

FORM  
2

Rev  
08/16

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:

401043021

APPLICATION FOR PERMIT TO:

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

TYPE OF WELL OIL ☐ GAS ☒ COALBED ☐ OTHER \_\_\_\_\_

Refiling ☒

Date Received:

05/11/2016

ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐

Sidetrack ☐

Well Name: Mead

Well Number: RWF 41-23

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: VICKI.SCHOEBER@WPXENERGY.COM

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20030107

WELL LOCATION INFORMATION

QtrQtr: NESE Sec: 23 Twp: 6S Rng: 94W Meridian: 6

Latitude: 39.510043 Longitude: -107.846919

Footage at Surface: 2304 Feet FNL/FSL FSL 204 Feet FEL/FWL FEL

Field Name: RULISON Field Number: 75400

Ground Elevation: 5604 County: GARFIELD

GPS Data:

Date of Measurement: 01/13/2009 PDOP Reading: 2.3 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  
726 FNL 711 FEL 726 FNL 711 FEL  
Sec: 23 Twp: 6S Rng: 94W Sec: 23 Twp: 6S Rng: 94W

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.)

T6S R94W

SEC. 23: LOTS 1 (37.40 NE/4NE/4), 3 (26.50 SE/4NW/4), 4 (37.50 SW/4NW/4), NWNE, N/2NW,  
AND ALSO INCLUDING ANY MEANDER LANDS, ACCRETION RIGHTS, AND RIPARIAN RIGHTS WHICH MAY BE OWNED OR  
CLAIMED BY LESSOR.  
FROM THE SURFACE TO BASE OF MV FORMATION

Total Acres in Described Lease: 221 Described Mineral Lease is: ☒ Fee ☐ State ☐ Federal ☐ Indian

Federal or State Lease # \_\_\_\_\_

Distance from Completed Portion of Wellbore to Nearest Lease Line of described lease: 530 Feet

## CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 715 Feet

Building Unit: 702 Feet

High Occupancy Building Unit: 5280 Feet

Designated Outside Activity Area: 5280 Feet

Public Road: 1710 Feet

Above Ground Utility: 820 Feet

Railroad: 2041 Feet

Property Line: 204 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: 296 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 711 Feet (Enter 5280 for distance greater than 1 mile.)

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

## SPACING & FORMATIONS COMMENTS

CA COC60381- 320 acres, E2 of Section 23, top of MVRD to base of 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	479-14	320	N2, NE4SW4 of Sec 23

## DRILLING PROGRAM

Proposed Total Measured Depth: 8888 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: 1850 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	45	25	45	0
SURF	13+1/2	9+5/8	32.3	0	1196	314	1196	0
1ST	8+3/4	4+1/2	11.6	0	8888	998	8888	

☐ 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 WPX Energy Rocky Mountain LLC drilling schedule. No changes have been made to the bottomhole location or lease description since the original permit was issued. A change to the surface hole footage and GPS coordinates were approved via Form 4 sundry 1/5/16.

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

Location ID: 419862

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: 5/11/2016 Email: vicki.schoeber@wpenergy.co

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: 9/9/2016

Expiration Date: 09/08/2018

### API NUMBER

05 045 20049 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.

### COA Type

### Description

	The approved Form 2A for this location will be posted onsite during construction, drilling, and completions operations.
	Approval of this refile APD does not provide relief from compliance with the COGCC Reclamation Rules.
	<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)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. 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	Planning	<ul style="list-style-type: none"> <li>* Share/consolidate corridors for pipeline ROWs to the maximum extent possible.</li> <li>* Maximize the utility of surface facilities by developing multiple wells from a single pad (directional drilling), and by co-locating multipurpose facilities (for example, well pads and compressors) to avoid unnecessary habitat fragmentation and disturbance of additional geographic areas.</li> <li>* Locate roads outside of drainages where possible and outside of riparian habitat.</li> <li>* Avoid constructing any road segment in the channel of an intermittent or perennial stream</li> <li>* Maximize the use of directional drilling to minimize habitat loss/fragmentation</li> <li>* Maximize use of remote completion/frac operations to minimize traffic</li> <li>* Maximize use of remote telemetry for well monitoring to minimize traffic</li> </ul>
2	Drilling/Completion Operations	<ul style="list-style-type: none"> <li>* WPX 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.</li> </ul>
3	Drilling/Completion Operations	<ul style="list-style-type: none"> <li>* Use centralized hydraulic fracturing operations.</li> <li>* Conduct well completions with drilling operations to limit the number of rig moves and traffic.</li> </ul>
4	Interim Reclamation	<ul style="list-style-type: none"> <li>* Remove well pad and road surface materials that are incompatible with post-production land use and re-vegetation requirements</li> <li>* Use only certified weed-free native seed in seed mixes, except for non-native plants that benefit wildlife</li> <li>* WPX Energy will use certified, weed free grass hay, straw, hay or other mulch materials used for the reseeding and reclamation of disturbed areas.</li> <li>* Install exclusionary devices to prevent bird and other wildlife access to equipment stacks, vents and openings.</li> <li>* Reduce visits to well-sites through remote monitoring (i.e. SCADA) and the use of multi-function contractors.</li> </ul>

Total: 4 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>
401043021	FORM 2 SUBMITTED
401051803	DEVIATED DRILLING PLAN
401051804	DEVIATED DRILLING PLAN
401051813	DIRECTIONAL DATA

Total Attach: 4 Files

### General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Waste Management plan matches the approved 2A. Checked box in exceptions section for 604.b.(1)A with operator approval. Final review complete.	8/31/2016 3:33:49 PM
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 was used to evaluate the adequacy of the operator's proposed surface casing setting depth. The deepest water well within one mile is 320 feet. Offset Well Evaluation: Existing offset oil and gas wells within 1,500 feet of this wellbore meet standards. No mitigation required.  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. Per operator, changed distance to nearest well owned by another operator.	6/7/2016 11:07:11 AM
Permit	Passed completeness.	5/30/2016 3:15:32 PM
Permit	Proposed TMD has changed from prior approved APD. Updated deviated drilling plan and directional data are attached.	5/30/2016 3:11:50 PM

Total: 4 comment(s)