

**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 _____	Refiling <input checked="" type="checkbox"/>
ZONE TYPE    SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONES <input checked="" type="checkbox"/> COMMINGLE ZONES <input checked="" type="checkbox"/>	Sidetrack <input type="checkbox"/>

Date Received:  
03/11/2015

Well Name: <u>FRU Federal</u>	Well Number: <u>11-14</u>
Name of Operator: <u>ENTEK GRB LLC</u>	COGCC Operator Number: <u>10323</u>
Address: <u>535 16TH STREET #620</u>	
City: <u>DENVER</u>	State: <u>CO</u>
Zip: <u>80202</u>	
Contact Name: <u>Andrea Gross</u>	Phone: <u>(303)942-0506</u> Fax: (    )
Email: <u>agross@upstreampm.com</u>	

**RECLAMATION FINANCIAL ASSURANCE**  
 Plugging and Abandonment Bond Surety ID: \_\_\_\_\_

**WELL LOCATION INFORMATION**

QtrQtr: SESW    Sec: 11    Twp: 11N    Rng: 88W    Meridian: 6  
 Latitude: 40.922583    Longitude: -107.231317

Footage at Surface: <u>607</u> feet	FNL/FSL FSL <u>2342</u> feet	FEL/FWL FWL _____
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Field Name: WILDCAT    Field Number: 99999  
 Ground Elevation: 7623    County: ROUTT

GPS Data:  
 Date of Measurement: 09/09/2011    PDOP Reading: 2.6    Instrument Operator's Name: Dave Fehringer

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.)

T11N R88W Sec. 11: All; Sec. 12: N2, NWSW, SE

Total Acres in Described Lease: 1160 Described Mineral Lease is:  Fee  State  Federal  Indian

Federal or State Lease # COC59203

Distance from Completed Portion of Wellbore to Nearest Lease Line of described lease: 607 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: 607 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: 5280 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 2423 Feet (Enter 5280 for distance greater than 1 mile.)

Federal or State Unit Name (if appl): Focus Ranch Uni Unit Number: COC63212X

**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.)
DEEP CREEK SAND	DPCK			
FRONTIER	FRTR			
NIOBRARA	NBRR			

**DRILLING PROGRAM**

Proposed Total Measured Depth: 7800 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 5280 Feet (Including plugged wells)

Will a closed-loop drilling system be used? Yes

Is H<sub>2</sub>S gas reasonably expected to be encountered during drilling operations at concentrations greater than



## 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 has been no changes on land use or lease description.
- The pad has not been built.
- There will be no additional surface disturbance beyond that described in the permitting documents.
- The location does not require a variance from any rules listed in Rule 306.d.(1).(A).(ii)
- The location is not within a wildlife Restricted Surface Occupancy Area.
- No Form 2A amendment is required.

Entek is aware of the Routt County permit requirements and at an appropriate time prior to any construction or drilling.

This application is in a Comprehensive Drilling Plan \_\_\_\_\_ CDP #: \_\_\_\_\_

Location ID: 431036

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: Andrea Gross

Title: Permit Agent Date: 3/11/2015 Email: agross@upstreampm.com

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: 9/11/2015

Expiration Date: 09/10/2017

**API NUMBER**

05 107 06251 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>A closed loop system must be implemented during drilling. All cuttings generated during drilling with oil based mud (OBM) or high chloride/TDS based mud (salt) must be kept in tanks/containers, or placed on a lined/bermed portion of the well pad; prior to disposition. The moisture content of any OBM-generated drill cuttings in a cuttings containment area or pile shall be as low as practicable to prevent accumulation of liquids greater than de minimis amounts. At the time of closure, if the drill cuttings are to be left onsite, they must also meet the applicable standards of Table 910-1. Representative cuttings samples will be analyzed for all Table 910-1 constituents. Any material which does not meet Table 910-1 criteria will either be manifested and disposed offsite at an approved commercial facility, or amended further onsite to comply with Table 910-1. If operator determines that long-term onsite management of oil based mud or high chloride/TDS mud cuttings is necessary, an approved Form 27 remediation plan will be required. All liners associated with oil based or high chloride/TDS drilling mud and cuttings must be disposed of offsite per CDPHE rules and regulations.</p> <p>The moisture content of water/bentonite based mud (WBM) generated 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 WBM drill cuttings that will remain on the well pad location (cuttings management area, the cut portion of the pad, cuttings trench, dry cuttings drilling pit), must meet the applicable standards of Table 910-1. 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 Waste Management Plan (submitted via a Form 4 Sundry Notice) specifying disposal location and waste characterization method. Commercial disposal of drill cuttings will only require notification to COGCC via a Form 4 Sundry Notice.</p>
	<p>Open hole resistivity and gamma logs shall be run to describe the stratigraphy of the entire well bore and to adequately verify the setting depth of surface casing and aquifer coverage. On a multi-well pad, these open hole logs are only required on one of the first wells drilled on the pad and the Drilling Completion Report - Form 5 for every well on the pad shall identify which well was logged.</p>
	<p>1) Operator shall comply with the most current revision of the Northwest Notification Policy. See attached notice.</p> <p>2) Operator shall provide cement coverage from the production casing shoe (7" First String) to a minimum of 200' above the surface casing shoe to provide isolation of all Mesaverde Group oil, gas, and water-bearing sandstone and coalbed formations that are not otherwise covered by surface casing. Verify production casing cement coverage with a cement bond log.</p>

## Best Management Practices

### No BMP/COA Type

### Description

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## Applicable Policies and Notices to Operators

NW Colorado Notification Policy.
Notice Concerning Operating Requirements for Wildlife Protection.

## Attachment Check List

<b>Att Doc Num</b>	<b>Name</b>
400790670	FORM 2 SUBMITTED

Total Attach: 1 Files

### General Comments

<b>User Group</b>	<b>Comment</b>	<b>Comment Date</b>
Permit	Final review complete.	9/10/2015 10:58:39 AM
OGLA	Form 2#400790670 reviewed by Dave Kubeczko on 09-08-15; cuttings disposal is the same as stated on Form 2A#400264092 for location Facility ID#431036; the applicable COA placed on the Form 2A adequately addresses onsite cuttings disposal: * The moisture content of any freshwater mud generated drill cuttings in a cuttings pit, trench, or pile shall be as low as practicable to prevent accumulation of liquids greater than de minimis amounts. At the time of closure, if the drill cuttings are to be left onsite, they must also meet the applicable standards of table 910-1. Two additional cuttings management specific COAs have been placed on Form2#400790670.	9/8/2015 9:50:32 AM
Permit	Emailed operator that form is being put on hold until they can work out the cuttings trench details with our OGLA.	9/3/2015 8:17:04 AM
Permit	Added OGLA task due to Cuttings Disposal. Form 2 reviewed by Dave Kubeczko on 09-08-15; cuttings disposal is the same as stated on Form 2A#400264092; applicable COA on Form 2A adequately addresses onsite cuttings disposal.	9/1/2015 8:28:08 AM
Permit	Removed Plugging bond as per opr. Checked Mineral Owner has signed lease as per Opr. Corrected distance to spacing unit from 5280 to 2423' as per opr.	5/7/2015 1:57:17 PM

LGD	<p>LGD Comments Entek GRB, LLC Well: Federal 11-14 SE4SW4 Sec 11-11-88 PP2012-011 Surface ownership: BLM Mineral Ownership: BLM Sent to COGCC 3.30.15 COGCC Doc #400790670[2]</p> <p>Routt County understands that this well site and a new access road is being reviewed by the BLM and does not have permit issued due to a pending EIS review for wildlife concerns. The EIS is not to be completed until later in 2015. Due to this situation, Routt County requests that this application be deferred until studies are completed. This would be a better use of staff time, especially if the proposed operation and/or access road are to be relocated.</p> <p>If the COGCC does not grant the above request, the following are current comments for this application.</p> <p>This site has previously been reviewed by Routt County and the permit has not been issued. During the two year permit period with the COGCC, which expired on 12.4.14, many regulations have changed in Routt County and the COGCC. It is our understanding that this application is considered a new application and must meet all new COGCC CDPHE rules. Comments have been revised based on new rules and regulations:</p> <ol style="list-style-type: none"> <li>1. Routt County has a permitting process for all oil/gas operations. All operators must contact Routt County and comply with the permit process before operations may proceed. This project may be eligible for a Finding of No Significant Impact (FONSI) approval.</li> <li>2. This site is mapped for wildlife concerns which include Elk Production and Summer Concentration and Greater Sage Grouse Production and Brood Area. Elk Production restrictions are 3/15 – 6/30 with Greater Sage Grouse restrictions 3/1-6/30. All operations must meet the requirements/restrictions placed by the CDPW and/or BLM.</li> <li>3. Best Management Practices must be adhered to prevent any contamination of waterbodies. Any access roads and well pad must have a comprehensive BMP and SWAMP plan and continually monitored for protection of these water sources from erosion and contaminants. The well pad is located between two drainages. The proposed access road has not had an on-site visit and comments cannot be completed at this time.</li> <li>4. There is a grazing lease and hunting lease. Care should be taken protect livestock from vehicles and fencing should be considered at the well site. Hunting operations should be honored and drilling not take place during this time.</li> </ol> <p>"LGD COMMENTS HAVE BEEN PREVIOUSLY ADDRESSED BY COGCC AS PART OF THE REVIEW PROCESS FOR FORM 2A#400264092"</p>	3/30/2015 9:59:09 AM
Engineer	Changes made as requested by Kim Rodell (Designated Agent) on 3/23/2015: Changed conductor hole size from 60" to 20" and changed conductor pipe size from 20" to 16".	3/23/2015 12:50:39 PM
Engineer	Offset water well check: There are no permitted water wells within 1 mile of this proposed surface hole location.	3/23/2015 10:20:46 AM
Engineer	Offset well evaluation: There are no existing oil & gas wells within 1,500' of this proposed wellbore.	3/23/2015 10:20:15 AM

Engineer	The Mesaverde Group is considered a potential freshwater resource in the Sand Wash Basin (CGS Ground Water Atlas of Colorado, 2003). The proposed surface casing setting depth of 2500' may not cover the entire Mesaverde Group, based on log tops in an offset well and the operator's drilling prognosis. COGCC concurs with operator's plan to cement the 7" First String into the surface casing for full isolation of the Mesaverde Group. Minimum cement isolation requirements are specified in Condition of Approval #2.	3/23/2015 10:17:18 AM
Permit	Passed completeness.	3/17/2015 1:25:43 PM
Permit	Returned to Draft: 1. The cultural Setbacks tab needs to be filled out.	3/13/2015 8:41:23 AM

Total: 12 comment(s)