



ANALYTICAL SUMMARY REPORT

May 30, 2025

Jorgensen Associates
1315 S Hwy 89 S Ste 201
Jackson, WY 83001-8514

Work Order: C25050413

Project Name: WY5601569 High Meadow Ranch

Energy Laboratories, Inc. Casper WY received the following 2 samples for Jorgensen Associates on 5/14/2025 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
C25050413-001	CL 2 TAP AT PCB/SP03	05/12/25 11:43	05/14/25	Drinking Water	Nitrogen, Nitrate + Nitrite 524-Purgeable Organics, SDWA
C25050413-002	Trip Blank	05/12/25 11:43	05/14/25	Trip Blank	524-Purgeable Organics, SDWA

The analyses presented in this report were performed by Energy Laboratories, Inc., 2393 Salt Creek Hwy, Casper, WY 82601-9601, unless otherwise noted. Any exceptions or problems with the analyses are noted in the report package. Any issues encountered during sample receipt are documented in the Work Order Receipt Checklist.

The results as reported relate only to the item(s) submitted for testing. This report shall be used or copied only in its entirety. Energy Laboratories, Inc. is not responsible for the consequences arising from the use of a partial report.

Energy Laboratories, Inc. verifies the reported results for the analysis has been technically reviewed and approved for release.

If you have any questions regarding these test results, please contact your Project Manager.



CLIENT: Jorgensen Associates
Project: WY5601569 High Meadow Ranch
Work Order: C25050413

Report Date: 05/30/25

CASE NARRATIVE

Tests associated with analyst identified as ELI-H were subcontracted to Energy Laboratories, 3161 E.Lyndale Ave., Helena, MT, EPA Number MT00945.



LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Jorgensen Associates

Client Sample ID: CL 2 TAP AT PCB/SP03

PWS #: WY5601569 **Name:** HIGH MEADOW RANCH

Facility ID: TP02

Sampling Point/Location: SP03 / CL 2 TAP AT PCB/SP03

Project ID: WY5601569 High Meadow Ranch

Collector's Name: Madeline Ensminger

Contact Phone #: (307) 733-5150

Compliance Sample: YES

Sample Type: RT

Lab ID: C25050413-001

Report Date: 05/30/25

Collection Date: 05/12/25 11:43

Date Received: 05/14/25

Matrix: Drinking Water

Federal ID#: WY00002

FRDS	Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
					RL	QCL		
NUTRIENTS								
1038	Nitrogen, Nitrate+Nitrite as N	ND	mg/L		0.05	10	E353.2	05/19/25 12:23 / jls1
VOLATILE ORGANIC COMPOUNDS								
2990	Benzene	ND	ug/L		0.50	5	E524.2	05/19/25 21:28 / eli-h
2993	Bromobenzene	ND	ug/L		0.50		E524.2	05/19/25 21:28 / eli-h
2430	Bromochloromethane	ND	ug/L		0.50		E524.2	05/19/25 21:28 / eli-h
2943	Bromodichloromethane	ND	ug/L		0.50		E524.2	05/19/25 21:28 / eli-h
2942	Bromoform	ND	ug/L		0.50		E524.2	05/19/25 21:28 / eli-h
2214	Bromomethane	ND	ug/L		0.50		E524.2	05/19/25 21:28 / eli-h
2422	n-Butylbenzene	ND	ug/L		0.50		E524.2	05/19/25 21:28 / eli-h
2428	sec-Butylbenzene	ND	ug/L		0.50		E524.2	05/19/25 21:28 / eli-h
2426	tert-Butylbenzene	ND	ug/L		0.50		E524.2	05/19/25 21:28 / eli-h
2982	Carbon tetrachloride	ND	ug/L		0.50	5	E524.2	05/19/25 21:28 / eli-h
2980	1,2-Dichloroethane	ND	ug/L		0.50	5	E524.2	05/19/25 21:28 / eli-h
2989	Chlorobenzene	ND	ug/L		0.50	100	E524.2	05/19/25 21:28 / eli-h
2944	Chlorodibromomethane	ND	ug/L		0.50		E524.2	05/19/25 21:28 / eli-h
2216	Chloroethane	ND	ug/L		0.50		E524.2	05/19/25 21:28 / eli-h
2941	Chloroform	ND	ug/L		0.50		E524.2	05/19/25 21:28 / eli-h
2210	Chloromethane	ND	ug/L		0.50		E524.2	05/19/25 21:28 / eli-h
2965	2-Chlorotoluene	ND	ug/L		0.50		E524.2	05/19/25 21:28 / eli-h
2966	4-Chlorotoluene	ND	ug/L		0.50		E524.2	05/19/25 21:28 / eli-h
2408	Dibromomethane	ND	ug/L		0.50		E524.2	05/19/25 21:28 / eli-h
2968	1,2-Dichlorobenzene	ND	ug/L		0.50	600	E524.2	05/19/25 21:28 / eli-h
2967	1,3-Dichlorobenzene	ND	ug/L		0.50		E524.2	05/19/25 21:28 / eli-h
2969	1,4-Dichlorobenzene	ND	ug/L		0.50	75	E524.2	05/19/25 21:28 / eli-h
2212	Dichlorodifluoromethane	ND	ug/L		0.50		E524.2	05/19/25 21:28 / eli-h
2978	1,1-Dichloroethane	ND	ug/L		0.50		E524.2	05/19/25 21:28 / eli-h
2977	1,1-Dichloroethene	ND	ug/L		0.50	7	E524.2	05/19/25 21:28 / eli-h
2380	cis-1,2-Dichloroethene	ND	ug/L		0.50	70	E524.2	05/19/25 21:28 / eli-h
2979	trans-1,2-Dichloroethene	ND	ug/L		0.50	100	E524.2	05/19/25 21:28 / eli-h
2983	1,2-Dichloropropane	ND	ug/L		0.50	5	E524.2	05/19/25 21:28 / eli-h
2412	1,3-Dichloropropane	ND	ug/L		0.50		E524.2	05/19/25 21:28 / eli-h
2416	2,2-Dichloropropane	ND	ug/L		0.50		E524.2	05/19/25 21:28 / eli-h
2410	1,1-Dichloropropene	ND	ug/L		0.50		E524.2	05/19/25 21:28 / eli-h
2413	cis-1,3-Dichloropropene	ND	ug/L		0.50		E524.2	05/19/25 21:28 / eli-h
2224	trans-1,3-Dichloropropene	ND	ug/L		0.50		E524.2	05/19/25 21:28 / eli-h

Report RL - Analyte Reporting Limit
Definitions: QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Jorgensen Associates

Client Sample ID: CL 2 TAP AT PCB/SP03

PWS #: WY5601569 **Name:** HIGH MEADOW RANCH

Facility ID: TP02

Sampling Point/Location: SP03 / CL 2 TAP AT PCB/SP03

Project ID: WY5601569 High Meadow Ranch

Collector's Name: Madeline Ensminger

Contact Phone #: (307) 733-5150

Compliance Sample: YES

Sample Type: RT

Lab ID: C25050413-001

Report Date: 05/30/25

Collection Date: 05/12/25 11:43

Date Received: 05/14/25

Matrix: Drinking Water

Federal ID#: WY00002

FRDS	Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
					RL	QCL		
VOLATILE ORGANIC COMPOUNDS								
2992	Ethylbenzene	ND	ug/L		0.50	700	E524.2	05/19/25 21:28 / eli-h
2246	Hexachlorobutadiene	ND	ug/L		0.50		E524.2	05/19/25 21:28 / eli-h
2994	Isopropylbenzene	ND	ug/L		0.50		E524.2	05/19/25 21:28 / eli-h
2030	p-Isopropyltoluene	ND	ug/L		0.50		E524.2	05/19/25 21:28 / eli-h
2251	Methyl tert-butyl ether (MTBE)	ND	ug/L		0.50		E524.2	05/19/25 21:28 / eli-h
2964	Methylene chloride	ND	ug/L		0.50	5	E524.2	05/19/25 21:28 / eli-h
2248	Naphthalene	ND	ug/L		0.50		E524.2	05/19/25 21:28 / eli-h
2998	n-Propylbenzene	ND	ug/L		0.50		E524.2	05/19/25 21:28 / eli-h
2996	Styrene	ND	ug/L		0.50	100	E524.2	05/19/25 21:28 / eli-h
2986	1,1,1,2-Tetrachloroethane	ND	ug/L		0.50		E524.2	05/19/25 21:28 / eli-h
2988	1,1,2,2-Tetrachloroethane	ND	ug/L		0.50		E524.2	05/19/25 21:28 / eli-h
2987	Tetrachloroethene	ND	ug/L		0.50	5	E524.2	05/19/25 21:28 / eli-h
2991	Toluene	ND	ug/L		0.50	1000	E524.2	05/19/25 21:28 / eli-h
2420	1,2,3-Trichlorobenzene	ND	ug/L		0.50		E524.2	05/19/25 21:28 / eli-h
2378	1,2,4-Trichlorobenzene	ND	ug/L		0.50	70	E524.2	05/19/25 21:28 / eli-h
2981	1,1,1-Trichloroethane	ND	ug/L		0.50	200	E524.2	05/19/25 21:28 / eli-h
2985	1,1,2-Trichloroethane	ND	ug/L		0.50	5	E524.2	05/19/25 21:28 / eli-h
2984	Trichloroethene	ND	ug/L		0.50	5	E524.2	05/19/25 21:28 / eli-h
2218	Trichlorofluoromethane	ND	ug/L		0.50		E524.2	05/19/25 21:28 / eli-h
2414	1,2,3-Trichloropropane	ND	ug/L		0.50		E524.2	05/19/25 21:28 / eli-h
2418	1,2,4-Trimethylbenzene	ND	ug/L		0.50		E524.2	05/19/25 21:28 / eli-h
2424	1,3,5-Trimethylbenzene	ND	ug/L		0.50		E524.2	05/19/25 21:28 / eli-h
2976	Vinyl chloride	ND	ug/L		0.50	2	E524.2	05/19/25 21:28 / eli-h
2963	m+p-Xylenes	ND	ug/L		1.0		E524.2	05/19/25 21:28 / eli-h
2997	o-Xylene	ND	ug/L		0.50		E524.2	05/19/25 21:28 / eli-h
2950	Trihalomethanes, Total	ND	ug/L		0.50	80	E524.2	05/19/25 21:28 / eli-h
2955	Xylenes, Total	ND	ug/L		0.50	10000	E524.2	05/19/25 21:28 / eli-h
	Surr: p-Bromofluorobenzene	110	%REC			70-130	E524.2	05/19/25 21:28 / eli-h
	Surr: 1,2-Dichloroethane-d4	97.0	%REC			70-130	E524.2	05/19/25 21:28 / eli-h
	Surr: Toluene-d8	106	%REC			70-130	E524.2	05/19/25 21:28 / eli-h

Report RL - Analyte Reporting Limit

Definitions: QCL - Quality Control Limit

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LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Jorgensen Associates

Client Sample ID: Trip Blank

PWS #: **Name:** UNKNOWN

Facility ID:

Sampling Point/Location:

Project ID: WY5601569 High Meadow Ranch

Collector's Name: ELI

Contact Phone #: (307) 733-5150

Compliance Sample: NO

Sample Type:

Lab ID: C25050413-002

Report Date: 05/30/25

Collection Date: 05/12/25 11:43

Date Received: 05/14/25

Matrix: Trip Blank

Federal ID#: WY00002

FRDS	Analyses	Result	Units	Qual	RL	MCL/	Method	Analysis Date / By
						QCL		
VOLATILE ORGANIC COMPOUNDS								
2990	Benzene	ND	ug/L		0.50	5	E524.2	05/19/25 18:44 / eli-h
2993	Bromobenzene	ND	ug/L		0.50		E524.2	05/19/25 18:44 / eli-h
2430	Bromochloromethane	ND	ug/L		0.50		E524.2	05/19/25 18:44 / eli-h
2943	Bromodichloromethane	ND	ug/L		0.50		E524.2	05/19/25 18:44 / eli-h
2942	Bromoform	ND	ug/L		0.50		E524.2	05/19/25 18:44 / eli-h
2214	Bromomethane	ND	ug/L		0.50		E524.2	05/19/25 18:44 / eli-h
2422	n-Butylbenzene	ND	ug/L		0.50		E524.2	05/19/25 18:44 / eli-h
2428	sec-Butylbenzene	ND	ug/L		0.50		E524.2	05/19/25 18:44 / eli-h
2426	tert-Butylbenzene	ND	ug/L		0.50		E524.2	05/19/25 18:44 / eli-h
2982	Carbon tetrachloride	ND	ug/L		0.50	5	E524.2	05/19/25 18:44 / eli-h
2980	1,2-Dichloroethane	ND	ug/L		0.50	5	E524.2	05/19/25 18:44 / eli-h
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2944	Chlorodibromomethane	ND	ug/L		0.50		E524.2	05/19/25 18:44 / eli-h
2216	Chloroethane	ND	ug/L		0.50		E524.2	05/19/25 18:44 / eli-h
2941	Chloroform	ND	ug/L		0.50		E524.2	05/19/25 18:44 / eli-h
2210	Chloromethane	ND	ug/L		0.50		E524.2	05/19/25 18:44 / eli-h
2965	2-Chlorotoluene	ND	ug/L		0.50		E524.2	05/19/25 18:44 / eli-h
2966	4-Chlorotoluene	ND	ug/L		0.50		E524.2	05/19/25 18:44 / eli-h
2408	Dibromomethane	ND	ug/L		0.50		E524.2	05/19/25 18:44 / eli-h
2968	1,2-Dichlorobenzene	ND	ug/L		0.50	600	E524.2	05/19/25 18:44 / eli-h
2967	1,3-Dichlorobenzene	ND	ug/L		0.50		E524.2	05/19/25 18:44 / eli-h
2969	1,4-Dichlorobenzene	ND	ug/L		0.50	75	E524.2	05/19/25 18:44 / eli-h
2212	Dichlorodifluoromethane	ND	ug/L		0.50		E524.2	05/19/25 18:44 / eli-h
2978	1,1-Dichloroethane	ND	ug/L		0.50		E524.2	05/19/25 18:44 / eli-h
2977	1,1-Dichloroethene	ND	ug/L		0.50	7	E524.2	05/19/25 18:44 / eli-h
2380	cis-1,2-Dichloroethene	ND	ug/L		0.50	70	E524.2	05/19/25 18:44 / eli-h
2979	trans-1,2-Dichloroethene	ND	ug/L		0.50	100	E524.2	05/19/25 18:44 / eli-h
2983	1,2-Dichloropropane	ND	ug/L		0.50	5	E524.2	05/19/25 18:44 / eli-h
2412	1,3-Dichloropropane	ND	ug/L		0.50		E524.2	05/19/25 18:44 / eli-h
2416	2,2-Dichloropropane	ND	ug/L		0.50		E524.2	05/19/25 18:44 / eli-h
2410	1,1-Dichloropropene	ND	ug/L		0.50		E524.2	05/19/25 18:44 / eli-h
2413	cis-1,3-Dichloropropene	ND	ug/L		0.50		E524.2	05/19/25 18:44 / eli-h
2224	trans-1,3-Dichloropropene	ND	ug/L		0.50		E524.2	05/19/25 18:44 / eli-h
2992	Ethylbenzene	ND	ug/L		0.50	700	E524.2	05/19/25 18:44 / eli-h
2246	Hexachlorobutadiene	ND	ug/L		0.50		E524.2	05/19/25 18:44 / eli-h
2994	Isopropylbenzene	ND	ug/L		0.50		E524.2	05/19/25 18:44 / eli-h

Report RL - Analyte Reporting Limit

Definitions: QCL - Quality Control Limit

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ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Jorgensen Associates

Client Sample ID: Trip Blank

PWS #: Name: UNKNOWN

Facility ID:

Sampling Point/Location:

Project ID: WY5601569 High Meadow Ranch

Collector's Name: ELI

Contact Phone #: (307) 733-5150

Compliance Sample: NO

Sample Type:

Lab ID: C25050413-002

Report Date: 05/30/25

Collection Date: 05/12/25 11:43

Date Received: 05/14/25

Matrix: Trip Blank

Federal ID#: WY00002

FRDS	Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
					RL	QCL		
VOLATILE ORGANIC COMPOUNDS								
2030	p-Isopropyltoluene	ND	ug/L		0.50		E524.2	05/19/25 18:44 / eli-h
2251	Methyl tert-butyl ether (MTBE)	ND	ug/L		0.50		E524.2	05/19/25 18:44 / eli-h
2964	Methylene chloride	ND	ug/L		0.50	5	E524.2	05/19/25 18:44 / eli-h
2248	Naphthalene	ND	ug/L		0.50		E524.2	05/19/25 18:44 / eli-h
2998	n-Propylbenzene	ND	ug/L		0.50		E524.2	05/19/25 18:44 / eli-h
2996	Styrene	ND	ug/L		0.50	100	E524.2	05/19/25 18:44 / eli-h
2986	1,1,1,2-Tetrachloroethane	ND	ug/L		0.50		E524.2	05/19/25 18:44 / eli-h
2988	1,1,2,2-Tetrachloroethane	ND	ug/L		0.50		E524.2	05/19/25 18:44 / eli-h
2987	Tetrachloroethene	ND	ug/L		0.50	5	E524.2	05/19/25 18:44 / eli-h
2991	Toluene	ND	ug/L		0.50	1000	E524.2	05/19/25 18:44 / eli-h
2420	1,2,3-Trichlorobenzene	ND	ug/L		0.50		E524.2	05/19/25 18:44 / eli-h
2378	1,2,4-Trichlorobenzene	ND	ug/L		0.50	70	E524.2	05/19/25 18:44 / eli-h
2981	1,1,1-Trichloroethane	ND	ug/L		0.50	200	E524.2	05/19/25 18:44 / eli-h
2985	1,1,2-Trichloroethane	ND	ug/L		0.50	5	E524.2	05/19/25 18:44 / eli-h
2984	Trichloroethene	ND	ug/L		0.50	5	E524.2	05/19/25 18:44 / eli-h
2218	Trichlorofluoromethane	ND	ug/L		0.50		E524.2	05/19/25 18:44 / eli-h
2414	1,2,3-Trichloropropane	ND	ug/L		0.50		E524.2	05/19/25 18:44 / eli-h
2418	1,2,4-Trimethylbenzene	ND	ug/L		0.50		E524.2	05/19/25 18:44 / eli-h
2424	1,3,5-Trimethylbenzene	ND	ug/L		0.50		E524.2	05/19/25 18:44 / eli-h
2976	Vinyl chloride	ND	ug/L		0.50	2	E524.2	05/19/25 18:44 / eli-h
2963	m+p-Xylenes	ND	ug/L		1.0		E524.2	05/19/25 18:44 / eli-h
2997	o-Xylene	ND	ug/L		0.50		E524.2	05/19/25 18:44 / eli-h
2950	Trihalomethanes, Total	ND	ug/L		0.50	80	E524.2	05/19/25 18:44 / eli-h
2955	Xylenes, Total	ND	ug/L		0.50	10000	E524.2	05/19/25 18:44 / eli-h
	Surr: p-Bromofluorobenzene	109	%REC			70-130	E524.2	05/19/25 18:44 / eli-h
	Surr: 1,2-Dichloroethane-d4	97.0	%REC			70-130	E524.2	05/19/25 18:44 / eli-h
	Surr: Toluene-d8	107	%REC			70-130	E524.2	05/19/25 18:44 / eli-h

Report RL - Analyte Reporting Limit
Definitions: QCL - Quality Control Limit

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QA/QC Summary Report

Prepared by Casper, WY Branch

Work Order: C25050413

Report Date: 05/22/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E353.2										Analytical Run: FIA201-C_250519A
Lab ID: ICV	Initial Calibration Verification Standard									
Nitrogen, Nitrate+Nitrite as N										05/19/25 11:21
		0.954	mg/L	0.050	95	90	110			
Lab ID: CCV	Continuing Calibration Verification Standard									
Nitrogen, Nitrate+Nitrite as N										05/19/25 12:17
		1.00	mg/L	0.050	100	90	110			
Method: E353.2										Batch: R316974
Lab ID: MBLK	Method Blank									
Nitrogen, Nitrate+Nitrite as N										05/19/25 11:22
		ND	mg/L	0.02						
Lab ID: LFB	Laboratory Fortified Blank									
Nitrogen, Nitrate+Nitrite as N										05/19/25 11:27
		0.967	mg/L	0.050	98	90	110			
Lab ID: C25050408-001CMS	Sample Matrix Spike									
Nitrogen, Nitrate+Nitrite as N										05/19/25 12:21
		1.07	mg/L	0.050	94	90	110			
Lab ID: C25050408-001CMSD	Sample Matrix Spike Duplicate									
Nitrogen, Nitrate+Nitrite as N										05/19/25 12:22
		1.06	mg/L	0.050	93	90	110	0.9	10	

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Helena, MT Branch

Work Order: C25050413

Report Date: 05/29/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E524.2								Analytical Run: R205311		
Lab ID: 19-May-25_CCV_6	63 Continuing Calibration Verification Standard								05/19/25 13:22	
Benzene		4.75	ug/L	0.50	95	70	130			
Bromobenzene		4.76	ug/L	0.50	95	70	130			
Bromochloromethane		4.27	ug/L	0.50	85	70	130			
Bromodichloromethane		4.50	ug/L	0.50	90	70	130			
Bromoform		4.85	ug/L	0.50	97	70	130			
Bromomethane		4.68	ug/L	0.50	94	70	130			
n-Butylbenzene		4.93	ug/L	0.50	99	70	130			
sec-Butylbenzene		5.02	ug/L	0.50	100	70	130			
tert-Butylbenzene		5.00	ug/L	0.50	100	70	130			
Carbon tetrachloride		4.68	ug/L	0.50	94	70	130			
Chlorobenzene		4.72	ug/L	0.50	94	70	130			
Chlorodibromomethane		4.40	ug/L	0.50	88	70	130			
Chloroethane		5.01	ug/L	0.50	100	70	130			
Chloroform		4.33	ug/L	0.50	87	70	130			
Chloromethane		4.93	ug/L	0.50	99	70	130			
2-Chlorotoluene		4.95	ug/L	0.50	99	70	130			
4-Chlorotoluene		5.00	ug/L	0.50	100	70	130			
Dibromomethane		4.51	ug/L	0.50	90	70	130			
1,2-Dichlorobenzene		4.54	ug/L	0.50	91	70	130			
1,3-Dichlorobenzene		4.66	ug/L	0.50	93	70	130			
1,4-Dichlorobenzene		4.66	ug/L	0.50	93	70	130			
Dichlorodifluoromethane		4.78	ug/L	0.50	96	70	130			
1,1-Dichloroethane		4.61	ug/L	0.50	92	70	130			
1,2-Dichloroethane		4.57	ug/L	0.50	91	70	130			
1,1-Dichloroethene		4.73	ug/L	0.50	95	70	130			
cis-1,2-Dichloroethene		4.40	ug/L	0.50	88	70	130			
trans-1,2-Dichloroethene		4.85	ug/L	0.50	97	70	130			
1,2-Dichloropropane		4.62	ug/L	0.50	92	70	130			
1,3-Dichloropropane		4.44	ug/L	0.50	89	70	130			
2,2-Dichloropropane		4.53	ug/L	0.50	91	70	130			
1,1-Dichloropropene		4.68	ug/L	0.50	94	70	130			
cis-1,3-Dichloropropene		4.58	ug/L	0.50	92	70	130			
trans-1,3-Dichloropropene		4.47	ug/L	0.50	89	70	130			
Ethylbenzene		4.83	ug/L	0.50	97	70	130			
Hexachlorobutadiene		4.99	ug/L	0.50	100	70	130			
Isopropylbenzene		4.98	ug/L	0.50	100	70	130			
p-Isopropyltoluene		5.01	ug/L	0.50	100	70	130			
Methyl tert-butyl ether (MTBE)		4.48	ug/L	0.50	90	70	130			
Methylene chloride		4.74	ug/L	0.50	95	70	130			
Naphthalene		4.01	ug/L	0.50	80	70	130			
n-Propylbenzene		5.09	ug/L	0.50	102	70	130			
Styrene		4.63	ug/L	0.50	93	70	130			
1,1,1,2-Tetrachloroethane		4.48	ug/L	0.50	90	70	130			
1,1,2,2-Tetrachloroethane		4.31	ug/L	0.50	86	70	130			
Tetrachloroethene		4.89	ug/L	0.50	98	70	130			

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Helena, MT Branch

Work Order: C25050413

Report Date: 05/29/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E524.2										Analytical Run: R205311
Lab ID: 19-May-25_CCV_6	63	Continuing Calibration Verification Standard								05/19/25 13:22
Toluene		4.82	ug/L	0.50	96	70	130			
1,2,3-Trichlorobenzene		3.98	ug/L	0.50	80	70	130			
1,2,4-Trichlorobenzene		4.20	ug/L	0.50	84	70	130			
1,1,1-Trichloroethane		4.54	ug/L	0.50	91	70	130			
1,1,2-Trichloroethane		4.27	ug/L	0.50	85	70	130			
Trichloroethene		4.90	ug/L	0.50	98	70	130			
Trichlorofluoromethane		5.11	ug/L	0.50	102	70	130			
1,2,3-Trichloropropane		4.80	ug/L	0.50	96	70	130			
1,2,4-Trimethylbenzene		4.96	ug/L	0.50	99	70	130			
1,3,5-Trimethylbenzene		5.00	ug/L	0.50	100	70	130			
Vinyl chloride		5.08	ug/L	0.20	102	70	130			
m+p-Xylenes		9.69	ug/L	0.50	97	70	130			
o-Xylene		4.75	ug/L	0.50	95	70	130			
Trihalomethanes, Total		18.1	ug/L	0.50	90	70	130			
Xylenes, Total		14.4	ug/L	0.50	96	70	130			
Surr: p-Bromofluorobenzene				0.50	108	70	130			
Surr: 1,2-Dichloroethane-d4				0.50	96	70	130			
Surr: Toluene-d8				0.50	107	70	130			
Lab ID: 19-May-25_CCV1_11	8	Continuing Calibration Verification Standard								05/19/25 16:33
Bromodichloromethane		0.549	ug/L	0.50	110	50	150			
Bromoform		0.561	ug/L	0.50	112	50	150			
Chlorodibromomethane		0.538	ug/L	0.50	108	50	150			
Chloroform		0.547	ug/L	0.50	109	50	150			
Trihalomethanes, Total		2.20	ug/L	0.50	110	50	150			
Surr: 1,2-Dichloroethane-d4				0.50	93	70	130			
Surr: p-Bromofluorobenzene				0.50	112	70	130			
Surr: Toluene-d8				0.50	108	70	130			
Method: E524.2										Batch: R205311
Lab ID: 19-May-25_LCS_7	63	Laboratory Control Sample				Run: 5973MSD2_250519B				05/19/25 14:03
Benzene		4.63	ug/L	0.50	93	70	130			
Bromobenzene		4.78	ug/L	0.50	96	70	130			
Bromochloromethane		4.03	ug/L	0.50	81	70	130			
Bromodichloromethane		4.26	ug/L	0.50	85	70	130			
Bromoform		4.31	ug/L	0.50	86	70	130			
Bromomethane		5.21	ug/L	0.50	104	70	130			
n-Butylbenzene		4.88	ug/L	0.50	98	70	130			
sec-Butylbenzene		4.41	ug/L	0.50	88	70	130			
tert-Butylbenzene		4.79	ug/L	0.50	96	70	130			
Carbon tetrachloride		4.48	ug/L	0.50	90	70	130			
Chlorobenzene		4.52	ug/L	0.50	90	70	130			
Chlorodibromomethane		4.22	ug/L	0.50	84	70	130			
Chloroethane		5.20	ug/L	0.50	104	70	130			
Chloroform		4.17	ug/L	0.50	83	70	130			

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Helena, MT Branch

Work Order: C25050413

Report Date: 05/29/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E524.2										Batch: R205311
Lab ID: 19-May-25 LCS_7	63	Laboratory Control Sample				Run: 5973MSD2_250519B				05/19/25 14:03
Chloromethane		4.99	ug/L	0.50	100	70	130			
2-Chlorotoluene		4.84	ug/L	0.50	97	70	130			
4-Chlorotoluene		4.84	ug/L	0.50	97	70	130			
Dibromomethane		4.17	ug/L	0.50	83	70	130			
1,2-Dichlorobenzene		4.32	ug/L	0.50	86	70	130			
1,3-Dichlorobenzene		4.44	ug/L	0.50	89	70	130			
1,4-Dichlorobenzene		4.44	ug/L	0.50	89	70	130			
Dichlorodifluoromethane		4.50	ug/L	0.50	90	70	130			
1,1-Dichloroethane		4.35	ug/L	0.50	87	70	130			
1,2-Dichloroethane		4.22	ug/L	0.50	84	70	130			
1,1-Dichloroethene		4.53	ug/L	0.50	91	70	130			
cis-1,2-Dichloroethene		4.22	ug/L	0.50	84	70	130			
trans-1,2-Dichloroethene		4.75	ug/L	0.50	95	70	130			
1,2-Dichloropropane		4.38	ug/L	0.50	88	70	130			
1,3-Dichloropropane		4.28	ug/L	0.50	86	70	130			
2,2-Dichloropropane		4.49	ug/L	0.50	90	70	130			
1,1-Dichloropropene		4.48	ug/L	0.50	90	70	130			
cis-1,3-Dichloropropene		4.52	ug/L	0.50	90	70	130			
trans-1,3-Dichloropropene		4.08	ug/L	0.50	82	70	130			
Ethylbenzene		4.70	ug/L	0.50	94	70	130			
Hexachlorobutadiene		5.16	ug/L	0.50	103	70	130			
Isopropylbenzene		4.85	ug/L	0.50	97	70	130			
p-Isopropyltoluene		4.68	ug/L	0.50	94	70	130			
Methyl tert-butyl ether (MTBE)		4.39	ug/L	0.50	88	70	130			
Methylene chloride		4.52	ug/L	0.50	90	70	130			
Naphthalene		4.15	ug/L	0.50	83	70	130			
n-Propylbenzene		4.90	ug/L	0.50	98	70	130			
Styrene		4.83	ug/L	0.50	97	70	130			
1,1,1,2-Tetrachloroethane		4.29	ug/L	0.50	86	70	130			
1,1,1,2,2-Tetrachloroethane		3.99	ug/L	0.50	80	70	130			
Tetrachloroethene		4.68	ug/L	0.50	94	70	130			
Toluene		4.69	ug/L	0.50	94	70	130			
1,2,3-Trichlorobenzene		3.91	ug/L	0.50	78	70	130			
1,2,4-Trichlorobenzene		4.06	ug/L	0.50	81	70	130			
1,1,1-Trichloroethane		4.39	ug/L	0.50	88	70	130			
1,1,2-Trichloroethane		4.12	ug/L	0.50	82	70	130			
Trichloroethene		4.63	ug/L	0.50	93	70	130			
Trichlorofluoromethane		5.56	ug/L	0.50	111	70	130			
1,2,3-Trichloropropane		4.54	ug/L	0.50	91	70	130			
1,2,4-Trimethylbenzene		5.02	ug/L	0.50	100	70	130			
1,3,5-Trimethylbenzene		4.88	ug/L	0.50	98	70	130			
Vinyl chloride		5.29	ug/L	0.20	106	70	130			
m+p-Xylenes		9.40	ug/L	0.50	94	70	130			
o-Xylene		4.48	ug/L	0.50	90	70	130			
Trihalomethanes, Total		17.0	ug/L	0.50	85	70	130			

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Helena, MT Branch

Work Order: C25050413

Report Date: 05/29/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E524.2										Batch: R205311
Lab ID: 19-May-25_LCS_7	63	Laboratory Control Sample			Run: 5973MSD2_250519B			05/19/25 14:03		
Xylenes, Total		13.9	ug/L	0.50	93	70	130			
Surr: p-Bromofluorobenzene				0.50	111	70	130			
Surr: 1,2-Dichloroethane-d4				0.50	96	70	130			
Surr: Toluene-d8				0.50	109	70	130			
Lab ID: 19-May-25_MBLK_9	63	Method Blank			Run: 5973MSD2_250519B			05/19/25 15:08		
Benzene		ND	ug/L	0.50						
Bromobenzene		ND	ug/L	0.50						
Bromochloromethane		ND	ug/L	0.50						
Bromodichloromethane		ND	ug/L	0.50						
Bromoform		ND	ug/L	0.50						
Bromomethane		ND	ug/L	0.50						
n-Butylbenzene		ND	ug/L	0.50						
sec-Butylbenzene		ND	ug/L	0.50						
tert-Butylbenzene		ND	ug/L	0.50						
Carbon tetrachloride		ND	ug/L	0.50						
Chlorobenzene		ND	ug/L	0.50						
Chlorodibromomethane		ND	ug/L	0.50						
Chloroethane		ND	ug/L	0.50						
Chloroform		ND	ug/L	0.50						
Chloromethane		ND	ug/L	0.50						
2-Chlorotoluene		ND	ug/L	0.50						
4-Chlorotoluene		ND	ug/L	0.50						
Dibromomethane		ND	ug/L	0.50						
1,2-Dichlorobenzene		ND	ug/L	0.50						
1,3-Dichlorobenzene		ND	ug/L	0.50						
1,4-Dichlorobenzene		ND	ug/L	0.50						
Dichlorodifluoromethane		ND	ug/L	0.50						
1,1-Dichloroethane		ND	ug/L	0.50						
1,2-Dichloroethane		ND	ug/L	0.50						
1,1-Dichloroethene		ND	ug/L	0.50						
cis-1,2-Dichloroethene		ND	ug/L	0.50						
trans-1,2-Dichloroethene		ND	ug/L	0.50						
1,2-Dichloropropane		ND	ug/L	0.50						
1,3-Dichloropropane		ND	ug/L	0.50						
2,2-Dichloropropane		ND	ug/L	0.50						
1,1-Dichloropropene		ND	ug/L	0.50						
cis-1,3-Dichloropropene		ND	ug/L	0.50						
trans-1,3-Dichloropropene		ND	ug/L	0.50						
Ethylbenzene		ND	ug/L	0.50						
Hexachlorobutadiene		ND	ug/L	0.50						
Isopropylbenzene		ND	ug/L	0.50						
p-Isopropyltoluene		ND	ug/L	0.50						
Methyl tert-butyl ether (MTBE)		ND	ug/L	0.50						
Methylene chloride		ND	ug/L	0.50						

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Helena, MT Branch

Work Order: C25050413

Report Date: 05/29/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E524.2										Batch: R205311
Lab ID: 19-May-25_MBLK_9	63	Method Blank		Run: 5973MSD2_250519B				05/19/25 15:08		
Naphthalene		ND	ug/L	0.50						
n-Propylbenzene		ND	ug/L	0.50						
Styrene		ND	ug/L	0.50						
1,1,1,2-Tetrachloroethane		ND	ug/L	0.50						
1,1,2,2-Tetrachloroethane		ND	ug/L	0.50						
Tetrachloroethene		ND	ug/L	0.50						
Toluene		ND	ug/L	0.50						
1,2,3-Trichlorobenzene		ND	ug/L	0.50						
1,2,4-Trichlorobenzene		ND	ug/L	0.50						
1,1,1-Trichloroethane		ND	ug/L	0.50						
1,1,2-Trichloroethane		ND	ug/L	0.50						
Trichloroethene		ND	ug/L	0.50						
Trichlorofluoromethane		ND	ug/L	0.50						
1,2,3-Trichloropropane		ND	ug/L	0.50						
1,2,4-Trimethylbenzene		ND	ug/L	0.50						
1,3,5-Trimethylbenzene		ND	ug/L	0.50						
Vinyl chloride		ND	ug/L	0.20						
m+p-Xylenes		ND	ug/L	0.50						
o-Xylene		ND	ug/L	0.50						
Trihalomethanes, Total		ND	ug/L	0.50						
Xylenes, Total		ND	ug/L	0.50						
Surr: p-Bromofluorobenzene				0.50	107	70	130			
Surr: 1,2-Dichloroethane-d4				0.50	100	70	130			
Surr: Toluene-d8				0.50	106	70	130			
Lab ID: H25050519-001ADUP	63	Sample Duplicate		Run: 5973MSD2_250519B				05/20/25 15:15		
Benzene		ND	ug/L	0.50						20
Bromobenzene		ND	ug/L	0.50						20
Bromochloromethane		ND	ug/L	0.50						20
Bromodichloromethane		ND	ug/L	0.50						20
Bromoform		ND	ug/L	0.50						20
Bromomethane		ND	ug/L	0.50						20
n-Butylbenzene		ND	ug/L	0.50						20
sec-Butylbenzene		ND	ug/L	0.50						20
tert-Butylbenzene		ND	ug/L	0.50						20
Carbon tetrachloride		ND	ug/L	0.50						20
1,2-Dichloroethane		ND	ug/L	0.50						20
Chlorobenzene		ND	ug/L	0.50						20
Chlorodibromomethane		ND	ug/L	0.50						20
Chloroethane		ND	ug/L	0.50						20
Chloroform		ND	ug/L	0.50						20
Chloromethane		ND	ug/L	0.50						20
2-Chlorotoluene		ND	ug/L	0.50						20
4-Chlorotoluene		ND	ug/L	0.50						20
Dibromomethane		ND	ug/L	0.50						20

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Helena, MT Branch

Work Order: C25050413

Report Date: 05/29/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E524.2									Batch: R205311	
Lab ID: H25050519-001ADUP 63 Sample Duplicate				Run: 5973MSD2_250519B					05/20/25 15:15	
1,2-Dichlorobenzene		ND	ug/L	0.50					20	
1,3-Dichlorobenzene		ND	ug/L	0.50					20	
1,4-Dichlorobenzene		ND	ug/L	0.50					20	
Dichlorodifluoromethane		ND	ug/L	0.50					20	
1,1-Dichloroethane		ND	ug/L	0.50					20	
1,1-Dichloroethene		ND	ug/L	0.50					20	
cis-1,2-Dichloroethene		ND	ug/L	0.50					20	
trans-1,2-Dichloroethene		ND	ug/L	0.50					20	
1,2-Dichloropropane		ND	ug/L	0.50					20	
1,3-Dichloropropane		ND	ug/L	0.50					20	
2,2-Dichloropropane		ND	ug/L	0.50					20	
1,1-Dichloropropene		ND	ug/L	0.50					20	
cis-1,3-Dichloropropene		ND	ug/L	0.50					20	
trans-1,3-Dichloropropene		ND	ug/L	0.50					20	
Ethylbenzene		ND	ug/L	0.50					20	
Hexachlorobutadiene		ND	ug/L	0.50					20	
Isopropylbenzene		ND	ug/L	0.50					20	
p-Isopropyltoluene		ND	ug/L	0.50					20	
Methyl tert-butyl ether (MTBE)		ND	ug/L	0.50					20	
Methylene chloride		ND	ug/L	0.50					20	
Naphthalene		ND	ug/L	0.50					20	
n-Propylbenzene		ND	ug/L	0.50					20	
Styrene		ND	ug/L	0.50					20	
1,1,1,2-Tetrachloroethane		ND	ug/L	0.50					20	
1,1,1,2,2-Tetrachloroethane		ND	ug/L	0.50					20	
Tetrachloroethene		0.293	ug/L	0.50					20	J
Toluene		ND	ug/L	0.50					20	
1,2,3-Trichlorobenzene		ND	ug/L	0.50					20	
1,2,4-Trichlorobenzene		ND	ug/L	0.50					20	
1,1,1-Trichloroethane		ND	ug/L	0.50					20	
1,1,2-Trichloroethane		ND	ug/L	0.50					20	
Trichloroethene		ND	ug/L	0.50					20	
Trichlorofluoromethane		ND	ug/L	0.50					20	
1,2,3-Trichloropropane		ND	ug/L	0.50					20	
1,2,4-Trimethylbenzene		ND	ug/L	0.50					20	
1,3,5-Trimethylbenzene		ND	ug/L	0.50					20	
Vinyl chloride		ND	ug/L	0.50					20	
m+p-Xylenes		ND	ug/L	1.0					20	
o-Xylene		ND	ug/L	0.50					20	
Trihalomethanes, Total		ND	ug/L	0.50					20	
Xylenes, Total		ND	ug/L	0.50					20	
Surr: p-Bromofluorobenzene				0.50	114	70	130			
Surr: 1,2-Dichloroethane-d4				0.50	85	70	130			
Surr: Toluene-d8				0.50	117	70	130			

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

J - Estimated value - analyte was present but less than the Reporting Limit (RL)



Work Order Receipt Checklist

Jorgensen Associates

C25050413

Login completed by: Dakota R. Sawyer

Date Received: 5/14/2025

Reviewed by: srichins

Received by: LXQ

Reviewed Date: 5/19/2025

Carrier name: Return UPS Ground

Shipping container/cooler in good condition?	Yes ☒	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☒	No ☐	Not Present ☐
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☒
Chain of custody present?	Yes ☒	No ☐	
Chain of custody signed when relinquished and received?	Yes ☒	No ☐	
Chain of custody agrees with sample labels?	Yes ☒	No ☐	
Samples in proper container/bottle?	Yes ☒	No ☐	
Sample containers intact?	Yes ☒	No ☐	
Sufficient sample volume for indicated test?	Yes ☒	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☒	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☒	No ☐	Not Applicable ☐
Container/Temp Blank temperature:	0.8°C On Ice		
Containers requiring zero headspace have no headspace or bubble that is <6mm (1/4").	Yes ☒	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☒	No ☐	Not Applicable ☐

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

The reference date for Radon analysis is the sample collection date. The reference date for all other Radiochemical analyses is the analysis date. Radiochemical precision results represent a 2-sigma Total Measurement Uncertainty.

For methods that require zero headspace or require preservation check at the time of analysis due to potential interference, the pH is verified at analysis. Nonconforming sample pH is documented as part of the analysis and included in the sample analysis comments.

Trip Blanks and/or Blind Duplicate samples are assigned the earliest collection time for the associated requested analysis in order to evaluate the holding time unless specifically indicated.

Contact and Corrective Action Comments:

None

Laboratory Certifications and Accreditations

Current certificates are available at www.energylab.com website:

	Agency	Number
Billings, MT  	Alaska	17-023
	California	3087
	Colorado	MT00005
	Department of Defense (DoD)/ISO17025	ADE-2588
	Florida (Primary NELAP)	E87668
	Idaho	MT00005
	Louisiana	05079
	Montana	CERT0044
	Nebraska	NE-OS-13-04
	Nevada	NV-C24-00250
	North Dakota	R-007
	National Radon Proficiency	109383-RMP
	Oregon	4184
	South Dakota	ARSD 74:04:07
	Texas	TX-C24-00302
	US EPA Region VIII	Reciprocal
	USDA Soil Permit	P330-20-00170
	Washington	C1039
Casper, WY 	Alaska	20-006
	California	3021
	Colorado	WY00002
	Florida (Primary NELAP)	E87641
	Idaho	WY00002
	Louisiana	05083
	Montana	CERT0002
	Nebraska	NE-OS-08-04
	Nevada	NV-C24-00245
	North Dakota	R-125
	Oregon	WY200001
	South Dakota	WY00002
	Texas	T104704181-23-21
	US EPA Region VIII	WY00002
	USNRC License	49-26846-01
	Washington	C1012
Gillette, WY	US EPA Region VIII	WY00006
Helena, MT	Colorado	MT00945
	Montana	CERT0079
	Nevada	NV-C24-00119
	US EPA Region VIII	Reciprocal
	USDA Soil Permit	P330-20-00090



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Chain of Custody (COC) & Analytical Request Record

Lab Workorder #: C25050413

Project Information

Client: Jorgensen Associates
Project: WY5601569 High Meadow Ranch
Purchase Order:
Contact/Phone: Dustin Ensminger (307) 231-6352

Laboratory Use

Quote: N/A
BO#: 82484
EE#: 20659
Turn-Around Time: Standard
Critical Hold Time: 14 Days
of Samples: 2
Matrix: Various



Comments:

Contact ELI prior to RUSH sample submittal for charges, availability & scheduling. Samples submitted may be subcontracted to other laboratories to complete the test(s) requested; this will be clearly noted on the analytical report.

Analysis Requested

Hold Time (Days)	Analysis Requested				Public Water Supply (PWS) Required System Information		
	28	14			PWS System ID	PWS Facility ID	PWS Sample Pt ID
Matrix							
RUSH TAT							
FPA/State Compliance							
Nitrogen, Nitrate + Nitrite (E353.2)							
524-Purgeable Organics, SDWA (E524.2)							
# of Containers	4	DW	W		WY5601569	TP02	SP03
1	CL 2 TAP AT PCB/SP03	Ultimate: 5/12/25 11:43 AM					
2	Trip Blank	Xylenes, VOC					
3							
4							
5							
6							
7							
8							
9							
10							
11							

Custody Record MUST be signed	Lab provided preservatives were used ☒ Yes ☐ No		Sampler Name (if different than Relinquished by):		Sampler Phone: 307-231-6353	
	Relinquished by (print) Modeline Ensminger	Date/Time 5/12/25 1:29	Signature Modeline	Received by (print)	Date/Time	Signature
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
				Lisa Querada	05/14/25	

Date Printed: 04/21/2025

EE: CA - 20659

COC: Page 1 of 1