

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.)

T5N R90W Sec. 29: Lot 1; Sec. 30: Lots 8-10, 12-15

Total Acres in Described Lease: 319 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: 110 Feet

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 2487 Feet

Building Unit: 2745 Feet

High Occupancy Building Unit: 5280 Feet

Designated Outside Activity Area: 5280 Feet

Public Road: 405 Feet

Above Ground Utility: 508 Feet

Railroad: 5280 Feet

Property Line: 272 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: 3025 Feet

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

Federal or State Unit Name (if appl): Williams Fork Unit Number: COC74956X

SPACING & FORMATIONS COMMENTS

This well is within the Williams Fork Federal Unit and the Fee mineral lease is committed to the unit.

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: 6743 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 1606 Feet (Including plugged wells)

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:

The Water Based cuttings will be buried onsite. The Oil Based cuttings and fluids will be transported to Twin Enviro in Milner, CO for disposal.

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	30	20	104	0	60	6	60	0
SURF	17+1/2	13+3/8	54.4	0	850	176	850	0
1ST	12+1/4	9+5/8	40	0	3444	265	3444	200
1ST LINER	7+7/8	5+1/2	15.5	3294	6743			

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 wellbore to nearest wellbore permitted or completed in the same formation was measured to the Williams Fork 1-19. Distance to nearest permitted or existing wellbore penetrating objective formation was measured to the Calista 9-19. This well is within the Williams Fork Federal Unit and the Fee mineral lease is committed to the unit.

This application is in a Comprehensive Drilling Plan _____ 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: Andrea Gross

Title: Permit Agent Date: 2/23/2015 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: 3/27/2015

Expiration Date: 03/26/2017

API NUMBER
05 081 07818 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>
	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 700' to 850' 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 production casing shoe (9+5/8" First String) to a minimum of 200' above the surface casing shoe to provide isolation of all formations that are not otherwise covered by surface casing. Verify production casing cement coverage with a cement bond log.
	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.

Best Management Practices

<u>No BMP/COA Type</u>	<u>Description</u>

Applicable Policies and Notices to Operators

NW Colorado Notification Policy.

Notice Concerning Operating Requirements for Wildlife Protection.

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
400784916	FORM 2 SUBMITTED
400788674	DIRECTIONAL DATA
400788675	WELL LOCATION PLAT
400788676	DEVIATED DRILLING PLAN
400797569	DRILLING PLAN

Total Attach: 5 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final review complete.	3/26/2015 2:43:09 PM
Engineer	A shallow, potential water source (weathered Mancos and/or Morapos) is apparent on offset electrical logs for Hamill #1 (081-06598, base at 740' MD, elev. 5620' MSL) and JM Dunbar Govt NCT-1 1 (081-06093, base at 1070' MD, elev. 5552' MSL). Using an average value of 5586' MSL and this proposed well's ground elevation of 6346', the approximate base of the water resource is 760'. The minimum required surface casing setting depth has been increased to 850' MD, as specified in Condition of Approval #2. COGCC concurs with the operator's plan to cement the production casing (9+5/8" First String) into the surface casing.	3/9/2015 10:26:49 AM
Engineer	Offset water well check: There are no permitted water wells within 1 mile of this proposed surface hole location. Water wells are present up the valley to the east along Hwy 317 (deepest is 450 feet, Mancos Shale at surface).	3/9/2015 10:19:19 AM
Engineer	Offset well evaluation: there are no offset oil & gas wells within 1,500 feet of the proposed wellbore path.	3/9/2015 10:15:13 AM
Engineer	Permitted path of Williams Fork 1-19 (081-07776) is closer than the distance to nearest permitted or completed well in the same formation specified by the operator of 4,090'. Distance to closest plugged and abandoned well penetrating the objective formation, JM Dunbar Govt NCT-1 1 (081-06093), is closer than the distance specified by the operator of 3,809'. Contacted operator for clarification on 3/9/2015. Operator replied on 3/10/2015, confirming that the values should be changed to 3,025' (completion to completion separation) and 1,606' (distance to plugged well JM Dunbar Govt NCT-1 1 [081-06093], which penetrates the objective formation).	3/6/2015 5:18:09 PM
Permit	BHL is 110 FWL however well is within Exploratory unit. Ready to pass pending approval of 2A.	2/26/2015 1:38:23 PM
Permit	Passed Completeness	2/25/2015 2:25:57 PM

Total: 7 comment(s)