

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:

400514890

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:

11/19/2013

Well Name: Peterson Ridge Well Number: #1-20H  
Name of Operator: EE3 LLC COGCC Operator Number: 10450  
Address: 4410 ARAPAHOE AVENUE #100  
City: BOULDER State: CO Zip: 80303  
Contact Name: Andrew Ashby Phone: (303)444-8881 Fax: (303)417-1000  
Email: aashby@ee3llc.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20130007

WELL LOCATION INFORMATION

QtrQtr: SWSE Sec: 20 Twp: 8N Rng: 80W Meridian: 6

Latitude: 40.644586

Longitude: -106.394469

Footage at Surface: 219 feet FNL/FSL FSL 1820 feet FEL/FWL FEL

Field Name: ECLIPSE Field Number: 19420

Ground Elevation: 8113 County: JACKSON

GPS Data:

Date of Measurement: 11/30/2010 PDOP Reading: 1.2 Instrument Operator's Name: Robert Kay

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  
480 FNL 1980 FEL 600 FSL 1600 FWL  
Sec: 29 Twp: 8N Rng: 80W Sec: 29 Twp: 8N Rng: 80W

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.)

Township 8N Range 80W, 6th P.M.  
Sec 29: N2N2  
Sec. 28: E2; E2W2; NWNW  
Sec. 21: All  
Sec. 20: N2; SE

Total Acres in Described Lease: 800 Described Mineral Lease is: ☐ Fee ☐ State ☒ Federal ☐ Indian

Federal or State Lease # COC-65607

Distance from Completed Portion of Wellbore to Nearest Lease Line of described lease: 600 Feet

## CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 2693 Feet  
Building Unit: 5280 Feet  
High Occupancy Building Unit: 5280 Feet  
Designated Outside Activity Area: 5280 Feet  
Public Road: 261 Feet  
Above Ground Utility: 636 Feet  
Railroad: 5280 Feet  
Property Line: 1525 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: 11760 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 600 Feet (Enter 5280 for distance greater than 1 mile.)

Federal or State Unit Name (if appl): Peterson Ridge Unit Number: COC-75018X

## 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		640	ALL

## DRILLING PROGRAM

Proposed Total Measured Depth: 12170 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 1125 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 or equal to 100 ppm? No (If Yes, attach an H<sub>2</sub>S 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: Other

Cuttings Disposal: ONSITE Cuttings Disposal Method: Other

Other Disposal Description:

Drilling mud will be flocculated, solids from that process will be land farmed and liquids will be injected into SWD. Cuttings will be mixed with an enzyme enriched absorbent material and land farmed on location.

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
SURF	13+1/2	9+5/8	36#	0	1555	1000	1555	0
1ST	8+3/4	5+1/2	20#	0	12170	1900	12170	

☒ 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

Location Assessment already provided.

EE3 requested verbal approval to commence a sidetrack of the horizontal lateral from the COGCC and BLM as shown in the directional plan attached to the request (Sundry Notice) on 14 November 2013. Ensign Rig 12 was on location and was pulling out of the hole to set a kick off plug and sidetrack the horizontal portion of the well at the time of the request. Two issues were encountered that necessitated this change 1) hole conditions deteriorated to point of sticking drilling assembly and 2) geological conditions.

This well is in a Federal Unit and the new trajectory will remain within the hardlines of the Unit. A new Form 2 was submitted to the COGCC on 19 November 2013 for this new trajectory. A Sundry was submitted to the COGCC on 14 November by fax and overnight hard-copy. The BLM approved of the sidetrack 15 November 2013. Verbal approval by David Andrews, COGCC, was made 15 November 2013 at 5:50 PM.

The actual kick off point was at 6,936' KB with a plug set from 7,000'KB to 6,500' KB. The plug consisted of 270 sk CI G 17ppg 1.13 cu ft/sk. Inclination of the vertical hole where the well was kicked off is less than 1 deg. Surface casing (9-5/8" 36# K-55) is set to 1,555' KB and cemented to surface.

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: Ruth Hartshorn

Title: Admin Manager Date: 11/19/2013 Email: rhartshorn@ee3llc.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: 11/23/2013

Expiration Date: 11/22/2015

API NUMBER

05 057 06515 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.

#### COA Type

#### Description

	Production casing (5-1/2" first string) cement coverage is required across the entire Coalmont Formation and must extend at least 200' above the surface casing shoe; verification of coverage is required by CBL. This Condition of Approval shall supersede the existing COA #3 on Form 2 #400199729.
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### Best Management Practices

#### No BMP/COA Type

#### Description

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Data retrieval failed for the subreport 'IntBeliev\_NTC' located at: \\DorDonSterling\cFormReport\believ\_ntc.rdl. Please

### Attachment Check List

#### Att Doc Num

#### Name

400514890	FORM 2 SUBMITTED
400515001	PLAT
400515946	DEVIATED DRILLING PLAN
400516335	CORRESPONDENCE
400516337	DIRECTIONAL DATA
400516339	OTHER

Total Attach: 6 Files

### General Comments

#### User Group

#### Comment

#### Comment Date

Engineer	Email correspondence from EE3 to COGCC on 11/15/2013 stated, "[The original wellbore, sidetrack #00] reached a measured depth of 10,726' KB and secondly, the new target is, like the original the Niobrara Fm."	11/23/2013 6:45:46 PM
Engineer	The Sundry Notice referenced in the operator's comments was WITHDRAWN without further processing by COGCC (redundant).	11/23/2013 6:43:09 PM
Permit	Final review complete.	11/21/2013 9:54:41 AM
Permit	Form passes completeness.	11/21/2013 9:32:14 AM
Permit	Form is missing the DS Data Sheet. Also requested the e-mial from Dave Andrews approving the sidetrack to be included in the attachments.	11/20/2013 2:43:03 PM
Permit	Needs description of unplanned sidetrack, new DS and data sheet.	11/20/2013 8:34:27 AM

Total: 6 comment(s)