



Western Water & Land, Inc.

August 12, 2019

Mr. Mike Gardner  
TEP Environmental Specialist  
TEP Rocky Mountain LLC  
1058 County Road 215  
Parachute, Colorado 81635

**RE: Status Report: Baseline Water Quality Sampling – Drill Pad PA 34-24**

Dear Mr. Gardner,

Western Water & Land, Inc. (WWL) completed a hydrologic Water Source evaluation for the TEP Rocky Mountain LLC (TEP) PA 34-24 Drill Pad in accordance with Colorado Oil and Gas Conservation Commission (COGCC) Rule 609. Drill Pad PA 34-24 is located in SW<sup>1</sup>/<sub>4</sub>, SE<sup>1</sup>/<sub>4</sub>, Section 24, Township 6 S, Range 95 W, 6<sup>th</sup> P.M. This status report addresses field revisions and the sampling location status as relevant to the original executed Baseline Water Quality Evaluation dated February 19, 2018.

The original evaluation considered all Water Sources as defined in Rule 609 within a 0.5-mile radius of the referenced drill pad. Water Sources located within a 0.5-mile radius of the PA 34-24 Drill Pad are shown in Figure 1. Please see the original Baseline Water Quality Evaluation (February 19, 2018) for details on how the evaluation was conducted.

### **Water Source Identification**

Water Sources as defined in Rule 609 include Colorado Division of Water Resources (DWR) registered water wells (water wells with existing valid well permits), permitted or adjudicated springs, and monitoring wells installed for baseline sampling and monitoring under COGCC Rules 318A.e(4), 608, 609, or 908.b(9) or specified conditions of approval. Each Water Source identified within the 0.5-mile radius area is considered to be a potentially Available Water Source unless existing information suggests that the Water Source would not be suitable for the baseline water quality program. The original Baseline Water Quality Evaluation identified two potentially Available Water Sources located within 0.5 miles of the PA 34-24 Drill Pad (see Figure 1).

The identified potentially Available Water Sources are summarized as follows:

- Water Well Permit No. 202848
- Naugle Well # 2 (Water Well Permit No. 67992-F)

### **Preferred Water Sources**

In accordance with Rule 609, all potentially Available Water Sources within a 0.5-mile radius of the drill pad are to be identified and up to a maximum of four sources must be included in the baseline and

subsequent monitoring program. Each potentially Available Water Source identified was evaluated based on WWL's hydrologic knowledge of the region, general hydrologic rationale, and in accordance with the guidelines specified in Rule 609 to identify the preferred sources for the baseline program. Since only two potentially Available Water Sources were identified they are considered to be preferred Water Sources:

- Water Well Permit No. 202848
- Naugle Well # 2 (Water Well Permit No. 67992-F)

Preferred Water Sources are incorporated into the baseline water quality monitoring program provided 1) the structures exist; 2) the structure owner, or land owner if the structure owner is not known, grants approval to sample the source; and 3) inspection of the structure confirms that a representative sample can be obtained from the structure.

### Access Request

Potentially Available Water Sources for Drill Pad PA 34-24 include those identified for Drill Pad PA 22-25. Access request letters were mailed for Drill Pad PA 22-25 on December 23, 2013.

All attempts requesting permission to sample potentially Available Water Sources from the well permit holders and the property owners are recorded in the Correspondence Logs below. Access request letters, certified mailing receipts, mailings that were returned to sender, mailed responses, and email correspondence are included in Attachment A.

<b>Correspondence Log: PA 22-25</b>				
<b>Contact Attempt Date</b>	<b>Contact Name</b>	<b>Contact Method</b>	<b>Responsible Person</b>	<b>Results</b>
12/23/2013	Naugle, Harry	Certified Mail: Access Request Letter	NWS	No response received after 30 days.
8/31/2017	Naugle, Harry	In-Person	NWS	Harry Naugle granted access to water sources.

### Field Results

Each identified potentially Available Water Source and its monitoring status is as follows:

- Water Well Permit No. 202848: well permit and property owned by Harry Naugle.
  - Access was granted to sample this Water Source by Mr. Harry Naugle. WWL conducted sampling of the well on August 31, 2017 and April 17, 2019.
- Naugle Well # 2 (Water Well Permit No. 67992-F): well permit and property owned by Harry Naugle.
  - Access was granted to sample this Water Source by Mr. Harry Naugle. WWL conducted sampling of the well on August 31, 2017 and April 18, 2019.

COGCC Rule 609 specifies that baseline water quality samples are to be collected within 1-year prior to the conductor set date for new drilling operations. Conductors for Drill Pad PA 34-24 were set

November 7-9, 2018. Samples collected on August 31, 2017 were originally collected as Rule 609 baseline water quality samples for Drill Pad PA 22-25, and it was expected they would apply as baseline water quality samples for Drill Pad PA 34-24 as well. Drill Pad PA 34-24 was delayed from the original schedule; the August 2017 samples were collected 14 months prior to conductors being set. No additional samples were collected within one year of the conductors being set.

A second sampling event, April 17-18, 2019, was conducted as the first subsequent samples for Drill Pad PA 22-25, and were submitted to COGCC; these samples were collected after the conductors were set, but prior to drilling on Drill Pad PA 34-24. Drill Pad PA 34-24 is expected to start drilling August 2019. As a result of these events, samples from Water Well Permit Nos. 202848 and 67992-F collected August 31, 2017, are being considered as the baseline water quality samples for Drill Pad PA 34-24.

If you have any questions or concerns, please contact me at (970) 242-0170.

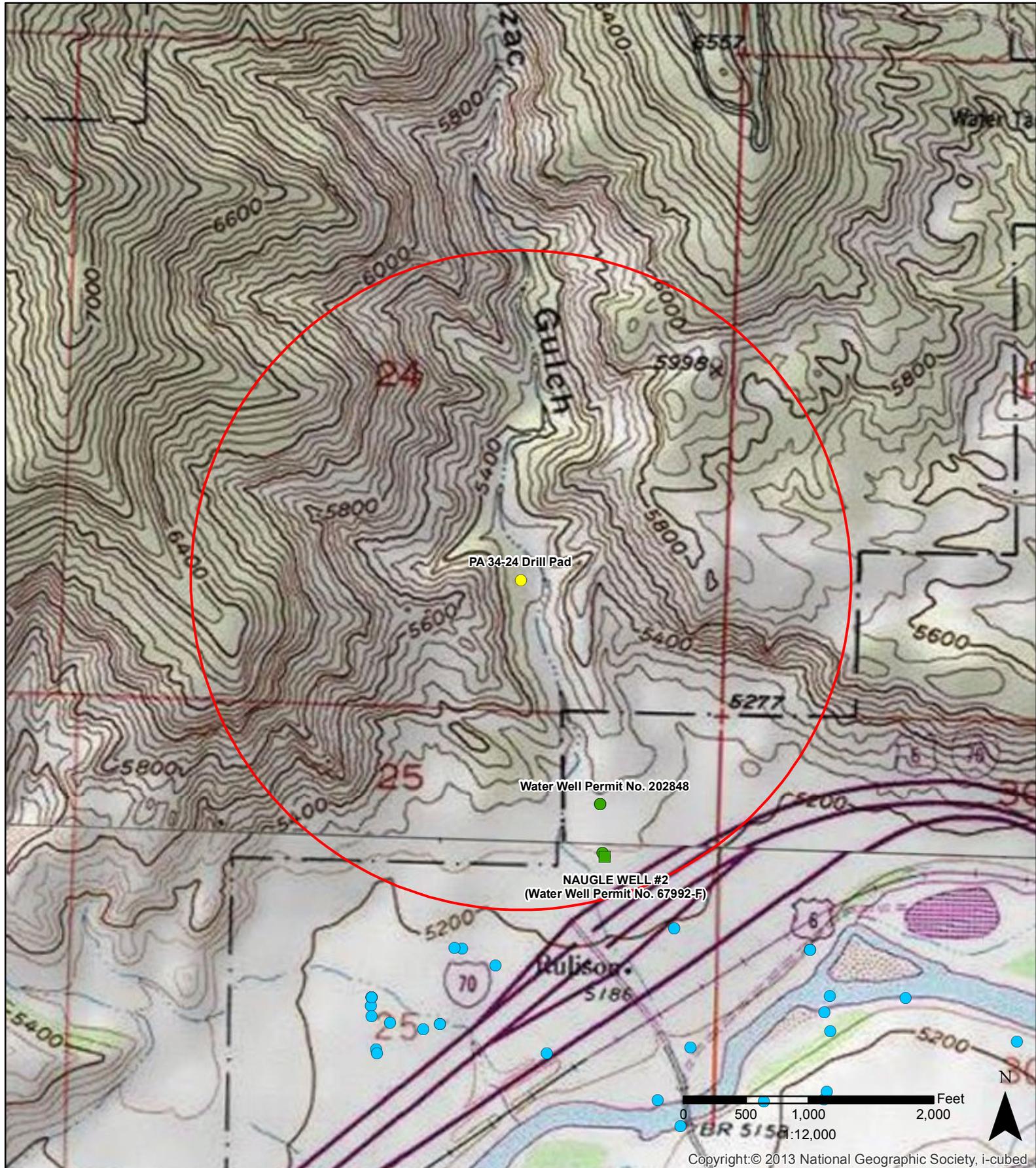
Sincerely,

A handwritten signature in black ink, appearing to read "Bruce D. Smith". The signature is fluid and cursive, with the first name "Bruce" being the most prominent.

Bruce D. Smith  
Principal Hydrogeologist  
WESTERN WATER & LAND, INC.

Attachments:

Figure 1 – Water Source Evaluation Map  
Attachment A – Access Request Documentation



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Legend	
<span style="color: yellow;">●</span> PA 34-24 Drill Pad	<span style="color: green;">■</span> Water right decree
<span style="color: red; border: 1px solid red; border-radius: 50%; width: 15px; height: 15px; display: inline-block;"></span> 0.5-mile radius evaluation area	<span style="color: blue;">●</span> Outside permits or decrees
<span style="color: green;">●</span> Constructed well	<span style="color: red;">●</span> Well completion status unknown

**Figure 1: PA 34-24 Drill Pad  
0.5-Mile Radius Water Source Evaluation  
SW 1/4, SE 1/4, S24, T6S, R95W, 6 PM**

Garfield County, Colorado  
TEP Rocky Mountain, LLC



**Attachment A**

**Access Request Documentation**



August 30, 2017

Harry Naugle  
PO Box 829  
Rifle, CO 81650

**RE: Baseline Groundwater Monitoring Program: Drill Pad PA 22-25**

Dear Mr. Naugle:

Under the Colorado Oil and Gas Conservation Commission (COGCC) Rule 609, all oil and gas operators are required to conduct baseline groundwater sampling and monitoring within one-half mile of a well pad containing new production well(s) or injection well(s). The rule was promulgated to gather baseline water quality data prior to oil and gas development occurring within a particular area and to gather additional water quality data after drilling and completion operations.

Sampling sites may be registered water wells or permitted or adjudicated springs. Up to four groundwater sampling sites will be included in the baseline sampling and monitoring program within the one-half mile radius of the well pad. Sampling of these groundwater sites will occur three times; once within 12 months prior to drilling the first well on the pad, once between 6 and 12 months after completion of the last well on the pad, and once between 60 and 72 months after completion of the last well on the pad. Final water quality results of each sample will be provided to the well or spring owner and to the COGCC.

TEP Rocky Mountain, LLC (TEP) is planning on constructing Drill Pad PA 22-25 and/or a new well located in SE<sup>1</sup>/<sub>4</sub>, NW<sup>1</sup>/<sub>4</sub>, Section 25, Township 6S, Range 95W, 6<sup>th</sup> P.M. Our research of state databases indicates that you may own property and/or hold one or more state permits or water right decrees for wells or springs located on property within 0.5 miles of the well pad. These identified wells and/or springs are listed below:

1. **Naugle Well (Water Well Permit No. 64071-F):** Latitude/Longitude (decimal degrees): 39.497267, -107.944418  
Water Right Case No.: W0123
2. **Naugle Well No. 2 (Water Well Permit No. 67992-F):** Latitude/Longitude (decimal degrees): 39.499687, -107.941424  
Water Right Case No.: W0123

These structures may qualify for baseline sampling and monitoring under Rule 609. If you do not have a well or spring on your property, or if you choose not to have your well or spring sampled for baseline water quality under Rule 609, please indicate so on the Acknowledgment Form provided in this letter.

This Acceptance Letter and Acknowledgment Form apply to the above water sources only. You may receive additional Acknowledgment Forms in the future for other water sources under your ownership or control that are related to other planned TEP drill pads or wells. Your decision to approve or decline participation in the baseline water quality program for the above water sources will also apply for new future TEP drill pads and wells other than Drill Pad PA 22-25 that are located within the 0.5 mile distance of these water sources. In these cases, a new Acknowledgment Form will not be mailed to you.

If you chose to include your well or spring in the Baseline Groundwater Sampling and Monitoring Program, please complete the attached questionnaire prepared by TEP to evaluate the groundwater source(s). The questionnaire is intended to assist TEP in the assessment of the best potential baseline groundwater monitoring sites.

Completion of the attached questionnaire is not required for consideration of your well or spring for the program, but final selection of sampling sites may be partially dependent on the results of the questionnaire. Completing the questionnaire and approval to sample your water source does not guarantee that your well or spring will be selected for the baseline sampling and monitoring program. Completed questionnaires will be confidential except for information that is required to be reported to the state.

If you agree to have your well or spring become a monitoring site for the program, and said well or spring is selected for sampling and monitoring, water quality data results will be provided to you and to the COGCC within 3 months of sample collection. Please note that the COGCC will make the results public by posting the results on the agency's public database and that by signing below to agree to have your well sampled, you also grant TEP permission to provide the data results to the COGCC and the COGCC's public database.

Please sign and date the attached Acknowledgment Form indicating your choice of participation in the program and return the form using the included pre-addressed envelope. If TEP does not receive this executed letter within 30 days from the date above, TEP will consider that you do not want to participate in the program. Please contact your TEP land representative at 970-285-9377, or myself at 970-263-2760, with any questions you may have. We appreciate your time and cooperation.

If at any time after returning the Acknowledgment Form you change your mind about your response, you may revise your response by contacting TEP.

Sincerely,

Michael Gardner  
Environmental Specialist, TEP Rocky Mountain, LLC

## Baseline Groundwater Quality Monitoring Program Acknowledgment Form

I \_\_\_\_\_ (print name), acknowledge that I have been contacted by TEP regarding the possible qualification of my well or spring as a Water Source for baseline groundwater sampling and monitoring under the COGCC Rule 609 associated with TEP Drill Pad PA 22-25, located in SE¼, NW¼, Section 25, Township 6S, Range 95W, 6<sup>th</sup> P.M. If I agree to have my well or spring water sampled for water quality parameters, I understand that the resulting data will be submitted to the COGCC and will be part of a public database. I understand that if my well or spring is selected as an Available Water Source, I will be contacted by TEP representatives to schedule sample collection. I understand that the baseline groundwater program involves three separate sampling events over a period of time. In addition, I understand that this acknowledgment applies to future new drill pads or wells other than TEP Drill Pad PA 22-25 where the specific water sources may be in question under the COGCC Rule 609.

\_\_\_\_\_ **I DO** want the following well(s) or spring(s) to be monitored for baseline groundwater quality in accordance with Rule 609 of the COGCC regulations.

1. **Naugle Well (Water Well Permit No. 64071-F):** Latitude/Longitude (decimal degrees):  
39.497267, -107.944418  
Water Right Case No.: W0123
  
2. **Naugle Well No. 2 (Water Well Permit No. 67992-F):** Latitude/Longitude (decimal degrees):  
39.499687, -107.941424  
Water Right Case No.: W0123

\_\_\_\_\_ **I DO NOT** want my well or spring to be monitored for baseline groundwater quality in accordance with Rule 609 of the COGCC regulations.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Print Name: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

Phone: \_\_\_\_\_

**Baseline Groundwater Quality Monitoring Program  
Acknowledgment Form**

I HARRY NAUGLE (print name), acknowledge that I have been contacted by TEP regarding the possible qualification of my well or spring as a Water Source for baseline groundwater sampling and monitoring under the COGCC Rule 609 associated with TEP Drill Pad PA 22-25, located in SE¼, NW¼, Section 25, Township 6S, Range 95W, 6<sup>th</sup> P.M. If I agree to have my well or spring water sampled for water quality parameters, I understand that the resulting data will be submitted to the COGCC and will be part of a public database. I understand that if my well or spring is selected as an Available Water Source, I will be contacted by TEP representatives to schedule sample collection. I understand that the baseline groundwater program involves three separate sampling events over a period of time. In addition, I understand that this acknowledgment applies to future new drill pads or wells other than TEP Drill Pad PA 22-25 where the specific water sources may be in question under the COGCC Rule 609.

**I DO** want the following well(s) or spring(s) to be monitored for baseline groundwater quality in accordance with Rule 609 of the COGCC regulations.

1. **Naugle Well (Water Well Permit No. 64071-F):** Latitude/Longitude (decimal degrees):  
39.497267, -107.944418  
Water Right Case No.: W0123
2. **Naugle Well No. 2 (Water Well Permit No. 67992-F):** Latitude/Longitude (decimal degrees):  
39.499687, -107.941424  
Water Right Case No.: W0123

**I DO NOT** want my well or spring to be monitored for baseline groundwater quality in accordance with Rule 609 of the COGCC regulations.

Signature: Harry Naugle Date: 8-31-17

Print Name: Harry Naugle

Address: PO Box 829  
Rifle 81650

Phone: 625-1139