



**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 Section 5: Lots 1-4, SE/4

Total Acres in Described Lease: 320 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: 5280 Feet

Building Unit: 5280 Feet

High Occupancy Building Unit: 5280 Feet

Designated Outside Activity Area: 5280 Feet

Public Road: 3660 Feet

Above Ground Utility: 3553 Feet

Railroad: 4490 Feet

Property Line: 1532 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: 1886 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 600 Feet (Enter 5280 for distance greater than 1 mile.)

Federal or State Unit Name (if appl): \_\_\_\_\_ Unit Number: \_\_\_\_\_

**SPACING & FORMATIONS COMMENTS**

\_\_\_\_\_

**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	531-18	626	Lots 1-4, S2N2, S2

**DRILLING PROGRAM**

Proposed Total Measured Depth: 11801 Feet

Distance from proposed wellbore to nearest existing or permitted wellbore belonging to another operator:

2592 Feet (Including plugged wells)

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? No

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: Recycle/reuse

Cuttings Disposal: ONSITE Cuttings Disposal Method: Other

Other Disposal Description:

The cuttings will be remediated onsite using Eco-Sponge. They will then either be sent offsite for Commercial disposal, or used onsite for reclamation and recontouring.

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	84	0	60			
SURF	12+1/4	9+5/8	36	0	1300	215	1300	0
1ST	8+3/4	7	23	0	7332	900	7332	1100
1ST LINER	6+1/8	4+1/2	11.6	6600	11801	545	11801	6600

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 the wellbore to nearest wellbore permitted or completed in the same formation was measured to the Mutual 7-17H. Distance to nearest permitted or existing wellbore penetrating objective formation was measured to the Gregory 5-09H.

This refile has no changes to the original APD.

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

Location ID: 434832

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: Andrea Gross

Title: Permit Agent Date: 11/9/2015 Email: agross@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: *Matthew Lee* Director of COGCC Date: 2/29/2016

Expiration Date: 02/27/2018

### API NUMBER

05 057 06522 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>
	Operator corrected distance to nearest well permitted/producing from 2592' to 1896'. Operator corrected spacing order to 531-18. Operator added refile comment. Operator added open hole logging BMP.
	1) Operator shall comply with the most current revision of the Northwest Notification Policy. See attached notice.  2) Surface casing setting depth has been increased from 500' to 1300' to meet minimum isolation requirements. Cement volume shall be increased accordingly to provide full coverage from total depth to surface.  3) Operator shall provide cement coverage from the intermediate casing shoe (7" First String) to a minimum of 200' above the surface casing shoe to provide full isolation of the Coalmont Formation. First String cement top changed from 300' (was 200' above operator-proposed surface casing depth of 500') to 1100' (now 200' above COGCC-required minimum surface casing depth of 1300'). Adjust cement volume as necessary to accomplish this objective, and verify intermediate casing cement coverage with a cement bond log.

## Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Drilling/Completion Operations	Open-hole Resistivity Log with Gamma Ray Log will be run from the kick-off point into the surface casing. A Cement Bond Log with Gamma-Ray will be run on production casing, or on intermediate casing if a production liner is run. The horizontal portion of the wellbore will be logged with a measured-while-drilling gamma-ray log. The Form 5, Completion Report, will list all logs run and have those logs attached.

Total: 1 comment(s)

## Applicable Policies and Notices to Operators

Policy
NW Colorado Notification Policy. <a href="http://cogcc.state.co.us/documents/reg/Policies/nw_notification_procedures.pdf">http://cogcc.state.co.us/documents/reg/Policies/nw_notification_procedures.pdf</a>
Notice Concerning Operating Requirements for Wildlife Protection. <a href="http://cogcc.state.co.us/documents/reg/Policies/Wildlife_Notice.pdf">http://cogcc.state.co.us/documents/reg/Policies/Wildlife_Notice.pdf</a>

## Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
400920139	FORM 2 SUBMITTED

Total Attach: 1 Files

### General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Corrected waste management info to agree with changes to related 2A#400920520. Application changed to Sandridge from EE3. Final Review Complete.	2/29/2016 3:24:07 PM
Permit	APD is lacking logging BMP and refile statement. Added related refile 2A. Corrected qtr/qtr designation to Lot 1. Needs updated spacing order. Need corrected distance to nearest well permitted (Gregory 5-09H).	2/2/2016 1:37:43 PM
Engineer	Offset Well Evaluation: There are no existing offset oil and gas wells within 1,500 feet of this wellbore.	11/10/2015 3:30:16 PM
Engineer	The Coalmont Formation is considered a principal bedrock aquifer in the North Park Basin (CGS Ground Water Atlas of Colorado, 2003). The proposed surface casing setting depth of 500 feet will not cover the entire Coalmont Formation, based on log tops in offset wells. Furthermore, the CGS Ground Water Atlas of Colorado states that the upper 1000 feet of the Coalmont Formation is considered economical for water supply development with reasonably good water quality. This interval is evident on offset geophysical logs to depths ranging from approximately 1000 feet to 1250 feet. Minimum required casing and cement requirements are shown in Conditions of Approval #2 and #3.	11/10/2015 3:14:11 PM
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 100 feet. Minimum required surface casing requirements are shown in Conditions of Approval #2.	11/10/2015 3:02:43 PM
Permit	Passed completeness.	11/9/2015 3:13:45 PM

Total: 6 comment(s)