B5I1921-MSD1)		**Source: E5I0426-01**			Prepared: 09/19/2025 Analyzed: 09/19/2025					
Diesel (C10-C28)	1060	54.9	mg/kg dry	1100	ND	96.6	70-130	1.88	35	
Residual Range Organics (C28-C36)	1100	220	"	1100	ND	101	70-130	1.72	35	
Surrogate: o-Terphenyl	*52*		"	*54.6*		*95.6*	*50-150*			

Origins Laboratory

Kayla Kenyon For Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

ORIGINS LABORATORY

Absaroka
112 High St.
Buffalo WY 82834

Max Dahlgren
Project Number: [none]
Project: KMG - McDonald 2-4A Wellhead

Metals by EPA 6000/7000 Series Methods - Quality Control
Origins Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B5I1923 - EPA 3050B										
Blank (B5I1923-BLK1)					Prepared: 09/19/2025 Analyzed: 09/22/2025					
Arsenic	ND	0.218	mg/kg wet							U
Barium	ND	61.5	"							U
Cadmium	ND	0.285	"							U
Copper	ND	34.5	"							U
Lead	ND	10.5	"							U
Nickel	ND	19.5	"							U
Selenium	ND	0.184	"							U
Silver	ND	0.600	"							U
Zinc	ND	278	"							U
LCS (B5I1923-BS1)					Prepared: 09/19/2025 Analyzed: 09/22/2025					
Arsenic	5.83	0.218	mg/kg wet	5.00		117	80-120			
Barium	587	61.5	"	500		117	80-120			
Cadmium	5.59	0.285	"	5.00		112	80-120			
Copper	55.9	34.5	"	50.0		112	80-120			
Lead	5.39	10.5	"	5.00		108	80-120			U
Nickel	5.64	19.5	"	5.00		113	80-120			U
Selenium	5.50	0.184	"	5.00		110	80-120			
Silver	5.92	0.600	"	5.00		118	80-120			
Zinc	56.8	278	"	50.0		114	80-120			U
Matrix Spike (B5I1923-MS1)			**Source: E5I0446-03**		Prepared: 09/19/2025 Analyzed: 09/22/2025					
Arsenic	9.71	0.263	mg/kg dry	6.02	3.86	97.1	75-125			
Barium	1040	74.1	"	602	425	101	75-125			
Cadmium	6.00	0.343	"	6.02	0.243	95.5	75-125			
Copper	80.3	41.6	"	60.2	24.2	93.1	75-125			
Lead	27.5	12.7	"	6.02	22.7	80.2	75-125			

Origins Laboratory

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Kayla Kenyon For Jen Pellegrini, Project Manager

ORIGINS LABORATORY

Absaroka
112 High St.
Buffalo WY 82834

Max Dahlgren
Project Number: [none]
Project: KMG - McDonald 2-4A Wellhead

Metals by EPA 6000/7000 Series Methods - Quality Control
Origins Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B5I1923 - EPA 3050B										
Matrix Spike (B5I1923-MS1)		**Source: E5I0446-03**			Prepared: 09/19/2025 Analyzed: 09/22/2025					
Nickel	21.7	23.5	mg/kg dry	6.02	19.1	43.9	75-125			QM-07, U
Selenium	6.02	0.222	"	6.02	0.575	90.4	75-125			
Silver	6.11	0.723	"	6.02	0.0676	100	75-125			
Zinc	159	334	"	60.2	110	81.0	75-125			U
Matrix Spike Dup (B5I1923-MSD1)		**Source: E5I0446-03**			Prepared: 09/19/2025 Analyzed: 09/22/2025					
Arsenic	8.92	0.258	mg/kg dry	5.91	3.86	85.5	75-125	8.47	20	
Barium	1000	72.8	"	591	425	97.2	75-125	3.55	20	
Cadmium	5.78	0.337	"	5.91	0.243	93.6	75-125	3.71	20	
Copper	74.5	40.8	"	59.1	24.2	85.0	75-125	7.48	20	
Lead	24.7	12.4	"	5.91	22.7	34.4	75-125	10.7	20	QM-07
Nickel	20.9	23.1	"	5.91	19.1	31.2	75-125	3.75	20	QM-07, U
Selenium	5.99	0.218	"	5.91	0.575	91.5	75-125	0.554	20	
Silver	5.84	0.710	"	5.91	0.0676	97.5	75-125	4.60	20	
Zinc	145	328	"	59.1	110	59.5	75-125	8.94	20	QM-07, U

Origins Laboratory

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Kayla Kenyon For Jen Pellegrini, Project Manager

ORIGINS LABORATORY

Absaroka
112 High St.
Buffalo WY 82834

Max Dahlgren
Project Number: [none]
Project: KMG - McDonald 2-4A Wellhead

Saturated Paste - Quality Control
Origins Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B5I1938 - Saturated Paste pH/EC										
Blank (B5I1938-BLK1)					Prepared: 09/19/2025 Analyzed: 09/23/2025					
Specific Conductance (EC)	ND	0.00500	mmhos/cm							U
Duplicate (B5I1938-DUP1)			**Source: E5I0453-01**		Prepared: 09/19/2025 Analyzed: 09/23/2025					
pH	7.94		pH Units		7.89			0.632	25	
Specific Conductance (EC)	0.660	0.00500	mmhos/cm		0.664			0.649	25	

Origins Laboratory

Kayla Kenyon For Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

ORIGINS LABORATORY

Absaroka
112 High St.
Buffalo WY 82834

Max Dahlgren
Project Number: [none]
Project: KMG - McDonald 2-4A Wellhead

Volatile Organic Compounds by GC/MS SW846 8260D - Quality Control
Origins Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B5I1942 - EPA 5030 (soil)										
Blank (B5I1942-BLK1)					Prepared: 09/19/2025 Analyzed: 09/21/2025					
1,2,4-Trimethylbenzene	ND	0.002	mg/kg wet							U
1,3,5-Trimethylbenzene	ND	0.002	"							U
Benzene	ND	0.002	"							U
Ethylbenzene	ND	0.002	"							U
Toluene	ND	0.002	"							U
Xylenes, total	ND	0.002	"							U
Gasoline Range Hydrocarbons	ND	0.200	"							U
Surrogate: 1,2-Dichloroethane-d4	*0.14*		"	*0.125*		*114*	*70-130*			
Surrogate: Toluene-d8	*0.12*		"	*0.125*		*98.1*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*0.12*		"	*0.125*		*92.6*	*70-130*			
LCS (B5I1942-BS1)					Prepared: 09/19/2025 Analyzed: 09/21/2025					
1,2,4-Trimethylbenzene	0.088	0.002	mg/kg wet	0.100		88.2	70-130			
1,3,5-Trimethylbenzene	0.086	0.002	"	0.100		86.1	70-130			
Benzene	0.098	0.002	"	0.100		98.1	70-130			
Ethylbenzene	0.084	0.002	"	0.100		84.0	70-130			
Toluene	0.093	0.002	"	0.100		92.7	70-130			
o-Xylene	0.081	0.002	"	0.100		80.7	70-130			
m,p-Xylene	0.173	0.004	"	0.200		86.4	70-130			
Surrogate: 1,2-Dichloroethane-d4	*0.14*		"	*0.125*		*114*	*70-130*			
Surrogate: Toluene-d8	*0.12*		"	*0.125*		*93.0*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*0.11*		"	*0.125*		*90.9*	*70-130*			
Matrix Spike (B5I1942-MS1)		**Source: E5I0437-01**			Prepared: 09/19/2025 Analyzed: 09/22/2025					
1,2,4-Trimethylbenzene	0.109	0.002	mg/kg wet	0.100	ND	109	70-130			
1,3,5-Trimethylbenzene	0.112	0.002	"	0.100	ND	112	70-130			
Benzene	0.090	0.002	"	0.100	ND	89.7	70-130			

Origins Laboratory

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Kayla Kenyon For Jen Pellegrini, Project Manager

ORIGINS LABORATORY

Absaroka
112 High St.
Buffalo WY 82834

Max Dahlgren
Project Number: [none]
Project: KMG - McDonald 2-4A Wellhead

Volatile Organic Compounds by GC/MS SW846 8260D - Quality Control
Origins Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B5I1942 - EPA 5030 (soil)										
Matrix Spike (B5I1942-MS1)		**Source: E5I0437-01**			Prepared: 09/19/2025 Analyzed: 09/22/2025					
Ethylbenzene	0.099	0.002	mg/kg wet	0.100	ND	99.0	70-130			
Toluene	0.098	0.002	"	0.100	ND	98.0	70-130			
o-Xylene	0.105	0.002	"	0.100	ND	105	70-130			
m,p-Xylene	0.221	0.004	"	0.200	ND	110	70-130			
Surrogate: 1,2-Dichloroethane-d4	*0.15*		"	*0.125*		*122*	*70-130*			
Surrogate: Toluene-d8	*0.11*		"	*0.125*		*90.9*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*0.11*		"	*0.125*		*87.9*	*70-130*			
Matrix Spike Dup (B5I1942-MSD1)		**Source: E5I0437-01**			Prepared: 09/19/2025 Analyzed: 09/21/2025					
1,2,4-Trimethylbenzene	0.080	0.002	mg/kg wet	0.100	ND	80.3	70-130	30.5	20	QR-02
1,3,5-Trimethylbenzene	0.081	0.002	"	0.100	ND	80.6	70-130	32.3	20	QR-02
Benzene	0.090	0.002	"	0.100	ND	89.7	70-130	0.0669	20	
Ethylbenzene	0.076	0.002	"	0.100	ND	75.9	70-130	26.3	20	QR-02
Toluene	0.084	0.002	"	0.100	ND	84.4	70-130	15.0	20	
o-Xylene	0.076	0.002	"	0.100	ND	75.5	70-130	32.8	20	QR-02
m,p-Xylene	0.145	0.004	"	0.200	ND	72.5	70-130	41.5	20	QR-02
Surrogate: 1,2-Dichloroethane-d4	*0.15*		"	*0.125*		*116*	*70-130*			
Surrogate: Toluene-d8	*0.11*		"	*0.125*		*91.7*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*0.11*		"	*0.125*		*87.6*	*70-130*			

Origins Laboratory

Kayla Kenyon For Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

ORIGINS LABORATORY

Absaroka
112 High St.
Buffalo WY 82834

Max Dahlgren
Project Number: [none]
Project: KMG - McDonald 2-4A Wellhead

Total Metals by 7199 - Quality Control
Enthalpy Orange

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 382921 - EPA 3060A										
BLANK (QC1297096)					Prepared: 09/25/2025 Analyzed: 09/26/2025					
Hexavalent Chromium	ND	0.30	mg/Kg				-			ND
LCS (QC1297097)					Prepared: 09/25/2025 Analyzed: 09/26/2025					
Hexavalent Chromium	40.27	0.5976	mg/Kg	39.84		101	80-120			
Duplicate (QC1297098)			Source: E5I0453-01		Prepared: 09/25/2025 Analyzed: 09/26/2025					
Hexavalent Chromium	ND	0.3179	mg/Kg dry		0		-		30	ND
Matrix Spike (QC1297100)			Source: E5I0453-01		Prepared: 09/25/2025 Analyzed: 09/26/2025					
Hexavalent Chromium	37.91	0.6332	mg/Kg dry	42.22	0	90	70-130			

Origins Laboratory

Kayla Kenyon For Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

ORIGINS LABORATORY

Absaroka
112 High St.
Buffalo WY 82834

Max Dahlgren
Project Number: [none]
Project: KMG - McDonald 2-4A Wellhead

Notes and Definitions

U	Sample is Non-Detect.
QR-02	The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Not Detected
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference

Origins Laboratory

Kayla Kenyon For Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.