

FORM  
2  
Rev  
08/16

State of Colorado  
Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203  
Phone: (303) 894-2100 Fax: (303) 894-2109



Document Number:  
400698329

APPLICATION FOR PERMIT TO:

Drill  Deepen  Re-enter  Recomplete and Operate

Date Received:  
09/30/2014

TYPE OF WELL OIL  GAS  COALBED  OTHER Unplanned  
ZONE TYPE SINGLE ZONE  MULTIPLE ZONES  COMMINGLE ZONES

Refiling   
Sidetrack

Well Name: Sheep Mountain Unit Well Number: 4-23-L  
Name of Operator: OXY USA INC COGCC Operator Number: 66561  
Address: PO BOX 27757  
City: HOUSTON State: TX Zip: 77227  
Contact Name: Joan Proulx Phone: (970)263-3641 Fax: (970)263-3694  
Email: joan\_proulx@oxy.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: \_\_\_\_\_

WELL LOCATION INFORMATION

QtrQtr: NENE Sec: 22 Twp: 27S Rng: 70W Meridian: 6  
Latitude: 37.691310 Longitude: -105.201730

Footage at Surface: 520 Feet <sup>FNL/FSL</sup> FNL 1100 Feet <sup>FEL/FWL</sup> FEL

Field Name: \_\_\_\_\_ Field Number: \_\_\_\_\_

Ground Elevation: 8765 County: HUERFANO

GPS Data:  
Date of Measurement: 12/05/2013 PDOP Reading: 2.3 Instrument Operator's Name: S Selin

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

Footage at Top of Prod Zone: <sup>FNL/FSL</sup> 2025 <sup>FSL</sup> FSL 3187 <sup>FEL</sup> FEL Bottom Hole: <sup>FNL/FSL</sup> 1921 <sup>FSL</sup> FSL 1999 <sup>FEL/FWL</sup> FEL  
Sec: 23 Twp: 27S Rng: 70W Sec: 23 Twp: 27S Rng: 70W

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: No

The right to construct the Oil and Gas Location is granted by: Surface Use Agreement

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.)

T27S, R70W, S23 all, and lands in other sections

Total Acres in Described Lease: 1640 Described Mineral Lease is:  Fee  State  Federal  Indian

Federal or State Lease # COC 010646

Distance from Completed Portion of Wellbore to Nearest Lease Line of described lease: 1999 Feet

**CULTURAL DISTANCE INFORMATION**

Distance to nearest:

Building: 2540 Feet

Building Unit: 5280 Feet

High Occupancy Building Unit: 5280 Feet

Designated Outside Activity Area: 5280 Feet

Public Road: 3871 Feet

Above Ground Utility: 393 Feet

Railroad: 5280 Feet

Property Line: 1100 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: 2075 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 935 Feet (Enter 5280 for distance greater than 1 mile.)

Federal or State Unit Name (if appl): Sheep Mountain Unit Number: 047683X

**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.)
DAKOTA	DKTA			
ENTRADA	ENRD			

## DRILLING PROGRAM

Proposed Total Measured Depth: 10300 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: 2075 Feet  No well belonging to another operator within 1,500 feet

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? 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: ONSITE Drilling Fluids Disposal Methods: Recycle/reuse

Cuttings Disposal: OFFSITE Cuttings Disposal Method: Commercial Disposal

Other Disposal Description:

Beneficial reuse or land application plan submitted? No

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
SURF	17+1/2	13+3/8	54.5	0	967	475	967	0
1ST	12+1/4	9+5/8	36	0	3633	543	3633	0
2ND	8+1/2	7+0/0	26	0	10300	560	10300	

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

a. While drilling 12 1/4" directional hole at 5,352' MD/3825' TVD, observed severe pack off while getting ready to make a connection. Managed to pull out of the hole to +/- 1618' while back-reaming due to tight hole, where the drill string became stuck. The pipe was worked free with fishing tools and continued to pull out of the hole. Once more, tight hole was observed and the drill string became stuck at 711' (inside surface casing). The pipe was worked free with fishing tools and finally pulled to surface. Several times throughout these operations, large amounts of cutting and indications of wellbore breakout were observed whenever we were able to circulate. It was decided to run a clean out assembly to attempt to clean out the hole and run intermediate casing. We were able to clean out to 1450' MD were we could not make any more progress, it was determined that the original wellbore was totally collapsed.

b. Total measured depth reached in the wellbore being plugged back is 5352'.

c. Surface casing is set at 967'.

1. Please note that the 9 5/8" casing will be changed to an MD of 3506'.

d. No fish was left in the hole.

e. Proposed plugs: Will place a 583' balanced plug from 1,450' md to 100' inside surface casing. Total volume of at least 175 bbls (including 100% excess).

f. Type of cement: Slurry weight 17.5 ppg, Slurry Yield 0.989 ft3/sack.

g. MD of KOP: 1025'

h. Objective formation same as original hole (Dakota, Entrada)

i. BHL target for sidetrack is the same as the original BHL.

j. Diana Burn provided email sidetrack approval on 09/30/2014.

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

Location ID: 333348

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: Joan Proulx

Title: Regulatory Date: 9/30/2014 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, applicable orders, and SB 19-181 and is hereby approved.

COGCC Approved: Matthew Lee Director of COGCC Date: 10/16/2014

Expiration Date: 10/15/2016

API NUMBER

05 055 06314 01

## 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

	1) Cement to 200' above Dakota. Verify coverage with cement bond log. This applies to production and intermediate casings as appropriate for zonal isolation of DKTA and ENRD. 2) If dry hole set the following plugs: 40 sks cement 50' above the Entrada, 40 sks cement 50' above the Dakota, 90 sks cement from 50' below to 50' above surface casing shoe, 40 sks cement at top of surface casing, cut casing 4-ft below GL, weld on plate, 5 sks cement in rat hole and mouse hole. 3) Run and submit Directional Survey from TD to base of surface casing.
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## Best Management Practices

### No BMP/COA Type

### Description

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## Applicable Policies and Notices to Operators

Notice Concerning Operating Requirements for Wildlife Protection.  
[http://cogcc.state.co.us/documents/reg/Policies/Wildlife\\_Notice.pdf](http://cogcc.state.co.us/documents/reg/Policies/Wildlife_Notice.pdf)

## Attachment Check List

### Att Doc Num

### Name

2092204	DEVIATED DRILLING PLAN
400698329	APD APPROVED
400698333	CORRESPONDENCE
400698396	WELLBORE DIAGRAM
400699436	FORM 2 SUBMITTED
400710174	FORM 2 SUBMITTED

Total Attach: 6 Files

### General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final review completed.	10/16/2014
Permit	Operator revised top of production and bottom hole footage as well as the proposed TD.	10/16/2014
Permit	Top of production footage setbacks and bottom hole footage setbacks are incorrect. Data is taken from original approved permit. A sundry was submitted to change the well trajectory and bottom hole location. The deviated drilling plan submitted with this form matches what was attached to the location change sundry. Requested operator to verify and approve the footage change in this permit to what was approved on the sundry.	10/15/2014
Engineer	Operator provided new directional plan and confirmed casing / cement table.	10/14/2014
Engineer	Requested casing cement table data from R.N. Vega.	10/09/2014
Engineer	Missing directional plan and directional data. The BHL and casing / cement table information is same as the original permit whereas there was a Sundry #400630828 that made changes to them. Asked operator to confirm the correct data and provide the missing attachments.	10/09/2014
Permit	Passed completeness. This permit is for an emergency sidetrack. Attached is a wellbore diagram. 9 5/8" casing setting depth is changing substantially. Verbal approval email is attached.	10/06/2014
Permit	Permit not completely filled out. returned to draft.	10/01/2014

Total: 8 comment(s)