

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:

401220986

Date Received:

03/09/2017

Oil and Gas Location Assessment

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

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:

450973

Expiration Date:

06/03/2020

☐ 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: Julie L. Vigil
Phone: (303) 803-1718
Fax: (720) 279-2331
email: jvigil@bonanzacrk.com

RECLAMATION FINANCIAL ASSURANCE

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

☒ Waste Management Surety ID: 20130009

LOCATION IDENTIFICATION

Name: Walden Land Treatment Facility Number: T7-P18
County: JACKSON
QuarterQuarter: NENE Section: 18 Township: 9N Range: 78W Meridian: 6 Ground Elevation: 8126
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: 200 feet FNL from North or South section line
610 feet FEL from East or West section line
Latitude: 40.755970 Longitude: -106.186010
PDOP Reading: 2.4 Date of Measurement: 11/22/2011
Instrument Operator's Name: Randy 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 _____	Oil Tanks* _____	Condensate Tanks* _____	Water Tanks* _____	Buried Produced Water Vaults* _____
Drilling Pits _____	Production Pits* _____	Special Purpose Pits _____	Multi-Well Pits* _____	Modular Large Volume Tanks _____
Pump Jacks _____	Separators* _____	Injection Pumps* _____	Cavity Pumps* _____	Gas Compressors* _____
Gas or Diesel Motors* _____	Electric Motors _____	Electric Generators* _____	Fuel Tanks* _____	LACT Unit* _____
Dehydrator Units* _____	Vapor Recovery Unit* _____	VOC Combustor* _____	Flare* _____	Pigging Station* _____

OTHER FACILITIES*

Other Facility Type

Number

Those facilities indicated by an asterisk () shall be used to determine the distance from the Production Facility to the nearest cultural feature on the Cultural Setbacks Tab.

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

CONSTRUCTION

Date planned to commence construction: 07/01/2017 Size of disturbed area during construction in acres: 4.50
Estimated date that interim reclamation will begin: 10/01/2017 Size of location after interim reclamation in acres: 4.50
Estimated post-construction ground elevation: 8126

DRILLING PROGRAM

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

Is H₂S anticipated? _____

Will salt sections be encountered during drilling: _____

Will salt based mud (>15,000 ppm Cl) be used? _____

Will oil based drilling fluids be used? _____

DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: _____ Drilling Fluids Disposal Method: _____

Cutting Disposal: _____ Cuttings Disposal Method: _____

Other Disposal Description:

Beneficial reuse or land application plan submitted? _____

Reuse Facility ID: _____ or Document Number: _____

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

SURFACE & MINERALS & RIGHT TO CONSTRUCT

Name: Bonanza Creek Energy Oper Phone: _____

Address: 410 17th Street, Suite 1400

Fax: _____

Address: _____

Email: _____

City: Denver State: CO Zip: 80202

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: No

The right to construct this Oil and Gas Location is granted by: applicant is owner

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

Provide the distance to the nearest cultural feature as measured from Wells or Production Facilities onsite.

	From WELL	From PRODUCTION FACILITY
Building:	_____ Feet	_____ Feet
Building Unit:	_____ Feet	_____ Feet
High Occupancy Building Unit:	_____ Feet	_____ Feet
Designated Outside Activity Area:	_____ Feet	_____ Feet
Public Road:	_____ Feet	_____ Feet
Above Ground Utility:	_____ Feet	_____ Feet
Railroad:	_____ Feet	_____ Feet
Property Line:	_____ Feet	_____ 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.
- For measurement purposes only, Production Facilities should only include those items with an asterisk(*) on the Facilities Tab.

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.
- Large UMA Facility - 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: _____

FOR MULTI-WELL PADS AND PRODUCTION FACILITIES WITHIN DESIGNATED SETBACK LOCATIONS ONLY:

- ☐ Check this box if this Oil and Gas Location has or will have Production Facilities that serve multiple wells (on or offsite) and the Production Facilities are proposed to be located less than 1,000 feet from a Building Unit. *(Pursuant to Rule 604.c.(2)E.i., the operator must evaluate alternative locations for the Production Facilities that are farther from the Building Unit, and determine whether those alternative locations were technically feasible and economically practicable for the same proposed development.)*
- ☐ By checking this box, I certify that no alternative placements for the Production Facilities, farther from the nearest Building Unit, were available based on the analysis conducted pursuant to Rule 604.c.(2)E.i.

In the space below, explain rationale for siting the multi-well Production Facility(ies) that supports your Rule 604.c.(2)E.i determination. Attach documentation that supports your determination to this Form 2A.

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: Fh. Fluetsch-Tiagos association

NRCS Map Unit Name: CyF. Cryorthents, steep

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: 1588 Feet

water well: 5280 Feet

Estimated depth to ground water at Oil and Gas Location 32 Feet

Basis for depth to groundwater and sensitive area determination:

Basis for depth to ground water State of Colorado Division of Water Resources Permit #227327.

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: _____

Is the Location within a Floodplain? ☒ No ☐ Yes Floodplain Data Sources Reviewed (check all that apply)

☒ Federal (FEMA)

☐ State

☐ County

☐ Local

☐ Other _____

GROUNDWATER BASELINE SAMPLING AND MONITORING AND WATER WELL SAMPLING

Water well sampling required per Rule 609 _____

WILDLIFE

☐ This location is included in a Wildlife Mitigation Plan

☐ This location was subject to a pre-consultation meeting with CPW held on _____

DESIGNATED SETBACK LOCATION EXCEPTIONS

Check all that apply:

- ☐ Rule 604.a.(1)A. Exception Zone (within 500' of a Building Unit) and is in an Urban Mitigation Area
- ☐ 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	<p>This Form 2A is submitted by Bonanza to obtain an Oil and Gas Location Permit for an existing location that was built prior to 2006.</p> <p>Bonanza will operate the site as a centralized exploration and production waste management facility solely for waste generated by Bonanza.</p> <p>All cultural distances measured from the closest edge of the disturbance. Building: 1015 Feet Building Unit: 5280 Feet High Occupancy Building Unit: 5280 Feet Designated Outside Activity Area: 5280 Feet Public Road: 4151 Feet Above Ground Utility: 1052 Feet Railroad: 5280 Feet Property Line: 373 Feet</p> <p>Reference Area Map and Reference Area Pictures will be submitted via Sundry Notice, Form 4 within 12 months of Form 2A approval.</p>
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I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.

Signed: _____ Date: 03/09/2017 Email: jvigil@bonanzacrk.com

Print Name: Julie L. Vigil 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: Matthew Lee Director of COGCC Date: 6/4/2017

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.

<u>COA Type</u>	<u>Description</u>
	<p>GENERAL FORM 28 PERMIT COAs:</p> <p>Conditions of Approval (COAs) attached to the Form 28 Permit will also apply to this Form 2A permit for this location.</p> <p>Commencement of new building/construction on this location is not authorized until the Form 28 permit has been approved.</p> <p>Prior to the Form 28 permit approval (and therefore start of any construction), adequate financial assurance per Rules 704 and 908.11.g.(1)B. are required.</p>
	<p>In addition to the notifications required by COGCC listed in the Northwest Notification Policy (Notice of Intent to Construct a New Location) and Rule 316C. COGCC Form 42. FIELD OPERATIONS NOTICE (c. Notice of Construction or Major Change); operator shall notify the COGCC 48 hours prior to Wildlife high visibility wire installation and addition of any soils or tank bottoms requiring placement in the treatment pods using the Form 42 (as described in Rule 316C.m. Notice of Completion of Form 2/2A Permit Conditions). The appropriate COGCC individuals will automatically be email notified.</p> <p>Operator shall provide a Reference Area Map and four (4) color photographs of the Reference Area, taken during the growing season of vegetation and facing each cardinal direction, within twelve (12) months after approval of the Form 2A permit. Each photograph shall be identified by date taken, well or Oil and Gas Location name, and direction of view.</p>
	<p>The following conditions of approval (COAs) will apply to the land treatment facility for protection and minimization of impacts to wildlife (big game Mule Deer and Elk, and Greater Sage Grouse). These COAs were discussed during the Wildlife Onsite Consultation on 04-04-17, subsequent emails, and phone conversations with CPW personnel.</p> <p>WLD 1 - Operator shall install a high visibility, vinyl-coated top wire on the top of the existing 4-foot tall wooden and steel post, barbed wire fence which will make the fence more visible to big game and greater sage grouse.</p> <p>WLD 2 - Operator shall monitor the facility on a regular basis to determine if wildlife are getting into the treatment pods. If there is evidence of wildlife activity, the operator shall install a 6-foot woven-wire fence around the area where the contaminated soils will be stored. The purpose of the fence is to ensure that big game animals (e.g., elk, mule deer and antelope) can not enter the facility and come into contact with contaminated soils, tank bottoms, etc. In addition, a high visibility, vinyl-coated top wire will be installed which will make the fence more visible to big game and greater sage grouse.</p> <p>WLD 3 - Within the land treatment facility, operator agrees to avoid construction-related activities which would require the use of heavy equipment (e.g., bulldozer, scraper, dump truck, front end loader, etc.) to conduct Form 28 required construction activities, such as building additional berms and ditches, during a period of time between March 1 and end on May 31.</p> <p>WLD 4 - Operator and contractors will restrict land treatment facility daily visits to twice a day and to portions of the day between 9:00 AM and 4:00 PM during the winter season (December 1 through April 15) for impact minimization for big game and during the spring season (March 1 through June 30) for greater sage grouse.</p>

Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
2108153	HYDROLOGY MAP
2108154	CORRESPONDENCE
401220986	FORM 2A SUBMITTED
401221056	NRCS MAP UNIT DESC
401221088	NRCS MAP UNIT DESC
401221190	ACCESS ROAD MAP
401229251	LOCATION PICTURES
401229498	LOCATION DRAWING
401229502	FACILITY LAYOUT DRAWING
401229503	CONST. LAYOUT DRAWINGS
401229518	WASTE MANAGEMENT PLAN

Total Attach: 11 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Corrected right to construct to applicant is owner and indicated that minerals beneath this location will NOT be produced to this location.	06/04/2017
Permit	The Operator provided an updated Location Pictures attachment. Passes permitting. Final review complete.	05/30/2017
Permit	Waiting on a corrected Location Photo attachment. Ready to pass.	05/24/2017
OGLA	Initiated/Completed OGLA Form 2A review on 05-20-17 by Dave Kubeczko; requested 'Hydrology Map' attachment and acknowledgement of notification, reference area map and photos, site-specific Form 28 COAs, no construction until approval of the Form 28, and financial assurance required per Rules 704 and 908.11.g.(1)B., and wildlife COAs from operator on 05-21-17; received 'Hydrology Map' attachment and acknowledgement of COAs from operator on 05-22-17; conducted a Wildlife Consultation with CPW, COGCC, and the operator on 04-04-17; passed by CPW on 04-24-17 with recommendations for greater sage grouse timing, high visibility wire installation, and additional fencing installed if operational activity increases on a continual basis acceptable; passed OGLA Form 2A review on 05-20-17 by Dave Kubeczko; notification, reference area map and photos, site-specific Form 28 COAs, no construction until approval of the Form 28, and financial assurance required per Rules 704 and 908.11.g.(1).B., and wildlife COAs.	05/20/2017
DOW	CPW staff attended an onsite of this location and developed two recommended BMPs to minimize impacts to wildlife. These BMPs were entered into the wildlife edit tab and emailed to the operator for their review. CPWs consultation period expires today (April 24, 2017) and we have not received concurrence/denial from the operator for the two recommended BMPs. OGLA staff has notified us that this permit will not be approved until the operator responds to the recommended wildlife BMPs. By: Taylor Elm, April 24, 2017, 12:06 p.m.	04/24/2017
Permit	Passed Completeness	03/15/2017
Permit	Returned to Draft: Consultation tab -Located in a SWH; box needs checked Construction tab -Estimated date for interim reclamation will begin must be a future date	03/14/2017

Total: 7 comment(s)