

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:

400472546

APPLICATION FOR PERMIT TO:

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

Date Received:

08/27/2013

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

Well Name: GERWECK

Well Number: 1-4

Name of Operator: MULL DRILLING COMPANY INC

COGCC Operator Number: 61250

Address: 1700 N WATERFRONT PKWY B#1200

City: WICHITA

State: KS

Zip: 67206-6637

Contact Name: MARK SHREVE

Phone: (316)264-6366

Fax: (316)264-6440

Email: MSHREVE@MULLDRILLING.COM

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20000063

WELL LOCATION INFORMATION

QtrQtr: NWNW Sec: 4 Twp: 14S Rng: 44W Meridian: 6

Latitude: 38.868120

Longitude: -102.349240

Footage at Surface: 660 feet FNL/FSL FNL 660 feet FEL/FWL FWL

Field Name: CHEYENNE WELLS

Field Number: 11050

Ground Elevation: 4261.29

County: CHEYENNE

GPS Data:

Date of Measurement: 08/14/2013 PDOP Reading: 1.1 Instrument Operator's Name: ELIJAH FRANE

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 ☐ 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.)

W/2 SECTION 4-T14S-R44W, 6TH P.M.

Total Acres in Described Lease: 320 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: 660 Feet

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 1554 Feet

Building Unit: 5280 Feet

High Occupancy Building Unit: 5280 Feet

Designated Outside Activity Area: 5280 Feet

Public Road: 630 Feet

Above Ground Utility: 537 Feet

Railroad: 5280 Feet

Property Line: 660 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: 3000 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): _____ 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.) |
|------------------------|----------------|-------------------------|-------------------------------|--------------------------------------|
| MARMATON | MRTN | | | |
| MISSISSIPPIAN | MSSP | | | |
| SHAWNEE | SHWNE | | | |

DRILLING PROGRAM

Proposed Total Measured Depth: 5600 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 1320 Feet (Including plugged wells)

Will a closed-loop drilling system be used? No

Is H₂S gas reasonably expected to be encountered during drilling operations at concentrations greater than

or equal to 100 ppm? Yes (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: ONSITE Drilling Fluids Disposal Methods: Other

Cuttings Disposal: ONSITE Cuttings Disposal Method: Other

Other Disposal Description:

DRY AND BURY.

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 | 17+1/2 | 13+3/8 | 48 | 0 | 460 | 400 | 460 | 0 |
| 1ST | 12+1/4 | 8+5/8 | 24 | 0 | 1700 | 75 | 1700 | 1500 |
| 2ND | 7+7/8 | 5+1/2 | 15 1/2 | 0 | 5600 | 250 | 5600 | 3700 |
| | | | Stage Tool | 0 | 3100 | 450 | 3100 | 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 8 5/8" INTERMEDIATE CASING WILL ONLY BE RUN IF NECESSARY FOR LOST CIRCULATION.

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

Location ID: _____

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: MARK SHREVE

Title: PRESIDENT/COO Date: 8/27/2013 Email: MSHREVE@MULLDRILLING.

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: 9/23/2013

Expiration Date: 09/22/2015

API NUMBER

05 017 07772 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) Provide 48 hour notice prior to spud via electronic Form 42.
- 2) If production casing is set provide cement coverage to at least 200' above the Topeka and stage cement Cheyenne/Dakota (2400'-1750' minimum). Run and submit CBL to verify cemented intervals.
- 3) If well is a dry hole set the following plugs: 40 sks cement +/- 50' above the Spergen, 40 sks cement +/- 50' above the Morrow, 40 sks cement +/- 50' above the Topeka, 40 sks cement across any DST w/ show, 40 sks cement at 2400' up, 40 sks cement at 1750' up, 50 sks cement from 50' below surface casing shoe up into surface casing, 15 sks cement in top of surface casing, cut 4 ft below GL, weld on plate, 5 sks cement each in rat hole and mouse hole.

Best Management Practices

| No | BMP/COA Type | Description |
|----|--|--|
| 1 | Planning | <ul style="list-style-type: none"> • Conduct Initial Site Assessment <ul style="list-style-type: none"> o Identification of nearby water bodies o Identification of vegetation types o Identification of protected wildlife species o Identification of potential access routes to minimize disturbances o Identification of nearby improvements |
| 2 | Pre-Construction | <ul style="list-style-type: none"> • Preparation of a Storm Water Pollution Prevention Plan. Acquisition of a Storm Water Discharge Permit • Consultation with the surface landowner or appointed agent • Finalize access routes • Finalize well pad location to minimize surface grade impacts • Finalize well pad layout to minimize disturbances • Develop wildlife management plan if protected species are present |
| 3 | General Housekeeping | <ul style="list-style-type: none"> • Drilling and production operations conducted in safe, workmanlike manner. Safety expectations include good housekeeping. • During drilling/completion operations, debris stored in caged container which is removed from the site. • During production operations, the lease is inspected daily by MDC personnel. |
| 4 | Wildlife | <ul style="list-style-type: none"> • Development and implementation of a Wildlife Management Plan if protected species are present |
| 5 | Storm Water/Erosion Control | <ul style="list-style-type: none"> • During drilling / completion operations, implementation of Storm Water Pollution Prevention Plan • Following drilling/completion operations, prompt reclamation of disturbed areas • During production operations, implementation of MDC's Post Construction Storm Water Management Program |
| 6 | Material Handling and Spill Prevention | <ul style="list-style-type: none"> • During drilling/completion operations, storage areas graded towards pit • During production operations, implementation of Spill Prevention, Control and Countermeasure Plan & daily inspection • All stock and produced water tanks have secondary containment |
| 7 | Construction | <ul style="list-style-type: none"> • Access road, well pad and pit disturbances minimized • Soils segregated by type to facilitate reclamation • Storm water controls deployed and routinely inspected |
| 8 | Drilling/Completion Operations | <p>INCLUDES STRUCTURAL PRACTICES:</p> <ul style="list-style-type: none"> • Implement Storm Water Pollution Prevention Plan, including routine inspections and evaluation of effectiveness • Locate tank batteries at safe distance from public roadways and railhead • Full containment for stock tanks and separators • Installation of pipelines in common trenches when practical • Installation of pipelines at right angles to water bodies (drainages, wetlands, perennial water bodies) where practical <p>SITE SPECIFIC:</p> <p>Per surface water area 244' northeast of proposed well pad – structural practices will be implemented at the site to minimize erosion and sediment transport. Practices may include but are not limited to: straw bales, wattles/sediment control logs, silt fences, earth dikes, drainage swales, sediment traps, subsurface drains, pipe slope drains, inlet protection, outlet protection, gabions, and temporary sediment basins.</p> |
| 9 | Interim Reclamation | <ul style="list-style-type: none"> • Debris and waste material removed • Areas not in use reclaimed promptly; pits closed using segregated material; well pad and other compacted surfaces ripped • Noxious weeds controlled |

| | | |
|----|-------------------|--|
| 10 | Final Reclamation | <ul style="list-style-type: none"> • All equipment and debris removed • All remaining disturbed areas, including access roads, reclaimed • Noxious Weed Control Plan developed if appropriate |
|----|-------------------|--|

Total: 10 comment(s)

Applicable Policies and Notices to Operators

Notice Concerning Operating Requirements for Wildlife Protection.

Attachment Check List

| <u>Att Doc Num</u> | <u>Name</u> |
|---------------------------|----------------------|
| 400472546 | FORM 2 SUBMITTED |
| 400473179 | PLAT |
| 400473180 | TOPO MAP |
| 400473297 | 30 DAY NOTICE LETTER |
| 400473366 | H2S CONTINGENCY PLAN |

Total Attach: 5 Files

General Comments

| <u>User Group</u> | <u>Comment</u> | <u>Comment Date</u> |
|--------------------------|--|----------------------------|
| Permit | Final review completed; no LGD or public comment received. | 9/23/2013 8:15:07 AM |
| Permit | The well location falls within an area that potentially may have measureable levels of H2S gas. Contingency plan attached. | 9/4/2013 5:53:41 AM |
| Permit | Operator corrected distance to nearest well and unit. This form has passed completeness. | 8/28/2013 12:12:37 PM |
| Permit | Returned to draft. Missing distance to nearest well and unit. | 8/28/2013 9:51:56 AM |

Total: 4 comment(s)