

**APPLICATION FOR PERMIT TO:**

**Drill**       Deepen       Re-enter       Recomplete and Operate

Date Received:

TYPE OF WELL    OIL     GAS     COALBED     OTHER \_\_\_\_\_      Refiling

ZONE TYPE      SINGLE ZONE     MULTIPLE ZONES     COMMINGLE ZONES       Sidetrack

Well Name: Sheep Mountain Unit      Well Number: 6-4-I

Name of Operator: OXY USA INC      COGCC Operator Number: 66561

Address: PO BOX 27757 #110

City: HOUSTON      State: TX      Zip: 77227-7757

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: 20060139

**WELL LOCATION INFORMATION**

QtrQtr: NWNE      Sec: 9      Twp: 27S      Rng: 70W      Meridian: 6

Latitude: 37.721810      Longitude: -105.222840

Footage at Surface: 305 feet      FNL/FSL      FNL 2039 feet      FEL/FWL      FEL \_\_\_\_\_

Field Name: SHEEP MOUNTAIN      Field Number: 77230

Ground Elevation: 8124      County: HUERFANO

GPS Data:

Date of Measurement: 10/29/2014      PDOP Reading: 2.4      Instrument Operator's Name: E Purcell

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

Footage at Top of Prod Zone:      FNL/FSL      FEL/FWL      Bottom Hole:      FNL/FSL      FEL/FWL

1223      FSL 1313      FEL      2546      FNL      615      FEL

Sec: 4      Twp: 27S      Rng: 70W      Sec: 4      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.)

S4, T27S, R70W: S1/2N1/2, N1/2S1/2

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: 615 Feet

## CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 816 Feet  
Building Unit: 5280 Feet  
High Occupancy Building Unit: 5280 Feet  
Designated Outside Activity Area: 5280 Feet  
Public Road: 4170 Feet  
Above Ground Utility: 960 Feet  
Railroad: 5280 Feet  
Property Line: 305 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: 475 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 1766 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: 9681 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 475 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 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: 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?

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+0/0	20+0/0	65	0	100	4	100	0
SURF	17+1/2	13+3/8	54.5	0	976	623	976	0
1ST	12+1/4	9+5/8	40	0	2245	446	2245	2019
2ND	8+1/2	7+0/0	26	0	9681	407	9681	1719

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 OXY USA Inc. is proposing to drill two CO2 wells from an existing pad, the 6-4-I pad, COGCC location # 334553. The existing location will be expanded to accommodate the two proposed wells. The COGCC GIS map indicates there are three pad location numbers for the location in question: 324499, 333353 and 334553. A Form 4 Sundry Notice has been submitted, document #400755420, to consolidate the locations into one location number of #334553.

There are six producing wells on the location:  
Well Name API Location #  
2-9-H 05-055-06057 324499  
6-9-B 05-055-06075 333353  
5-9-A 05-055-06073 333353  
3-4-O 05-055-06065 334553  
4-4-P 05-055-06072 334553  
7-9 05-055-06031 334553

The pad lies on private (fee) surface. The proposed 6-4-I well will pass through BLM minerals and bottom hole in fee minerals. The proposed production will be obtained from both BLM and fee minerals. The proposed 1-3-M well will reach into and bottom hole in Federal minerals. The BHLs for both wells lie within an Exploratory Unit. All access roads, pipelines and production facilities are existing, with the exception of an approximate 150' pad access road and a new flowline for the two proposed wells.

OXY will provide appropriate housing for essential personnel in order to conduct safe, efficient drilling operations at this site.

A closed-loop system will be utilized.

The nearest building to the proposed wells is the compressor building located on the original pad footprint. The next closest building is a house located 4,970' away, which is the distance used for the Cultural Distance Information on the Form 2 and Form 2A.

Surface owner consultation: All communication with the surface owner is to be routed through the surface owner's representative. An invitation was extended to the surface owner on Nov. 11, 2014, for a pre-consultation meeting/visit. Her attorney responded that the surface owner's schedule will not allow the surface owner to attend. A second invitation was extended requesting alternate dates and no response was received. Per the BLM, they also sent an invitation to the surface owner to attend the on-site Notice of Staking/pre-consultation meeting and no response was received. The surface owner recently acquired a new representative and a request for a surface owner consultation was received by OXY on January 9, 2015. Arrangements are being made for the surface owner consultation.

The proposed pad extension lies within a black bear area; the OXY BMP for black bear wildlife is attached. The CPW consultation occurred on 12/8/2014 via email to Brett Ackerman.

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

Location ID: 334553

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: \_\_\_\_\_ Email: joan\_proulx@oxy.com

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: \_\_\_\_\_

Expiration Date: \_\_\_\_\_

API NUMBER

05

## 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.

## Best Management Practices

**No BMP/COA Type**

**Description**

No BMP/COA Type	Description

## Attachment Check List

**Att Doc Num**

**Name**

400764945	TOPO MAP
400764951	DEVIATED DRILLING PLAN
400764956	DEVIATED DRILLING PLAN
400764958	DIRECTIONAL DATA
400770028	WELL LOCATION PLAT
400770172	MINERAL LEASE MAP
400770173	MINERAL LEASE MAP

Total Attach: 7 Files

## General Comments

**User Group**

**Comment**

**Comment Date**

User Group	Comment	Comment Date

Total: 0 comment(s)