

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:

401739888

#### APPLICATION FOR PERMIT TO:

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

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

Refiling ☒

ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐

Sidetrack ☐

Date Received:

08/23/2018

Well Name: Surprise Unit 0680

Well Number: 3-9H16

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: NENW Sec: 9 Twp: 6N Rng: 80W Meridian: 6

Latitude: 40.509980

Longitude: -106.384040

Footage at Surface: 631 Feet FNL/FSL FNL 1800 Feet FEL/FWL FWL

Field Name: WILDCAT

Field Number: 99999

Ground Elevation: 8264

County: JACKSON

GPS Data:

Date of Measurement: 06/01/2018 PDOP Reading: 1.2 Instrument Operator's Name: LRK

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  
730 FNL 778 FWL 25 FSL 764 FWL  
Sec: 9 Twp: 6N Rng: 80W Sec: 16 Twp: 6N 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: 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.)

T6N R80W Section 16: All

Total Acres in Described Lease: 640 Described Mineral Lease is: ☐ Fee ☒ State ☐ Federal ☐ Indian

Federal or State Lease # OG 108665

Distance from Completed Portion of Wellbore to Nearest Lease Line of described lease: 0 Feet

## CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 4198 Feet  
Building Unit: 4777 Feet  
High Occupancy Building Unit: 5280 Feet  
Designated Outside Activity Area: 5280 Feet  
Public Road: 327 Feet  
Above Ground Utility: 372 Feet  
Railroad: 5280 Feet  
Property Line: 866 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: 1462 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 1066 Feet (Enter 5280 for distance greater than 1 mile.)

Federal or State Unit Name (if appl): Surprise Unit Unit Number: COC75017X

## SPACING & FORMATIONS COMMENTS

The spacing order 531-48 only applies to the offsets to the unit boundaries. This well is located in the middle of the unit.

## OBJECTIVE FORMATIONS

| Objective Formation(s) | Formation Code | Spacing Order Number(s) | Unit Acreage Assigned to Well | Unit Configuration (N/2, SE/4, etc.) |
|------------------------|----------------|-------------------------|-------------------------------|--------------------------------------|
| NIOBRARA               | NBRR           | 531-48                  |                               |                                      |

## DRILLING PROGRAM

Proposed Total Measured Depth: 17392 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: 347 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? 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   | 26           | 16+1/2         | 42    | 0             | 90            | 190       | 90      | 0       |
| SURF        | 12+1/4       | 9+5/8          | 36    | 0             | 2400          | 630       | 2400    | 0       |
| 1ST         | 8+3/4        | 5+1/2          | 20    | 0             | 17392         | 2900      | 17392   |         |

☐ 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 Distance from completed portion of proposed wellbore to nearest completed portion of offset wellbore completed or permitted in the same formation was measured to the SandRidge operated Surprise 2-08H (API #05-057-06526).

Distance from the proposed wellbore to nearest existing or proposed wellbore belonging to another operator, was measured to the drilled and abandoned Rich 21, API No. 05-057-05012, owned by Midwest Refining Corp.

There are multiple leases that cover this location. The horizontal wellbore crosses the listed lease line and conforms to all unit setbacks.

Please contact Angela Callaway at 303-942-0506, or at [acallaway@upstreampm.com](mailto:acallaway@upstreampm.com) for questions regarding this permit.

Thank you.

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

Location ID: 445005

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: Angela Callaway

Title: Permit Agent Date: 8/23/2018 Email: [acallaway@upstreampm.com](mailto: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: 10/31/2018

Expiration Date: 10/30/2020

### API NUMBER

05 057 06551 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

|  |  |
|--|--|
|  | If location is not built by 2A expiration 10/26/2021, Operator must Refile Form 2A for approval prior to location construction.  |
|  | <p>1) Operator shall comply with the most current revision of the Northwest Notification Policy.</p> <p>2) Operator shall provide cement coverage from the production casing shoe (5 1/2" First String) to a minimum of 200' above the surface casing shoe to provide full isolation of the Coalmont Formation. Verify production casing cement coverage with a cement bond log.</p> <p>3) Oil-based drilling fluid is to be used only after all fresh water aquifers are covered.</p> <p>4) Operator acknowledges the proximity of the listed non-operated wells. Operator assures that this offset list will be remediated per the Horizontal Offset Policy (option 4). Operator will submit a Form 42 ("OTHER – AS SPECIFIED BY PERMIT CONDITION") stating that appropriate mitigation will be completed, during the hydraulic stimulation of this well. This Form 42 shall be filed 48 hours prior to stimulation. Operator will assure that the well's Bradenhead is open and monitored during the entire stimulation treatment – a person will monitor for any evidence of fluid, a Bradenhead test will be performed prior to the beginning of stimulation.<br/>SURPRISE UNIT 2-08H (API 05-057-06526)</p> <p>5) The Operator shall monitor the bradenhead pressure of all wells under Operator's control within 300 feet of the well which is to be treated, provided such other wells penetrate the productive zone which is to be treated. This offset monitoring will be required for any well stimulated on this pad.</p> <p>If at any time during the Treatment or the 24-hour post-stimulation period, the bradenhead annulus pressure of the Treatment well or any of the monitored offset wells increases by more than 200 psig, the Operator of the well being treated shall notify the Director by Form 42, as soon as practicable, but no later than twenty-four (24) hours following such incident. Within fifteen (15) days after the occurrence, the Operator or Adjacent Operator(s), as the case may be, shall submit a Sundry Notice, Form 4, giving all details, including corrective actions taken.</p> |

## Best Management Practices

### No BMP/COA Type

### Description

|   |                                |  |
|---|--------------------------------|--|
| 1 | Drilling/Completion Operations | 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 Cement Bond Log with cased-hole gamma ray log from TD into the surface casing. 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 clearly state "No open-hole logs were run" and shall clearly identify (by API#, well name & number) the well in which open-hole logs were run. |
|---|--------------------------------|--|

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](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](http://cogcc.state.co.us/documents/reg/Policies/Wildlife_Notice.pdf)

## Attachment Check List

| <u>Att Doc Num</u> | <u>Name</u>                |
|--------------------|----------------------------|
| 401739888          | FORM 2 SUBMITTED           |
| 401740329          | DEVIATED DRILLING PLAN     |
| 401740338          | WELL LOCATION PLAT         |
| 401740370          | DIRECTIONAL DATA           |
| 401741749          | OffsetWellEvaluations Data |
| 401818557          | OFFSET WELL EVALUATION     |

Total Attach: 6 Files

## General Comments

| <u>User Group</u> | <u>Comment</u>   | <u>Comment Date</u> |
|-------------------|--|---------------------|
| Permit            | Final review complete.   | 10/29/2018          |
| Engineer          | Offset wells evaluated<br><br>317.r<br>No active non-op wellbores within 150'.<br>317.s<br>No stimulation setback consents required.<br><br>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 200 feet.<br><br>The Coalmont Formation is considered a potential freshwater resource in the North Park Basin (CGS Ground Water Atlas of Colorado, 2003). The proposed surface casing setting depth of 2400' will not cover the entire Coalmont Formation, based on the operator's drilling prognosis in the drilling plan. Minimum cement isolation standards are specified in Condition of Approval #2. | 10/29/2018          |
| Permit            | Corrected field name from North Park Horizontal Niobrara to Wildcat and notified operator. Preliminary review complete.  | 09/25/2018          |
| Permit            | Surface Restoration Bond on file with SLB; per Steve Freese. Corrected State lease number from OG 9476.8 to OG 108665 with operator concurrence. Form passes completeness.   | 09/05/2018          |
| Permit            | Corrected spacing and formations section by removing the unit acreage and unit configuration with operator concurrence. Corrected typo in operator comments. Emailed Steve Freese at SLB for verification of Surface Restoration Bond.   | 09/04/2018          |

Total: 5 comment(s)