

**FORM  
2A**Rev  
04/01**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:

400328648

Date Received:

11/28/2012

**Oil and Gas Location Assessment**☒ New Location ☐ Amend Existing Location Location#: \_\_\_\_\_

Submit original plus one copy. This form is to be submitted to the COGCC prior to any ground disturbance activity associated with oil and gas development operations. This Assessment may be approved as a standalone application or submitted as an informational report accompanying an Application for Permit-To-Drill, Form 2. Approval of this 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. This form may serve as notice to land owners and other interested parties, please see the COGCC web site at <http://colorado.gov/cogcc/> for all accompanying information pertinent to this Oil and Gas Location Assessment.

Location ID:

**431418**

Expiration Date:

**01/22/2016**☒ This location assessment is included as part of a permit application.**1. 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.

**2. Operator**

Operator Number: 8960

Name: BONANZA CREEK ENERGY OPERATING COMPANY LLC

Address: 410 17TH STREET SUITE #1400

City: DENVER State: CO Zip: 80202

**3. Contact Information**

Name: Keith Caplan

Phone: (720) 440-6100

Fax: (720) 279-2331

email: KCaplan@BonanzaCrk.com

**4. Location Identification:**

Name: State Antelope Number: 34-12 PAD

County: WELD

QuarterQuarter: SWSE Section: 12 Township: 5N Range: 62W Meridian: 6 Ground Elevation: 4597

Define a single point as a location reference for the facility location. This point should be used as the point of measurement in the drawings to be submitted with this application. When the location is to be used as a well site then the point shall be a well location.

Footage at surface: 300 feet FSL, from North or South section line, and 1924 feet FEL, from East or West section line.

Latitude: 40.409110 Longitude: -104.268810 PDOP Reading: 1.7 Date of Measurement: 10/25/2012

Instrument Operator's Name: Brian Rottinghaus

**5. Facilities (Indicate the number of each type of oil and gas facility planned on location):**

Special Purpose Pits: <input type="text"/>	Drilling Pits: <input type="text"/>	Wells: <input type="text" value="7"/>	Production Pits: <input type="text"/>	Dehydrator Units: <input type="text"/>
Condensate Tanks: <input type="text" value="28"/>	Water Tanks: <input type="text" value="7"/>	Separators: <input type="text" value="7"/>	Electric Motors: <input type="text" value="7"/>	Multi-Well Pits: <input type="text"/>
Gas or Diesel Motors: <input type="text" value="7"/>	Cavity Pumps: <input type="text"/>	LACT Unit: <input type="text"/>	Pump Jacks: <input type="text" value="7"/>	Pigging Station: <input type="text" value="7"/>
Electric Generators: <input type="text" value="4"/>	Gas Pipeline: <input type="text" value="1"/>	Oil Pipeline: <input type="text"/>	Water Pipeline: <input type="text"/>	Flare: <input type="text"/>
Gas Compressors: <input type="text" value="6"/>	VOC Combustor: <input type="text" value="7"/>	Oil Tanks: <input type="text"/>	Fuel Tanks: <input type="text"/>	

Other: 7 60-bbl cement water vaults

**6. Construction:**

Date planned to commence construction: 12/03/2012 Size of disturbed area during construction in acres: 5.80  
Estimated date that interim reclamation will begin: 07/01/2013 Size of location after interim reclamation in acres: 3.00  
Estimated post-construction ground elevation: 4598 Will a closed loop system be used for drilling fluids: Yes ☒  
Will salt sections be encountered during drilling: Yes ☐ No ☒ Is H2S anticipated? Yes ☐ No ☒  
Will salt (>15,000 ppm TDS Cl) or oil based muds be used: Yes ☐ No ☒  
Mud disposal: Offsite ☒ Onsite ☐ Method: Land Farming ☐ Land Spreading ☒ Disposal Facility ☐  
Other: \_\_\_\_\_

## 7. Surface Owner:

Name: \_\_\_\_\_ Phone: \_\_\_\_\_  
Address: \_\_\_\_\_ Fax: \_\_\_\_\_  
Address: \_\_\_\_\_ Email: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ Date of Rule 306 surface owner consultation: 09/18/2012  
Surface Owner: ☐ Fee ☒ State ☐ Federal ☐ Indian  
Mineral Owner: ☐ Fee ☒ State ☐ Federal ☐ Indian  
The surface owner is: ☒ the mineral owner ☒ committed to an oil and gas lease  
☒ is the executer of the oil and gas lease ☐ the applicant  
The right to construct the location is granted by: ☒ oil and gas lease ☐ Surface Use Agreement ☐ Right of Way  
☐ applicant is owner  
Surface damage assurance if no agreement is in place: ☐ \$2000 ☐ \$5000 ☐ Blanket Surety ID \_\_\_\_\_

## 8. Reclamation Financial Assurance:

☐ Well Surety ID: 20120018 ☐ Gas Facility Surety ID: \_\_\_\_\_ ☐ Waste Mgmt. Surety ID: \_\_\_\_\_

## 9. Cultural:

Is the location in a high density area (Rule 603.b.): Yes ☐ No ☒  
Distance, in feet, to nearest building: 5280, public road: 5280, above ground utilit: 5280  
, railroad: 5280, property line: 300

## 10. 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

## 11. 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

## 12. Soils:

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.gov/> 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: Valent sand, 3-9% slopes (70)

NRCS Map Unit Name: \_\_\_\_\_  
NRCS Map Unit Name: \_\_\_\_\_

### 13. 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): \_\_\_\_\_

### 14. Water Resources:

Rule 901.e. may require a sensitive area determination be performed. If this determination is performed the data is to be submitted with the Form 2A.

Is this a sensitive area: ☒ No ☐ Yes Was a Rule 901.e. Sensitive Areas Determination performed: ☒ No ☐ Yes  
Distance (in feet) to nearest surface water: 4310, water well: 5850, depth to ground water: 70  
Is the location in a riparian area: ☒ No ☐ Yes Was an Army Corps of Engineers Section 404 permit filed ☒ No ☐ Yes  
Is the location within a Rule 317B Surface Water Supply Area buffer zone:  
☒ No ☐ 0-300 ft. zone ☐ 301-500 ft. zone ☐ 501-2640 ft. 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: ☐ No ☐ Yes

### 15. Comments:

Water well permit 165930 used for static water level. Reference Area Map and Pictures attached. Cultural Resources Clearance attached.

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

Signed: \_\_\_\_\_ Date: 11/28/2012 Email: KCaplan@BonanzaCrk.com

Print Name: Keith S. 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: 1/23/2013

**CONDITIONS OF  
APPROVAL, IF ANY:**

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.

### Attachment Check List

Att Doc Num	Name
400328648	FORM 2A SUBMITTED
400329120	WASTE MANAGEMENT PLAN
400340852	CONST. LAYOUT DRAWINGS
400340853	MULTI-WELL PLAN
400340854	ACCESS ROAD MAP
400340855	HYDROLOGY MAP
400340856	LOCATION DRAWING
400340898	LOCATION PICTURES
400340935	NRCS MAP UNIT DESC
400351311	OTHER
400353753	REFERENCE AREA MAP
400353756	REFERENCE AREA PICTURES

Total Attach: 12 Files

### General Comments

User Group	Comment	Comment Date
OGLA	Added a construction BMP related to tank battery construction in a sensitive area at the request of the Operator.	1/7/2013 12:22:48 PM
Final Review	placed on hold due to use of water vaults in sensitive area (depth to water 8') fluids storage should be above ground or isolated from groundwater with liner system.	12/31/2012 10:06:13 AM
Permit	State land board ok with location and bond. Final Review Completed. No LGD or public comment received.	12/31/2012 8:32:22 AM
Permit	Corrected elevation to match plat on reference well.	12/31/2012 8:24:23 AM
OGLA	Reviewed 12/11/2012.	12/11/2012 10:35:39 AM
Permit	Initial review complete. Form 2A compared with form 2's. Notified state land board.	12/10/2012 8:27:42 AM
Permit	operator corrected reference area pictures and map to reference 34-12 Pad location. This form passed completeness.	12/4/2012 12:50:21 PM
Permit	Return to draft: 1. reference area pictures include a second location (J-12 Pad), which does not match submitted form 2A, which only permits one location. 2. reference area map includes second location (J-12 Pad).	12/4/2012 10:50:55 AM
Permit	Return to draft: 1. reference area pictures include a second location (J-12 Pad), which does not match submitted form 2A, which only permits one location. 2. reference area map includes second location (J-12 Pad). Note: location pictures are snow covered.	12/1/2012 4:19:41 PM

Total: 9 comment(s)

## **BMP**

<u>Type</u>	<u>Comment</u>
Construction	<p>The following procedure describes construction practices for setting a partially buried pre-cast cement water vault on locations characterized as containing shallow depth to groundwater.</p> <ol style="list-style-type: none"><li>1) The excavation will first be lined with 4" of clay or other low permeability soil.</li><li>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.</li><li>3) The tank battery / water vault liner will be keyed into a galvanized steel containment ring installed surrounding the tank battery.</li><li>4) Sand bedding will be installed to protect the synthetic liner prior to placing equipment in the containment area.</li></ol>

Total: 1 comment(s)