

2018 4th quarter review



Safety Improvements

*added guard around open hole (gallery well)

2017



2018



*changed pumps from connecting to car battery to generator

Before



After



RC uses 1 AZ certified lab

- **SVL Analytical, Inc. Environmental**



Nov-2017 & Dec-2018 BTA Results

<RL A result is less than the reporting limit

<u>Field Parameters</u>	<u>AWQS (mg/L)</u>	<u>BTA-01 Nov-2017</u>	<u>BTA-01 Dec-2018</u>	<u>Classical Chemistry Parameters</u>	<u>AWQS (mg/L)</u>	<u>BTA-01 Nov-2017</u>	<u>BTA-01 Dec-2018</u>
EC mS/cm		1182	1122	Cyanide, amenable	0.2	< 0.05	< 0.05
pH		7.45	7	Nitrate/Nitrite as N		0.844	0.304
Temp C		21.4	19	Total Dissolved Solids		623	699
<u>Dissolved Metals</u>				Chloride		68.2	87.5
Antimony	0.006	< 0.003	< 0.003	Fluoride	4	0.274	0.318
Arsenic	0.05	< 0.025	0.0162	Sulfate		188	149
Barium	2	0.0097	0.0107	<u>Rad Chem</u>			
Beryllium	0.004	< 0.002	< 0.002	Gross Alpha			
Cadmium	0.005	< 0.002	< 0.002	(including Radium		5.1 +/- 2	ND(+/-1.8)
Copper		0.0175	<0.01	226) pCi/L			
Lead	0.05	< 0.0075	<0.003	Radium 226 pCi/L		< 0.5	ND(+/- 0.14)
Mercury	0.002	< 0.0002	<0.000093	Radium 228 pCi/L		.9 +/- .3	ND(+/- 0.3)
Nickel	0.1	< 0.01	<0.01	Total Radium pCi/L		.9 +/- .3	ND(+/- 0)
Selenium	0.05	< 0.04	<0.003				
Thallium	0.002	< 0.001	< 0.001				

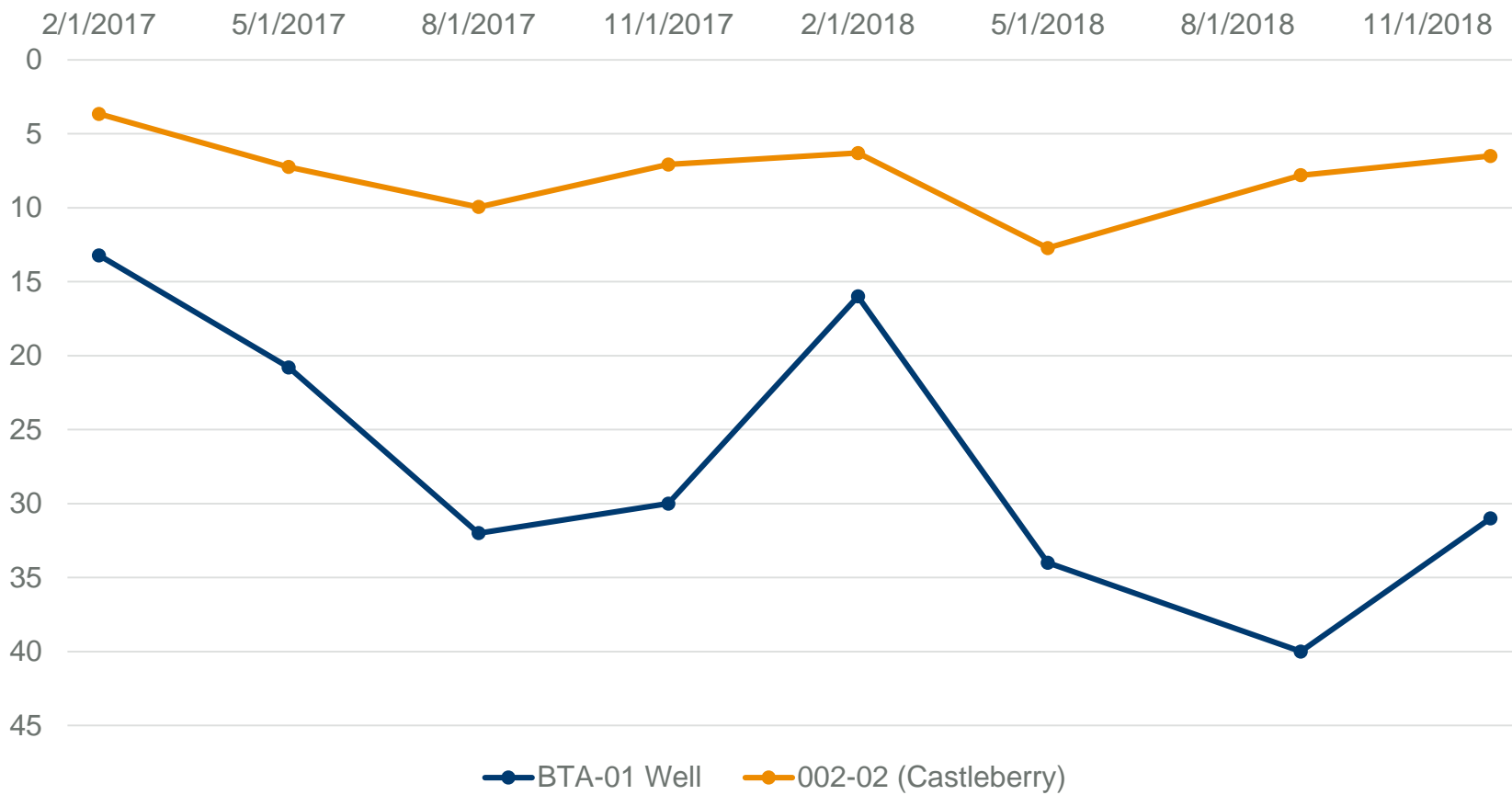
Nov 2017 & Dec 2018 Castleberry Well Results

<RL A result is less than the reporting limit

<u>Field Parameters</u>	<u>AWQS</u> <u>(mg/L)</u>	<u>002-02</u> <u>Nov-2017</u>	<u>002-02</u> <u>Dec-2018</u>
EC mS/cm		1015	1019
pH		8.73	7.31
Temp C		13.7	16.9
<u>Dissolved Metals</u> <u>(mg/L)</u>			
Antimony	0.006	<0.003	<0.003
Arsenic	0.05	0.032	0.0296
Barium	2	0.0175	0.0177
Beryllium	0.004	<0.002	<0.002
Copper		0.0121	0.0114
Lead	0.05	<0.0075	<0.00300
Mercury	0.002	<0.0002	<0.000093
Selenium	0.05	<0.04	<0.003
Nickel	0.1	<0.01	<0.01
Thallium	0.002	<0.001	<0.001

<u>Classical Chemistry</u> <u>Parameters (mg/L)</u>	<u>AWQS</u> <u>(mg/L)</u>	<u>002-02</u> <u>Nov-2017</u>	<u>002-02</u> <u>Dec-2018</u>
Cyanide, amenable	0.2	<0.05	<0.05
Nitrate/Nitrite as N	10	1.35	0.206
Carbonate		<1	<1
Total Dissolved Solids		705	642
Chloride		93.2	115
Fluoride	4	0.34	0.326
Sulfate		211	95.7
<u>Gross Alpha</u>			
Radium 226 pCi/L		<0.5	ND(+/- 0.13)
Radium 228 pCi/L		0.7 +/-0.3	ND(+/- 0.29)
Total Radium pCi/L		0.7 +/-0.3	ND(+/- 0)

Water Level Graph



Questions?