

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 _____ ZONE TYPE SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONES <input type="checkbox"/> COMMINGLE ZONES <input type="checkbox"/>	Refiling <input checked="" type="checkbox"/> Sidetrack <input type="checkbox"/>
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Date Received:
09/19/2016

Well Name: B&V Well Number: 11A-18-07-95

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: NWSW Sec: 7 Twp: 7S Rng: 95W Meridian: 6

Latitude: 39.450164 Longitude: -108.047211

Footage at Surface:	<u>1879</u> Feet	FNL/FSL	<u>522</u> Feet	FEL/FWL
	FSL		FWL	

Field Name: WILDCAT Field Number: 99999

Ground Elevation: 5083 County: GARFIELD

GPS Data:
Date of Measurement: 06/16/2014 PDOP Reading: 1.7 Instrument Operator's Name: HOFFMAN

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>101</u>	FNL	<u>580</u>	<u>101</u>	FNL	<u>580</u>
	FWL			FWL	
Sec: <u>18</u>	Twp: <u>7S</u>	Rng: <u>95W</u>	Sec: <u>18</u>	Twp: <u>7S</u>	Rng: <u>95W</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 LEASE MAP ATTACHED TO ORIGINAL APD SUBMITTAL.

Total Acres in Described Lease: 91 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: 460 Feet

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 615 Feet

Building Unit: 615 Feet

High Occupancy Building Unit: 728 Feet

Designated Outside Activity Area: 5280 Feet

Public Road: 549 Feet

Above Ground Utility: 823 Feet

Railroad: 1093 Feet

Property Line: 292 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: 05/23/2014

Date of Rule 305.a.(2) Buffer Zone Notification to Building Unit Owners: 05/23/2014

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: 330 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 120 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	440-71	320	SEC.18 N/2

DRILLING PROGRAM

Proposed Total Measured Depth: 6751 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: 1150 Feet No well belonging to another operator within 1,500 feet

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: Other

Other Disposal Description:

Please see attachment J(2) - Waste Management Plan attached to the associated Form 2A (Doc 400778375)

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	1817	375	1817	0
1ST	7+7/8	4+1/2	11.6	0	6751	481	6751	

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 440-71

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

B&V 11A-18-07-95 APD refile. Please note, the B&V pad location has been constructed and conductors have been set at this location. Ursa currently has plans to begin drilling operations on the B&V pad beginning November, 2016. No changes to the original APD are proposed at this time, all attachments submitted with the original Form 2 are still valid and therefore are not re-attached with this submittal.
I certify there have been no changes to land use or mineral lease description and 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). This location is not within a wildlife Restricted Surface Occupany area.

Please see attached plat for reference to cultural setbacks. Distance to nearest well completed in the same formation / permitted or existing well penetrating objective formation was measured to the proposed B&V 14D-07-07-95. Distance to existing/proposed well belonging to another operator was measured to the TEP C&C Energy GM 444-12 at 1570'.

UMA notification to LGD was sent on 5/23/14. Pre-application Notice / Buffer Zone Notice was sent to building unit owners within 1000' of the location on 5/23/14. UMA BMPs, LGD notification certification and pre-application certification are attached to the associated B&V pad Form 2A (Doc #400632523).

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

Location ID: 440634

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: 9/19/2016 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:  Director of COGCC Date: 11/8/2016

Expiration Date: 11/07/2018

API NUMBER 05 045 22713 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>
	This Permit to Drill is approved subject to all the BMP's and COA's on the most recently approved Form 2A and any subsequently approved Form 4 for the Oil and Gas Location (Location ID # 440634). The most recently approved Form 2A and an subsequent Form 4's containing applicable COA's for this location shall be posted onsite during construction, drilling, and completions operations.
	If conductors are preset, operator shall comply with Notice to Operators: Procedures for Preset Conductors (dated September 1, 2016, revised October 6, 2016).
	<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 650' above the Mesaverde Group to provide isolation of the Lower Wasatch, all Mesaverde Group formations including the Ohio Creek Formation, and underlying formations, if penetrated. 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. http://cogcc.state.co.us/documents/reg/Policies/NoticeToOp-20060623-2.pdf
NW Colorado Notification Policy. http://cogcc.state.co.us/documents/reg/Policies/nw_notification_procedures.pdf
Notice Concerning Operating Requirements for Wildlife Protection. http://cogcc.state.co.us/documents/reg/Policies/Wildlife_Notice.pdf

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
401108064	FORM 2 SUBMITTED

Total Attach: 1 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Corrected drilling and waste program as per operator to reflect approved active 2A. Checked exception to 318.c for spacing order 440-71 with operator approval. Final review complete.	10/31/2016
Engineer	<p>The Wasatch Formation is below Modern Alluvium based on review of COGCC's geologic maps. The nearest offset Wasatch G production is greater than one mile to the north in Section 6. The operator's proposed surface casing setting depth may not cover the Fort Union Formation. Based on COGCC offset log review, Fort Union cement coverage is not required for wells on this pad. Condition of Approval #3 addresses isolation of the Lower Wasatch and Mesaverde Group formations including the Ohio Creek Formation. Operator to adjust cement quantity as needed.</p> <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 300 feet.</p> <p>Offset Well Evaluation: Existing offset oil and gas wells within 1,500 feet of this wellbore meet standards. No mitigation required.</p> <p>Per operator: Changed distance to wellbore owned by another operator to 1150'. Distance is in plan view only. Actual three dimensional separation is greater. Removed operator comment regarding cement >500 feet above TOG. See COA #3. Changed cement bottom and total measured depth to 6751'.</p>	10/17/2016
LGD	Pass, KHW. This location will present particular challenges to avoid, light, noise and odor issue for surrounding land uses that include nearby hotel.	10/10/2016
Permit	Passes completeness. --TPZ on original APD should have been 101' FNL. Attachments in well file apply to 101' FNL.	09/26/2016

Total: 4 comment(s)