

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:

401308340

APPLICATION FOR PERMIT TO:

Drill Deepen Re-enter Recomplete and Operate

Date Received:

06/17/2017

TYPE OF WELL OIL GAS COALBED OTHER _____

Refiling

ZONE TYPE SINGLE ZONE MULTIPLE ZONES COMMINGLE ZONES

Sidetrack

Well Name: Mallard Well Number: 0780 1-15H22
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: Kim Rodell Phone: (303)942-0506 Fax: ()
Email: krodell@upstreampm.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20170015

WELL LOCATION INFORMATION

QtrQtr: NENE Sec: 16 Twp: 7N Rng: 80W Meridian: 6

Latitude: 40.583981 Longitude: -106.369379

Footage at Surface: 401 Feet ^{FNL/FSL} FNL 140 Feet ^{FEL/FWL} FEL

Field Name: WILDCAT Field Number: 99999

Ground Elevation: 8112 County: JACKSON

GPS Data:

Date of Measurement: 04/19/2017 PDOP Reading: 2.1 Instrument Operator's Name: Randall R. Miller

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

Footage at Top of Prod Zone: ^{FNL/FSL} 880 ^{FEL/FWL} FNL 991 ^{FEL/FWL} FWL 100 ^{FNL/FSL} FSL 990 ^{FEL/FWL} FWL
Sec: 15 Twp: 7N Rng: 80W Sec: 22 Twp: 7N 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.)

T7N R80W Sec. 14: S2NW,SW,S2SE; Sec. 15: S2NE,S2; Sec. 22: E2,E2W2,W2SW; Sec. 23: All; Sec. 24: NW,W2SW

Total Acres in Described Lease: 2160 Described Mineral Lease is: Fee State Federal Indian

Federal or State Lease # COC070033

Distance from Completed Portion of Wellbore to Nearest Lease Line of described lease: 0 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: 5280 Feet

Above Ground Utility: 5243 Feet

Railroad: 5280 Feet

Property Line: 140 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: 1302 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 990 Feet (Enter 5280 for distance greater than 1 mile.)

Federal or State Unit Name (if appl): Surprise Unit Unit Number: COC75107X

SPACING & FORMATIONS COMMENTS

The expansion of the Federal Surprise Unit as approved on June 12, 2017. The letter showing this approval is attached.

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			

DRILLING PROGRAM

Proposed Total Measured Depth: 18443 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	2500	629	2500	0
1ST	8+3/4	5+1/2	20	0	18443	3216	18443	

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 proposed well will also be permitted by the BLM. On May 2, 2017 Sandridge held an onsite location review with the COGCC, CPW and the BLM. This location is located on privately owned surface but the well will penetrate and produce from federal minerals at some point along its lateral.

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: Kim Rodell

Title: Permit Agent Date: 6/17/2017 Email: krodell@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: 7/24/2017

Expiration Date: 07/23/2019

API NUMBER

05 057 06601 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 (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.
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Best Management Practices

No	BMP/COA Type	Description
1	Drilling/Completion Operations	There is currently only one well planned on the pad at this time. This well will be logged with open-hole Resistivity Log and Gamma Ray Log from the kick-off point into the surface casing. This well and all future 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 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

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

Att Doc Num	Name
401308340	FORM 2 SUBMITTED
401308617	DIRECTIONAL DATA
401308646	DEVIATED DRILLING PLAN
401308649	WELL LOCATION PLAT
401309223	OffsetWellEvaluations Data
401309254	OTHER
401309799	EXCEPTION LOC REQUEST
401309956	SURFACE AGRMT/SURETY
401311460	EXCEPTION LOC WAIVERS
401350972	OFFSET WELL EVALUATION

Total Attach: 10 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final review complete.	07/20/2017
Engineer	<p>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 150 feet.</p> <p>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 2500' 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.</p> <p>Offset Well Evaluation: Offset wells within 1,500 feet of the wellbore planned on this pad are horizontal Niobrara wells. No mitigation required.</p> <p>Changed distance to nearest well belonging to another operator to greater than 1500 feet. The API # within 1500 feet is an abandoned location and has not been drilled.</p>	07/03/2017
Permit	Passed Completeness.	06/26/2017

Total: 3 comment(s)