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

Oil and Gas Location Assessment

Document Number: 400579476

Date Received: 04/29/2014

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

Location ID: **437441**

Expiration Date: **05/31/2017**

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.

☒ 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) 564-9100

Fax: (970) 565-8874

email: lgetts@ecosphere-services.com

RECLAMATION FINANCIAL ASSURANCE

☒ Plugging and Abandonment Bond Surety ID: 20110027 ☐ Gas Facility Surety ID:

☐ Waste Management Surety ID:

LOCATION IDENTIFICATION

Name: Goodman Point (GP) Number: 27

County: MONTEZUMA

QuarterQuarter: SWSE Section: 18 Township: 36N Range: 17W Meridian: N Ground Elevation: 7080

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: 935 feet FSL from North or South section line

2105 feet FEL from East or West section line

Latitude: 37.373670 Longitude: -108.761870

PDOP Reading: 5.9 Date of Measurement: 03/13/2014

Instrument Operator's Name: Gerald G Huddleston

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	1	Oil Tanks		Condensate Tanks		Water Tanks		Buried Produced Water Vaults	
Drilling Pits		Production Pits		Special Purpose Pits		Multi-Well Pits		Temporary Large Volume Above Ground Tanks	
Pump Jacks		Separators		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
Glycol Injection Equipment	1

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

Detailed information associated with this pipeline are still in the planning stages. The pipeline will have the following characteristics:

Diameter: 10"
Material: Carbon Steel with HDPE Liner
Fluids: CO2 and Water

CONSTRUCTION

Date planned to commence construction: 06/01/2014 Size of disturbed area during construction in acres: 5.57

Estimated date that interim reclamation will begin: 12/01/2014 Size of location after interim reclamation in acres: 1.00

Estimated post-construction ground elevation: 7075

DRILLING PROGRAM

Will a closed loop system be used for drilling fluids: Yes

Is H_2S anticipated? Yes

Will salt sections be encountered during drilling: Yes

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

Will oil based drilling fluids be used? No

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 licensed UIC 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?

Reuse Facility ID: or Document Number:

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

SURFACE & MINERALS & RIGHT TO CONSTRUCT

Name: HUTCHINSON, FLOYD L. Phone:

Address: LMTD LIABILITY LMTD PRTNSHIP Fax:

Address: 704 LOS BRONCOS CT. Email:

City: WHITEWATER State: CO Zip: 81527

Surface Owner: [X] 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: [X] 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: Bond

Surface damage assurance if no agreement is in place: Blanket Surface Surety ID: 20080051

Date of Rule 306 surface owner consultation 03/13/2014

CURRENT AND FUTURE LAND USE

Current Land Use (Check all that apply):

Crop Land:	[ ] Irrigated	[X] Dry land	[ ] Improved Pasture	[ ] Hay Meadow	[ ] CRP
Non-Crop Land:	[X] Rangeland	[ ] Timber	[ ] Recreational	[ ] Other (describe):	
Subdivided:	[ ] Industrial	[ ] Commercial	[ ] Residential		

Future Land Use (Check all that apply):

Crop Land:	[ ] Irrigated	[X] Dry land	[ ] Improved Pasture	[ ] Hay Meadow	[ ] CRP
Non-Crop Land:	[X] Rangeland	[ ] Timber	[ ] Recreational	[ ] Other (describe):	
Subdivided:	[ ] Industrial	[ ] Commercial	[ ] Residential		

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building:	4653	Feet
Building Unit:	4653	Feet
High Occupancy Building Unit:	5280	Feet
Designated Outside Activity Area:	5280	Feet
Public Road:	4341	Feet
Above Ground Utility:	3175	Feet
Railroad:	5280	Feet
Property Line:	840	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 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 144 - Wetherill loam, 3 to 6 percent slopes

NRCS Map Unit Name: Map Unit 42 - Gladel-Pulpit complex, 3 to 9 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: 04/05/2014

List individual species: Pinus edulis, Juniperus osteosperma, Artemisia tridentata, Ericameria nauseosa, Elymus trachycaulus

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)
- [x] Shrub Land (Mahogany, Oak, Sage, Serviceberry, Chokecherry)
- [ ] Plains Riparian (Cottonwood, Willow, Aspen, Maple, Poplar, Russian Olive, Tamarisk)
- [ ] Mountain Riparian (Cottonwood, Willow, Blue Spruce)
- [x] 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: [x] No [ ] Yes

Distance to nearest

downgradient surface water feature: 865 Feet

water well: 5541 Feet

Estimated depth to ground water at Oil and Gas Location 60 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 5 miles South of the GP-27. The GP-27 CO2 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, ground water basin, or surface water supply area.

Is the location in a riparian area: [x] No [ ] Yes

Was an Army Corps of Engineers Section 404 permit filed [x] No [ ] Yes If yes attach permit.

Is the location within a Rule 317B Surface Water Supply Area buffer zone: No

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 609

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: Kinder Morgan CO2 Company may install glycol 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 plan of the glycol skid equipment is attached.

There are no water wells located within a .5 mile radius of the GP-27 Limit of Disturbance. A Form 4 will be filed accordingly.

Oil & Gas leases are attached to the Form 2. A Surface Use Agreement will be submitted as soon as it becomes available.

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.
Signed: _____ Date: 04/29/2014 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: Matthew Lee **Director of COGCC** Date: 6/1/2014

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
	Notify the COGCC 48 hours prior to start of pad construction, rig mobilization, spud, start of hydraulic stimulation operations (if applicable), start of flowback operations (if applicable), and pipeline testing using Form 42 (the appropriate COGCC individuals will automatically be email notified, including the LGD for hydraulic stimulation operations). 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.
	A closed loop system (which operator has indicated on the Form 2A) must be implemented during drilling. All cuttings generated during drilling with high chloride mud must be kept in containers or on a lined/bermed portion of the well pad; prior to analysis and/or offsite disposal. The moisture content of any drill cuttings in a cuttings area or pile shall be as low as practicable to prevent accumulation of liquids greater than de minimis amounts.
	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.

Best Management Practices

No	BMP/COA Type	Description
1	Planning	A Kinder Morgan Fire Mitigation Plan is currently on file with the Montezuma County Planning Office. Any material not in use that might constitute a fire hazard will be removed a minimum of 25 feet from the wellhead, tanks and separator. Any electrical installations inside the bermed area 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 GP-27, is currently on file with Montezuma County. The Road Use Plan was produced after consulting with the county Road and Bridge Supervisor. All access roads are fully compliant with local county road standards. Access roads are composed of compacted gravel. In an effort to mitigate dust, magnesium-chloride applications to the road surface are performed at the request of Montezuma County.
3	General Housekeeping	Erosion control barriers, namely fiber wattles, will be placed 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. During the construction, drilling, and completion phases, on-site trash dumpsters are emptied regularly by the local waste management company. Steel ranch fencing will be placed around the well head 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. During drilling and completion operations, safety officers are present on location to ensure that livestock, wildlife, and unauthorized personnel do not enter the location. Following completion, the only items present on the well pad are the well head and aboveground pipeline junction. Additionally, there is no active grazing near the proposed location.
4	Storm Water/Erosion Control	Diversion ditches will be implemented to divert run-on and run-off around the well pad. Compacted earthen berms will also be utilized to control stormwater run-on and runoff. 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. Stormwater BMPs will be maintained/amended by Kinder Morgan as site conditions change throughout the construction and reclamation process.
5	Material Handling and Spill Prevention	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 solid waste facility. Water that can no longer be reused or recycled will be disposed of in a Class I disposal well. 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. Tanks are designed to meet all API 650 guidelines.
6	Dust control	In an effort to mitigate dust, magnesium-chloride applications to the road surface are performed at the request of Montezuma County.

7	Construction	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. 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, and wellpads require the complete removal of vegetation.
8	Noise mitigation	During normal operations, the well will remain within COGCC regulations for noise. However, during the construction phase of the project, this standard may be exceeded occasionally.
9	Emissions mitigation	Non-flammable CO2 will be produced from the Leadville formation and thus green completion per rule 805 (3) does not apply. All CO2 wells are equipped with a CO2 leak detection monitor during drilling.
10	Drilling/Completion Operations	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. Kinder Morgan conducts a BOPE test and files a 24 hour notice (Form 42) at the initial rig-up time, after each casing emplacement, and/or every 30 days. KM standard operating protocol includes a check list for well-site clearance activities when a well is transferred from the Drilling Department to the Operations Department. Adequate blowout prevention equipment is used on all well servicing operations. 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. No pits are present at the well site.
11	Interim Reclamation	Surface roughening, surface contouring, seeding, and weed control will be employed to facilitate vegetation reestablishment. Tackifier will be added to reclaimed areas.
12	Final Reclamation	All disturbed areas that are not necessary for operational procedures will be restored to at least 80 percent of pre-disturbance vegetative cover.

Total: 12 comment(s)

Attachment Check List

Att Doc Num	Name
2106997	CORRESPONDENCE
2106999	REFERENCE AREA PICTURES
2107000	REFERENCE AREA MAP
2519107	ACCESS ROAD MAP
2519108	TOPO MAP
2519109	ACCESS ROAD MAP
2519110	LOCATION DRAWING
2519111	OTHER
2519112	OTHER
400579476	FORM 2A SUBMITTED
400583912	NRCS MAP UNIT DESC
400583913	WELL LOCATION PLAT
400583922	SENSITIVE AREA MAP
400583928	OTHER
400584605	HYDROLOGY MAP
400588269	PROPOSED BMPs
400594604	LOCATION PICTURES
400594660	REFERENCE AREA PICTURES
400594712	REFERENCE AREA MAP

Total Attach: 19 Files

General Comments

User Group	Comment	Comment Date
Permit	Final review completed; no public comment received.	5/27/2014 11:11:43 AM
OGLA	Initiated/Completed OGLA Form 2A review on 05-19-14 by Dave Kubeczko; requested acknowledgement of notification, H2S training, cuttings containment/low moisture content, and pipeline testing COAs from operator on 05-19-14; received acknowledgement from operator on 05-21-14; corrected distance to nearest SW from 1270' to 865', stream to northwest on aerial photo and topo map; corrected depth to GW from 254' bgs (depth of well) to 60' bgs (water level reported in water well database); no CPW; passed OGLA Form 2A review on 05-23-14 by Dave Kubeczko; notification, H2S training, cuttings containment/low moisture content, and pipeline testing COAs.	5/19/2014 11:09:24 AM
LGD	County Permit Applications have been reviewed by the Planning and Zoning Commission Board and recommended for approval. The applications are currently scheduled for public hearing before the Board of County Commissioners on June 9, 2014. A Road Use Agreement is still being worked out between Kinder Morgan and the County	5/9/2014 1:19:35 PM
Permit	Passed completeness	5/2/2014 2:29:22 PM
Permit	Missing the following attachments: Access Road Map, Hydrology Map, Location Drawing, Location Pictures, and NRCS Map Unit Description.	5/2/2014 1:57:12 PM

Total: 5 comment(s)