



STATE OF
COLORADO

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

M-1980-183 Quarterly GW Monitoring

Joshua Oliver <joliver@brannan1.com>

Thu, Apr 4, 2019 at 4:10 PM

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

Jared,

Please find the attached quarterly groundwater level monitoring report for Q1 2019.

There are no significant changes to surrounding groundwater levels.

Let me know if there are any questions.

Joshua Oliver

Environmental Manager



joliver@brannan1.com

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4 attachments



Piezometer Chart.pdf

314K



Piezometers Table.pdf

35K



M-1980-183 Q1 2019.pdf

103K



MW4 Chart.pdf

983K



April 4, 2019
Colorado Division of Reclamation, Mining and Safety
ATTN: Jared Ebert
1313 Sherman St. Suite 215
Denver, CO 80203

Re: M-1980-183 Quarterly Groundwater Monitoring Results Submission

Mr. Ebert,

Attached is the quarterly groundwater level monitoring for Brannan Sand and Gravel Company's Pit 29 facility for 1st quarter 2019.

MW-4 continues to exhibit that the French drain remains functional in keeping the hydrologic balance in line with historic levels. There have not been any offsite impacts associated with hydrologic balance issues observed since the construction of the French drain.

MW-1 remains somewhat higher than in months past at around 18 ft. bgs, rather than around 20 ft. bgs. This slight elevation does not have any offsite impacts that we are aware of and remains well below the ground surface. MW-2 groundwater elevations remain stable. We expect to see higher levels in MW-2 in the coming months as the Fulton Ditch runs.

Please let me know if there are any questions.

Sincerely,

A handwritten signature in black ink that reads "Josh Oliver".

Joshua Oliver
Environmental Manager
Brannan Sand and Gravel Company, L.L.C.
(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
9/11/2017	19.97	19.60	N/A	8.96
10/16/2017	20.42	20.30	N/A	8.99
11/21/2017	22.48	21.58	N/A	9.12
12/19/2017	22.39	22.14	N/A	9.06
1/19/2018	23.32	22.58	N/A	9.22
2/16/2018	23.90	22.81	N/A	9.27
3/12/2018	24.48	23.00	N/A	9.38
4/30/2018	22.80	20.19	N/A	9.22
5/21/2018	21.95	19.75	N/A	9.18
6/22/2018	20.80	19.08	N/A	9.05
7/12/2018	20.50	19.24	N/A	9.06

8/15/2018	20.60	19.83	N/A	9.01
9/5/2018	21.75	20.11	NA	9.05
10/18/2018	17.95	20.81	NA	9.05
11/19/2018	17.04	21.48	NA	9.15
12/14/2018	17.34	21.87	NA	9.20
2/28/2019	18.21	22.49	NA	9.30
3/28/2019	18.44	22.61	NA	9.31



