



STATE OF
COLORADO

Ebert - DNR, Jared <jared.ebert@state.co.us>

Pit 29 GW Level Submission

1 message

Joshua Oliver <joliver@brannan1.com>
To: "Jared.Ebert@state.co.us" <Jared.Ebert@state.co.us>

Tue, Aug 15, 2017 at 10:01 AM

Mr. Ebert,

Please find the attached monitoring result for Pit 29.

It looks like the monitoring requirements stem from the 6-18-2010 TR-03.

Now that the French drain is operational, do you think that it is important to keep doing the quarterly monitoring?

Please let me know if you have any questions.

Thank you,

Joshua Oliver
Environmental Manager



joliver@brannan1.com

O: 303.853.5159 | M: 303.472.1736 | F: 303.853.5233



3 attachments



Pit 29 Wells and Reservoir Water Levels 8-11-17.pdf
948K



Pit 29 Wells and Reservoir Water Levels Piezometer Measurements.pdf
31K

8/15/2017

State.co.us Executive Branch Mail - Pit 29 GW Level Submission



Q2 Pit 29 Groundwater Letter.pdf

50K



August 11, 2017
Colorado Division of Reclamation, Mining and Safety
1313 Sherman St. Room 215
Denver, CO 80203

Re: Pit 29 M-1980-183 Groundwater Level Monitoring

Mr. Jared Ebert:

Please find the attached reservoir, MW-1, MW-2 and MW-4 quarterly readings, in addition to Pit 29 South cell water levels.

MW-4 datalogger monitoring and manual depth to groundwater monitoring continues to verify the functionality of the French drain project, which was completed in 2015 along the southern boundary of the western half of the property.

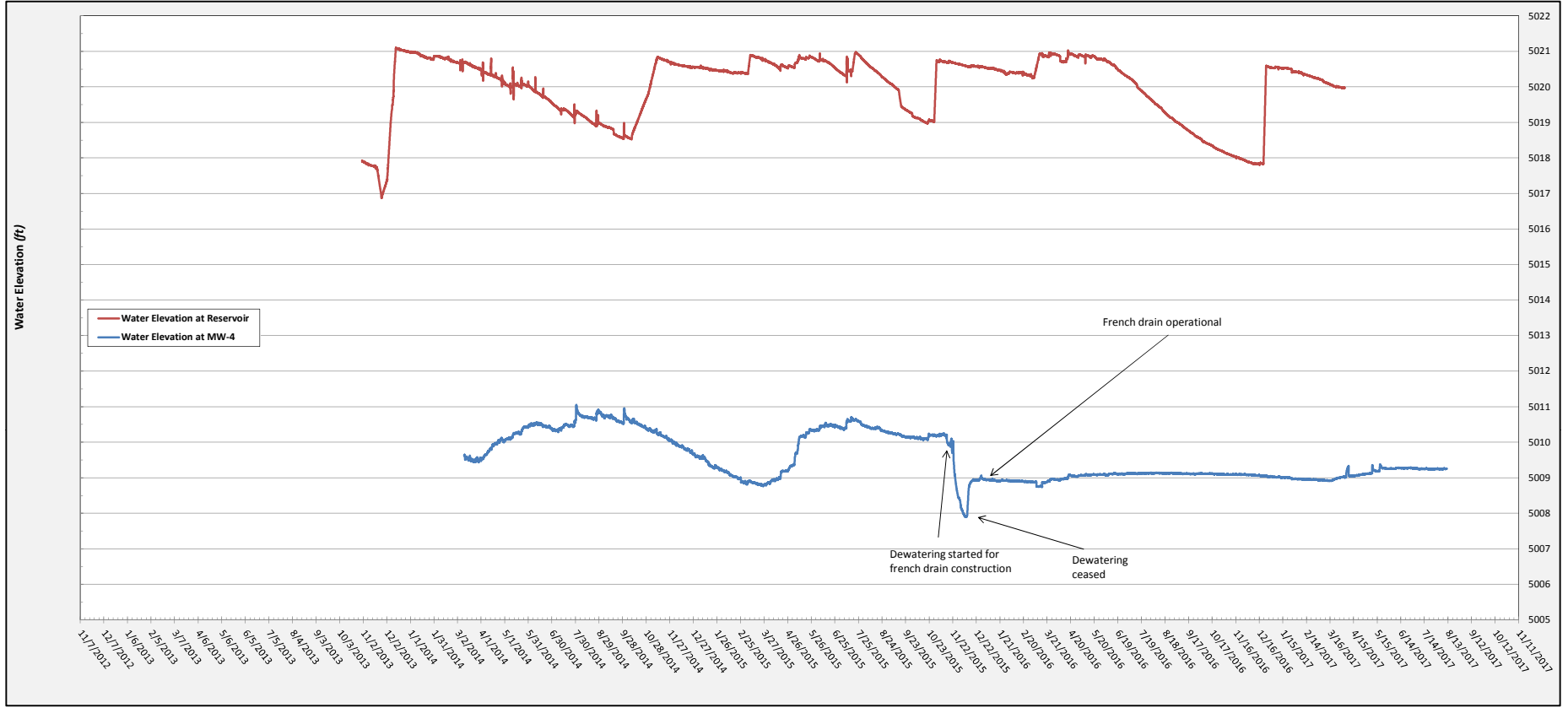
The datalogger in the reservoir is not currently able to transmit data. The manufacturer is being consulted about options, regarding this, however Brannan believes that the reservoir water level is not significantly affecting the groundwater in the North cell, nor on the property to the west and south of Pit 29.

Groundwater levels in MW-1 and MW-2 are within 1 foot of this time last year and within what appears to be within normal fluctuations since data has been recorded by Brannan. The groundwater level in MW-4 is a little higher than usual, however this is likely due to higher precipitation in the preceding several weeks.

Sincerely,

A handwritten signature in black ink, appearing to read "Josh", followed by a long, horizontal, wavy line that extends across the width of the signature area.

Joshua Oliver
Environmental Manager
(303) 472-1736
joliver@brannan1.com



Brannan Pit #29

Water Level Measurements

Date Month-Year	Depth to Water (ft)			
	MW-1 OUT	MW-2 OUT	MW-3 OUT	MW-4 OUT
12/1/2005	21.50	22.50	11	NA
1/1/2006	23.00	23.00	13	NA
3/1/2006	22.00	20.00	11.5	NA
5/1/2006	21.50	20.00	10.5	NA
6/1/2010	20.50	17.70	N/A	NA
9/1/2010	20.00	18.90	N/A	21.40
12/1/2010	20.90	23.17	N/A	26.25
3/1/2011	20.57	19.40	N/A	24.66
6/1/2011	19.40	15.74	N/A	21.80
9/1/2011	18.94	18.63	N/A	21.08
12/1/2011	20.20	21.10	N/A	21.15
3/1/2012	20.95	10.30	N/A	17.75
6/1/2012	20.89	18.47	N/A	14.09
9/12/2012	20.97	19.21	N/A	5.64
11/12/2012	-	-	N/A	4.84
12/12/2012	21.79	20.54	N/A	5.67
4/13/2013	22.84	18.16	N/A	5.61
4/22/2013	22.55	19.70	N/A	5.30
6/13/2013	22.48	18.78	N/A	5.60
9/1/2013	21.66	19.15	N/A	4.52
12/13/2013	23.19	20.60	N/A	5.60
3/14/2014	24.15	16.75	N/A	6.09
6/14/2014	23.32	17.76	N/A	5.18
9/14/2014	22.91	18.80	N/A	4.64
11/14/2014	23.60	19.62	N/A	5.22
12/1/2014	24.85	20.48	N/A	6.02
3/31/2015	26.87	17.50	N/A	6.78
6/15/2015	21.79	16.69	N/A	4.79
9/15/2015	19.94	17.75	N/A	5.27
12/15/2015	21.42	19.15	N/A	6.54
4/6/2016	23.11	20.06	N/A	9.15
7/13/2016	20.66	18.64	N/A	6.33
8/30/2016	20.61	19.86	N/A	9.01
9/27/2016	20.78	20.37	N/A	8.77
10/31/2016	20.53	20.91	N/A	9.09
11/21/2016	20.58	21.05	N/A	9.05
12/28/2016	21.61	21.93	N/A	9.15
1/26/2017	22.49	22.31	N/A	9.20
2/27/2017	23.44	22.60	N/A	9.20
3/28/2017	23.35	19.78	N/A	9.19
5/22/2017	21.12	19.25	N/A	8.90
6/14/2017	20.76	18.88	N/A	8.91
7/17/2017	19.68	18.60	N/A	8.94
8/11/2017	19.81	19.5	N/A	8.11