

FORM  
2

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:

400506683

### APPLICATION FOR PERMIT TO:

Drill       Deepen       Re-enter       Recomplete and Operate

Date Received:

11/05/2013

TYPE OF WELL    OIL     GAS     COALBED     OTHER \_\_\_\_\_

Refilling

ZONE TYPE    SINGLE ZONE     MULTIPLE ZONES     COMMINGLE ZONES

Sidetrack

Well Name: Gaffney      Well Number: 2-29-8-61  
Name of Operator: CARRIZO NIOBRARA LLC      COGCC Operator Number: 10439  
Address: 500 DALLAS STREET #2300  
City: HOUSTON      State: TX      Zip: 77002  
Contact Name: Cynthia Pinel      Phone: (713)358-6210      Fax: ( )  
Email: cynthia.pinel@crzo.net

### RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20120105

### WELL LOCATION INFORMATION

QtrQtr: SWNW      Sec: 29      Twp: 8N      Rng: 61W      Meridian: 6

Latitude: 40.633800      Longitude: -104.238270

Footage at Surface:      FNL/FSL      FEL/FWL  
2164 feet      FNL      443 feet      FWL

Field Name: WILDCAT      Field Number: 99999

Ground Elevation: 4991      County: WELD

#### GPS Data:

Date of Measurement: 10/03/2013      PDOP Reading: 2.8      Instrument Operator's Name: MARC WOODARD

If well is     Directional     Horizontal (highly deviated)    **submit deviated drilling plan.**

Footage at Top of Prod Zone:      FNL/FSL      FEL/FWL      Bottom Hole:      FNL/FSL      FEL/FWL  
2363      FNL      300      FWL      300      FNL      300      FWL  
Sec: 29      Twp: 9N      Rng: 61W      Sec: 20      Twp: 9N      Rng: 61W

### LOCATION SURFACE & MINERALS & RIGHT TO CONSTRUCT

Surface Ownership:     Fee     State     Federal     Indian

The Surface Owner is:     is the mineral owner beneath the location.

(check all that apply)     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 by this Well:    Yes

The right to construct the Oil and Gas Location is granted by:    oil and gas lease

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

**LEASE INFORMATION**

Using standard QtrQtr, Sec, Twp, Rng format, describe one entire mineral lease that will be produced by this well (Describe lease beneath surface location if produced. Attach separate description page or map if necessary.)

Township 8 North, Range 61W of the 6th P.M., Section 29: NE4 & NW4 (this wellbore produces from multiple leases). Production zone starts in section 29 and goes north into section 20.

Total Acres in Described Lease: 320 Described Mineral Lease is:  Fee  State  Federal  Indian

Federal or State Lease # \_\_\_\_\_

Distance from Completed Portion of Wellbore to Nearest Lease Line of described lease: 0 Feet

**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: 2146 Feet  
 Above Ground Utility: 580 Feet  
 Railroad: 5280 Feet  
 Property Line: 443 Feet

**INSTRUCTIONS:**

- All measurements shall be provided from center of the Proposed Well to nearest of each cultural feature as described in Rule 303.a.(5).  
 - 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: \_\_\_\_\_

**SPACING and UNIT INFORMATION**

Distance from Completed Portion of Wellbore to Nearest Wellbore Permitted or Completed in the same formation: 300 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 300 Feet (Enter 5280 for distance greater than 1 mile.)

Federal or State Unit Name (if appl): \_\_\_\_\_ Unit Number: \_\_\_\_\_

**SPACING & FORMATIONS COMMENTS**

Spacing order approval for Township 8 North, Range 61 West, 6th P.M. in Section 20: ALL and Section 29: N2

**OBJECTIVE FORMATIONS**

Objective Formation(s)	Formation Code	Spacing Order Number(s)	Unit Acreage Assigned to Well	Unit Configuration (N/2, SE/4, etc.)
NIOBRARA	NBRR	535-420	960	S.20:ALL,S.29:N/2

**DRILLING PROGRAM**

Proposed Total Measured Depth: 13973 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 300 Feet (Including plugged wells)

Will a closed-loop drilling system be used? Yes

Is H<sub>2</sub>S gas reasonably expected to be encountered during drilling operations at concentrations greater than or equal to 100 ppm? No (If Yes, attach an H<sub>2</sub>S Drilling Operations Plan)

Will salt sections be encountered during drilling?     No      
 Will salt based (>15,000 ppm Cl) drilling fluids be used?     No      
 Will oil based drilling fluids be used?     No      
 BOP Equipment Type:  Annular Preventor     Double Ram     Rotating Head     None

**GROUNDWATER BASELINE SAMPLING AND MONITORING AND WATER WELL SAMPLING**

Water well sampling required per Rule     609    

**DRILLING WASTE MANAGEMENT PROGRAM**

Drilling Fluids Disposal:     OFFSITE          Drilling Fluids Disposal Methods:     Commercial Disposal    

Cuttings Disposal:     OFFSITE          Cuttings Disposal Method:     Commercial Disposal    

Other Disposal Description:

Beneficial reuse or land application plan submitted?                     

Reuse Facility ID:                      or Document Number:                     

**CASING PROGRAM**

Casing Type	Size of Hole	Size of Casing	Wt/Ft	Csg/Liner Top	Setting Depth	Sacks Cmt	Cmt Btm	Cmt Top
CONDUCTOR	18	16	64	0	70	10	70	0
SURF	12+1/4	9+5/8	36	0	1400	534	1400	0
1ST	8+3/4	7	23	0	6511	589	6511	
1ST LINER	6+1/8	4+1/2	11.6	6742	13973			

Conductor Casing is NOT planned

**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)

**GREATER WATTENBERG AREA LOCATION EXCEPTIONS**

Check all that apply:

- Rule 318A.a. Exception Location (GWA Windows).
- Rule 318A.c. Exception Location (GWA Twinning).

**RULE 502.b VARIANCE REQUEST**

Rule 502.b. Variance Request from COGCC Rule or Spacing Order Number

## OTHER LOCATION EXCEPTIONS

Check all that apply:

- Rule 318.c. Exception Location from Rule or Spacing Order Number \_\_\_\_\_
- Rule 603.a.(2) Exception Location (Property Line Setback).

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 Swell packer will be set beyond 300' from the section line to keep wellbore from 7" casing unproduced. Form 2A submitted (doc no. 400507282 )

This application is in a Comprehensive Drilling Plan \_\_\_\_\_ CDP #: \_\_\_\_\_

Location ID: \_\_\_\_\_

Is this application being submitted with an Oil and Gas Location Assessment application? Yes

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

Signed: \_\_\_\_\_ Print Name: Cynthia Pinel

Title: Regulatory Comp. Analyst Date: 11/5/2013 Email: cynthia.pinel@crzo.net

Operator must have a valid water right or permit allowing for industrial use or purchased water from a seller that has a valid water right or permit allowing for industrial use, otherwise an application for a change in type of use is required under Colorado law. Operator must also use the water in the location set forth in the water right decree or well permit, otherwise an application for a change in place of use is required under Colorado law. Section 37-92-103(5), C.R.S. (2011).

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: 12/2/2013

Expiration Date: 12/01/2015

**API NUMBER**

05 123 38575 00

## Conditions Of Approval

All representations, stipulations and conditions of approval stated in the Form 2A for this location shall constitute representations, stipulations and conditions of approval for this Form 2 Permit-to-Drill and are enforceable to the same extent as all other representations, stipulations and conditions of approval stated in this Permit-to-Drill.

<u>COA Type</u>	<u>Description</u>
	Operator acknowledges the proximity of the following wells: Ullman Farms #19-2 (123-10402). Operator agrees to provide mitigation option 3 (per the DJ Basin Horizontal Offset Policy) to mitigate the situation, ensure all applicable documentation is submitted based on the selected mitigation option chosen, and submit a Form 42 ("OTHER – AS SPECIFIED BY PERMIT CONDITION") stating what appropriate mitigation occurred and that it has been completed, prior to the hydraulic stimulation of this well.
	1) Submit Form 42 electronically to COGCC 48 hours prior to MIRU. 2) Comply with Rule 317.i and provide cement coverage from end of 7" casing to a minimum of 200' above Niobrara. Verify coverage with cement bond log. 3) Comply with Rule 321. Run and submit Directional Survey from TD to base of surface casing. Ensure that the wellbore complies with setback requirements in commission orders or rules prior to producing the well. The Drilling Completion Report, Form 5 and the Completed Interval Report, Form 5A will explicitly detail how those portions of the well outside of the legal setback are isolated from production.

## Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Planning	A Form 15 Pit Report will be submitted within 30 days of construction of the fresh water storage pit.
2	Pre-Construction	The COGCC to be notified 48 hours prior to construction of the Fresh Water Storage Pit.
3	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.
4	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.
5	Construction	The location will be fenced and the fenced area will include the Fresh Water Storage Pit.
6	Drilling/Completion Operations	Fresh water for the Fresh Water Storage Pit comes from water provider; water sources permitted for consumable industrial use. Fresh Water Storage Pit shall contain fresh water only and signage prohibiting the use of the pit for any fluid that does not come from municipal, irrigation or surface water source. Operator will implement interim reclamation measures immediately after construction of the location to stabilize cut and fill slopes, stabilize the topsoil and spoil stockpiles, establish desirable vegetation and control weeds on the location.

Total: 6 comment(s)

Data retrieval failed for the subreport 'IntPolicy\_MTO' located at: \\DnrDnsSterling\cFarmReports\policy\_nto.rdl. Please

## Attachment Check List

<b>Att Doc Num</b>	<b>Name</b>
2157347	OFFSET WELL EVALUATION
400506683	FORM 2 SUBMITTED
400507229	DIRECTIONAL DATA
400507231	DEVIATED DRILLING PLAN
400507233	CONST. LAYOUT DRAWINGS
400507234	WELL LOCATION PLAT

Total Attach: 6 Files

### General Comments

<b>User Group</b>	<b>Comment</b>	<b>Comment Date</b>
Permit	Offset well eval. attached. Corrected distance to west line to agree w/ plat. No LGD or public comments. Final Review--passed.	12/2/2013 7:59:42 AM
Permit	Corrected dist. to prop. line to agree w/ plat. Corrected unit acres. Need offset well eval.	11/27/2013 10:55:24 AM
Engineer	Existing wells of concern within 1500': Ullman Farms #19-2 (123-10402) Attached Well Evaluation states Carrizo will Re-enter this well and plug to provide adequate protection.	11/26/2013 5:32:22 PM
Permit	This form has passed completeness.	11/6/2013 12:53:44 PM

Total: 4 comment(s)