

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:

400563690

Date Received:

04/30/2014

Oil and Gas Location Assessment

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

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:

**437423**

Expiration Date:

**05/30/2017**

☐ 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: 46685

Name: KINDER MORGAN CO2 CO LP

Address: 17801 HWY 491

City: CORTEZ State: CO Zip: 81321

Contact Information

Name: Laura Getts

Phone: (970) 565-9100

Fax: ( )

email: lgetts@ecosphere-services.com

RECLAMATION FINANCIAL ASSURANCE

☐ Plugging and Abandonment Bond Surety ID: \_\_\_\_\_ ☒ Gas Facility Surety ID: 20080052

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

LOCATION IDENTIFICATION

Name: CC Cluster Number: \_\_\_\_\_

County: MONTEZUMA

QuarterQuarter: TRT 39 Section: 1 Township: 38N Range: 19W Meridian: N Ground Elevation: 6853

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: 2247 feet FSL from North or South section line

2377 feet FWL from East or West section line

Latitude: 37.579340 Longitude: -108.895310

PDOP Reading: 5.9 Date of Measurement: 03/31/2014

Instrument Operator's Name: R.J.Caffey

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

## OTHER FACILITIES

### Other Facility Type

### Number

DEG Metering Pump	1
Coalescing Filters	2
PDC Building	1
Sump Tank Pump	1
P-601A/B Produced Water Pumps	1
T-601 DEG Storage Tank	1
K-340 A/B Instrument Air Compressor	1
Produced water tank heater	2
V-501 Test Separator	1
Free Floating Lever Drain Trap	1
T-343 Sump Tank	1
Instrument Air Receiver	1
T-501 Produced Water Tank	1
S-601A/B Surge Bottle	1
MCC Gear	1
Air Dryer	1
V-601 Production Separator	1

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

Please See CC Cluster Construction Layout Drawing (attached).

## CONSTRUCTION

Date planned to commence construction: 10/03/2014 Size of disturbed area during construction in acres: 5.55  
Estimated date that interim reclamation will begin: 04/03/2015 Size of location after interim reclamation in acres: 2.50  
Estimated post-construction ground elevation: 6832

## DRILLING PROGRAM

Will a closed loop system be used for drilling fluids: \_\_\_\_\_

Is H<sub>2</sub>S anticipated? \_\_\_\_\_

Will salt sections be encountered during drilling: \_\_\_\_\_

Will salt based mud (>15,000 ppm Cl) be used? \_\_\_\_\_

Will oil based drilling fluids be used? \_\_\_\_\_

## DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: \_\_\_\_\_ Drilling Fluids Disposal Method: \_\_\_\_\_

Cutting Disposal: \_\_\_\_\_ Cuttings Disposal Method: \_\_\_\_\_

Other Disposal Description:

The produced water removed at the cluster facility is transported by truck or pipeline to an approved underground injection facility for disposal.

Beneficial reuse or land application plan submitted? \_\_\_\_\_

Reuse Facility ID: \_\_\_\_\_ or Document Number: \_\_\_\_\_

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

## SURFACE & MINERALS & RIGHT TO CONSTRUCT

Name: Wright, James S. & John W

Phone: \_\_\_\_\_

Address: 1005 AMARILLO ST

Fax: \_\_\_\_\_

Address: \_\_\_\_\_

Email: \_\_\_\_\_

City: PLAINVIEW State: TX Zip: 79072

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 03/27/2014

## 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**

Distance to nearest:

Building: 2059 Feet  
Building Unit: 2202 Feet  
High Occupancy Building Unit: 5280 Feet  
Designated Outside Activity Area: 5280 Feet  
Public Road: 2241 Feet  
Above Ground Utility: 2202 Feet  
Railroad: 5280 Feet  
Property Line: 204 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 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: Map Unit 143—Wetherill loam, 1 to 3 percent slopes  
NRCS Map Unit Name: Map Unit 144—Wetherill loam, 3 to 6 percent slopes  
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: \_\_\_\_\_

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: 1376 Feet

water well: 3991 Feet

Estimated depth to ground water at Oil and Gas Location 230 Feet

Basis for depth to groundwater and sensitive area determination:

Depth to groundwater is determined by using depth recordings from nearby well permit applications on file with the Colorado Division of Water Resources.

Sensitive Area Determination:

The nearest perennial water source is approximately 9 miles east of the CC Cluster. The CC Cluster is not within a local wellhead protection area, is greater than 1/8 mile from a domestic water well, and is greater than 1/4 mile from a public water supply well, ground water basin, or surface water supply area.

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 N/A

## 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 A cluster is a relatively simple facility connected to a small number of CO2 producing wells. CO2 from the wells flows to the cluster in separate pipelines. At the cluster facility, the separate streams of CO2 are combined into one stream. Water which is produced with CO2 from the wells is physically removed in a separator, and a hydrate inhibitor is added. The combined stream of CO2 flows out of the cluster into another pipeline which connects to a compression facility some distance away. The produced water removed at the cluster facility is transported by truck or pipeline to an approved underground injection facility for disposal.

Permission to construct the CC Cluster has been granted by an exclusive easement (see attached).

A Form 12 for this facility has been included in the attachments.

Water well sampling required by Rule 609 is N/A for the cluster facilities.

Once the CO2 wells associated with this cluster location have been permitted, an updated list of these wells will be provided to the COGCC.

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

Signed: \_\_\_\_\_ Date: 04/30/2014 Email: lgetts@ecosphere-services.com

Print Name: Laura Getts Title: Permitting Specialist

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: 5/31/2014

## 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
	Operator shall pressure test pipelines in accordance with Rule 1101.e.(1) prior to putting into initial service any temporary surface or permanent buried pipelines and following any reconfiguration of the pipeline network.
	Notify the COGCC 48 hours prior to start of cluster facility pad construction, pipeline testing, and start of operations using Form 42 (the appropriate COGCC individuals will automatically be email notified).

## **Best Management Practices**

<b>No</b>	<b>BMP/COA Type</b>	<b>Description</b>
1	Planning	A Kinder Morgan Fire Mitigation Plan is currently on file with Montezuma County.
2	Traffic control	<p>All access roads will be fully compliant with local county road standards. Access roads will be composed of compacted gravel.</p> <p>Kinder Morgan is working with CDOT to develop an appropriate State Highway Access Permit and Method of Handling Traffic plan.</p> <p>Kinder Morgan and (or) contractors/subcontractors will use Rd. CC or other routes as established and approved by CDOT and Montezuma County. Reduced speed and courtesy will be exercised by all employees and contractors/subcontractors.</p> <p>Magnesium chloride/ water will be used to control dust and particulate impacts to neighboring properties.</p> <p>Kinder Morgan keeps a road maintenance bond in place with Montezuma County.</p>
3	General Housekeeping	<p>The location will be adequately fenced to restrict access by unauthorized persons.</p> <p>On-site trash dumpsters will be emptied regularly by the local waste management company.</p>
4	Storm Water/Erosion Control	<p>Erosion control barriers, namely fiber wattles, will be placed around stock piled soils and at the edge of disturbance where necessary. Care will be taken to avoid disturbance outside of the project area unless it is deemed necessary for equipment stability and fire safety.</p> <p>Soil roughening will be used in all disturbed areas.</p> <p>Fuel and chemicals stored within the project area will be within secondary containment to reduce the potential for spills or releases.</p> <p>BMPs will be maintained or amended by Kinder Morgan as site conditions change throughout the construction and reclamation process.</p>
5	Dust control	<p>All access and parking surfaces will be graveled to aid in dust mitigation.</p> <p>Magnesium chloride/ water will be used to control dust and particulate impacts to neighboring properties.</p>
6	Construction	<p>All equipment will be contained within the project area of disturbance.</p> <p>Vegetation that does not need to be removed will be avoided during construction and removed vegetation will be cut near ground level, leaving the root system intact except where permanent facilities, roads, or ROWs require the complete removal of vegetation.</p>
7	Noise mitigation	During normal operations, the CC Cluster will remain within COGCC regulations for noise. The COGCC noise levels may be exceeded on a short-term basis during construction.
8	Emissions mitigation	All CO2 Cluster Stations are equipped with electronic controls which monitor CO2 leaks. These monitors are directly linked to the Supervisory Control and Data Acquisition (SCADA). All personnel are equipped with H2S monitoring devices.
9	Interim Reclamation	Disturbed areas not necessary for operation and maintenance will be re-contoured and roughened to blend into the surrounding terrain. In addition, a landowner approved seed mix will be applied at the appropriate time using seeding and mulching methods outlined in the Kinder Morgan Master Stormwater Management Plan (MSWMP). Weed control will be employed to help facilitate vegetation reestablishment.
10	Final Reclamation	All disturbed areas that are not necessary for operational procedures will be restored to at least 70 percent of pre-disturbance vegetative cover.

Total: 10 comment(s)

## Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
400563690	FORM 2A SUBMITTED
400564155	NRCS MAP UNIT DESC
400591281	TOPO MAP
400591282	CONST. LAYOUT DRAWINGS
400591283	ACCESS ROAD MAP
400591284	HYDROLOGY MAP
400591287	SENSITIVE AREA MAP
400591288	OTHER
400592422	OTHER
400593716	LOCATION PICTURES
400593737	PROPOSED BMPs
400594105	OTHER
400599249	SURFACE AGRMT/SURETY
400599320	LOCATION DRAWING

Total Attach: 14 Files

## General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final review completed; no public comment received.	5/27/2014 12:11:30 PM
OGLA	Initiated/Completed OGLA Form 2A review on 05-19-14 by Dave Kubeczko; notification and pipeline COAs, operator submitted BMPs sufficient; corrected ground elevation from 6853' to 6835' based on Construction Layout Drawings; corrected footages at surface from 1944' FSL to 2247' FSL and from 28' FWL to 2377' FWL based on lat/long provided; corrected distance to building from 2710' to 2059', distance from building unit from 2710' to 2202', and distance to above ground utility from 2710' to 22012' based on 2011 aerial photo showing house due north; corrected depth to GW from 250' bgs to 230' bgs (water level reported on database for water wells); no CPW; passed OGLA Form 2A review on 05-26-14 by Dave Kubeczko; notification and pipeline COAs.	5/19/2014 2:27:42 PM
LGD	County Applications have been submitted within the last week. They are currently scheduled to be reviewed by the Planning and Zoning Commission Board on May 22, 2014.	5/9/2014 1:27:46 PM
Permit	Passed completeness.	5/5/2014 3:08:07 PM

Total: 4 comment(s)