

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:  
400378043

Date Received:  
03/08/2013

Oil and Gas Location Assessment

New Location  Amend Existing Location Location#: 428984

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:  
**428984**  
Expiration Date:  
**04/04/2016**

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: Antelope Number: P-29 PAD  
County: WELD  
Quarter: NWNE Section: 29 Township: 5N Range: 62W Meridian: 6 Ground Elevation: 4640

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: 200 feet FNL, from North or South section line, and 1320 feet FEL, from East or West section line.  
Latitude: 40.377340 Longitude: -104.342930 PDOP Reading: 1.9 Date of Measurement: 06/21/2012  
Instrument Operator's Name: Wyatt Hall

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="3"/>	Production Pits: <input type="text"/>	Dehydrator Units: <input type="text"/>
Condensate Tanks: <input type="text" value="12"/>	Water Tanks: <input type="text" value="3"/>	Separators: <input type="text" value="3"/>	Electric Motors: <input type="text" value="3"/>	Multi-Well Pits: <input type="text"/>
Gas or Diesel Motors: <input type="text" value="3"/>	Cavity Pumps: <input type="text"/>	LACT Unit: <input type="text"/>	Pump Jacks: <input type="text" value="3"/>	Pigging Station: <input type="text" value="1"/>
Electric Generators: <input type="text" value="2"/>	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="3"/>	VOC Combustor: <input type="text" value="3"/>	Oil Tanks: <input type="text"/>	Fuel Tanks: <input type="text"/>	

Other: 3 60-bbl precast cement water vaults

6. Construction:

Date planned to commence construction: 04/08/2013 Size of disturbed area during construction in acres: 3.00  
 Estimated date that interim reclamation will begin: 04/30/2015 Size of location after interim reclamation in acres: 2.00  
 Estimated post-construction ground elevation: 4640 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: 04/20/2012  
 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 Mgnt. 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 utility: 2003,  
 railroad: 5280, property line: 199

**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 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: 5280, water well: 1410, depth to ground water: 25  
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 Suppl 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:**

Memo of SUA attached to APDs. Changing Location Name to Antelope P-29 Pad.

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.  
Signed: \_\_\_\_\_ Date: 03/08/2013 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: 4/5/2013

**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
400378043	FORM 2A SUBMITTED
400389152	MULTI-WELL PLAN
400389153	ACCESS ROAD MAP
400389154	HYDROLOGY MAP
400389155	LOCATION DRAWING
400389156	LOCATION PICTURES
400389157	SENSITIVE AREA MAP
400389159	REFERENCE AREA PICTURES
400389160	WASTE MANAGEMENT PLAN
400389163	NRCS MAP UNIT DESC

Total Attach: 10 Files

**General Comments**

<b><u>User Group</u></b>	<b><u>Comment</u></b>	<b><u>Comment Date</u></b>
Permit	Final review completed. No LGD or public comments on this amended 2A.	4/5/2013 9:35:51 AM
OGLA	three total wells on 2A = two planned plus one existing, the amendmended 2A was also submitted by the operator to change the access route and increase the production facility equipment count	4/2/2013 9:17:17 AM
OGLA	per operator email -  This acreage on 70 Ranch used to be National Hog Farms. The "air valve" identified on the location drawing is off of the pad, and not part of Bonanza's operations. One of our production managers checked with his contact and was informed it is a purge valve that is part of the old irrigation system.  The Amended 2A was submitted to 1) correct the access route, 2) increase the number of wells on location, and 3) increase the production facility equipment count to account for the additional wells.	3/19/2013 11:38:32 AM
OGLA	email sent to operator requesting additional information about "air vent" identified on location drawing adjacent to planned pad. Also requested brief description of changes from original to amended location (2A).	3/19/2013 11:28:59 AM
Permit	This form has passed completeness.	3/11/2013 9:16:19 AM

Total: 5 comment(s)

## BMP

<u>Type</u>	<u>Comment</u>
Construction	<p>Bonanza Creek Energy Best Management Practices for Installation of Cement Water Vaults at locations Associated with Shallow Groundwater</p> <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)