

**APPLICATION FOR PERMIT TO:**

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

TYPE OF WELL    OIL <input type="checkbox"/> GAS <input checked="" type="checkbox"/> COALBED <input type="checkbox"/> OTHER _____	Refiling <input checked="" type="checkbox"/>
ZONE TYPE    SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONES <input type="checkbox"/> COMMINGLE ZONES <input type="checkbox"/>	Sidetrack <input type="checkbox"/>

Date Received:  
08/30/2013

Well Name: <u>Frei</u>	Well Number: <u>A20</u>
Name of Operator: <u>URSA OPERATING COMPANY LLC</u>	COGCC Operator Number: <u>10447</u>
Address: <u>1050 17TH STREET #2400</u>	
City: <u>DENVER</u>	State: <u>CO</u>
Zip: <u>80265</u>	
Contact Name: <u>Shauna Redican</u>	Phone: <u>(720)508-8350</u>
Email: <u>sredican@ursaresources.com</u>	Fax: (    )

**RECLAMATION FINANCIAL ASSURANCE**  
 Plugging and Abandonment Bond Surety ID: 20120125

**WELL LOCATION INFORMATION**

QtrQtr: Lot 10    Sec: 7    Twp: 6S    Rng: 91W    Meridian: 6

Latitude: 39.536057    Longitude: -107.603306

Footage at Surface: <u>569</u> feet	FNL/FSL    FEL/FWL	FSL    907    feet    FWL
-------------------------------------	--------------------	---------------------------

Field Name: KOKOPELLI    Field Number: 47525

Ground Elevation: 5596    County: GARFIELD

GPS Data:  
 Date of Measurement: 07/18/2013    PDOP Reading: 2.4    Instrument Operator's Name: SCOTT E. AIBNER

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
<u>2023</u> FSL <u>660</u> FEL	<u>2023</u> FSL <u>660</u> FEL		
Sec: <u>12</u> Twp: <u>6S</u> Rng: <u>92W</u>	Sec: <u>12</u> Twp: <u>6S</u> Rng: <u>92W</u>		

**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.)

PLEASE SEE ATTACHED MINERAL LEASE MAP (34.15 acre lease)

Total Acres in Described Lease: 34 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: 265 Feet

**CULTURAL DISTANCE INFORMATION**

Distance to nearest:

Building: 626 Feet  
 Building Unit: 782 Feet  
 High Occupancy Building Unit: 5244 Feet  
 Designated Outside Activity Area: 5280 Feet  
 Public Road: 528 Feet  
 Above Ground Utility: 487 Feet  
 Railroad: 5280 Feet  
 Property Line: 401 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: 341 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 660 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.)
WILLIAMS FORK	WMFK	523-6	320	Sec 12:E/2

**DRILLING PROGRAM**

Proposed Total Measured Depth: 7554 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 341 Feet (Including plugged wells)

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?                     

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	55#	0	60	111	60	0
SURF	12+1/4	8+5/8	24/32#	0	1017	270	1017	0
1ST	7+7/8	4+1/2	11.6#	0	7554	664	7554	

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 Form 2 Re-file has been revised from the originally approved Form 2 APD. The SHL, BHL, casing and cement program and TD have been updated. There have been no changes to the mineral lease. This pad has been built and a Form 2A Amendment for pad expansion was submitted 9/5/2013 (DOC# 400475622). First String/ Production will be > 500 Feet above TOG. Please see attached plat for reference to cultural setbacks. Distance to nearest well was measured to Frei A18. Mitigation Measures were addressed with building unit owners at an on-site on 8/21/2013. There were no objections.

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

Location ID: 417777

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: Shauna Redican

Title: Permit Representative Date: 8/30/2013 Email: sredican@ursaresources.com

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: 12/15/2013

Expiration Date: 12/14/2015

**API NUMBER**  
05 045 19945 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) COMPLIANCE WITH THE MOST CURRENT REVISION OF THE NORTHWEST COLORADO NOTIFICATION POLICY IS REQUIRED. SEE ATTACHED NOTICE.</p> <p>(2) COMPLIANCE WITH THE MOST CURRENT REVISION OF THE GARFIELD COUNTY RULISON FIELD NOTICE TO OPERATORS IS REQUIRED, WITH THE FOLLOWING EXCEPTION: ALL FIELD NOTICE REQUIREMENTS SPECIFIED IN THIS NOTICE TO OPERATORS ARE SUPERSEDED BY THE REQUIREMENTS OF THE MOST CURRENT REVISION OF THE NORTHWEST COLORADO NOTIFICATION POLICY (SEE CONDITION OF APPROVAL #1). SEE ATTACHED NOTICE.</p> <p>(3) COMPLIANCE WITH THE MOST CURRENT REVISION OF THE MAMM CREEK FIELD NOTICE TO OPERATORS IS REQUIRED, WITH THE FOLLOWING EXCEPTION: ALL FIELD NOTICE REQUIREMENTS SPECIFIED IN THIS NOTICE TO OPERATORS ARE SUPERSEDED BY THE REQUIREMENTS OF THE MOST CURRENT REVISION OF THE NORTHWEST COLORADO NOTIFICATION POLICY (SEE CONDITION OF APPROVAL #1). SEE ATTACHED NOTICE.</p> <p>(4) COMPLIANCE WITH THE NOTICE TO OPERATORS DRILLING WELLS IN THE BUZZARD, MAMM CREEK, AND RULISON FIELDS, GARFIELD COUNTY AND MESA COUNTY – PROCEDURES AND SUBMITTAL REQUIREMENTS FOR COMPLIANCE WITH COGCC ORDER NOS. 1-107, 139-56, 191-22, AND 369-2 (JULY 8, 2010) -- IS REQUIRED. SEE ATTACHED NOTICE.</p> <p>(5) CEMENT ON PRODUCTION CASING MUST BE A MINIMUM OF 200' ABOVE THE TOP OF THE MESA VERDE FORMATION (OR 200' ABOVE THE OHIO CREEK FORMATION IF PRESENT). CEMENT TOP VERIFICATION BY CBL IS REQUIRED. THIS REQUIREMENT SHALL SUPERSEDE THE TOP OF CEMENT REQUIREMENTS IN THE MAMM CREEK FIELD NOTICE TO OPERATORS.</p>

## Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>

## Applicable Policies and Notices to Operators

Mamm Creek Field Area Notice to Operators.
Piceance Rulison Field - Notice to Operators.
NW Colorado Notification Policy.
Bradenhead Pressure Reporting-Garfield County (Mamm Creek & Rulison Fields) Mesa County (Buzzard Field).
Notice Concerning Operating Requirements for Wildlife Protection.

## Attachment Check List

<b>Att Doc Num</b>	<b>Name</b>
1638229	SURFACE AGRMT/SURETY
400474744	FORM 2 SUBMITTED
400475091	WELL LOCATION PLAT
400475094	DEVIATED DRILLING PLAN
400475097	DIRECTIONAL DATA
400475098	MINERAL LEASE MAP

Total Attach: 6 Files

### General Comments

<b>User Group</b>	<b>Comment</b>	<b>Comment Date</b>
Engineer	THE PROPOSED SURFACE CASING IS MORE THAN 50' BELOW THE DEPTH OF THE DEEPEST WATER WELL WITHIN 1MILE OF THE SURFACE LOCATION WHEN CORRECTED FOR ELEVATION DIFFERENCES. THE DEEPEST WATER WELL WITHIN 1 MILE IS 235' FEET DEEP.	12/15/2013 4:51:02 PM
Permit	Per operator: Changed "Minerals beneath Location developed by this Well" to NO, "Changed Right to Construct" to Surface Use Agreement, Attached SUA.	12/12/2013 6:08:23 PM
Permit	No LGD or public comments. Final Review--passed.	9/30/2013 10:37:54 AM
LGD	pass, gdb	9/27/2013 1:26:49 PM
Permit	Corrected spacing order & checked Single Zone per oper.	9/11/2013 2:33:02 PM
Permit	This form has passed completeness.	9/9/2013 8:49:06 AM
Permit	Returned to draft: 1) Need mitigation comment. 2) Need surface owner notification date.	9/4/2013 1:24:57 PM

Total: 7 comment(s)