

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



Document Number:

400227363

Date Received:

02/10/2012

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 standalone 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:

**428391**

Expiration Date:

**03/29/2015**

☒ 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: 46685

Name: KINDER MORGAN CO2 CO LP

Address: 17801 HWY 491

City: CORTEZ State: CO Zip: 81321

3. Contact Information

Name: Carolyn Dunmire

Phone: (970) 564-9100

Fax: ( )

email: dunmire@ecosphere-services.com

4. Location Identification:

Name: HA Number: 4

County: MONTEZUMA

QuarterQuarter: NWSE Section: 29 Township: 38N Range: 18W Meridian: N Ground Elevation: 6708

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: 1508 feet FSL, from North or South section line, and 2521 feet FEL, from East or West section line.

Latitude: 37.519540 Longitude: -108.855420 PDOP Reading: 1.6 Date of Measurement: 10/17/2011

Instrument Operator's Name: R.J. Caffey

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

Special Purpose Pits: <input type="text"/>	Drilling Pits: <input type="text" value="2"/>	Wells: <input type="text" value="1"/>	Production Pits: <input type="text"/>	Dehydrator Units: <input type="text"/>
Condensate Tanks: <input type="text"/>	Water Tanks: <input type="text" value="2"/>	Separators: <input type="text"/>	Electric Motors: <input type="text"/>	Multi-Well Pits: <input type="text"/>
Gas or Diesel Motors: <input type="text"/>	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"/>	Gas Pipeline: <input type="text"/>	Oil Pipeline: <input type="text"/>	Water Pipeline: <input type="text"/>	Flare: <input type="text"/>
Gas Compressors: <input type="text"/>	VOC Combustor: <input type="text"/>	Oil Tanks: <input type="text"/>	Fuel Tanks: <input type="text" value="1"/>	

Other: CO2 pipeline

6. Construction:

Date planned to commence construction: 02/27/2012 Size of disturbed area during construction in acres: 2.53  
Estimated date that interim reclamation will begin: 04/23/2012 Size of location after interim reclamation in acres: 1.00  
Estimated post-construction ground elevation: 6708 Will a closed loop system be used for drilling fluids: Yes ☒ No ☐  
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: \_\_\_\_\_ Phone: \_\_\_\_\_  
Address: \_\_\_\_\_ Fax: \_\_\_\_\_  
Address: \_\_\_\_\_ Email: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ Date of Rule 306 surface owner consultation: 12/13/2011  
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 20080051

### 8. Reclamation Financial Assurance:

☒ Well Surety ID: 20110027 ☐ 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: 2449, public road: 612, above ground utilit: 5280  
, railroad: 5280, property line: 180

### 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 be 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: 143. wetherill loam 1 to 3 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: 11/17/2011

List individual species: slender wheatgrass, crested wheatgrass, cheat grass, Russian thistle

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): \_\_\_\_\_

### 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: 660, water well: 3960, depth to ground water: 300

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:

The water well permit for the nearest water well was proposed to be 300 feet deep, however this water well (permit 24358-F) expired 1/6/1982. The nearest water well constructed is 4435 feet north and depth to ground water is not available (permit# 8441-AD) and is owned by Colorado Pacific Aztec. A ten-pound brine in the salt selection will be used, no oil-based mud. Fresh water will be used in the hole until salts then back to fresh water after we case off the salts. The mud will be disposed onsite for the surface cuttings and offsite at a land farm for the salt cuttings; separate pits will be used for each. Form 15 forthcoming.

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

Signed: \_\_\_\_\_ Date: 02/10/2012 Email: dunmire@ecosphere-services.com

Print Name: Carolyn Dunmire Title: Project Manager

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: 3/30/2012

**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.**

**SITE SPECIFIC COAs:**

Either a lined drilling pit or closed loop system must be implemented.

Production pit or any other pit constructed to hold fluids or salt based cuttings must be lined.

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 prior to offsite disposal.

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.

Operator must ensure 110 percent secondary containment for any volume of fluids contained at well site during drilling and completion operations; including, but not limited to, construction of a berm or diversion dike, diversion/collection trenches within and/or outside of berms/dikes, site grading, or other comparable measures (i.e., best management practices (BMPs) associated with stormwater management) sufficiently protective of nearby surface water. Any berm constructed at the well pad location will be stabilized, inspected at regular intervals, and maintained in good condition.

Operator must implement best management practices to contain any unintentional release of fluids, including any fluids conveyed via temporary surface pipelines or buried permanent pipelines.

If the well is to have hydraulic fracturing treatment, then flowback and stimulation fluids must be sent to tanks, separators, or other containment/filtering equipment before the fluids can be placed into any pipeline or pit located on the well pad or into tanker trucks for offsite disposal. The flowback and stimulation fluid tanks, separators, or other containment/filtering equipment must be placed on the well pad in an area with additional downgradient perimeter berming. The area where flowback fluids will be stored/reused must be constructed to be sufficiently impervious to contain any spilled or released material.

All personnel must be H2S trained and proper air monitoring for H2S must be implemented during drilling, completion, and production operations. Emergency response plan for H2S must be onsite at all times.

**Attachment Check List**

Att Doc Num	Name
2034161	CORRESPONDENCE
2034282	OTHER
400227363	FORM 2A SUBMITTED
400227432	LOCATION PICTURES
400227832	ACCESS ROAD MAP
400227833	HYDROLOGY MAP
400227837	SENSITIVE AREA MAP
400230871	LOCATION DRAWING
400230978	REFERENCE AREA PICTURES
400238776	PROPOSED BMPs
400250125	NRCS MAP UNIT DESC

Total Attach: 11 Files

**General Comments**

<b><u>User Group</u></b>	<b><u>Comment</u></b>	<b><u>Comment Date</u></b>
Permit	Final review completed.	3/29/2012 5:55:56 AM
Permit	The nearest county road we can determine from COGCC maps is on the order of 612'. Any road seen in the aerial photos (part of which I copy/pasted below) beyond that point is private and does not have public access. Please correct our form 2A, "Cultural section public road" to 612' (docnum 400227363), and correct the form 2s "distance to nearest building, public road, above ground utility or railroad" to 612' (for doc nums: 400224189 & 400224207). Thanks Let me know if you need anything further. PAUL	3/1/2012 5:25:20 AM
OGLA	Initiated/Completed OGLA Form 2A review on 02-17-12 by Dave Kubeczko; requested acknowledgement of fluid containment, spill/release BMPs, moisture content cuttings, H2S training, lined pit/closed loop, no pit in fill, and flowback to tanks COAs from operator on 02-17-12; received acknowledgement of COAs from operator on 02-21-12; no CPW; passed OGLA Form 2A AND FORM 15 Pit Permit review on 03-28-12 by Dave Kubeczko; fluid containment, spill/release BMPs, moisture content cuttings, H2S training, lined pit/closed loop, no pit in fill, and flowback to tanks COAs.	2/17/2012 12:04:33 PM

Total: 3 comment(s)

**BMP**

<b><u>Type</u></b>	<b><u>Comment</u></b>
Storm Water/Erosion Control	Disturbed portions of the well pad not necessary for operation and maintenance of the well would be re-contoured and roughened to blend into the surrounding terrain. In addition, a land-owner approved seed mix would be applied at the appropriate time using seeding and mulching methods outlined in the Kinder Morgan Programmatic Stormwater Management Plan.
Storm Water/Erosion Control	Fiber wattles will encompass the entire western periphery of the well pad and will continue wrapping approximately 100 feet of the southern periphery.
Storm Water/Erosion Control	A culvert will be placed under the access and have a wattle placed at the culvert outlet.

Total: 3 comment(s)