

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:

402630872

Date Received:

03/17/2021

APPLICATION FOR PERMIT TO:

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

Amend ☐

TYPE OF WELL OIL ☐ GAS ☒ COALBED ☐ OTHER: UNPLANNED SIDETRACK

Refill ☐

ZONE TYPE SINGLE ZONE ☐ MULTIPLE ZONES ☒ COMMINGLE ZONES ☒

Sidetrack ☒

Well Name: FEDERAL Well Number: RG 543-18-297
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

Surface Location

QtrQtr: NWNE Sec: 18 Twp: 2S Rng: 97W Meridian: 6
Footage at Surface: 691 Feet FNL 2119 Feet FEL
Latitude: 39.881728 Longitude: -108.322789
GPS Data: GPS Quality Value: 3.2 Type of GPS Quality Value: PDOP Date of Measurement: 08/23/2019
Ground Elevation: 6621
Field Name: SULPHUR CREEK Field Number: 80090

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: 18 Twp: 2S Rng: 97W Footage at TPZ: 1656 FSL 686 FEL
Measured Depth of TPZ: 8331 True Vertical Depth of TPZ: 7631 FNL/FSL FEL/FWL

Base of Productive Zone (BPZ)

Sec: 18 Twp: 2S Rng: 97W Footage at TPZ: 1656 FSL 686 FEL
Measured Depth of TPZ: 12494 True Vertical Depth of TPZ: 11711 FNL/FSL FEL/FWL

Bottom Hole Location (BHL)

Sec: 18 Twp: 2S Rng: 97W Footage at BHL: 1656 FSL 686 FEL
FNL/FSL FEL/FWL

LOCAL GOVERNMENT PERMITTING INFORMATION

County: RIO BLANCO Municipality: 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: Approved Date of Final Disposition: 04/20/2020

Comments: Rio Blanco County approved the Oil or Gas Well Pad Special Use/Building Permit #COGW-0002-20 on 4/20/2020.

SURFACE AND MINERAL OWNERSHIP AT WELL'S OIL & GAS LOCATION

Surface Owner of the land at this Well's Oil and Gas Location: ☐ Fee ☐ State ☒ Federal ☐ Indian

Mineral 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.)

T2S-R97W
SEC 18: S2NE4, E2W2, SE4, LOTS 1-4
T2S-R98W
SEC 12: N2SW4, S2NW4, SW4NE4, NE4NW4, LOTS 17-20
SEC 13: LOTS 1-12, SW4
SEC 14: E2SE4, LOTS 1, 8
SEC 23: E2NE4, N2SE4, SW4NE4
SEC 24: N2, N2S2

Total Acres in Described Lease: 2371 Described Mineral Lease is: ☐ Fee ☐ State ☒ Federal ☐ Indian

Federal or State Lease # COC0003453

SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 2454 Feet

INSTRUCTIONS:

- Specify all distances per Rule 308.b.(1).
- Enter 5280 for distance greater than 1 mile.

Building Unit: 5280 Feet
Public Road: 5280 Feet
Above Ground Utility: 5280 Feet
Railroad: 5280 Feet
Property Line: 5195 Feet

- 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.)
ILES	ILES	1-229		
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: 686 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: _____ 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: 12494 Feet

TVD at Proposed Total Measured Depth 11711 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

<u>Casing Type</u>	<u>Size of Hole</u>	<u>Size of Casing</u>	<u>Grade</u>	<u>Wt/Ft</u>	<u>Csg/Liner Top</u>	<u>Setting Depth</u>	<u>Sacks Cmt</u>	<u>Cmt Btm</u>	<u>Cmt Top</u>
CONDUCTOR	30	20	X-65	78.67	0	84	199	80	0
SURF	13+1/2	9+5/8	J-55	36	0	3360	612	3360	1323
1ST	8+3/4	4+1/2	P-110	11.6	0	12494	977	12494	6977
	14+3/4	9+5/8		Stage Tool		1323	548	1323	0

☐ Conductor Casing is NOT planned

POTENTIAL FLOW AND CONFINING FORMATIONS

<u>Zone Type</u>	<u>Formation /Hazard</u>	<u>Top M.D.</u>	<u>Top T.V.D.</u>	<u>Bottom M.D.</u>	<u>Bottom T.V.D.</u>	<u>TDS (mg/L)</u>	<u>Data Source</u>	<u>Comment</u>
Groundwater	Uinta	0	0	922	901	1001-10000	Other	Division of Reclamation, Mining and Safety Study
Groundwater	Green River	922	901	1100	1061	501-1000	Other	Division of Reclamation, Mining and Safety Study
Groundwater	A Groove	1100	1061	1305	1246	501-1000	Other	Division of Reclamation, Mining and Safety Study
Groundwater	B Groove	1305	1246	1654	1561	501-1000	Other	Division of Reclamation, Mining and Safety Study
Subsurface Hazard	Dissolution Surface	1654	1561	2554	2416			Lost Circulation Zone
Subsurface Hazard	Orange Marker	2544	2416	2763	2621			Lost Circulation Zone
Confining Layer	Wasatch	2763	2621	5330	4941			
Subsurface Hazard	Top of G Sand	5330	4941	5726	5271			Lost Circulation Zone
Hydrocarbon	Fort Union	5726	5271	7237	6541			
Hydrocarbon	U. Mesaverde	7237	6541	8408	7631			
Subsurface Hazard	Ohio Creek	7237	6541	8408	7631			Lost Circulation Zone
Hydrocarbon	Approx. Top Gas	8408	7631	10763	9981			
Hydrocarbon	Cameo Coals	10763	9981	11343	10561			
Hydrocarbon	Rollins SS	11343	10561	11493	10711			
Hydrocarbon	Cozzette	11493	10711	11713	10931			
Hydrocarbon	Corcoran	11713	10931	12073	11291			
Hydrocarbon	Upper Sego	12073	11291	12373	11591			
Hydrocarbon	Lower Sego	13737	11591	12494	11711			

OPERATOR COMMENTS AND SUBMITTAL

Comments

TEP Rocky Mountain LLC (TEP) plans to plug back the Federal RG 543-18-297 well due to a parted mud motor left in the hole. Equipment left in hole was the rotor, lower half of mud motor and drill bit. After two failed fishing attempts the decision was made to plug back and perform sidetrack operations. TEP is requesting approval to execute the following plug back and sidetrack plan. Please see the attached plug back and sidetrack plan and wellbore diagram for plan specifics. There will be no changes to the original permitted bottom hole location or objective formations.

- b) Original Hole TD 8894' MD
- c) 9 5/8" 36# J55 LTC Surface casing set 3360.5' MD
- d) Fish in the hole – Mud motor and 8 3/4" PDC bit
Fish bottom MD - 8894'
Top of fish MD - 8860'
- e) Cementing procedure and plug depths – attached
- f) Cementing procedure and plug depths – attached
- g) Sidetrack KOP – 7961' MD - wellbore diagram – attached
- h) Objective formations with the new well bore are the same as permitted.
- i) No changes to the BHL – Same as permitted

Verbal approval received from Craig Burger, COGCC Western Region Engineering Supervisor on March 17, 2021. A copy of the email is attached.

This application is in a Comprehensive Area Plan No CAP #: _____
Oil and Gas Development Plan Name _____ OGDP ID#: _____
Location ID: 316591

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: 3/17/2021 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: 3/23/2021

Expiration Date: 03/22/2024

API NUMBER

05 103 12465 01

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.

COA Type

Description

Drilling/Completion Operations	1)Operator shall comply with the most current revision of the Northwest Colorado Notification Policy. See attached notice. 2)Operator shall provide cement coverage from the production casing shoe (4+1/2" FIRST STRING) to a minimum of 200' above all Mesa Verde 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.
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Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Drilling/Completion Operations	Alternative Logging Program: The Federal RG 41-18-297D (API #05-103-10906), the first well drilled on this pad was logged with an open-hole resistivity log with gammaray, 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

NW Colorado Notification Policy.
http://cogcc.state.co.us/documents/reg/Policies/nw_notification_procedures.pdf

Attachment List

<u>Att Doc Num</u>	<u>Name</u>
402630872	FORM 2 SUBMITTED
402631431	DIRECTIONAL DATA
402631432	DEVIATED DRILLING PLAN
402631433	CORRESPONDENCE
402631436	OTHER
402631660	WELLBORE DIAGRAM

Total Attach: 6 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed.	03/18/2021
Engineer	Original Approved Form 2 APD is DOC#402346430 Updated MD on PFZ table to match deviated drillin plan DOC# 402631432 Surface casing has been set and cemented.	03/18/2021
Permit	Passed Permit review.	03/18/2021

Total: 3 comment(s)