

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:

400702649

Date Received:

10/08/2014

APPLICATION FOR PERMIT TO:

☒ Drill ☐ Deepen ☐ Re-enter ☐ Recomplete and Operate

TYPE OF WELL OIL ☒ GAS ☐ COALBED ☐ OTHER _____

Refilling ☐

ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐

Sidetrack ☐

Well Name: TIMBRO RANCH

Well Number: 1-3-9-59

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: Lot 2 Sec: 3 Twp: 9N Rng: 59W Meridian: 6

Latitude: 40.786250

Longitude: -103.963270

Footage at Surface: 311 feet FNL/FSL FNL 2299 feet FEL/FWL FEL

Field Name: WILDCAT

Field Number: 99999

Ground Elevation: 5067

County: WELD

GPS Data:

Date of Measurement: 10/03/2014 PDOP Reading: 1.3 Instrument Operator's Name: ERIC PURCELL

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

Footage at Top of Prod Zone: FNL/FSL FNL/FWL Bottom Hole: FNL/FSL FEL/FWL
600 FNL 2150 FEL 600 FSL 2175 FEL
Sec: 3 Twp: 9N Rng: 59W Sec: 3 Twp: 9N Rng: 59W

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 9 NORTH, RANGE 59W OF THE 6TH P.M., SECTION 3: LOTS 1, 2, 3, 4 AND S/2N/2, A/D/A N/2

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: 297 Feet

Above Ground Utility: 2336 Feet

Railroad: 5280 Feet

Property Line: 305 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: 3934 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

INTERNAL WELLBORES OFFSET BY 300 FEET AND UNIT BOUNDARY SETBACKS OF 600 FEET

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	535-345	640	SEC 3: ALL

DRILLING PROGRAM

Proposed Total Measured Depth: 10622 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 H₂S gas reasonably expected to be encountered during drilling operations at concentrations greater than or equal to 100 ppm? No (If Yes, attach an H₂S 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	65	0	7	8	77	0
SURF	12+1/4	9+5/8	36	0	1750	534	1750	0
1ST	8+3/4	7	23	0	6386	574	6386	
1ST LINER	6+1/8	4+1/2	11.6	5655	10622			

☐ 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

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: 10/8/2014 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: 10/30/2014

Expiration Date: 10/29/2016

API NUMBER

05 123 40455 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.

COA Type

Description

	Open hole resistivity and gamma logs shall be run to describe the stratigraphy of the entire well bore and to adequately verify the setting depth of surface casing and aquifer coverage. On a multi-well pad, these open hole logs are only required on one of the first wells drilled on the pad and the Drilling Completion Report - Form 5 for every well on the pad shall identify which well was logged.
	Note changes: Increased surface casing depth or require stage cement of Upper Pierre Sandy interval (Pawnee aquifer). 1) Provide 48 hour notice of spud via electronic Form 42. 2) Set at least 1750' of surface casing or set at minimum of 760' of surface casing and stage cement from 1750' to 50' above surface casing (due to 1630' WW in SESW10-9N-59W and 1560' base of U. Prre sandy zone on offset 123-07350 Ind. Log). Cement surface casing to surface. 3) Provide cement coverage to a minimum of 200' above Niobrara. Verify coverage with cement bond log. 4) 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.

Best Management Practices

No	<u>BMP/COA Type</u>	<u>Description</u>
1	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.
2	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.
3	Construction	The location will be fenced.
4	Drilling/Completion Operations	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. Jet pump used at the initial start-up of the well then replaced with pump jack.

Total: 4 comment(s)

Applicable Policies and Notices to Operators

Notice Concerning Operating Requirements for Wildlife Protection.

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
400702649	FORM 2 SUBMITTED
400702659	WELL LOCATION PLAT
400702660	DEVIATED DRILLING PLAN
400702662	DIRECTIONAL DATA

Total Attach: 4 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed. No LGD or public comment received.	10/30/2014 8:02:49 AM
Permit	Operator corrected distances to wellbore penetrating and permitted.	10/23/2014 11:42:02 AM
Permit	-Distance from completed portion of wellbore to nearest wellbore permitted or completed in the same formation is listed as 3934'. -Distance to nearest permitted or existing wellbore penetrating objective formation is listed as 3934'. The adjacent niobrara TIMBRO RANCH 2-3-9-59 measures 300'. Emailed operator to correct distances.	10/23/2014 11:33:05 AM
Permit	Operator contacted surveyor and confirmed distances. Surveyor states the 305' to property line and 297' to Public Road are correct. The south edge of the WCR 110 is south of the north property line.	10/17/2014 10:29:06 AM
Permit	Distance to Property Line is listed on the form and well plat as 305' to the west and Public Road is 297' to the north. Emailed operator to confirm if property line is actually the road to the north.	10/17/2014 10:27:19 AM
Engineer	Evaluated any existing wells within 1500' of proposed directional.	10/15/2014 3:28:07 PM
Permit	Passed Completeness	10/9/2014 2:05:33 PM

Total: 7 comment(s)