



## 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.)

Township 7 North-Range 91 West, 6th P.M.  
Section 13: Lots 11(40.45), 12(40.44), 13(40.42), 14(40.42)  
Section 14: Lots 11(40.47), 13(40.42), 14(40.45)  
Section 22: Lots 7(40.52), 8(40.66), 9(40.66), 10 (40.44), 16(40.48)  
Section 23: Lots 1(40.29), 2(40.35), 3(40.41), 4(40.47), 5(40.40), 12(40.32), 13(40.26)  
Section 24: Lots 3(40.40), 4(40.40)  
Section 26: Lots 4(40.25), 5(40.29)  
Section 27: Lots 1(40.46)

Containing 970.13 acres, more or less.

Total Acres in Described Lease: 970 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: 605 Feet

## CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 5280 Feet  
Building Unit: 2570 Feet  
High Occupancy Building Unit: 5280 Feet  
Designated Outside Activity Area: 5280 Feet  
Public Road: 279 Feet  
Above Ground Utility: 2379 Feet  
Railroad: 5280 Feet  
Property Line: 605 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 Wellbore to Nearest Wellbore Permitted or Completed in the same formation: 5280 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary \_\_\_\_\_ 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.)
MANCOS	MNCS			
NIOBRARA	NBRR			

## DRILLING PROGRAM

Proposed Total Measured Depth: 10750 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 5280 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? Yes

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	24	20	85	0	60	100	60	0
SURF	17+1/2	13+3/8	54.50	0	1200	731	1200	0
1ST	12+1/4	9+5/8	40	0	5700	1057	5700	700
2ND	8+3/4	5+1/2	20	0	10750	1222	10750	4700

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 application is in a Comprehensive Drilling Plan \_\_\_\_\_ CDP #: \_\_\_\_\_

Location ID: 425554

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: CHERYL ROWELL

Title: SR. STAFF REG. ANALYST Date: 8/29/2014 Email: CHERYL\_ROWELL@SWN.CO

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: 9/26/2014

Expiration Date: 09/25/2016

<b>API NUMBER</b>
05 081 07683 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

	Open hole resistivity and gamma logs shall be run to describe the stratigraphy of the entire well bore and to adequately verify the setting depth of surface casing and aquifer coverage. On a multi-well pad, these open hole logs are only required on one of the first wells drilled on the pad and the Drilling Completion Report - Form 5 for every well on the pad shall identify which well was logged.
	(1) COMPLIANCE WITH THE MOST CURRENT REVISION OF THE NORTHWEST COLORADO NOTIFICATION POLICY IS REQUIRED. SEE ATTACHED NOTICE.  (2) CEMENT ON INTERMEDIATE CASING (9-5/8" FIRST STRING) MUST EXTEND INTO THE SURFACE CASING (MINIMUM 200' LAP ABOVE SURFACE CASING SHOE) TO PROVIDE ISOLATION OF ALL CRETACEOUS (INCLUDING MESAVERDE GROUP, LEWIS, FOX HILLS, AND LANCE) AND TERTIARY (INCLUDING FORT UNION) OIL, GAS, AND WATER-BEARING SANDSTONE AND COALBED FORMATIONS THAT ARE NOT OTHERWISE COVERED BY SURFACE CASING. VERIFY INTERMEDIATE CASING (9-5/8" FIRST STRING) CEMENT COVERAGE WITH A CBL.

## Best Management Practices

### No BMP/COA Type

### Description

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## Applicable Policies and Notices to Operators

NW Colorado Notification Policy.

Notice Concerning Operating Requirements for Wildlife Protection.

## Attachment Check List

### Att Doc Num

### Name

1345211	WELLL LOCATION PLAT
400674524	FORM 2 SUBMITTED
400674563	LEGAL/LEASE DESCRIPTION
400677530	SURFACE AGRMT/SURETY

Total Attach: 4 Files

## General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final review completed on this refile. No LGD comments.	9/26/2014 9:37:16 AM
Permit	Operator provided corrected lease description, distance to the nearest lease line and total acres.	9/26/2014 9:35:45 AM
Permit	Lease description doesn't include any holding in section. Requested review by operator.	9/23/2014 1:26:41 PM
Engineer	<p>PROPOSED SURFACE CASING OF 1200' MAY NOT PROVIDE FULL COVERAGE OF FORT UNION FORMATION, BASED ON FORT UNION REPORTED LOG TOP IN AN OFFSET WELL. COGCC CONCURS WITH OPERATOR'S PLAN TO CEMENT THE INTERMEDIATE CASING (9-5/8" FIRST STRING) INTO THE SURFACE CASING. MINIMUM INTERMEDIATE CASING CEMENT REQUIREMENTS ARE SPECIFIED IN CONDITION OF APPROVAL #2.</p> <p>THE PROPOSED SURFACE CASING IS MORE THAN 50' BELOW THE DEPTH OF THE DEEPEST WATER WELL WITHIN 1-MILE OF THE SURFACE LOCATION WHEN CORRECTED FOR ELEVATION DIFFERENCES. THE DEEPEST WATER WELL WITHIN 1-MILE IS 560 FEET DEEP.</p> <p>OFFSET WELL EVALUATION: NO EXISTING OFFSET OIL &amp; GAS WELLS WITHIN 1,500 FEET OF THIS PROPOSED WELLBORE.</p>	9/22/2014 9:37:59 AM
Engineer	Changed "Second String" to "First String," and changed "Third String" to "Second String."	9/22/2014 9:32:55 AM
Permit	Operator requested corrections in SHL to match the supplied Well location plat.	9/4/2014 6:42:25 AM
Permit	Operator requested changing to 'refile" and supplied the APD# 081-07683.	9/4/2014 6:12:09 AM
Permit	The lat/long on the well location plat don't match lat/longs given on this form. Requested review by operator. Requested the operator consider this form to be a refile of 081-07683.	9/2/2014 2:43:39 PM

Total: 8 comment(s)