

APPLICATION FOR PERMIT TO:

Drill

 Deepen

 Re-enter

 Recomplete and Operate

Date Received:
 05/22/2018

TYPE OF WELL OIL <input checked="" type="checkbox"/> GAS <input type="checkbox"/> COALBED <input type="checkbox"/> OTHER _____	Refiling <input type="checkbox"/>
ZONE TYPE SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONES <input type="checkbox"/> COMMINGLE ZONES <input type="checkbox"/>	Sidetrack <input type="checkbox"/>

Well Name: <u>FLASCHENRIEM</u>	Well Number: <u>2</u>
Name of Operator: <u>PETRO OPERATING COMPANY LLC</u>	COGCC Operator Number: <u>10583</u>
Address: <u>9033 E EASTER PLACE SUITE 112</u>	
City: <u>CENTENNIAL</u> State: <u>CO</u> Zip: <u>80112-2105</u>	
Contact Name: <u>ROGER PARKER</u> Phone: <u>(303)475-5640</u> Fax: <u>()</u>	
Email: <u>rogeraparker9@aol.com</u>	

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20150075

WELL LOCATION INFORMATION

QtrQtr: SENW Sec: 3 Twp: 4N Rng: 68W Meridian: 6

Latitude: 40.344130 Longitude: -104.991540

Footage at Surface:	<u>1848</u>	Feet	FNL/FSL	<u>FNL</u>	<u>2180</u>	Feet	FEL/FWL	<u>FWL</u>
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Field Name: WATTENBERG Field Number: 90750

Ground Elevation: 5068 County: WELD

GPS Data:

Date of Measurement: 03/13/2018 PDOP Reading: 1.7 Instrument Operator's Name: Brian Rottinghaus

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
<u>1983</u>	<u>FSL</u>	<u>2199</u>	<u>1994</u>	<u>FSL</u>	<u>460</u>
Sec: <u>34</u>	Twp: <u>5N</u>	Rng: <u>68W</u>	Sec: <u>35</u>	Twp: <u>5N</u>	Rng: <u>68W</u>

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.)

See attached lease map.

Total Acres in Described Lease: 100 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: 0 Feet

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 691 Feet
 Building Unit: 1069 Feet
 High Occupancy Building Unit: 5280 Feet
 Designated Outside Activity Area: 5280 Feet
 Public Road: 2167 Feet
 Above Ground Utility: 823 Feet
 Railroad: 5280 Feet
 Property Line: 525 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: 08/29/2018

Date of Rule 305.a.(2) Buffer Zone Notification to Building Unit Owners: 04/20/2018

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: 535 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 460 Feet (Enter 5280 for distance greater than 1 mile.)

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

SPACING & FORMATIONS COMMENTS

SE/4 Sec. 34 & S/2 Sec. 35-T5N-R68W

OBJECTIVE FORMATIONS

Objective Formation(s)	Formation Code	Spacing Order Number(s)	Unit Acreage Assigned to Well	Unit Configuration (N/2, SE/4, etc.)
CODELL	CODL	407-2138	480	SE/4 S.34 & S/2 S.35

DRILLING PROGRAM

Proposed Total Measured Depth: 15947 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: 89 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 318A

DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE Drilling Fluids Disposal Methods: Commercial Disposal

Cuttings Disposal: OFFSITE Cuttings Disposal Method: Commercial Disposal

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	16	42	0	80	400	80	0
SURF	13+1/2	9+5/8	36	0	1500	940	1500	0
1ST	8+1/2	5+1/2	17	0	15947	2527	15947	

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

In the attached SU and Damage Agreement the Surface Owner consents to the surface location exception of GWA Windows and Twinning contained in Rules 318A.a and 318A.c:

- 1. Page 2, 1.5 – Waiver of Setbacks and Other Requirements.
- 2. Page 4, 2.4a. - Consents to Rules 318A.a and 318A.c(2) .
- 3. Signed Waiver is also attached for the GWA Window & Twinning Rules.

The Surface and Minerals tab question: Distance from Completed Portions of Wellbore to Nearest Lease Line of described lease – A DSU 407-2138 is approved for parts of 2 sections comprising 480 acres and the Mineral Lease reaches across a part of the DSU from north to south, so answer is 0'.

On the Spacing and Formations Tab, Distance from Completed portion of proposed wellbore to nearest completed portion of offset wellbore permitted or completed in the same formation is 535' to the FLASCHENRIEM 1 well, Measurement determined using 3D SYSDRIL SOFTWARE.

On the Drilling & Waste Plans tab, Distance from the proposed wellbore to the nearest existing or proposed wellbore belonging to another operator, including plugged wells is 89' to the AVEX 33-35D, Measurement determined using 3D SYSDRIL SOFTWARE.

A Stimulation Setback Consent is also attached.
The wellbore does not cross lease described but the lease is within DSU.

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? Yes

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

Signed: _____ Print Name: PAUL GOTTLOB

Title: Regulatory & Engin. Tech. Date: 5/22/2018 Email: paul.gottlob@iptenergyservices

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: 3/1/2019

Expiration Date: 02/28/2021

API NUMBER
05 123 49817 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>
	COA: This Permit to Drill is approved subject to all the BMPs and COAs on the most recently approved Form 2A and any subsequently approved Form 4 for the Oil and Gas Location. The most recently approved Form 2A and any subsequent Form 4s containing applicable COAs for this location shall be posted onsite during construction, drilling, and completions operations.
	1) Submit Form 42 electronically to COGCC 48 hours prior to MIRU (Spud Notice), for the first well/activity on the pad and provide 48 hour spud notice for all subsequent wells drilled on the pad. 2) Comply with Rule 317.j and provide cement coverage from the end of production casing to a minimum of 200' above Niobrara. Verify coverage with cement bond log.
	Per COGCC Order 1-232, Bradenhead tests shall be performed according to the following schedule and Form 17 submitted within 10 days of each test: 1) Within 60 days of rig release, prior to stimulation. If any pressure greater than 200 psi, must contact COGCC engineer prior to stimulation. 2) If a delayed completion, 6 months after rig release and prior to stimulation. If any pressure greater than 200 psi, must contact COGCC engineer prior to stimulation. 3) A post-production test within 60 days after first sales, as reported on the Form 10, Certificate of Clearance.

Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Drilling/Completion Operations	Anti-collision: Operator will perform an anti-collision evaluation of all active (producing, shut in, or temporarily abandoned) offset wellbores that have the potential of being within 150 feet of a proposed well prior to drilling operations for the proposed well. Notice shall be given to all offset operators prior to drilling
2	Drilling/Completion Operations	Operator acknowledges and will comply with COGCC policy for Bradenhead Monitoring during Hydraulic Fracturing treatments in the Greater Wattenberg Area dated May 29, 2012.
3	Drilling/Completion Operations	Alternative Logging Program: One of the first wells drilled on the pad will be logged with open-hole resistivity log and gamma-ray log from the kick-off point into the surface casing. All wells on the pad will have a cement bond log with gamma-ray run on production casing (or on intermediate casing if production liner is run) into the surface casing. The horizontal portion of every well will be logged with a measured-while-drilling gamma-ray log. 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 shall state "Alternative Logging Program - No open-hole logs were run" and shall clearly identify the type of log and the well (by API#) in which open-hole logs were run.

Total: 3 comment(s)

Applicable Policies and Notices to Operators

Notice Concerning Operating Requirements for Wildlife Protection.
http://cogcc.state.co.us/documents/reg/Policies/Wildlife_Notice.pdf

Policy for Bradenhead Monitoring During Hydraulic Fracturing Treatments in the Greater Wattenberg Area.
<http://cogcc.state.co.us/documents/reg/Policies/PolicyGwaBradenheadMonitoringFinal.pdf>

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
2473241	EXCEPTION LOC WAIVERS

401611502	FORM 2 SUBMITTED
401612259	MINERAL LEASE MAP
401612262	WELL LOCATION PLAT
401612264	SURFACE AGRMT/SURETY
401638978	DIRECTIONAL DATA
401638980	DEVIATED DRILLING PLAN
401640249	OffsetWellEvaluations Data
401640988	EXCEPTION LOC REQUEST
401644411	STIMULATION SETBACK CONSENT
401957550	OFFSET WELL EVALUATION

Total Attach: 11 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final permitting review Complete. Send to Final Approval. The following changes were made with Operator concurrence: - corrected 317.p. logging BMP	02/28/2019
Permit	Initial permitting review complete and task passed. The following changes were made with Operator concurrence: - corrected Contact information, distance to nearest lease line & comment, Buffer Zone and UMA boxes and dates, and Unit Config. - corrected EXCEPTION LOC WAIVERS attached	11/19/2018
Permit	Contacted Operator for the following corrections: - updated Contact information, distance to nearest lease line, Buffer Zone and UMA boxes and dates, Unit Configuration and well distances, corrected EXCEPTION LOC WAIVERS attachment	11/16/2018
Engineer	Offset Wells Evaluated. Operator has indicated oil-based drilling fluids will not be used.	08/28/2018
Permit	Passed Completeness.	05/29/2018

Total: 5 comment(s)