

APPLICATION FOR PERMIT TO:

Drill Deepen Re-enter Recomplete and Operate

TYPE OF WELL OIL <input checked="" type="checkbox"/> GAS <input type="checkbox"/> COALBED <input type="checkbox"/> OTHER _____ ZONE TYPE SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONES <input checked="" type="checkbox"/> COMMINGLE ZONES <input checked="" type="checkbox"/>	Refilling <input checked="" type="checkbox"/> Sidetrack <input type="checkbox"/>
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Date Received:
11/18/2014

Well Name: Wiley Well Number: 22-3-97-1

Name of Operator: ENDEAVOUR OPERATING CORPORATION COGCC Operator Number: 10411

Address: 1125 17TH STREET #1525

City: DENVER State: CO Zip: 80202

Contact Name: Mark Degenhart Phone: (720)979-0700 Fax: ()

Email: Mark.Degenhart@endeavourcorp.com

RECLAMATION FINANCIAL ASSURANCE
Plugging and Abandonment Bond Surety ID: 20120033

WELL LOCATION INFORMATION

QtrQtr: NWNW Sec: 22 Twp: 3N Rng: 97W Meridian: 6

Latitude: 40.218568 Longitude: -108.270778

Footage at Surface: 1144 feet FNL 879 feet FWL

Field Name: WILDCAT Field Number: 99999

Ground Elevation: 5869 County: RIO BLANCO

GPS Data:
Date of Measurement: 05/11/2012 PDOP Reading: 1.9 Instrument Operator's Name: Shay Young

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

Sec: _____ Twp: _____ Rng: _____ Sec: _____ Twp: _____ Rng: _____

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.)

Sec. 22: N2, W2SW; Sec. 23: N2, NESW, N2SE; Sec. 24: SE

Total Acres in Described Lease: 1000 Described Mineral Lease is: Fee State Federal Indian

Federal or State Lease # COC66386

Distance from Completed Portion of Wellbore to Nearest Lease Line of described lease: 879 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: 2693 Feet

Above Ground Utility: 5280 Feet

Railroad: 5280 Feet

Property Line: 1438 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: 3892 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 879 Feet (Enter 5280 for distance greater than 1 mile.)

Federal or State Unit Name (if appl): Wiley Unit Unit Number: COC075390X

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.)
FRONTIER	FRTR			
NIOBRARA	NBRR			

DRILLING PROGRAM

Proposed Total Measured Depth: 10820 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 3892 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 N/A

DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE Drilling Fluids Disposal Methods: Commercial Disposal
 Cuttings Disposal: ONSITE Cuttings Disposal Method: Cuttings trench
 Other Disposal Description:

Drilling fluids will be disposed at the Harley Dome Disposal facility in Utah or the drilling fluids will be de-watered and used for fracking onsite.

Beneficial reuse or land application plan submitted? No
 Reuse Facility ID: _____ or Document Number: _____

CASING PROGRAM

<u>Casing Type</u>	<u>Size of Hole</u>	<u>Size of Casing</u>	<u>Wt/Ft</u>	<u>Csg/Liner Top</u>	<u>Setting Depth</u>	<u>Sacks Cmt</u>	<u>Cmt Btm</u>	<u>Cmt Top</u>
CONDUCTOR	20	16	75	0	80	75	80	0
SURF	18+3/4	9+5/8	36	0	3000	894	3000	0
OPEN HOLE	8+3/4			3000	10820			

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

There have been no changes to the location.

I certify that there have been no changes on land use, lease description.

The pad has not been built.

The pit has not been constructed.

There will be no additional surface disturbance.

The location does not require a variance from any of the rules listed in Rule 306.d.(1).(A).(ii).

The location is not within a wildlife Restricted Surface Occupancy Area.

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

Location ID: 430834

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: Mark Degenhart

Title: Director-Res. Eng. Date: 11/18/2014 Email: Mark.Degenhart@endeavourco

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: 2/3/2015

Expiration Date: 02/02/2017

API NUMBER 05 103 11952 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

	<p>The moisture content of drill cuttings managed onsite shall be kept as low as practicable to prevent accumulation of liquids greater than de minimis amounts. After drilling and completion operations have been completed, the drill cuttings that will remain on the well pad location (within a cuttings management area, the cut portion of the pad, a cuttings trench, or a dry cuttings drilling pit), must meet the applicable standards of Table 910-1. Land-farming of E&P waste is prohibited on the location; however, this shall not preclude onsite disposal of E&P waste in accordance with COGCC Rules and permit conditions. After the drill cuttings have been amended (if necessary) and placed on the well pad, sampling frequency of the drill cuttings (to be determined by the operator) shall be representative of the material left on location. No offsite disposal of cuttings to another oil and gas location shall occur without prior approval of a Form 4 Sundry Notice specifying disposal location and waste characterization method. If operator decides to dispose of drill cuttings offsite at a commercial disposal facility, notification to COGCC via a Form 4 Sundry Notice will be required.</p>
	<p>(1) Operator shall comply with the most current revision of the Northwest Notification Policy. See attached notice.</p> <p>(2) If dry hole, set 100' cement plug above the Niobrara Formation top, set 100' plug across the surface casing shoe 1/2 in and 1/2 out casing, a 100' cement plug above the Mesa Verde Formation top and set 50' cement plug at surface (in casing and in annulus if casing is not pulled). Minimum one plug per 3000' of open hole.</p>

Best Management Practices

No	BMP/COA Type	Description
1	Storm Water/Erosion Control	<p>Endeavour Operating Corporation Wiley #22-3-97-1 NWNW Section 22-T3N-R97W Rio Blanco Co., Colorado</p> <p>Best Management Practices Summary</p> <p>Stormwater Management Plans (SWMP) will be in place to address construction, drilling and operations associated with Oil & Gas development throughout the state of Colorado in accordance with Colorado Department of Public Health and Environment (CDPHE). BMP's will be constructed around the perimeter of the site prior to, or at the beginning of construction. The BMP's used will vary according to the location, and will remain in place until the pad reaches final reclamation.</p> <p>Spill Prevention Control and Counter measures (SPCC) plans will be in place to address any possible spills associated with Oil & Gas operations throughout the state of Colorado in accordance with CFR12.</p> <p>Housekeeping will consist of neat and orderly storage of materials and fluids. Wastes will be temporarily stored in sealed containers and regularly collected and disposed of at offsite, suitable facilities. If spills occur prompt cleanup will be required to minimize any commingling of waste materials with stormwater runoff. Routine maintenance will be limited to fueling and lubrication of equipment. Drip pans will be used during routine fueling and maintenance to contain spills or leaks. Any waste product from maintenance will be containerized and transported offsite for disposal or recycling. There will be no major equipment overhauls conducted onsite. Equipment will be transported offsite for major overhauls. Cleanup will consist of patrolling the roadways, access areas, and other work areas to pick up trash, scrap debris, other discarded materials, and any contaminated soil. These materials will be disposed of properly.</p> <p>The above BMP's will be provided to all Endeavour Operating Corporation, contractors and will be posted in the company trailer located on location during drilling, completion and production operations.</p>

Total: 1 comment(s)

Applicable Policies and Notices to Operators

NW Colorado Notification Policy.

Notice Concerning Operating Requirements for Wildlife Protection.

Attachment Check List

Att Doc Num	Name
400726207	FORM 2 SUBMITTED

Total Attach: 1 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final review complete.	2/2/2015 1:53:31 PM
Permit	Corrected distance to property line from 5280' to 1438' as per opr. Corrected distance the nearest wellbores from 8862' to 3892' as per opr. Corrected the statements in the submit tab to say the pad is not built and the pit is not constructed as per opr.	1/23/2015 8:35:07 AM
Permit	Original distance to property line was 1438'. Need verification from opr. Distance to wellbores S/B 3892. Five statements are inconclusive. Notified Opr of desired corrections and clarification.	1/22/2015 9:48:04 AM
Engineer	There are no offset wells within 1500 feet of the proposed wellbore. Offset water well check: The deepest water well within one mile is 460 feet. The proposed surface casing setting depth is more than 50 feet below the base of the aquifer in which water wells are screened within one mile.	1/22/2015 8:47:20 AM
Permit	corrected county from Rio Grande to Rio Blanco; assigned task to correct staff	1/22/2015 6:55:52 AM
Permit	Passed Completeness	11/19/2014 12:42:38 PM

Total: 6 comment(s)