

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:

400525148

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:

12/16/2013

Well Name: Sharp

Well Number: 24-3-11HC

Name of Operator: WARD PETROLEUM CORPORATION

COGCC Operator Number: 10359

Address: PO BOX 1187

City: ENID State: OK Zip: 73702

Contact Name: Andrea Gross

Phone: (303)942-0506

Fax: ()

Email: agross@upstreampm.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20100221

WELL LOCATION INFORMATION

QtrQtr: SWSW Sec: 24 Twp: 1S Rng: 67W Meridian: 6

Latitude: 39.944030

Longitude: -104.846050

Footage at Surface: 250 feet FNL/FSL FSL 190 feet FEL/FWL FWL

Field Name: WATTENBERG

Field Number: 90750

Ground Elevation: 5019

County: ADAMS

GPS Data:

Date of Measurement: 10/15/2013 PDOP Reading: 1.2 Instrument Operator's Name: Rob Daley

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

Footage at Top of Prod Zone: FNL/FSL FSL 462 FSL 833 FWL 460 FNL 880 FWL
Sec: 24 Twp: 1S Rng: 67W Sec: 24 Twp: 1S Rng: 67W

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.)

See attached Lease Description and map.

Total Acres in Described Lease: 246 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: 600 Feet
Building Unit: 596 Feet
High Occupancy Building Unit: 5280 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 239 Feet
Above Ground Utility: 200 Feet
Railroad: 1825 Feet
Property Line: 190 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: 11/13/2013

SPACING and UNIT INFORMATION

Distance from Completed Portion of Wellbore to Nearest Wellbore Permitted or Completed in the same formation: 885 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: W/2 Section 24-T1S-R67W. 320 acres.

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 | | 320 | GWA |

DRILLING PROGRAM

Proposed Total Measured Depth: 12507 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 885 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 318A

DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE Drilling Fluids Disposal Methods: Commercial Disposal

Cuttings Disposal: OFFSITE Cuttings Disposal Method: Other

Other Disposal Description:

The drill cuttings will be disposed of offsite and land farmed.

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 | 1200 | 586 | 1200 | 0 |
| 1ST | 8+3/4 | 7 | 23 | 0 | 8146 | 819 | 8146 | 3000 |
| 1ST LINER | 6+1/8 | 4+1/2 | 11.6 | 7206 | 12507 | | | |

☒ 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: _____ 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: <u>Andrea Gross</u> Title: <u>Permit Agent</u> Date: <u>12/16/2013</u> Email: <u>agross@upstreampm.com</u> | |
| 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: <u></u> | Director of COGCC Date: <u>2/8/2014</u> Expiration Date: <u>02/07/2016</u> |
| <div style="border: 1px solid black; display: inline-block; padding: 5px;"> API NUMBER 05 001 09801 00 </div> | |

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) Submit Form 42 electronically to COGCC 48 hours prior to MIRU.. 2) Comply with Rule 317.i and provide cement coverage from end of 7" casing to a minimum of 200' above Niobrara and from 200' below Sussex to 200' above Sussex. Verify coverage with cement bond log. 3) Comply with Rule 321. Run and submit Directional Survey from TD to base of surface casing. Ensure that the wellbore complies with setback requirements in commission orders or rules prior to producing the well. |
| | Open hole resistivity and gamma logs shall be run to describe the stratigraphy of the entire well bore and to adequately verify the setting depth of surface casing and aquifer coverage. On a multi-well pad, these open hole logs are only required on one of the first wells drilled on the pad and the Drilling Completion Report - Form 5 for every well on the pad shall identify which well was logged. |
| | Operator shall comply with Buffer Zone Move-In, Rig-Up Notice Policy dated 12-16-2013. |

Best Management Practices

No BMP/COA Type

Description

| | | |
|---|----------|--|
| 1 | Planning | Guy Line Anchors: Per the SUA, Ward will remove all guy line anchors for drilling and completions within 30 days upon termination of oil and gas operations by Ward. |
| 2 | Planning | Development from existing well pads: Development from existing well pads was not an option for this well. However, this well pad will be considered for future well locations. |

| | | |
|----|--|--|
| 3 | Planning | Site Specific Measures: Ward will maintain a Stormwater Management Plan with site specific measurements to assess erosion control. |
| 4 | Planning | Multiwell Pads: In order to reduce surface disturbance, Ward is permitting this 2A for five (5) wells. |
| 5 | Traffic control | Traffic Plan: A traffic plan will be done if required by Adams County. |
| 6 | Traffic control | Access Roads: Ward will utilize Highway and County roads as well as the agreed upon access road to the surface location per the SUA. Any required county permits will be obtained prior to use. |
| 7 | General Housekeeping | Loadlines: All loadlines shall be bullplugged or capped. |
| 8 | General Housekeeping | Removal of Surface Trash: Per the SUA, Ward agrees that all trash, refuse pipe, equipment, liquids, chemicals or other materials that are not necessary for the continued operations of the wells will be removed and disposed of no later than 30 days after completion. No such items will be burned or buried on location. |
| 9 | General Housekeeping | Well Site Cleared: Per the SUA, Ward agrees that all trash, refuse pipe, equipment, liquids, chemicals or other materials that are not necessary for the continued operations of the wells will be removed and disposed of no later than 30 days after completion. No such items will be burned or buried on location. |
| 10 | Material Handling and Spill Prevention | Leak Detection Plan: To ensure protection for the surface during fracturing treatment, the location will be specifically constructed to contain any releases or spills. Secondary containment from any chemical spills or leaks will surround any trucks that carry, mix, or add chemicals to the flow stream as well as connections that could possibly leak fluid. Should any spill or release occur, every reasonable step will be taken to quickly remediate the area disturbed. |
| 11 | Material Handling and Spill Prevention | Control of Fire Hazards: Ward and its contractor's employ best management practices during the drilling and production of its wells and facilities. They will comply with appropriate COGCC and any county rules concerning fire and safety. Ward will ensure that any flammable material will remain no less than 25 feet from the wellhead (s), tanks and separator(s). |
| 12 | Construction | Berm Construction: A containment berm will be constructed around the oil and water storage tanks. The berm will be inspected regularly and maintained in good condition. |
| 13 | Construction | Fencing: Per the SUA, during drilling operations the well sites and any pits shall be fenced or required by the Owner. |
| 14 | Noise mitigation | Noise: No noise mitigation will required for this location. |
| 15 | Drilling/Completion Operations | Closed Loop System: Closed Loop System will be used for drilling and fluid management. No reserve pit will be used. |
| 16 | Drilling/Completion Operations | Green Completions: Ward will comply with COGCC Rule 805b.(3)A and utilize Green Completion Methods. |
| 17 | Drilling/Completion Operations | BOPE Testing: Upon initial rig-up and once every 30 days during drilling operations, pressure testing of the casing string and each component of the BOPE will be performed to 70% of working pressure or 70% of the internal yield of the casing, whichever is less. |
| 18 | Drilling/Completion Operations | BOPE for well servicing operations: Adequate blowout prevention equipment will be used on any servicing operations associated with this well. Backup staving valves shall be required on well servicing operations during reverse circulation. Valves will be pressure tested before each well servicing operation using both low-pressure and high-pressure fluid. |
| 19 | Drilling/Completion Operations | BOPE: Ward will utilize drilling rigs with a minimum of a double ram and annular preventer. |
| 20 | Drilling/Completion Operations | Drill Stem Tests: Drill Stem Tests are not anticipated for this location. |
| 21 | Drilling/Completion Operations | Tank specifications: Tanks shall be constructed and maintained in accordance with the National Fire Protection Association Code 30 (2008 version). All tanks will be visually inspected once a day for issues. Recorded inspections will be conducted once a month pursuant to 40 CFR §112. |
| 22 | Drilling/Completion Operations | Pit Level Indicators: Pit Level Indicators will not be needed as no pits will be used on location. |

| | | |
|----|-------------------|--|
| 23 | Final Reclamation | Identification of Plugged and Abandoned Wells: Pursuant to Rule 319.a.(5)., once the well has been plugged and abandoned, Ward will identify the location of the wellbore with a permanent monument that will detail the well name and date of plugging. |
|----|-------------------|--|

Total: 23 comment(s)

Applicable Policies and Notices to Operators

Notice Concerning Operating Requirements for Wildlife Protection.

Policy for Bradenhead Monitoring During Hydraulic Fracturing Treatments in the Greater Wattenberg Area.

Attachment Check List

| <u>Att Doc Num</u> | <u>Name</u> |
|---------------------------|-------------------------|
| 2157446 | EXCEPTION LOC REQUEST |
| 2157447 | PROPOSED SPACING UNIT |
| 2157449 | LEASE MAP |
| 2157450 | EXCEPTION LOC WAIVERS |
| 400525148 | FORM 2 SUBMITTED |
| 400527805 | WELL LOCATION PLAT |
| 400527807 | MULTI-WELL PLAN |
| 400527808 | LEGAL/LEASE DESCRIPTION |
| 400527809 | ACCESS ROAD MAP |
| 400527810 | DEVIATED DRILLING PLAN |
| 400527811 | DIRECTIONAL DATA |
| 400528302 | 30 DAY NOTICE LETTER |

Total Attach: 12 Files

General Comments

| <u>User Group</u> | <u>Comment</u> | <u>Comment Date</u> |
|-------------------|---|---------------------------|
| Permit | LGD comments pertain to county permits. No public comments. Final Review--passed. | 2/5/2014 12:16:06 PM |
| Engineer | LOCATION: SW1/4 OF SW1/4 OF SEC. 24, T.1s., R.67W. (250 SSL, 190 WSL) Ground Elevation: 5019 Number of Acres: 160 ELEVATION DEPTH TO ANNUAL ----- NET ----- APPROP STATUS AQUIFER BOT. TOP SAND BOT. TOP A-F ----- UPPER DAWSON ---- - LOWER DAWSON ---- - DENVER ---- - UPPER ARAPAHOE 4865 4925 25.7 154 94 7.00 NNT LOWER ARAPAHOE 4587 4807 118.6 432 212 32.26 NT LARAMIE-FOX HILLS 3892 4148 179.4 1127 871 43.05 NT note: E indicates location is at aquifer boundary and values may be more approximate. Elevation of the bottom and the depth to the bottom of the Upper Arapahoe are approximate and should be checked against DENVER BASIN ATLAS NO. 3 Deepest WW 1146' | 1/26/2014 8:33:59 PM |
| Engineer | No wells w/in 1500' | 1/26/2014 8:19:58 PM |
| Permit | Oper. submitted PSU, exception loc request letter & waiver, and lease map. Corrected dist. to unit & nearest well. | 1/15/2014 3:35:02 PM |
| LGD | These facilities will be accessed by existing access roads. Any additional access point required for these facilities will be approved by the Adams County Transportation Dept. An Oil and Gas Drilling Rig Move Permit will be required to move the Drilling Facilities both into and out of this location. When the site is placed into production, an On-Site Oil and Gas Facilities Production Permit will be required . Please contact Mr. Mark Russell at 720-523-6821 for information regarding these permits. | 1/3/2014 8:14:30 AM |
| Permit | Oper. requested target formation to be Codell only. Req'd 318A.a and 318A.c exception location requests and waivers. Req'd PSU. | 12/23/2013 6:47:18 AM |
| Permit | Passed completeness. | 12/17/2013 11:27:39 AM |
| Permit | Returned to draft for the following: 1. Missing attached letter certifying notification of building unit owners in buffer zone. 2. Water well sampling should be for Rule 318A in Drilling & Waste Plans tab. | 12/17/2013 8:35:53 AM |

Total: 8 comment(s)