

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:

400594209

APPLICATION FOR PERMIT TO:

☒ Drill
 ☐ Deepen
 ☐ Re-enter
 ☐ Recomplete and Operate

Date Received:

07/10/2014

TYPE OF WELL OIL ☒ GAS ☐ COALBED ☐ OTHER _____Refilling ☒ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐Sidetrack ☐

Well Name: MARR

Well Number: 06-07H

Name of Operator: EE3 LLC

COGCC Operator Number: 10450

Address: 4410 ARAPAHOE AVENUE #100

City: BOULDER State: CO Zip: 80303

Contact Name: Paul Gottlob

Phone: (720)420-5747

Fax: ()

Email: paul.gottlob@iptenergyservices.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20130007

WELL LOCATION INFORMATION

QtrQtr: NWNE Sec: 7 Twp: 7N Rng: 80W Meridian: 6

Latitude: 40.598347

Longitude: -106.415444

Footage at Surface: 405 feet FNL/FSL FNL 2355 feet FEL/FWL FEL

Field Name: UNNAMED

Field Number: 85251

Ground Elevation: 8131

County: JACKSON

GPS Data:

Date of Measurement: 04/18/2013 PDOP Reading: 1.2 Instrument Operator's Name: ROBERT L. KAY

If well is ☐ Directional ☒ Horizontal (highly deviated) submit deviated drilling plan.

Footage at Top of Prod Zone: FNL/FSL FNL/FWL Bottom Hole: FNL/FSL FNL/FWL

 333 FSL 2341 FEL 620 FNL 620 FEL
 Sec: 6 Twp: 7N Rng: 80W Sec: 6 Twp: 7N Rng: 80W

LOCATION SURFACE & MINERALS & RIGHT TO CONSTRUCT

Surface Ownership: ☒ Fee ☐ State ☐ Federal ☐ IndianThe 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.)

ALL SEC 6-T7N-R80W - see attached SUA.

This Surface location is already built and the 1st well on the location has been drilled: Hebron 2-07H, API# 05-057-06499, NWNE, Sec. 7-T7N-R80W.

Total Acres in Described Lease: 640 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: 2190 Feet

Building Unit: 2190 Feet

High Occupancy Building Unit: 5280 Feet

Designated Outside Activity Area: 5280 Feet

Public Road: 1617 Feet

Above Ground Utility: 2219 Feet

Railroad: 5280 Feet

Property Line: 405 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: 1739 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 620 Feet (Enter 5280 for distance greater than 1 mile.)

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

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	531-2	640	ALL SEC 6-T7N-R80W

DRILLING PROGRAM

Proposed Total Measured Depth: 12062 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 1739 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? 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 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? 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
SURF	12+1/4	9+5/8	36	0	1400	860	1400	0
1ST	8+3/4	5+1/2	17	0	12062	1800	12062	1200

☒ 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: 413754

Is this application being submitted with an Oil and Gas Location Assessment application? Yes

I hereby certify all statements made in this form are, to the best of my knowledge, true, correct, and complete.

Signed: _____ Print Name: Paul Gottlob

Title: Regulatory & Eng. Tech. Date: 7/10/2014 Email: paul.gottlob@iptenergyservices

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: 10/24/2014

Expiration Date: 10/23/2016

API NUMBER

05 057 06497 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

	(1) COMPLIANCE WITH THE MOST CURRENT REVISION OF THE NORTHWEST COLORADO NOTIFICATION POLICY IS REQUIRED. SEE ATTACHED NOTICE. (2) PRODUCTION CASING (5-1/2" FIRST STRING) CEMENT SHALL EXTEND FROM THE PRODUCTION CASING SHOE TO 200' ABOVE THE SURFACE CASING SHOE TO PROVIDE FULL ISOLATION OF THE COALMONT FORMATION. PRODUCTION CASING (5-1/2" FIRST STRING) CEMENT COVERAGE VERIFICATION BY CBL IS REQUIRED.
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Best Management Practices

No BMP/COA Type

Description

1	Planning	2-well Pad. Location is already built and 1st well has been drilled.
2	Traffic control	Access roads. The access road has been constructed to accommodate local emergency vehicles. This road will be maintained for access at all times.
3	General Housekeeping	Fencing requirements. A permanent fencing plan will be reviewed by the surface owner, & the applicant.
4	General Housekeeping	Removal of surface trash. All trash, debris and material not intrinsic to the operation of the oil and gas facility shall be removed and legally disposed of as is applicable.
5	Material Handling and Spill Prevention	Leak Detection Plan. Pumper will visit the location daily and visually inspect all tanks and fittings for leaks. Additionally, monthly documented SPCCP inspections are conducted pursuant to 40 CFR §112.

6	Material Handling and Spill Prevention	Berm construction. Tank berms shall be constructed of steel rings with a synthetic or engineered liner and designed to contain 150% of the capacity of the largest tank. All berms will be visually checked periodically to ensure proper working condition.
7	Material Handling and Spill Prevention	Load-lines. All load-lines shall be bull-plugged or capped.
8	Material Handling and Spill Prevention	Tank specifications. Tanks will be designed, constructed and maintained in accordance with NFPA Code 30. The tanks are visually inspected once a day for issues, and recorded inspections are conducted once a month.
9	Noise mitigation	Lighting abatement measures shall be implemented, including the installation lighting shield devices on all of the more conspicuous lights, low density sodium lighting where practicable; and rig shrouding is not believed necessary as this is an industrial area and the only building unit within 1,000' is owned by the operator, however, at its election the operator may install temporary engineering controls consisting of perimeter sound walls shall be used on the location during drilling and completion activities to provide noise relief. Permanent equipment on location shall be muffled to reduce noise, or shall be appropriately buffered.
10	Drilling/Completion Operations	Closed Loop Drilling Systems – a closed-loop system will be used for drilling.
11	Drilling/Completion Operations	Green Completions – Emission Control Systems. Test separators and associated flow lines and sand traps shall be installed on-site to accommodate Green completions techniques pursuant to COGCC Rules. In the anticipated absence of a viable gas sales line, the flow-back gas shall be thermally oxidized in an emissions control device (ECD), which will be installed and kept in operable condition for least the first 90-days of production pursuant to CDPHE rules. This ECD shall have an adequate capacity for 1.5 times the largest flow-back within a 10 mile radius, will be flanged to route gas to other or permanent oxidizing equipment and shall be provided with the equipment needed to maintain combustion where non-combustible gases are present.
12	Drilling/Completion Operations	Blowout preventer equipment (“BOPE”). A double ram and annular preventer will be used during drilling. At least the drilling company shall have a valid well blowout prevention certifications.
13	Drilling/Completion Operations	BOPE for well servicing operations. Adequate BOP equipment shall be used. Stabbing valves shall be installed in the event of reverse circulation and shall be prior tested with low and high pressure fluid.
14	Drilling/Completion Operations	Pit level indicators. Not applicable; a closed-loop system will be used and no pits shall be dug.
15	Drilling/Completion Operations	Drill stem tests. Not applicable; no Drill Stem tests are planned.
16	Drilling/Completion Operations	Control of fire hazards. All materials which are considered fire hazards shall be a minimum of 25' from the wellhead tanks or separators. Electrical equipment shall comply with API RP 500 and will comply with the current national electrical code. An emergency response plan has been generated for this site.
17	Drilling/Completion Operations	Guy line anchors. All guy line anchors shall be brightly marked pursuant to Rule 604.c (2)Q.
18	Final Reclamation	Well site cleared. Within 90-day subsequent to the time of plugging and abandonment of the entire site, superfluous debris and equipment shall be removed from the site.
19	Final Reclamation	Identification of plugged and abandoned wells. P&A'd wells shall be identified pursuant to 319.a.(5).

Total: 19 comment(s)

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>
2167838	MINERAL LEASE MAP
400594209	FORM 2 SUBMITTED
400603537	OffsetWellEvaluations Data
400603551	WELL LOCATION PLAT
400639081	DIRECTIONAL DATA
400639082	DEVIATED DRILLING PLAN
400641784	SURFACE AGRMT/SURETY

Total Attach: 7 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed. No LGD or public comment received.	10/22/2014 8:41:32 AM
Permit	Form is being put on hold for an amended 2A to add another well to the pad.	8/19/2014 4:06:11 PM
Permit	Corrected APD to refile of API 057-0649-00 with opr approval. Removed related form 2A for facility to the SE. Added Location ID # 413754. Changed "is there a OGLA submitted" to yes. Ready to pass pending Engineering approval.	8/19/2014 9:02:14 AM
Permit	Attached Mineral Lease Map as per opr.	8/12/2014 11:36:07 AM
Engineer	<p>THE PROPOSED SURFACE CASING IS MORE THAN 50' BELOW THE DEPTH OF THE DEEPEST WATER WELL WITHIN 1-MILE OF THE SURFACE LOCATION WHEN CORRECTED FOR ELEVATION DIFFERENCES. THE DEEPEST WATER WELL WITHIN 1-MILE IS 140 FEET DEEP.</p> <p>PROPOSED SURFACE CASING OF 1400' WILL NOT PROVIDE FULL COVERAGE OF COALMONT FORMATION, BASED ON OPERATOR'S GEOLOGIC PROGNOSIS. COGCC CONCURS WITH OPERATOR'S PLAN TO CEMENT THE PRODUCTION CASING INTO THE SURFACE CASING FOR FULL ISOLATION OF THE COALMONT FORMATION.</p> <p>One existing offset well present within 1500 feet of this wellbore:</p> <p>EVALUATED OFFSET HORIZONTAL PR WELL HEBRON #2-07H ST (057-06499), TD AT 10800' AND COMPLETED IN NBRR. FIRST STRING CEMENT COVERAGE APPEARS TO BE POOR OR ABSENT ABOVE 6000' ON THE CEMENT BOND LOG, NBRR TOP REPORTED AT 6205', BUT TOP NBRR PRODUCTION PERF AT 6470'. UNCEMENTED INTERVALS OF THE COALMONT FORMATION ARE LIKELY BETWEEN THEN PRRE FORMATION TOP AND THE SURFACE CASING SHOE AT 950'. MITIGATION REQUIRED.</p> <p>OPERATOR ACKNOWLEDGES COGCC'S CONCERNS WITH EXISTING CEMENT COVERAGE IN THE HEBRON #2-07H ST WELL AND PLANS THE FOLLOWING OFFSET WELL MITIGATION, AS DESCRIBED IN A 8/1/2014 EMAIL, "Prior to the completion of the Marr #06-07H, a 1" tubing string will be utilized in the (9-5/8" x 5-1/2") annulus of the Hebron 02-7H and run to a depth of 3,200'. A gel plug will be pumped below and a balanced cement plug placed from this depth to 300' above the 9-5/8" casing shoe." THIS REMEDIAL CEMENT PLAN IS CONSISTENT WITH COGCC'S INTERIM STATEWIDE HORIZONTAL OFFSET POLICY MITIGATION OPTION NO. 1.</p>	7/21/2014 4:37:40 PM
Permit	Passed completeness.	7/10/2014 2:14:01 PM
Permit	Return to draft. Proposed TD/Casing TD does not match Deviated drilling plan/Drilling Data TD.	7/10/2014 1:42:05 PM

Total: 7 comment(s)