

APPLICATION FOR PERMIT TO:

Drill Deepen Re-enter Recomplete and Operate

Date Received:
03/28/2019

TYPE OF WELL OIL GAS COALBED OTHER: _____

ZONE TYPE SINGLE ZONE MULTIPLE ZONES COMMINGLE ZONES

Refiling
Sidetrack

Well Name: Gregory 0780 Well Number: 7-9H4

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: SWSW Sec: 9 Twp: 7N Rng: 80W Meridian: 6

Latitude: 40.586020 Longitude: -106.387340

Footage at Surface: 476 Feet FSL 187 Feet FWL

Field Name: WILDCAT Field Number: 99999

Ground Elevation: 8125 County: JACKSON

GPS Data:
Date of Measurement: 08/03/2017 PDOP Reading: 1.7 Instrument Operator's Name: Levi Kurtzer

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

Footage at Top of Prod Zone: FNL/FSL FEL/FWL Bottom Hole: FNL/FSL FEL/FWL

556 FSL 1328 FWL 100 FNL 1320 FWL

 Sec: 9 Twp: 7N Rng: 80W Sec: 4 Twp: 7N Rng: 80W

LOCAL GOVERNMENT INFORMATION

County: JACKSON Municipality: N/A

Per § 34-60-106 (1)(f)(I)(A), the following questions pertain to the "local government with jurisdiction to approve the siting of the proposed oil and gas location."

The local government with jurisdiction is: County

Does the local government with jurisdiction regulate the siting of Oil and Gas Locations, with respect to this COGCC application? If the local government has waived its right to precede the COGCC in siting determination, indicate by selecting "NO" here and selecting "Waived" below. Yes No

If yes, in checking this box, I hereby certify that an application has been filed with the local government with jurisdiction to approve the siting of the proposed oil and gas location.

The local government siting permit type is: _____

The local government siting permit was filed on: _____

The disposition of the application filed with the local government is: _____

Additional explanation of local process:

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.)

T7N-R80W, 6th P.M., Sec. 4: W2, Sec. 9: W2, S. 16: W2, S. 21: W2

Total Acres in Described Lease: 1281 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: 100 Feet

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 3677 Feet

Building Unit: 3767 Feet

High Occupancy Building Unit: 5280 Feet

Designated Outside Activity Area: 5280 Feet

Public Road: 5280 Feet

Above Ground Utility: 390 Feet

Railroad: 5280 Feet

Property Line: 3116 Feet

School Facility: 5280 Feet

School Property Line: 5280 Feet

Child Care Center: 5280 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, Designated Outside Activity Area, School Facility, and Child Care Center – 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 INFORMATIONDistance from completed portion of proposed wellbore to nearest completed portion of offset wellbore permitted or completed in the same formation: 330 FeetDistance 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

If this Form 2 is associated with a Drilling and Spacing Unit application, provide docket number: _____

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	531-52	1281	4:W2; 9:W2

DRILLING PROGRAMProposed Total Measured Depth: 18778 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 feetWill a closed-loop drilling system be used? YesIs 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? NoWill salt based (>15,000 ppm Cl) drilling fluids be used? NoWill oil based drilling fluids be used? YesBOP 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 DisposalCuttings 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+1/4	42	0	90	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	18778	3215	18778	

 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 refile APD with new well location plat, deviated drilling plan, and directional data template due to changes to SHL, TPZ, and BHL footages. Well name has also changed. This refile is also updating the spacing Order, mineral lease description, and wellbore construction as well as BOP equipment type.

SUA is already in the well file.

Nearest well in the DSU (producing zone to producing zone) per manual calculation is the proposed Gregory 0780 6-9H4.

No well belonging to another operator within 1,500 feet.

Location has been built and a sundry has been submitted to update the multi-well plan, access road, cultural distances, and facility layout.

The Rule 305.f Statutory notice to Surface Owner has been mailed to the surface owner.

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

Location ID: 439603

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: Ann Feldman

Title: Regulatory Manager Date: 3/28/2019 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, applicable orders, and SB 19-181 and is hereby approved.

COGCC Approved: _____

Director of COGCC

Date: 8/30/2019

Expiration Date: 08/29/2021

API NUMBER

05 057 06568 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>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 the Form 2 and Form 2A).•Water/Bentonite-Based Drilling Mud (WBM) and Oil-Based Drilling Mud (OBM) Generated Solids / Cuttings Management and Offsite Disposal.•The moisture content of all drill cuttings managed onsite shall be kept as low as practicable to prevent accumulation of liquids greater than de minimis amounts.•All Oil Based Mud (OBM)-generated cuttings must be segregated from Water/Bentonite Based Mud (WBM)-generated cuttings and managed separately on the well pad. All OBM-generated drill cuttings must be kept in tanks or containers, or placed on a lined and bermed portion of the well pad prior to disposition.•The trucks used for offsite disposal of OBM-generated drill cuttings must have a liner and the operator must implement measures (covers, misting, etc.) to reduce dust and PM emissions during transport from the well site to the commercial disposal facility.•Flowback and stimulation fluids must be sent to enclosed tanks, separators, or other containment or filtering equipment before the fluids can be placed into any pipeline, storage vessel, or into tanker trucks for offsite disposal. No open top tanks can be used for initial flowback fluids containment. Secondary containment for flowback storage tanks shall meet the requirements of Rule 906.d.(1).
	<ol style="list-style-type: none">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.3) Oil-based drilling fluid is to be used only after all fresh water aquifers are covered.4) 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>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 with 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 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 state, "Alternative Logging Program - No open-hole logs were run", and shall clearly identify the type of log and the well (by API#) 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

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
2108925	OBJECTIVE CRITERIA REVIEW MEMO
401981164	FORM 2 SUBMITTED
401982853	WELL LOCATION PLAT
401982857	DEVIATED DRILLING PLAN
401982859	DIRECTIONAL DATA
401987448	OffsetWellEvaluations Data
402162366	OFFSET WELL EVALUATION

Total Attach: 7 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Operator BMP corrected, the well (0780 #1-09H) they wanted to use for alternative logging did not qualify and they must log one of the wells with open-hole resistivity.	08/21/2019
Permit	In Process	08/09/2019
OGLA	<p>07/01/2019 to 07/10/2019 - During the technical review process for evaluating the measures the operator has for the protection of groundwater and surface water resources for the refile Form 2s, COGCC staff received additional information and clarification regarding the operator's fluid containment and stormwater/erosion control measures as well as details concerning the construction and maintenance of the offsite pipelines. Given that the implementation of previously imposed permit conditions, additional technical information, and inclusion of additional BMPs that address the protection of groundwater and surface water resources met the standard for protection of the sensitive environment and water resources.</p> <p>During the technical review process for evaluating the measures the operator has for the protection of greater sage grouse resources for the refile Form 2s, COGCC staff requested additional information and clarification regarding the applicant's site-specific BMPs and the progress of the Wildlife Mitigation Plan. Given this is a built location that has had several occupations for construction, drilling, and completion activities that were conducted during greater sage grouse lekking, nesting, and brood rearing activities, along with CPW's permanent waiver of any grouse timing stipulations, the standard for protection of the 'sensitive wildlife habitat (SWH)' environment for greater sage grouse has been met.</p>	07/15/2019
OGLA	The 'Objective Criteria Review Memo' document (#2108925) is attached to the following Form 2s; #401981159, #401981161, #401981162, and #401981164 and to the SandRidge Exploration & Production LLC, Gregory 0780 1-09H Pad, Location ID #439603 file. Following additional analysis of the Director Objective Criteria, the Director determined that these Form 2 refile applications meet the standard for the protection of public health, safety, welfare, the environment and wildlife resources set by SB 19-181.	07/11/2019
Permit	ON Hold	07/03/2019
Permit	Operator provided local government siting permit status and school and childcare distances via the Local Government Information Google Form - information entered with operator concurrence.	06/04/2019
Permit	Additional Director review suggested due to potential issues (sensitive area for water resources).	05/14/2019
Engineer	Engineering review complete.	05/10/2019
Engineer	<p>317.r No active non-op wellbores within 150'. 317.s No stimulation setback consents required.</p> <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 152 feet.</p>	05/10/2019
Permit	Passed completeness.	04/01/2019

Total: 10 comment(s)