

FORM  
2A

Rev  
04/01

State of Colorado  
Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80205 Phone: (303) 894-2100 Fax: (303) 894-2109



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Document Number:

400014868

**Oil and Gas Location Assessment**

☒ New Location ☐ Amend Existing Location Location#: \_\_\_\_\_

Submit original plus one copy. This form is to be submitted to the COGCC prior to any ground disturbance activity associated with oil and gas development operations. This Assessment may be approved as a stand alone application or submitted as an informational report accompanying an Application for Permit-To-Drill, Form 2. Approval of this 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. This form may serve as notice to land owners and other interested parties, please see the COGCC web site at <http://colorado.gov/cogcc/> for all accompanying information pertinent to this Oil and Gas Location Assessment.

Location ID:

**416503**

Expiration Date:

**04/08/2013**

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

**1. 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.

**2. Operator**

Operator Number: 10091

Name: BERRY PETROLEUM COMPANY

Address: 1999 BROADWAY STE 3700

City: DENVER State: CO Zip: 80202

**3. Contact Information**

Name: JANNI KEIDEL

Phone: (303) 999-4225

Fax: (303) 999-4325

email: jek@bry.com

**4. Location Identification:**

Name: OXY "O22 697" PAD Number: 22-10D

County: GARFIELD

QuarterQuarter: SWSE Section: 22 Township: 6S Range: 97W Meridian: 6 Ground Elevation: 8491

Define a single point as a location reference for the facility location. This point should be used as the point of measurement in the drawings to be submitted with this application. When the location is to be used as a well site then the point shall be a well location.

Footage at surface: 463 feet, from North or South section line: FSL and 1487 feet, from East or West section line: FEL

Latitude: 39.502517 Longitude: -108.202003 PDOP Reading: 1.3 Date of Measurement: 08/05/2009

**5. Facilities (Indicate the number of each type of oil and gas facility planned on location):**

Special Purpose Pits: <u>1</u>	Drilling Pits: <u>1</u>	Wells: <u>16</u>	Production Pits: <u>1</u>	Dehydrator Units: <u>  </u>
Condensate Tanks: <u>  </u>	Water Tanks: <u>1</u>	Separators: <u>3</u>	Electric Motors: <u>3</u>	Multi-Well Pits: <u>  </u>
Gas or Diesel Motors: <u>6</u>	Cavity Pumps: <u>  </u>	LACT Unit: <u>  </u>	Pump Jacks: <u>  </u>	Pigging Station: <u>  </u>
Electric Generators: <u>3</u>	Gas Pipeline: <u>1</u>	Oil Pipeline: <u>  </u>	Water Pipeline: <u>1</u>	Flare: <u>  </u>
Gas Compressors: <u>  </u>	VOC Combustor: <u>  </u>	Oil Tanks: <u>1</u>	Fuel Tanks: <u>1</u>	

Other: DRILLING RIG TEMPORARY ON LOCATION FOR 10 DAYS PER WELL. SEPARATORS USED WILL BE: 2 QUADS, 1 DOUBLE. TEMPORARY OFFICE AND HOUSING.

## 6. Construction:

Date planned to commence construction: 04/01/2010 Size of disturbed area during construction in acres: 7.74  
Estimated date that interim reclamation will begin: 06/15/2012 Size of location after interim reclamation in acres: 2.94  
Estimated post-construction ground elevation: 8491 Will a closed loop system be used for drilling fluids: Yes ☐  
Will salt sections be encountered during drilling: Yes ☐ No ☒ Is H2S anticipated? Yes ☐ No ☒  
Will salt (>15,000 ppm TDS Cl) or oil based muds be used: Yes ☐ No ☒  
Mud disposal: Offsite ☐ Onsite ☒ Method: Land Farming ☐ Land Spreading ☒ Disposal Facility ☐  
Other: \_\_\_\_\_

## 7. Surface Owner:

Name: OXY USA, INC. Phone: \_\_\_\_\_  
Address: 5 GREENWAY PLAZA, SUITE #110 Fax: \_\_\_\_\_  
Address: \_\_\_\_\_ Email: \_\_\_\_\_  
City: HOUSTON State: TX Zip: 77046 Date of Rule 306 surface owner consultation: 08/05/2009  
Surface Owner: ☒ Fee ☐ State ☐ Federal ☐ Indian  
Mineral Owner: ☒ Fee ☐ State ☐ Federal ☐ Indian  
The surface owner is: ☐ the mineral owner ☒ committed to an oil and gas lease  
☐ is the executer of the oil and gas lease ☐ the applicant  
The right to construct the location is granted by: ☐ oil and gas lease ☒ Surface Use Agreement ☐ Right of Way  
☐ applicant is owner  
Surface damage assurance if no agreement is in place: ☐ \$2000 ☐ \$5000 ☐ Blanket Surety ID \_\_\_\_\_

## 8. Reclamation Financial Assurance:

☒ Well Surety ID: 20040105 ☒ Gas Facility Surety ID: \_\_\_\_\_ ☐ Waste Mgnt. Surety ID: \_\_\_\_\_

## 9. Cultural:

Is the location in a high density area (Rule 603.b.): Yes ☐ No ☒  
Distance, in feet, to nearest building: 25605, public road: 22440, above ground utilit: 22959  
, railroad: 33111, property line: 494

## 10. 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

## 11. 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

## 12. Soils:

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.gov/> 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: 57. Parachute-Rhone loams, 5 to 30 percent slopes

NRCS Map Unit Name: 52. Northwater-Adel complex, 5 to 50 percent slopes

NRCS Map Unit Name: \_\_\_\_\_

### 13. 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: 08/05/2009

List individual species: SERVICE BERRIES, SAGEBRUSH AND NATIVE GRASSES

Check all plant communities that exist in the disturbed area.

- ☐ Disturbed Grassland (Cactus, Yucca, Cheatgrass, Rye)  
☐ Native Grassland (Bluestern, 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): \_\_\_\_\_

### 14. Water Resources:

Rule 901.e. may require a sensitive area determination be performed. If this determination is performed the data is to be submitted with the Form 2A.

Is this a sensitive area: ☒ No ☐ Yes Was a Rule 901.e. Sensitive Areas Determination performed: ☒ No ☐ Yes

Distance (in feet) to nearest surface water: 655, water well: 8448, depth to ground water: 42

Is the location in a riparian area: ☒ No ☐ Yes Was an Army Corps of Engineers Section 404 permit filed ☒ No ☐ Yes

Is the location within a Rule 317B Surface Water Supply Area buffer zone:

☒ No ☐ 0-300 ft. zone ☐ 301-500 ft. zone ☐ 501-2640 ft. 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: ☒ No ☐ Yes

15. Comments:

Berry Petroleum Company-Best Management Practices-Oxy O22 697 Well Pad (16 wells)-A total of sixteen wells will be directionally drilled from the O22 697 well pad. Directional drilling has enabled Berry Petroleum Company to reduce the number of well pads required for gas recovery and will minimize surface damage. The O22 697 well pad will be constructed adjacent to an existing access road. This eliminates the need to construct an additional road for access and avoids additional surface disturbance. In general, Berry Petroleum Company will comply with applicable federal, state and local statutes, rules, regulations and ordinances, including, those of OSHA, the COGCC and CDPHE relating to safety and the environment.

During construction of the well pad, topsoil will be isolated from other soils and placed and stacked per COGCC requirements. All cuts, full slopes, pit and topsoil piles and soil piles will be stabilized and revegetated immediately following construction. The pad will be constructed in compliance with CDPHE Stormwater Discharge regulations. The reserve/completion pit will be fenced/flagged and/or netted to prevent entry of wildlife (including birds) and livestock. Bear-proof dumpsters or trash cages will be used on the location for solid/food waste storage. Noxious weeds will be controlled. Temporary housing for the drill rig crews will meet all Garfield County regulations. The housing quarters will receive 24/7 supervision by Berry Petroleum Company. Production tanks shall be placed on a non-permeable liner and surrounded by a metal containment wall at least 3-feet high. During the reclamation phase, all areas of soil disturbance will be smooth graded, cultivated to provide a loose seed bed of a minimum of 6 inches in depth, fertilized with 250 pounds of 46-0-0 per acre, seeded with the seed mixture specified by the surface owner, and mulched with 1-1/2 tons of grass hay crimped into the soil.

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

Signed: \_\_\_\_\_ Date: 02/11/2010 Email: jek@bry.com

Print Name: JANNI KEIDEL Title: PERMITTING AGENT

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: 4/9/2010

**CONDITIONS OF APPROVAL, IF ANY:**

**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.**

The nearby hillside must be monitored for any day-lighting of drilling fluids throughout the drilling of the surface casing interval.

All pits must be lined.

Reserve pit must be lined.

No portion of any pit that will be used to hold liquids shall be constructed on fill material, unless the pit and fill slope are designed and certified by a professional engineer, subject to review and approval by the director prior to construction of the pit. The construction and lining of the pit shall be supervised by a professional engineer or their agent. The entire base of the pit must be in cut.

The moisture content of any drill cuttings in a cuttings pit, trench, or pile shall be as low as practicable to prevent accumulation of liquids greater than de minimis amounts. At the time of closure, the drill cuttings must also meet the applicable standards of table 910-1.

Operator must ensure 110 percent secondary containment for any volume of fluids contained at well site during drilling and completion operations. If fluids are conveyed via pipeline, operator must implement best management practices to contain any unintentional release of fluids.

### Attachment Check List

Att Doc Num	Name	Doc Description
2033029	CORRESPONDENCE	LF@2441953 2033029
400038180	ACCESS ROAD MAP	LF@2431057 400038180
400038181	LOCATION DRAWING	LF@2431058 400038181
400038182	CONST. LAYOUT DRAWINGS	LF@2431059 400038182
400038184	CONST. LAYOUT DRAWINGS	LF@2431060 400038184
400038186	HYDROLOGY MAP	LF@2431061 400038186
400038187	CONST. LAYOUT DRAWINGS	LF@2431062 400038187
400038188	LOCATION PICTURES	LF@2431063 400038188
400038189	TOPO MAP	LF@2431064 400038189
400038190	REFERENCE AREA PICTURES	LF@2431065 400038190
400038191	CONST. LAYOUT DRAWINGS	LF@2431066 400038191
400038192	CONST. LAYOUT DRAWINGS	LF@2431067 400038192
400038193	TOPO MAP	LF@2431068 400038193
400038194	REFERENCE AREA MAP	LF@2431069 400038194
400038195	NRCS MAP UNIT DESC	LF@2431070 400038195
400038196	NRCS MAP UNIT DESC	LF@2431071 400038196
400038197	MULTI-WELL PLAN	LF@2431072 400038197
400038198	LOCATION PICTURES	LF@2431073 400038198
400038199	EQUIPMENT LIST	LF@2431074 400038199
400038200	PROPOSED BMPs	LF@2431075 400038200
400038203	CONST. LAYOUT DRAWINGS	LF@2431076 400038203
400038204	FORM 2A	LF@2431077 400038204
400039138	FORM 2A SUBMITTED	LF@2431078 400039138

Total Attach: 23 Files