

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:

400665131

APPLICATION FOR PERMIT TO:

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

TYPE OF WELL OIL ☐ GAS ☐ COALBED ☐ OTHER UIC

Refiling ☐

ZONE TYPE SINGLE ZONE ☐ MULTIPLE ZONES ☒ COMMINGLE ZONES ☐

Sidetrack ☐

Date Received:

09/12/2014

Well Name: NGL

Well Number: C1C

Name of Operator: NGL WATER SOLUTIONS DJ LLC

COGCC Operator Number: 10373

Address: 3773 CHERRY CRK NORTH DR #1000

City: DENVER State: CO Zip: 80209

Contact Name: Paul Gottlob

Phone: (720)420-5747

Fax: ()

Email: paul.gottlob@iptenergyservices.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20110128

WELL LOCATION INFORMATION

QtrQtr: SESE Sec: 8 Twp: 4N Rng: 64W Meridian: 6

Latitude: 40.320590

Longitude: -104.565810

Footage at Surface: 336 feet FNL/FSL FSL 211 feet FEL/FWL FEL

Field Name: WATTENBERG

Field Number: 90750

Ground Elevation: 4706

County: WELD

GPS Data:

Date of Measurement: 07/18/2014 PDOP Reading: 1.7 Instrument Operator's Name: Kyle Rutz

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

Footage at Top of Prod Zone: FNL/FSL 2161 FNL 75 FEL 2161 FNL 75 FEL
Sec: 17 Twp: 4N Rng: 64W Sec: 17 Twp: 4N Rng: 64W

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: No

The right to construct the Oil and Gas Location is granted by: applicant is owner

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.)

SESE Sec 8 4N64W

There is no lease because there are no minerals applicable to the wellbore.

Total Acres in Described Lease: _____ 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: _____ Feet

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 315 Feet

Building Unit: 513 Feet

High Occupancy Building Unit: 5280 Feet

Designated Outside Activity Area: 5280 Feet

Public Road: 200 Feet

Above Ground Utility: 240 Feet

Railroad: 5280 Feet

Property Line: 211 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: 08/11/2014

SPACING and UNIT INFORMATION

Distance from Completed Portion of Wellbore to Nearest Wellbore Permitted or Completed in the same formation: 144 Feet

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

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

SPACING & FORMATIONS COMMENTS

Distance from Completed Portion of Wellbore to Nearest Wellbore Permitted or Completed in the same formation: Well used is API# 05-123-29536, SWD #1-8B at 10000' TD. It is 100 feet shallower. The nearest that is as deep as this proposed well is > mile.

OBJECTIVE FORMATIONS

| Objective Formation(s) | Formation Code | Spacing Order Number(s) | Unit Acreage Assigned to Well | Unit Configuration (N/2, SE/4, etc.) |
|------------------------|----------------|-------------------------|-------------------------------|--------------------------------------|
| Admire | ADMI | | | |
| AMAZON | AMZN | | | |
| COUNCIL GROVE | COUGR | | | |
| FOUNTAIN | FNTN | | | |
| LOWER SATANKA | LSTKA | | | |
| LYONS | LYNS | | | |
| MISSOURI | MSSR | | | |
| MORROW | MRRW | | | |
| VIRGIL | VRGL | | | |
| WOLFCAMP | WFCMP | | | |

DRILLING PROGRAM

Proposed Total Measured Depth: 11100 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 2400 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?

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 | 650 | 188 | 650 | 0 |
| 1ST | 8+3/4 | 7 | 26 | 7531 | 9076 | 192 | 9076 | 7531 |
| 1ST LINER | 6+1/8 | 4+1/2 | 13.5 | 8876 | 11100 | | | |
| | | | Stage Tool | 0 | 7531 | 740 | 7531 | 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

This well will be serviced by the already permitted NGL Facility to the SW and will be connected by Intra-facility flow lines generally 4" fusion bonded schedule 160 steel from Well Head to the Facility.

Regarding Offset Well Evalutaion - per Steve Jenkins: Since this well is not technically a horizontal well and the policy pertains to horizontal wells, along with this being an injection well, and injecting into formations much deeper than any adjacent producing well, it doesn't really fall into the requirements of the Horizontal offset policy. I would remove the spreadsheet from the Form 2, but include a comment somewhere on the Form indicating why there is not an Offset Well Evaluation spreadsheet attached.

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: Paul Gottlob

Title: Regulatory & Engin. Tech. Date: 9/12/2014 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: Matthew Lee Director of COGCC Date: 10/16/2014

Expiration Date: 10/15/2016

API NUMBER

05 123 40377 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

| | |
|--|---|
| | <ol style="list-style-type: none">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. Verify coverage with cement bond log.3) Run and submit Directional Survey from TD to base of surface casing. The operator shall comply with Rule 321, and it shall be the operator's responsibility to ensure that the wellbore complies with setback requirements in commission orders or rules prior to producing the well. |
| | <ol style="list-style-type: none">1. Daily drilling reports are required.2. CBL of the 1st and 2nd (if present) Casing Strings required.3. A Mudlog is required containing at least the following information:<ol style="list-style-type: none">a. Rate of Penetration Log andb. Location of any drilling breaks or zones of lost circulation.4. A static water level taken after perforation in cased wells and prior to any stimulation in either cased or open-hole wells.5. Retrieve water sample(s) from injection zone(s) before stimulating formation, Step Rate Test, or Injectivity Test.6. A Transient Injectivity Test is required to determine the Maximum Daily Injection Rate in barrels per day (bbls/day).7. A Transient Injectivity Test or a Step Rate Test is required to determine the Maximum Injection Pressure in pounds per square inch (psi).8. Prior approval of Form 4 is required for Step Rate and Injectivity Tests.9. Operators are required to install a seismometer at a location to be determined by the operator and COGCC from which seismic activity in the vicinity of the injection well can be monitored. The operator will be responsible for maintenance of the seismometer. Data gathered by the seismometer will be made available to one or more third parties (such as the USGS, CU-Boulder, CSM, or CSU) for analysis.10. Injection is not authorized until approval of Forms 31 and 33. |
| | 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 | Logging – An Open Hole Resistivity Log will be run from the bottom of surface casing to TD. |
| 2 | Material Handling and Spill Prevention | Load-lines. All load-lines shall be bull-plugged or capped. |
| 3 | 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 will be used as well as sound walls on the north side during drilling and completion activities to provide noise relief, as the nearest building unit is just over 500' to the north. Permanent equipment on location shall be muffled to reduce noise, or shall be appropriately buffered. |
| 4 | Drilling/Completion Operations | Green Completions – No hydrocarbons anticipated - NA. |
| 5 | 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 certification. Stabbing valves shall be installed in the event of reverse circulation and shall be prior tested with low and high pressure fluid. |
| 6 | Drilling/Completion Operations | Drill stem tests. Not applicable; no Drill Stem tests are planned. |
| 7 | Drilling/Completion Operations | Well will be logged with an open hole logging tool with gamma ray. A CBL will be run on all production casing or, in the case of a production liner, the intermediate casing, when these casing strings are run. No CBL over slotted liner completion. |
| 8 | 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. |
| 9 | Drilling/Completion Operations | Guy line anchors. All guy line anchors shall be brightly marked pursuant to Rule 604.c (2)Q. |
| 10 | 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. Plugged and abandoned wells will be identified. P&A'd wells shall be identified pursuant to 319.a.(5). |
| 11 | Underground Injection Control | Formation Water, Mechanical Integrity, & Step Rate Tests will be done prior to approval to inject. |

Total: 11 comment(s)

Applicable Policies and Notices to Operators

Notice Concerning Operating Requirements for Wildlife Protection.

Attachment Check List

| Att Doc Num | Name |
|--------------------|------------------------|
| 400665131 | FORM 2 SUBMITTED |
| 400670049 | WELL LOCATION PLAT |
| 400673939 | OTHER |
| 400680152 | ANTI-COLLISION WAIVER |
| 400680250 | DIRECTIONAL DATA |
| 400680252 | DEVIATED DRILLING PLAN |

Total Attach: 6 Files

General Comments

| <u>User Group</u> | <u>Comment</u> | <u>Comment Date</u> |
|-------------------|--|--------------------------|
| Permit | Final Review Completed. No LGD or public comment received. | 10/15/2014 3:58:30 PM |
| Engineer | No wells within the 1500' buffer penetrate the Formations this well will be injecting into. Have met with Bob Koehler, prior to approval. | 10/3/2014 12:06:40 PM |
| Permit | The Certification of Compliance with Rule 305.a is under other on form 2A. Checked 604.b.(1)A per operator. ok to pass. | 9/25/2014 1:52:39 PM |
| Permit | Operator requests approval of an Anti-Collision Waiver for Rule 318Am. Wellbore is to be located less than 150' from an existing wellbore. Request and waivers attached. | 9/25/2014 1:48:46 PM |
| Permit | Passed Completeness | 9/12/2014 1:49:04 PM |

Total: 5 comment(s)