

APPLICATION FOR PERMIT TO:

Drill Deepen Re-enter Recomplete and Operate

Date Received:
03/31/2015

TYPE OF WELL OIL GAS COALBED OTHER _____ Refilling

ZONE TYPE SINGLE ZONE MULTIPLE ZONES COMMINGLE ZONES Sidetrack

Well Name: Wiley 22-3-97 Well Number: J-2H

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)9790733 Fax: ()

Email: mark.degenhart@endeavourcorp.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20120033

WELL LOCATION INFORMATION

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

Latitude: 40.212075 Longitude: -108.259826

Footage at Surface: 1778 feet FNL/FSL FSL 1352 feet FEL/FWL FEL

Field Name: WILDCAT Field Number: 99999

Ground Elevation: 5889 County: RIO BLANCO

GPS Data:
Date of Measurement: 10/02/2014 PDOP Reading: 1.4 Instrument Operator's Name: K. Stewart

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

1543 FSL 1138 FEL 2294 FNL 1106 FEL

 Sec: 22 Twp: 3N Rng: 97W Sec: 15 Twp: 3N Rng: 97W

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: Blanket Surface Surety ID: 20120034

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.)

The lease contains a mix of fee and federal minerals
Skeeters, Buffalo Horn Properties, LLC, et al. Tract 16 Lease: 800 Acres
Sec. 22, T3N, R97W: E/2SW/4, SE/4
Sec. 23, T3N, R97W: NW/4SW/4, S/2S/2
Sec. 24, T3N, R97W: SW/4
Sec. 26, T3N, R97W: NE/4NE/4, SW/4

Skeeters, Buffalo Horn Properties, LLC, et al. Tract 15 Lease: 760 Acres
Sec. 1, T3N, R97W: N/2SW/4
Sec. 13, T3N, R97W: E/2NE/4, SW/4NW/4, S/2SE/4, SW/4
Sec. 14, T3N, R97W: SE/4NE/4
Sec. 15, T3N, R97W: N/2NW/4, SW/4NW/4, NE/4

Federal Lands Tract 4 Lease: 1,000 Acres
Sec. 22, T3N, R97W: N/2, W/2SW/4
Sec. 23, T3N, R97W: N/2, NE/4SW/4, N/2SE/4
Sec. 24, T3N, R97W: SE/4

Federal Lands Tract 9 Lease: 1,000 Acres
Sec. 10, T3N, R97W: NE/4NE/4, W/2NE/4, E/2NW/4
Sec. 14, T3N, R97W: W/2NW/4, SW/4
Sec. 15, T3N, R97W: E/2SE/4
Sec. 34, T3N, R97W: W/2, SE/4

Total Acres in Described Lease: 3560 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: 346 Feet

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 4625 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: 862 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: 3167 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 3948 Feet (Enter 5280 for distance greater than 1 mile.)

Federal or State Unit Name (if appl): Wiley

Unit Number: COC75390X

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			

DRILLING PROGRAM

Proposed Total Measured Depth: 16813 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 3167 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? Yes

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: ONSITE

Drilling Fluids Disposal Methods: Land application

Cuttings Disposal: OFFSITE

Cuttings Disposal Method: Commercial Disposal

Other Disposal Description:

Beneficial reuse or land application plan submitted? No

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+0/0	20+0/0	104.13	0	80			
SURF	14+3/4	9+5/8	36	0	3300	1000	2970	43
1ST	8+3/4	7+0/0	29	0	10401	1221	10401	43
1ST LINER	6+1/8	4+1/5	11.6	9631	16813	474	6869	86

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: 430927

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: Brad Baum

Title: Project Manager Date: 3/31/2015 Email: bbaum@kleinfelder.com

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: _____

Expiration Date: _____

API NUMBER
05 103 11953 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.

Best Management Practices

No	BMP/COA Type	Description
1	Storm Water/Erosion Control	<p>Endeavour Operating Corporation Wiley #22-3-97 J-2H NWSE 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 Countermeasures (SPCC) plans will be in place to address any possible spills associated with Oil & Gas operations throughout the state of Colorado in accordance with 40 CFR 112.</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>
2	Drilling/Completion Operations	<p>One of the first wells drilled on the J 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 the well by API#, well name, and well number in which open-hole logs were run.</p>

Total: 2 comment(s)

Attachment Check List

Att Doc Num	Name
400811109	FORM 2 SUBMITTED
400817414	DIRECTIONAL DATA
400817416	DEVIATED DRILLING PLAN
400817418	WELL LOCATION PLAT

Total Attach: 4 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	On the Surface & Minerals tab, if the Surface Owner (SO) is committed to an oil and gas lease, then they must also be the Mineral Owner (MO). On the Surface & Minerals tab, information regarding MO differs from original Form 2 (APD). On Spacing & Formations tab, objective formations differs from original APD. Missing 317.p BMP "Plat" attachment should be "Well Loc Plat" Return to draft.	4/2/2015 1:48:09 PM

Total: 1 comment(s)

