

FORM  
2A

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:

400756522

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Date Received:

01/14/2015

Oil and Gas Location Assessment

☐ New Location ☐ Refile ☒ Amend Existing Location Location#: 334553

Submit signed original form. This Oil and Gas Location Assessment is to be submitted to the COGCC for approval prior to any ground disturbance activity associated with oil and gas operations. Approval of this Oil and Gas Location Assessment will allow for the construction of the below specified Location; however, it does not supersede any land use rules applied by the local land use authority. Please see the COGCC website at <http://cogcc.state.co.us/> for all accompanying information pertinent this Oil and Gas Location Assessment.

Location ID:

**334553**

Expiration Date:

**04/02/2018**

☒ This location assessment is included as part of a permit application.

CONSULTATION

- ☐ This location is included in a Comprehensive Drilling Plan. CDP # \_\_\_\_\_
- ☐ This location is in a sensitive wildlife habitat area.
- ☐ This location is in a wildlife restricted surface occupancy area.
- ☐ This location includes a Rule 306.d.(1)A.ii. variance request.

Operator

Operator Number: 66561  
Name: OXY USA INC  
Address: 760 HORIZON DR #101  
City: GRAND JUNCTION State: CO Zip: 81506

Contact Information

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 ☐ Gas Facility Surety ID: \_\_\_\_\_  
☐ Waste Management Surety ID: \_\_\_\_\_

LOCATION IDENTIFICATION

Name: Sheep Mountain Unit Number: 6-4-I  
County: HUERFANO  
QuarterQuarter: NWNE Section: 9 Township: 27S Range: 70W Meridian: 6 Ground Elevation: 8124  
Define a single point as a location reference for the facility location. When the location is to be used as a well site then the point shall be a well location.  
Footage at surface: 305 feet FNL from North or South section line  
2039 feet FEL from East or West section line  
Latitude: 37.721810 Longitude: -105.222840  
PDOP Reading: 2.4 Date of Measurement: 10/29/2014  
Instrument Operator's Name: E Purcell

## RELATED REMOTE LOCATIONS

(Enter as many Related Locations as necessary. Enter the Form 2A document # only if there is no established COGCC Location ID#)

This proposed Oil and Gas Location is:

LOCATION ID # FORM 2A DOC #

## FACILITIES

Indicate the number of each type of oil and gas facility planned on location

Wells	8	Oil Tanks*		Condensate Tanks*		Water Tanks*	2	Buried Produced Water Vaults*	
Drilling Pits		Production Pits*		Special Purpose Pits		Multi-Well Pits*	2	Modular Large Volume Tanks	
Pump Jacks		Separators*		Injection Pumps*		Cavity Pumps*		Gas Compressors*	1
Gas or Diesel Motors*		Electric Motors	4	Electric Generators*		Fuel Tanks*		LACT Unit*	
Dehydrator Units*	2	Vapor Recovery Unit*		VOC Combustor*		Flare*		Pigging Station*	

## OTHER FACILITIES\*

### Other Facility Type

### Number

Electrical substation/transformers	2
Air coolers	2
Compressor station	1

\*Those facilities indicated by an asterisk (\*) shall be used to determine the distance from the Production Facility to the nearest cultural feature on the Cultural Setbacks Tab.

Per Rule 303.b.(3)C, description of all oil, gas, and/or water pipelines:

A new gathering line will be installed from the 6-4-I and 1-3-M wells to the compressor station.  
There is a 12" steel existing pipeline from this pad to the next pad, which then travels to the transfer station, 1.5 miles in length.

## CONSTRUCTION

Date planned to commence construction: 03/01/2015 Size of disturbed area during construction in acres: 8.10  
Estimated date that interim reclamation will begin: 09/01/2016 Size of location after interim reclamation in acres: 2.90  
Estimated post-construction ground elevation: 8120

## DRILLING PROGRAM

Will a closed loop system be used for drilling fluids: Yes

Is H<sub>2</sub>S anticipated? No

Will salt sections be encountered during drilling: No

Will salt based mud (>15,000 ppm Cl) be used? No

Will oil based drilling fluids be used? Yes

## DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: ONSITE Drilling Fluids Disposal Method: Recycle/reuse  
Cutting Disposal: OFFSITE Cuttings Disposal Method: Commercial Disposal

Other Disposal Description:

Beneficial reuse or land application plan submitted? No

Reuse Facility ID: or Document Number:

Centralized E&P Waste Management Facility ID, if applicable:

## SURFACE & MINERALS & RIGHT TO CONSTRUCT

Name: Carol Koscove

Phone: 303-623-4987

Address: Gary Jerman, ASA

Fax: 303-623-4988

Address: 1499 Blake St, Ste 4I

Email: jermanoil@msn.com

City: Denver State: CO Zip: 80202

Surface Owner: ☒ Fee ☐ State ☐ Federal ☐ Indian

Check all that apply. The Surface Owner: ☐ is the mineral owner

☐ 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 from or produced to this Oil and Gas Location: No

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

Surface damage assurance if no agreement is in place: \_\_\_\_\_ Surface Surety ID: \_\_\_\_\_

Date of Rule 306 surface owner consultation 11/11/2014

## CURRENT AND FUTURE LAND USE

Current Land Use (Check all that apply):

Crop Land: ☐ Irrigated ☐ Dry land ☐ Improved Pasture ☐ Hay Meadow ☐ CRP

Non-Crop Land: ☒ Rangeland ☐ Timber ☐ Recreational ☐ Other (describe): \_\_\_\_\_

Subdivided: ☐ Industrial ☐ Commercial ☐ Residential

Future Land Use (Check all that apply):

Crop Land: ☐ Irrigated ☐ Dry land ☐ Improved Pasture ☐ Hay Meadow ☐ CRP

Non-Crop Land: ☒ Rangeland ☐ Timber ☐ Recreational ☐ Other (describe): \_\_\_\_\_

Subdivided: ☐ Industrial ☐ Commercial ☐ Residential

## CULTURAL DISTANCE INFORMATION

Provide the distance to the nearest cultural feature as measured from Wells or Production Facilities onsite.

	From WELL	From PRODUCTION FACILITY
Building:	4800 Feet	5100 Feet
Building Unit:	4890 Feet	5200 Feet
High Occupancy Building Unit:	5280 Feet	5280 Feet
Designated Outside Activity Area:	5280 Feet	5280 Feet
Public Road:	4040 Feet	3354 Feet
Above Ground Utility:	960 Feet	1776 Feet
Railroad:	5280 Feet	5280 Feet
Property Line:	305 Feet	1121 Feet

### INSTRUCTIONS:

- All measurements shall be provided from center of nearest Well or edge of nearest Production Facility to nearest of each cultural feature as described in Rule 303.b.(3)A.
- 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.
- For measurement purposes only, Production Facilities should only include those items with an asterisk(\*) on the Facilities Tab.

## 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: \_\_\_\_\_

## FOR MULTI-WELL PADS AND PRODUCTION FACILITIES WITHIN DESIGNATED SETBACK LOCATIONS ONLY:

- ☐ Check this box if this Oil and Gas Location has or will have Production Facilities that serve multiple wells (onll or offsite) and the Production Facilities are proposed to be located less than 1,000 feet from a Building Unit. *(Pursuant to Rule 604.c.(2)E.i., the operator must evaluate alternative locations for the Production Facilities that are farther from the Building Unit, and determine whether those alternative locations were technically feasible and economically practicable for the same proposed development.)*
- ☐ By checking this box, I certify that no alternative placements for the Production Facilities, farther from the nearest Building Unit, were available based on the analysis conducted pursuant to Rule 604.c.(2)E.i.

In the space below, explain rationale for siting the multi-well Production Facility(ies) that supports your Rule 604.c.(2)E.i determination. Attach documentation that supports your determination to this Form 2A.

## SOIL

List all soil map units that occur within the proposed location. attach the National Resource Conservation Service (NRCS) report showing the "Map Unit Description" report listing the soil typical vertical profile. This data is to be used when segregating topsoil.

The required information can be obtained from the NRCS web site at <http://soildatamart.nrcs.usda.org/> or from the COGCC web site GIS Online map page found at <http://colorado.gov/cogcc>. Instructions are provided within the COGCC web site help section.

NRCS Map Unit Name: 8, Brownsto very gravelly loam, 3 to 15 percent slopes

NRCS Map Unit Name: 9, Brownsto very channery loam, 15 to 75 percent slopes

NRCS Map Unit Name: 71, ring cobbly loam, 20 to 45 percent slopes

## PLANT COMMUNITY:

Complete this section only if any portion of the disturbed area of the location's current land use is on non-crop land.

Are noxious weeds present: Yes ☐ No ☒

Plant species from: ☒ NRCS or, ☐ field observation Date of observation: \_\_\_\_\_

List individual species: 8: Blue grama, Bottlebrush squirreltail, Streambank wheatgrass, Needleandthread, True mountain mahogany, Little bluestem, Sideoats grama, Indian ricegrass, Twoneedle pinyon

Check all plant communities that exist in the disturbed area.

- ☐ Disturbed Grassland (Cactus, Yucca, Cheatgrass, Rye)  
☒ Native Grassland (Bluestem, Grama, Wheatgrass, Buffalograss, Fescue, Oatgrass, Brome)  
☒ Shrub Land (Mahogany, Oak, Sage, Serviceberry, Chokecherry)  
☐ Plains Riparian (Cottonwood, Willow, Aspen, Maple, Poplar, Russian Olive, Tamarisk)  
☐ Mountain Riparian (Cottonwood, Willow, Blue Spruce)  
☒ Forest Land (Spruce, Fir, Ponderosa Pine, Lodgepole Pine, Juniper, Pinyon, Aspen)  
☐ Wetlands Aquatic (Bullrush, Sedge, Cattail, Arrowhead)  
☐ Alpine (above timberline)  
☐ Other (describe): \_\_\_\_\_

## WATER RESOURCES

Is this a sensitive area: ☒ No ☐ Yes

Distance to nearest

downgradient surface water feature: 1080 Feet

water well: 4430 Feet

Estimated depth to ground water at Oil and Gas Location 50 Feet

Basis for depth to groundwater and sensitive area determination:

Hydrology plat and COGCC GIS map

Is the location in a riparian area: ☒ No ☐ Yes

Was an Army Corps of Engineers Section 404 permit filed ☒ No ☐ Yes If yes attach permit.

Is the location within a Rule 317B Surface Water Supply Area buffer \_\_\_\_\_ No \_\_\_\_\_  
zone:

If the location is within a Rule 317B Surface Water Supply Area buffer have all public water supply systems within 15 miles been notified: \_\_\_\_\_

## GROUNDWATER BASELINE SAMPLING AND MONITORING AND WATER WELL SAMPLING

Water well sampling required per Rule 609 \_\_\_\_\_

## 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)

## RULE 502.b VARIANCE REQUEST

☐ Rule 502.b. Variance Request from COGCC Rule or Spacing Order Number \_\_\_\_\_

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.

Map Unit Symbol 9: True mountain mahogany, Little bluestem, Sideoats grama, Indian ricegrass, Twoneedle pinyon, Blue grama, bottlebrush squirreltail, Streambank wheatgrass, Needleandthread

Map Unit Symbol 71: Western wheatgrass, Mountain muhly, Muttongrass, Pine dropseed, Blue grama, Arizona fescue, Bottlebrush squirreltail, Prairie junegrass, Sideoats grama

Sheep Mountain is an area consisting of slopes and sometimes steep terrain and for safety purposes, the two new wells are being placed in an adjacent area. The original pad was recontoured to a smaller footprint that allows work on the wells with a workover unit only; no additional space was left for a drilling rig.

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.

Signed: \_\_\_\_\_ Date: 01/14/2015 Email: joan\_proulx@oxy.com

Print Name: Joan Proulx Title: Regulatory

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: 4/3/2015

### Conditions Of Approval

All representations, stipulations and conditions of approval stated in this Form 2A for this location shall constitute representations, stipulations and conditions of approval for any and all subsequent operations on the location unless this Form 2A is modified by Sundry Notice, Form 4 or an Amended Form 2A.

COA Type	Description
	Operator shall provide notice to COGCC 48 hours prior to commencing construction of this Oil and Gas Location via Form 42.

### **Best Management Practices**

No	BMP/COA Type	Description
1	Wildlife	<p>Wildlife and Domestic Animals Policy</p> <ul style="list-style-type: none"> <li>• All firearms and hunting paraphernalia are strictly prohibited.</li> <li>• Employees, contractors, subcontractors, or visitors will not hunt, fish, trap, trade, feed, or harass animals or keep wildlife in captivity.</li> <li>• Employees, contractors, subcontractors or visitors shall not bring domestic animals to Oxy property.</li> <li>• 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.</li> <li>• All employees and visitors shall attend Oxy's Visitor Orientation presentation which includes training for Oxy's Wildlife and Domestic Animals policy.</li> <li>• 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.</li> <li>• All employees, contractors, subcontractors, or visitors shall comply with the following bear specific guidelines: <ul style="list-style-type: none"> <li>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.</li> <li>o Food and food waste located at temporary job sites shall be kept in the vehicle and only disposed of in bear-proof containers.</li> <li>o Report bear conflicts immediately to Oxy HES and/or Regulatory Departments so that it may be reported to CPW.</li> </ul> </li> </ul>

Total: 1 comment(s)

### **Attachment Check List**

Att Doc Num	Name
1009776	CORRESPONDENCE
2519665	SURFACE AGRMT/SURETY
400756522	FORM 2A SUBMITTED
400770383	30 DAY NOTICE LETTER
400770387	HYDROLOGY MAP
400770390	ACCESS ROAD MAP
400770392	REFERENCE AREA MAP
400770397	REFERENCE AREA PICTURES
400770403	MULTI-WELL PLAN
400770408	TOPO MAP
400770418	LOCATION PICTURES
400770454	OTHER
400770456	OTHER
400771552	SURFACE PLAN
400771554	LOCATION DRAWING
400771558	CONST. LAYOUT DRAWINGS
400775692	NRCS MAP UNIT DESC

Total Attach: 17 Files

## General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final review completed; no LGD or public comment received	4/1/2015 11:00:32 AM
OGLA	Added statement:  "Sheep Mountain is an area consisting of slopes and sometimes steep terrain and for safety purposes, the two new wells are being placed in an adjacent area. The original pad was recontoured to a smaller footprint that allows work on the wells with a workover unit only; no additional space was left for a drilling rig."  to the Submit tab.	3/31/2015 4:23:09 PM
OGLA	Changed distance from wellhead to nearest building to 4800 feet based on the Location Drawing Changed distance from wellhead to nearest Building Unit to 4890 feet based on the Location Drawing Changed distance from wellhead to the nearest public road to 4040 feet based on the Location Drawing  Changed distance from production facility to nearest building to 5100 feet based on the COGIS Map Changed distance from production facility to nearest Building Unit to 5200 feet based on the COGIS Map	3/27/2015 5:04:05 PM
Permit	Operator revised drilling fluid disposal onsite.	2/5/2015 2:00:06 PM
Permit	Attached provided SUA.	2/5/2015 10:26:20 AM
Permit	Removed and transfered form 2 associated documents to the form 2.	1/22/2015 8:59:47 AM
Permit	Passed completeness.	1/20/2015 10:35:02 AM
Permit	Missing additional NRCS map unit descriptions. Current provided NRCS file unacceptable. Return to draft.	1/20/2015 9:32:32 AM

Total: 8 comment(s)