

FORM
2

Rev
08/13

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:

400550547

APPLICATION FOR PERMIT TO:

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

Date Received:

02/05/2014

TYPE OF WELL OIL ☐ GAS ☐ COALBED ☒ OTHER _____

Refilling ☐

ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐

Sidetrack ☒

Well Name: Fosset Gulch 16U

Well Number: #1

Name of Operator: PETROX RESOURCES INC

COGCC Operator Number: 69805

Address: P O BOX 2600

City: MEEKER

State: CO

Zip: 81641

Contact Name: Mike Clark

Phone: (970)878-5594

Fax: (970)878-4489

Email: mike.petroxcbm@gmail.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20090113

WELL LOCATION INFORMATION

QtrQtr: NENW Sec: 16 Twp: 34N Rng: 5W Meridian: N

Latitude: 37.195770

Longitude: -107.400480

Footage at Surface: 1065 feet FNL/FSL FNL 1787 feet FEL/FWL FWL

Field Name: IGNACIO BLANCO

Field Number: 38300

Ground Elevation: 7286

County: ARCHULETA

GPS Data:

Date of Measurement: 01/30/2014 PDOP Reading: 2.3 Instrument Operator's Name: Scott Weibe

If well is ☐ Directional ☒ Horizontal (highly deviated) **submit deviated drilling plan.**

Footage at Top of Prod Zone: FNL/FSL FNL/FWL Bottom Hole: FNL/FSL FEL/FWL
727 FNL 2119 FWL 1103 FSL 1191 FEL
Sec: 16 Twp: 34N Rng: 5W Sec: 9 Twp: 34N Rng: 5W

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: Yes

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.)

This location and wellpad and road already exist. Petrox will propose a sidetrack out of the existing 7" casing wellbore, and the proposed lateral will be on Fee minerals only. Tract 13 of Fosset Gulch Unit, T34N-R5W. See lease map attached.

Total Acres in Described Lease: 1316 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: 210 Feet

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 4000 Feet

Building Unit: 4000 Feet

High Occupancy Building Unit: 5280 Feet

Designated Outside Activity Area: 5280 Feet

Public Road: 5280 Feet

Above Ground Utility: 4000 Feet

Railroad: 5280 Feet

Property Line: 175 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 Wellbore to Nearest Wellbore Permitted or Completed in the same formation: 275 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 4780 Feet (Enter 5280 for distance greater than 1 mile.)

Federal or State Unit Name (if appl): _____ Unit Number: COC68668X

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.)
FRUITLAND COAL	FRLDC	112-85		

DRILLING PROGRAM

Proposed Total Measured Depth: 5582 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 275 Feet (Including plugged wells)

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 N/A

DRILLING WASTE MANAGEMENT PROGRAM

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

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
SURF	12+1/4	9+5/8	36	0	328	200	385	0
1ST	8+3/4	7	20	0	2902	395	2902	0
1ST LINER	6+1/4	4+1/2	12.75	1950	5582			

☒ 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 is a sidetrack out of the existing 7" casing wellbore. The access road and Pad have been built. A Form 2A is not required for this sidetrack because no pit will be constructed and there will be no additional surface disturbance beyond the originally disturbed area. This location does not need a CDPHE consultation, it does not require a variance from any of the rules listed in 306.d.(1).(A).(ii). The location is not in a wildlife restricted surface occupancy area.

This application is in a Comprehensive Drilling Plan _____ CDP #: _____

Location ID: 320905

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.

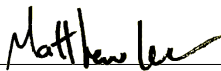
Signed: _____ Print Name: Barbara J Vaughn

Title: Administrative Assistant Date: 2/5/2014 Email: barb.petroxcbm@gmail.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 and applicable orders and is hereby approved.

COGCC Approved: _____



Director of COGCC

Date: 3/29/2014

Expiration Date: 03/28/2016

API NUMBER

05 007 06238 02

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. Fruitland Outcrop Reconnaissance – continue participation in the Fruitland Outcrop Reconnaissance monitoring, including on an every 3 year basis (e.g. 2008, 2011, etc), a low altitude, high-resolution aerial photography will be used to map the vegetation along the Fruitland Formation in those sections of land in T34N R5W, South of Ute Line (SUL) and Sections 9, 13, 14, 15, and 16 in T34N R5W, North of Ute Line (NUL) in which the Fruitland Formation outcrops. This work will coincide with and be tied into similar work conducted in La Plata County under Orders 112-156 and 112-157. Once the aerial IR imagery is reviewed, "suspect" areas requiring further field investigation will be identified. Using a GPS and the IR imagery the suspect areas will be located and surveyed for the presence or absence of methane, carbon monoxide, and hydrogen sulfide WHERE ACCESS IS GRANTED BY THE LANDOWNER. If methane seeps or seeps of other gases from the outcrop of the Fruitland Formation are identified, then Petrox shall develop a plan for mapping the seeps in detail and monitoring the seeps to identify any changes in extent of impacted area, and volume, concentration, composition, and stable isotope ratios. In addition, Petrox shall attempt to identify the cause of the changes.

2. Fruitland Outcrop Spring Survey – continue participation in the regional reconnaissance survey to identify all springs that emanate from or that appear to emanate from the outcrop of the Fruitland Formation in T34N R5W SUL and Sections 9, 13, 14, 15, and 16 in T34N R5W NUL shall be surveyed WHERE ACCESS IS GRANTED BY THE LANDOWNER, including accurately locating each spring using GPS or other land survey technology. Thereafter these springs shall be visited on an

annual basis at approximately the same time of the year as the 2005 survey. Three springs owned by the Candelarias', one located in the SWSE Section 13 T34N R5W, SUL, one located in the SWNW Section 14 T34N R5W SUL, and one located in NWNE Section 15 T34N R5W SUL, shall be included in this annual survey. At a minimum, methane concentration, water chemistry, and flow rate shall be tested and measured. Copies of all test results shall be provided to the COGCC and the landowner within 3 months of collecting the samples used for the tests.

3. IF ACCESS IS GRANTED BY THE LANDOWNER, the crawl spaces of the two houses located at 6551 FS Road 613 (Fosset Gulch Road) in Section 24 T34N R5W SUL shall be monitored one time per year. In addition a soil gas survey shall be conducted around the outside of the two houses one time per year to test for the presence of flammable gas including methane. Copies of all monitoring results shall be provided to the COGCC and the landowner within 3 months of conducting the monitoring.

4. Ground Water Monitoring Program – On an annual basis Petrox will monitor private water wells in those sections of land in T34N R5W SUL and Sections 9, 13, 14, 15, and 16 in T34N R5W, NUL WHERE ACCESS IS GRANTED BY THE LANDOWNER in which the Fruitland Formation outcrops following the parameters established in COGCC Orders 112-156 and 112-157. Prior to start up of any drilling activities, Petrox shall provide the COGCC with a list of all tested water wells, the analytical results, and the locations surveyed using GPS or other accurate method. Copies of all test results shall be provided to the COGCC and the landowner within 3 months of collecting the samples used for the test.

5. Produced Water Limitations – Petrox shall limit water production to less than 100 barrels of water per day per well. Once the wells are online and producing and drilling and completion fluids have been removed from the wells, Petrox shall collect one water sample from each well and analyze these samples for major anions and cations, TDS, pH, conductivity, and other parameters as appropriate. These data shall be provided to the COGCC within 3 months of sample collection by Petrox.

6. Post Completion Pressure Build-Up Test – after completion and prior to sales a bottom hole pressure measurement must be made using a bottom hole gauge after a 48 hour shut-in period. Petrox shall submit these data via form 13 to the COGCC within one month of conducting each test.

7. Plugged and Abandoned Wells - Petrox shall attempt to identify all plugged and abandoned ("P&A") wells located within one mile of a proposed well location. Any P&A well within one mile of a proposed well that is identified shall be assessed for risk taking into account cementing practices reported in the P&A. The operator shall notify the Director of the risk assessment of plugging procedures. The Director shall review the risk assessment and take appropriate action to pursue further investigation and remediation if warranted.

8. Emergency Preparedness Plan (EPP) – Petrox shall submit an EPP to Archuleta County. The EPP shall include as-built facilities maps showing the location of wells, pipelines, and other facilities, except control valve locations that may be held confidential. The EPP shall include an emergency personnel contact list, that must be updated whenever the contact information changes.

- 1) Provide 48 hour notice of spud to via eform 42
- 2) Run and submit Directional Survey from TD to kick-off point
- 3) The operator shall comply with Rule 321, and it shall be the operator's responsibility to ensure that the well bore complies with setback requirements in Commission orders and/or rules prior to producing the well.
- 4) Sample and test two closest water wells within 1/4 mile swath of the directional wellbore.
- 5) Operators are required to obtain a bottom hole pressure utilizing a bottom hole gauge after a minimum 48 hour shut-in period following completion and prior to sales
- 6) Comply with all applicable provisions of Order 112-85

Best Management Practices

No	BMP/COA Type	Description

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
2518952	LEASE MAP
2518965	WELLBORE DIAGRAM AND PROCEDURE
400550547	FORM 2 SUBMITTED
400550675	PLAT
400550678	DEVIATED DRILLING PLAN
400550716	FED. SUNDRY NOTICE
400551836	DEVIATED DRILLING PLAN
400554716	DIRECTIONAL DATA

Total Attach: 8 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final review completed; no LGD or public comment received.	3/25/2014 10:24:33 AM
Permit	A recomplete form needs wellbore diagram and a description of the recomplete process. Operator submitted wellbore diagram but is not current. 2/20/2014. Operator revised wellbore diagram to show both sidetracks.	2/19/2014 2:17:39 PM
Permit	Changed distance to another well completed in the same formation. Bottom hole of this well comes within 230 of the producing interval of the Fosset Gulch Unit 9U 4	2/19/2014 2:15:50 PM
Permit	Changed distance to lease line as measured from productive portion of the well to boundary of tract 13.	2/19/2014 2:15:08 PM
Permit	Surface agreement is attached to well file from previous well APD.	2/13/2014 11:40:42 AM
Permit	Returned to draft: Directional data still not uploading into template in Attachments tab.	2/12/2014 11:34:46 AM
Permit	Returned to draft: Directional data still not uploading into template in Attachments tab.	2/11/2014 10:32:39 AM
Permit	Returned to draft: Directional data must be imported into the prepared excel spreadsheet called a directional data template. Then the directional tool in the form 2 can import the data into the form so that it plats on our maps. This has been a requirement since Jan 2012. Call me at ex 5142.	2/7/2014 10:57:04 AM

Total: 8 comment(s)