



11/5/2020

Work Order: 20J1411
Project: Chekshani Cliffs

Central Iron County WCD
Attn: Tracy Feltner
88 East Fiddlers Canyon Road
Cedar City, UT 84721

Client Service Contact: 801.262.7299

The analyses presented on this report were performed in accordance with the National Environmental Laboratory Accreditation Program (NELAP) unless noted in the comments, flags, or case narrative. If the report is to be used for regulatory compliance, it should be presented in its entirety, and not be altered.



Approved By:

Dave Gayer, Laboratory Director



Certificate of Analysis

Lab Sample No.: 20J1411-01

Name: Central Iron County WCD	Sample Date: 10/22/2020 3:00 PM
Sample Site: Chekshani I-15 Well	Receipt Date: 10/23/2020 10:11 AM
Comments:	Sampler: Tracy Feltner
Sample Matrix: Drinking Water	Project: Chekshani Cliffs
PO Number:	System No.: UTAH11087
Source Code:	Sample Point:
	Report to State: Y

Parameter	Sample Result	EPA Max Contaminant Level (MCL)	Minimum Reporting Limit	Units	Analytical Method	Preparation Date/Time	Analysis Date/Time	Flag
Calculations								
Langelier Index @ 22 Deg. C	-0.01			None	Calculation	11/04/2020	11/04/2020	
Hardness, Total as CaCO3	356		1.32	mg/L	SM 2340 B	10/26/2020	10/27/2020	
Inorganic								
Alkalinity - Bicarbonate (as CaCO3)	188		1.0	mg/L	SM 2320 B	10/29/2020	10/29/2020	
Alkalinity - Carbonate (as CaCO3)	ND		1.0	mg/L	SM 2320 B	10/29/2020	10/29/2020	
Alkalinity - Hydroxide (as CaCO3)	ND		1.0	mg/L	SM 2320 B	10/29/2020	10/29/2020	
Alkalinity - Total (as CaCO3)	188		1.0	mg/L	SM 2320 B	10/29/2020	10/29/2020	
Ammonia as N	ND		0.2	mg/L	SM 4500 NH3 H	10/26/2020	10/26/2020	
Chloride	20.2	250	1.0	mg/L	EPA 300.0	10/23/2020	10/23/2020	
Color	10	15	0	Color Units	SM 2120 B	10/23/2020 12:15	10/23/2020 12:35	
Conductivity	701		1	umho/cm	EPA 120.1	10/29/2020	11/02/2020	
Cyanide, Free	ND	0.2	0.016	mg/L	SM 4500 CN-E	11/02/2020	11/02/2020	
Fluoride	0.27	4	0.10	mg/L	EPA 300.0	10/23/2020	10/23/2020	
MBAS Surfactants	ND	0.5	0.08	mg/L	SM 5540 C	10/23/2020 14:23	10/23/2020 15:00	
Nitrate as N	0.5	10	0.1	mg/L	EPA 300.0	10/23/2020 15:04	10/23/2020 15:04	
Nitrite as N	ND	1	0.1	mg/L	EPA 300.0	10/23/2020 15:04	10/23/2020 15:04	
Odor	ND	3	0	0 - 5 Scale	SM 2150 B	10/23/2020 12:15	10/23/2020 12:35	
pH	7.4		0.1	pH Units	SM 4500 H-B	10/23/2020 15:26	10/23/2020 17:16	SPH
Phosphate, ortho as P	0.01		0.01	mg/L	SM 4500 P-E	10/23/2020 14:07	10/23/2020 14:48	
Sulfate	153	250	5.0	mg/L	EPA 300.0	10/23/2020	10/23/2020	
Total Dissolved Solids (TDS)	448	1000	20	mg/L	SM 2540 C	10/27/2020	10/27/2020	
Total Suspended Solids (TSS)	78		4	mg/L	SM 2540 D	10/23/2020	10/23/2020	
Turbidity	52	5	0.05	NTU	EPA 180.1	10/23/2020 12:38	10/23/2020 13:04	
Metals								
Aluminum, Total	1.3	0.2	0.05	mg/L	EPA 200.7	10/26/2020	10/27/2020	
Antimony, Total	ND	0.006	0.0005	mg/L	EPA 200.8	10/26/2020	10/27/2020	
Arsenic, Total	0.0021	0.01	0.0005	mg/L	EPA 200.8	10/26/2020	10/27/2020	
Barium, Total	0.045	2	0.005	mg/L	EPA 200.7	10/26/2020	10/27/2020	
Beryllium, Total	ND	0.004	0.001	mg/L	EPA 200.7	10/26/2020	10/27/2020	
Boron, Total	0.07		0.05	mg/L	EPA 200.7	10/26/2020	10/27/2020	
Cadmium, Total	ND	0.005	0.0002	mg/L	EPA 200.8	10/26/2020	10/27/2020	
Calcium, Total	83.8		0.2	mg/L	EPA 200.7	10/26/2020	10/27/2020	
Chromium, Total	ND	0.1	0.005	mg/L	EPA 200.7	10/26/2020	10/27/2020	
Copper, Total	0.0757	1.3	0.0010	mg/L	EPA 200.8	10/26/2020	10/27/2020	
Iron, Total	1.12	0.3	0.02	mg/L	EPA 200.7	10/26/2020	10/27/2020	
Lead, Total	0.0010	0.015	0.0005	mg/L	EPA 200.8	10/26/2020	10/27/2020	
Magnesium, Total	35.5		0.2	mg/L	EPA 200.7	10/26/2020	10/27/2020	



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Sample Matrix: Drinking Water	Project: Chekshani Cliffs
PO Number:	System No.: UTAH11087
Source Code:	Sample Point:
	Report to State: Y

Parameter	Sample Result	EPA Max Contaminant Level (MCL)	Minimum Reporting Limit	Units	Analytical Method	Preparation Date/Time	Analysis Date/Time	Flag
Metals (cont.)								
Manganese, Total	0.037	0.05	0.005	mg/L	EPA 200.7	10/26/2020	10/27/2020	
Mercury, Total	ND	0.002	0.00020	mg/L	EPA 245.1	10/27/2020	10/28/2020	
Nickel, Total	ND	0.1	0.005	mg/L	EPA 200.7	10/26/2020	10/27/2020	
Potassium, Total	2.3		0.5	mg/L	EPA 200.7	10/26/2020	10/27/2020	
Selenium, Total	0.0011	0.05	0.0005	mg/L	EPA 200.8	10/26/2020	10/27/2020	
Silica, (as SiO2) Total	26.3		0.1	mg/L	EPA 200.7	10/26/2020	10/27/2020	
Silver, Total	ND	0.1	0.0005	mg/L	EPA 200.8	10/26/2020	10/27/2020	
Sodium, Total	17.9		0.5	mg/L	EPA 200.7	10/26/2020	10/27/2020	
Thallium, Total	ND	0.002	0.0002	mg/L	EPA 200.8	10/26/2020	10/27/2020	
Zinc, Total	ND	5	0.01	mg/L	EPA 200.7	10/26/2020	10/27/2020	
Carbamates								
3-Hydroxycarbofuran	ND		1	ug/L	EPA 531.1	10/29/2020	10/29/2020	
Aldicarb	ND		1	ug/L	EPA 531.1	10/29/2020	10/29/2020	
Aldicarb sulfone	ND		1	ug/L	EPA 531.1	10/29/2020	10/29/2020	
Aldicarb sulfoxide	ND		1	ug/L	EPA 531.1	10/29/2020	10/29/2020	
Carbaryl	ND		1	ug/L	EPA 531.1	10/29/2020	10/29/2020	
Carbofuran	ND	40	1	ug/L	EPA 531.1	10/29/2020	10/29/2020	
Methomyl	ND		1	ug/L	EPA 531.1	10/29/2020	10/29/2020	
Oxamyl	ND	200	1	ug/L	EPA 531.1	10/29/2020	10/29/2020	
Herbicides								
2,4,5-TP (Silvex)	ND	50	0.440	ug/L	EPA 515.3	10/28/2020	10/29/2020	
2,4-D	ND	70	0.220	ug/L	EPA 515.3	10/28/2020	10/29/2020	
Dalapon	ND	200	2.20	ug/L	EPA 515.3	10/28/2020	10/29/2020	
Dicamba	ND		1.00	ug/L	EPA 515.3	10/28/2020	10/29/2020	
Dinoseb	ND	7	0.440	ug/L	EPA 515.3	10/28/2020	10/29/2020	
Pentachlorophenol	ND	1	0.088	ug/L	EPA 515.3	10/28/2020	10/29/2020	
Picloram	ND	500	0.220	ug/L	EPA 515.3	10/28/2020	10/29/2020	
Pesticides								
Endrin	ND	2	0.022	ug/L	EPA 508.1	10/30/2020	11/02/2020	
Heptachlor	ND	0.4	0.088	ug/L	EPA 508.1	10/30/2020	11/02/2020	
Heptachlor epoxide	ND	0.2	0.044	ug/L	EPA 508.1	10/30/2020	11/02/2020	
Lindane	ND	0.2	0.044	ug/L	EPA 508.1	10/30/2020	11/02/2020	
Methoxychlor	ND	40	0.22	ug/L	EPA 508.1	10/30/2020	11/02/2020	
PCB-1016	ND	0.2	0.20	ug/L	EPA 508.1	10/30/2020	11/02/2020	
PCB-1221	ND	0.5	0.20	ug/L	EPA 508.1	10/30/2020	11/02/2020	
PCB-1232	ND	0.5	0.20	ug/L	EPA 508.1	10/30/2020	11/02/2020	
PCB-1242	ND	0.5	0.50	ug/L	EPA 508.1	10/30/2020	11/02/2020	



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Source Code:	Sample Point:
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Pesticides (cont.)								
PCB-1248	ND	0.5	0.50	ug/L	EPA 508.1	10/30/2020	11/02/2020	
PCB-1254	ND	0.5	0.50	ug/L	EPA 508.1	10/30/2020	11/02/2020	
PCB-1260	ND	0.5	0.50	ug/L	EPA 508.1	10/30/2020	11/02/2020	
PCB - Total	ND	0.5	0.50	ug/L	EPA 508.1	10/30/2020	11/02/2020	
Toxaphene	ND	3	2.2	ug/L	EPA 508.1	10/30/2020	11/02/2020	
Semi-Volatile Compounds								
Alachlor	ND	2	0.44	ug/L	EPA 525.2	11/02/2020	11/02/2020	
Aldrin	ND		2.00	ug/L	EPA 525.2	11/02/2020	11/02/2020	
Atrazine	ND	3	0.22	ug/L	EPA 525.2	11/02/2020	11/02/2020	
Benzo (a) pyrene	ND	0.2	0.04	ug/L	EPA 525.2	11/02/2020	11/02/2020	
Bis (2-ethylhexyl) Adipate	ND	400	1.30	ug/L	EPA 525.2	11/02/2020	11/02/2020	
Bis (2-ethylhexyl) Phthalate	ND	6	1.30	ug/L	EPA 525.2	11/02/2020	11/02/2020	
Butachlor	ND		0.50	ug/L	EPA 525.2	11/02/2020	11/02/2020	
alpha-Chlordane	ND	2	0.44	ug/L	EPA 525.2	11/02/2020	11/02/2020	
gamma-Chlordane	ND	2	0.44	ug/L	EPA 525.2	11/02/2020	11/02/2020	
Chlordane - Total	ND	2	0.44	ug/L	EPA 525.2	11/02/2020	11/02/2020	
Dieldrin	ND		1.00	ug/L	EPA 525.2	11/02/2020	11/02/2020	
Hexachlorobenzene	ND	1	0.22	ug/L	EPA 525.2	11/02/2020	11/02/2020	
Hexachlorocyclopentadiene	ND	50	0.22	ug/L	EPA 525.2	11/02/2020	11/02/2020	
Metolachlor	ND		0.50	ug/L	EPA 525.2	11/02/2020	11/02/2020	
Metribuzin	ND		0.50	ug/L	EPA 525.2	11/02/2020	11/02/2020	
Propachlor	ND		0.50	ug/L	EPA 525.2	11/02/2020	11/02/2020	
Simazine	ND	4	0.15	ug/L	EPA 525.2	11/02/2020	11/02/2020	
Volatile Organic Compounds								
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L	EPA 524.2	10/29/2020	10/29/2020	
1,1,1-Trichloroethane	ND	200	0.5	ug/L	EPA 524.2	10/29/2020	10/29/2020	
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L	EPA 524.2	10/29/2020	10/29/2020	
1,1,2-Trichloroethane	ND	5	0.5	ug/L	EPA 524.2	10/29/2020	10/29/2020	
1,1,2-Trichlorotrifluoroethane	ND		1.0	ug/L	EPA 524.2	10/29/2020	10/29/2020	
1,1-Dichloroethane	ND		1.0	ug/L	EPA 524.2	10/29/2020	10/29/2020	
1,1-Dichloroethene	ND	7	0.5	ug/L	EPA 524.2	10/29/2020	10/29/2020	
1,1-Dichloropropene	ND		0.5	ug/L	EPA 524.2	10/29/2020	10/29/2020	
1,2,3-Trichlorobenzene	ND		1.0	ug/L	EPA 524.2	10/29/2020	10/29/2020	
1,2,3-Trichloropropane	ND		1.0	ug/L	EPA 524.2	10/29/2020	10/29/2020	
1,2,4-Trichlorobenzene	ND	70	0.5	ug/L	EPA 524.2	10/29/2020	10/29/2020	
1,2,4-Trimethylbenzene	ND	70	1.0	ug/L	EPA 524.2	10/29/2020	10/29/2020	
1,2-Dichlorobenzene	ND	600	0.5	ug/L	EPA 524.2	10/29/2020	10/29/2020	



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Comments:	Sampler: Tracy Feltner
Sample Matrix: Drinking Water	Project: Chekshani Cliffs
PO Number:	System No.: UTAH11087
Source Code:	Sample Point:
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Parameter	Sample Result	EPA Max Contaminant Level (MCL)	Minimum Reporting Limit	Units	Analytical Method	Preparation Date/Time	Analysis Date/Time	Flag
Volatile Organic Compounds (cont.)								
1,2-Dichloroethane	ND	5	0.5	ug/L	EPA 524.2	10/29/2020	10/29/2020	
1,2-Dichloropropane	ND	5	0.5	ug/L	EPA 524.2	10/29/2020	10/29/2020	
1,3,5-Trimethylbenzene	ND		1.0	ug/L	EPA 524.2	10/29/2020	10/29/2020	
1,3-Dichlorobenzene	ND		1.0	ug/L	EPA 524.2	10/29/2020	10/29/2020	
1,3-Dichloropropane	ND		0.5	ug/L	EPA 524.2	10/29/2020	10/29/2020	
1,4-Dichlorobenzene	ND	75	0.5	ug/L	EPA 524.2	10/29/2020	10/29/2020	
2,2-Dichloropropane	ND		0.5	ug/L	EPA 524.2	10/29/2020	10/29/2020	
2-Chlorotoluene	ND		1.0	ug/L	EPA 524.2	10/29/2020	10/29/2020	
4-Chlorotoluene	ND		1.0	ug/L	EPA 524.2	10/29/2020	10/29/2020	
Benzene	ND	5	0.5	ug/L	EPA 524.2	10/29/2020	10/29/2020	
Bromobenzene	ND		1.0	ug/L	EPA 524.2	10/29/2020	10/29/2020	
Bromochloromethane	ND		1.0	ug/L	EPA 524.2	10/29/2020	10/29/2020	
Bromodichloromethane	ND		0.5	ug/L	EPA 524.2	10/29/2020	10/29/2020	
Bromoform	ND		0.5	ug/L	EPA 524.2	10/29/2020	10/29/2020	
Bromomethane	ND		1.0	ug/L	EPA 524.2	10/29/2020	10/29/2020	
Carbon Tetrachloride	ND	5	1.0	ug/L	EPA 524.2	10/29/2020	10/29/2020	
Chlorobenzene	ND	100	0.5	ug/L	EPA 524.2	10/29/2020	10/29/2020	
Chloroethane	ND		1.0	ug/L	EPA 524.2	10/29/2020	10/29/2020	
Chloroform	ND		0.5	ug/L	EPA 524.2	10/29/2020	10/29/2020	
Chloromethane	ND		1.0	ug/L	EPA 524.2	10/29/2020	10/29/2020	
cis-1,2-Dichloroethene	ND	70	1.0	ug/L	EPA 524.2	10/29/2020	10/29/2020	
cis-1,3-Dichloropropene	ND		1.0	ug/L	EPA 524.2	10/29/2020	10/29/2020	
Dibromochloromethane	ND		0.5	ug/L	EPA 524.2	10/29/2020	10/29/2020	
Dibromomethane	ND	5	1.0	ug/L	EPA 524.2	10/29/2020	10/29/2020	
Dichlorodifluoromethane	ND		1.0	ug/L	EPA 524.2	10/29/2020	10/29/2020	
Ethyl Benzene	ND	700	0.5	ug/L	EPA 524.2	10/29/2020	10/29/2020	
Hexachlorobutadiene	ND		1.0	ug/L	EPA 524.2	10/29/2020	10/29/2020	
Isopropylbenzene	ND		1.0	ug/L	EPA 524.2	10/29/2020	10/29/2020	
Methyl tert-Butyl Ether (MTBE)	ND		1.0	ug/L	EPA 524.2	10/29/2020	10/29/2020	
Methylene Chloride	ND	5	1.0	ug/L	EPA 524.2	10/29/2020	10/29/2020	
Naphthalene	ND		1.0	ug/L	EPA 524.2	10/29/2020	10/29/2020	
n-Butyl Benzene	ND		1.0	ug/L	EPA 524.2	10/29/2020	10/29/2020	
n-Propyl Benzene	ND		1.0	ug/L	EPA 524.2	10/29/2020	10/29/2020	
p-Isopropyltoluene	ND		1.0	ug/L	EPA 524.2	10/29/2020	10/29/2020	
sec-Butyl Benzene	ND		1.0	ug/L	EPA 524.2	10/29/2020	10/29/2020	
Styrene	ND	100	0.5	ug/L	EPA 524.2	10/29/2020	10/29/2020	
tert-Butylbenzene	ND		1.0	ug/L	EPA 524.2	10/29/2020	10/29/2020	
Tetrachloroethene	ND	5	0.5	ug/L	EPA 524.2	10/29/2020	10/29/2020	
Toluene	ND	1000	0.5	ug/L	EPA 524.2	10/29/2020	10/29/2020	



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Volatile Organic Compounds (cont.)								
trans-1,2-Dichloroethene	ND	100	0.5	ug/L	EPA 524.2	10/29/2020	10/29/2020	
trans-1,3-Dichloropropene	ND		1.0	ug/L	EPA 524.2	10/29/2020	10/29/2020	
Trichloroethene	ND	5	0.5	ug/L	EPA 524.2	10/29/2020	10/29/2020	
Trichlorofluoromethane	ND		1.0	ug/L	EPA 524.2	10/29/2020	10/29/2020	
Vinyl Chloride	ND	2	0.5	ug/L	EPA 524.2	10/29/2020	10/29/2020	
Xylenes, total	ND	10000	0.5	ug/L	EPA 524.2	10/29/2020	10/29/2020	



Certificate of Analysis

Report Footnotes

Abbreviations

ND = Not detected at the corresponding Minimum Reporting Limit.

1 mg/L = one milligram per liter or 1 mg/Kg = one milligram per kilogram = 1 part per million.

1 ug/L = one microgram per liter or 1 ug/Kg = one microgram per kilogram = 1 part per billion.

1 ng/L = one nanogram per liter or 1 ng/Kg = one nanogram per kilogram = 1 part per trillion.

Flag Descriptions

SPH = Sample submitted past method specified holding time.

Data Comparisons

Values reported in **RED** exceed Primary Drinking Water standards.

Values reported in **BLUE** exceed Secondary Drinking Water standards.

BLANK values in the MCL column indicate no standard.

