



September 23, 2021

Mr. Bruce White, Manager  
Moffat County Road Department  
PO Box 667  
Craig, CO 81626

NWCC Project Number: 14-9900

Subject: Waste Characterization and Disposal Acceptance  
Recommendation, Diamond T Sheep

Dear Mr. White:

In accordance with your recent request, NWCC, Inc. (NWCC) reviewed analytical data and a waste characterization form provided by SWN Production CO, LLC (SWN) of Spring, Texas. Provided information is reportedly associated with petroleum impacted soils at the Diamond T Sheep 7-92 2-26H35 production well located in Moffat County, Colorado. Petroleum contaminated soil resulted from production well operations. Impacted soil proposed for disposal at Moffat County Regional Landfill (MCRL) appears to be limited to approximately 3 cubic yards.

Based upon MCRL permit requirements and Industrial, Special, and Universal Waste Plan (ISUWP), contaminated material must be characterized prior to acceptance for disposal at the landfill. Based upon analytical data and the waste characterization form, a five-point composite sample was collected throughout stockpiled petroleum contaminated soil for analyses and submitted to ACZ Laboratories, Inc. (ACZ) of Steamboat Springs, Colorado.

A National Environmental Laboratory Accreditation Program (NELAP) certified analytical laboratory must be used to provide analytical services, in accordance with the ISUWP. Based upon NWCC's understanding, ACZ is a NELAP certified laboratory. The collected sample was analyzed for the following analytes.

- Resource Conservation and Recovery Act (RCRA) eight metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver) using U.S. Environmental Protection Agency (EPA) Methods 6010/7471 (MCRL Appendix D: ISUWP Test Suite Number [TSN] 1).
- Full volatile organic compound suite include benzene, toluene, ethylbenzene, and xylene (BTEX) using EPA Method 8260 (TSN 2 and 3).

- Diesel range organic (DRO) compounds using EPA modified Method 8015 (TSN 5b).
- Ignitability using EPA Method 1030 (TSN 11).
- Paint Filter using EPA Method 9095 (TSN 13).

Based upon review of provided information and in accordance with the ISUWP, the material appears to meet landfill disposal acceptance criteria. Analytical reports and the waste characterization form are attached for your records.

Note that in accordance with the Clean Air Act statute, the petroleum contaminated material must be buried using soil at the end of the shift. This material may not be used as daily landfill cover.

If you have any questions or concerns, please contact the undersigned. We look forward to continuing to work with you.

Sincerely,  
**NWCC, Inc.**



Gary R. Webber, PG  
Vice President

Attachments

Cc: Dan Miller, Moffat County Road Department  
Shane Kawcak, Moffat County Regional Landfill

## Moffat County Landfill - Waste Characterization Form

Please provide the following information that will allow Moffat County to lawfully and safely accept your waste for delivery at the landfill. Fill out the form completely and honestly. You as the "Generator" provide data and information concerning the waste so that the County can make a hazardous waste determination. As the Generator, you are responsible for its waste from cradle to grave. All related analysis must be attached to this form and if a change of characteristics are suspected in the waste prior to disposal, the waste must be re-tested.

### 1. Generator Information

Your Name: Karen Manectis Company Name: SWN Production CO, LLC  
Mailing Address: PO BOX 12359, Spring, TX 77389 Phone: (970) 620-6099

### 2. Waste Information

Common name of waste: Petroleum Contaminated Soil  
Location or place of origin: Diamond T Sheep 7-97  
2-261435 Well Pad Address: Moffat County  
Method of waste generation: Production Well Operations  
Physical Characteristics of Waste: Color: BROWN  
Odor: ☐ None ☒ Mild ☐ Strong Describe: Petroleum  
Physical State: ☒ Solid ☐ Sludge ☐ Liquid ☐ Other  
Anticipated volume: 23 yds Method of delivery: TRUCK Frequency of delivery: ONCE

### 3. Waste Sampling and Testing

Total Volume of material 23 cubic yards Number of samples collected: 5  
Date of sampling: 8/26/21 Type of sample: ☐ grab ☐ composite  
Describe Sampling Plan 5-Point Composite Sample collected  
throughout stockpiled soil.  
Name of Analytical Laboratory: ACE Laboratories, Inc.  
NELAP Certified? ☒ Yes ☐ No Analytical data from the laboratory is attached: ☐ yes ☐ no  
If no, explanation: \_\_\_\_\_

4. **Certification** I hereby certify that I am the Generator, or I am authorized by the Generator to provide the information submitted in this form including any attached documents and to enter into this Agreement on the Generator's behalf. The characterization included laboratory analysis performed in accordance with the County guidelines on a representative sample of the waste. All required information concerning the waste, including the results of all laboratory analyses has been provided in this form and the attached documents. I further hereby certify that such information is complete and accurate and that all known or suspected hazardous constituents, characteristics or safety hazards associated with the waste have been disclosed herein. I understand that the waste may be subject to random sampling, that any waste that is non-conforming will be returned to me, and that the County will not be responsible for expenses related to transportation, storage and handling of the non-conforming waste.

Print Name: Karen Manectis Signature: [Signature]

Date: 9/23/2021

September 22, 2021

## Report to:

Gary Webber  
Northwest Colorado Consultants  
2580 Copper Ridge Dr.  
Steamboat Springs, CO 80487

## Bill to:

Gary Webber  
Northwest Colorado Consultants  
2580 Copper Ridge Cr.  
Steamboat Springs, CO 80487

Project ID: DIAMOND-T-SHEEP-7-92

ACZ Project ID: L68121

Gary Webber:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on August 26, 2021. This project has been assigned to ACZ's project number, L68121. Please reference this number in all future inquiries.


All analyses were performed according to ACZ's Quality Assurance Plan. The enclosed results relate only to the samples received under L68121. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after October 22, 2021. If the samples are determined to be hazardous, additional charges apply for disposal (typically \$11/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical raw data reports for ten years.

If you have any questions or other needs, please contact your Project Manager.



Scott Habermehl has reviewed  
and approved this report.





Northwest Colorado Consultants

September 21, 2021

Project ID: DIAMOND-T-SHEEP-7-92

ACZ Project ID: L68121

**Sample Receipt**

ACZ Laboratories, Inc. (ACZ) received 2 miscellaneous samples from Northwest Colorado Consultants on August 26, 2021. The samples were received in good condition. Upon receipt, the sample custodian removed the samples from the cooler, inspected the contents, and logged the samples into ACZ's computerized Laboratory Information Management System (LIMS). The samples were assigned ACZ LIMS project number L68121. The custodian verified the sample information entered into the computer against the chain of custody (COC) forms and sample bottle labels.

**Holding Times**

All analyses were performed within EPA recommended holding times.

**Sample Analysis**

These samples were analyzed for inorganic, organic parameters. The individual methods are referenced on both, the ACZ invoice and the analytical reports. The extended qualifier reports may contain footnotes qualifying specific elements due to QC failures. In addition the following has been noted with this specific project:

1. (DE) BTEX Compounds. Sample required dilution. Sample matrix interfering with internal standard.

**Northwest Colorado Consultants**

Project ID: DIAMOND-T-SHEEP-7-92

Sample ID: WC1

ACZ Sample ID: **L68121-01**

Date Sampled: 08/26/21 12:40

Date Received: 08/26/21

Sample Matrix: Soil

## Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Arsenic, total (3050)	M6010D ICP	102	<4.08	U		mg/Kg	4.08	20.4	09/12/21 23:19	kja
Barium, total (3050)	M6010D ICP	102	192		*	mg/Kg	0.714	3.57	09/12/21 23:19	kja
Cadmium, total (3050)	M6010D ICP	102	<0.816	U		mg/Kg	0.816	2.55	09/12/21 23:19	kja
Chromium, total (3050)	M6010D ICP	102	8.89			mg/Kg	2.04	5.1	09/12/21 23:19	kja
Lead, total (3050)	M6010D ICP	102	9.62	B		mg/Kg	3.06	15.3	09/12/21 23:19	kja
Mercury, total	M7471A CVAA	173	<0.0346	U		mg/Kg	0.0346	0.173	09/13/21 14:44	mlh
Selenium, total (3050)	M6010D ICP	102	<5.1	U		mg/Kg	5.1	25.5	09/12/21 23:19	kja
Silver, total (3050)	M6010D ICP	102	<1.02	U		mg/Kg	1.02	2.55	09/12/21 23:19	kja

## Soil Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Free liquid by Paint Filter	M9095B	1	Contains no free liquid		*				09/01/21 13:20	gkh
Ignitability in Solids	M1030	1	Not Flammable		*				09/07/21 8:00	jpj
Solids, Percent	D2216-80	1	97.3		*	%	0.1	0.5	09/02/21 6:39	zln

## Soil Preparation

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Digestion - Hot Plate	M3050B ICP								09/10/21 9:00	mep

**Northwest Colorado Consultants**

Project ID: DIAMOND-T-SHEEP-7-92

Sample ID: TP1

ACZ Sample ID: **L68121-02**

Date Sampled: 08/26/21 13:10

Date Received: 08/26/21

Sample Matrix: Soil

## Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Boron, soluble (Hot Water)	M6010D ICP	10	0.383	B	*	mg/L	0.3	1	09/17/21 12:09	kja

## Soil Preparation

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Air Dry at 34 Degrees C	USDA No. 1, 1972								09/01/21 14:54	zln
Hot Water Extraction	ASA No. 9 M25-9 (Modified)								09/16/21 9:30	gkh
Sieve-2000 um (2.0mm)	ASA No.9, 15-4.2.2								09/10/21 8:30	mep

Report Header Explanations

<i>Batch</i>	A distinct set of samples analyzed at a specific time
<i>Found</i>	Value of the QC Type of interest
<i>Limit</i>	Upper limit for RPD, in %.
<i>Lower</i>	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
<i>MDL</i>	Method Detection Limit. Same as Minimum Reporting Limit unless omitted or equal to the PQL (see comment #5). Allows for instrument and annual fluctuations.
<i>PCN/SCN</i>	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
<i>PQL</i>	Practical Quantitation Limit. Synonymous with the EPA term "minimum level".
<i>QC</i>	True Value of the Control Sample or the amount added to the Spike
<i>Rec</i>	Recovered amount of the true value or spike added, in % (except for LCSS, mg/Kg)
<i>RPD</i>	Relative Percent Difference, calculation used for Duplicate QC Types
<i>Upper</i>	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
<i>Sample</i>	Value of the Sample of interest

QC Sample Types

<i>AS</i>	Analytical Spike (Post Digestion)	<i>LCSWD</i>	Laboratory Control Sample - Water Duplicate
<i>ASD</i>	Analytical Spike (Post Digestion) Duplicate	<i>LFB</i>	Laboratory Fortified Blank
<i>CCB</i>	Continuing Calibration Blank	<i>LFM</i>	Laboratory Fortified Matrix
<i>CCV</i>	Continuing Calibration Verification standard	<i>LFMD</i>	Laboratory Fortified Matrix Duplicate
<i>DUP</i>	Sample Duplicate	<i>LRB</i>	Laboratory Reagent Blank
<i>ICB</i>	Initial Calibration Blank	<i>MS</i>	Matrix Spike
<i>ICV</i>	Initial Calibration Verification standard	<i>MSD</i>	Matrix Spike Duplicate
<i>ICSAB</i>	Inter-element Correction Standard - A plus B solutions	<i>PBS</i>	Prep Blank - Soil
<i>LCSS</i>	Laboratory Control Sample - Soil	<i>PBW</i>	Prep Blank - Water
<i>LCSSD</i>	Laboratory Control Sample - Soil Duplicate	<i>PQV</i>	Practical Quantitation Verification standard
<i>LCSW</i>	Laboratory Control Sample - Water	<i>SDL</i>	Serial Dilution

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.
Standard	Verifies the validity of the calibration.

ACZ Qualifiers (Qual)

B	Analyte concentration detected at a value between MDL and PQL. The associated value is an estimated quantity.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
L	Target analyte response was below the laboratory defined negative threshold.
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

Method References

(1)	EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
(2)	EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
(3)	EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
(4)	EPA SW-846. Test Methods for Evaluating Solid Waste.
(5)	Standard Methods for the Examination of Water and Wastewater.

Comments

(1)	QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
(2)	Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
(3)	Animal matrices for Inorganic analyses are reported on an "as received" basis.
(4)	An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.
(5)	If the MDL equals the PQL or the MDL column is omitted, the PQL is the reporting limit.

For a complete list of ACZ's Extended Qualifiers, please click:

<https://aczk.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf>

Northwest Colorado Consultants

ACZ Project ID: **L68121**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

**Arsenic, total (3050)**

M6010D ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG526993</b>													
WG526993ICV	ICV	09/12/21 22:34	II210823-1	4		3.797	mg/L	95	90	110			
WG526993ICB	ICB	09/12/21 22:37				U	mg/L		-0.12	0.12			
WG526890PBS	PBS	09/12/21 23:01				U	mg/Kg		-12	12			
WG526890LCSS1	LCSS	09/12/21 23:04	PCN63759	156		145.6	mg/Kg		129	183			
WG526890LCSSD1	LCSSD	09/12/21 23:08	PCN63759	156		146.1	mg/Kg		129	183	0	20	
L68121-01MS	MS	09/12/21 23:23	II210903-3	102.0816	U	96.349	mg/Kg	94	75	125			
L68121-01MSD	MSD	09/12/21 23:26	II210903-3	102.0816	U	96.706	mg/Kg	95	75	125	0	20	

**Barium, total (3050)**

M6010D ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG526993</b>													
WG526993ICV	ICV	09/12/21 22:34	II210823-1	2		2.004	mg/L	100	90	110			
WG526993ICB	ICB	09/12/21 22:37				U	mg/L		-0.021	0.021			
WG526890PBS	PBS	09/12/21 23:01				U	mg/Kg		-2.1	2.1			
WG526890LCSS1	LCSS	09/12/21 23:04	PCN63759	239		238	mg/Kg		197	280			
WG526890LCSSD1	LCSSD	09/12/21 23:08	PCN63759	239		239.2	mg/Kg		197	280	1	20	
L68121-01MS	MS	09/12/21 23:23	II210903-3	51	192	259.692	mg/Kg	133	75	125			M3
L68121-01MSD	MSD	09/12/21 23:26	II210903-3	51	192	255.816	mg/Kg	125	75	125	2	20	

**Boron, soluble (Hot Water)**

M6010D ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG527372</b>													
WG527372ICV	ICV	09/17/21 11:37	II210826-1	2		1.99	mg/L	100	90	110			
WG527372ICB	ICB	09/17/21 11:41				U	mg/L		-0.09	0.09			
WG526683PBS	PBS	09/17/21 12:05				U	mg/Kg		-0.18	0.18			
L68121-02AS	AS	09/17/21 12:13	II210910-2	5.005	.383	5.45	mg/Kg	101	75	125			
L68121-02ASD	ASD	09/17/21 12:17	II210910-2	5.005	.383	5.387	mg/Kg	100	75	125	1	20	
L68121-02DUP	DUP	09/17/21 12:24			.383	.391	mg/Kg				2	20	RA

**Cadmium, total (3050)**

M6010D ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG526993</b>													
WG526993ICV	ICV	09/12/21 22:34	II210823-1	2		1.918	mg/L	96	90	110			
WG526993ICB	ICB	09/12/21 22:37				U	mg/L		-0.024	0.024			
WG526890PBS	PBS	09/12/21 23:01				U	mg/Kg		-2.4	2.4			
WG526890LCSS1	LCSS	09/12/21 23:04	PCN63759	137		123.6	mg/Kg		113	160			
WG526890LCSSD1	LCSSD	09/12/21 23:08	PCN63759	137		130.8	mg/Kg		113	160	6	20	
L68121-01MS	MS	09/12/21 23:23	II210903-3	51.255	U	45.9	mg/Kg	90	75	125			
L68121-01MSD	MSD	09/12/21 23:26	II210903-3	51.255	U	45.8286	mg/Kg	89	75	125	0	20	

Northwest Colorado Consultants

ACZ Project ID: **L68121**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

**Chromium, total (3050)**

M6010D ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG526993</b>													
WG526993ICV	ICV	09/12/21 22:34	II210823-1	2		1.984	mg/L	99	90	110			
WG526993ICB	ICB	09/12/21 22:37				U	mg/L		-0.06	0.06			
WG526890PBS	PBS	09/12/21 23:01				U	mg/Kg		-6	6			
WG526890LCSS1	LCSS	09/12/21 23:04	PCN63759	154		145.1	mg/Kg		126	181			
WG526890LCSSD1	LCSSD	09/12/21 23:08	PCN63759	154		151.2	mg/Kg		126	181	4	20	
L68121-01MS	MS	09/12/21 23:23	II210903-3	51.204	8.89	58.028	mg/Kg	96	75	125			
L68121-01MSD	MSD	09/12/21 23:26	II210903-3	51.204	8.89	59.068	mg/Kg	98	75	125	2	20	

**Lead, total (3050)**

M6010D ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG526993</b>													
WG526993ICV	ICV	09/12/21 22:34	II210823-1	4		3.979	mg/L	99	90	110			
WG526993ICB	ICB	09/12/21 22:37				U	mg/L		-0.09	0.09			
WG526890PBS	PBS	09/12/21 23:01				U	mg/Kg		-9	9			
WG526890LCSS1	LCSS	09/12/21 23:04	PCN63759	130		129.4	mg/Kg		107	152			
WG526890LCSSD1	LCSSD	09/12/21 23:08	PCN63759	130		129.5	mg/Kg		107	152	0	20	
L68121-01MS	MS	09/12/21 23:23	II210903-3	102.1428	9.62	101.082	mg/Kg	90	75	125			
L68121-01MSD	MSD	09/12/21 23:26	II210903-3	102.1428	9.62	100.021	mg/Kg	89	75	125	1	20	

**Mercury, total**

M7471A CVAA

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG527029</b>													
WG527029ICV	ICV	09/13/21 14:36	HG210913-14	.01002		.00953	mg/L	95	90	110			
WG527029ICB	ICB	09/13/21 14:38				U	mg/L		-0.0006	0.0006			
WG527029PBS	PBS	09/13/21 14:39				U	mg/Kg		-0.12	0.12			
WG527029LCSS	LCSS	09/13/21 14:40	PCN61732	15.4		10.9434	mg/Kg		9.89	23.1			
WG527029LCSSD	LCSSD	09/13/21 14:42	PCN61732	15.4		13.0152	mg/Kg		9.89	23.1	17	20	
L68121-01MS	MS	09/13/21 14:45	HG210913-16	.915915	U	.83814	mg/Kg	92	85	115			
L68121-01MSD	MSD	09/13/21 14:46	HG210913-16	.885885	U	.81066	mg/Kg	92	85	115	3	20	

**Selenium, total (3050)**

M6010D ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG526993</b>													
WG526993ICV	ICV	09/12/21 22:34	II210823-1	4		4.011	mg/L	100	90	110			
WG526993ICB	ICB	09/12/21 22:37				U	mg/L		-0.15	0.15			
WG526890PBS	PBS	09/12/21 23:01				U	mg/Kg		-15	15			
WG526890LCSS1	LCSS	09/12/21 23:04	PCN63759	167		164.7	mg/Kg		132	201			
WG526890LCSSD1	LCSSD	09/12/21 23:08	PCN63759	167		167.7	mg/Kg		132	201	2	20	
L68121-01MS	MS	09/12/21 23:23	II210903-3	102.102	U	96.217	mg/Kg	94	75	125			
L68121-01MSD	MSD	09/12/21 23:26	II210903-3	102.102	U	95.146	mg/Kg	93	75	125	1	20	



Northwest Colorado Consultants

ACZ Project ID: **L68121**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

**Silver, total (3050)**

M6010D ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG526993</b>													
WG526993ICV	ICV	09/12/21 22:34	II210823-1	1		.999	mg/L	100	90	110			
WG526993ICB	ICB	09/12/21 22:37				U	mg/L		-0.03	0.03			
WG526890PBS	PBS	09/12/21 23:01				U	mg/Kg		-3	3			
WG526890LCSS1	LCSS	09/12/21 23:04	PCN63759	33.6		32.68	mg/Kg		26.8	40.3			
WG526890LCSSD1	LCSSD	09/12/21 23:08	PCN63759	33.6		32.95	mg/Kg		26.8	40.3	1	20	
L68121-01MS	MS	09/12/21 23:23	II210903-3	51.204	U	45.472	mg/Kg	89	75	125			
L68121-01MSD	MSD	09/12/21 23:26	II210903-3	51.204	U	45.298	mg/Kg	88	75	125	0	20	

**Solids, Percent**

D2216-80

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG526403</b>													
WG526403PBS	PBS	09/01/21 14:30				U	%		-0.1	0.1			
L68136-02DUP	DUP	09/02/21 11:29			72.5	71.4	%				2	20	

Northwest Colorado Consultants

ACZ Project ID: **L68121**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68121-01	WG526993	Barium, total (3050)	M6010D ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
L68121-02	WG527372	Boron, soluble (Hot Water)	M6010D ICP	DJ	Sample dilution required due to insufficient sample.
			M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

**Northwest Colorado Consultants**

Project ID: DIAMOND-T-SHEEP-7-92

Sample ID: WC1

ACZ Sample ID: **L68121-01**

Date Sampled: 08/26/21 12:40

Date Received: 08/26/21

Sample Matrix: Soil

**Diesel Range Organics (C10-C28)**Analysis Method: **M8015D GC/FID**Extract Method: **M3546****Workgroup:** WG527062

Analyst: ttg

Extract Date: 09/09/21 16:59

Analysis Date: 09/13/21 14:33

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
TPH C10 to C28		4740		1.33	*	mg/Kg	133	667
Surrogate Recoveries	CAS	% Recovery		Dilution	XQ	Units	LCL	UCL
OTP	84-15-1	347.5		1.33	*	%	60	115

**Northwest Colorado Consultants**

Project ID: DIAMOND-T-SHEEP-7-92  
 Sample ID: WC1

ACZ Sample ID: **L68121-01**  
 Date Sampled: 08/26/21 12:40  
 Date Received: 08/26/21  
 Sample Matrix: Soil

**Volatile Organics by GC/MS**

Analysis Method: **M8260C/D GC/MS**  
 Extract Method: **3580A**

Workgroup: **WG526661**

Analyst: jmm  
 Extract Date: 09/07/21 16:39  
 Analysis Date: 09/07/21 16:39

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
1,1,1,2-Tetrachloroethane	630-20-6	<1000	U	250	*	ug/Kg	1000	2500
1,1,1-Trichloroethane	71-55-6	<2500	U	250	*	ug/Kg	2500	6250
1,1,2,2-Tetrachloroethane	79-34-5	<750	U	250	*	ug/Kg	750	2500
1,1,2-Trichloroethane	79-00-5	<1000	U	250	*	ug/Kg	1000	2500
1,1-Dichloroethane	75-34-3	<1000	U	250	*	ug/Kg	1000	2500
1,1-Dichloroethene	75-35-4	<1000	U	250	*	ug/Kg	1000	2500
1,1-Dichloropropene	563-58-6	<1000	U	250	*	ug/Kg	1000	2500
1,2,3-Trichlorobenzene	87-61-6	<1000	U	250	*	ug/Kg	1000	2500
1,2,3-Trichloropropane	96-18-4	<1000	U	250	*	ug/Kg	1000	2500
1,2,4-Trichlorobenzene	120-82-1	<750	U	250	*	ug/Kg	750	2500
1,2,4-Trimethylbenzene	95-63-6	<1000	U	250	*	ug/Kg	1000	2500
1,2-Dibromo-3-chloropropane	96-12-8	<1000	U	250	*	ug/Kg	1000	2500
1,2-Dibromoethane	106-93-4	<1000	U	250	*	ug/Kg	1000	2500
1,2-Dichlorobenzene	95-50-1	<1000	U	250	*	ug/Kg	1000	2500
1,2-Dichloroethane	107-06-2	<1000	U	250	*	ug/Kg	1000	2500
1,2-Dichloropropane	78-87-5	<1000	U	250	*	ug/Kg	1000	2500
1,3,5-Trimethylbenzene	108-67-8	<1000	U	250	*	ug/Kg	1000	2500
1,3-Dichlorobenzene	541-73-1	<1000	U	250	*	ug/Kg	1000	2500
1,3-Dichloropropane	142-28-9	<1000	U	250	*	ug/Kg	1000	2500
1,4-Dichlorobenzene	106-46-7	<1000	U	250	*	ug/Kg	1000	2500
2,2-Dichloropropane	594-20-7	<1000	U	250	*	ug/Kg	1000	2500
2-Butanone	78-93-3	<2500	U	250	*	ug/Kg	2500	6250
2-Chloroethyl vinyl ether	110-75-8	<1250	U	250	*	ug/Kg	1250	6250
2-Chlorotoluene	95-49-8	<1000	U	250	*	ug/Kg	1000	2500
2-Hexanone	591-78-6	<2500	U	250	*	ug/Kg	2500	6250
4-Chlorotoluene	106-43-4	<1000	U	250	*	ug/Kg	1000	2500
4-Isopropyltoluene	99-87-6	<1000	U	250	*	ug/Kg	1000	2500
4-Methyl-2-Pentanone	108-10-1	<2500	U	250	*	ug/Kg	2500	12500
Acetone	67-64-1	<2500	U	250	*	ug/Kg	2500	6250
Acrylonitrile	107-13-1	<1000	U	250	*	ug/Kg	1000	2500
Benzene	71-43-2	<1000	U	250	*	ug/Kg	1000	2500
Bromobenzene	108-86-1	<1000	U	250	*	ug/Kg	1000	2500
Bromochloromethane	74-97-5	<1000	U	250	*	ug/Kg	1000	2500
Bromodichloromethane	75-27-4	<1000	U	250	*	ug/Kg	1000	2500
Bromoform	75-25-2	<1000	U	250	*	ug/Kg	1000	2500
Bromomethane	74-83-9	<1000	U	250	*	ug/Kg	1000	2500
Carbon Disulfide	75-15-0	<1000	U	250	*	ug/Kg	1000	2500
Carbon Tetrachloride	56-23-5	<2500	U	250	*	ug/Kg	2500	6250

**Northwest Colorado Consultants**

Project ID: DIAMOND-T-SHEEP-7-92

Sample ID: WC1

ACZ Sample ID: **L68121-01**

Date Sampled: 08/26/21 12:40

Date Received: 08/26/21

Sample Matrix: Soil

Chlorobenzene	108-90-7	<1000	U	250	*	ug/Kg	1000	2500
Chloroethane	75-00-3	<1000	U	250	*	ug/Kg	1000	2500
Chloroform	67-66-3	<1000	U	250	*	ug/Kg	1000	2500
Chloromethane	74-87-3	<1000	U	250	*	ug/Kg	1000	2500
cis-1,2-Dichloroethene	156-59-2	<1000	U	250	*	ug/Kg	1000	2500
cis-1,3-Dichloropropene	10061-01-5	<1000	U	250	*	ug/Kg	1000	2500
Dibromochloromethane	124-48-1	<1000	U	250	*	ug/Kg	1000	2500
Dibromomethane	74-95-3	<1000	U	250	*	ug/Kg	1000	2500
Dichlorodifluoromethane	75-71-8	<1250	U	250	*	ug/Kg	1250	3750
Ethylbenzene	100-41-4	<1000	U	250	*	ug/Kg	1000	2500
Hexachlorobutadiene	87-68-3	<1000	U	250	*	ug/Kg	1000	2500
Isopropylbenzene	98-82-8	<1000	U	250	*	ug/Kg	1000	2500
m p Xylene	1330-20-7	<2500	U	250	*	ug/Kg	2500	6250
Methyl Tert Butyl Ether	1634-04-4	<1000	U	250	*	ug/Kg	1000	2500
Methylene Chloride	75-09-2	<1000	U	250	*	ug/Kg	1000	2500
Naphthalene	91-20-3	<1000	U	250	*	ug/Kg	1000	2500
n-Butylbenzene	104-51-8	<1000	U	250	*	ug/Kg	1000	2500
n-Propylbenzene	103-65-1	<1000	U	250	*	ug/Kg	1000	2500
o Xylene	95-47-6	<1000	U	250	*	ug/Kg	1000	2500
sec-Butylbenzene	135-98-8	<1000	U	250	*	ug/Kg	1000	2500
Styrene	100-42-5	<1000	U	250	*	ug/Kg	1000	2500
tert-Butylbenzene	98-06-6	<1000	U	250	*	ug/Kg	1000	2500
Tetrachloroethene	127-18-4	<1000	U	250	*	ug/Kg	1000	2500
Toluene	108-88-3	<1000	U	250	*	ug/Kg	1000	2500
trans-1,2-Dichloroethene	156-60-5	<1000	U	250	*	ug/Kg	1000	2500
trans-1,3-Dichloropropene	10061-02-6	<750	U	250	*	ug/Kg	750	2500
Trichloroethene	79-01-6	<1250	U	250	*	ug/Kg	1250	3750
Trichlorofluoromethane	75-69-4	<1000	U	250	*	ug/Kg	1000	2500
Vinyl Acetate	108-05-4	<1000	U	250	*	ug/Kg	1000	2500
Vinyl Chloride	75-01-4	<1000	U	250	*	ug/Kg	1000	2500
<b>Surrogate Recoveries</b>	<b>CAS</b>	<b>% Recovery</b>		<b>Dilution</b>	<b>XQ</b>	<b>Units</b>	<b>LCL</b>	<b>UCL</b>
Bromofluorobenzene	460-00-4	98.9		250		%	70	130
Dibromofluoromethane	1868-53-7	99.2		250		%	70	130
Toluene-d8	2037-26-5	96.7		250		%	70	130


**Report Header Explanations**

<i>Batch</i>	A distinct set of samples analyzed at a specific time
<i>Found</i>	Value of the QC Type of interest
<i>Limit</i>	Upper limit for RPD, in %.
<i>Lower</i>	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
<i>LCL</i>	Lower Control Limit
<i>MDL</i>	Method Detection Limit. Same as Minimum Reporting Limit unless omitted or equal to the PQL (see comment #4) Allows for instrument and annual fluctuations.
<i>PCN/SCN</i>	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
<i>PQL</i>	Practical Quantitation Limit. Synonymous with the EPA term "minimum level".
<i>QC</i>	True Value of the Control Sample or the amount added to the Spike
<i>Rec</i>	Amount of the true value or spike added recovered, in % (except for LCSS, mg/Kg)
<i>RPD</i>	Relative Percent Difference, calculation used for Duplicate QC Types
<i>Upper</i>	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
<i>UCL</i>	Upper Control Limit
<i>Sample</i>	Value of the Sample of interest

**QC Sample Types**

<i>SURR</i>	Surrogate	<i>LFB</i>	Laboratory Fortified Blank
<i>INTS</i>	Internal Standard	<i>LFM</i>	Laboratory Fortified Matrix
<i>AS</i>	Analytical Spike (Post Digestion)	<i>LFMD</i>	Laboratory Fortified Matrix Duplicate
<i>ASD</i>	Analytical Spike (Post Digestion) Duplicate	<i>LRB</i>	Laboratory Reagent Blank
<i>DUP</i>	Sample Duplicate	<i>MS/MSD</i>	Matrix Spike/Matrix Spike Duplicate
<i>LCSS</i>	Laboratory Control Sample - Soil	<i>PBS</i>	Prep Blank - Soil
<i>LCSW</i>	Laboratory Control Sample - Water	<i>PBW</i>	Prep Blank - Water

**QC Sample Type Explanations**

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.

**ACZ Qualifiers (Qual)**

O	Analyte concentration is estimated due to result exceeding calibration range.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
J	Analyte concentration detected at a value between MDL and PQL. The associated value is an estimated quantity.
L	Target analyte response was below the laboratory defined negative threshold.
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

**Method References**

- (1) EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
- (2) EPA 600/4-90/020. Methods for the Determination of Organic Compounds in Drinking Water (I), July 1990.
- (3) EPA 600/R-92/129. Methods for the Determination of Organic Compounds in Drinking Water (II), July 1990.
- (4) EPA SW-846. Test Methods for Evaluating Solid Waste.
- (5) Standard Methods for the Examination of Water and Wastewater.

**Comments**

- (1) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
- (2) Excluding Oil & Grease, solid & biological matrices for organic analyses are reported on a wet weight basis.
- (3) An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.
- (4) If the MDL equals the PQL or the MDL column is omitted, the PQL is the reporting limit.

For a complete list of ACZ's Extended Qualifiers, please click:

<https://acz.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf>



Northwest Colorado Consultants

ACZ Project ID: **L68121**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

**Diesel Range Organics (C10-C28)**

M8015D GC/FID

**WG527062**

MS		Sample ID: L68121-01MS		PCN/SCN: OPTPH210623-1			Analyzed: 09/13/21 14:56			
Compound	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
TPH C10 TO C28	2508.3	4740	5110	mg/Kg	443.0	70	130			M1
OTP (surr)				%	339.5	60	115			S8

MSD	Sample ID: L68121-01MSD			PCN/SCN: OPTPH210623-1				Analyzed: 09/13/21 15:19		
Compound	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
TPH C10 TO C28	2508.3	4740	5952.3	mg/Kg	290.0	70	130	15	20	M1
OTP (surr)				%	401.0	60	115			S8

LCSS		Sample ID: WG526864LCSS		PCN/SCN: OPTPH210623-1				Analyzed: 09/13/21 13:46			
Compound	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual	
TPH C10 TO C28	2508.3		67.9	mg/Kg	81.0	70	130				
OTP (surr)				%	72.5	60	115				

LCSSD		Sample ID: WG526864LCSSD		PCN/SCN: OPTPH210623-1			Analyzed: 09/13/21 14:09			
Compound	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
TPH C10 TO C28	2508.3		63.9	mg/Kg	76.0	70	130	6	20	
OTP (surr)				%	69.5	60	115			

PBS		Sample ID: WG526864PBS						Analyzed: 09/13/21 13:23		
Compound	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
TPH C10 TO C28			U	mg/Kg		-16.6	16.6			
OTP (surr)				%	66.3	60	115			

Northwest Colorado Consultants

ACZ Project ID: **L68121**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

**Volatile Organics by GC/MS**

M8260C/D GC/MS

**WG526661**

MS	Sample ID: L68121-01MS		PCN/SCN: V210902-2-CCV				Analyzed: 09/07/21 17:07			
Compound	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
2-CHLOROETHYL VINYL ETHER	25.2	U	6412.5	ug/L	102.0	70	130			
1,1,1,2-TETRACHLOROETHANE	24.7	U	6428.3	ug/Kg	104.0	70	130			
1,1,1-TRICHLOROETHANE	25.1	U	6730	ug/Kg	107.0	70	130			
1,1,2,2-TETRACHLOROETHANE	25.3	U	6165.3	ug/Kg	98.0	70	130			
1,1,2-TRICHLOROETHANE	24.9	U	6180.3	ug/Kg	99.0	70	130			
1,1-DICHLOROETHANE	25	U	6371	ug/Kg	102.0	70	130			
1,1-DICHLOROETHENE	25	U	6694.3	ug/Kg	107.0	70	130			
1,1-DICHLOROPROPENE	25	U	6888.5	ug/Kg	110.0	70	130			
1,2,3-TRICHLOROBENZENE	25	U	6294	ug/Kg	101.0	70	130			
1,2,3-TRICHLOROPROPANE	25	U	6103.3	ug/Kg	98.0	70	130			
1,2,4-TRICHLOROBENZENE	25	U	6520.5	ug/Kg	104.0	70	130			
1,2,4-TRIMETHYLBENZENE	25	U	6526	ug/Kg	104.0	70	130			
1,2-DIBROMO-3-CHLOROPROPANE	25.1	U	6384	ug/Kg	102.0	70	130			
1,2-DIBROMOETHANE	25.1	U	6180	ug/Kg	98.0	70	130			
1,2-DICHLOROBENZENE	25	U	6220	ug/Kg	99.0	70	130			
1,2-DICHLOROETHANE	25	U	6194	ug/Kg	99.0	70	130			
1,2-DICHLOROPROPANE	25	U	6424	ug/Kg	103.0	70	130			
1,3,5-TRIMETHYLBENZENE	25	U	6557.5	ug/Kg	105.0	70	130			
1,3-DICHLOROBENZENE	25.1	U	6262	ug/Kg	100.0	70	130			
1,3-DICHLOROPROPANE	25	U	6137.5	ug/Kg	98.0	70	130			
1,4-DICHLOROBENZENE	25.1	U	6283	ug/Kg	100.0	70	130			
2,2-DICHLOROPROPANE	25	U	6611.3	ug/Kg	106.0	70	130			
2-BUTANONE	50	U	12897	ug/Kg	103.0	70	130			
2-CHLOROTOLUENE	24.9	U	6308.5	ug/Kg	101.0	70	130			
2-HEXANONE	50.2	U	12638	ug/Kg	101.0	70	130			
4-CHLOROTOLUENE	25.1	U	6376.3	ug/Kg	102.0	70	130			
4-ISOPROPYLTOLUENE	25	U	6913.3	ug/Kg	111.0	70	130			
4-METHYL-2-PENTANONE	50.1	U	12898	ug/Kg	103.0	70	130			
ACETONE	50	U	11662	ug/Kg	93.0	70	130			
ACRYLONITRILE	24.9	U	6417.5	ug/Kg	103.0	70	130			
BENZENE	24.9	U	6501	ug/Kg	104.0	70	130			
BROMOBENZENE	25	U	6114.8	ug/Kg	98.0	70	130			
BROMOCHLOROMETHANE	25	U	6239.3	ug/Kg	100.0	70	130			
BROMODICHLOROMETHANE	24.9	U	6501.3	ug/Kg	105.0	70	130			
BROMOFORM	24.9	U	6444	ug/Kg	104.0	70	130			
BROMOMETHANE	24.9	U	4854.8	ug/Kg	78.0	70	130			
CARBON DISULFIDE	25	U	6708.8	ug/Kg	107.0	70	130			
CARBON TETRACHLORIDE	25	U	6931	ug/Kg	111.0	70	130			
CHLOROBENZENE	25	U	6379.3	ug/Kg	102.0	70	130			
CHLOROETHANE	24.8	U	5192.8	ug/Kg	84.0	70	130			
CHLOROFORM	24.9	U	6481.5	ug/Kg	104.0	70	130			
CHLOROMETHANE	25.1	U	6195.5	ug/Kg	99.0	70	130			
CIS-1,2-DICHLOROETHENE	24.1	U	6415.8	ug/Kg	106.0	70	130			
CIS-1,3-DICHLOROPROPENE	25	U	6568	ug/Kg	105.0	70	130			

**Northwest Colorado Consultants**

ACZ Project ID: **L68121**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

DIBROMOCHLOROMETHANE	25.3	U	6545.3	ug/Kg	104.0	70	130	
DIBROMOMETHANE	25	U	6319.5	ug/Kg	101.0	70	130	
DICHLORODIFLUOROMETHANE	25	U	6907	ug/Kg	111.0	70	130	
ETHYLBENZENE	25	U	6454	ug/Kg	103.0	70	130	
HEXACHLOROBUTADIENE	25	U	9168.3	ug/Kg	147.0	70	130	M1
ISOPROPYLBENZENE	25	U	6700.8	ug/Kg	107.0	70	130	
M P XYLENE	50.2	U	12994	ug/Kg	104.0	70	130	
METHYL TERT BUTYL ETHER	25	U	6269.3	ug/Kg	100.0	70	130	
METHYLENE CHLORIDE	25	U	6147.5	ug/Kg	98.0	70	130	
NAPHTHALENE	25	U	6215	ug/Kg	99.0	70	130	
N-BUTYLBENZENE	25.1	U	7106.8	ug/Kg	113.0	70	130	
N-PROPYLBENZENE	25	U	6521	ug/Kg	104.0	70	130	
O XYLENE	25	U	6444.3	ug/Kg	103.0	70	130	
SEC-BUTYLBENZENE	25	U	7016.8	ug/Kg	112.0	70	130	
STYRENE	25	U	6514.8	ug/Kg	104.0	70	130	
TERT-BUTYLBENZENE	25	U	6758.3	ug/Kg	108.0	70	130	
TETRACHLOROETHENE	25.1	U	6766.3	ug/Kg	108.0	70	130	
TOLUENE	24.9	U	6407	ug/Kg	103.0	70	130	
TRANS-1,2-DICHLOROETHENE	24.9	U	6456.5	ug/Kg	104.0	70	130	
TRANS-1,3-DICHLOROPROPENE	25.1	U	5982.3	ug/Kg	96.0	70	130	
TRICHLOROETHENE	24.8	U	6512.8	ug/Kg	105.0	70	130	
TRICHLOROFLUOROMETHANE	24.9	U	7070	ug/Kg	114.0	70	130	
VINYL ACETATE	25.1	U	6585.3	ug/Kg	105.0	70	130	
VINYL CHLORIDE	25.1	U	6726.8	ug/Kg	107.0	70	130	
BROMOFLUOROBENZENE (surr)				%	100.6	70	130	
DIBROMOFLUOROMETHANE (surr)				%	99.4	70	130	
TOLUENE-D8 (surr)				%	97.4	70	130	

MSD	Sample ID: L68121-01MSD		PCN/SCN: V210902-2-CCV				Analyzed:		09/07/21 17:35	
Compound	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
2-CHLOROETHYL VINYL ETHER	25.2	U	6208.8	ug/L	99.0	70	130	3	20	
1,1,1,2-TETRACHLOROETHANE	24.7	U	6340.8	ug/Kg	103.0	70	130	1	20	
1,1,1-TRICHLOROETHANE	25.1	U	6331	ug/Kg	101.0	70	130	6	20	
1,1,2,2-TETRACHLOROETHANE	25.3	U	5952.8	ug/Kg	94.0	70	130	4	20	
1,1,2-TRICHLOROETHANE	24.9	U	6139	ug/Kg	99.0	70	130	1	20	
1,1-DICHLOROETHANE	25	U	5939.5	ug/Kg	95.0	70	130	7	20	
1,1-DICHLOROETHENE	25	U	6179.3	ug/Kg	99.0	70	130	8	20	
1,1-DICHLOROPROPENE	25	U	6435.5	ug/Kg	103.0	70	130	7	20	
1,2,3-TRICHLOROBENZENE	25	U	6276	ug/Kg	100.0	70	130	0	20	
1,2,3-TRICHLOROPROPANE	25	U	6029.3	ug/Kg	96.0	70	130	1	20	
1,2,4-TRICHLOROBENZENE	25	U	6475	ug/Kg	104.0	70	130	1	20	
1,2,4-TRIMETHYLBENZENE	25	U	6303.3	ug/Kg	101.0	70	130	3	20	
1,2-DIBROMO-3-CHLOROPROPANE	25.1	U	6290	ug/Kg	100.0	70	130	1	20	
1,2-DIBROMOETHANE	25.1	U	6192	ug/Kg	99.0	70	130	0	20	
1,2-DICHLOROBENZENE	25	U	6120.3	ug/Kg	98.0	70	130	2	20	
1,2-DICHLOROETHANE	25	U	5776.8	ug/Kg	93.0	70	130	7	20	
1,2-DICHLOROPROPANE	25	U	6153.3	ug/Kg	98.0	70	130	4	20	
1,3,5-TRIMETHYLBENZENE	25	U	6270.5	ug/Kg	100.0	70	130	4	20	
1,3-DICHLOROBENZENE	25.1	U	6191.3	ug/Kg	99.0	70	130	1	20	

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ACZ Project ID: **L68121**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

1,3-DICHLOROPROPANE	25	U	6064.5	ug/Kg	97.0	70	130	1	20
1,4-DICHLOROBENZENE	25.1	U	6233.5	ug/Kg	99.0	70	130	1	20
2,2-DICHLOROPROPANE	25	U	6039.3	ug/Kg	97.0	70	130	9	20
2-BUTANONE	50	U	12235	ug/Kg	98.0	70	130	5	20
2-CHLOROTOLUENE	24.9	U	6031.3	ug/Kg	97.0	70	130	4	20
2-HEXANONE	50.2	U	12282	ug/Kg	98.0	70	130	3	20
4-CHLOROTOLUENE	25.1	U	6148	ug/Kg	98.0	70	130	4	20
4-ISOPROPYLTOLUENE	25	U	6672	ug/Kg	107.0	70	130	4	20
4-METHYL-2-PENTANONE	50.1	U	12354	ug/Kg	99.0	70	130	4	20
ACETONE	50	U	10876	ug/Kg	87.0	70	130	7	20
ACRYLONITRILE	24.9	U	6083.8	ug/Kg	98.0	70	130	5	20
BENZENE	24.9	U	6117.8	ug/Kg	98.0	70	130	6	20
BROMOBENZENE	25	U	5887	ug/Kg	94.0	70	130	4	20
BROMOCHLOROMETHANE	25	U	5773	ug/Kg	92.0	70	130	8	20
BROMODICHLOROMETHANE	24.9	U	6284.3	ug/Kg	101.0	70	130	3	20
BROMOFORM	24.9	U	6708.8	ug/Kg	108.0	70	130	4	20
BROMOMETHANE	24.9	U	4734.3	ug/Kg	76.0	70	130	3	20
CARBON DISULFIDE	25	U	6317.8	ug/Kg	101.0	70	130	6	20
CARBON TETRACHLORIDE	25	U	6489	ug/Kg	104.0	70	130	7	20
CHLOROBENZENE	25	U	6278.3	ug/Kg	100.0	70	130	2	20
CHLOROETHANE	24.8	U	4865.5	ug/Kg	79.0	70	130	7	20
CHLOROFORM	24.9	U	6019	ug/Kg	97.0	70	130	7	20
CHLOROMETHANE	25.1	U	5661	ug/Kg	90.0	70	130	9	20
CIS-1,2-DICHLOROETHENE	24.1	U	5897.3	ug/Kg	98.0	70	130	8	20
CIS-1,3-DICHLOROPROPENE	25	U	6335.3	ug/Kg	101.0	70	130	4	20
DIBROMOCHLOROMETHANE	25.3	U	6705	ug/Kg	106.0	70	130	2	20
DIBROMOMETHANE	25	U	6161.5	ug/Kg	99.0	70	130	3	20
DICHLORODIFLUOROMETHANE	25	U	6275.3	ug/Kg	101.0	70	130	10	20
ETHYLBENZENE	25	U	6317.5	ug/Kg	101.0	70	130	2	20
HEXACHLOROBUTADIENE	25	U	9050.3	ug/Kg	145.0	70	130	1	20
ISOPROPYLBENZENE	25	U	6573	ug/Kg	105.0	70	130	2	20
M P XYLENE	50.2	U	12684	ug/Kg	101.0	70	130	2	20
METHYL TERT BUTYL ETHER	25	U	5941	ug/Kg	95.0	70	130	5	20
METHYLENE CHLORIDE	25	U	5650	ug/Kg	90.0	70	130	8	20
NAPHTHALENE	25	U	6213.3	ug/Kg	99.0	70	130	0	20
N-BUTYLBENZENE	25.1	U	6813.5	ug/Kg	109.0	70	130	4	20
N-PROPYLBENZENE	25	U	6248.3	ug/Kg	100.0	70	130	4	20
O XYLENE	25	U	6283	ug/Kg	101.0	70	130	3	20
SEC-BUTYLBENZENE	25	U	6704.8	ug/Kg	107.0	70	130	5	20
STYRENE	25	U	6463.3	ug/Kg	103.0	70	130	1	20
TERT-BUTYLBENZENE	25	U	6513.5	ug/Kg	104.0	70	130	4	20
TETRACHLOROETHENE	25.1	U	6749	ug/Kg	107.0	70	130	0	20
TOLUENE	24.9	U	6246.5	ug/Kg	100.0	70	130	3	20
TRANS-1,2-DICHLOROETHENE	24.9	U	6019.3	ug/Kg	97.0	70	130	7	20
TRANS-1,3-DICHLOROPROPENE	25.1	U	5867.8	ug/Kg	94.0	70	130	2	20
TRICHLOROETHENE	24.8	U	6240.5	ug/Kg	101.0	70	130	4	20
TRICHLOROFLUOROMETHANE	24.9	U	6553	ug/Kg	105.0	70	130	8	20
VINYL ACETATE	25.1	U	6125	ug/Kg	98.0	70	130	7	20
VINYL CHLORIDE	25.1	U	6232.5	ug/Kg	100.0	70	130	8	20

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ACZ Project ID: **L68121**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

BROMOFLUOROBENZENE (surr)	%	99.9	70	130
DIBROMOFLUOROMETHANE (surr)	%	95.8	70	130
TOLUENE-D8 (surr)	%	97.5	70	130

LCSS		Sample ID: WG526661LCSS		PCN/SCN: V210902-2-CCV			Analyzed: 09/07/21 14:46			
Compound	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
1,1,1,2-TETRACHLOROETHANE	24.7		24.6	ug/Kg	99.0	70	130			
1,1,1-TRICHLOROETHANE	25.1		25	ug/Kg	100.0	70	130			
1,1,2,2-TETRACHLOROETHANE	25.3		25.1	ug/Kg	99.0	70	130			
1,1,2-TRICHLOROETHANE	24.9		24.4	ug/Kg	98.0	70	130			
1,1-DICHLOROETHANE	25		24.9	ug/Kg	100.0	70	130			
1,1-DICHLOROETHENE	25		24.9	ug/Kg	100.0	70	130			
1,1-DICHLOROPROPENE	25		24.9	ug/Kg	100.0	70	130			
1,2,3-TRICHLOROBENZENE	25		24.2	ug/Kg	97.0	70	130			
1,2,3-TRICHLOROPROPANE	25		24.5	ug/Kg	98.0	70	130			
1,2,4-TRICHLOROBENZENE	25		24.1	ug/Kg	96.0	70	130			
1,2,4-TRIMETHYLBENZENE	25		24.4	ug/Kg	98.0	70	130			
1,2-DIBROMO-3-CHLOROPROPANE	25.1		25.3	ug/Kg	101.0	70	130			
1,2-DIBROMOETHANE	25.1		24.6	ug/Kg	98.0	70	130			
1,2-DICHLOROBENZENE	25		24	ug/Kg	96.0	70	130			
1,2-DICHLOROETHANE	25		25.3	ug/Kg	101.0	70	130			
1,2-DICHLOROPROPANE	25		25	ug/Kg	100.0	70	130			
1,3,5-TRIMETHYLBENZENE	25		24.2	ug/Kg	97.0	70	130			
1,3-DICHLOROBENZENE	25.1		24.1	ug/Kg	96.0	70	130			
1,3-DICHLOROPROPANE	25		24.3	ug/Kg	97.0	70	130			
1,4-DICHLOROBENZENE	25.1		24.2	ug/Kg	96.0	70	130			
2,2-DICHLOROPROPANE	25		24.5	ug/Kg	98.0	70	130			
2-BUTANONE	50		53	ug/Kg	106.0	70	130			
2-CHLOROETHYL VINYL ETHER	25.2		25.6	ug/Kg	102.0	70	130			
2-CHLOROTOLUENE	24.9		24.1	ug/Kg	97.0	70	130			
2-HEXANONE	50.2		51	ug/Kg	102.0	70	130			
4-CHLOROTOLUENE	25.1		24.2	ug/Kg	97.0	70	130			
4-ISOPROPYLTOLUENE	25		24.3	ug/Kg	97.0	70	130			
4-METHYL-2-PENTANONE	50.1		52	ug/Kg	104.0	70	130			
ACETONE	50		49	ug/Kg	98.0	70	130			
ACRYLONITRILE	24.9		26.6	ug/Kg	107.0	70	130			
BENZENE	24.9		24.9	ug/Kg	100.0	70	130			
BROMOBENZENE	25		24.4	ug/Kg	98.0	70	130			
BROMOCHLOROMETHANE	25		25.2	ug/Kg	101.0	70	130			
BROMODICHLOROMETHANE	24.9		25.3	ug/Kg	102.0	70	130			
BROMOFORM	24.9		25.2	ug/Kg	101.0	70	130			
BROMOMETHANE	24.9		24.4	ug/Kg	98.0	70	130			
CARBON DISULFIDE	25		24.8	ug/Kg	99.0	70	130			
CARBON TETRACHLORIDE	25		25	ug/Kg	100.0	70	130			
CHLOROBENZENE	25		24.3	ug/Kg	97.0	70	130			
CHLOROETHANE	24.8		24.6	ug/Kg	99.0	70	130			
CHLOROFORM	24.9		25.1	ug/Kg	101.0	70	130			
CHLOROMETHANE	25.1		23.7	ug/Kg	95.0	70	130			
CIS-1,2-DICHLOROETHENE	24.1		24.9	ug/Kg	103.0	70	130			

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ACZ Project ID: **L68121**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

CIS-1,3-DICHLOROPROPENE	25	25.2	ug/Kg	101.0	70	130
DIBROMOCHLOROMETHANE	25.3	25.6	ug/Kg	101.0	70	130
DIBROMOMETHANE	25	25.2	ug/Kg	101.0	70	130
DICHLORODIFLUOROMETHANE	25	24.2	ug/Kg	97.0	70	130
ETHYLBENZENE	25	24.1	ug/Kg	96.0	70	130
HEXACHLOROBUTADIENE	25	24.1	ug/Kg	96.0	70	130
ISOPROPYLBENZENE	25	24.2	ug/Kg	97.0	70	130
M P XYLENE	50.2	48	ug/Kg	96.0	70	130
METHYL TERT BUTYL ETHER	25	25.4	ug/Kg	102.0	70	130
METHYLENE CHLORIDE	25	24.5	ug/Kg	98.0	70	130
NAPHTHALENE	25	24.6	ug/Kg	98.0	70	130
N-BUTYLBENZENE	25.1	23.9	ug/Kg	95.0	70	130
N-PROPYLBENZENE	25	24.1	ug/Kg	96.0	70	130
O XYLENE	25	24.1	ug/Kg	96.0	70	130
SEC-BUTYLBENZENE	25	24.4	ug/Kg	98.0	70	130
STYRENE	25	24.7	ug/Kg	99.0	70	130
TERT-BUTYLBENZENE	25	24.3	ug/Kg	97.0	70	130
TETRACHLOROETHENE	25.1	23.5	ug/Kg	93.0	70	130
TOLUENE	24.9	23.9	ug/Kg	96.0	70	130
TRANS-1,2-DICHLOROETHENE	24.9	24.5	ug/Kg	98.0	70	130
TRANS-1,3-DICHLOROPROPENE	25.1	23.8	ug/Kg	95.0	70	130
TRICHLOROETHENE	24.8	24	ug/Kg	97.0	70	130
TRICHLOROFLUOROMETHANE	24.9	25.2	ug/Kg	101.0	70	130
VINYL ACETATE	25.1	27.3	ug/Kg	109.0	70	130
VINYL CHLORIDE	25.1	24.3	ug/Kg	97.0	70	130
BROMOFLUOROBENZENE (surr)			%	100.1	70	130
DIBROMOFLUOROMETHANE (surr)			%	100.9	70	130
TOLUENE-D8 (surr)			%	97.5	70	130

LCSSD	Sample ID: WG526661LCSSD		PCN/SCN: V210902-2-CCV				Analyzed: 09/07/21 15:14			
Compound	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
1,1,1,2-TETRACHLOROETHANE	24.7		25.4	ug/Kg	103.0	70	130	3	20	
1,1,1-TRICHLOROETHANE	25.1		26	ug/Kg	104.0	70	130	4	20	
1,1,2,2-TETRACHLOROETHANE	25.3		24.9	ug/Kg	99.0	70	130	1	20	
1,1,2-TRICHLOROETHANE	24.9		24.8	ug/Kg	100.0	70	130	2	20	
1,1-DICHLOROETHANE	25		25.6	ug/Kg	102.0	70	130	3	20	
1,1-DICHLOROETHENE	25		25.8	ug/Kg	103.0	70	130	4	20	
1,1-DICHLOROPROPENE	25		25.9	ug/Kg	104.0	70	130	4	20	
1,2,3-TRICHLOROBENZENE	25		25	ug/Kg	100.0	70	130	3	20	
1,2,3-TRICHLOROPROPANE	25		24.5	ug/Kg	98.0	70	130	0	20	
1,2,4-TRICHLOROBENZENE	25		25.1	ug/Kg	100.0	70	130	4	20	
1,2,4-TRIMETHYLBENZENE	25		25.2	ug/Kg	101.0	70	130	3	20	
1,2-DIBROMO-3-CHLOROPROPANE	25.1		26.1	ug/Kg	104.0	70	130	3	20	
1,2-DIBROMOETHANE	25.1		25	ug/Kg	100.0	70	130	2	20	
1,2-DICHLOROBENZENE	25		24.5	ug/Kg	98.0	70	130	2	20	
1,2-DICHLOROETHANE	25		25.4	ug/Kg	102.0	70	130	0	20	
1,2-DICHLOROPROPANE	25		25.4	ug/Kg	102.0	70	130	2	20	
1,3,5-TRIMETHYLBENZENE	25		25	ug/Kg	100.0	70	130	3	20	
1,3-DICHLOROBENZENE	25.1		24.6	ug/Kg	98.0	70	130	2	20	



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ACZ Project ID: **L68121**

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1,3-DICHLOROPROPANE	25	24.7	ug/Kg	99.0	70	130	2	20
1,4-DICHLOROBENZENE	25.1	24.6	ug/Kg	98.0	70	130	2	20
2,2-DICHLOROPROPANE	25	25.2	ug/Kg	101.0	70	130	3	20
2-BUTANONE	50	53	ug/Kg	106.0	70	130	0	20
2-CHLOROETHYL VINYL ETHER	25.2	25.7	ug/Kg	102.0	70	130	0	20
2-CHLOROTOLUENE	24.9	24.7	ug/Kg	99.0	70	130	2	20
2-HEXANONE	50.2	51	ug/Kg	102.0	70	130	0	20
4-CHLOROTOLUENE	25.1	25	ug/Kg	100.0	70	130	3	20
4-ISOPROPYLTOLUENE	25	25.4	ug/Kg	102.0	70	130	4	20
4-METHYL-2-PENTANONE	50.1	52	ug/Kg	104.0	70	130	0	20
ACETONE	50	48	ug/Kg	96.0	70	130	2	20
ACRYLONITRILE	24.9	26.2	ug/Kg	105.0	70	130	2	20
BENZENE	24.9	25.8	ug/Kg	104.0	70	130	4	20
BROMOBENZENE	25	24.6	ug/Kg	98.0	70	130	1	20
BROMOCHLOROMETHANE	25	25.1	ug/Kg	100.0	70	130	0	20
BROMODICHLOROMETHANE	24.9	26	ug/Kg	105.0	70	130	3	20
BROMOFORM	24.9	25.8	ug/Kg	104.0	70	130	2	20
BROMOMETHANE	24.9	25.1	ug/Kg	101.0	70	130	3	20
CARBON DISULFIDE	25	26.1	ug/Kg	104.0	70	130	5	20
CARBON TETRACHLORIDE	25	26	ug/Kg	104.0	70	130	4	20
CHLOROBENZENE	25	25.2	ug/Kg	101.0	70	130	4	20
CHLOROETHANE	24.8	25.3	ug/Kg	102.0	70	130	3	20
CHLOROFORM	24.9	25.8	ug/Kg	104.0	70	130	3	20
CHLOROMETHANE	25.1	24.4	ug/Kg	97.0	70	130	3	20
CIS-1,2-DICHLOROETHENE	24.1	25.6	ug/Kg	106.0	70	130	3	20
CIS-1,3-DICHLOROPROPENE	25	26.1	ug/Kg	104.0	70	130	4	20
DIBROMOCHLOROMETHANE	25.3	26.2	ug/Kg	104.0	70	130	2	20
DIBROMOMETHANE	25	25.4	ug/Kg	102.0	70	130	1	20
DICHLORODIFLUOROMETHANE	25	25.1	ug/Kg	101.0	70	130	4	20
ETHYLBENZENE	25	25.3	ug/Kg	101.0	70	130	5	20
HEXACHLOROBUTADIENE	25	25.6	ug/Kg	102.0	70	130	6	20
ISOPROPYLBENZENE	25	25.6	ug/Kg	103.0	70	130	6	20
M P XYLENE	50.2	50	ug/Kg	100.0	70	130	4	20
METHYL TERT BUTYL ETHER	25	25.4	ug/Kg	102.0	70	130	0	20
METHYLENE CHLORIDE	25	24.5	ug/Kg	98.0	70	130	0	20
NAPHTHALENE	25	25.4	ug/Kg	102.0	70	130	3	20
N-BUTYLBENZENE	25.1	24.9	ug/Kg	99.0	70	130	4	20
N-PROPYLBENZENE	25	25	ug/Kg	100.0	70	130	4	20
O XYLENE	25	25.1	ug/Kg	100.0	70	130	4	20
SEC-BUTYLBENZENE	25	25.5	ug/Kg	102.0	70	130	4	20
STYRENE	25	25.6	ug/Kg	102.0	70	130	4	20
TERT-BUTYLBENZENE	25	25.2	ug/Kg	101.0	70	130	4	20
TETRACHLOROETHENE	25.1	25	ug/Kg	99.0	70	130	6	20
TOLUENE	24.9	25.1	ug/Kg	101.0	70	130	5	20
TRANS-1,2-DICHLOROETHENE	24.9	25.7	ug/Kg	103.0	70	130	5	20
TRANS-1,3-DICHLOROPROPENE	25.1	25.2	ug/Kg	101.0	70	130	6	20
TRICHLOROETHENE	24.8	25.4	ug/Kg	102.0	70	130	6	20
TRICHLOROFLUOROMETHANE	24.9	26.3	ug/Kg	106.0	70	130	4	20
VINYL ACETATE	25.1	26.3	ug/Kg	105.0	70	130	4	20

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ACZ Project ID: **L68121**

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VINYL CHLORIDE	25.1	25.3	ug/Kg	101.0	70	130	4	20
BROMOFLUOROBENZENE (surr)			%	99.9	70	130		
DIBROMOFLUOROMETHANE (surr)			%	100.6	70	130		
TOLUENE-D8 (surr)			%	97.3	70	130		

**PBS** Sample ID: **WG526661PBS** Analyzed: **09/07/21 16:11**

Compound	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
1,1,1,2-TETRACHLOROETHANE			U	ug/Kg		-10	10			
1,1,1-TRICHLOROETHANE			U	ug/Kg		-25	25			
1,1,2,2-TETRACHLOROETHANE			U	ug/Kg		-10	10			
1,1,2-TRICHLOROETHANE			U	ug/Kg		-10	10			
1,1-DICHLOROETHANE			U	ug/Kg		-10	10			
1,1-DICHLOROETHENE			U	ug/Kg		-10	10			
1,1-DICHLOROPROPENE			U	ug/Kg		-10	10			
1,2,3-TRICHLOROBENZENE			U	ug/Kg		-10	10			
1,2,3-TRICHLOROPROPANE			U	ug/Kg		-10	10			
1,2,4-TRICHLOROBENZENE			U	ug/Kg		-10	10			
1,2,4-TRIMETHYLBENZENE			U	ug/Kg		-10	10			
1,2-DIBROMO-3-CHLOROPROPANE			U	ug/Kg		-10	10			
1,2-DIBROMOETHANE			U	ug/Kg		-10	10			
1,2-DICHLOROBENZENE			U	ug/Kg		-10	10			
1,2-DICHLOROETHANE			U	ug/Kg		-10	10			
1,2-DICHLOROPROPANE			U	ug/Kg		-10	10			
1,3,5-TRIMETHYLBENZENE			U	ug/Kg		-10	10			
1,3-DICHLOROBENZENE			U	ug/Kg		-10	10			
1,3-DICHLOROPROPANE			U	ug/Kg		-10	10			
1,4-DICHLOROBENZENE			U	ug/Kg		-10	10			
2,2-DICHLOROPROPANE			U	ug/Kg		-10	10			
2-BUTANONE			U	ug/Kg		-25	25			
2-CHLOROETHYL VINYL ETHER			U	ug/Kg		-25	25			
2-CHLOROTOLUENE			U	ug/Kg		-10	10			
2-HEXANONE			U	ug/Kg		-25	25			
4-CHLOROTOLUENE			U	ug/Kg		-10	10			
4-ISOPROPYLTOLUENE			U	ug/Kg		-10	10			
4-METHYL-2-PENTANONE			U	ug/Kg		-50	50			
ACETONE			U	ug/Kg		-25	25			
ACRYLONITRILE			U	ug/Kg		-10	10			
BENZENE			U	ug/Kg		-10	10			
BROMOBENZENE			U	ug/Kg		-10	10			
BROMOCHLOROMETHANE			U	ug/Kg		-10	10			
BROMODICHLOROMETHANE			U	ug/Kg		-10	10			
BROMOFORM			U	ug/Kg		-10	10			
BROMOMETHANE			U	ug/Kg		-10	10			
CARBON DISULFIDE			U	ug/Kg		-10	10			
CARBON TETRACHLORIDE			U	ug/Kg		-25	25			
CHLOROBENZENE			U	ug/Kg		-10	10			
CHLOROETHANE			U	ug/Kg		-10	10			
CHLOROFORM			U	ug/Kg		-10	10			
CHLOROMETHANE			U	ug/Kg		-10	10			

## Northwest Colorado Consultants

ACZ Project ID: **L68121**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

CIS-1,2-DICHLOROETHENE	U	ug/Kg	-10	10
CIS-1,3-DICHLOROPROPENE	U	ug/Kg	-10	10
DIBROMOCHLOROMETHANE	U	ug/Kg	-10	10
DIBROMOMETHANE	U	ug/Kg	-10	10
DICHLORODIFLUOROMETHANE	U	ug/Kg	-15	15
ETHYLBENZENE	U	ug/Kg	-10	10
HEXACHLOROBUTADIENE	U	ug/Kg	-10	10
ISOPROPYLBENZENE	U	ug/Kg	-10	10
M P XYLENE	U	ug/Kg	-25	25
METHYL TERT BUTYL ETHER	U	ug/Kg	-10	10
METHYLENE CHLORIDE	U	ug/Kg	-10	10
NAPHTHALENE	U	ug/Kg	-10	10
N-BUTYLBENZENE	U	ug/Kg	-10	10
N-PROPYLBENZENE	U	ug/Kg	-10	10
O XYLENE	U	ug/Kg	-10	10
SEC-BUTYLBENZENE	U	ug/Kg	-10	10
STYRENE	U	ug/Kg	-10	10
TERT-BUTYLBENZENE	U	ug/Kg	-10	10
TETRACHLOROETHENE	U	ug/Kg	-10	10
TOLUENE	U	ug/Kg	-10	10
TRANS-1,2-DICHLOROETHENE	U	ug/Kg	-10	10
TRANS-1,3-DICHLOROPROPENE	U	ug/Kg	-10	10
TRICHLOROETHENE	U	ug/Kg	-15	15
TRICHLOROFLUOROMETHANE	U	ug/Kg	-10	10
VINYL ACETATE	U	ug/Kg	-10	10
VINYL CHLORIDE	U	ug/Kg	-10	10
BROMOFLUOROBENZENE (surr)		%	99.5	70
DIBROMOFLUOROMETHANE (surr)		%	97.9	70
TOLUENE-D8 (surr)		%	96.3	70

ACZ Project ID: **L68121**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68121-01	WG527062	OTP	M8015D GC/FID	S8	The sample required a dilution such that the surrogate recovery calculation does not provide useful information. The recovery for the associated control sample was acceptable.
		TPH C10 to C28	M8015D GC/FID	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG526661	1,1,1,2-Tetrachloroethane	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		1,1,1-Trichloroethane	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		1,1,2,2-Tetrachloroethane	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		1,1,2-Trichloroethane	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		1,1-Dichloroethane	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		1,1-Dichloroethene	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		1,1-Dichloropropene	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		1,2,3-Trichlorobenzene	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		1,2,3-Trichloropropane	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		1,2,4-Trichlorobenzene	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		1,2,4-Trimethylbenzene	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		1,2-Dibromo-3-chloropropane	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		1,2-Dibromoethane	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		1,2-Dichlorobenzene	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		1,2-Dichloroethane	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		1,2-Dichloropropane	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		1,3,5-Trimethylbenzene	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		1,3-Dichlorobenzene	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		1,3-Dichloropropane	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		1,4-Dichlorobenzene	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		2,2-Dichloropropane	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		2-Butanone	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		2-Chloroethyl vinyl ether	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		2-Chlorotoluene	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		2-Hexanone	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		4-Chlorotoluene	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		4-Isopropyltoluene	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		4-Methyl-2-Pentanone	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		Acetone	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		Acrylonitrile	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		Benzene	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		Bromobenzene	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		Bromochloromethane	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		Bromodichloromethane	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		Bromoform	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		Bromomethane	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		Carbon Disulfide	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		Carbon Tetrachloride	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		Chlorobenzene	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		Chloroethane	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		Chloroform	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		Chloromethane	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		cis-1,2-Dichloroethene	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		cis-1,3-Dichloropropene	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		Dibromochloromethane	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.

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ACZ Project ID: **L68121**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
		Dibromomethane	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		Dichlorodifluoromethane	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		Ethylbenzene	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		Hexachlorobutadiene	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
			M8260C/D GC/MS	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
		Isopropylbenzene	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		m p Xylene	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		Methyl Tert Butyl Ether	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		Methylene Chloride	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		Naphthalene	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		n-Butylbenzene	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		n-Propylbenzene	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		o Xylene	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		sec-Butylbenzene	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		Styrene	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		tert-Butylbenzene	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		Tetrachloroethene	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		Toluene	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		trans-1,2-Dichloroethene	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		trans-1,3-Dichloropropene	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		Trichloroethene	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		Trichlorofluoromethane	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		Vinyl Acetate	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.
		Vinyl Chloride	M8260C/D GC/MS	DD	Sample required dilution due to matrix color or odor.

**Northwest Colorado Consultants**

ACZ Project ID: **L68121**

Soil Analysis

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Free liquid by Paint Filter	M9095B
Ignitability in Solids	M1030
Solids, Percent	D2216-80



Northwest Colorado Consultants  
DIAMOND-T-SHEEP-7-92

ACZ Project ID: L68121  
Date Received: 08/26/2021 16:56  
Received By:  
Date Printed: 8/31/2021

**Receipt Verification**

	YES	NO	NA
1) Is a foreign soil permit included for applicable samples?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2) Is the Chain of Custody form or other directive shipping papers present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3) Does this project require special handling procedures such as CLP protocol?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4) Are any samples NRC licensable material?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5) If samples are received past hold time, proceed with requested short hold time analyses?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6) Is the Chain of Custody form complete and accurate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7) Were any changes made to the Chain of Custody form prior to ACZ receiving the samples?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A change was made in the # of Containers section prior to ACZ custody.			
A change was made in the # of Containers section prior to ACZ custody.			
A change was made in the # of Containers section prior to ACZ custody.			
A change was made in the # of Containers section prior to ACZ custody.			

**Samples/Containers**

	YES	NO	NA
8) Are all containers intact and with no leaks?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9) Are all labels on containers and are they intact and legible?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10) Do the sample labels and Chain of Custody form match for Sample ID, Date, and Time?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11) For preserved bottle types, was the pH checked and within limits? <sup>1</sup>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12) Is there sufficient sample volume to perform all requested work?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13) Is the custody seal intact on all containers?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
14) Are samples that require zero headspace acceptable?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
15) Are all sample containers appropriate for analytical requirements?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16) Is there an Hg-1631 trip blank present?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
17) Is there a VOA trip blank present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
18) Were all samples received within hold time?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

NA indicates Not Applicable

**Chain of Custody Related Remarks**

**Client Contact Remarks**

**Shipping Containers**

Cooler Id	Temp (°C)	Temp Criteria (°C)	Rad (µR/Hr)	Custody Seal Intact?
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Northwest Colorado Consultants  
DIAMOND-T-SHEEP-7-92

ACZ Project ID: L68121  
Date Received: 08/26/2021 16:56  
Received By:  
Date Printed: 8/31/2021

-----  
6732      15.4      <=6.0      15      N/A

Was ice present in the shipment container(s)?

Yes - Wet ice was present in the shipment container(s).

Client must contact an ACZ Project Manager if analysis should not proceed for samples received  
outside of their thermal preservation acceptance criteria.

<sup>1</sup> The preservation of the following bottle types is not checked at sample receipt: Orange (oil and  
grease), Purple (total cyanide), Pink (dissolved cyanide), Brown (arsenic speciation), Sterile (fecal  
coliform), EDTA (sulfite), HCl preserved vial (organics), Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub> preserved vial (organics), and HG-  
1631 (total/dissolved mercury by method 1631).

