

**FORM
2A**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:

400519239

Date Received:

12/12/2013

Oil and Gas Location Assessment☒ New Location ☐ Refile ☐ Amend Existing Location Location#: _____

Submit signed original form. This Oil and Gas Location Assessment is to be submitted to the COGCC for approval prior to any ground disturbance activity associated with oil and gas operations. Approval of this Oil and Gas Location Assessment will allow for the construction of the below specified Location; however, it does not supersede any land use rules applied by the local land use authority. Please see the COGCC website at <http://cogcc.state.co.us/> for all accompanying information pertinent this Oil and Gas Location Assessment.

Location ID:

436196

Expiration Date:

02/22/2017☐ This location assessment is included as part of a permit application.**CONSULTATION**

- ☐ This location is included in a Comprehensive Drilling Plan. CDP # _____
- ☒ This location is in a sensitive wildlife habitat area.
- ☐ This location is in a wildlife restricted surface occupancy area.
- ☐ This location includes a Rule 306.d.(1)A.ii. variance request.

Operator

Operator Number: 10447

Name: URSA OPERATING COMPANY LLC

Address: 1050 17TH STREET #2400

City: DENVER State: CO Zip: 80265

Contact Information

Name: Rob Bleil

Phone: (720) 425-0303

Fax: ()

email: rbleil@ursaresources.com

RECLAMATION FINANCIAL ASSURANCE

☐ Plugging and Abandonment Bond Surety ID: _____ ☐ Gas Facility Surety ID: _____

☐ Waste Management Surety ID: _____

LOCATION IDENTIFICATION

Name: Burckle Cuttings Staging Area Number: _____

County: GARFIELD

QuarterQuarter: NWSE Section: 16 Township: 6S Range: 92W Meridian: 6 Ground Elevation: 5558

Define a single point as a location reference for the facility location. When the location is to be used as a well site then the point shall be a well location.

Footage at surface: 1634 feet FSL from North or South section line

1905 feet FEL from East or West section line

Latitude: 39.523849 Longitude: -107.669499

PDOP Reading: 2.2 Date of Measurement: 10/21/2013

Instrument Operator's Name: Paul Hoffmann

RELATED REMOTE LOCATIONS

(Enter as many Related Locations as necessary. Enter the Form 2A document # only if there is no established COGCC Location ID#)

This proposed Oil and Gas Location is:

LOCATION ID

FORM 2A DOC

Production Facilities Location serves Well(s)

416703

400431791

422286

400077143

420223

400453604

417777

400097171

416722

400475622

422301

400039706

421223

400076537

FACILITIES

Indicate the number of each type of oil and gas facility planned on location

Wells _____	Oil Tanks _____	Condensate Tanks _____	Water Tanks _____	Buried Produced Water Vaults _____
Drilling Pits _____	Production Pits _____	Special Purpose Pits _____	Multi-Well Pits _____	Temporary Large Volume Above Ground Tanks _____
Pump Jacks _____	Separators _____	Injection Pumps _____	Cavity Pumps _____	
Gas or Diesel Motors _____	Electric Motors _____	Electric Generators _____	Fuel Tanks _____	Gas Compressors _____
Dehydrator Units _____	Vapor Recovery Unit _____	VOC Combustor _____	Flare _____	LACT Unit _____
				Pigging Station _____

OTHER FACILITIES

Other Facility Type

Number

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Per Rule 303.b.(3)C, description of all oil, gas, and/or water pipelines:

Please refer to Attachment C - for a complete List of Equipment/ Facilities and Attachment J - Facility Layout Drawing

CONSTRUCTION

Date planned to commence construction: 02/15/2014 Size of disturbed area during construction in acres: 4.95
Estimated date that interim reclamation will begin: 03/01/2014 Size of location after interim reclamation in acres: 2.87
Estimated post-construction ground elevation: 5580

DRILLING PROGRAM

Will a closed loop system be used for drilling fluids: _____

Is H₂S anticipated? No

Will salt sections be encountered during drilling: _____

Will salt based mud (>15,000 ppm Cl) be used? _____

Will oil based drilling fluids be used? _____

DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: _____ Drilling Fluids Disposal Method: _____

Cutting Disposal: _____ Cuttings Disposal Method: _____

Other Disposal Description:

See Attachment J(1)

Beneficial reuse or land application plan submitted? No

Reuse Facility ID: _____ or Document Number: _____

Centralized E&P Waste Management Facility ID, if applicable: _____

SURFACE & MINERALS & RIGHT TO CONSTRUCT

Name: Ursa Operating Company

Phone: 720-508-8350

Address: 1050 17th Street #2400

Fax: _____

Address: _____

Email: _____

City: Denver State: CO Zip: 80265

Surface Owner: ☒ Fee ☐ State ☐ Federal ☐ Indian

Check all that apply. The Surface Owner: ☐ is the mineral owner

☐ 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 from or produced to this Oil and Gas Location: No

The right to construct this Oil and Gas Location is granted by: applicant is owner

Surface damage assurance if no agreement is in place: _____ Surface Surety ID: _____

Date of Rule 306 surface owner consultation 10/24/2013

CURRENT AND FUTURE LAND USE

Current Land Use (Check all that apply):

Crop Land: ☐ Irrigated ☒ Dry land ☐ Improved Pasture ☐ Hay Meadow ☐ CRP

Non-Crop Land: ☐ Rangeland ☐ Timber ☐ Recreational ☐ Other (describe): _____

Subdivided: ☐ Industrial ☐ Commercial ☐ Residential

Future Land Use (Check all that apply):

Crop Land: ☐ Irrigated ☒ Dry land ☐ Improved Pasture ☐ Hay Meadow ☐ CRP

Non-Crop Land: ☐ Rangeland ☐ Timber ☐ Recreational ☐ Other (describe): _____

Subdivided: ☐ Industrial ☐ Commercial ☐ Residential

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 1566 Feet
Building Unit: 1566 Feet
High Occupancy Building Unit: 5280 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 1987 Feet
Above Ground Utility: 370 Feet
Railroad: 5280 Feet
Property Line: 588 Feet

INSTRUCTIONS:

- All measurements shall be provided from center of nearest Well or edge of nearest Production Facility to nearest of each cultural feature as described in Rule 303.b.(3)A.
- 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: _____

SOIL

List all soil map units that occur within the proposed location. attach the National Resource Conservation Service (NRCS) report showing the "Map Unit Description" report listing the soil typical vertical profile. This data is to be used when segregating topsoil.

The required information can be obtained from the NRCS web site at <http://soildatamart.nrcs.usda.org/> or from the COGCC web site GIS Online map page found at <http://colorado.gov/cogcc>. Instructions are provided within the COGCC web site help section.

NRCS Map Unit Name: 51. Olney loam (6-12% slopes)

NRCS Map Unit Name: 67. Torriorthents-Rock outcrop complex (steep)

NRCS Map Unit Name: _____

PLANT COMMUNITY:

Complete this section only if any portion of the disturbed area of the location's current land use is on non-crop land.

Are noxious weeds present: Yes ☐ No ☒

Plant species from: ☒ NRCS or, ☒ field observation Date of observation: 11/05/2013

List individual species: Please see attachment NRCS Soil Survey.

Check all plant communities that exist in the disturbed area.

- ☐ Disturbed Grassland (Cactus, Yucca, Cheatgrass, Rye)
☒ Native Grassland (Bluestem, Grama, Wheatgrass, Buffalograss, Fescue, Oatgrass, Brome)
☐ Shrub Land (Mahogany, Oak, Sage, Serviceberry, Chokecherry)
☐ Plains Riparian (Cottonwood, Willow, Aspen, Maple, Poplar, Russian Olive, Tamarisk)
☐ Mountain Riparian (Cottonwood, Willow, Blue Spruce)
☐ Forest Land (Spruce, Fir, Ponderosa Pine, Lodgepole Pine, Juniper, Pinyon, Aspen)
☐ Wetlands Aquatic (Bullrush, Sedge, Cattail, Arrowhead)
☐ Alpine (above timberline)
☒ Other (describe): Please see attachment B - Location Photos

WATER RESOURCES

Is this a sensitive area: ☐ No ☒ Yes

Distance to nearest

downgradient surface water feature: 440 Feet

water well: 281 Feet

Estimated depth to ground water at Oil and Gas Location 110 Feet

Basis for depth to groundwater and sensitive area determination:

Please refer to Attachment P, Q, S and Attachment O. Depth to ground water was determined by using static water level data of Colorado Division of Water Resources (Permit# 31354-MH-/Receipt# 0031354).

Is the location in a riparian area: ☒ No ☐ Yes

Was an Army Corps of Engineers Section 404 permit filed ☒ No ☐ Yes If yes attach permit.

Is the location within a Rule 317B Surface Water Supply Area buffer No zone:

If the location is within a Rule 317B Surface Water Supply Area buffer have all public water supply systems within 15 miles been notified: _____

GROUNDWATER BASELINE SAMPLING AND MONITORING AND WATER WELL SAMPLING

Water well sampling required per Rule 609

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)

RULE 502.b VARIANCE REQUEST

- ☐ Rule 502.b. Variance Request from COGCC Rule or Spacing Order Number _____

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 2A Location Assessment is being submitted to permit the Burckle Cuttings Staging Area as a facility to temporarily store cuttings generated from various well pads throughout the Piceance Basin. (Please refer to the related remote locations for a list of Ursa's planned well pads). Lat/ Long is measured from center of staging area. Disposal methods are dependent upon sampling as outlined in the J(1) attachment. This is a temporary facility so reclamation financial assurance is not required. Interim reclamation at the subject location is not applicable therefore, the date referenced for interim reclamation on this form (3/1/2014) is for temporary reclamation. For any regulatory questions, please contact Rob Bleil at 720-425-0303 or rbleil@ursaresources.com.

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.

Signed: _____ Date: 12/12/2013 Email: sdemattee@ursaresources.com

Print Name: Shauna DeMattee Title: Permit Representative

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: 2/23/2014

Conditions Of Approval

All representations, stipulations and conditions of approval stated in this Form 2A for this location shall constitute representations, stipulations and conditions of approval for any and all subsequent operations on the location unless this Form 2A is modified by Sundry Notice, Form 4 or an Amended Form 2A.

COA Type

Description

	<p>All materials brought to this location that exceed the requirements in Table 910-1 will be placed in an area of the site that is completely segregated from materials that meet the requirements in Table 910-1. This area must be lined and bermed and appropriate BMPs need to be in place during the entire operational lifetime (no more than three years from date of start of construction). Sufficient stormwater BMPs must be implemented at this location to insure compliance with CDPHE and COGCC requirements and to prevent any stormwater run-on and /or stormwater runoff.</p> <p>The area where cuttings that exceed the requirements of Table 910-1 will be stored/treated/amended must be constructed to be sufficiently impervious to contain any spill or release of material or any accumulations of fluids.</p> <p>The moisture content of any drill cuttings placed in a cuttings pit, trench, or pile shall be as low as practicable to prevent accumulation of liquids greater than de minimis amounts.</p>
	<p>Notify the COGCC 48 hours prior to start of cuttings pad construction and prior to transport of cuttings to this location and placement activities using Form 42 (the appropriate COGCC individuals will automatically be email notified).</p> <p>Approval from the COGCC must be obtained via Sundry Notice Form 4 (Form 4) from EACH well pad or location that cuttings are generated prior to transporting to the Burckle Cuttings Staging Area. The information must be obtained and submitted to the COGCC on an electronic Form 4 for approval.</p> <ul style="list-style-type: none">• Location of Cuttings Generation (well pad where cuttings were generated from)• Estimated dates of Cuttings Transport• Volume of Cuttings• Intended Use• Raw Cuttings Analytical Results (off the shaker)
	<p>Operator must ensure containment at cuttings trench site during operations; including, but not limited to, construction of a berm or diversion dike, diversion/collection trenches within and/or outside of berms/dikes, site grading, or other comparable measures (i.e., best management practices (BMPs) associated with stormwater management) sufficiently protective of nearby surface water. Any berm constructed at the well pad location will be stabilized, inspected at regular intervals (at least every 14 days), and maintained in good condition.</p>

Best Management Practices

No	BMP/COA Type	Description
1	Planning	<ul style="list-style-type: none"> • The Cuttings Staging Area is located on land owned by Ursa Operating Company LLC. This area is not within an Urban Mitigation Area (UMA). • On 10/11/13 an e-mail was received from C. Lujan, COGCC Env. Div stating that a Form 2A ("with the material management plan") should be submitted. Dave Kubeczko, OGLA Specialist was also consulted. • A copy of Ursa's internal Site Assessment Map was forwarded via e-mail to C. Lujan on 10/22/13. An internal onsite was held on 10/23/13. Pre-application NOIs were sent out on 10/24/13. • On 11/7/13, an email was forwarded to C. Lujan to update the status of the Form 2A. Also stated that Ursa has redesigned the layout to more of a rectangular shape vs. the previous layout for management purposes. In the future, D. Kubeczko will be copied on all correspondence regarding Location Assessment. • Due to the location of Ursa's operations, Ursa determined that the Rifle Office will be staffed with a Regulatory and Environmental Manager, and a landman; these positions didn't exist in the Rifle office under the previous operator. This decision reflects Ursa's commitment to sound environmental stewardship, and to an increased level of communication with all stakeholders (see below). • Ursa typically holds weekly meetings to address new, expanded, or additional wells, and new or revised field facilities meeting the criteria as an Oil and Gas Location. Once a location is determined feasible, preliminary notifications are made to affected surface owners (see below) as a best management practice (BMP). • Prior to initiation of the Form 2A permitting process, internal onsites are held to determine the feasibility of the location (based on the SUA and landowner preferences), topographic constraints, proximity to building units, and public and environmental concerns including surface waters, traffic/haul routes, 317B applicability, wildlife RSOs and SWH areas, noise potential, soil stability, etc. All information that may affect the location is documented as appropriate in Ursa's "Site Assessment Checklist and Site Assessment Map" as a BMP. A copy of these internal practices was provided to the COGCC at the Setback Training on August 30, 2013 held in Grand Junction. • Upon approval of the Form 2A, Ursa holds Pre-Construction, Pre-Spud, Pre-Completions and Pre-Production meetings with contractors performing work at the location as determined necessary by the responsible Ursa Operations Manager or Supervisor. As a BMP, Ursa has developed checklists for these meetings to review COAs, NTOs and related issues. • Traffic and Public Safety – Ursa 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.
2	Community Outreach and Notification	<ul style="list-style-type: none"> • Voluntary Notifications - Once a new or expanded location, or additional wells are proposed, Ursa's land department contacts the landowner to get an initial approval, prior to formal Pre-application notifications to all affected stakeholders. • Once the Form 2A permitting process was initiated all surface owners and owners of building units within 1000 feet of the location were notified by letter with an invitation to meet or discuss the proposal (See Attachment J (2)). • Ursa routinely communicates proposed plans and operations schedules with Community Counts, the GARCO Energy Advisory Board, and Battlement Mesa Concerned Citizens (BMCC), if the proposal or work may affect Battlement Mesa. 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.

3	Pre-Construction	<ul style="list-style-type: none"> • SAFETY - The location and site layout has been designed to accommodate staging of drill cuttings within the limits of disturbance while meeting Federal and state safety regulations, including required buffers and distances between operating components and equipment. • DUST CONTROL - The access road will be graveled to reduce fugitive dust. In addition, water and other dust suppressants are used as required, dependent upon the level of activity, moisture conditions, etc. • RECLAMATION - The non-operational areas of the cuttings locations stabilized using seed mixes and materials compatible with soil types, moisture, and local climate conditions as specified in landowner surface use agreements, or locally acceptable industry practices. Seeding will be completed during optimum conditions to achieve best results for plant growth. • STORMWATER – Per e-mail on 10/11/13 from C. Lujan, D. Kubeczko stated that the stormwater plan doesn't need to be included in the soil management plan. Kubeczko may add a COA just as a reminder that stormwater must be managed (See next bullet). • STORMWATER – The location will be constructed in accordance with the CDPHE Stormwater regulations as implemented by Ursa's Stormwater Management Plan, so as to control sediment run-off. Stormwater BMPs may also serve as secondary or tertiary containment in the event of a spill. Site specific plans (i.e. diagrams) will be developed and inspected against at the frequency required by CDPHE regulations, to include 14 day, 30 day, and major storm event inspections until 70% reclamation is achieved. Corrective actions will be tracked and implemented. COGCC inspections will be conducted through 80% interim reclamation and annually thereafter. These inspections are also tracked and corrective actions implemented. Native soils will be used whenever available to construct stormwater BMPs, supplemented by non-native materials based on site-specific conditions. • 317B WATER SAMPLING – Water sampling will be conducted in accordance with COGCC rules. • WASTE - The location will be managed in accordance with Ursa's Waste Management Plan as summarized in Attachment J(1) of this applications. The location will be constructed to minimize the potential for any drill cuttings from leaving the location, including berms, barriers, and use of spill control materials. • WASTE – KEY CORRESPONDENCE VIA EMAIL ON 10/16/13 <ul style="list-style-type: none"> o A copy of Ursa's Comprehensive Waste Management plan was forwarded to C. Lujan and D. Kubeczko. Response: Waste Plan forwarded on 10-16-13...again, I apologize for the delay as Dave had requested this a while back. o Material that may be reused for beneficial use will meet Table 910-1 analyses. o A copy of Ursa's Drill Cuttings Management Summary (updated monthly for our purposes) for tracking cuttings and the decision matrix attached to the plan for determining disposal of cuttings was forwarded to C. Lujan. o An annual report for the site describing what was treated, reused, disposed will be part of the requirements (will use Ursa's Waste Management Tracking which includes drill cuttings). o The potential exists that raw cuttings (particularly the surface hole cuttings) in most cases will meet 910-1 standards. If so, the application of an inert material (e.g. STABIL EZ – CORN BASED) to "solidify" the cuttings has the potential to fail 910-1 due to higher DRO. STABIL EZ has a much higher absorption capacity than sawdust or soil, and results in far less cuttings volume to be managed; and is more compactable, yet conducive to revegetation. We suggest that this material or any other inert material that is commercially available and has numerous commercial applications shouldn't be required to be regulated as E&P waste if the raw cuttings analysis falls within 910-1 standards for beneficial reuse.
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4	General Housekeeping	<ul style="list-style-type: none"> • GENERAL – AGENCY INSPECTIONS / CONCERNS Ursa has developed and implemented processes and systems to track all agency inspections and concerns (e.g. COGCC, CDPHE, BLM...). Corrective actions are typically implemented with 24 – 48 hours of discovery. • NOXIOUS WEEDS – Weeds will be managed in accordance with Ursa's Noxious Weed plan; to include three treatments per year, mapping, etc. • SPILLS / INCIDENTS – 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 the COGCC 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.
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Total: 4 comment(s)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
2106875	CORRESPONDENCE
400519239	FORM 2A SUBMITTED
400519269	LOCATION PICTURES
400519277	EQUIPMENT LIST
400519279	HYDROLOGY MAP
400519281	ACCESS ROAD MAP
400519293	NRCS MAP UNIT DESC
400519294	CONST. LAYOUT DRAWINGS
400519295	CONST. LAYOUT DRAWINGS
400519298	SENSITIVE AREA MAP
400523014	LOCATION DRAWING
400523017	WASTE MANAGEMENT PLAN
400523019	30 DAY NOTICE LETTER
400525446	FACILITY LAYOUT DRAWING

Total Attach: 14 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final review completed. No LGD comments.	2/19/2014 10:15:28 AM
OGLA	Initiated/Completed OGLA Form 2A review on 01-13-14 by Dave Kubeczko; requested acknowledgement of containment, stormwater BMPs, lined/bermed cuttings treatment areas, pad sediment control, and cuttings low moisture COAs from operator on 01-13-14; received concurrence of COAs from operator on 01-13-14; passed by CPW on 12-13-13 with BMPs and WMP acceptable; passed OGLA Form 2A review on 01-30-14 by Dave Kubeczko; containment, stormwater BMPs, lined/bermed cuttings treatment areas, pad sediment control, and cuttings low moisture COAs.	1/13/2014 3:59:03 PM
LGD	pass, gdb	12/26/2013 11:59:45 AM
DOW	This location is within the boundary of the approved Antero-URSA Wildlife Mitigation Plan. The BMPs were developed and agreed upon in the consultation and development of the Wildlife Mitigation Plan. CPW affirms that the BMPs and conditions of approval of the Wildlife Mitigation Plan suffice to address wildlife concerns. Approved: Jim Komatinsky 12-13-2013	12/13/2013 9:32:43 AM
Permit	Passed completeness.	12/13/2013 7:38:36 AM

Total: 5 comment(s)