

FORM
2A

Rev
04/01

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:

400403602

Date Received:

04/15/2013

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:

433368

Expiration Date:

06/24/2016

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: 10439
 Name: CARRIZO NIOBRARA LLC
 Address: 500 DALLAS STREET #2300
 City: HOUSTON State: TX Zip: 77002

3. Contact Information

Name: Tina Taylor
 Phone: (713) 328-1000
 Fax: (713) 328-1060
 email: tina.taylor@crzo.net

4. Location Identification:

Name: Nelson Ranches Number: 1-33-10-59
 County: WELD
 Quarter: SWSE Section: 28 Township: 10N Range: 59W Meridian: 6 Ground Elevation: 5214

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: 941 feet FSL, from North or South section line, and 1727 feet FEL, from East or West section line.
 Latitude: 40.804320 Longitude: -103.981150 PDOP Reading: 3.5 Date of Measurement: 03/13/2013
 Instrument Operator's Name: Marc Woodard

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

Special Purpose Pits: <input type="checkbox"/>	Drilling Pits: <input type="checkbox"/>	Wells: <input type="text" value="4"/>	Production Pits: <input type="checkbox"/>	Dehydrator Units: <input type="text" value="2"/>
Condensate Tanks: <input type="checkbox"/>	Water Tanks: <input type="text" value="4"/>	Separators: <input type="text" value="2"/>	Electric Motors: <input type="checkbox"/>	Multi-Well Pits: <input type="checkbox"/>
Gas or Diesel Motors: <input type="text" value="5"/>	Cavity Pumps: <input type="checkbox"/>	LACT Unit: <input type="checkbox"/>	Pump Jacks: <input type="text" value="4"/>	Pigging Station: <input type="checkbox"/>
Electric Generators: <input type="checkbox"/>	Gas Pipeline: <input type="text" value="1"/>	Oil Pipeline: <input type="checkbox"/>	Water Pipeline: <input type="checkbox"/>	Flare: <input type="text" value="1"/>
Gas Compressors: <input type="checkbox"/>	VOC Combustor: <input type="text" value="2"/>	Oil Tanks: <input type="text" value="12"/>	Fuel Tanks: <input type="checkbox"/>	

Other: Heater Treater, Separators-one high pressure, one low pressure, Jet pump, one propane tank, Flare until pipeline connection ready.

6. Construction:

Date planned to commence construction: 05/15/2013 Size of disturbed area during construction in acres: 7.20
Estimated date that interim reclamation will begin: 12/31/2015 Size of location after interim reclamation in acres: 2.00
Estimated post-construction ground elevation: 5212 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: _____ Phone: _____
Address: _____ Fax: _____
Address: _____ Email: _____
City: _____ State: _____ Zip: _____ Date of Rule 306 surface owner consultation: _____
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 _____

8. Reclamation Financial Assurance:

Well Surety ID: 20120105 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: 5280, public road: 3650, above ground utility: 5280,
railroad: 5280, property line: 904

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: 27 Epping silt loam, 0 to 9 percent slopes

NRCS Map Unit Name: 29 Haverson loam, 0 to 3 percent slopes

NRCS Map Unit Name: 47 Otero sandy loam, 3 to 9 percent slopes

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: _____

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): _____

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: 370, water well: 3000, depth to ground water: 150

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 Suppl 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:

Nearest surface water is 370' NW Intermittent drainage. Nearest water well is 3000' NW permit 37114.

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

Signed: _____ Date: 04/15/2013 Email: tina.taylor@crzo.net

Print Name: Tina Taylor Title: Regulatory Compliance

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: 6/25/2013

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.

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Attachment Check List

Att Doc Num	Name
2614326	CORRESPONDENCE
400403602	FORM 2A SUBMITTED
400403664	ACCESS ROAD MAP
400403685	CONST. LAYOUT DRAWINGS
400403686	HYDROLOGY MAP
400403687	LOCATION DRAWING
400403689	MULTI-WELL PLAN
400403690	NRCS MAP UNIT DESC
400403691	NRCS MAP UNIT DESC
400403692	NRCS MAP UNIT DESC
400403693	LOCATION PICTURES
400403694	REFERENCE AREA MAP
400403695	REFERENCE AREA PICTURES

Total Attach: 13 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Per operator road 112 to the west is not public. Final Review Completed. No LGD or public comment received.	6/24/2013 1:57:21 PM
Permit	Per operator corrected distance to nearest property line.	6/19/2013 1:47:43 PM
OGLA	Operator will not construct a freshwater pit at this location; removed the freshwater pit from the facilities list. Added operator BMPs for site construction and stabilization to the location; removed BMPs that pertain to the freshwater pit; OGLA review complete	5/17/2013 8:31:50 AM
Permit	Initial review complete. Form 2 and 2A compared.	4/29/2013 3:40:27 PM

Total: 4 comment(s)

BMP

<u>Type</u>	<u>Comment</u>
Material Handling and Spill Prevention	Operator will ensure 110 percent secondary containment for any volume of fluids contained at the well site during drilling and completion. Operator will implement best management practices to contain any unintentional release of fluids. Operator shall not allow any fluids to flow back to the Fresh Water Storage Pit/Pond.
Site Specific	Portions of the access road will cross highly erodible soil. The road will be built to the minimal width required and ditch vegetation will be established to prevent erosion.
Site Specific	Production equipment will be painted with consideration to environmental colors to reduce visual contrast with the surrounding environment.
Site Specific	Gas engines will be equipped with mufflers to reduce noise.
Storm Water/Erosion Control	Operator has designed the well pad with insloping and a storm water control ditch to prevent storm water run-on/runoff and the release of fluids from the location. See attached Construction Layout Drawing.

Total: 5 comment(s)