

FORM  
2A

Rev  
04/18

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:

401810583

Date Received:

11/05/2018

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:

**462951**

Expiration Date:

**03/03/2022**

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: Brian Dodek

Phone: (720) 225-6653

Fax: ( )

email: bdodek@bonanzacrk.com

FINANCIAL ASSURANCE

- Plugging and Abandonment Bond Surety ID (Rule 706): 20120018     Gas Facility Surety ID (Rule 711): \_\_\_\_\_
- Waste Management Surety ID (Rule 704): \_\_\_\_\_

LOCATION IDENTIFICATION

Name: LATHAM    Number: 11-13 CPF

County: WELD

Quarter: NWNW    Section: 13    Township: 4N    Range: 63W    Meridian: 6    Ground Elevation: 4604

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: 1059 feet FNL from North or South section line

464 feet FWL from East or West section line

Latitude: 40.317090    Longitude: -104.394190

PDOP Reading: 1.4    Date of Measurement: 09/21/2018

Instrument Operator's Name: Casey Kohout

## 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)

401799290

429825

## FACILITIES

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

Wells	_____	Oil Tanks*	20	Condensate Tanks*	4	Water Tanks*	8	Buried Produced Water Vaults*	_____
Drilling Pits	_____	Production Pits*	_____	Special Purpose Pits	_____	Multi-Well Pits*	_____	Modular Large Volume Tanks	_____
Pump Jacks	_____	Separators*	15	Injection Pumps*	_____	Cavity Pumps*	_____	Gas Compressors*	6
Gas or Diesel Motors*	10	Electric Motors	21	Electric Generators*	2	Fuel Tanks*	_____	LACT Unit*	3
Dehydrator Units*	2	Vapor Recovery Unit*	10	VOC Combustor*	12	Flare*	_____	Pigging Station*	3

## OTHER FACILITIES\*

**Other Facility Type**

**Number**

Meter House	2
Flash Gas Conditioning Unit	4

\*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:

One (1) 8" coated carbon steel gas gathering pipeline connection  
One (1) 6" composite plastic oil gathering pipeline connection  
One (1) 4" composite plastic produced water gathering pipeline connection  
One (4) 4" coated carbon steel gas lift pipeline connection  
One (1) 6" coated carbon steel line from the heater treater to the oil tanks  
One (1) 8" coated carbon steel line from the gas gathering pipeline to the compression  
One (1) 6" coated carbon steel line from the compression to the sales meter

## CONSTRUCTION

Date planned to commence construction: 03/31/2019 Size of disturbed area during construction in acres: 8.70

Estimated date that interim reclamation will begin: 09/30/2019 Size of location after interim reclamation in acres: 8.70

Estimated post-construction ground elevation: 4604

## DRILLING PROGRAM

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

Is H<sub>2</sub>S 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? Yes

## DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE Drilling Fluids Disposal Method: Recycle/reuse

Cutting Disposal: OFFSITE Cuttings Disposal Method: Commercial Disposal

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: TH Ranch, LLC

Phone:         

Address: P.O. Box 189

Fax:         

Address:         

Email:         

City: Kersey State: CO Zip: 80614

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: Surface Use Agreement

Surface damage assurance if no agreement is in place:          Surface Surety ID:         

Date of Rule 306 surface owner consultation 09/21/2018

## 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.

	<b>From WELL</b>	<b>From PRODUCTION FACILITY</b>
Building:	_____ Feet	3944 Feet
Building Unit:	_____ Feet	3944 Feet
High Occupancy Building Unit:	_____ Feet	5280 Feet
Designated Outside Activity Area:	_____ Feet	5280 Feet
Public Road:	_____ Feet	197 Feet
Above Ground Utility:	_____ Feet	276 Feet
Railroad:	_____ Feet	5280 Feet
Property Line:	_____ Feet	162 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 (onl 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 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: Map Unit Symbol# 70: Valent Sand 3-9% Slope  
 NRCS Map Unit Name: \_\_\_\_\_  
 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: 09/21/2018

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, Chokeycherry)
- 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: 324 Feet

water well: 3188 Feet

Estimated depth to ground water at Oil and Gas Location 11 Feet

Basis for depth to groundwater and sensitive area determination:

Basis for depth to ground water and sensitive area determination is State of Colorado Division of Water Resources Permit #157504

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 zone: No

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 318A

**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

- Bonanza is drilling 18 wells from the Latham U-14 location. Production will be routed to the proposed Latham 11-13 facility.
- As part of the surface use agreement, the landowner requested that Bonanza remove the existing Latham 14-12 facility as soon as the Latham 11-13 facility is completed. The existing Latham 14-12 Facility is in the view shed of the hunting area north of our locations. Once the Latham 11-13 Facility is constructed, Bonanza will route production from the existing Latham 14-12 Pad to the new Latham 11-13 Facility.
- The landowner also requested that Bonanza access the new locations and the remaining Latham 14-12 Pad from Highway 34. This will keep traffic off the existing ranch road.

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

Signed: \_\_\_\_\_ Date: 11/05/2018 Email: kmiller@bonanzacr.com

Print Name: Kate Miller Title: 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: 3/4/2019

### 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

### Best Management Practices

#### No BMP/COA Type

#### Description

## Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
1010615	LOCATION DRAWING
401810583	FORM 2A SUBMITTED
401817164	NRCS MAP UNIT DESC
401818432	LOCATION PICTURES
401818437	ACCESS ROAD MAP
401818443	REFERENCE AREA PICTURES
401818448	REFERENCE AREA MAP
401818462	HYDROLOGY MAP
401818666	SURFACE AGRMT/SURETY

Total Attach: 9 Files

## General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
OGLA	<p>Railroad shown on the aerial to the north of the proposed Location has been decommissioned.</p> <p>Changed the estimated depth to groundwater to 11 feet based on the static water level reported for DWR Water Well Permit #301516. Changed the distance to the nearest surface water feature to 324 feet based on the distance to the barroe ditch as reported on the Hydrology Map submitted by the operator. Changed Sensitive Area to YES based on the potential for shallow groundwater. Operator uses a pitless, closed-loop system.</p> <p>Additional Conditions of Approval for the protection of groundwater are not warranted at this time as the drilling waste will be disposed of offsite.</p>	03/04/2019
Final Review	<p>Final Approval On Hold. Water Resources data and COGCC OGLA comments on this Form 2A #401810583 are not consistent with the nearby, related well pad, Form 2A #401799290, that amends existing Location ID #437416. Notified OGLA for corrections to this Form 2A. Update: corrections made and ready for Final Approval on 3/4.</p>	03/03/2019
Permit	<p>Final Review Completed.</p>	03/01/2019
OGLA	<p>There appears to be an inconsistency in the surface footages.</p> <ul style="list-style-type: none"> <li>- Per Operator, "the surveyor used located monuments for the south line (Sec 12)/North Line (Sec 13) boundary. The correct measurement is 1,059 FNL."</li> <li>- Changed the surface footage to reflect "FNL."</li> <li>- Replaced Location Drawing with the updated Location Drawing reflecting the surface footages FNL.</li> </ul> <p>Please provide a surface rationale for the additional production facility.</p> <ul style="list-style-type: none"> <li>- Per Operator, added the following surface disturbance rationale to the Submit Tab.</li> <li>· Bonanza is drilling 18 wells from the Latham U-14 location. Production will be routed to the proposed Latham 11-13 facility.</li> <li>· As part of the surface use agreement, the landowner requested that Bonanza remove the existing Latham 14-12 facility as soon as the Latham 11-13 facility is completed. The existing Latham 14-12 Facility is in the view shed of the hunting area north of our locations. Once the Latham 11-13 Facility is constructed, Bonanza will route production from the existing Latham 14-12 Pad to the new Latham 11-13 Facility.</li> <li>· The landowner also requested that Bonanza access the new locations and the remaining Latham 14-12 Pad from Highway 34. This will keep traffic off the existing ranch road.</li> </ul>	01/24/2019
Permit	<p>Permitting Review Complete.</p>	01/03/2019
LGD	<p>This proposed oil and gas location is situated in the Agricultural Zone District of unincorporated Weld County. A Weld Oil and Gas Location Assessment (WOGLA) is required prior to constructing any improvements related to oil and gas exploration and production.</p> <p>At the time of this comment, the operator has not noticed the Weld County LGD of their intent to apply for a WOGLA.</p> <p>A building permit is required for the production facilities (tank battery, separators, pump jacks, compressors, generators, etc.) from the Department of Planning Services. Access points from County roads require an Access Permit from the Department of Public Works, which includes any necessary traffic control plans and Improvement Agreements. The use of County right-of-way requires a permit from the Department of Public Works.</p> <p>Jason Maxey, Weld Oil/Gas Specialist and LGD 970-400-3579</p>	12/05/2018
Permit	<p>Passed completeness.</p>	11/15/2018

Total: 7 comment(s)