

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:

400634527

Date Received:

## Oil and Gas Location Assessment

New Location     Refile     Amend Existing Location    Location#: 431370

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:

**431370**

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

### Contact Information

Name: Cynthia Pinel  
 Phone: (713) 358-6210  
 Fax: ( )  
 email: cynthia.pinel@crzo.net

### RECLAMATION FINANCIAL ASSURANCE

- Plugging and Abandonment Bond Surety ID: 20120105       Gas Facility Surety ID: \_\_\_\_\_
- Waste Management Surety ID: \_\_\_\_\_

### LOCATION IDENTIFICATION

Name: O'Hare      Number: 1-5-10-57  
 County: WELD  
 Quarter: 3    Section: 5    Township: 10N    Range: 57W    Meridian: 6    Ground Elevation: 4934

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: 718 feet FNL from North or South section line  
2111 feet FWL from East or West section line

Latitude: 40.873500      Longitude: -103.777100

PDOP Reading: 1.1      Date of Measurement: 06/12/2014

Instrument Operator's Name: GARY ALGIEN

## 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 _____        | Buried Produced Water Vaults _____              |
| Drilling Pits _____        | Production Pits _____     | Special Purpose Pits _____ | Multi-Well Pits <u>1</u> | 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**

|                        |   |
|------------------------|---|
| FRESHWATER STORAGE PIT | 1 |
|------------------------|---|

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

Water transfer to be done by a temporary above ground lay-flat hose (fire-hose like material). Minimum pressure used to pump and prevents leaking. Only issue is possible freezing in below freezing temperatures in the winter. (Freshwater Storage Pit si multi-well pit).

## CONSTRUCTION

Date planned to commence construction: 08/15/2014 Size of disturbed area during construction in acres: 4.30

Estimated date that interim reclamation will begin: 02/15/2015 Size of location after interim reclamation in acres: 2.00

Estimated post-construction ground elevation: 4931

## DRILLING PROGRAM

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

Is H<sub>2</sub>S anticipated? No

Will salt sections be encountered during drilling: No

Will salt based mud (>15,000 ppm Cl) be used? No

Will oil based drilling fluids be used? No

## DRILLING WASTE MANAGEMENT PROGRAM

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

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

Other Disposal Description:

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: Virginia Ohare & Virginia

Phone: 970-437-5438

Address: 60480 County Road 135

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

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

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

City: New Raymer State: CO Zip: 80742

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: oil and gas lease

Surface damage assurance if no agreement is in place: \_\_\_\_\_ Surface Surety ID: \_\_\_\_\_

Date of Rule 306 surface owner consultation \_\_\_\_\_

### 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: 5280 Feet  
Building Unit: 5280 Feet  
High Occupancy Building Unit: 5280 Feet  
Designated Outside Activity Area: 5280 Feet  
Public Road: 777 Feet  
Above Ground Utility: 2080 Feet  
Railroad: 5280 Feet  
Property Line: 718 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: NRCS 27\_Epping Silt Loam, 0 to 9 percent slopes

NRCS Map Unit Name: NRCS 6\_Ascalon Blakeland complex, 3 to 15 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: 06/14/2014

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: 396 Feet

water well: 3107 Feet

Estimated depth to ground water at Oil and Gas Location 25 Feet

Basis for depth to groundwater and sensitive area determination:

Determined by surveyor after Hydrology Map survey was provided.

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 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

The 2A submittal is for a pit location only. After discussing with Doug Andrews, the original pit constructed for the O'Hare section 5 wells will be enlarged and used for the O'Hare 1-32-11-57 and 2-32-11-57 wells located to north in section 32 (Location ID 437280 for the O'Hare 1-32).

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

Signed: \_\_\_\_\_ Date: \_\_\_\_\_ Email: cynthia.pinel@crzo.net

Print Name: Cynthia Pinel Title: Regulatory Comp. Analyst

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.

### **Best Management Practices**

#### **No BMP/COA Type**

#### **Description**

|   |  |   |
|---|--|---|
| 1 | Planning                               | The COGCC to be notified 48 hours prior to construction of the Freshwater Storage Pit.  |
| 2 | Pre-Construction                       | Operator has designed the well pad with insloping and a storm water control ditch to prevent storm water run-on/run-off and the release of fluids from the location. See attached Construction Layout Drawing.  |
| 3 | Material Handling and Spill Prevention | Operator will implement best management practices to contain any unintentional release of fluids. Freshwater for the Freshwater Storage Pit comes from water provider; water sources. Permitted for consumable industrial use Operator shall not allow any fluids to flow back to the Freshwater Storage Pit/Pond. Freshwater Storage Pit shall contain freshwater only and signage prohibiting the use of the pit for any fluid that does not come from municipal, irrigation or surface water source. |
| 4 | Drilling/Completion Operations         | The location will be fenced and fenced area will include the Freshwater Storage Pit. This pit will be enlarged to the south of the O'Hare 1-32-11-57 Pad (located in section 32) Freshwater Storage Pit will be screened off.   |

Total: 4 comment(s)

### **Attachment Check List**

#### **Att Doc Num**

#### **Name**

|           |                        |
|-----------|------------------------|
| 400634551 | NRCS MAP UNIT DESC     |
| 400634552 | NRCS MAP UNIT DESC     |
| 400634553 | ACCESS ROAD MAP        |
| 400634554 | CONST. LAYOUT DRAWINGS |
| 400634556 | LOCATION PICTURES      |
| 400634558 | HYDROLOGY MAP          |
| 400634559 | LOCATION DRAWING       |
| 400634560 | REFERENCE AREA MAP     |

Total Attach: 8 Files

### **General Comments**

#### **User Group**

#### **Comment**

#### **Comment Date**

|  |  |  |
|--|--|--|
|  |  |  |
|--|--|--|

Total: 0 comment(s)