

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:

400568107

Date Received:

03/17/2014

Oil and Gas Location Assessment

New Location Refile Amend Existing Location Location#: 333348

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:

333348

Expiration Date:

04/26/2017

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: PO BOX 27757

City: HOUSTON State: TX Zip: 77227

Contact Information

Name: L. Kiki Lockett

Phone: (713) 2630510

Fax: (713) 9854962

email: kiki_lockett@oxy.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: _____

Gas Facility Surety ID: _____

Waste Management Surety ID: _____

LOCATION IDENTIFICATION

Name: Sheep Mountain Unit - Drill Site 3

Number: 047683X

County: HUERFANO

Quarter: NENE Section: 15 Township: 27S Range: 70W Meridian: 6 Ground Elevation: 8769

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: 73 feet FSL from North or South section line

709 feet FEL from East or West section line

Latitude: 37.692950 Longitude: -105.200460

PDOP Reading: 2.3 Date of Measurement: 12/05/2013

Instrument Operator's Name: S. Selin

Name: Carol Koscove

Phone: 7192164668

Address: 54 Maryland

Fax: _____

Address: _____

Email: lodi120@yahoo.com

City: Colorado Springs State: CO Zip: 80906

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 11/21/2013

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

Distance to nearest:

Building: 1843 Feet
 Building Unit: 5280 Feet
 High Occupancy Building Unit: 5280 Feet
 Designated Outside Activity Area: 5280 Feet
 Public Road: 3669 Feet
 Above Ground Utility: 305 Feet
 Railroad: 5280 Feet
 Property Line: 709 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.

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: _____

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 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: Map Unit 71, Ring cobbly loam, 20 to 45 percent slopes --- Huerfano County Area, Colorado
 NRCS Map Unit Name: Map Unit 75, Rubble land-Rock outcrop complex--- Huerfano County Area, Colorado
 NRCS Map Unit Name: _____

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: Pine dropseed, Sideoates grama, Blue grama, Arizona fescue, Prarie junegrass, Bottlebrush squirreltail, Mountain muhlyMuttongrass, Western wheatgrass

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: 277 Feet

water well: 4229 Feet

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

Basis for depth to groundwater and sensitive area determination:

The Hydrology Map in the plat package 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 is proposing to deepen an existing CO2 well and to drill a new CO2 well from the existing Sheep Mountain Unit 627S70W pad. The existing pad will be amended by constructing an annex to the south in order to drill the new well. There are currently six producing wells on this pad. The existing well which will be deepened reaches Federal minerals into BLM lease #COC010646, and the new well to be drilled will reach Federal minerals into BLM lease #COC010488. No new roads, pipelines or pad facilities will be required; the new well will tie-in to the existing gathering line. The pad lies on private surface, and the surface owner consultation meeting occurred on October 31, 2013 with David Woest from the Oxy Land Department. The CPW pre-consultation meeting occurred on November 18, 2013 with Al Trujillo and he granted Oxy an exception to the bighorn sheep and elk production area drilling restrictions. The existing well and the proposed well are located in two separate NRCS areas. The dry pond on the plat Location Drawing is utilized for capturing rainwater and stormwater runoff. Oxy will provide appropriate housing for essential personnel in order to conduct safe, efficient drilling operations at this well site.

Reference Area pictures will be provided in the next growing season.

If you have any questions or comments, I can be reached at 713.215.7643 or kiki_lockett@oxy.com.

The building located at 120 feet from the proposed well is an onsite Oil and Gas related facility.

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

Signed: _____ Date: 03/17/2014 Email: kiki_lockett@oxy.com

Print Name: L. Kiki Lockett Title: Regulatory Analyst

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: 4/27/2014

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

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Best Management Practices

No BMP/COA Type

Description

1	Wildlife	<p>OXY USA WTP LP and OXY USA Inc.</p> <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. 1. Use centralized hydraulic fracturing operations.
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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 (*Bacillus thuringiensis v. israelensis*) 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 (*Artemisia 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

		<p>a metric that considers only species with at least 3 percent relative plant cover.</p> <p>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.</p> <p>3. Timing</p> <p>a. Use early and effective reclamation techniques, including interim reclamation to accelerate return of disturbed areas for use by wildlife.</p> <p>b. Remove all unnecessary infrastructure.</p> <p>c. Close and reclaim roads not necessary for development immediately, including removing all bridges and culverts and recontouring/reclaiming all stream crossings.</p> <p>d. Reclaim reserve pits as quickly as possible after drilling and ensure that pit contents do not contaminate soil.</p> <p>e. Remediate hydrocarbon spills on disturbed areas prior to reclamation.</p> <p>f. Reclaim sites during optimum seasons (e.g. late fall/early winter or early spring).</p> <p>g. Complete final reclamation activities so that seeding occurs during the first optimal season following plugging and abandonment of oil and gas wells.</p>
2	Interim Reclamation	<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 tacify 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: 2 comment(s)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
2519009	SURFACE AGRMT/SURETY
2519016	NRCS MAP UNIT DESC
400568107	FORM 2A SUBMITTED
400570149	ACCESS ROAD MAP
400570150	HYDROLOGY MAP
400570151	CONST. LAYOUT DRAWINGS
400570154	LOCATION DRAWING
400570155	MULTI-WELL PLAN
400570159	LOCATION PICTURES
400570166	REFERENCE AREA MAP
400570243	30 DAY NOTICE LETTER

Total Attach: 11 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final review completed; no LGD or public comment received.	4/25/2014 6:21:04 AM
OGLA	Added pipeline information per Operator email dated April 16, 2014.	4/24/2014 1:40:14 PM
OGLA	Added additional information to "Other Disposal Description" under Construction, Drilling and Waste tab per telephone conversation with Kiki Lockett, April 11, 2014.	4/11/2014 3:29:52 PM
OGLA	Revised typo in Water Resources.	4/11/2014 12:58:59 PM
OGLA	Changed distance to nearest building to 1843 feet from 120 feet.	4/11/2014 12:15:23 PM
OGLA	Added "Gas Plant" to the Facilities Tab under Other Facilities.	4/11/2014 11:14:24 AM
OGLA	Added the statement "The building located at 120 feet from the proposed well is an onsite Oil and Gas related facility." to the Submit Tab.	4/11/2014 11:13:33 AM
Permit	NRCS map unit desc. incorrect. Operator provided the correct survey.	3/20/2014 11:08:21 AM
DOW	CPW consultation complete. Minimal disturbance to a location that already has well pad.	3/19/2014 9:42:11 AM
Permit	The original SUA was made with BP which Oxy USA acquired. per Operator 3/18/2014	3/19/2014 6:05:47 AM
Permit	Surface owner has been notified of location name difference. (name changed to be more relevant) "On December 20, 2013 the landowner Carol Koscove and the BLM, both surface owners, were notified of the staking and permitting of the following wells in Sheep Mountain, 4-23-L, 6-15-I, 7-15-I and 8-15-D."	3/18/2014 7:41:06 AM
Permit	Attached provided Surface Use Agreement.	3/18/2014 6:40:07 AM
Permit	New location pictures will also need to be taken during the growing season.	3/17/2014 2:10:59 PM
Permit	Location name was changed but the land owner notice still has the old pad name on it.	3/17/2014 2:08:24 PM
Permit	Requested the surface agreement.	3/17/2014 2:05:36 PM

Total: 15 comment(s)