

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:

401151263

**(SUBMITTED)**

Date Received:

#### APPLICATION FOR PERMIT TO:

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

TYPE OF WELL OIL ☐ GAS ☐ COALBED ☐ OTHER Injection

Refilling ☐

ZONE TYPE SINGLE ZONE ☐ MULTIPLE ZONES ☒ COMMINGLE ZONES ☒

Sidetrack ☐

Well Name: EWS

Well Number: 4A

Name of Operator: EXPEDITION WATER SOLUTIONS COLORADO LLC

COGCC Operator Number: 10580

Address: 1023 39TH AVENUE SUITE E

City: GREELEY

State: CO

Zip: 80634

Contact Name: Jeremiah Demuth

Phone: (303)290-9414

Fax: ( )

Email: jdemuth@petrotek.com

#### RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20150089

#### WELL LOCATION INFORMATION

QtrQtr: SENW Sec: 17 Twp: 2N Rng: 63W Meridian: 6

Latitude: 40.139470

Longitude: -104.463560

Footage at Surface: 2232 Feet FNL/FSL FNL 2037 Feet FEL/FWL FWL

Field Name: WATTENBERG

Field Number: 90750

Ground Elevation: 4843

County: WELD

GPS Data:

Date of Measurement: 11/21/2016 PDOP Reading: 1.3 Instrument Operator's Name: Doug Berling

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 ☐ 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: Surface Use Agreement

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.)

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: 647 Feet  
Building Unit: 5280 Feet  
High Occupancy Building Unit: 5280 Feet  
Designated Outside Activity Area: 5280 Feet  
Public Road: 261 Feet  
Above Ground Utility: 223 Feet  
Railroad: 420 Feet  
Property Line: 220 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: 5280 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

## 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           |                         |                               |                                      |
| COUNCIL GROVE                             | COUGR          |                         |                               |                                      |
| DENVER BASIN<br>COMBINED DISPOSAL<br>ZONE | DJINJ          |                         |                               |                                      |
| FOUNTAIN                                  | FNTN           |                         |                               |                                      |
| LOWER SATANKA                             | LSTKA          |                         |                               |                                      |
| LYONS                                     | LYNS           |                         |                               |                                      |
| MISSOURI                                  | MSSR           |                         |                               |                                      |
| VIRGIL                                    | VRGL           |                         |                               |                                      |
| WOLFCAMP                                  | WFCMP          |                         |                               |                                      |

## DRILLING PROGRAM

Proposed Total Measured Depth: 10119 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: 694 Feet ☐ No well belonging to another operator within 1,500 feet

Will a closed-loop drilling system be used? Yes

Is H<sub>2</sub>S gas reasonably expected to be encountered during drilling operations at concentrations greater than or equal to 100 ppm? No (If Yes, attach an H<sub>2</sub>S 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: 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 |
|-------------|--------------|----------------|------------|---------------|---------------|-----------|---------|---------|
| CONDUCTOR   | 24           | 16             | 42.09      | 0             | 100           | 10        | 100     | 0       |
| SURF        | 12+1/2       | 9+5/8          | 36         | 0             | 1000          | 477       | 1000    | 0       |
| 1ST         | 8+3/4        | 7              | 26         | 0             | 8750          | 379       | 8750    | 6000    |
| 1ST LINER   | 6+1/8        | 4+1/2          | 11.6       | 8700          | 10119         |           |         |         |
|             |              |                | Stage Tool |               | 6000          | 799       | 6000    | 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: The nearest well in any formation is the Champlin 1-17 (05-123-11119) at 647 feet northwest. This well location was plotted using the gps coordinates of the well.

This application is in a Comprehensive Drilling Plan \_\_\_\_\_ No \_\_\_\_\_ 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: Jeremiah Demuth \_\_\_\_\_

Title: Engineering Technician \_\_\_\_\_ Date: \_\_\_\_\_ Email: jdemuth@petrotek.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

## 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

| <u>No</u> | <u>BMP/COA Type</u>                    | <u>Description</u>  |
|-----------|--|---|
| 1         | Material Handling and Spill Prevention | Load-lines. All load-lines shall be bull-plugged or capped.   |
| 2         | Drilling/Completion Operations         | Green Completions – No hydrocarbons are anticipated in this well. Hydrocarbon bearing formations will be isolated behind cement and casing.   |
| 3         | 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.   |
| 4         | 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.  |
| 5         | Drilling/Completion Operations         | Drill stem tests. Not applicable; no Drill Stem tests are planned.  |
| 6         | Drilling/Completion Operations         | Rule 317.p Open Hole Logging Requirement:<br>Open-hole Resistivity Log with Gamma Ray Log will be run from TD into the surface casing. A Cement Bond Log with Gamma Ray will be run on production casing, or on intermediate casing if a production liner is run. The Form 5, Completion Report, will list all logs run and have those logs attached. |
| 7         | 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 will be generated for this site.                                    |
| 8         | Drilling/Completion Operations         | Guy line anchors. All guy line anchors shall be brightly marked pursuant to Rule 604.c (2)Q.  |
| 9         | Drilling/Completion Operations         | Closed Loop Drilling Systems – Pit Restrictions. Not applicable; a closed-loop system will be used for drilling.  |
| 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.  |
| 11        | Final Reclamation                      | Identification of plugged and abandoned wells. P&A'd wells shall be identified pursuant to 319.a.(5).   |

Total: 11 comment(s)

## Attachment Check List

| <u>Att Doc Num</u> | <u>Name</u>        |
|--------------------|--------------------|
| 401159984          | WELLBORE DIAGRAM   |
| 401160032          | WELL LOCATION PLAT |

Total Attach: 2 Files

## General Comments

| <u>User Group</u> | <u>Comment</u> | <u>Comment Date</u> |
|-------------------|----------------|---------------------|
|                   |                | Stamp Upon Approval |

Total: 0 comment(s)

## Public Comments

No public comments were received on this application during the comment period.

