

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:

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Date Received:

08/17/2012

Oil and Gas Location Assessment

New Location Amend Existing Location Location#: 421165

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:
421165
Expiration Date:
09/20/2015

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: 41-31
 County: WELD
 Quarter: NENE Section: 31 Township: 5N Range: 62W Meridian: 6 Ground Elevation: 4604
 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: 777 feet FNL, from North or South section line, and 578 feet FEL, from East or West section line.
 Latitude: 40.361270 Longitude: -104.359020 PDOP Reading: 1.4 Date of Measurement: 08/08/2012
 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="checkbox"/>	Drilling Pits: <input type="checkbox"/>	Wells: <input type="checkbox" value="3"/>	Production Pits: <input type="checkbox"/>	Dehydrator Units: <input type="checkbox"/>
Condensate Tanks: <input type="checkbox" value="4"/>	Water Tanks: <input type="checkbox" value="2"/>	Separators: <input type="checkbox"/>	Electric Motors: <input type="checkbox" value="1"/>	Multi-Well Pits: <input type="checkbox"/>
Gas or Diesel Motors: <input type="checkbox" value="1"/>	Cavity Pumps: <input type="checkbox"/>	LACT Unit: <input type="checkbox"/>	Pump Jacks: <input type="checkbox" value="1"/>	Pigging Station: <input type="checkbox"/>
Electric Generators: <input type="checkbox" value="1"/>	Gas Pipeline: <input type="checkbox" value="1"/>	Oil Pipeline: <input type="checkbox"/>	Water Pipeline: <input type="checkbox"/>	Flare: <input type="checkbox"/>
Gas Compressors: <input type="checkbox"/>	VOC Combustor: <input type="checkbox" value="1"/>	Oil Tanks: <input type="checkbox"/>	Fuel Tanks: <input type="checkbox"/>	

Other: 1 40-bbl cement water vault, 2 3-phase flowlines to Antelope 42-31 (Loc ID 421167) for production of existing 41-1 and 31-1 wells.

6. Construction:

Date planned to commence construction: 09/05/2012 Size of disturbed area during construction in acres: 3.00
 Estimated date that interim reclamation will begin: 03/04/2013 Size of location after interim reclamation in acres: 1.50
 Estimated post-construction ground elevation: 4604 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: 01/19/2012
 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 utilit: 5280
 , railroad: 5280, property line: 578

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: 70: Valent sand, 3-9% slopes

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: 5030, water well: 3260, depth to ground water: 18
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:

Closest water well not a MH permit is Allard stock well, permit 36913. The following wells have already been drilled from this pad: Antelope 41-31, Antelope 31-31. The following well will be drilled from this pad: Antelope 41-44-31HZ.

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.
Signed: _____ Date: 08/17/2012 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: 9/21/2012

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.

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Attachment Check List

Att Doc Num	Name
2086136	LOCATION DRAWING
400316239	FORM 2A SUBMITTED
400316253	NRCS MAP UNIT DESC
400316254	ACCESS ROAD MAP
400316255	HYDROLOGY MAP
400316260	LOCATION PICTURES
400316263	REFERENCE AREA MAP
400316265	REFERENCE AREA PICTURES
400316268	WASTE MANAGEMENT PLAN
400317225	MULTI-WELL PLAN

Total Attach: 10 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed. No LGD or public comment received. Received sundry to update Antelope 41-31's SHL.	9/17/2012 8:17:28 AM
OGLA	Uploaded revised Location Drawing, added interim reclamation BMP.	9/14/2012 12:45:02 PM
Permit	The SHL of this well does not match any of the form 2's.	8/23/2012 9:23:08 AM

Total: 3 comment(s)

BMP

<u>Type</u>	<u>Comment</u>
Interim Reclamation	<p>Bonanza will immediately reclaim the disturbed area that lies outside of the planned 360'*360' drilling pad as follows:</p> <ul style="list-style-type: none">o Mechanically lower gradient of well pad's steep shoulders and smooth out disturbed eroded soilo Spread by manure slinger and tractor, a dairy cow bedding which is a combination of long stem straw and manure. This combination dilutes the concentration of nitrogen which is detrimental to native grass germination growth while enhancing opportunistic weed populations. Manure acts as a binder and shades the soil for moisture retention and from wind abrasion. Application level .25-.5 inch thick where possible to form a mat over exposed soil.o Drill seed over the top of the bedding. This allows seed to be placed at a proper depth for small native seed to germinate (have moisture and nutrients to grow) under the adverse conditions found on well sites. The seed planted is a combination of approximately 12-15 pounds per acre of small grain-oats a cool season annual which will grow in the fall, provide stubble to protect the soil and native plants against spring winds. Along with the oats 14-18 pounds per acre of native grass (Sharp Bros. 70 Ranch Sandy Soil Mix requested by ranch manager and owner).o Irrigate using water applied by an agricultural reel gun. Water will be applied as long as possible (cold weather, winds, seed germination, natural moisture, etc influencing decisions).o The reclamation area will be fenced off to prohibit disturbance by construction or wildlife/cattle. <ul style="list-style-type: none">• Following completion and flowback of the proposed new well, the same procedures will be used to perform interim reclamation within the 360' * 360' pad, with the exception of the production facility, area immediately surrounding the wellheads, and road. The size of location following interim reclamation will be 1.5 acres.• Mowing, re-seeding, and watering will be conducted on an as-needed basis and as seasonally appropriate, until interim reclamation has been successfully achieved.

Total: 1 comment(s)