

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:

400464714

APPLICATION FOR PERMIT TO:

Drill Deepen Re-enter Recomplete and Operate

Date Received:

08/08/2013

TYPE OF WELL OIL GAS COALBED OTHER _____

Refilling

ZONE TYPE SINGLE ZONE MULTIPLE ZONES COMMINGLE ZONES

Sidetrack

Well Name: O'Hare Well Number: 1-5-10-57
Name of Operator: CARRIZO OIL & GAS INC COGCC Operator Number: 10338
Address: 500 DALLAS STREET #2300
City: HOUSTON State: TX Zip: 77002
Contact Name: Carol Pruitt Phone: (713)828-6028 Fax: (713)328-1060
Email: carol.pruitt@crzo.net

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20100108

WELL LOCATION INFORMATION

QtrQtr: Lot 3 Sec: 5 Twp: 10N Rng: 57W Meridian: 6

Latitude: 40.874430 Longitude: -103.778490

Footage at Surface: 376 feet FNL/FSL FNL 1893 feet FEL/FWL FWL

Field Name: WILDCAT Field Number: 99999

Ground Elevation: 4921 County: WELD

GPS Data:

Date of Measurement: 12/05/2012 PDOP Reading: 2.1 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
650 FNL 710 FWL 650 FSL 710 FWL
Sec: 5 Twp: 10N Rng: 57W Sec: 5 Twp: 10N Rng: 57W

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.)

See attached lease

Total Acres in Described Lease: 2602 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: 570 Feet

Above Ground Utility: 1875 Feet

Railroad: 5280 Feet

Property Line: 370 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: 1250 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 650 Feet (Enter 5280 for distance greater than 1 mile.)

Federal or State Unit Name (if appl): _____ Unit Number: _____

SPACING & FORMATIONS COMMENTS

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	535-338	640	5 All

DRILLING PROGRAM

Proposed Total Measured Depth: 10218 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 1250 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? Yes

Reuse Facility ID: _____ or Document Number: 400356426

CASING PROGRAM

Casing Type	Size of Hole	Size of Casing	Wt/Ft	Csg/Liner Top	Setting Depth	Sacks Cmt	Cmt Btm	Cmt Top
CONDUCTOR	20	16	65	0	70	5	70	60
SURF	12+1/4	9+5/8	36	0	1400	53	1400	0
1ST	8+3/4	7	23	0	6005	685	6005	1400
1ST LINER	6+1/8	4+1/2	11.6	5147	10218			

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 across 650' from section line to keep wellbore from 7" casing shore to Swell Packer unproduced.

Location is part of an Oil and Gas Location Assessment, Original Form 2 and 2A has already been approved.

This application is in a Comprehensive Drilling Plan _____ CDP #: _____

Location ID: 431370

Is this application being submitted with an Oil and Gas Location Assessment application? No

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

Signed: _____ Print Name: Carol Pruitt

Title: Regulatory Compliance Date: 8/8/2013 Email: carol.pruitt@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: *Matthew Lee* Director of COGCC Date: 9/12/2013

Expiration Date: 09/11/2015

API NUMBER
05 123 36578 01

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

	PILOT HOLE 1) Submit Form 42 electronically to COGCC 48 hours prior to MIRU. FOR LATERAL 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.
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Best Management Practices

No	BMP/COA Type	Description
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 distch to prevent storm water run-on/run-off 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 wellsite during drilling and completion. Operator will implement best Managment practices to contain any unintentional release of fluids.
5	Material Handling and Spill Prevention	Fresh water for the Fresh Water Storage Pit comes from water provider; water sources permitted for consumable industrial use. Operator shall not allow any fluids to flow back to the Fresh Water Storage Pit./Pond.
6	Construction	The location will be fenced and the fenced area will included the Fresh Water Storage Pit.
7	Interim Reclamation	Operator will participate in the Colorado Oil & Gas Association Voluntary Baseline Groundwater Quality Sampling Program. Operator will implement interim reclamation measures immediately after construction of the location to stablize cut and fill slopes, stabilize the topsoil and spoil stockpiles, establish desirable vegetation and control wedds on the location.

Total: 7 comment(s)

Applicable Policies and Notices to Operators

Notice Concerning Operating Requirements for Wildlife Protection.

Attachment Check List

Att Doc Num	Name
400464714	FORM 2 SUBMITTED
400465395	PLAT
400465397	OIL & GAS LEASE
400465398	DIRECTIONAL DATA
400465405	DEVIATED DRILLING PLAN
400465409	SURFACE CASING CHECK

Total Attach: 6 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed. No LGD or public comment received.	9/9/2013 6:53:33 AM
Permit	Per operator corrected surface and minerals information, distance to lease line, removed federal lease number, updated distance to unit boundary, selected water sampling rule, erased soil information, and corrected comment regarding swell packer. This form was submitted in order to add a pilot portion to this wellbore.	9/9/2013 6:32:08 AM
Engineer	Well at 1200' - DA 1950's	8/27/2013 7:52:47 AM
Permit	Requested surface and minerals information, distance to nearest lease line, information on federal lease number, distance to unit boundary, rule for water well sampling, why the soil information was included, and the actual depth the swell packer will be set.	8/27/2013 7:39:17 AM
Permit	Passed into process per JPS.	8/12/2013 12:28:38 PM
Permit	This form was sent back to draft for an attachment that would not open. The rest of the form has not been reviewed. returned to draft: attachment APD approved will not open.	8/9/2013 10:22:34 AM

Total: 6 comment(s)