

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:

400812683

Date Received:

03/26/2015

APPLICATION FOR PERMIT TO:

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

TYPE OF WELL OIL ☒ GAS ☐ COALBED ☐ OTHER Lateral

Refilling ☐

ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐

Sidetrack ☐

Well Name: Razor

Well Number: 08E-1704

Name of Operator: WHITING OIL & GAS CORPORATION

COGCC Operator Number: 96155

Address: 1700 BROADWAY STE 2300

City: DENVER State: CO Zip: 80290

Contact Name: Michael Brown

Phone: (307)-265-3510

Fax: ()

Email: ml_brown@bresnan.net

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20030110

WELL LOCATION INFORMATION

QtrQtr: SWNW Sec: 8 Twp: 10N Rng: 58W Meridian: 6

Latitude: 40.854006

Longitude: -103.896808

Footage at Surface: 2242 feet FNL/FSL FNL 769 feet FEL/FWL FWL

Field Name: WILDCAT

Field Number: 99999

Ground Elevation: 4965

County: WELD

GPS Data:

Date of Measurement: 12/03/2014 PDOP Reading: 1.7 Instrument Operator's Name: Dallas Nielsen

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

2486 FSL 1253 FWL 100 FSL 1155 FWL
Sec: 8 Twp: 10N Rng: 58W Sec: 17 Twp: 10N Rng: 58W

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.)

Tract 1

6th PM

T10N R58W

Sec 8: Gr acs: 320.0000 Net acs: 320.0000
W2

T10N R59W

Sec 1: Gr acs: 560.5600 Net acs: 560.5600
L1(40.04), L2(40.10), L3(40.18), L4(40.24),
S2N2, NWSW, S2S2, NESE

Sec 2: Gr acs: 40.0000 Net acs: 40.0000
SENE

Sec 2: Gr acs: 320.0000 Net acs: 320.0000
S2

Sec 12: Gr acs: 240.0000 Net acs: 240.0000
N2NW, N2SW, S2SE

Sec 13: Gr acs: 540.2200 Net acs: 540.2200
L2(43.38), L3(43.32), L4(43.11), L7(42.83),
L8(42.53), L9(42.49), L10(42.56), NWNW, S2NW,
N2SW, SESE

Sec 14: Gr acs: 360.0000 Net acs: 360.0000
NE, N2NW, SENW, N2SE

Sec 24: Gr acs: 120.0000 Net acs: 120.0000
N2NE, SENE

Tract 2

6th PM

T10N R59W

Sec 23: Gr acs: 160.0000 Net acs: 156.8000
11/26/14 LEASE DATA SHEET
Lease no.: CO076.181-021

Page: 2

SW

Tract 3

6th PM

T10N R59W

Sec 13: Gr acs: 86.3900 Net acs: 43.1950
L1(43.33), L5(43.06)

Tract 4

6th PM

T10N R59W

Sec 11: Gr acs: 320.0000 Net acs: 160.0000
S2

Tract 5

6th PM

T10N R59W

Sec 14: Gr acs: 280.0000 Net acs: 140.0000
S2SE, SWNW, SW

Tract 6

6th PM

T10N R59W

Sec 15: Gr acs: 320.0000 Net acs: 160.0000
E2

Tract 7

6th PM

T10N R59W

Sec 23: Gr acs: 160.0000 Net acs: 80.0000
SE

Tract 8
6th PM
T10N R59W
Sec 24: Gr acs: 160.0000 Net acs: 80.0000
SE/4

Tract 9
6th PM
T10N R59W
Sec 24: Gr acs: 160.0000 Net acs: 80.0000
SW/4

Tract 10
6th PM
T10N R59W
Sec 26: Gr acs: 320.0000 Net acs: 160.0000
N2

Tract 11
6th PM
T10N R59W
Sec 26: Gr acs: 320.0000 Net acs: 320.0000
S2

Total Acres in Described Lease: 4787 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: 2941 Feet
Above Ground Utility: 375 Feet
Railroad: 5280 Feet
Property Line: 769 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: 368 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 100 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	535-553	960	S/2 S8, All S17

DRILLING PROGRAM

Proposed Total Measured Depth: 14087 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 368 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: ONSITE Cuttings Disposal Method: Other

Other Disposal Description:

Bio-remediation

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	24	16	65	0	80	179	80	0
SURF	13+1/2	9+5/8	36	0	1750	776	1750	0
1ST	8+3/4	7	29	0	6266	419	6266	0
1ST LINER	6	4+1/2	11.6	5448	14087			

☐ 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: Michael Brown

Title: Agent Date: 3/26/2015 Email: ml_brown@bresnan.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: 5/11/2015

Expiration Date: 05/10/2017

API NUMBER

05 123 41491 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

	<p>Whiting acknowledges that the proper mitigation will be provided to the following wells per the DJ Basin Horizontal Offset Policy: 05-123-14324, NELSON RANCHES A-2 : Option 1 05-123-16140, NELSON RANCHES A-5 : Option 1</p> <p>Operator agrees to: comply with 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 Form 42(s) ("OFFSET MITIGATION COMPLETED") for the remediated wells, referencing the API Number of the proposed horizontal well(s) stating what appropriate mitigation occurred and that it has been completed, prior to the hydraulic stimulation of this well.</p>
	<p>Note changes to submitted form.</p> <ol style="list-style-type: none">1) Provide 48 hour notice of MIRU via electronic Form 42.2) Set 1750' of surface casing. (base of Upper Pierre aquifer is deeper than proposed surface casing, 1580' in offset 123-10205, gs 4851').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

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Storm Water/Erosion Control	Stormwater management plans (SWMP) are in place to address construction, drilling and operations associated with oil and gas development throughout the State of Colorado. BMPs will be constructed as necessary to prevent stormwater from leaving the construction site. BMPs used will vary according to the location, and will remain until the pad is reclaimed.
2	Material Handling and Spill Prevention	Spill Prevention Control and Countermeasures (SPCC) plans are in place to address any possible spill associated with oil and gas operations throughout the State of Colorado. <ul style="list-style-type: none">• Materials and fluids will be stored in a neat and orderly fashion.• Waste will be collected regularly and disposed of at an offsite facility.• Prompt cleanup is required of spills to minimize waste materials entering the stormwater runoff.• Drip pans will be used during fueling and maintenance to contain spills or leaks.• Cleanup of trash and discarded material will be done at the end of the work day.• Cleanup will consist of monitoring the road, location and any other work areas.• Material to be cleaned up includes trash, scrap, and contaminated soil.
3	Drilling/Completion Operations	Wells Planned within 1500 feet are shown on the multi-well plan map.
4	Drilling/Completion Operations	One of the first wells drilled on the pad will be logged with an open-hole resistivity log with gamma-ray from TD to into the surface casing. All wells on the pad will have a cement bond log with gamma-ray run on the production casing (or intermediate casing if production liner is run). All wells on the pad will have the horizontal portion of the wellbore logged with a measured-while-drilling log with gamma-ray. The Form 5, Completion Report, for each well on the pad will list all logs run and have those logs attached. The Form 5 for a well without open-hole logs shall clearly state "No open-hole logs were run." The Form 5 for a well without open-hole logs shall clearly identify (by API#, well name & number) the well in which open-hole logs were run.

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>
400812683	FORM 2 SUBMITTED
400815948	OffsetWellEvaluations Data
400815949	DIRECTIONAL DATA
400815950	DRILLING PLAN
400815952	WELL LOCATION PLAT
400815956	DEVIATED DRILLING PLAN
400815959	DEVIATED DRILLING PLAN

Total Attach: 7 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed. No LGD or public comment received.	5/4/2015 11:49:32 AM
Permit	Changed distance to a public road from 2939 to 2941 to match the related 2A per the operator. Other cultural distances may be different than the related 2A because this Pilot Hole APD is not the reference well for some of the distances. According to the multi-well plan on the related 2A, 15 wells are planned.	4/16/2015 10:35:37 AM
Permit	Added -01 extension to the API since this is a lateral APD.	4/16/2015 9:38:32 AM
Permit	In Process--Related 2A back in process. Updated Open hole logging BMP per the operator's instruction. Removed 317.p exception request letter. Requested cultural distance feedback from the operator.	4/16/2015 9:07:14 AM
Engineer	Increased surface casing from 1650' to 1750' and cement qty proportionally. Evaluated existing wells within 1500' of proposed directional. Contacted operator Re: Offset Well(s) w/o adequate isolation: 4/14/15 05-123-14324, NELSON RANCHES A 2 , PR, TOC inadequate for Nbr isolation, base Fox Hills transition and U. Pierre Aquifer exposed below SC. 05-123-16140, NELSON RANCHES A-5 , PR, TOC inadequate for Nbr isolation, base Fox Hills transition and U. Pierre Aquifer exposed below SC. Received acknowledgement 4/15/15.	4/13/2015 4:30:57 PM
Permit	Pending-Related 2A on hold.	4/7/2015 11:12:31 AM
Permit	Passed completeness.	4/7/2015 9:12:22 AM
Permit	Missing 317.p BMP. Return to draft.	4/2/2015 11:25:32 AM
Permit	Missing 317.p BMP. Return to draft.	3/30/2015 1:00:29 PM

Total: 9 comment(s)