

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:

400971170

APPLICATION FOR PERMIT TO:

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

Date Received:

01/18/2016

TYPE OF WELL OIL ☐ GAS ☒ COALBED ☐ OTHER _____Refiling ☐ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐Sidetrack ☐

Well Name: POWDER WASH

Well Number: 19-1

Name of Operator: QEP ENERGY COMPANY

COGCC Operator Number: 10343

Address: 1050 17TH STREET - SUITE 800

City: DENVER State: CO Zip: 80265

Contact Name: MELISSA CUNNINGHAM

Phone: (307)367-4012

Fax: (303)534-6436

Email: melissa.cunningham@qepres.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: _____

WELL LOCATION INFORMATION

QtrQtr: SESE Sec: 19 Twp: 12N Rng: 97W Meridian: 6

Latitude: 40.981498

Longitude: -108.330040

Footage at Surface: 1094 Feet FNL/FSL FSL 1261 Feet FEL/FWL FEL

Field Name: POWDER WASH

Field Number: 69800

Ground Elevation: 6781

County: MOFFAT

GPS Data:

Date of Measurement: 12/03/2015 PDOP Reading: 2.7 Instrument Operator's Name: KIM LITTLE

If well is ☒ Directional ☐ Horizontal (highly deviated) **submit deviated drilling plan.**
 Footage at Top of Prod Zone: FNL/FSL FSL 830 FEL 1250 FSL 830 FEL
 Sec: 19 Twp: 12N Rng: 97W Sec: 19 Twp: 12N Rng: 97W

LOCATION SURFACE & MINERALS & RIGHT TO CONSTRUCT

Surface Ownership: ☐ Fee ☐ State ☒ Federal ☐ IndianThe 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.)

T12N R97W
SEC 19: LOTS 5-8, E/2, E/2W/2
SEC 20: N/2N/2

Total Acres in Described Lease: 766 Described Mineral Lease is: ☐ Fee ☐ State ☒ Federal ☐ Indian

Federal or State Lease # COC-081266

Distance from Completed Portion of Wellbore to Nearest Lease Line of described lease: 830 Feet

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 5280 Feet
Building Unit: 5280 Feet
High Occupancy Building Unit: 5280 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 1786 Feet
Above Ground Utility: 5280 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: 2275 Feet

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

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

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.)
FORT UNION	FTUN			

DRILLING PROGRAM

Proposed Total Measured Depth: 8546 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: 2472 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 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?

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	20	16	45.0	0	80			
SURF	12+1/4	9+5/8	36.0	0	1509	435	1509	0
1ST	7+7/8	4+1/2	11.6	0	8546	1440	8546	0

☐ 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 application is in a Comprehensive Drilling Plan _____ No _____ CDP #: _____

Location ID: _____

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

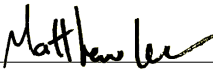
I hereby certify all statements made in this form are, to the best of my knowledge, true, correct, and complete.

Signed: _____ Print Name: MELISSA CUNNINGHAM

Title: REGULATORY ANALYST Date: 1/18/2016 Email: melissa.cunningham@qepres.c

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:  Director of COGCC Date: 10/16/2016

Expiration Date: 10/15/2018

API NUMBER

05 081 07832 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

- 1) Operator shall comply with the most current revision of the Northwest Notification Policy.
- 2) Operator shall provide cement coverage from the production casing shoe (4+1/2" First String) to a minimum of 200' above the surface casing shoe to provide isolation of all Tertiary (including Wasatch Formation and any members of the Green River Formation, if present) oil, gas, and water-bearing sandstone and coalbed formations that are not otherwise covered by surface casing. Verify production casing cement coverage with a cement bond log.
- 3) If dry hole, set 100' open hole cement plug above the Fort Union Formation top, set 100' plug 50' below to 50' above the surface casing shoe (1/2-in 1/2-out), and set 50' cement plug in surface casing at surface.

Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Drilling/Completion Operations	Open-hole Resistivity Log with Gamma Ray Log will be run from TD into the surface casing. A Cement Bond Log with Gamma-Ray will be run on production casing, or on intermediate casing if a production liner is run. The Form 5, Completion Report, will list all logs run and have those logs attached.

Total: 1 comment(s)

Applicable Policies and Notices to Operators

Policy
NW Colorado Notification Policy. 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

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
400971170	FORM 2 SUBMITTED
400971433	WELL LOCATION PLAT
400971646	DIRECTIONAL DATA
400971663	WELLBORE DIAGRAM
400971666	DRILLING PLAN
400971671	DEVIATED DRILLING PLAN
400972950	SURFACE PLAN

Total Attach: 7 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Checked that SO is committed to a lease and has signed the lease with operator approval. Corrected drilling disposal methods in order to match the disposal methods on the 2A. Notified operator. Operator agreed to add 317.p BMP. Final review of this form and the associated 2A are complete.	10/14/2016 7:39:07 AM
OGLA	OGLA corrected distances from Wellhead to Public Road (BLM 62H) from 5280' to 1786' - based on COGCC's review of the complete Surveyor's Package	10/13/2016 2:46:07 PM
Permit	Form 2A has been filed and referenced in the related forms tab. Distance to nearest well in same formation (from 1875' to 2275') and belonging to another operator (from 1875 to 2475') is measured to the Wexpro producing well JC Donnell 14 (API 081-07423) Operator agrees to correction. Added 609 to the water sampling rule with operator approval. Removed the 1094' as distance to the nearest unit boundary, there is no unit and operator agreed. Ready to pass pending 2A review and OGLA approval.	3/7/2016 3:53:56 PM
Permit	Removed bond information because surface and minerals are Fed/Fed with operator approval. Corrected zone type from multiple to single with operator approval. There is no 2A for this location. Corrected Distance to lease line from 1094' to 830' as per operator.	2/8/2016 10:48:32 AM
Engineer	Distance to offset plugged and abandoned well of 1875' is the distance to Donnell, J C #12 (081-06193).	1/21/2016 11:25:20 AM
Engineer	Offset water well check: COGCC evaluated offset water wells within one mile of this proposed well's surface hole location. All permitted water wells within the search radius show zero for reported depths. Depths to formation tops in offset oil and gas wells, locally-available geophysical logs, and hydrogeologic information to evaluate the adequacy of the operator's proposed surface casing setting depth.	1/21/2016 11:21:52 AM
Engineer	The Fort Union and Wasatch formations are considered potential freshwater resources in the Sand Wash Basin (CGS Ground Water Atlas of Colorado, 2003). The proposed surface casing setting depth of 1500' will not cover the entire Wasatch Formation, based on operator's drilling prognosis. Minimum cement coverage requirements to isolate these formations are specified in Condition of Approval #2.	1/21/2016 11:11:43 AM
Engineer	Offset Well Evaluation: Existing offset oil and gas wells within 1,500 feet of this wellbore meet standards. No mitigation required.	1/21/2016 11:10:53 AM
Permit	Passed completeness.	1/20/2016 11:32:23 AM
Permit	Returned to draft. 1. Footages and top of producing zone need to be filled out. 2. Casing set depth is greater than drilling depth. Needs to be measured depth not TVD.	1/19/2016 10:39:58 AM

Total: 10 comment(s)