

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:

401859251

APPLICATION FOR PERMIT TO:

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

Date Received:

01/10/2019

TYPE OF WELL OIL ☒ GAS ☐ COALBED ☐ OTHER _____

Refilling ☐

ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐

Sidetrack ☐

Well Name: Damfino 0680

Well Number: 8-6H31

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: Lot 11 Sec: 6 Twp: 6N Rng: 80W Meridian: 6

Latitude: 40.512709

Longitude: -106.417310

Footage at Surface: 436 Feet FNL/FSL FSL 2172 Feet FEL/FWL FEL

Field Name: NORTH PARK HORIZONTAL
NIOBRARA

Field Number: 60120

Ground Elevation: 8219.9

County: JACKSON

GPS Data:

Date of Measurement: 08/16/2018 PDOP Reading: 2.2 Instrument Operator's Name: James Freshwater

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

Footage at Top of Prod Zone: FNL/FSL FSL 950 FSL 1725 FEL FEL 100 FNL 2310 FEL
Sec: 6 Twp: 6N Rng: 80W Sec: 31 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: 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.)

Please see attached lease map.

Total Acres in Described Lease: 952 Described Mineral Lease is: ☐ Fee ☐ State ☒ Federal ☐ Indian

Federal or State Lease # COC 065600

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

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 1214 Feet
Building Unit: 1253 Feet
High Occupancy Building Unit: 5280 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 590 Feet
Above Ground Utility: 245 Feet
Railroad: 5280 Feet
Property Line: 436 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: 320 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 100 Feet (Enter 5280 for distance greater than 1 mile.)

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

SPACING & FORMATIONS COMMENTS

Township 7 North, Range 80 West Sec:31 All
Township 6 North, Range 80 West Sec:6,7 All

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	531-63	1837	31,6,7: All

DRILLING PROGRAM

Proposed Total Measured Depth: 17116 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: 922 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	26	16	42	0	80	190	90	0
SURF	12+1/4	9+5/8	36	0	2400	673	2400	0
1ST	8+3/4	5+1/2	20	0	17116	2957	17116	

☐ 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 Nearest wellbore in proposed unit per manual calculation is the Damfino 0680 7-6H31.
Nearest permitted or existing wellbore belonging to another operator per GIS measurement is the South Coalmont 1 (API: 05-057-06244) PA Status.

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

Location ID: 416625

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: Justin Garrett

Title: Regulatory Analyst Date: 1/10/2019 Email: regulatory@ascentgeomatics.c

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: 4/16/2019

Expiration Date: 04/15/2021

API NUMBER

05 057 06621 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

	<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 wells. Operator assures that this offset list will be remediated per the Interim Statewide 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 actively monitored during the entire stimulation treatment – a person will monitor for any evidence of fluid, liquid or gas. A Bradenhead test will be performed prior to the beginning of stimulation. DAMFINO 2-06H (API 05-057-06482) MUTUAL 2-30H (API 05-057-06465)</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>
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Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Drilling/Completion Operations	Prior to drilling operations, operator will perform an anti-collision scan of existing wells that have the potential of being within close proximity of the proposed well. This anti-collision scan will include definitive MWD or gyro surveys of the offset wells with included error of uncertainty per survey instrument, and compared against the proposed well path with its respective error of uncertainty. If current surveys do not exist for the offset wells, operator may have gyro surveys conducted to verify bottom hole location. The proposed well will only be drilled if the anti-collision scan results indicate that there is not a risk for collision, or harm to people or the environment.
2	Drilling/Completion Operations	One of the first wells drilled on the pad will be logged with openhole Resistivity Log and Gamma Ray Log from 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 each well without open-hole logs shall clearly state "No openhole logs were run" and shall clearly identify (by API#, well name & number) the well in which openhole logs were run.

Total: 2 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>
401859251	FORM 2 SUBMITTED
401859409	DEVIATED DRILLING PLAN
401859412	DIRECTIONAL DATA
401859414	WELL LOCATION PLAT
401885991	OffsetWellEvaluations Data
401900290	LEASE MAP
402011043	OFFSET WELL EVALUATION

Total Attach: 7 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Engineer	OWE complete, no non-op wells within 1500'. Engineering review is complete.	03/14/2019
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 120 feet.	03/14/2019
Engineer	317.r No active non-op wellbores within 150'. 317.s No stimulation setback consents required.	03/14/2019
Permit	-Corrected TPZ footage from 500 to 950 FSL to match plat -Removed surface surety ID: It is not needed as they are not bonding on -Corrected total acre described in lease from 1861 to 952 to only include acreage of lease described -All corrections made with operator concurrence -Ready to send to final after engineer review	02/26/2019
Permit	Passed completeness.	01/13/2019

Total: 5 comment(s)