

FORM
2

Rev
12/20

State of Colorado

Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203
Phone: (303) 894-2100 Fax: (303) 894-2109



Document Number:

402579587

Date Received:

09/01/2021

APPLICATION FOR PERMIT TO:

☒ Drill ☐ Deepen ☐ Re-enter ☐ Recomplete and Operate

Amend ☐

TYPE OF WELL OIL ☐ GAS ☒ COALBED ☐ OTHER: _____

Refill ☐

ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐

Sidetrack ☐

| | |
|---|---|
| Well Name: <u>FEDERAL</u> | Well Number: <u>WMC 13-20</u> |
| Name of Operator: <u>TEP ROCKY MOUNTAIN LLC</u> | COGCC Operator Number: <u>96850</u> |
| Address: <u>PO BOX 370</u> | |
| City: <u>PARACHUTE</u> | State: <u>CO</u> Zip: <u>81635</u> |
| Contact Name: <u>Vicki Schoeber</u> | Phone: <u>(970)263-2721</u> Fax: <u>()</u> |
| Email: <u>vschoeber@terraep.com</u> | |

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: _____

WELL LOCATION INFORMATION

Surface Location

QtrQtr: SESW Sec: 17 Twp: 7S Rng: 93W Meridian: 6

Footage at Surface: 248 Feet FSL 1816 Feet FWL

Latitude: 39.439072 Longitude: -107.799499

GPS Data: GPS Quality Value: 3.4 Type of GPS Quality Value: PDOP Date of Measurement: 07/28/2020

Ground Elevation: 8869

Field Name: RULISON Field Number: 75400

Well Plan: is ☒ Directional ☐ Horizontal (highly deviated) ☐ Vertical

If Well plan is Directional or Horizontal attach Deviated Drilling Plan and Directional Data.

Subsurface Locations

Top of Productive Zone (TPZ)

Sec: 20 Twp: 7S Rng: 93W Footage at TPZ: 2480 FSL 607 FWL

Measured Depth of TPZ: 7915 True Vertical Depth of TPZ: 7292 FNL/FSL FEL/FWL

Base of Productive Zone (BPZ)

Sec: 20 Twp: 7S Rng: 93W Footage at BPZ: 2480 FSL 607 FWL

Measured Depth of BPZ: 11478 True Vertical Depth of BPZ: 10812 FNL/FSL FEL/FWL

Bottom Hole Location (BHL)

Sec: 20 Twp: 7S Rng: 93W Footage at BHL: 2480 FSL 607 FWL

FNL/FSL FEL/FWL

LOCAL GOVERNMENT PERMITTING INFORMATION

County: GARFIELDMunicipality: N/A

Is the Surface Location of this Well in an area designated as one of State interest and subject to the requirements of §

24-65.1-108 C.R.S.? No

Per § 34-60-106(1)(f)(I)(A) C.R.S., the following questions pertain to the Relevant Local Government approval of the siting of the proposed Oil and Gas Location.

SB 19-181 provides that when "applying for a permit to drill," operators must include proof that they sought a local government siting permit and the disposition of that permit application, or that the local government does not have siting regulations. § 34-60-106(1)(f)(I)(A) C.R.S.

Does the Relevant Local Government regulate the siting of Oil and Gas Locations, with respect to this Location? ☐ Yes ☒ No☐ If yes, in checking this box, I hereby certify that an application has been filed with the local government with jurisdiction to approve the siting of the proposed oil and gas location.

The disposition of the application filed with the Relevant Local Government is: _____ Date of Final Disposition: _____

Comments: TEP Rocky Mountain LLC contacted Garfield County, the local government with jurisdiction over the siting of this proposed oil and gas location on April 20, 2021, and determined that no county permit is required for these wells and therefore per the Garfield County Land Use and Development Code, Table 3-403, "Oil and Gas Drilling and Production" and "Hydraulic Fracturing, Remote Surface Locations" are a use-by-right or exempt from Land Use Regulation, if the application does not trigger an Alternative Location Analysis.

SURFACE AND MINERAL OWNERSHIP AT WELL'S OIL & GAS LOCATIONSurface Owner of the land at this Well's Oil and Gas Location: ☐ Fee ☐ State ☒ Federal ☐ IndianMineral Owner beneath this Well's Oil and Gas Location: ☐ Fee ☐ State ☒ Federal ☐ Indian

Surface Owner Protection Financial Assurance (if applicable): _____ Surety ID Number (if applicable): _____

MINERALS DEVELOPED BY WELL

The ownership of all the minerals that will be developed by this Well is (check all that apply):

- ☐ Fee
☐ State
☒ Federal
☐ Indian
☐ N/A

LEASE INFORMATION

Using standard QtrQtr, Section, Township, Range format describe one entire mineral lease as follows:

* If this Well is within a unit, describe a lease that will be developed by the Well.

* If this Well is not subject to a unit, describe the lease that will be produced by the Well.

(Attach a Lease Map or Lease Description or Lease if necessary.)

T7S-R93W

Sec 19: Lots 5, 6, 9-12, 17, 18

Sec 20: N2, W2SW4, N2SE4, SW4SE4

Sec 29: Lots 4, 9, 12

Sec 30: S2NE4, NE4SE4, Lots 5, 6, 12

Total Acres in Described Lease: 1161 Described Mineral Lease is: ☐ Fee ☐ State ☒ Federal ☐ IndianFederal or State Lease # COC075070**SAFETY SETBACK INFORMATION**

Distance from Well to nearest:

INSTRUCTIONS:

- Specify all distances per Rule 308.b.(1).

Building: 4458 Feet
Building Unit: 5280 Feet
Public Road: 5280 Feet
Above Ground Utility: 5280 Feet
Railroad: 5280 Feet
Property Line: 248 Feet

- 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 – as defined in 100 Series Rules.

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 | 1-229 | | |

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

SUBSURFACE MINERAL SETBACKS

Enter 5280 for distance greater than 1 mile.

Is this Well within a unit? No

If YES:

Enter the minimum distance from the Completed Zone of this Well to the Unit Boundary: Feet

Enter the minimum distance from the Completed Zone of this Well to the Completed Zone of an offset Well within the same unit permitted or completed in the same formation: Feet

If NO:

Enter the minimum distance from the Completed Zone of this Well to the Lease Line of the described lease: 650 Feet

Enter the minimum distance from the Completed Zone of this Well to the Completed Zone of an offset Well producing from the same lease and permitted or completed in the same formation: 336 Feet

Exception Location

☐ If this Well requires the approval of a Rule 401.c Exception Location, enter the Rule or spacing order number and attach the Exception Location Request and Waivers.

SPACING & FORMATIONS COMMENTS

DRILLING PROGRAM

Proposed Total Measured Depth: 11628 Feet

TVD at Proposed Total Measured Depth 10962 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 H₂S gas reasonably expected to be encountered during drilling operations at concentrations greater than

or equal to 100 ppm? No If yes, attach an H₂S Drilling Plan unless a plan was already submitted with the Form 2A per Rule 304.c.(10).

Will there be hydraulic fracture treatment at a depth less than 2,000 feet in this well? No

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

Beneficial reuse or land application plan submitted? No

Reuse Facility ID: _____ or Document Number: _____

CASING PROGRAM

| Casing Type | Size of Hole | Size of Casing | Grade | Wt/Ft | Csg/Liner Top | Setting Depth | Sacks Cmt | Cmt Btm | Cmt Top |
|-------------|--------------|----------------|-------|-------|---------------|---------------|-----------|---------|---------|
| CONDUCTOR | 30 | 20 | X-65 | 78.67 | 0 | 84 | 199 | 84 | 0 |
| SURF | 13+1/2 | 9+5/8 | J-55 | 36 | 0 | 1100 | 285 | 1100 | 0 |
| 1ST | 8+3/4 | 4+1/2 | P-110 | 11.6 | 0 | 11628 | 1034 | 11628 | 6921 |

☐ Conductor Casing is NOT planned

POTENTIAL FLOW AND CONFINING FORMATIONS

| Zone Type | Formation /Hazard | Top M.D. | Top T.V.D. | Bottom M.D. | Bottom T.V.D. | TDS (mg/L) | Data Source | Comment |
|-----------------|-------------------|----------|------------|-------------|---------------|------------|------------------|----------------------------------|
| Groundwater | Green River | 0 | 0 | 909 | 900 | 501-1000 | Other | Surface Water/Rose Stream Sample |
| Confining Layer | U. Wasatch | 909 | 900 | 5217 | 4832 | | | |
| Hydrocarbon | Wasatch G | 5217 | 4832 | 7046 | 6500 | | | Non-Productive Zone |
| Confining Layer | Ft Union | 7046 | 6500 | 7421 | 6842 | | | |
| Groundwater | L. Wasatch | 7421 | 6842 | 7915 | 7292 | >10000 | Field Scout Card | |
| Hydrocarbon | Mesaverde | 7915 | 7292 | 9478 | 8812 | | | |
| Hydrocarbon | Top Gas | 9478 | 8812 | 10708 | 10042 | | | |
| Hydrocarbon | Cameo | 10708 | 10042 | 11478 | 10812 | | | |
| Hydrocarbon | Rollins | 11478 | 10812 | 11628 | 10962 | | | |

OPERATOR COMMENTS AND SUBMITTAL

Comments: Nearest offset well producing from the same lease and permitted or completed in the same formation: FEDERAL WMC 512-20 (Doc #402579518)

OGDP application (Docket #210500082) and Form 2A (Doc #402578943) approved on 9/1/2021.

This application is in a Comprehensive Area Plan No CAP #: _____

OGDP ID#: 480230 OGDP Name: FEDERAL WMC 24-17 Expiration Date: _____

Location ID: 480732 Location Name: _____

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: 9/1/2021 _____

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, applicable orders, and SB 19-181 and is hereby approved.

COGCC Approved:  _____

Director of COGCC

Date: 9/21/2021 _____

Expiration Date: 09/20/2024 _____

API NUMBER

05 045 24496 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.

Condition of Approval**COA Type****Description**

Drilling/Completion Operations

- 1.Operator shall comply with the most current revision of the Northwest Notification Policy.
- 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).
- 3.Operator shall comply with the Notice to Operators Drilling Wells in the Buzzard, Mamm Creek, and Rulison fields, Garfield County and Mesa County – Procedures and Submittal Requirements for Compliance with COGCC Order Nos. 1-107, 139-56, 191-22, and 369-2 (July 8, 2010).
- 4.Operator shall provide cement coverage from the production casing shoe (4 1/2" FIRST STRING) to a minimum of 500' 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.
- 5.During stimulation, operator shall monitor the bradenhead, casing, and tubing 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 notify COGCC Engineering staff if bradenhead pressures increase by more than 200 psig.

Interim Reclamation

Operator shall comply with Notice to Operators: Interim Reclamation Procedures for Delayed Operations (dated January 5, 2017).

2 COAs

Best Management Practices

| <u>No</u> | <u>BMP/COA Type</u> | <u>Description</u> |
|-----------|--------------------------------|---|
| 1 | Drilling/Completion Operations | Alternative Logging Program: 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 "Alternative Logging Program - 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

Piceance Rulison Field - Notice to Operators.

<http://cogcc.state.co.us/documents/reg/Policies/NoticeToOp-20060623-2.pdf>

NW Colorado Notification Policy.

http://cogcc.state.co.us/documents/reg/Policies/nw_notification_procedures.pdf

Bradenhead Pressure Reporting-Garfield County (Mamm Creek & Rulison Fields) Mesa County (Buzzard Field).

http://cogcc.state.co.us/documents/reg/Policies/NT0_07082010.pdf

Attachment List

| <u>Att Doc Num</u> | <u>Name</u> |
|--------------------|----------------------------|
| 402579587 | FORM 2 SUBMITTED |
| 402583671 | WELL LOCATION PLAT |
| 402583673 | DIRECTIONAL DATA |
| 402583675 | DEVIATED DRILLING PLAN |
| 402810797 | OffsetWellEvaluations Data |
| 402810883 | OffsetWellEvaluations Data |
| 402818117 | OFFSET WELL EVALUATION |

Total Attach: 7 Files

General Comments

| <u>User Group</u> | <u>Comment</u> | <u>Comment Date</u> |
|-------------------|--|---------------------|
| Permit | Final Review Completed. | 09/21/2021 |
| Engineer | Surface hole location is within Lower Wasatch 500 ft. coverage area Offset water well check: COGCC evaluated offset water wells within one mile of this proposed well's surface hole location. This information 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 12 feet. Offset Well Evaluation: Existing offset oil and gas wells within 1,500 feet of this wellbore meet standards. No mitigation required. | 09/14/2021 |
| Engineer | Need offset well evaluation Review complete once offset eval is uploaded | 09/14/2021 |
| Permit | Passed Permitting review. | 09/13/2021 |
| OGLA | The Commission approved OGDG #480230 on 09/01/2021 for the TEP Federal WMC 24-17 Oil and Gas Location (Location ID #480732) related to this Form 2. | 09/07/2021 |

Total: 5 comment(s)