

FORM
2

Rev
08/16

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:

401893432

APPLICATION FOR PERMIT TO:

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

Date Received:

TYPE OF WELL OIL ☒ GAS ☐ COALBED ☐ OTHER UNPLANNED

Refilling ☐

ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐

Sidetrack ☒

Well Name: Melbon Ranch

Well Number: 4H-17H-M265

Name of Operator: CRESTONE PEAK RESOURCES OPERATING LLC

COGCC Operator Number: 10633

Address: 1801 CALIFORNIA STREET #2500

City: DENVER

State: CO

Zip: 80202

Contact Name: Erin Lind

Phone: (720)410-8478

Fax: ()

Email: erin.lind@crestonepr.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20160104

WELL LOCATION INFORMATION

QtrQtr: SWSW Sec: 17 Twp: 2N Rng: 65W Meridian: 6

Latitude: 40.134724

Longitude: -104.696629

Footage at Surface: 1225 Feet FSL 219 Feet FWL

Field Name: WATTENBERG

Field Number: 90750

Ground Elevation: 4956

County: WELD

GPS Data:

Date of Measurement: 11/30/2018 PDOP Reading: 6.3 Instrument Operator's Name: Brett Hill

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

Footage at Top of Prod Zone: FNL/FSL 890 FSL 460 FWL 890 FSL 460 FEL/FWL 890 FSL 460 FEL 890
Sec: 17 Twp: 2N Rng: 65W Sec: 17 Twp: 2N Rng: 65W

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.)

N/2NE/4, S/2, Sec 17, T2N, R65W

Total Acres in Described Lease: 400 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: 460 Feet

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 1632 Feet
Building Unit: 1863 Feet
High Occupancy Building Unit: 5280 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 1206 Feet
Above Ground Utility: 1869 Feet
Railroad: 5280 Feet
Property Line: 219 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: 116 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 460 Feet (Enter 5280 for distance greater than 1 mile.)

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

SPACING & FORMATIONS COMMENTS

Proposed Spacing Unit = Township 2 North, Range 65 West
S½ of Section 17

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 | | 320 | GWA |

DRILLING PROGRAM

Proposed Total Measured Depth: 12004 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: 246 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? (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 318A

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 | 24 | 16 | 42.09 | 0 | 121 | 78 | 121 | 0 |
| SURF | 13+1/2 | 9+5/8 | 40 | 0 | 2377 | 977 | 2377 | 0 |
| 1ST | 8+1/2 | 5+1/2 | 20 | 0 | 12027 | 1529 | 12027 | 0 |

☐ 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

Per COGCC Guidance Document:

Explanation of the situation that resulted in the need to sidetrack:

The Melbon Ranch 4H-17H-M265 encountered graben faulting that dropped the Sharon Springs formation significantly deeper than originally planned.

As drilling operations progressed in the lateral, faulting was encountered and the Sharon Springs formation was drilled from 8,438 ft MD to 8,598 ft MD (~160 ft).

Drilling operations were stopped at this point, and based on previous lost fish/sidetrack operations experienced on the Melbon Ranch 4E-17H-M265 (well on same pad) an open-hole sidetrack was performed.

Total measured depth reached in the wellbore being plugged back:

8,598 ft MD / 7,121 ft TVD

Casing set – size(s) and measured depth(s):

16" 40 lb/ft A252 conductor pipe set at 121 ft TVD, cemented back to surface

9-5/8" 40 lb/ft J55 LTC surface casing set at 2,377 ft MD / 2,367 ft TVD, cemented back to surface

Description of fish in the hole (if any):

No fish in wellbore

Description of proposed plugs: setting measured depths, heights, and cement volumes:

No cement/mechanical plugs set

Type of cement to be used for all plugs, including slurry weight (ppg) and yield (cf/sk):

No cement/mechanical plugs set

Measured depth of proposed sidetrack kick-off point:

Actual KOP was 7,781 ft MD / 7,161 ft TVD

Proposed objective formation(s) for sidetrack hole – new or same as the wellbore being abandoned:

Same formation – Niobrara

BHL target for sidetrack hole – new or same as the wellbore being abandoned:

Same BHL as wellbore being abandoned

MELBON RANCH 4H-17H-M265 Open-Hole Sidetrack

No change to original approved well SHL or BHL coordinates.

Original Wellbore TD: 8,598 ft MD / 7,121 ft TVD (within faulted Sharon Springs formation, ~8,438 ft to 8,598 ft = 160 ft, remaining footage was within Niobrara formation)

Open-Hole KOP: 7,781 ft MD / 7,161 ft TVD (within faulted Niobrara formation)

No cement/mechanical plug was set for the open hole sidetrack operations.

Sidetrack Wellbore TD: 12,027 ft MD / 7,090 ft TVD

5.5" production casing was run to 12,027 ft MD and cemented as per original plan with no issues .

This application is in a Comprehensive Drilling Plan No CDP #: _____

Location ID: 428103

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: Erin Lind

Title: Regulatory Analyst Date: _____ Email: erin.lind@crestonepr.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 47754 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**

| | |
|--|--|
| | |
|--|--|

Best Management Practices

No BMP/COA Type **Description**

| | |
|--|--|
| | |
|--|--|

Attachment Check List

Att Doc Num **Name**

| | |
|-----------|------------------------|
| 401893598 | DEVIATED DRILLING PLAN |
| 401893599 | CORRESPONDENCE |
| 401893600 | DIRECTIONAL DATA |
| 401894044 | WELLBORE DIAGRAM |

Total Attach: 4 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.