

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:

400012354

## 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:

**416586**

Expiration Date:

**04/11/2013**
☒ 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 "E22 697" PAD Number: 22-25D

County: GARFIELD

QuarterQuarter: SWNW Section: 22 Township: 6S Range: 97W Meridian: 6 Ground Elevation: 8359

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: 2240 feet, from North or South section line: FNL and 634 feet, from East or West section line: FWL

Latitude: 39.509583 Longitude: -108.213190 PDOP Reading: 1.4 Date of Measurement: 08/10/2009

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

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

Other: DRILLING RIG TEMPORARY ON LOCATION FOR 10 DAYS PER WELL. 3 GAS MOTORS & 3 DIESEL MOTORS. SEPARTORS USED WILL BE: 2 QUADS, 1 DOUBLE.

6. Construction:

Date planned to commence construction: 08/01/2010 Size of disturbed area during construction in acres: 7.93  
Estimated date that interim reclamation will begin: 03/01/2011 Size of location after interim reclamation in acres: 3.81  
Estimated post-construction ground elevation: 8359 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 # Fax: \_\_\_\_\_  
110  
Address: \_\_\_\_\_ Email: \_\_\_\_\_  
City: HOUSTON State: TX Zip: 77046 Date of Rule 306 surface owner consultation: 02/08/2010  
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 20040106

8. Reclamation Financial Assurance:

☒ Well Surety ID: 20040105 ☐ Gas Facility Surety ID: 20040107 ☐ Waste Mgmt. Surety ID: \_\_\_\_\_

9. Cultural:

Is the location in a high density area (Rule 603.b.): Yes ☐ No ☒  
Distance, in feet, to nearest building: 8856, public road: 17900, above ground utilit: 48899  
, railroad: 36930, property line: 2137

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: \_\_\_\_\_

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: 08/10/2009

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: 429, water well: 13940, 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- E22 697 Well Pad (16 wells)

A total of sixteen wells will be directionally drilled from the E22 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 E22 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: 02/10/2010 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: 4/12/2010

**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.

Location is in a sensitive area because of proximity to surface water; therefore, 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.

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.

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.

### **Attachment Check List**

Att Doc Num	Name	Doc Description
2033030	CORRESPONDENCE	LF@2441954 2033030
2033031	LOCATION DRAWING	LF@2441955 2033031
400037314	NRCS MAP UNIT DESC	LF@2432496 400037314
400037315	LOCATION DRAWING	LF@2432497 400037315
400037316	LOCATION DRAWING	LF@2432498 400037316
400037317	CONST. LAYOUT DRAWINGS	LF@2432499 400037317
400037318	CONST. LAYOUT DRAWINGS	LF@2432500 400037318
400037319	REFERENCE AREA MAP	LF@2432501 400037319
400037320	CONST. LAYOUT DRAWINGS	LF@2432502 400037320
400037321	TOPO MAP	LF@2432503 400037321
400037322	CONST. LAYOUT DRAWINGS	LF@2432504 400037322
400037323	ACCESS ROAD MAP	LF@2432505 400037323
400037324	HYDROLOGY MAP A, TOPO	LF@2432506 400037324
400037325	MULTI-WELL PLAN	LF@2432507 400037325
400037817	PROPOSED BMPs	LF@2432508 400037817
400037821	LOCATION PICTURES	LF@2432509 400037821
400037823	REFERENCE AREA PICTURES	LF@2432510 400037823
400037827	FORM 2A	LF@2432511 400037827
400039102	FORM 2A SUBMITTED	LF@2432512 400039102

Total Attach: 19 Files