

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:
400715752

APPLICATION FOR PERMIT TO:

Drill Deepen Re-enter Recomplete and Operate

Date Received:
10/31/2014

TYPE OF WELL OIL GAS COALBED OTHER _____
ZONE TYPE SINGLE ZONE MULTIPLE ZONES COMMINGLE ZONES

Refiling
Sidetrack

Well Name: Cottonwood Well Number: 08E-0503
Name of Operator: WHITING OIL & GAS CORPORATION COGCC Operator Number: 96155
Address: 1700 BROADWAY STE 2300
City: DENVER State: CO Zip: 80290
Contact Name: Larry Brown Phone: (307)237-9310 Fax: ()
Email: ld_brown@bresnan.net

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20030110

WELL LOCATION INFORMATION

QtrQtr: SWNW Sec: 8 Twp: 9N Rng: 57W Meridian: 6
Latitude: 40.767043 Longitude: -103.781194

Footage at Surface: 2285 feet FNL/FSL FNL 706 feet FEL/FWL FWL

Field Name: WILDCAT Field Number: 99999
Ground Elevation: 4721 County: WELD

GPS Data:
Date of Measurement: 06/02/2014 PDOP Reading: 1.7 Instrument Operator's Name: Q. Miller

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
2490 FNL 931 FWL 100 FNL 875 FWL
Sec: 8 Twp: 9N Rng: 57W Sec: 5 Twp: 9N 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: Surface Use Agreement

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.)

T9N, R57W, 6TH P.M.
SECTION 8: ALL
SECTION 9: E/2
SECTION 15: NW/4, W/2NE/4, S/2
SECTION 17: N/2

Total Acres in Described Lease: 1840 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: 5280 Feet
Above Ground Utility: 5280 Feet
Railroad: 5280 Feet
Property Line: 706 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: 327 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	535-481	960	N/2 8 All 5

DRILLING PROGRAM

Proposed Total Measured Depth: 13548 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 327 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:

Bioremediation

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	1500	667	1500	0
1ST	8+3/4	7	29	0	5859	393	5859	0
1ST LINER	6	4+1/2	11.6	5041	13548	586	13548	5041

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: 439412

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: Larry Brown

Title: Agent Date: 10/31/2014 Email: ld_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: *Matthew Lee* Director of COGCC Date: 12/5/2014

Expiration Date: 12/04/2016

API NUMBER
05 123 40738 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>
	<p>Operator acknowledges the proximity of the following offset well(s) of concern and proposes stated mitigation: 05-123-20077, MADDY 1-31 – Option 3 05-123-05655, Motis 1 – Option 3 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>1) Provide 48 hour notice prior to spud via electronic Form 42. 2) Provide cement coverage to a minimum of 200' above Niobrara. Verify coverage with cement bond log. 3) 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.</p>

Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Planning	Wells Planned within 1500 feet are shown on the multi-well plan map.
2	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.
3	Material Handling and Spill Prevention	<p>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.</p> <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

Total: 3 comment(s)

Applicable Policies and Notices to Operators

Notice Concerning Operating Requirements for Wildlife Protection.

Attachment Check List

Att Doc Num	Name
400715752	FORM 2 SUBMITTED
400720266	OffsetWellEvaluations Data
400720270	WELL LOCATION PLAT
400720272	DEVIATED DRILLING PLAN
400720275	DRILLING PLAN
400721884	DIRECTIONAL DATA
400721887	SURFACE AGRMT/SURETY
400721891	OPEN HOLE LOGGING EXCEPTION

Total Attach: 8 Files

General Comments

User Group	Comment	Comment Date
Engineer	Casing Program: The cement sack data fields for Surface, First, and First Liner were blank. Filled in using values from attached drilling plan and notified operator.	12/3/2014 2:33:50 PM
Permit	Changed objective formation to match the deviated drilling plan and notified operator.	11/28/2014 1:12:24 PM
Permit	Final Review Completed. No LGD or public comment received.	11/26/2014 11:11:44 AM
Permit	Request for Exception to Open Hole Logging Rule 317.p letter attached.	11/20/2014 8:28:08 AM
Permit	Horizontal wellbore crosses lease line. Distance to nearest lease line is 0 feet.	11/20/2014 8:26:28 AM
Engineer	Evaluated any existing wells within 1500' of proposed directional. Contacted operator Re: Offset Well(s) w/o adequate isolation 05-123-20077, MADDY 1-31 , DA, plugs inadequate for Nbr and aquifer isolation. Offset Well Evaluation also lists: 05-123-05655, MOTIS 1, DA, plugs inadequate for Nbr and aquifer isolation. This well is to the south in section 17 - for permits south from the same pad.	11/17/2014 10:44:06 AM
Permit	Passed Completeness	11/5/2014 9:11:01 AM

Total: 7 comment(s)