

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:

400688480

Date Received:

09/16/2014

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:

439302

Expiration Date:

10/13/2017

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: 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: 1-29-11-57

County: WELD

Quarter: SWSW Section: 29 Township: 11N Range: 57W Meridian: 6 Ground Elevation: 4935

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: 1265 feet FSL from North or South section line

1154 feet FWL from East or West section line

Latitude: 40.893350 Longitude: -103.780740

PDOP Reading: 2.0 Date of Measurement: 09/04/2014

Instrument Operator's Name: MARC WOODARD

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 #

Production Facilities Location serves Well(s)

438648

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 Pit

1

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

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CONSTRUCTION

Date planned to commence construction: 10/14/2014 Size of disturbed area during construction in acres: 7.00

Estimated date that interim reclamation will begin: 04/07/2015 Size of location after interim reclamation in acres: 2.00

Estimated post-construction ground elevation: 4842

DRILLING PROGRAM

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

Is H₂S 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: OFFSITE

Drilling Fluids Disposal Method: Commercial Disposal

Cutting Disposal: OFFSITE

Cuttings Disposal Method: Commercial Disposal

Other Disposal Description:

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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: COLORADO LAND AND CATTLE

Phone: 970-437-5345

Address: 70008 WCR 132

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: Yes

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: 740 Feet
Building Unit: 980 Feet
High Occupancy Building Unit: 5280 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 1136 Feet
Above Ground Utility: 1120 Feet
Railroad: 5280 Feet
Property Line: 1256 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 MAP UNIT 12

NRCS Map Unit Name: NRCS MAP UNIT 32

NRCS Map Unit Name: NRCS MAP UNIT 27

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: 09/09/2014

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: 336 Feet

water well: 3185 Feet

Estimated depth to ground water at Oil and Gas Location 33 Feet

Basis for depth to groundwater and sensitive area determination:

FIELD OBSERVATION DETERMINED BY GEOSURV (SURVEY COMPANY) ON 9/9/2014

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

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

Signed: _____ Date: 09/16/2014 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: 10/14/2014

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.

<u>COA Type</u>	<u>Description</u>
	Operator shall provide notice to COGCC 48 hours prior to commencing construction of this Oil and Gas Location via Form 42.

Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
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 a new pit location to accommodate completion operations for the O'hare 1 -29-11-57 and 2-29-11-57.

Total: 4 comment(s)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
1668564	ABANDONED HOUSE PICTURES
1668565	CORRESPONDENCE
400688480	FORM 2A SUBMITTED
400691438	LOCATION DRAWING
400691447	CONST. LAYOUT DRAWINGS
400691451	HYDROLOGY MAP
400691459	REFERENCE AREA MAP
400691461	REFERENCE AREA PICTURES
400691464	NRCS MAP UNIT DESC
400691465	NRCS MAP UNIT DESC
400691466	FORM 2A SUBMITTED
400691672	NRCS MAP UNIT DESC
400691674	ACCESS ROAD MAP
400691675	LOCATION PICTURES
400691691	FORM 2A SUBMITTED

Total Attach: 15 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Nearest occupied building unit at 3760'. Oper. agreed to change dates of construction & interim rec. No LGD or public comments. Final Review--passed.	10/14/2014 10:51:24 AM
OGLA	IN PROCESS - Operator provide additional pictures of the nearby Building Unit 980 feet to the northeast (see Attachment). Pics show it appears to be abandoned and unfit for occupation. Operator also indicated the surface owner has indicated that it is unoccupied. Although it is within 1,000 feet of the location, it does not appear to be a concern requiring the Rule 604.c. mitigation measure BMPs. No Public Comments. OGLA task passed.	10/14/2014 10:13:48 AM
OGLA	ON HOLD - Added Related Remote Location info, listed Freshwater Pit in Facilities section, changed Land Use to Rangeland, and requested further information concerning the condition of a Building Unit approximately 980 feet to the northeast (is it abandoned and unfit for occupation?). Due by 11/9/14.	10/9/2014 1:39:41 PM
Permit	Confirmed oil & gas lease covers S/2 Section 29. Minerals beneath this location will be developed.	9/26/2014 11:34:12 AM
Permit	Passed Completeness	9/22/2014 11:15:31 AM
Permit	Returned to Draft: Missing location pictures. NCRS Map 12 corrupted, access map corrupted.	9/19/2014 10:36:50 AM
Permit	Returned to Draft: 1. Under Consultation & Contact Info: Is this a new, refile or amending of existing well. 2. There are no attachments. Need the Access Map, Hydrology Map, NRCS Map, Location Drawing, Location Pictures, facility layout drawing, etc.	9/17/2014 8:07:44 AM

Total: 7 comment(s)