

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:

400789885

APPLICATION FOR PERMIT TO:

Drill Deepen Re-enter Recomplete and Operate

Date Received:

03/04/2015

TYPE OF WELL OIL GAS COALBED OTHER _____

Refilling

ZONE TYPE SINGLE ZONE MULTIPLE ZONES COMMINGLE ZONES

Sidetrack

Well Name: FRU Federal Well Number: 1-1
Name of Operator: ENTEK GRB LLC COGCC Operator Number: 10323
Address: 535 16TH STREET #620
City: DENVER State: CO Zip: 80202
Contact Name: Andrea Gross Phone: (303)942-0506 Fax: ()
Email: agross@upstreampm.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: _____

WELL LOCATION INFORMATION

QtrQtr: NENE Sec: 1 Twp: 11N Rng: 88W Meridian: 6

Latitude: 40.948197 Longitude: -107.203917

Footage at Surface: 653 feet FNL/FSL FNL 659 feet FEL/FWL FEL

Field Name: WILDCAT Field Number: 99999

Ground Elevation: 7583 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. 1: S2N2, S2, Lots 5-8; Sec. 2: S2N2, N2S2, SESW, S2SE, Lots 5-8

Total Acres in Described Lease: 1243 Described Mineral Lease is: Fee State Federal Indian

Federal or State Lease # COC59201

Distance from Completed Portion of Wellbore to Nearest Lease Line of described lease: 653 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: 653 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 5280 Feet (Enter 5280 for distance greater than 1 mile.)

Federal or State Unit Name (if appl): Focus Ranch 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			
MORAPOS	MRPS			
NIOBRARA	NBRR			

DRILLING PROGRAM

Proposed Total Measured Depth: 8200 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 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: OFFSITE Drilling Fluids Disposal Methods: Commercial Disposal

Cuttings Disposal: ONSITE Cuttings Disposal Method: Cuttings trench

Other Disposal Description:

Drill cuttings will be buried in cuttings pit when dry.

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	20	16		0	60		60	0
SURF	12+1/4	9+5/8	36	0	2000	387	2000	0
1ST	8+3/4	7	23	0	8200	252	8200	6600
S.C. 1.1					6600	470	6600	1800

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 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 required Routt County permit requirements and will submit them.

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

Location ID: 431436

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: 3/4/2015 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:  Director of COGCC Date: 9/11/2015

Expiration Date: 09/10/2017

API NUMBER

05 107 06252 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>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

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>

Applicable Policies and Notices to Operators

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

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
400789885	FORM 2 SUBMITTED
400794704	OffsetWellEvaluations Data

Total Attach: 2 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final review complete.	9/10/2015 10:59:36 AM
OGLA	<p>Form 2#400789885 reviewed by Dave Kubeczko on 09-08-15; cuttings disposal is the same as stated on Form 2A#400324683 for location Facility ID#431436; the applicable COAs placed on the Form 2A adequately addresses onsite cuttings disposal:</p> <p>* A closed loop system must be implemented during drilling (which operator has indicated on the Form 2A); or, if a closed loop system drilling rig is not used/available, then an amended Form 2A will need to be submitted/approved to include a drilling pit, and a Form 15 Earthen Pit Permit will also need to be submitted/approved prior to construction of the pit (the drilling pit will be required to be lined, fenced, and netted). All cuttings generated during drilling with oil based muds or high chloride/TDS mud must be kept in containers, a lined/bermed portion of the well pad, or the lined drilling (if permitted and constructed) prior to offsite disposal. The moisture content of any 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.</p> <p>* 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.</p> <p>Two additional cuttings management specific COAs have been placed on Form2#400789885.</p>	9/8/2015 10:05:57 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 8:16:03 AM
Permit	Added OGLA task due to Cuttings Disposal.	9/1/2015 8:29:45 AM
Permit	Removed Plugging bond as per opr. Checked Mineral Owner has signed lease as per Opr.	5/7/2015 1:25:41 PM

LGD	<p>LGD Comments March, 2015 Entek GRB LLC Focus Ranch Unit Federal 1-1 Section 1-11-88 Routt County PP2012-035 COGCC Doc # 400789885[02]</p> <p>Routt County understands that this well site is being reviewed by the BLM and does not have a permit issued due to a pending EIS review for wildlife concerns for Sage Grouse. This includes the well site location and the access roads to the site. 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 is to be relocated.</p> <p>If the COGCC does not consider the above request, the following are current comments for this application.</p> <p>This site has previously been reviewed by Routt County and during the two year permit period which expired in January, 2015, 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 and CDPHE rules. Comments have been revised based on new rules and regulations:</p> <ol style="list-style-type: none"> 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. 2. There is a stream located near the proposed access road. Routt County was previously informed that water ways will not be crossed by the new access road to the well pad. However, it is unclear how close the access will be located from the stream. Routt County has waterbody setback requirements and this access may be reviewed for off-site impacts. 3. The well pad is east of an intermittent drainage. The petitioner agreed during the site visit to reroute the access road to avoid this drainage area. Maps have been submitted to the COGCC reflecting this change, but there are also location maps submitted with both the Forms 2 and 2A showing the previous access. The location maps need to be updated and reflect the re-routed access to avoid the drainage area; this was requested during the previous LGD process. Any access roads and the well pad should have a comprehensive BMP plan and be continually monitored for protection of these water sources from erosion and contaminants. 4. Even though this was a previously approved permit that has expired, this is a new application and should be required to meet all new regulations by the COGCC and the CDPHE. 5. There are mapped wildlife concerns in this area which also include Elk winter range; Sharp-tail Grouse production area along with Greater Sage Grouse production areas. The pad is located immediately north of the mapped area for GSG brood area. Wildlife restrictions should be strictly enforced and Entek should adhere to the wildlife mitigation placed by the CDPW and BLM for all wildlife. 6. Routt County recommended COA's or concerns with the previous submittal. One of the concerns was that this area is located in an area of geologic concerns which include landslide, unstable slopes, subsidence and a fault area. Routt County continues to recommend that this site have an inspection by the Colorado Geologic Survey or a geologic study to determine if the site and/or access road should have mitigation or be relocated. <p>"LGD COMMENTS HAVE BEEN PREVIOUSLY ADDRESSED BY COGCC AS PART OF THE REVIEW PROCESS FOR FORM 2A#400324683"</p>	3/18/2015 2:09:16 PM
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Permit	Ready to pass pending public comment.	3/10/2015 1:16:20 PM
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 2000' will 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.	3/9/2015 11:32:10 AM
Engineer	Offset water well check: There are no permitted water wells within 1 mile of this proposed surface hole location.	3/9/2015 11:31:53 AM
Engineer	Evaluated existing offset oil and gas wells within 1,500 feet of this wellbore. No mitigation required.	3/9/2015 11:31:12 AM
Permit	Passed completeness.	3/5/2015 11:17:23 AM

Total: 11 comment(s)