Laramie Energy - Baker Canyon Spill
Q4 2022 - Groundwater Analytical Results

Location/Date	Benzene MCL = 5 ug/L	Toluene MCL = 560 - 1,000 µg/L	Ethylbenzene MCL = 700 µg/L	Xylenes MCL = 1,400-10,000 µg/L	Naphthalene MCL = 140 µg/L	1,2,4 - Trimethylbenze MCL = 67 µg/L	1,3,5 - Trimethylbenzene MCL = 67 µg/L	Chloride 250 mg/L or <1.25 x background (104.25)	Sulfate 250 mg/L or <1.25 x background mg/L (1,046.25)	Total Dissolved Solids MCL = <1.25 x background mg/L (2,262.5)	Depth to Groundwater (ft)	Temperature (°C)	Dissolved Oxygen Saturation (%)	Dissolved Oxygen (mg/L)	Specific Conductivity (mS/cm)	Total Dissolved Solids (mg/L)	Salinity (%)	pH (su)
	Organic Compounds							General Chemistry				Field Parameters						
Conn Creek (SW1 - Surface Water)																		
10/27/2022	<1.0	<1.0	<1.0	<3.0	<5.0	<1.0	<1.0	80.1	354	1090	NA	11.7	34.6	3.70	1.767	1.148	0.90	7.36
12/6/2022	<1.0	<1.0	<1.0	<3.0	<5.0	<1.0	<1.0	59.0	210	803	NA	8.6	33.5	4.04	1.25	0.8125	0.62	9.2
MW1 (BG)											**Total Depth - 54.63'**							
10/27/2022	<1.0	**0.404 J**	**0.227 J**	<3.0	<5.0	<1.0	<1.0	58.6	268	916	34.03	11.7	40.8	4.42	1.425	0.926	0.72	7.57
12/6/2022	<1.0	<1.0	<1.0	<3.0	<5.0	<1.0	<1.0	54.9	298	998	34.00	11.3	3.64	32.8	1.44	0.936	0.73	8.67
MW2											**Total Depth - 42.12'**							
10/27/2022	**0.177 J**	<1.0	**0.197 J**	**0.543 J**	<5.0	<1.0	<1.0	73.3	768	1610	25.30	12.9	20.5	2.13	2.234	1.449	1.15	7.16
12/6/2022	<1.0	<1.0	<1.0	<3.0	<5.0	<1.0	**1.35**	91.6	775	1680	25.37	11.3	18.8	2.07	2.26	1.469	1.17	8.31
MW3											**Total Depth - 45.40'**							
10/27/2022	**6.22**	<1.0	**0.592 J**	**2.55 J**	<5.0	**0.356 J**	**0.330 J**	75.1	675	1500	27.53	12.6	20	2.05	2.264	1.471	1.17	7.25
12/6/2022	**9.7**	**4.22**	**1.19**	**7.62**	<5.0	<1.0	<1.0	80.4	788	1560	27.61	11.4	25.3	2.78	2.14	1.391	1.10	8.47
MW4											**Total Depth - 43.15'**							
10/27/2022	<1.0	<1.0	<1.0	<3.0	<5.0	**0.739 J**	**1.03**	105	953	1860	25.65	12	15	1.59	2.79	1.814	1.46	7.44
12/6/2022	**7.75**	<1.0	<1.0	<3.0	<5.0	<1.0	<1.0	107	897	1840	27.53	11.1	21.7	2.37	2.63	1.7095	1.37	8.52
MW5											**Total Depth - 43.35'**							
10/27/2022	**161**	**0.779 J**	**34.1**	**68.9**	<5.0	**6.83**	**8.77**	73.8	723	1550	27.02	13.1	18.4	1.9	2.234	1.452	1.15	7.08
12/6/2022	**302**	<1.0	**47.7**	**86.5**	<5.0	**7.85**	**12.6**	84.2	763	1540	27.06	11.5	21.2	2.33	2.25	1.4625	1.16	8.53
MW6											**Total Depth - 36.60'**							
10/27/2022	<1.0	<1.0	**0.200 J**	<3.0	<5.0	<1.0	<1.0	113	932	1810	24.48	13.3	21.9	2.25	2.715	1.765	1.42	7.23
12/6/2022	<1.0	<1.0	<1.0	<3.0	<5.0	<1.0	<1.0	122	904	1800	24.58	11.3	23.8	2.62	2.61	1.69	1.35	8.56
MW7											**Total Depth - 37.94'**							
10/27/2022	**0.0947 J**	**0.515 J**	**0.419 J**	**0.269 J**	<5.0	<1.0	<1.0	108	994	2000	24.13	11.9	19.3	2.03	2.864	1.863	1.5	7.3
12/6/2022	<1.0	<1.0	<1.0	<3.0	<5.0	<1.0	<1.0	119	980	1910	24.18	10.6	21.7	2.34	2.74	1.781	1.43	8.46
MW8											**Total Depth - 33.50'**							
10/27/2022	<1.0	<1.0	<1.0	<3.0	<5.0	<1.0	<1.0	125	1120	2120	23.03	11.4	22.4	2.47	2.821	1.834	1.47	7.25
12/6/2022	<1.0	<1.0	<1.0	<3.0	<5.0	<1.0	<1.0	123	1030	1970	23.03	11.3	25.5	2.79	2.78	1.807	1.45	8.31
MW9											**Total Depth - 34.17'**							
10/27/2022	**239**	<1.0	**20.9**	**113**	<5.0	**8.25 J**	**9.44 J**	76.4	653	1500	25.96	13.8	23	2.31	2.187	1.421	1.13	7.08
12/6/2022	**165**	<1.0	**12.4**	**92.5**	<25.0	**6.35**	**7.35**	79.9	658	1480	25.98	11.6	17.3	1.85	2.03	1.3195	1.04	8.24
MW10											**Total Depth - 39.05'**							
10/27/2022	<1.0	**0.502 J**	**0.381 J**	**0.254 J**	<5.0	<1.0	<1.0	73.0	887	1790	28.06	12.6	30.1	3.08	2.188	1.421	1.13	7.17
12/6/2022	<1.0	<1.0	<1.0	<3.0	<5.0	<1.0	<1.0	69.2	628	1480	28.20	11.2	31.1	3.43	1.75	1.1375	0.89	8.57
MW11											**Total Depth - 34.64'**							
10/27/2022	**0.984 J**	**0.467 J**	**0.591 J**	**0.416 J**	<5.0	<1.0	**0.197 J**	81.3	771	1690	25.96	13.7	25.9	2.58	2.294	1.491	1.19	7.15
12/6/2022	<1.0	<1.0	<1.0	<3.0	<5.0	<1.0	<1.0	84.9	717	1590	25.98	10.7	18.8	2.15	2.24	1.456	1.15	8.34
MW12											**Total Depth - 37.16'**							
10/27/2022	**0.188 J**	<1.0	<1.0	<3.0	<5.0	<1.0	<1.0	82	645	1510	26.33	13.6	32.7	3.30	2.281	1.481	1.18	7.08
12/6/2022	<1.0	<1.0	<1.0	<3.0	<5.0	<1.0	<1.0	86.1	666	1520	26.33	11.0	24.4	2.70	2.16	1.3975	1.11	8.39
MW13											**Total Depth - 37.90'**							
10/27/2022	<1.0	**0.382 J**	**0.272 J**	<3.0	<5.0	<1.0	<1.0	66.9	942	1910	31.97	12.7	23.5	2.39	2.44	1.587	1.27	7.30
12/6/2022	<1.0	<1.0	<1.0	<3.0	<5.0	<1.0	<1.0	70.6	679	1580	31.93	10.6	19.1	2.15	2.24	1.456	1.15	8.49

Over COGCC Table 915-1 concentration levels

µg/L - micrograms per liter
mg/kg - milligrams per kilogram
mg/L - milligrams per liter
J - indicates an estimated value
J4 - The associated batch QC was outside the established quality control range for accuracy.
mmhos/cm - millimhos per centimeter
mv - millivolts
su - standard units
NA - not applicable
NT - parameter was not tested
ND - not detected above method detection limit