

**APPLICATION FOR PERMIT TO:**

**Drill**       Deepen       Re-enter       Recomplete and Operate

Date Received:  
09/09/2016

TYPE OF WELL    OIL     GAS     COALBED     OTHER INJECTION WELL

ZONE TYPE      SINGLE ZONE     MULTIPLE ZONES     COMMINGLE ZONES

Refiling   
Sidetrack

Well Name: TOMPKINS      Well Number: 41AWI-08-07-95

Name of Operator: URSA OPERATING COMPANY LLC      COGCC Operator Number: 10447

Address: 1050 17TH STREET #1700

City: DENVER      State: CO      Zip: 80265

Contact Name: JENNIFER LIND      Phone: (720)508-8362      Fax: ( )

Email: JLIND@URSARESOURCES.COM

**RECLAMATION FINANCIAL ASSURANCE**

Plugging and Abandonment Bond Surety ID: 20120125

**WELL LOCATION INFORMATION**

QtrQtr: SESE      Sec: 5      Twp: 7S      Rng: 95W      Meridian: 6

Latitude: 39.459959      Longitude: -108.013739

Footage at Surface: 200 Feet <sup>FNL/FSL</sup> FSL 522 Feet <sup>FEL/FWL</sup> FEL

Field Name: PARACHUTE      Field Number: 67350

Ground Elevation: 5528      County: GARFIELD

GPS Data:  
Date of Measurement: 04/22/2014    PDOP Reading: 1.7    Instrument Operator's Name: HOFFMANN

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

1320    FNL    1320    FEL    1320    FNL    1350    FEL

Sec: 8    Twp: 7S    Rng: 95W    Sec: 8    Twp: 7S    Rng: 95W

**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.)

LEASE INFORMATION IS NOT APPLICABLE AS THIS IS A PLANNED INJECTION WELL.

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: 518 Feet  
 Building Unit: 518 Feet  
 High Occupancy Building Unit: 5260 Feet  
 Designated Outside Activity Area: 5280 Feet  
 Public Road: 223 Feet  
 Above Ground Utility: 216 Feet  
 Railroad: 5011 Feet  
 Property Line: 201 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: 04/29/2014

**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 1320 Feet (Enter 5280 for distance greater than 1 mile.)

Federal or State Unit Name (if appl): \_\_\_\_\_ Unit Number: \_\_\_\_\_

**SPACING & FORMATIONS COMMENTS**

ILES FORMATION (OF WHICH CZ-CR FORMATIONS ARE MEMBERS) IS UNSPACED IN THIS AREA.

**OBJECTIVE FORMATIONS**

| Objective Formation(s) | Formation Code | Spacing Order Number(s) | Unit Acreage Assigned to Well | Unit Configuration (N/2, SE/4, etc.) |
|------------------------|----------------|-------------------------|-------------------------------|--------------------------------------|
| COZZETTE-CORCORAN      | CZ-CR          |                         |                               |                                      |

## DRILLING PROGRAM

Proposed Total Measured Depth: 8130 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: 125 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 609

## DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE Drilling Fluids Disposal Methods: Recycle/reuse

Cuttings Disposal: OFFSITE Cuttings Disposal Method: Beneficial reuse

Other Disposal Description:

If cuttings meet Table 910 they will be beneficially reused.

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             | 84    | 0             | 60            | 111       | 60      | 0       |
| SURF        | 12+1/4       | 8+5/8          | 32    | 0             | 1700          | 267       | 1700    | 0       |
| 1ST         | 7+7/8        | 4+1/2          | 11.6  | 0             | 8130          | 755       | 8130    |         |

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 Refile for the Tompkins 41AWI-08-07-95 injection well. Ursa plans to use this well as an underground injection well. Forms 31 and 33 will be submitted by 9/16/16 to accompany this APD refile. No updates to the attachments submitted with the original APD have been made, therefore have not be re-attached with this refile.

Distance to nearest well completed in the same formation is greater than 1 mile (5280') from the proposed BHL location.

No changes to the well are proposed at this time. BMPs were approved with the Tompkins (Location ID# 438312) Form 2A.

I certify that there have been no changes on land use, lease description.  
The pad has been built, and contains 17 existing WFCM wells (drilled, currently WOC).  
There will be no additional surface disturbance associated with this well.  
The location does not require a variance from any of the rules listed in Rule 306.d.(1).(A).(ii).  
The location is not within a wildlife Restricted Surface Occupancy Area.  
There have been no changes to the mineral lease.

Pre-application Notice / Buffer Zone Notice was sent to building unit owners within 1000' of the location on 4/29/14. The building unit owners within 1000' have waived all future notification requirements. Pre-application certification and signed notification waivers are attached to the associated Tompkins Pad Form 2A (Doc #400607816).

This application is in a Comprehensive Drilling Plan \_\_\_\_\_ CDP #: \_\_\_\_\_

Location ID: 438312

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: JENNIFER LIND

Title: REGULATORY ANALYST Date: 9/9/2016 Email: JLIND@URSARESOURCES.C

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: 11/27/2016

Expiration Date: 11/26/2018

**API NUMBER**  
05 045 22551 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.

| <u>COA Type</u> | <u>Description</u>  |
|-----------------|---|
|                 | <p>1. Injection is not authorized until approval of Subsequent Forms 31 and 33.</p> <p>2. Prior to performing operations, Operator is required to contact COGCC to discuss Step Rate Test or Injectivity Test criteria for Maximum Surface Injection Pressure determination. Prior approval of Form 4 is required for step rate and injectivity tests.</p> <p>3. Prior to performing operations approval of Form 4 is required for acid and fracturing jobs. (New as of 4/13/2016).</p> <p>4. Retrieve water sample(s) from injection zone(s) before stimulating formation. Samples must be analyzed for Total Dissolved Solids at a minimum.</p> <p>5. For ALL NEW DRILL UNDERGROUND INJECTION WELLS a suite of open-hole Resistivity/Gamma Ray and Density/Neutron logs IS REQUIRED from Surface Casing shoe to TD. A PDF, TIFF, or PDS visual image and a LAS or DILS file version of each log is required. LOGS FROM ADJACENT PRODUCTION WELLS ON PAD ARE NOT ACCEPTABLE.</p> <p>6. For all new and converted Underground Injection Control wells a Cement Bond Log (CBL) is required on the cased portions of the hole from the bottom of the casing to the top of the next shallower casing string for all casing strings other than the Surface Casing. Only a PDF, TIFF, or PDS visual image is required.</p> <p>7. Operator must provide all tops of formations encountered from surface to TD on the Form 5 when submitted.</p> |
|                 | <p>1) Operator shall comply with the most current revision of the Northwest Notification Policy.</p> <p>2) Operator shall comply with the most current revision of the Garfield County Rulison Field Notice to Operators, with the following exception: All field notice requirements specified in that Notice to Operators are superseded by the requirements of the most current revision of the Northwest Colorado Notification Policy (see Condition of Approval #1).</p> <p>3) Operator shall provide cement coverage from the production casing shoe (4+1/2" FIRST STRING) to a minimum of 200' above all Mesaverde Group (and Ohio Creek Formation, if present) oil, gas, and water-bearing sandstone and coalbed formations. Verify production casing cement coverage with a cement bond log.</p>   |

## Best Management Practices

| <u>No</u> | <u>BMP/COA Type</u>            | <u>Description</u>  |
|-----------|--------------------------------|---|
| 1         | Drilling/Completion Operations | One of the first wells drilled on the pad will be logged with open-hole Resistivity Log and Gamma Ray Log from TD into the surface casing. All wells on the pad will have a cement bond log with gamma-ray run on production casing (or on intermediate casing if production liner is run) into the surface casing. The Form 5, Completion Report, for each well on the pad will list all logs run and have those logs attached. The Form 5 for a well without open-hole logs shall clearly state "No open-hole logs were run" and shall clearly identify (by API#, well name & number) the well in which openhole logs were run. |

Total: 1 comment(s)

## Applicable Policies and Notices to Operators

|  |
|--|
| Policy   |
| Piceance Rulison Field - Notice to Operators.<br><a href="http://cogcc.state.co.us/documents/reg/Policies/NoticeToOp-20060623-2.pdf">http://cogcc.state.co.us/documents/reg/Policies/NoticeToOp-20060623-2.pdf</a>         |
| NW Colorado Notification Policy.<br><a href="http://cogcc.state.co.us/documents/reg/Policies/nw_notification_procedures.pdf">http://cogcc.state.co.us/documents/reg/Policies/nw_notification_procedures.pdf</a>            |
| Notice Concerning Operating Requirements for Wildlife Protection.<br><a href="http://cogcc.state.co.us/documents/reg/Policies/Wildlife_Notice.pdf">http://cogcc.state.co.us/documents/reg/Policies/Wildlife_Notice.pdf</a> |

## Attachment Check List

| <u>Att Doc Num</u> | <u>Name</u>          |
|--------------------|----------------------|
| 401106591          | FORM 2 SUBMITTED     |
| 401115414          | SURFACE AGRMT/SURETY |

Total Attach: 2 Files

## General Comments

| <u>User Group</u> | <u>Comment</u>   | <u>Comment Date</u> |
|-------------------|--|---------------------|
| Permit            | Final review complete.   | 11/21/2016          |
| LGD               | May require county permit per Garfield County Land Use Code depending on fluid delivery/storage operational plans  | 10/10/2016          |
| Engineer          | <p>Offset water well check: COGCC evaluated offset water wells within one mile of this proposed well's surface hole location. This information was used in addition to locally-available geophysical logs and hydrogeologic information to evaluate the adequacy of the operator's proposed surface casing setting depth. The deepest water well within one mile is 240 feet.</p> <p>Offset Well Evaluation: Existing offset oil and gas wells within 1,500 feet of this wellbore meet standards. No mitigation required. Unchecked "No offset wells within 1500 feet" on offset wells evaluation tab.</p> <p>Emailed operator regarding distance to wellbore owned by another operator. Changed distance to wellbore owned by another operator to 125' per operator. Distance is in plan view only. Actual three dimensional separation is much greater. No anti-collision scan or stimulation consent required. Removed operator comment regarding cement &gt;500 feet above TOG. See Drilling/Completion Operations Condition of Approval #3.</p> | 09/27/2016          |
| Engineer          | The Wasatch Formation is present at surface, possibly overlain by landslide deposits, based on review of COGCC's geologic maps. The operator's proposed surface casing setting depth or First String cement coverage will provide adequate isolation across Wasatch G productive intervals (offset Wasatch G production within one mile to the northeast in Section 4). The operator's proposed surface casing setting depth is above the Fort Union Formation top. Based on COGCC offset log review, Fort Union cement coverage is not required for wells on this pad. Drilling operations on this pad are on-going, and this is a re-file permit. Lower Wasatch cement coverage is not required, consistent with other approved permits on this pad. Drilling/Completion Operations Condition of Approval #3 addresses isolation of the Mesaverde Group.   | 09/27/2016          |
| UIC               | Attached SUA for Injection.  | 09/21/2016          |
| Permit            | Passed completeness.   | 09/20/2016          |

Total: 6 comment(s)