

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.)

See attached Mineral Lease Description

Total Acres in Described Lease: 9640 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: 275 Feet

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 861 Feet

Building Unit: 5280 Feet

High Occupancy Building Unit: 5280 Feet

Designated Outside Activity Area: 5280 Feet

Public Road: 5280 Feet

Above Ground Utility: 5280 Feet

Railroad: 5280 Feet

Property Line: 2171 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: 36432 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: 18144 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 36432 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? 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: OFFSITE Cuttings Disposal Method: Other
 Other Disposal Description:

Drilling fluids may be trucked to the 604-1 SWD for injection.
 Cuttings may be disposed of at the 697-15-01 Cuttings Disposal Area (see approved Form 4 Sundry Notice doc #400493031).

Beneficial reuse or land application plan submitted?
 Reuse Facility ID: or Document Number:

CASING PROGRAM

<u>Casing Type</u>	<u>Size of Hole</u>	<u>Size of Casing</u>	<u>Wt/Ft</u>	<u>Csg/Liner Top</u>	<u>Setting Depth</u>	<u>Sacks Cmt</u>	<u>Cmt Btm</u>	<u>Cmt Top</u>
CONDUCTOR	24+0/0	20+0/0	70	0	90	160	90	0
SURF	17+1/2	13+3/8	68	0	5500	2880	5500	0
1ST	12+1/4	9+5/8	53.5	0	13118	3000	13118	0
2ND	8+1/2	5+1/2	26	0	18114	590	18114	0

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

The Cascade Creek 697-09-61 pad is an existing pad with 17 producing wells and 4 plugged and abandoned wells. The location is being amended in order to permit and drill one horizontal well. Oxy is both the surface and mineral owner. Per GarCo Vacation Ordinance dated 10-5-1987, CR 213 is now OXY's private property north of Sec 8, 7S, 97W, 6 PM. Oxy will provide appropriate housing for essential personnel in order to conduct safe, efficient drilling operations at this well site. . Oxy will comply with Notice to Operators (NTO) Drilling wells on the Roan Plateau (June 12, 2008). The seasonal wood frame house on the location drawing plat is "Conn Camp," a cow camp located on Oxy private surface and used by ranchers leasing Oxy surface to graze their cattle. This location is not located within a SWH (sensitive wildlife habitat) or an RSO (restricted surface occupancy), but it is located within a black bear area. Per the CPW, no notification is needed if the location is located only within a black bear area. The appropriate BMP is attached.

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

Location ID: 335889

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: Joan Proulx

Title: Regulatory Date: 1/31/2014 Email: joan_proulx@oxy.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:  Director of COGCC Date: 5/30/2014

Expiration Date: 05/29/2016

API NUMBER

05 045 22426 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>
	<p>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.</p>
	<p>(1) COMPLIANCE WITH THE MOST CURRENT REVISION OF THE NORTHWEST COLORADO NOTIFICATION POLICY IS REQUIRED. SEE ATTACHED NOTICE.</p> <p>(2) COMPLIANCE WITH THE MOST CURRENT REVISION OF THE GARFIELD COUNTY RULISON FIELD NOTICE TO OPERATORS IS REQUIRED, WITH THE FOLLOWING EXCEPTION: ALL FIELD NOTICE REQUIREMENTS SPECIFIED IN THIS NOTICE TO OPERATORS ARE SUPERSEDED BY THE REQUIREMENTS OF THE MOST CURRENT REVISION OF THE NORTHWEST COLORADO NOTIFICATION POLICY (SEE CONDITION OF APPROVAL #1). SEE ATTACHED NOTICE.</p> <p>(3) CEMENT ON INTERMEDIATE CASING MUST EXTEND INTO THE SURFACE CASING (MINIMUM 200' LAP ABOVE SURFACE CASING SHOE) TO PROVIDE ISOLATION OF ALL CRETACEOUS (AND TERTIARY IF PRESENT) OIL, GAS, AND WATER-BEARING SANDSTONE AND COALBED FORMATIONS THAT ARE NOT OTHERWISE COVERED BY SURFACE CASING. VERIFY PRODUCTION CASING AND INTERMEDIATE CASING CEMENT COVERAGE WITH A CBL.</p> <p>(4) THE NEARBY HILLSIDE MUST BE MONITORED FOR ANY DAY-LIGHTING DRILLING FLUIDS THROUGHOUT THE DRILLING OF THE SURFACE-CASING INTERVAL.</p> <p>(5) COMPLY WITH ALL PROVISIONS OF THE JUNE 12, 2008 NOTICE TO OPERATORS DRILLING WELLS WITHIN ¼ MILE OF THE RIM OF THE ROAN PLATEAU IN GARFIELD COUNTY -- PIT DESIGN, CONSTRUCTION, AND MONITORING REQUIREMENTS. SEE ATTACHED NOTICE.</p>

Best Management Practices

No	BMP/COA Type	Description
1	Wildlife	<p>Wildlife and Domestic Animals Policy</p> <ul style="list-style-type: none"> • All firearms and hunting paraphernalia are strictly prohibited. • Employees, contractors, subcontractors, or visitors will not hunt, fish, trap, trade, feed, or harass animals or keep wildlife in captivity. • Employees, contractors, subcontractors or visitors shall not bring domestic animals to Oxy property. • All employees, contractors, subcontractors, or visitors shall comply with Colorado Parks and Wildlife, and U.S. Fish and Wildlife rules and regulations pertaining to wildlife. • All employees and visitors shall attend Oxy's Visitor Orientation presentation which includes training for Oxy's Wildlife and Domestic Animals policy. • Contractors and subcontractors shall read Oxy's Contractor, Health, Environment, and Safety Expectations Handbook, which contains Oxy's wildlife policies. After reading the handbook, all contractors and subcontractors shall sign, date, and return the last sheet of the handbook prior to coming on location. • All employees, contractors, subcontractors, or visitors shall comply with the following bear specific guidelines: <ul style="list-style-type: none"> o Initiate a food and waste/refuse management program that uses bear-proof food storage containers and trash receptacles, including but not limited to all permanent facilities, drilling locations, temp housing facilities, completions and workover locations. o Food and food waste located at temporary job sites shall be kept in the vehicle and only disposed of in bear-proof containers. o Report bear conflicts immediately to Oxy HES and/or Regulatory Departments so that it may be reported to CPW.

Total: 1 comment(s)

Applicable Policies and Notices to Operators

Piceance Rulison Field - Notice to Operators.
NW Colorado Notification Policy.
Notice Concerning Operating Requirements for Wildlife Protection.
Pit Design, Construction and Monitoring Requirements Within 3/4 mile of the Rim of the Roan Plateau.

Attachment Check List

Att Doc Num	Name
400548324	FORM 2 SUBMITTED
400548483	TOPO MAP
400548486	WELL LOCATION PLAT
400548489	OTHER
400548490	DEVIATED DRILLING PLAN
400549447	DIRECTIONAL DATA

Total Attach: 6 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final review completed. No LGD comments.	5/29/2014 8:19:17 AM
Permit	Operator states the TOP is valid although it would require perfling the casing. Operator requested the number on wells on this facility to 21 from 18.	5/29/2014 7:33:48 AM
Permit	Requested the operator review the number on wells at this facility. It appears with the recently submitted APD there would be 20 wells not the 18 as shown on the facility tab.	5/28/2014 1:28:16 PM
LGD	pass, gdb	2/18/2014 11:09:40 AM
Engineer	As per Horizontal Offset Policy: All offset wells within 1500' of the proposed wellbore have been evaluated for adequate isolation.	2/5/2014 9:40:23 AM
Engineer	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 00 FEET DEEP.	2/4/2014 12:50:09 PM
Permit	Passed completeness.	2/3/2014 4:23:53 PM
Permit	Returned to draft: Horizontal should be selected and production zone information needs to be provided in the Well Location tab. Directional data not uploading in Attachment data import tab. Please check your spreadsheet headings and formats and resolve and resubmit.	2/3/2014 12:29:56 PM

Total: 8 comment(s)