

**APPLICATION FOR PERMIT TO:**

**Drill**       Deepen       Re-enter       Recomplete and Operate

TYPE OF WELL    OIL <input type="checkbox"/> GAS <input checked="" type="checkbox"/> COALBED <input type="checkbox"/> OTHER _____	Refiling <input checked="" type="checkbox"/>
ZONE TYPE    SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONES <input type="checkbox"/> COMMINGLE ZONES <input type="checkbox"/>	Sidetrack <input type="checkbox"/>

Date Received: 10/17/2016

Well Name: Huggard RWF      Well Number: 344-35

Name of Operator: TEP ROCKY MOUNTAIN LLC      COGCC Operator Number: 96850

Address: PO BOX 370

City: PARACHUTE      State: CO      Zip: 81635

Contact Name: Vicki Schoeber      Phone: (970)263-2721      Fax: ( )

Email: vschoeber@terraep.com

**RECLAMATION FINANCIAL ASSURANCE**  
Plugging and Abandonment Bond Surety ID: 20160057

**WELL LOCATION INFORMATION**

QtrQtr: NWSE      Sec: 35      Twp: 6S      Rng: 94W      Meridian: 6

Latitude: 39.478863      Longitude: -107.853651

Footage at Surface: <u>1537</u> Feet	FNL/FSL	FEL/FWL
<u>FSL</u> <u>2161</u> Feet	<u>FEL</u>	

Field Name: RULISON      Field Number: 75400

Ground Elevation: 5837      County: GARFIELD

GPS Data:  
Date of Measurement: 01/14/2014    PDOP Reading: 1.8    Instrument Operator's Name: J. KIRKPATRICK

If well is  Directional     Horizontal (highly deviated)    **submit deviated drilling plan.**

Footage at Top of Prod Zone: FNL/FSL	FEL/FWL	Bottom Hole: FNL/FSL	FEL/FWL
<u>192</u> FSL <u>310</u> FEL	<u>192</u> FSL <u>310</u> FEL		
Sec: <u>35</u> Twp: <u>6S</u> Rng: <u>94W</u>	Sec: <u>35</u> Twp: <u>6S</u> Rng: <u>94W</u>		

**LOCATION SURFACE & MINERALS & RIGHT TO CONSTRUCT**

Surface Ownership:  Fee     State     Federal     Indian

The Surface Owner is:  is the mineral owner beneath the location.  
(check all that apply)  is committed to an Oil and Gas Lease.  
 has signed the Oil and Gas Lease.  
 is the applicant.

The Mineral Owner beneath this Oil and Gas Location is:  Fee     State     Federal     Indian

The Minerals beneath this Oil and Gas Location will be developed by this Well: No

The right to construct the Oil and Gas Location is granted by: Surface Use Agreement

Surface damage assurance if no agreement is in place: \_\_\_\_\_      Surface Surety ID: \_\_\_\_\_

**LEASE INFORMATION**

Using standard QtrQtr, Sec, Twp, Rng format, describe one entire mineral lease that will be produced by this well (Describe lease beneath surface location if produced. Attach separate description page or map if necessary.)

LEASE IN THE WELL FILE.

Total Acres in Described Lease: 1167 Described Mineral Lease is:  Fee  State  Federal  Indian

Federal or State Lease # COC07506

Distance from Completed Portion of Wellbore to Nearest Lease Line of described lease: 1117 Feet

**CULTURAL DISTANCE INFORMATION**

Distance to nearest:

Building: 1490 Feet  
 Building Unit: 1623 Feet  
 High Occupancy Building Unit: 5280 Feet  
 Designated Outside Activity Area: 5280 Feet  
 Public Road: 1848 Feet  
 Above Ground Utility: 1859 Feet  
 Railroad: 5280 Feet  
 Property Line: 213 Feet

**INSTRUCTIONS:**

- All measurements shall be provided from center of the Proposed Well to nearest of each cultural feature as described in Rule 303.a.(5).  
 - Enter 5280 for distance greater than 1 mile.  
 - Building - nearest building of any type. If nearest Building is a Building Unit, enter same distance for both.  
 - Building Unit, High Occupancy Building Unit, and Designated Outside Activity Area - as defined in 100-Series Rules.

**DESIGNATED SETBACK LOCATION INFORMATION**

Check all that apply. This location is within a:  Buffer Zone  
 Exception Zone  
 Urban Mitigation Area

- Buffer Zone – as described in Rule 604.a.(2), within 1,000' of a Building Unit  
 - Exception Zone - as described in Rule 604.a.(1), within 500' of a Building Unit.  
 - Urban Mitigation Area - as defined in 100-Series Rules.

Pre-application Notifications (required if location is within 1,000 feet of a building unit):

Date of Rule 305.a.(1) Urban Mitigation Area Notification to Local Government: \_\_\_\_\_

Date of Rule 305.a.(2) Buffer Zone Notification to Building Unit Owners: \_\_\_\_\_

**SPACING and UNIT INFORMATION**

Distance from completed portion of proposed wellbore to nearest completed portion of offset wellbore permitted or completed in the same formation: 908 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 192 Feet (Enter 5280 for distance greater than 1 mile.)

Federal or State Unit Name (if appl): \_\_\_\_\_ Unit Number: \_\_\_\_\_

**SPACING & FORMATIONS COMMENTS**

CA - COC0128379, all of Sec. 35. - MVRD

**OBJECTIVE FORMATIONS**

Objective Formation(s)	Formation Code	Spacing Order Number(s)	Unit Acreage Assigned to Well	Unit Configuration (N/2, SE/4, etc.)
WILLIAMS FORK	WMFK	139-66	640	All of Sec. 35

## DRILLING PROGRAM

Proposed Total Measured Depth: 8621 Feet

Distance from the proposed wellbore to nearest existing or proposed wellbore belonging to another operator, including plugged wells:

Enter distance if less than or equal to 1,500 feet: 127 Feet  No well belonging to another operator within 1,500 feet

Will a closed-loop drilling system be used? Yes

Is H<sub>2</sub>S gas reasonably expected to be encountered during drilling operations at concentrations greater than or equal to 100 ppm? No (If Yes, attach an H<sub>2</sub>S Drilling Operations Plan)

Will salt sections be encountered during drilling? No

Will salt based (>15,000 ppm Cl) drilling fluids be used? No

Will oil based drilling fluids be used? No

BOP Equipment Type:  Annular Preventor  Double Ram  Rotating Head  None

## GROUNDWATER BASELINE SAMPLING AND MONITORING AND WATER WELL SAMPLING

Water well sampling required per Rule 609

## DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE Drilling Fluids Disposal Methods: Recycle/reuse

Cuttings Disposal: ONSITE Cuttings Disposal Method: Cuttings trench

Other Disposal Description:

Beneficial reuse or land application plan submitted? No

Reuse Facility ID: \_\_\_\_\_ or Document Number: \_\_\_\_\_

## CASING PROGRAM

Casing Type	Size of Hole	Size of Casing	Wt/Ft	Csg/Liner Top	Setting Depth	Sacks Cmt	Cmt Btm	Cmt Top
CONDUCTOR	26	18	48	0	60	25	60	0
SURF	13+1/2	9+5/8	32.3	0	1141	301	1141	0
1ST	8+3/4	4+1/2	11.6	0	8621	980	8621	

Conductor Casing is NOT planned

## DESIGNATED SETBACK LOCATION EXCEPTIONS

Check all that apply:

- Rule 604.a.(1)A. Exception Zone (within 500' of Building Unit)
- Rule 604.b.(1)A. Exception Location (existing or approved Oil & Gas Location now within a Designated Setback as a result of Rule 604.a.)
- Rule 604.b.(1)B. Exception Location (existing or approved Oil & Gas Location is within a Designated Setback due to Building Unit construction after Location approval)
- Rule 604.b.(2) Exception Location (SUA or site-specific development plan executed on or before August 1, 2013)
- Rule 604.b.(3) Exception Location (Building Units constructed after August 1, 2013 within setback per an SUA or site-specific development plan)

## GREATER WATTENBERG AREA LOCATION EXCEPTIONS

Check all that apply:

- Rule 318A.a. Exception Location (GWA Windows).
- Rule 318A.c. Exception Location (GWA Twinning).

## RULE 502.b VARIANCE REQUEST

Rule 502.b. Variance Request from COGCC Rule or Spacing Order Number \_\_\_\_\_

### OTHER LOCATION EXCEPTIONS

Check all that apply:

Rule 318.c. Exception Location from Rule or Spacing Order Number \_\_\_\_\_

Rule 603.a.(2) Exception Location (Property Line Setback).

ALL exceptions and variances require attached Request Letter(s). Refer to applicable rule for additional required attachments (e.g. waivers, certifications, SUAs).

### OPERATOR COMMENTS AND SUBMITTAL

Comments

This permit refile is to allow for changes in the TEP Rocky Mountain LLC drilling schedule. No changes have been made to the surface hole location, bottomhole location, lease description or surface use since the original permit was issued.

The distance from proposed wellbore to nearest existing/permitted wellbore belonging to another operator was derived by using the COGCC map, and measuring the shortest distance from this well's proposed directional wellbore path to the Burns #9-35-6-94W vertical well. Based on measurements from the COGCC map, the proposed BHL of the RWF 344-35 is over 1600 ft from the BHL of the Burns #9-35-6-94W well, and therefore a stimulation consent is not necessary.

This application is in a Comprehensive Drilling Plan No CDP #: \_\_\_\_\_

Location ID: 323894

Is this application being submitted with an Oil and Gas Location Assessment application? No

I hereby certify all statements made in this form are, to the best of my knowledge, true, correct, and complete.

Signed: \_\_\_\_\_ Print Name: Vicki Schoeber

Title: Regulatory Specialist Date: 10/17/2016 Email: vschoeber@terraep.com

Operator must have a valid water right or permit allowing for industrial use or purchased water from a seller that has a valid water right or permit allowing for industrial use, otherwise an application for a change in type of use is required under Colorado law. Operator must also use the water in the location set forth in the water right decree or well permit, otherwise an application for a change in place of use is required under Colorado law. Section 37-92-103(5), C.R.S. (2011).

Based on the information provided herein, this Application for Permit-to-Drill complies with COGCC Rules and applicable orders and is hereby approved.

COGCC Approved: *Matthew Lee* Director of COGCC Date: 12/30/2016

Expiration Date: 12/29/2018

**API NUMBER**

05 045 22562 00

## Conditions Of Approval

All representations, stipulations and conditions of approval stated in the Form 2A for this location shall constitute representations, stipulations and conditions of approval for this Form 2 Permit-to-Drill and are enforceable to the same extent as all other representations, stipulations and conditions of approval stated in this Permit-to-Drill.

<u>COA Type</u>	<u>Description</u>
	If conductors are preset, operator shall comply with Notice to Operators: Procedures for Preset Conductors (dated September 1, 2016, revised October 6, 2016).
	If the well has not been drilled by the expiration of the 2A (11/3/2017) a new form 2A must be submitted.
	<p>1)Operator shall comply with the most current revision of the Northwest Notification Policy.</p> <p>2)Operator shall comply with the most current revision of the Garfield County Rulison Field Notice to Operators, with the following exception: All field notice requirements specified in that Notice to Operators are superseded by the requirements of the most current revision of the Northwest Colorado Notification Policy (see Condition of Approval #1).</p> <p>3)Operator shall provide cement coverage from the production casing shoe (4+1/2" FIRST STRING) to a minimum of 200' above the Lower Wasatch (as defined by COGCC in the report "Casing and Cement Standards for Geologic Isolation Piceance Basin Bradenhead Monitoring Area and Nearby Fields," dated April 18, 2016, COGCC Document No. 2056199, Appendix A Field Scout Cards and Annotated Type Logs) to provide isolation of the Lower Wasatch, all Mesaverde Group formations including the Ohio Creek Formation, and underlying formations, if penetrated. Verify production casing cement coverage with a cement bond log.</p> <p>4)Operator shall provide stage cement or increase cement coverage for production casing (4+1/2" FIRST STRING) to provide coverage from 200' below the Fort Union top (also known locally by operators as the Atwell Gulch Member of the Wasatch Formation) to 200' above the Wasatch G Upper Interval (also known locally by operators as the Molina Member of the Wasatch Formation). These formations are defined by COGCC in the report "Casing and Cement Standards for Geologic Isolation Piceance Basin Bradenhead Monitoring Area and Nearby Fields," dated April 18, 2016, COGCC Document No. 2056199, Appendix A Field Scout Cards and Annotated Type Logs). Isolation is required for offset Wasatch G Sand production or UIC injection. Verify production casing cement coverage with a cement bond log.</p> <p>5)Operator will perform an anti-collision evaluation of all active (producing, shut in, or temporarily abandoned) offset wellbores that have the potential of being within 150 feet of a proposed well prior to drilling operations for the proposed well. Notice shall be given to all offset operators prior to drilling.</p> <p>6)The Operator shall monitor the bradenhead pressure of the proposed well and all offset wells under Operator's control which penetrate the stimulated formation and have a treated interval separation of 300 feet or less. Operator shall also monitor the bradenhead of offset well Barrett RMV 20-35 well (05-045-07562). Monitoring shall occur from 24 hours prior to stimulation and shall continue until 24 hours after stimulation is complete. Recording shall be at a frequency of at least once per 24 hours with the capability of recording the maximum pressure observed during each 24 hour period. Operator shall notify COGCC Engineering staff if bradenhead pressures increase by more than 200 psig.</p>

## Best Management Practices

<b>No</b>	<b>BMP/COA Type</b>	<b>Description</b>
1	Drilling/Completion Operations	TEP will run triple-combo open hole logs from well TD up to base of surface casing on one of the first wells drilled on a multi-well pad. Remaining wells on the pad will be logged with either cased hole pulsed neutron or triple-combo open hole. Every well will also have a CBL log from well TD up through well surface. Form 5 Completion Reports will identify wells on the pad with triple-combo open hole logs.

Total: 1 comment(s)

### Applicable Policies and Notices to Operators

Policy
Piceance Rulison Field - Notice to Operators. <a href="http://cogcc.state.co.us/documents/reg/Policies/NoticeToOp-20060623-2.pdf">http://cogcc.state.co.us/documents/reg/Policies/NoticeToOp-20060623-2.pdf</a>
NW Colorado Notification Policy. <a href="http://cogcc.state.co.us/documents/reg/Policies/nw_notification_procedures.pdf">http://cogcc.state.co.us/documents/reg/Policies/nw_notification_procedures.pdf</a>
Notice Concerning Operating Requirements for Wildlife Protection. <a href="http://cogcc.state.co.us/documents/reg/Policies/Wildlife_Notice.pdf">http://cogcc.state.co.us/documents/reg/Policies/Wildlife_Notice.pdf</a>

### Attachment Check List

<b>Att Doc Num</b>	<b>Name</b>
401129526	FORM 2 SUBMITTED

Total Attach: 1 Files

### General Comments

<b>User Group</b>	<b>Comment</b>	<b>Comment Date</b>
Permit	Final review complete.	12/27/2016
Engineer	<p>Offset water well check: COGCC evaluated offset water wells within one mile of this proposed well's surface hole location. This information was used in addition to locally-available geophysical logs and hydrogeologic information was used to evaluate the adequacy of the operator's proposed surface casing setting depth. The deepest water well within one mile is 250 feet.</p> <p>Offset Well Evaluation: Existing offset oil and gas wells within 1,500 feet of this wellbore meet standards. No mitigation required. However, bradenhead monitoring is required in one offset well, per COA #5.</p> <p>Removed operator's proposed first string cement top. Operator's proposed first string cement top is not adequate to satisfy COGCC's new cement coverage requirements, effective April 18, 2016. Increase cement coverage accordingly, as specified in Conditions of Approval #3 and #4. Addition of a stage tool to the casing design requires approval on a sundry notice.</p>	11/02/2016
Engineer	Emailed operator regarding anti collision BMP or COA (Rule 317.r). Rule 317.s written consent of the operator of the encroached upon wellbore is not required since the portion of this directional Williams Fork wellbore near the offset Wasatch G well is not being permitted for stimulation.	11/01/2016
Permit	Passes completeness. Engineering review will address distance to non-op well on Drilling Tab.	11/01/2016
Permit	Returned to Draft per Operator's Request.	10/27/2016
Permit	<p>Returned to Draft:</p> <ul style="list-style-type: none"> <li>* Need to know how distance from proposed wellbore (127') to nearest existing or proposed wellbore belonging to another operator was calculated.</li> <li>* And if a Stimulation Setback Consent is needed.</li> </ul>	10/24/2016

Total: 6 comment(s)