

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:

401283035

**(SUBMITTED)**

Date Received:

05/17/2017

## Oil and Gas Location Assessment

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

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:

Expiration Date:

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: 1001 LOUISIANA ST SUITE 1000

City: HOUSTON    State: TX    Zip: 77002

### Contact Information

Name: Chris Lopez

Phone: (970) 882-5537

Fax: ( )

email: christopher\_lopez@kindermorgan.com

### RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20110027

Gas Facility Surety ID: \_\_\_\_\_

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

### LOCATION IDENTIFICATION

Name: DC

Number: 27

County: DOLORES

Quarter: SWSW Section: 15 Township: 40N Range: 18W Meridian: N Ground Elevation: 6920

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: 215 feet FSL from North or South section line

699 feet FWL from East or West section line

Latitude: 37.726650 Longitude: -108.840720

PDOP Reading: 6.0 Date of Measurement: 04/13/2017

Instrument Operator's Name: R. J. Caffey



## DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE Drilling Fluids Disposal Method: Recycle/reuse

Cutting Disposal: OFFSITE Cuttings Disposal Method: Commercial Disposal

Other Disposal Description:

Fluids: Recycle as much as possible; any excess will go to a licensed Class I disposal facility. Cuttings are dewatered in a closed loop system and disposed of at a permitted commercial solid waste facility.

Beneficial reuse or land application plan submitted? No

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

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

## SURFACE & MINERALS & RIGHT TO CONSTRUCT

Name: Betty Jo & Larry Larimore Phone: \_\_\_\_\_

Address: P. O. Box 84 Fax: \_\_\_\_\_

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

City: Dove Creek State: CO Zip: 81324

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: Yes

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 05/11/2017

## 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

Provide the distance to the nearest cultural feature as measured from Wells or Production Facilities onsite.

	From WELL	From PRODUCTION FACILITY
Building:	3671 Feet	3671 Feet
Building Unit:	3671 Feet	3671 Feet
High Occupancy Building Unit:	5280 Feet	5280 Feet
Designated Outside Activity Area:	5280 Feet	5280 Feet
Public Road:	4555 Feet	4555 Feet
Above Ground Utility:	663 Feet	663 Feet
Railroad:	5280 Feet	5280 Feet
Property Line:	217 Feet	217 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.
- For measurement purposes only, Production Facilities should only include those items with an asterisk(\*) on the Facilities Tab.

## 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.
- Large UMA Facility - 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: \_\_\_\_\_

## FOR MULTI-WELL PADS AND PRODUCTION FACILITIES WITHIN DESIGNATED SETBACK LOCATIONS ONLY:

- Check this box if this Oil and Gas Location has or will have Production Facilities that serve multiple wells (on or offsite) and the Production Facilities are proposed to be located less than 1,000 feet from a Building Unit. *(Pursuant to Rule 604.c.(2)E.i., the operator must evaluate alternative locations for the Production Facilities that are farther from the Building Unit, and determine whether those alternative locations were technically feasible and economically practicable for the same proposed development.)*
- By checking this box, I certify that no alternative placements for the Production Facilities, farther from the nearest Building Unit, were available based on the analysis conducted pursuant to Rule 604.c.(2)E.i.

In the space below, explain rationale for siting the multi-well Production Facility(ies) that supports your Rule 604.c.(2)E.i determination. Attach documentation that supports your determination to this Form 2A.

## 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: 144 Wetherill loam, 3 to 6 percent slopes

NRCS Map Unit Name: 145 Wetherill loam, 6 to 12 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: 03/29/2017

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): Dry land crop



## WATER RESOURCES

Is this a sensitive area:  No  Yes

Distance to nearest

downgradient surface water feature: 663 Feet

water well: 604 Feet

Estimated depth to ground water at Oil and Gas Location 250 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

According to the COGCC GIS mapping system and the Colorado Division of Water Resources, the proposed DC-27 CO2 well is located approximately 604 feet from the nearest water well (CDWR Permit #36330, STOCK use, 63' FSL & 134' FWL, Sec. 15, T40N, R18W). No evidence of this stock water supply well can be found on the ground, so additional research into the well's status is being conducted. The proposed well is also located approximately 663 feet from the nearest surface water supply being a Dolores Water Conservancy District (DWCD) irrigation canal. The proposed well 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 or groundwater basin.

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: \_\_\_\_\_

Is the Location within a Floodplain?  No  Yes Floodplain Data Sources Reviewed (check all that apply)

Federal (FEMA)

State

County

Local

Other \_\_\_\_\_

## GROUNDWATER BASELINE SAMPLING AND MONITORING AND WATER WELL SAMPLING

Water well sampling required per Rule 609

## WILDLIFE

This location is included in a Wildlife Mitigation Plan

This location was subject to a pre-consultation meeting with CPW held on \_\_\_\_\_

### Operator Proposed Wildlife BMPs

No BMP

## DESIGNATED SETBACK LOCATION EXCEPTIONS

Check all that apply:

Rule 604.a.(1)A. Exception Zone (within 500' of a Building Unit) and is in an Urban Mitigation Area

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 Kinder Morgan CO2 Company, LP, may install glycol skid injection equipment on the well location to address hydrate formation/line obstruction due to freezing. The tanks would be filled by a supply truck every 7 to 10 days, and would be operated between mid-October and June as weather conditions dictate. When not in operation, the skids would either remain installed on location, or be removed from the well location and stored during the off-season to protect them from potential vandalism as determined necessary by Kinder Morgan. The pumps are fairly quiet and should not be audible outside of the well pad area. A plot of glycol skid equipment is attached.

There is one possible stock water-well (CDWR Permit #36330) and one DWCD irrigation canal located within 1/2 mile radius of the proposed DC-27 well location. Water sampling results and a Form 4 will be filed accordingly.

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.  
 Signed: \_\_\_\_\_ Date: 05/17/2017 Email: christopher\_lopez@kindermorgan.com  
 Print Name: Chris Lopez Title: EHS 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: \_\_\_\_\_

**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.

<u>COA Type</u>	<u>Description</u>

**Best Management Practices**

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Planning	A Kinder Morgan Wildfire Mitigation Plan is currently on file with the Dolores County Planning Office.  Any material not in use that might constitute a fire hazard will be moved a minimum of 25 feet from the wellhead.  Any electrical installations inside bermed areas (if necessary) will comply with API RP 500 classifications and comply with the current national electrical code as adopted by the State of Colorado.
2	Traffic control	A Road Use Plan, which addresses traffic concerns specific to the DC-27 well, has been agreed upon between Kinder Morgan and the Dolores County Road and Bridge Department. Kinder Morgan will consult with the County Road and Bridge Supervisor to ensure that all county related traffic concerns are addressed.  All access roads are fully compliant with local county road standards. Access roads are composed of compacted gravel.

3	General Housekeeping	<p>Erosion control barriers, namely fiber wattles, will be placed at the edge of the 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>During the construction, drilling, and completion phases, on-site trash dumpsters are emptied regularly by the local waste management company.</p> <p>Steel ranch fencing will be placed around the wellhead after the well is drilled. Once the well is tied-in, the fencing will be removed. The proposed well location will be drilled using a closed loop system and will therefore not use open pits.</p> <p>During drilling and completion operations, safety officers are present on location to ensure that livestock, wildlife, and unauthorized personnel do not enter the location.</p> <p>Following completion, the only items present on the well pad are the wellhead, above ground pipeline junction and possible glycol injection skid.</p>
4	Storm Water/Erosion Control	<p>Diversion ditches will be implemented to divert stormwater run-on and run-off around the well pad. Compacted earthen berms will also be utilized to control stormwater run-on and run-off.</p> <p>Tackifier will be added to the stored topsoil piles and all slopes to prevent erosion. Stockpiled soils will have slopes not greater than 3:1.</p> <p>Stormwater BMP's will be maintained/amended by Kinder Morgan as site conditions change throughout the construction and reclamation process.</p>
5	Material Handling and Spill Prevention	<p>The use of a closed-loop drilling system will reduce the amount of waste produced and water used during drilling operations. Solid cuttings will be disposed of at a permitted commercial solid waste facility.</p> <p>Water that can no longer be reused or recycled will be disposed of in a licensed Class I disposal well.</p> <p>Sufficiently impervious containment devices will be constructed around any condensate and produced water tanks. The containment devices will be sufficiently impervious to contain any spilled or released material. All containment devices will be inspected at regular intervals and maintained in good condition.</p> <p>Tanks are designed to meet all API 650 guidelines.</p>
6	Construction	<p>All equipment will be stored within the right-of-way (ROW) area of disturbance. Top soil will be removed to create a level pad for drilling and access road.</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 ROW's, and well pads require the complete removal of vegetation.</p>
7	Noise mitigation	<p>During the construction, drilling, completion and operations phases of the well, it will remain within COGCC regulations for noise.</p>
8	Emissions mitigation	<p>Non-flammable CO<sub>2</sub> will be produced from the Leadville formation and thus green completion per Rule 805.b.(3) does not apply.</p> <p>All CO<sub>2</sub> wells are equipped with a CO<sub>2</sub> leak detection monitor during drilling.</p>

9	Drilling/Completion Operations	<p>Blowout preventer equipment (BOPE) complies with COGCC equipment regulations. Mineral Management certification or Director approved training for blowout prevention has been conducted for at least one person at the well site during drilling operations.</p> <p>Kinder Morgan conducts a BOPE test and files a 24-hour notice (Form 42) at the initial rig-up time (if conducted), after each casing placement and/or every 30-days.</p> <p>Adequate BOPE is used on all well servicing operations.</p> <p>Backup stabbing valves are used on well servicing operations during reverse circulation and are pressure tested before each well servicing operation using both low-pressure air and high-pressure fluid.</p> <p>No pits are present at the well site.</p>
10	Interim Reclamation	<p>This location is currently classified as 'Dry-land Crop'. Surface roughening, surface contouring, seeding and weed control will be employed to facilitate vegetation reestablishment. A standard stabilized "Working Area" 150 feet by 250 feet in size will be maintained as level, graveled and weed-free for maintenance/workover activities. The area surrounding the Working Area will be returned to dry-land crop or re-seeded with a surface owner approved seed mix.</p>
11	Final Reclamation	<p>All disturbed areas that are not necessary for operational procedures will be restored to at least 80 percent of pre-disturbance vegetative cover.</p>

Total: 11 comment(s)

### Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
401283035	FORM 2A SUBMITTED
401283780	WELL LOCATION PLAT
401283791	ACCESS ROAD MAP
401283794	CONST. LAYOUT DRAWINGS
401283798	CONST. LAYOUT DRAWINGS
401283802	CONST. LAYOUT DRAWINGS
401283805	EQUIPMENT LIST
401283811	CONST. LAYOUT DRAWINGS
401283822	ACCESS ROAD MAP
401283829	EQUIPMENT LIST
401283838	NRCS MAP UNIT DESC
401283846	HYDROLOGY MAP
401283858	HYDROLOGY MAP B, AERIAL
401283865	SENSITIVE AREA MAP
401283868	PROPOSED BMPS
401283871	LOCATION DRAWING
401283875	TOPO MAP
401283879	SURFACE AGRMT/SURETY
401285814	LOCATION PICTURES
401285815	REFERENCE AREA PICTURES

Total Attach: 20 Files

### General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
		Stamp Upon Approval

Total: 0 comment(s)

**Public Comments**

No public comments were received on this application during the comment period.

