

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:

400618730

Date Received:

06/09/2014

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:

438314

Expiration Date:

07/28/2017

☒ 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: 8960

Name: BONANZA CREEK ENERGY OPERATING COMPANY LLC

Address: 410 17TH STREET SUITE #1400

City: DENVER State: CO Zip: 80202

Contact Information

Name: Andrea Gross

Phone: (303) 942-0506

Fax: ()

email: agross@upstreampm.com

RECLAMATION FINANCIAL ASSURANCE

☒ Plugging and Abandonment Bond Surety ID: 20120018 ☐ Gas Facility Surety ID: _____

☐ Waste Management Surety ID: _____

LOCATION IDENTIFICATION

Name: NMU Number: 11-12H

County: JACKSON

QuarterQuarter: NWNE Section: 11 Township: 9N Range: 79W Meridian: 6 Ground Elevation: 8165

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: 413 feet FNL from North or South section line

1886 feet FEL from East or West section line

Latitude: 40.771734 Longitude: -106.229966

PDOP Reading: 2.9 Date of Measurement: 04/25/2014

Instrument Operator's Name: Randall R. Miller

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 #

FACILITIES

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

| | | | | | | | | | |
|----------------------|---------------|---------------------|---------------|----------------------|---------------|-----------------|---------------|---|---------------|
| Wells | <u>1</u> | Oil Tanks | <u>4</u> | Condensate Tanks | <u> </u> | Water Tanks | <u>2</u> | Buried Produced Water Vaults | <u> </u> |
| Drilling Pits | <u> </u> | Production Pits | <u> </u> | Special Purpose Pits | <u> </u> | Multi-Well Pits | <u> </u> | Temporary Large Volume Above Ground Tanks | <u> </u> |
| Pump Jacks | <u> </u> | Separators | <u>1</u> | Injection Pumps | <u>1</u> | Cavity Pumps | <u> </u> | | |
| Gas or Diesel Motors | <u> </u> | Electric Motors | <u> </u> | Electric Generators | <u>1</u> | Fuel Tanks | <u>1</u> | Gas Compressors | <u> </u> |
| Dehydrator Units | <u> </u> | Vapor Recovery Unit | <u> </u> | VOC Combustor | <u> </u> | Flare | <u> </u> | LACT Unit | <u> </u> |
| | | | | | | | | Pigging Station | <u> </u> |

OTHER FACILITIES

Other Facility Type

Number

40 bbl Cement Water Vault

1

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

No pipelines are anticipated. Once the well is determined to be productive pipelines may be determined at that time.

CONSTRUCTION

Date planned to commence construction: 08/02/2014 Size of disturbed area during construction in acres: 2.48

Estimated date that interim reclamation will begin: 02/02/2015 Size of location after interim reclamation in acres: 1.58

Estimated post-construction ground elevation: 8164

DRILLING PROGRAM

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

Is H₂S anticipated? No

Will salt sections be encountered during drilling: No

Will salt based mud (>15,000 ppm Cl) be used? No

Will oil based drilling fluids be used? No

DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE

Drilling Fluids Disposal Method: Commercial Disposal

Cutting Disposal: OFFSITE

Cuttings Disposal Method: Commercial Disposal

Other Disposal Description:

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: Bureau of Land Management

Phone: 970-724-3000

Address: 2103 E. Park Ave.

Fax: _____

Address: P.O. Box 68

Email: _____

City: Kremmling State: CO Zip: 80459

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: Yes

The right to construct this Oil and Gas Location is granted by: oil and gas lease

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

Date of Rule 306 surface owner consultation 04/25/2014

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: 1542 Feet
Building Unit: 5280 Feet
High Occupancy Building Unit: 5280 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 896 Feet
Above Ground Utility: 272 Feet
Railroad: 5280 Feet
Property Line: 5280 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: CyF- Cryorthents, steep

NRCS Map Unit Name: Bs- Bosler sandy loam

NRCS Map Unit Name: Fh- Fluetsch-Tiagos association

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: _____

List individual species: Big sagebrush, Muttongrass, Pine needlegrass, Prairie junegrass, Streambank wheatgrass, Bottlebrush squirreltail, Bluebunch wheatgrass, Yellow rabbitbrush, Needleandthread, Blue grama, Buckwheat, Steambank wheatgrass.

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): _____

WATER RESOURCES

Is this a sensitive area: ☒ No ☐ Yes

Distance to nearest

downgradient surface water feature: 335 Feet

water well: 1115 Feet

Estimated depth to ground water at Oil and Gas Location 25 Feet

Basis for depth to groundwater and sensitive area determination:

Depth to ground water was determined from Water Well Permit 0298427 which is located in Sec. 11 T9N R79W.

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

The location drawing is incorrect. There are no high occupancy buildings within 1-mile.

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

Signed: _____ Date: 06/09/2014 Email: agross@upstreampm.com

Print Name: Andrea Gross Title: Permit Agent

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: 7/29/2014

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

| | |
|--|--|
| | Operator shall pressure test pipelines (if constructed) in accordance with Rule 1101.e. (1) prior to putting into initial service any temporary surface or permanent buried pipelines and following any reconfiguration of the pipeline network. |
| | The moisture content of any cuttings in a cuttings pit, trench, or pile shall be as low as practicable to prevent accumulation of liquids greater than de minimis amounts. Flowback and stimulation fluids must be sent to tanks, separators, or other containment/filtering equipment before the fluids can be placed into any pipeline or storage vessel located on the well pad; or into tanker trucks for offsite disposal. The flowback and stimulation fluid tanks, separators, or other containment/filtering equipment must be placed on the well pad in an area constructed to be sufficiently impervious to contain any spilled or released material. |
| | Notify the COGCC 48 hours prior to start of pad construction, rig mobilization, spud, pipeline testing, start of hydraulic stimulation operations, and start of flowback operations using Form 42 (the appropriate COGCC individuals will automatically be email notified, including the LGD for hydraulic stimulation operations). |
| | Operator must ensure secondary containment for any volume of fluids contained at well site during drilling and completion 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 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. Strategically apply fugitive dust control measures, including enforcing established speed limits on private roads, to reduce fugitive dust and coating of vegetation and deposition in water sources. Berms or other containment devices shall be constructed to be sufficiently impervious (corrugated steel with poly liner) to contain any spilled or released material around permanent crude oil, condensate, and produced water storage tanks. |

Best Management Practices

No BMP/COA Type

Description

| | |
|--|--|
| | |
|--|--|

Attachment Check List

| <u>Att Doc Num</u> | <u>Name</u> |
|--------------------|-------------------------|
| 2107066 | CORRESPONDENCE |
| 400618730 | FORM 2A SUBMITTED |
| 400621287 | CONST. LAYOUT DRAWINGS |
| 400621288 | LOCATION DRAWING |
| 400621289 | NRCS MAP UNIT DESC |
| 400621290 | REFERENCE AREA MAP |
| 400621293 | REFERENCE AREA PICTURES |
| 400621297 | LOCATION PICTURES |
| 400623638 | ACCESS ROAD MAP |
| 400623639 | HYDROLOGY MAP |

Total Attach: 10 Files

General Comments

| <u>User Group</u> | <u>Comment</u> | <u>Comment Date</u> |
|-------------------|---|--------------------------|
| Permit | Final review complete. | 7/29/2014 10:06:12 AM |
| OGLA | Initiated/Completed OGLA Form 2A review on 07-15-14 by Dave Kubeczko; requested acknowledgement of fluid containment, spill/release BMPs, notification, flowback to tanks, tank berming, dust control, and pipeline COAs from operator on 07-15-14; received acknowledgement of COAs from operator on 07-16-14; passed by CPW on 06-24-14 with CPW to consult on BLM permit acceptable; passed OGLA Form 2A review on 07-23-14 by Dave Kubeczko; fluid containment, spill/release BMPs, notification, flowback to tanks, tank berming, dust control, and pipeline COAs. | 7/15/2014 4:44:44 PM |
| Permit | Ready to pass pending public comment 7/3/14. | 7/2/2014 11:49:31 AM |
| DOW | CPW is in communication with the BLM to address wildlife concerns associated with this location. Approved: Taylor Elm, 6/24/2014, 9:50 | 6/24/2014 9:50:34 AM |
| Permit | Passed completeness. | 6/11/2014 9:32:38 AM |

Total: 5 comment(s)