

FORM

2

Rev
08/13

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:

400863637

(SUBMITTED)

Date Received:

APPLICATION FOR PERMIT TO:

☐ Drill
 ☐ Deepen
 ☐ Re-enter
 ☒ **Recomplete and Operate**
TYPE OF WELL OIL ☐ GAS ☒ COALBED ☐ OTHER _____Refilling ☐ZONE TYPE SINGLE ZONE ☐ MULTIPLE ZONES ☒ COMMINGLE ZONES ☒Sidetrack ☐

Well Name: Sheep Mountain Unit

Well Number: 7-22-P

Name of Operator: OXY USA INC

COGCC Operator Number: 66561

Address: 760 HORIZON DR #101

City: GRAND JUNCTION

State: CO

Zip: 81506

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: NESE Sec: 26 Twp: 27S Rng: 70W Meridian: 6

Latitude: 37.671400

Longitude: -105.197100

Footage at Surface: 2308 feet FNL/FSL FSL 11 feet FEL/FWL FEL

Field Name: SHEEP MOUNTAIN

Field Number: 77230

Ground Elevation: 9176

County: HUERFANO

GPS Data:

Date of Measurement: 06/24/2011 PDOP Reading: 1.1 Instrument Operator's Name: J R Stark

If well is ☒ Directional ☐ Horizontal (highly deviated) **submit deviated drilling plan.**
 Footage at Top of Prod Zone: FNL/FSL FSL 486 FSL 155 FEL 719 FSL 204 FEL
 Sec: 22 Twp: 27S Rng: 70W Sec: 22 Twp: 27S Rng: 70W

LOCATION SURFACE & MINERALS & RIGHT TO CONSTRUCT

Surface Ownership: ☐ Fee ☐ State ☒ Federal ☐ IndianThe 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 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.)

See attached mineral lease map

Total Acres in Described Lease: 840 Described Mineral Lease is: ☐ Fee ☐ State ☒ Federal ☐ Indian

Federal or State Lease # COC004401A

Distance from Completed Portion of Wellbore to Nearest Lease Line of described lease: 204 Feet

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 301 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: 1263 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: 4756 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 2471 Feet (Enter 5280 for distance greater than 1 mile.)

Federal or State Unit Name (if appl): Exploratory Uni Unit Number: COC047683X

SPACING & FORMATIONS COMMENTS

No COGCC spacing orders for this location

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: 6910 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 4756 Feet (Including plugged wells)

Will a closed-loop drilling system be used? No

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 ☐ N/A

DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: ☐ Drilling Fluids Disposal Methods: ☐

Cuttings Disposal: ☐ Cuttings Disposal Method: ☐

Other Disposal Description: ☐

There will be no additional drilling activities on this well for the recompletion; no drilling waste management program is needed.

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	16+0/0	62	0	122	375	122	0
SURF	14+3/4	10+3/4	45.5	0	1295	1090	1295	0
1ST	9+5/8	7+5/8	26.4	0	6786	1190	6786	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 OXY is proposing to recomple the Dakota formation of the Sheep Mountain 7-22-P well. There will be no additional surface disturbance to the pad.

A recompletion procedure is attached.

There are 8 offset wells to the 7-22-P well. The well name, status and tops of cement are:

4-26-E PR Surface
2-35-C PR Surface
9-26 PR Surface
6-26-D AL
5-23-N AL
3-26-B AL
2-26-O AL
1-26-L PR Surface

Per my conversation with Arthur Koepsell on 10/14/2014 no baseline water sampling is required on a re-entry/recompletion procedure.

Please note that when using the most recent GPS data, the COGCC Footage Calculator puts the SHL in a different section than what is on the scout card (2292 FSL, -45 FEL, S26, 27S, 70W).

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

Location ID: 324501

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: _____ 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

05 055 06080 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.

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.
2	Wildlife	<p>Sensitive Wildlife Habitat: Elk Production Area and Bighorn Sheep</p> <ul style="list-style-type: none"> • Consult with CPW to identify locations of elk production areas and bighorn sheep production areas. Map all seasonal habitats using CPW habitat selection models as they become available. • After drilling and completions activities reduce visits to well-sites through remote monitoring (i.e. SCADA) and the use of multi-function contractors. • Schedule, as best as possible, well site visitations to portions of the day between 8:00 a.m. and 3:00 p.m. between November 1 through April 15 in Bighorn Sheep areas. • Schedule, as best as possible, well site visitations to portions of the day between 8:00 a.m. and 3:00 p.m. between May 15 through June 30 in elk production areas. • Establish company guidelines to minimize wildlife mortality from vehicle collisions on roads. • Implement the species appropriate Infrastructure Layout and Drilling and Production Operations Wildlife Protection Measures found in Section II D. of the CPW Wildlife BMP document as follows: <ul style="list-style-type: none"> • Section II D. DRILLING AND PRODUCTION OPERATIONS WILDLIFE PROTECTION MEASURES: The purpose of these measures is to reduce disturbance on the actual drill site and the surrounding area, to reduce direct conflict with wildlife and hunters, and to prevent wildlife access to equipment. <ol style="list-style-type: none"> 1. Use centralized hydraulic fracturing operations. 2. Where possible, transport water through centralized pipeline systems rather than by trucking. 3. Where possible, locate pipeline systems under existing roadways, or roadways that are planned for development. 4. Maximize use of state-of-the-art drilling technology (e.g., high efficiency rigs, coiled-tubing unit rigs, closed-loop or pitless drilling, etc.) to minimize disturbance. 5. Conduct well completions with drilling operations to limit the number of rig moves and traffic. 6. Install exclusionary devices to prevent bird and other wildlife access to equipment stacks, vents and openings. • Minimize surface disturbance and fragmentation of elk and bighorn sheep habitat through use of the smallest facility footprints possible, use of multiple well pads, clustering of roads and pipelines, and the widest possible spacing of surface facilities. • Remove all unnecessary infrastructure. • Treat waste water pits and any associated pit containing water that provides a suitable medium for breeding mosquitoes with Bti (<i>Bacillus thuringiensis</i> v. <i>israelensis</i>) or take other effective action to control mosquito larvae that may spread West Nile

Virus to wildlife, especially grouse.

- In order to prevent wildlife from accessing the temporary drilling pits, pits will be contained by a 4-foot high fence. Further, while the pit is not in use, flagging will be placed over the pit to prevent birds from entering the pit.
- Implement the species appropriate reclamation guidelines found in Section II G. of the CPW Wildlife BMP document.
- Section II G. RESTORATION, RECLAMATION AND ABANDONMENT: The purpose of these measures is to restore disturbed sites to their pre-development conditions, using native vegetation that can be used by the indigenous wildlife. Develop a reclamation plan in consultation with CPW, NRCS, and the land owner or land management agency that incorporates wildlife species-specific goals and that defines reclamation performance standards, including the following components:
 1. Seed
 - a. Use only certified weed-free native seed in seed mixes, unless use of non-native plant materials is recommended by CPW.
 - b. Use locally adapted seed whenever available, especially for species which have wide geographic ranges and much genetic variation (e.g., big sagebrush (*Artemesia tridentata*), antelope bitterbrush (*Purshia tridentata*), etc.).
 - c. Where more than one ecotype of a given species is available and potentially adapted to the site, include more than one ecotype per species in the seed mix.
 - d. Use appropriately diverse reclamation seed mixes that mirror an appropriate reference area for the site being reclaimed (see also species-specific recommendations).
 - e. Conduct seeding in a manner that ensures that seedbed preparation and planting techniques are targeted toward the varied needs of grasses, forbs and shrubs (e.g., seed forbs and shrubs separately from grasses, broadcast big sagebrush but drill grasses, etc.).
 - f. Emphasize bunchgrass over sod-forming grasses in seed mixes in order to provide more effective wildlife cover and to facilitate forb and shrub establishment.
 - g. Seed immediately after recontouring and spreading topsoil. Spread topsoil and conduct seeding during optimal periods for seed germination and establishment. Use of the same contractor for re-contouring land as used for seeding is often the most effective approach.
 - h. Do not include aggressive, non-native grasses (e.g., intermediate wheatgrass, pubescent wheatgrass, crested wheatgrass, smooth brome, etc.) in reclamation seed mixes. Site specific exceptions may be considered.
 - i. Distribute quick germinating site adapted native seed or sterile non-native seed for interim reclamation on cut and fill slopes and topsoil piles.
 - j. Plan for reclamation failure and be prepared to repeat seeding as necessary to meet vegetation cover, composition, and diversity standards.
 2. Vegetative Cover Standard
 - a. Choose reference areas as goals for reclamation that have high wildlife value, with attributes such a diverse and productive understory of vegetation, productive and palatable shrubs, and a high prevalence of native species.
 - b. Establish vegetation with total perennial non-invasive plant cover of at least eighty (80) percent of pre-disturbance or reference area levels.
 - c. Establish vegetation with plant diversity of non-invasive species which is at least half that of pre-disturbance or reference area levels. Quantify diversity of vegetation using a metric that considers only species with at least 3 percent relative plant cover.
 - d. Observe and maintain a performance standard for reclamation success characterized by the establishment of a self-sustaining, vigorous, diverse, locally appropriate plant community on the site, with a density sufficient to control erosion and non-native plant invasion and diversity sufficient to allow for normal plant community development.
 3. Timing
 - a. Use early and effective reclamation techniques, including interim reclamation to accelerate return of disturbed areas for use by wildlife.
 - b. Remove all unnecessary infrastructure.
 - c. Close and reclaim roads not necessary for development immediately, including removing all bridges and culverts and recontouring/reclaiming all stream crossings.
 - d. Reclaim reserve pits as quickly as possible after drilling and ensure that pit contents do not contaminate soil.
 - e. Remediate hydrocarbon spills on disturbed areas prior to reclamation.
 - f. Reclaim sites during optimum seasons (e.g. late fall/early winter or early spring).
 - g. Complete final reclamation activities so that seeding occurs during the first optimal

		season following plugging and abandonment of oil and gas wells.
3	Wildlife	<p>Sensitive Wildlife Habitat: Elk Production Area and Bighorn Sheep Continued:</p> <p>4. Interim reclamation</p> <p>a. Use a variety of native grasses and forbs to establish effective, interim reclamation on all disturbed areas (e.g., road shoulders and borrow areas), including disturbed areas where additional future ground disturbance is expected to occur.</p> <p>b. Oxy will make a good-faith effort to perform interim reclamation to final reclamation species composition and establishment standards.</p> <p>c. Perform "interim" reclamation on all disturbed areas not needed for active support of production operations.</p> <p>5. Riparian areas (none associated with this pad or associated access roads and pipelines)</p> <p>a. Replace all riparian vegetation removed during development at a rate of at least 3:1.</p> <p>b. Restore both form and function of impacted wetlands and riparian areas and mitigate erosion.</p> <p>6. Disposal</p> <p>a. Remove well pad and road surface materials that are incompatible with post-production land use and re-vegetation requirements.</p> <p>b. Remove and properly dispose of degraded silt fencing and erosion control materials after their utility has expired.</p> <p>c. Remove and properly dispose of pit contents where contamination of surface water, groundwater, or soil by pit contents cannot be effectively prevented.</p> <p>7. Establishing reclaimed areas</p> <p>a. Apply certified weed free mulch and crimp or tacyfy to remain in place to reclaim areas for seed preservation and moisture retention.</p> <p>b. Utilize staked soil retention blankets for erosion control and reclamation of large surface areas with 3:1 or steeper slopes. Avoid use of plastic blanket materials, known to cause mortality of snakes.</p> <p>c. Control weeds in areas surrounding reclamation areas in order to reduce weed competition.</p> <p>d. Educate employees and contractors about weed issues.</p> <ul style="list-style-type: none"> • Use early and effective reclamation techniques, including an aggressive interim reclamation program, to return habitat to use by greater sage-grouse as quickly as possible. • Gate single-purpose roads and restrict general public access to reduce traffic disruptions to wildlife. • Close and immediately reclaim all roads that are redundant, not used regularly, or have been abandoned to the maximum extent possible to minimize disturbance and habitat fragmentation. • Avoid aggressive non-native grasses and shrubs in mule deer and elk habitat restoration. • Reclaim mule deer and elk habitats with native shrubs, grasses, and forbs appropriate to the ecological site disturbed. • Restore disturbed sagebrush sites with the appropriate sagebrush species or subspecies on disturbed sagebrush sites. Use locally collected seed for reseeding where possible.

Total: 3 comment(s)

Attachment Check List

Att Doc Num	Name
400863647	MINERAL LEASE MAP
400863648	OTHER
400863650	WELLBORE DIAGRAM
400863651	OTHER

Total Attach: 4 Files

General Comments

User Group

Comment

Comment Date

--	--	--

Total: 0 comment(s)

