

APPLICATION FOR PERMIT TO:

Drill Deepen Re-enter Recomplete and Operate

TYPE OF WELL OIL GAS COALBED OTHER _____ Refilling

ZONE TYPE SINGLE ZONE MULTIPLE ZONES COMMINGLE ZONES Sidetrack

Date Received:
11/27/2017

Well Name: Critter Creek Well Number: 537-1807H

Name of Operator: FIFTH CREEK ENERGY OPERATING COMPANY LLC COGCC Operator Number: 10629

Address: 5251 DTC PKWY STE 420

City: GREENWOOD VILLAGE State: CO Zip: 80111

Contact Name: Sydney Smith Phone: (303)910-4511 Fax: ()

Email: ssmith@fifthcreekenergy.com

RECLAMATION FINANCIAL ASSURANCE
Plugging and Abandonment Bond Surety ID: 20160087

WELL LOCATION INFORMATION

QtrQtr: SWSW Sec: 18 Twp: 11N Rng: 63W Meridian: 6

Latitude: 40.915606 Longitude: -104.482433

Footage at Surface: 215 Feet FNL/FSL 803 Feet FEL/FWL

Field Name: HEREFORD Field Number: 34200

Ground Elevation: 5335 County: WELD

GPS Data:
Date of Measurement: 01/20/2017 PDOP Reading: 1.4 Instrument Operator's Name: Greg Weimer

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

300 FSL 700 FWL 300 FNL 700 FWL

Sec: 18 Twp: 11N Rng: 63W Sec: 7 Twp: 11N Rng: 63W

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.)

Lessor: Brain Farrington, a married man dealing in his sole and separate property
Original Lessee: Exterra Resources, LLC
Current Lessee: Fifth Creek Energy, LLC
Legal Description: Township 11 North – Range 63 West, 6th P.M.
Section 18: NE4 and SENW, Lots 3(40.30) and 4 (40.19) and the E2SW4 (a/k/a SW4) and other lands.
Containing 880.89 acres more or less

Total Acres in Described Lease: 881 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: 1595 Feet
Building Unit: 1615 Feet
High Occupancy Building Unit: 5280 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 204 Feet
Above Ground Utility: 247 Feet
Railroad: 5280 Feet
Property Line: 215 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 proposed wellbore to nearest completed portion of offset wellbore permitted or completed in the same formation: 3859 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 700 Feet (Enter 5280 for distance greater than 1 mile.)

Federal or State Unit Name (if appl): _____ Unit Number: _____

SPACING & FORMATIONS COMMENTS

Distance to completed portion of wellbore permitted or completed in the same formation was measured East to the Critter Creek 501-1807H (API# 05-123-42531).

OBJECTIVE FORMATIONS

Objective Formation(s)	Formation Code	Spacing Order Number(s)	Unit Acreage Assigned to Well	Unit Configuration (N/2, SE/4, etc.)
CODELL	CODL	421-79	1280	All: Sec 18 & Sec 7

DRILLING PROGRAM

Proposed Total Measured Depth: 18214 Feet

Distance from the proposed wellbore to nearest existing or proposed wellbore belonging to another operator, including plugged wells:

Enter distance if less than or equal to 1,500 feet: _____ Feet No well belonging to another operator within 1,500 feet

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: OFFSITE Cuttings Disposal Method: Commercial Disposal

Other Disposal Description:

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	42	0	60	50	60	0
SURF	13+1/2	9+5/8	36	0	1500	386	1500	0
1ST	8+3/4	5+1/2	17	0	18214	2500	18214	

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 Form 2 is being submitted as the sidetrack permit for the Critter Creek 537-1807H (API# 05-123-42368). The open hole sidetrack procedure will be to time the drill for 12 hours and drill 15' to kick away from the old wellbore located at 7150'. The proposed sidetrack is necessary as a tight hole has been encountered and a BHA cannot be worked to bottom. The hole appears to have swelling issues as the hole is packing off as we attempt to pump and rotate past 9,150'.

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

Location ID: _____

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: Sydney Smith _____

Title: Regulatory Analyst _____ Date: 11/27/2017 _____ Email: ssmith@fifthcreekenergy.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
05 123 42368 01

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>

Best Management Practices

No	BMP/COA Type	Description
1	Drilling/Completion Operations	One of the first wells drilled on the pad will be logged with open-hole Resistivity Log and Gamma Ray Log from the kick-off point into the surface casing. All wells on the pad will have a cement bond log with gamma-ray run on production casing (or on intermediate casing if production liner is run) into the surface casing. The horizontal portion of every well will be logged with a measured-while-drilling gamma-ray log. 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" and shall clearly identify (by API#, well name & number) the well in which open-hole logs were run.
2	Drilling/Completion Operations	Anti-collision: EOG Resources, Inc. will perform an anti-collision evaluation of all active (producing, shut in or temporarily abandoned) offset well bores that have the potential of being within 150 feet of a proposed well prior to drilling operations for the proposed well. Notice shall be given to all offset operators prior to drilling. Prior to drilling operations, EOG will perform an anti-collision review of existing offset wells that have the potential of being within close proximity of the proposed well. This anti-collision review may include MWD or gyro surveys of the offset wells with included error of uncertainty per survey instrument and compared against the proposed well path with tis respective error of uncertainty. If the current surveys do not exist for the offset wells, EOG may have gyro surveys conducted to verify bottom hole location. EOG maybe also perform IFR (In Field Reference) to increase survey accuracy. The proposed well will only be drilled if the anti-collision review results indicate that the risk of collision is sufficiently low as defined by the anti-collision plan, with separation factors greater than 1.5 or if the risk of collision has been mitigated through other means including shutting in wells, pugging wells, increased drilling fluid in the event of lost returns or as appropriate for the specific situation. In the event of an increased risk of collision, that risk will be mitigated to prevent harm to people, environment or property. A MWD directional survey for the proposed well will be submitted to the COGCC with Form 5 upon completion of drilling operations.

Total: 2 comment(s)

Attachment Check List

Att Doc Num	Name
401467795	FORM 2 SUBMITTED
401467882	DEVIATED DRILLING PLAN
401467898	DIRECTIONAL DATA
401467900	WELLBORE DIAGRAM
401467920	WELL LOCATION PLAT
401468130	CORRESPONDENCE

Total Attach: 6 Files

General Comments

User Group	Comment	Comment Date
		Stamp Upon Approval

Total: 0 comment(s)

Public Comments

No public comments were received on this application during the comment period.

