

**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 _____ ZONE TYPE       SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONES <input checked="" type="checkbox"/> COMMINGLE ZONES <input checked="" type="checkbox"/>	Refiling <input checked="" type="checkbox"/> Sidetrack <input type="checkbox"/>
--	--

Date Received: 01/16/2018

Well Name: FEDERAL      Well Number: RGU 641-27-198  
 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: \_\_\_\_\_

**WELL LOCATION INFORMATION**  
 QtrQtr: LOT 4      Sec: 26      Twp: 1S      Rng: 98W      Meridian: 6  
 Latitude: 39.940241      Longitude: -108.368813  
 Footage at Surface:      Feet      FNL/FSL      Feet      FEL/FWL  
609      Feet      FNL      191      Feet      FWL  
 Field Name: SULPHUR CREEK      Field Number: 80090  
 Ground Elevation: 6590      County: RIO BLANCO  
 GPS Data:  
 Date of Measurement: 02/14/2013      PDOP Reading: 2.7      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  
25      FNL      527      FEL      25      FNL      527      FEL  
 Sec: 27      Twp: 1S      Rng: 98W      Sec: 27      Twp: 1S      Rng: 98W

**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:    Yes  
 The right to construct the Oil and Gas Location is granted by:    oil and gas lease  
 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.)

T1S R98W

SEC. 21: NE/4NE/4, S/2NE/4, NE/4SW/4, S/2SW/4, SE/4

SEC. 22: LOTS 1 (38.84, NE/4NE/4), 2 (38.84, NW/4NE/4), 3 (38.57, NE/4NW/4), 4 (38.57, NW/4NW/4), 5 (38.66, SW/4NW/4), 6 (38.66, SE/4NW/4), 7 (38.86, SW/4NE/4), 8 (38.86, SE/4NE/4), 9 (38.84, NE/4SE/4), 10 (38.84, NW/4SE/4), 11 (38.72, NE/4SW/4) 12 (38.70, NW/4SW/4), 13 (38.78, SW/4SW/4), 14 (38.79, SE/4SW/4), 15 (38.84, SW/4SE/4), 16 (38.84, SE/4SE/4) [ALL]

SEC. 27: LOTS 1 (38.94, NE/4NE/4), 2 (38.90, NW/4NE/4), 3 (38.85, NE/4NW/4), 4 (38.82, NW/4NW/4), 5 (38.85, SW/4NW/4), 6 (38.88, SE/4NW/4), 7 (38.95, SW/4NE/4), 8 (38.99, SE/4NE/4), 9 (38.99, NE/4SE/4), 16 (39.02, SE/4SE/4) [N/2, E/2SE/4]

Total Acres in Described Lease: 1409 Described Mineral Lease is:  Fee  State  Federal  Indian

Federal or State Lease # COC60731

Distance from Completed Portion of Wellbore to Nearest Lease Line of described lease: 527 Feet

**CULTURAL DISTANCE INFORMATION**

Distance to nearest:

Building: 2988 Feet

Building Unit: 2988 Feet

High Occupancy Building Unit: 5280 Feet

Designated Outside Activity Area: 5280 Feet

Public Road: 3430 Feet

Above Ground Utility: 755 Feet

Railroad: 5280 Feet

Property Line: 5280 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: 330 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 3350 Feet (Enter 5280 for distance greater than 1 mile.)

Federal or State Unit Name (if appl): RYAN GULCH UNIT Unit Number: 068239X

**SPACING & FORMATIONS COMMENTS****OBJECTIVE FORMATIONS**

Objective Formation(s)	Formation Code	Spacing Order Number(s)	Unit Acreage Assigned to Well	Unit Configuration (N/2, SE/4, etc.)
ILES	ILES			
SEGO	SEGO			
WILLIAMS FORK	WMFK			

## DRILLING PROGRAM

Proposed Total Measured Depth: 12319 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: \_\_\_\_\_ 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: Other

Other Disposal Description:

Spent drilling fluids are treated with a de-watering unit. Separated mud solids are disposed with the drill cuttings at a well pad location, or at an approved disposal trench. Separated water is re-used for drilling, or disposed at a permitted inj. well.

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	30	18	48	0	80	50	80	0
SURF	14+3/4	9+5/8	36	0	3878	1408	3878	0
1ST	8+3/4	4+1/2	11.6	0	12319	1259	12319	7374

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 refill is to allow for changes in the TEP Rocky Mountain LLC drilling schedule. No changes have been made to the surface hole location, bottom hole location or lease description since the original permit was issued. Pre-set conductors were reported in Form 4 sundry notice (Doc #401222863) which was approved on 6/14/2017.

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

Location ID:       436652      

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:       1/16/2018       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:       2/25/2018      

Expiration Date:       02/24/2020      

<b>API NUMBER</b>
05 103 12092 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>
	Operator shall comply with Notice to Operators: Interim Reclamation Procedures for Delayed Operations (dated January 5, 2017).
	The moisture content of water/bentonite based mud (WBM) generated drill cuttings managed onsite shall be kept as low as practicable to prevent accumulation of liquids greater than de minimis amounts. The operator has indicated in the 'DRILLING WASTE MANAGEMENT PROGRAM SECTION' of the Form 2A; that 'Cuttings Disposal' will be "ONSITE" and that the 'Cuttings Disposal Method' will be "Other", 'Other Disposal Description' as "Spent drilling fluids are treated with a de-watering unit. Separated mud solids are disposed with the drill cuttings at a well pad location, or at an approved disposal trench. Separated water is re-used for drilling, or disposed at a permitted inj. well.". Any proposed offsite disposal or beneficial reuse of cuttings to a previously permitted cuttings trench location or to another oil and gas location shall not occur until approval of a Form 4 Sundry Notice specifying either disposal at a previously permitted cuttings trench location or beneficial reuse at another oil and gas location; as well as a discussion of the proposed cuttings material sampling and characterization methods. Any of the WBM drill cuttings that will remain on the well pad location must be sampled and meet the applicable standards of Table 910-1.
	1)Operator shall comply with the most current revision of the Northwest Colorado Notification Policy.  2)Operator shall provide cement coverage from the production casing shoe (4+1/2" FIRST STRING) to a minimum of 200' above all Mesaverde Group (and Ohio Creek Formation, if present) oil, gas, and water-bearing sandstone and coalbed formations. Verify production casing cement coverage with a cement bond log.

## Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Drilling/Completion Operations	One of the first wells drilled on this pad will be logged with an open-hole resistivity log with gamma-ray, from TD into the surface casing. All wells on the pad will have a cement bond log (CBL) with gamma-ray run on production casing (or on intermediate casing if production liner is run) into the surface casing. The Form 5, Completion Report, for each well on the pad will list all logs run and have those logs attached. The Form 5 for a well without open-hole logs will state "No open-hole logs were run" and will clearly identify the type of log and the well (by API#) in which open-hole logs were run.

Total: 1 comment(s)

## Applicable Policies and Notices to Operators

NW Colorado Notification Policy.  
[http://cogcc.state.co.us/documents/reg/Policies/nw\\_notification\\_procedures.pdf](http://cogcc.state.co.us/documents/reg/Policies/nw_notification_procedures.pdf)

Notice Concerning Operating Requirements for Wildlife Protection.  
[http://cogcc.state.co.us/documents/reg/Policies/Wildlife\\_Notice.pdf](http://cogcc.state.co.us/documents/reg/Policies/Wildlife_Notice.pdf)

## Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
401406767	FORM 2 SUBMITTED

Total Attach: 1 Files

### General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Corrected distance to unit boundary from 5280' to 3350' with operator concurrence. Final review complete.	02/16/2018
Engineer	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 to evaluate the adequacy of the operator's proposed surface casing setting depth. The deepest water well within one mile is 3,001 feet (used for extraction of natural soda). The deviated drilling plan shows the surface casing extending through the Green River Formation.  Offset Well Evaluation: Existing offset oil and gas wells within 1,500 feet of this wellbore meet standards. No mitigation required.	01/31/2018
Permit	Passed Completeness.	01/24/2018

Total: 3 comment(s)