

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:
04/09/2014

Well Name: MCPHERSON Well Number: A10

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

Address: 1050 17TH STREET #2400

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: NENW Sec: 16 Twp: 6S Rng: 92W Meridian: 6

Latitude: 39.531109 Longitude: -107.675985

Footage at Surface: <u>1044</u> feet	FNL/FSL	FEL/FWL
<u>FNL</u> <u>1482</u> feet	<u>FNL</u>	<u>FWL</u>

Field Name: MAMM CREEK Field Number: 52500

Ground Elevation: 5448 County: GARFIELD

GPS Data:
Date of Measurement: 04/08/2014 PDOP Reading: 1.3 Instrument Operator's Name: 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>2156</u> feet	<u>FNL</u> <u>1885</u> feet	<u>FWL</u>	<u>2156</u> feet	<u>FNL</u> <u>1885</u> feet	<u>FWL</u>
Sec: <u>16</u>	Twp: <u>6S</u>	Rng: <u>92W</u>	Sec: <u>16</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.)

T6S-R92W-SEC.16: SENW

Total Acres in Described Lease: 40 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: 464 Feet

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 663 Feet

Building Unit: 1162 Feet

High Occupancy Building Unit: 5280 Feet

Designated Outside Activity Area: 5280 Feet

Public Road: 1042 Feet

Above Ground Utility: 1029 Feet

Railroad: 5280 Feet

Property Line: 1044 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: 255 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 464 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-ILES	WFILS	191-34	160	NW/4

DRILLING PROGRAM

Proposed Total Measured Depth: 7770 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 255 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: 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	55	0	60	177	60	0
SURF	12+1/4	8+5/8	24/32	0	1000	416	1000	0
1ST	7+7/8	4+1/2	11.6	0	7770	356	7770	

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 McPherson A10 APD Refile. A new BHL location is provided with this APD submittal. The following information is included in the form: revised TD and casing / cement program; the following supporting documents are attached: well location plat and directional plan / data. The mineral lease information and remaining attachments remain unchanged from the Sundry approved 8/2/11.. Please note: conductor has been set on the subject well - casing tab is updated with actual conductor data. There have been no changes to land use, well construction or the lease. This Refile Form 2 does not require a Form 2A because the pad has been constructed, a closed loop system is being used so no pits need to be constructed, the refiled well will not require any expansion /additional surface disturbance of the pad. The location is not in a wildlife restricted surface occupancy area (RSO); consultation with CDOW is not required and the location does not require a variance from any of the rules listed in Rule 306.d.(1).(A).(ii).; consultation with CDPHE is not required. Top of cement of 1st string / production casing will be >500' above top of gas.

Distance to nearest well penetrating / completed in same formation has been updated using reference well Weinreis A4 (API 05-045-15129).

This application is in a Comprehensive Drilling Plan _____ CDP #: _____

Location ID: 335539

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: 4/9/2014 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: 7/12/2014

Expiration Date: 07/11/2016

API NUMBER 05 045 20750 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 IS REQUIRED. (PROCEDURES AND SUBMITTAL REQUIREMENTS FOR COMPLIANCE WITH COGCC ORDERS NOS. 1-107, 139-56, 191-22, AND 369-2 (JULY 8, 2010)).</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>
	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.

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

Att Doc Num	Name
1345191	DEVIATED DRILLING PLAN
1345192	DIRECTIONAL DATA
1345193	WELL LOCATION PLAT
400581171	FORM 2 SUBMITTED
400640969	DIRECTIONAL DATA

Total Attach: 5 Files

General Comments

User Group	Comment	Comment Date
Permit	Final review completed on the refile. No LGD comments.	7/8/2014 11:42:54 AM
Permit	Operator submitted deviated drilling plan, directional data and requested changes in the comments.	7/8/2014 10:29:54 AM
Permit	Operator submitted new well location plat, but the supporting deviated drilling plan and directional data must be submitted to support the BHL location.	7/8/2014 9:14:41 AM
Permit	Can't locate the deviated drilling plan that would support the change of BHL from the origianlly approved form 2 to the presently submitted form 2. Request operator supply such.	3/2/2014 1:23:58 PM
LGD	pass, gdb	4/28/2014 3:40:32 PM
Engineer	Scout card shows proposed BHL, but map shows original APD BHL -- which is in opposite direction. Was able to conduct 1500-foot offset well evaluation based on proposed BHL and line to SHL.	4/17/2014 12:13:35 PM
Engineer	THE PROPOSED SURFACE CASING IS MORE THAN 50' BELOW THE DEPTH OF THE DEEPEST WATER WELL WITHIN 1-MILE OF THE SURFACE LOCATION WHEN CORRECTED FOR ELEVATION DIFFERENCES. THE DEEPEST WATER WELL WITHIN 1-MILE IS 300 FEET DEEP. Evaluated existing offset wells within 1,500 feet of this wellbore. No mitigation required.	4/17/2014 12:13:35 PM
Permit	Operator made correction. This form has passed completeness.	4/11/2014 2:50:44 PM
Permit	Returned to draft. TPZ and BHL should be FWL.	4/11/2014 1:42:10 PM

Total: 9 comment(s)