

FORM
2

Rev
08/13

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:

400546320

APPLICATION FOR PERMIT TO:

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

TYPE OF WELL OIL ☐ GAS ☒ COALBED ☐ OTHER _____

Refiling ☒

Date Received:

03/14/2014

ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐

Sidetrack ☐

Well Name: Dixon

Well Number: A4

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: SWNE Sec: 18 Twp: 6S Rng: 92W Meridian: 6

Latitude: 39.529604

Longitude: -107.706139

Footage at Surface: 1526 feet FNL/FSL FNL 1732 feet FEL/FWL FEL

Field Name: MAMM CREEK

Field Number: 52500

Ground Elevation: 5535

County: GARFIELD

GPS Data:

Date of Measurement: 08/17/2012 PDOP Reading: 3.6 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 FNL/FWL Bottom Hole: FNL/FSL FNL/FWL

1499 FNL 1783 FWL 1499 FNL 1783 FWL
Sec: 18 Twp: 6S Rng: 92W Sec: 18 Twp: 6S Rng: 92W

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: Yes

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.)

Section 18, T6S, R92W - SWNE and SENE

Total Acres in Described Lease: 80 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: 187 Feet

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 950 Feet

Building Unit: 950 Feet

High Occupancy Building Unit: 5280 Feet

Designated Outside Activity Area: 5280 Feet

Public Road: 580 Feet

Above Ground Utility: 370 Feet

Railroad: 5280 Feet

Property Line: 169 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: 250 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 1121 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	191-40	223	N2

DRILLING PROGRAM

Proposed Total Measured Depth: 7906 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 233 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	32	0	1000	416	1000	0
1ST	7+7/8	4+1/2	11.6	0	7906	763	7906	

☐ 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 SHL has been updated to reflect the "as-drilled" location, please refer to the attached as-built plat. The BHL, casing and cement program and mineral lease information have not been changed from the original permit. Please note: conductor has been set on the subject well, casing and cement program includes 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.

Ursa requests approval of an exception location to Rule 604.a.(2), request letter attached. Pre-application notification date and certification were not required for this submittal. This APD is being submitted in lieu of a Form 10 – Change of Operator, per COGCC request (see notes below). Ursa requests that upon approval of this APD, Antero be released of any bond obligations related to this API number. Please note the following information:

- Ursa Operating Company (Ursa) acquired assets from Antero Resources in December 2012 under a Purchase and Sale Agreement, and assumed full operational responsibility on April 1, 2013.
- On June 5, 2013 (via e-mail), COGCC requested that Antero submit Form 4 Sundries to abandon the locations (e.g. well permits) for approximately 84 permits in lieu of a Form 10 to transfer the expired well permits; and that Ursa then refile APD's in the future and utilize the same API#s.
- Ursa wishes to retain this well location for future development of its assets. There will be no pad expansion, no addition of wells, no pits, and no significant changes to the well pad as a result of this re-filed APD. Therefore, a revised Location Assessment (Form 2A) is not required.
- The well pad for this location has already been constructed, and conductor set for this well. Therefore, Ursa is voluntarily submitting APDs for this well to complete transfer of ownership, and as such is seeking a waiver under COGCC Rule 604.b (1). A, as this existing well is within a designated setback location solely as a result of rules implemented on August 1, 2013.

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

Location ID: 335550

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: 3/14/2014 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:  Director of COGCC Date: 5/7/2014

Expiration Date: 05/06/2016

API NUMBER

05 045 14887 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)). 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>
	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.
	Operator shall comply with Buffer Zone Move-In, Rig-Up Notice Policy dated 12-16-2013.

Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Community Outreach and Notification	<ul style="list-style-type: none"> • Ursa routinely communicates proposed plans and operations schedules with Community Counts and the GARCO Energy Advisory Board. In addition, periodic stakeholder meetings are held with landowners and affected parties. • Communication with Kirby Wynn and municipal LGDs are also held routinely in addition to communication required by COGCC regulations. • Pre-application notifications were not required prior to the submission of this Form 2 refile as the pad has already been built and an amended Form 2A is not required. Statutory Notice to Surface Owner and MIRU Notice will be provided in accordance with COGCC rules.
2	Pre-Construction	<ul style="list-style-type: none"> • Pre-construction consultation was not required prior to the submission of this Form 2 refile as the pad has already been built and an amended Form 2A is not required. Statutory Notice to Surface Owner and MIRU Notice will be provided in accordance with COGCC rules.

3	Traffic control	<ul style="list-style-type: none"> • Rule 604.c.(2).D - Ursa has developed a site-specific Emergency Response Plan and Haul Route Map which is communicated to local emergency response agencies and stakeholders, as well as contractors performing work at the location.
4	General Housekeeping	<ul style="list-style-type: none"> • Rule 604.c.(2).P- Trash containers will be maintained on site. Trash will be hauled to and disposed at a commercial landfill. • Rule 604.c.(2).T- Any and all non-essential equipment, trash, and debris will be removed within 90 days if a proposed well is plugged and abandoned.
5	Material Handling and Spill Prevention	<ul style="list-style-type: none"> • All materials and chemicals will be managed to minimize environmental contamination. It should be noted that materials and chemicals that are not a waste may be reused or recycled. • Rule 604.c.(2).G - Spill containment will be managed in accordance with Ursa's EPA SPCC Plan under 40 CFR 112 and in accordance with COGCC Section 600 containment regulations. • Rule 604.c.(2).F - Spill prevention is addressed in Ursa's Spill Prevention and Management Plan. This includes training of employees and contractors personnel. Spills response includes notifications, reporting, response actions, remediation and corrective actions. The spill criteria in Ursa's plan requires that waste be properly classified as E&P or non-E&P wastes. For E&P waste, all spills greater than 1 barrel will be reported to the COGCC using a Form 19. Should remediation be required, a Form 27 will be submitted as well. Spills related to non-E&P waste will be managed in accordance with CDPHE and EPA regulations depending on the volume spilled.
6	Dust control	<ul style="list-style-type: none"> • The pad and access road will be graveled to reduce fugitive dust. In addition, water and other dust suppressants will be applied as needed, dependent upon the level of activity, moisture conditions, etc.
7	Construction	<ul style="list-style-type: none"> • Rule 604.c.(2).N - The location and site layout has been designed to accommodate all operations, including drilling and completions, within the limits of disturbance while meeting Federal and state safety regulations, including required buffers and distances between operating components and combustion sources in accordance with COGCC Section 600 Rules. • Rule 604.c.(2).M - Fencing will be constructed as required under the SUA with the landowner and COGCC regulations. • Rule 604.c.(2).R.- All new and replaced permanent crude oil and condensate storage tanks will meet the current API and NFPA standards. • Rule 604.c.(2).E & V - Existing well pad and access road will be utilized for this well. No new disturbance is anticipated. • Rule 604.c.(2).S - Existing well access road will be used and maintained for all weather use and will meet safety requirements. • Rule 604.c.(2).U – Operator will install a permanent marker per Rule 319.2.(5) when this wellbore is plugged and abandoned.
8	Noise mitigation	<ul style="list-style-type: none"> • Rule 604.c.(2).A - Noise levels will be in accordance with COGCC Section 800 Rules and any well-specific COAs. • Lighting will be directed down and away from building units.

9	Drilling/Completion Operations	<ul style="list-style-type: none"> • All NTOs applicable to the Piceance Basin or areas within the Piceance Basin (e.g. Bradenhead testing, well cementing, drilling, chemical disclosure, etc.) will be complied with. • If conductors are set, post drilling water well testing will be performed for permitted water wells in accordance with COGCC Sec 609 as implemented by Ursa's COGCC Section 609 water sampling plan. • Rule 604.c.(2).B - A closed-loop (pitless) drilling system will be used; No cuttings pit will be constructed; cuttings will be hauled to an approved waste. All waste generated (e.g. cuttings) will be managed in accordance with Ursa's Waste Management. Cuttings or other wastes that do not meet COGCC Table 910.1 criteria will be disposed of at a facility authorized to accept Exploration and Production (E&P) wastes, in accordance with COGCC Section 900 Rules. • All chemicals used will be tracked and reported in accordance with COGCC rules and submitted through FracFocus within 120 days of initiating well stimulation. • Rule 604.c.(2).C - Well completions will utilize flowback completion technologies and/or flares to reduce odors from plug drillout, and venting of salable and non-salable gas. No stimulation or flowback pits will be constructed. Green completions will be used for this well. • Completions will be conducted during daylight hours to the maximum extent possible. • Combustor controls and related odor reducing measures will be used to mitigate odors from production tanks. • Produced water used for well completions will be recycled and treated to the maximum extent practical. Water that can't be recycled will be injected through the use of wells approved by COGCC and Garfield County. • Rule 604.c.(2).H - Operator will utilize blowout prevention equipment (BOPE) per COGCC rules. • Rule 604.c.(2).I - Blowout prevention equipment (BOPE) pressure testing will be performed in accordance with COGCC rules. • Rule 604.c.(2).J - All well servicing operations will implement sufficient blowout prevention equipment (BOPE) especially during reverse circulation conditions. • Rule 604.c.(2).K - Pit level indicators will be used. • Rule 604.c.(2).L - Drill stem tests are not anticipated. If drill stem tests are required, they will be conducted in accordance with COGCC rules. • Rule 604.c.(2).O - Load lines will be bullplugged. • Rule 604.c.(2).Q - Guy line anchors will be identified per COGCC rules.
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Total: 9 comment(s)

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

<u>Att Doc Num</u>	<u>Name</u>
1792979	WELL LOCAITON PLAT
400546320	FORM 2 SUBMITTED
400572159	DEVIATED DRILLING PLAN
400572161	DIRECTIONAL DATA
400572163	SURFACE AGRMT/SURETY
400586251	EXCEPTION LOC REQUEST

Total Attach: 6 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final review completed. No LGD comments.	5/7/2014 7:04:08 AM
Permit	Received correct Well location plat.	5/7/2014 7:00:15 AM
Permit	Operator requested the correction on the TOP distance. Waiting on new Well location plat to reflect the change in distance to the nearest section line.	5/6/2014 1:19:46 PM
Permit	Requested corrected Well location ;plat to reflect the shorter distance to the nearest section line, also authorization to replace that shorter distance in the TOP and BHL footages.	5/6/2014 10:45:48 AM
LGD	pass, gdb	4/28/2014 3:33:17 PM
Engineer	<p>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 400 FEET DEEP.</p> <p>Evaluated existing offset wells within 1,500 feet of this wellbore. No mitigation required.</p> <p>Changed size of surface string casing from 5 5/8" to 8 5/8".</p>	4/14/2014 3:42:49 PM
Permit	This form has passed completeness.	4/9/2014 10:39:37 AM
Permit	<p>Returned to draft:</p> <p>1) Submitter is not designated agent under Shauna DeMattee. Re-submit under Shauna Redican.</p> <p>2) API # is 123-14887.</p> <p>3) SO mineral owner? Right to construct lease?</p> <p>4) Casing setting depth incorrect for 1st string.</p> <p>5) Exception Request Letter to Rule 604.b(1)A must be attached.</p> <p>6) Buffer zone mitigation BMP's for built location in buffer zone must be attached.</p>	3/17/2014 3:16:54 PM

Total: 8 comment(s)