



STATE OF  
COLORADO

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

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## Fwd: Quarterly Brannan Pit 29 M-1980-183 Groundwater Level Monitoring Report

2 messages

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**Scott - DNR, Eric** <eric.scott@state.co.us>  
To: "Ebert, Jared" <Jared.Ebert@state.co.us>

Tue, Jan 31, 2017 at 2:25 PM

Jared-

Here's some correspondence from one of your Adams county operators. I'm not really sure what Tyler had set up with these guys, but I suspect these monthly submissions are part of some kind of corrective action that also includes the french drain they refer to.

**Eric Scott**  
Environmental Protection Specialist, P.G., R.G.

P 303.866.3567 x 8140 | F 303.832.8106  
1313 Sherman Street, Room 215, Denver, CO 80203  
[eric.scott@state.co.us](mailto:eric.scott@state.co.us) | [www.mining.state.co.us](http://www.mining.state.co.us)

----- Forwarded message -----

From: **Joshua Oliver** <joliver@brannan1.com>  
Date: Tue, Jan 31, 2017 at 9:47 AM  
Subject: Quarterly Brannan Pit 29 M-1980-183 Groundwater Level Monitoring Report  
To: "eric.scott@state.co.us" <eric.scott@state.co.us>  
Cc: Fred Marvel <fmarvel@brannan1.com>, Alex Schatz <aschatz@brannan1.com>

Mr. Scott,

Please find the attached Brannan Sand and Gravel Pit 29 M-1980-183 Quarterly Groundwater Submission.

Should you have any questions, please let me know.

Thank you,

Joshua Oliver  
Environmental Manager



joliver@brannan1.com

O: 303.853.5159 |M: 303.472.1736 |F: 303.853.5233



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**4 attachments**

 **Piezometer Comparative Graph 1-26-17.pdf**  
33K

 **Piezometer Measurements 1-26-17.pdf**  
44K

 **Reservoir vs MW-4 Graph 1-26-17.pdf**  
1016K

 **Cover Letter 1-27-17.pdf**  
48K

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

Tue, Jan 31, 2017 at 2:38 PM

Mr. Ebert,

Mr. Scott said that he would forward this e-mail to you, but I also just wanted to open a line of communication with you, if you need anything.

You may have been in contact with Alex Schatz and/or Fred Marvel as well.

If you need anything from me, please let me know.

Thank you,

Joshua Oliver

Environmental Manager



joliver@brannan1.com

O: 303.853.5159 | M: 303.472.1736 | F: 303.853.5233



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**From:** Scott - DNR, Eric [mailto:[eric.scott@state.co.us](mailto:eric.scott@state.co.us)]

**Sent:** Tuesday, January 31, 2017 2:23 PM

**To:** Joshua Oliver

**Subject:** Re: Quarterly Brannan Pit 29 M-1980-183 Groundwater Level Monitoring Report

Joshua-

Sorry, but I forgot that I need to tell you that Jared Ebert ( [Jared.Ebert@state.co.us](mailto:Jared.Ebert@state.co.us)) is now the DRMS Specialist for Adams county.. I will forward your email to him as well. His extension is x8120 if you need to contact him directly for any reason.

Eric Scott

Environmental Protection Specialist, P.G., R.G.

P [303.866.3567](tel:303.866.3567) x 8140 | F [303.832.8106](tel:303.832.8106)

1313 Sherman Street, Room 215, Denver, CO 80203

[eric.scott@state.co.us](mailto:eric.scott@state.co.us) | [www.mining.state.co.us](http://www.mining.state.co.us)

On Tue, Jan 31, 2017 at 9:47 AM, Joshua Oliver <[joliver@brannan1.com](mailto:joliver@brannan1.com)> wrote:

Mr. Scott,

Please find the attached Brannan Sand and Gravel Pit 29 M-1980-183 Quarterly Groundwater Submission.

Should you have any questions, please let me know.

Thank you,

Joshua Oliver

Environmental Manager



3/3/2017

State.co.us Executive Branch Mail - Fwd: Quarterly Brannan Pit 29 M-1980-183 Groundwater Level Monitoring Report

joliver@brannan1.com

O: 303.853.5159 |M: 303.472.1736 |F: 303.853.5233





January 27, 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. Eric Scott:

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 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. Since construction of the French drain, the depth to groundwater in MW-4 has varied less than 6", indicating that groundwater levels to the south of Pit 29 are being managed appropriately by the French drain.

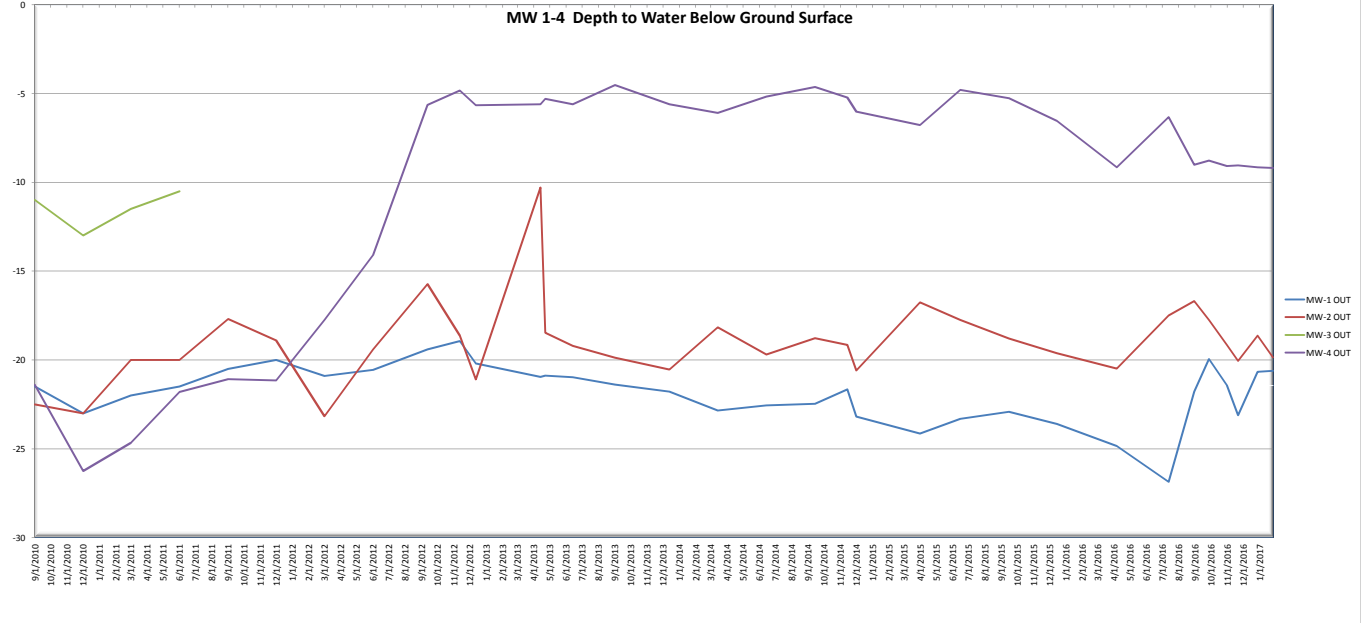
The data indicates a lack of relationship between groundwater levels in MW-4 and the South Cell Reservoir.

Piezometers MW-1 and MW-2 groundwater levels appear to be deeper than in previous months, however this may be due to lower precipitation and/or less artificial addition of water to groundwater via Fulton Ditch and/or Sandy Acres.

Sincerely,

A handwritten signature in black ink, appearing to read "Josh", followed by a long horizontal line extending to the right.

Joshua Oliver  
Environmental Manager  
(303) 472-1736  
[joliver@brannan1.com](mailto:joliver@brannan1.com)



# Brannan Pit #29

## Water Level Measurements

| Date<br>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     |
|                    |                     |          | N/A      |          |

