

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:

400624405

Date Received:

06/13/2014

Oil and Gas Location Assessment

☐ New Location ☐ Refile ☒ Amend Existing Location Location#: 428267

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:

428267

Expiration Date:

08/21/2017

☐ 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: Keith Caplan
Phone: (720) 440-6100
Fax: (720) 279-2331
email: KCaplan@BonanzaCrk.com

RECLAMATION FINANCIAL ASSURANCE

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

LOCATION IDENTIFICATION

Name: North Platte Number: 24-34 Pad
County: WELD
QuarterQuarter: SESW Section: 34 Township: 5N Range: 63W Meridian: 6 Ground Elevation: 4529
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: 153 feet FSL from North or South section line
2216 feet FWL from East or West section line
Latitude: 40.349150 Longitude: -104.423460
PDOP Reading: 1.8 Date of Measurement: 04/09/2011
Instrument Operator's Name: Aaron Lund

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)

428272

400550334

FACILITIES

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

Wells	8	Oil Tanks	14	Condensate Tanks		Water Tanks	6	Buried Produced Water Vaults	4
Drilling Pits		Production Pits		Special Purpose Pits		Multi-Well Pits		Temporary Large Volume Above Ground Tanks	
Pump Jacks	8	Separators	18	Injection Pumps		Cavity Pumps			
Gas or Diesel Motors	8	Electric Motors	8	Electric Generators	6	Fuel Tanks		Gas Compressors	4
Dehydrator Units	2	Vapor Recovery Unit	6	VOC Combustor	8	Flare		LACT Unit	
								Pigging Station	1

OTHER FACILITIES

Other Facility Type

Number

Vapor Recovery Tower

4

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

18 - 3-inch coated steel 3-phase flowlines
18 - 4-inch coated steel gas lift return lines
4 - 4-inch coated steel oil gathering lines
4 - 4-inch coated steel produced water gathering lines
4 - 4-inch coated steel gas gathering

Vent/VRU lines: 4@10", 4@6", 2@12" Steel

CONSTRUCTION

Date planned to commence construction: 09/01/2014

Size of disturbed area during construction in acres: 3.80

Estimated date that interim reclamation will begin: 12/01/2014

Size of location after interim reclamation in acres: 3.50

Estimated post-construction ground elevation: 4529

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: Recycle/reuse

Cutting Disposal: OFFSITE

Cuttings Disposal Method: Beneficial reuse

Other Disposal Description:

Beneficial reuse or land application plan submitted? Yes

Reuse Facility ID: 427606 or Document Number: _____

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

SURFACE & MINERALS & RIGHT TO CONSTRUCT

Name: 70 Ranch, LLC

Phone: 303.773.1005

Address: 8301 E. Prentice Ave.

Fax: _____

Address: Ste. 100

Email: _____

City: Greenwood Village State: CO Zip: 80111

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 _____

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: 940 Feet
Building Unit: 1063 Feet
High Occupancy Building Unit: 5280 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 170 Feet
Above Ground Utility: 328 Feet
Railroad: 5280 Feet
Property Line: 1030 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: Bankard sandy loam, 0-3% slopes (10)

NRCS Map Unit Name: Aquolls and Aquents, gravelly substratum (3)

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: _____

List individual species: _____

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: 164 Feet

water well: 1635 Feet

Estimated depth to ground water at Oil and Gas Location 3 Feet

Basis for depth to groundwater and sensitive area determination:

Permit 40911-M

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 318A

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 603.a.1

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

Per the Location Drawing, distances to cultural items were measured from the proposed facility closest to the referenced item. This 2A is being submitted at this time to allow for production facility expansion. Six APDs will follow in a month or two. The APDs will be in-line with the existing two wellheads on location.

Multi-well Plan, Rule 603.a.1 Waiver and Variance Request attached.

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

Signed: _____ Date: 06/13/2014 Email: KCaplan@BonanzaCrk.com

Print Name: Keith Caplan Title: Sr. Regulatory Specialist

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: 8/22/2014

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

	All future wellheads proposed for this Location shall be in compliance with all COGCC Rules and setbacks. Each Application for Permit to Drill (APD - Form 2) submitted shall be accompanied by the 502.b Variance Request letter attached to this Form 2A, along with the waiver from the County. The variance request letter attached to this Form 2A is for reference only and approval of the Form 2A does not constitute approval of the variance.
	The Proposed Location shall be designed in a manner that will prevent glare from lighting to impact driver safety along County Road 380.
	Preventative measures will be taken to mitigate fugitive dust emissions from migrating off the Proposed Location including but not limited to the use of engineered controls.

Best Management Practices

No	BMP/COA Type	Description
1	Dust control	<p>Odors and Dust</p> <p>Oil and gas facilities and equipment will be operated in such a manner that odors and dust do not constitute a nuisance or hazard to public welfare.</p> <p>If drilling mud is to sit stagnant for any lengthy period of time, biocides will be added to prevent the build-up of nuisance odors.</p> <p>The location will be watered, as needed, to prevent the formation of fugitive dust due to truck traffic and equipment operations. Additionally, exceptionally sandy locations will be plated with up to 4-inches of cohesive soils or Class V Roadbase.</p> <p>During frac'ing operations, dust control socks will be placed on the mountain movers/sand masters and storage bins to control the spread of fugitive silica dust.</p> <p>During hydraulic fracturing operations, a Sierra Frac Sand, LLC Total Dust Control System, or equivalent, will be implemented in order to control the release of fugitive dust from inspection hatches on top of the bulk storage movers, transfer belts, "T" or "V" belts leading to the blender hopper, and drop points throughout the activities of unloading, storing, transfer or conveying of sand used in hydraulic fracturing operations.</p>
2	Construction	<p>The following procedure describes BCEI standard construction practices for setting a partially buried pre-cast cement water vault and new tank battery construction.</p> <p>1) The excavation will first be lined with 4" of clay or other low permeability soil.</p> <p>2) A 30 mil liner will be installed on top of the low permeability soil. The 30 mil liner will be a contiguous liner which will underlay the entire tank battery.</p> <p>3) The tank battery / water vault liner will be keyed into a galvanized steel containment ring installed surrounding the tank battery.</p> <p>4) Sand bedding will be installed to protect the synthetic liner prior to placing equipment in the containment area.</p>
3	Drilling/Completion Operations	<p>Lighting</p> <p>To the extent practicable, site lighting will be directed downward and inward and shielded so as to avoid glare.</p>

Total: 3 comment(s)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
1009659	VARIANCE REQUEST
1009671	CPW Correspondence
2167837	MULTI-WELL PLAN
400624405	FORM 2A SUBMITTED
400626399	NRCS MAP UNIT DESC
400626400	NRCS MAP UNIT DESC
400626453	ACCESS ROAD MAP
400626456	HYDROLOGY MAP
400626457	LOCATION PICTURES
400626458	LOCATION DRAWING
400626465	WASTE MANAGEMENT PLAN

Total Attach: 11 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final review complete.	8/21/2014 4:13:03 PM
Permit	Replaced Multi-well plan as per opr. Ready for approval.	3/7/2014 7:50:18 AM
OGLA	Changed distance to nearest surface water feature to 164 feet based on the Hydrology Map and Location Drawing provided by the Operator.	7/29/2014 11:16:32 AM
OGLA	Had Operator revise Variance Request Letter Revised Letter Uploaded	7/29/2014 10:25:43 AM
OGLA	Changed Date Planned to Commence Construction to 09/01/02014 Changed Interim Reclamation date to 12/01/2014 for compliance with 1000 Series Rules	7/29/2014 10:23:51 AM
DOW	Field verification of mapped ferruginous hawk nest indicates no current or recent sign of activity at nest.No alternate nest location noted.There are several active, producing oil/gas wells inclose proximity or within 0.5 miles of nest location.There is no need for a wildlife recommendation involving a 0.5 mile buffer and seasonal timing restriction.	7/11/2014 3:43:38 PM
Permit	Passed completeness. RSO checked off and distance to property line changed to 1030 ft.	6/16/2014 4:41:57 PM
Permit	Return to draft: 1. Location appears to now be in a Restricted Surface Occupancy area, but that is not checked on the form 2. Distance to property line is 117 ft, but request/waivers not attached for exception to the rule 603.a.(2)	6/16/2014 3:19:09 PM

Total: 8 comment(s)