

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:

401544743

Date Received:

08/06/2018

APPLICATION FOR PERMIT TO:

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

TYPE OF WELL OIL ☒ GAS ☐ COALBED ☐ OTHER Pilot Hole

Refilling ☐

ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐

Sidetrack ☐

Well Name: PRU 0880

Well Number: 6-29H17

Name of Operator: SANDRIDGE EXPLORATION & PRODUCTION LLC

COGCC Operator Number: 10598

Address: 123 ROBERT S KERR AVE

City: OKLAHOMA CITY

State: OK

Zip: 73102

Contact Name: Diane Overbey

Phone: (405)429-5828

Fax: ()

Email: doverbey@sandridgeenergy.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20170015

WELL LOCATION INFORMATION

QtrQtr: SWSE Sec: 29 Twp: 8N Rng: 80W Meridian: 6

Latitude: 40.629882

Longitude: -106.395394

Footage at Surface: 87 Feet FNL/FSL FSL 2189 Feet FEL/FWL FEL

Field Name: WILDCAT

Field Number: 99999

Ground Elevation: 8084

County: JACKSON

GPS Data:

Date of Measurement: 04/10/2017 PDOP Reading: 1.5 Instrument Operator's Name: Jared Christopher

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

Footage at Top of Prod Zone: FNL/FSL FSL 100 FEL 1615 FEL 100 FSL 1615 FEL
Sec: 29 Twp: 8N Rng: 80W Sec: 29 Twp: 8N Rng: 80W

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.)

Total Acres in Described Lease: _____ 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: 2329 Feet
Building Unit: 2676 Feet
High Occupancy Building Unit: 5280 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 785 Feet
Above Ground Utility: 982 Feet
Railroad: 5280 Feet
Property Line: 2874 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: _____ 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): Peterson Ridge Unit Number: COC075018X

SPACING & FORMATIONS COMMENTS

No portion of this well will produce minerals within the setback from the section line. This well will only be used for testing and logging and therefore will not violate the spacing order.

OBJECTIVE FORMATIONS

| Objective Formation(s) | Formation Code | Spacing Order Number(s) | Unit Acreage Assigned to Well | Unit Configuration (N/2, SE/4, etc.) |
|------------------------|----------------|-------------------------|-------------------------------|--------------------------------------|
| CHUGWATER | CGTR | | | |

DRILLING PROGRAM

Proposed Total Measured Depth: 9130 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 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? Yes

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: Commercial Disposal

Cuttings Disposal: OFFSITE Cuttings Disposal Method: Commercial Disposal

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 | 65 | 0 | 90 | 63 | 90 | 0 |
| SURF | 12+1/4 | 9+5/8 | 36 | 0 | 2400 | 673 | 2400 | 0 |
| OPEN HOLE | 8+3/4 | | | 2400 | 9130 | | | |

☐ 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 wellbore will be a pilot hole used to collect data by logging above and below the target production formation of the Niobrara, plugging back then drilling a horizontal sidetrack.

An additional Form 2 will be submitted for the lateral portion of this well.

Please contact Angela Callaway at 303-942-0560 or at acallaway@upstreampm.com for questions regarding this permit.

Thank you.

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

Location ID: 458790

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: Angela Callaway

Title: Permit Agent Date: 8/6/2018 Email: acallaway@upstreampm.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: 12/28/2018

Expiration Date: 12/27/2020

API NUMBER

05 057 06613 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> |
|-----------------|--|
| | <p>Drilling/Completions: The following conditions of approval (COAs) will apply:</p> <ul style="list-style-type: none">• A closed loop system must be implemented during drilling (as indicated on this Form 2 and previously submitted / approved Form 2A). All cuttings generated during drilling with oil based mud (OBM) must be segregated from water/bentonite based mud- (WBM-) generated drill cuttings and placed separately on the well pad. All OBM-generated drill cuttings must be kept in tanks/containers, or placed on a lined/bermed portion of the well pad; prior to disposition. The moisture content of any OBM-generated drill cuttings in a tank, cuttings containment area, or pile shall be as low as practicable to prevent accumulation of liquids greater than de minimis amounts. The operator has indicated that 'Cuttings Disposal' will be "Offsite" and that the 'Cuttings Disposal Method' will be "Commercial Disposal" (as shown in the 'Drilling Waste Management Program' sections of the Form 2A and this Form 2). Any liners associated with oil-based drilling mud and OBM-generated drill cuttings must be disposed of offsite per CDPHE rules and regulations. Any changes to drill cuttings management and disposal at this location will require submittal (via a Form 4 Sundry Notice) and approval of a Waste Management Plan detailing the changes (specifying cuttings characterization methods, cuttings management, amendment, and onsite disposal location[s]).• The moisture content of water/bentonite-based drilling mud (WBM) drill cuttings, generated during drilling of the surface casing intervals and intermediate intervals, and managed onsite; shall be kept as low as practicable to prevent accumulation of liquids greater than de minimis amounts. The operator has indicated that 'Cuttings Disposal' will be "Offsite" and that the 'Cuttings Disposal Method' will be "Commercial Disposal" (as shown in the 'Drilling Waste Management Program' sections of the Form 2A and the Form 2). After drilling and completion operations have been completed, if any of the WBM-generated drill cuttings will remain on the well pad location (cuttings management area, the cut portion of the pad, cuttings trench, dry cuttings drilling pit, or utilized in onsite interim reclamation activities), they must be sampled and meet the applicable standards of Table 910-1. No liners (if used) are allowed to be disposed of with the drill cuttings. |
| | <p>1) Operator shall comply with the most current revision of the Northwest Notification Policy.</p> <p>2) Oil-based drilling fluid is to be used only after all fresh water aquifers are covered.</p> |

Best Management Practices

| <u>No</u> | <u>BMP/COA Type</u> | <u>Description</u> |
|-----------|--------------------------------|---|
| 1 | Drilling/Completion Operations | This pilot Hole on this pad will be logged with a MWD-GR log from kickoff point to TD while drilling. A Quad Combo, Sonic, Scanner and Resonance logs will be "Open Hole" logs. All wells on the pad will have a cement bond log with gamma ray on production casing or on intermediate casing if production liner is ran. The form 5, Completion Report, for this well will list all logs run and will have logs attached. |

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

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> |
|--------------------|--------------------|
| 2137066 | Well Location Plat |

| | |
|-----------|----------------------------|
| 401544743 | FORM 2 SUBMITTED |
| 401719450 | WELL LOCATION PLAT |
| 401719451 | DEVIATED DRILLING PLAN |
| 401719453 | WELLBORE DIAGRAM |
| 401719459 | DIRECTIONAL DATA |
| 401719493 | SURFACE AGRMT/SURETY |
| 401719500 | LEASE MAP |
| 401723040 | OffsetWellEvaluations Data |
| 401888114 | OFFSET WELL EVALUATION |

Total Attach: 10 Files

General Comments

| <u>User Group</u> | <u>Comment</u> | <u>Comment Date</u> |
|-------------------|--|---------------------|
| Permit | -Uploaded correct well location plat -Removed lease information as it is not needed since minerals will not be developed for the pilot hole | 12/28/2018 |
| Engineer | Engineering Review Complete | 12/17/2018 |
| 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 to evaluate the adequacy of the operator's proposed surface casing setting depth. The deepest water well within one mile is 160 feet. | 12/17/2018 |
| Engineer | 317.r No active non-op wellbores within 150'. | 12/17/2018 |
| Permit | This pilot hole will not be completed, thus I removed the distance to the completed portion of the nearest offset wellbore and the unit boundary with operator concurrence. Corrected MD and open hole setting depth from 8980' to 9130' with operator concurrence. | 11/05/2018 |
| Permit | Preliminary rview complete. | 10/23/2018 |
| Permit | Form passes completeness. | 08/28/2018 |

Total: 7 comment(s)