

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:

400697292

Date Received:

01/12/2015

#### APPLICATION FOR PERMIT TO:

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

TYPE OF WELL OIL ☐ GAS ☒ COALBED ☐ OTHER \_\_\_\_\_

Refilling ☒

ZONE TYPE SINGLE ZONE ☐ MULTIPLE ZONES ☒ COMMINGLE ZONES ☒

Sidetrack ☐

Well Name: VALLEY FARMS

Well Number: F15

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: NWSW Sec: 14 Twp: 6S Rng: 92W Meridian: 6

Latitude: 39.525738

Longitude: -107.642616

Footage at Surface: 2141 feet FNL/FSL FSL 323 feet FEL/FWL FWL

Field Name: MAMM CREEK

Field Number: 52500

Ground Elevation: 5619

County: GARFIELD

GPS Data:

Date of Measurement: 06/26/2013 PDOP Reading: 2.2 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

1105 FSL 132 FEL 1105 FSL 132 FEL  
Sec: 15 Twp: 6S Rng: 92W Sec: 15 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.)

PLEASE SEE MINERAL LEASE MAP ATTACHED TO ORIGINALLY APPROVED APD.

Total Acres in Described Lease: 2356 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: 132 Feet

## CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 663 Feet  
Building Unit: 754 Feet  
High Occupancy Building Unit: 5280 Feet  
Designated Outside Activity Area: 5280 Feet  
Public Road: 412 Feet  
Above Ground Utility: 1114 Feet  
Railroad: 5280 Feet  
Property Line: 217 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: 11/14/2014

## SPACING and UNIT INFORMATION

Distance from Completed Portion of Wellbore to Nearest Wellbore Permitted or Completed in the same formation: 316 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 132 Feet (Enter 5280 for distance greater than 1 mile.)

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

## SPACING & FORMATIONS COMMENTS

CA (COC 073832) in the S2 of Sec 15

## OBJECTIVE FORMATIONS

Objective Formation(s)	Formation Code	Spacing Order Number(s)	Unit Acreage Assigned to Well	Unit Configuration (N/2, SE/4, etc.)
ILES	ILES	191-25	320	Sec 15 S/2
WILLIAMS FORK	WMFK	191-24	320	Sec 15 S/2

## DRILLING PROGRAM

Proposed Total Measured Depth: 8487 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 316 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: Commercial Disposal

Other Disposal Description:

If cuttings meet Table 910-1, they may be left onsite after submittal/approval of a Form 4 Sundry Notice.

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	8487	763	8487	

☐ 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 APD for the Valley Farms F15. I certify that all conditions in the original permit are the same. There have been no other changes to land use, well construction or the lease. A well location plat updated to meet current COGCC requirements is attached. 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. First String / Production cement will be > 500 feet above TOG.

Ursa requests approval of an exception location to Rule 604.a.(2), 604.B.(1)A request letter attached. Pre-application notification date and certification were not required for this submittal.

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

Location ID: 335538

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: 1/12/2015 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: 2/5/2015

Expiration Date: 02/04/2017

**API NUMBER**

05 045 18283 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>
	Operator shall comply with Buffer Zone Move-In, Rig-Up Notice Policy dated 12-16-2013.
	<p>1) Compliance with the most current revision of the Northwest Colorado Notification Policy is required. See attached notice.</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). See attached notice.</p> <p>3) Operator shall comply with the most current revision of the Mamm Creek 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). See attached notice.</p> <p>4) Operator shall comply 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). See attached notice.</p> <p>5) Operator shall provide cement coverage from the production casing shoe to a minimum of 200' above all Mesa Verde 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. 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>
1	Community Outreach and Notification	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Communication with Kirby Wynn and municipal LGDs are also held routinely in addition to communication required by COGCC regulations.</li> <li>• 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.</li> </ul>
2	Traffic control	<ul style="list-style-type: none"> <li>• 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.</li> </ul>
3	General Housekeeping	<ul style="list-style-type: none"> <li>• Rule 604.c.(2).P- Trash containers will be maintained on site. Trash will be hauled to and disposed at a commercial landfill.</li> <li>• 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.</li> </ul>

4	Material Handling and Spill Prevention	<ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> <li>• 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&amp;P or non-E&amp;P wastes. For E&amp;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&amp;P waste will be managed in accordance with CDPHE and EPA regulations depending on the volume spilled.</li> </ul>
5	Dust control	<ul style="list-style-type: none"> <li>• 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.</li> </ul>
6	Construction	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Rule 604.c.(2).M - Fencing will be constructed as required under the SUA with the landowner and COGCC regulations.</li> <li>• Rule 604.c.(2).R.- All new and replaced permanent crude oil and condensate storage tanks will meet the current API and NFPA standards.</li> <li>• Rule 604.c.(2).E &amp; V - Existing well pad and access road will be utilized for this well. No new disturbance is anticipated.</li> <li>• Rule 604.c.(2).S - Existing well access road will be used and maintained for all weather use and will meet safety requirements.</li> <li>• Rule 604.c.(2).U – Operator will install a permanent marker per Rule 319.2.(5) when this wellbore is plugged and abandoned.</li> </ul>
7	Noise mitigation	<ul style="list-style-type: none"> <li>• Rule 604.c.(2).A - Noise levels will be in accordance with COGCC Section 800 Rules and any well-specific COAs.</li> <li>• Lighting will be directed down and away from building units.</li> </ul>

8	Drilling/Completion Operations	<ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> <li>• 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&amp;P) wastes, in accordance with COGCC Section 900 Rules.</li> <li>• All chemicals used will be tracked and reported in accordance with COGCC rules and submitted through FracFocus within 120 days of initiating well stimulation.</li> <li>• 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.</li> <li>• Completions will be conducted during daylight hours to the maximum extent possible.</li> <li>• Combustor controls and related odor reducing measures will be used to mitigate odors from production tanks.</li> <li>• 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.</li> <li>• Rule 604.c.(2).H - Operator will utilize blowout prevention equipment (BOPE) per COGCC rules.</li> <li>• Rule 604.c.(2).I - Blowout prevention equipment (BOPE) pressure testing will be performed in accordance with COGCC rules.</li> <li>• Rule 604.c.(2).J - All well servicing operations will implement sufficient blowout prevention equipment (BOPE) especially during reverse circulation conditions.</li> <li>• Rule 604.c.(2).K - Pit level indicators will be used.</li> <li>• 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.</li> <li>• Rule 604.c.(2).O - Load lines will be bullplugged.</li> <li>• Rule 604.c.(2).Q - Guy line anchors will be identified per COGCC rules.</li> </ul>
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Total: 8 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**

<b><u>Att Doc Num</u></b>	<b><u>Name</u></b>
400697292	FORM 2 SUBMITTED
400769368	WELL LOCATION PLAT
400769369	EXCEPTION LOC REQUEST

Total Attach: 3 Files

## General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final review complete.	2/4/2015 3:24:13 PM
OGLA	Buffer Zone mitigation measures BMPs reviewed by Dave Kubeczko on 02-04-15 and are sufficient; operator has submitted a Form 4 Sundry Notice for the well pad location, OGCC ID#335538, Valley Farms F Pad, adding the Buffer Zone mitigation measures BMPs; per discussion with operator on 02-04-15, disposal method for drill cuttings has been changed from "Beneficial Reuse - If cuttings meet Table 910 they will be beneficially reused." to "Commercial Disposal" with the option that "If cuttings meet Table 910-1, they may be left onsite after submittal/approval of a Form 4 Sundry Notice."; passed OGLA Form 2 review on 02-04-15 by Dave Kubeczko.	2/4/2015 2:07:21 PM
Permit	Added CA number in spacing comments as per opr. Added Sec 15 to unit configuration as per opr. Added OGLA task to review cuttings and buffer zone BMP's.	2/3/2015 8:10:06 AM
Permit	Corrected that described mineral lease is Fee as per opr. Removed related 2A in related forms tab as per opr. Ready to pass pending public comment 2/3/15.	1/20/2015 2:54:50 PM
Engineer	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 350 feet. The proposed surface casing setting depth is more than 50 feet below the base of the aquifer in which water wells are screened within one mile.  Evaluated existing offset oil and gas wells within 1,500 feet of this wellbore. No mitigation required.	1/16/2015 2:51:18 PM
Permit	Passed Completeness	1/13/2015 10:06:59 AM

Total: 6 comment(s)