

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:

401254440

Date Received:

05/16/2017

Oil and Gas Location Assessment

☐ New Location ☐ Refile ☒ Amend Existing Location Location#: 442024

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:

**442024**

Expiration Date:

**07/18/2020**

☒ 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: Brian Dodek

Phone: (720) 225-6653

Fax: (720) 279-2331

email: bdodek@bonanzacrk.com

RECLAMATION FINANCIAL ASSURANCE

☒ Plugging and Abandonment Bond Surety ID: 20120018 ☐ Gas Facility Surety ID: \_\_\_\_\_

☐ Waste Management Surety ID: \_\_\_\_\_

LOCATION IDENTIFICATION

Name: State Seventy Holes Number: J-18 Pad

County: WELD

QuarterQuarter: SESW Section: 18 Township: 4N Range: 62W Meridian: 6 Ground Elevation: 4560

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: 610 feet FSL from North or South section line

1455 feet FWL from East or West section line

Latitude: 40.306861 Longitude: -104.371342

PDOP Reading: 1.4 Date of Measurement: 02/09/2015

Instrument Operator's Name: Marc Mayer

## 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	<u>4</u>	Oil Tanks*	<u>4</u>	Condensate Tanks*	<u>      </u>	Water Tanks*	<u>4</u>	Buried Produced Water Vaults*	<u>      </u>
Drilling Pits	<u>      </u>	Production Pits*	<u>      </u>	Special Purpose Pits	<u>      </u>	Multi-Well Pits*	<u>      </u>	Modular Large Volume Tanks	<u>3</u>
Pump Jacks	<u>4</u>	Separators*	<u>4</u>	Injection Pumps*	<u>      </u>	Cavity Pumps*	<u>      </u>	Gas Compressors*	<u>3</u>
Gas or Diesel Motors*	<u>4</u>	Electric Motors	<u>4</u>	Electric Generators*	<u>2</u>	Fuel Tanks*	<u>      </u>	LACT Unit*	<u>      </u>
Dehydrator Units*	<u>      </u>	Vapor Recovery Unit*	<u>      </u>	VOC Combustor*	<u>4</u>	Flare*	<u>1</u>	Pigging Station*	<u>      </u>

## 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:

Four (4) three phase 3" coated steel flowlines from wellheads to separators  
Four (4) 2" coated gas lift lines from gas lift meters to wellheads  
One (1) 6" coated steel gas sales line connection  
One (1) 6" coated steel oil gathering lines connection  
One (1) 4" coated steel produced water gathering connection  
One (1) 3" Coated Steel Gas Lift Delivery Line

## CONSTRUCTION

Date planned to commence construction: 03/01/2018 Size of disturbed area during construction in acres: 9.50

Estimated date that interim reclamation will begin: 06/01/2018 Size of location after interim reclamation in acres: 6.90

Estimated post-construction ground elevation: 4564

## 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? No

## 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: Colorado State Land Board

Phone:                                     

Address: 1127 Sherman Street, Ste 300

Fax:                                     

Address:                                     

Email:                                     

City: Denver State: CO Zip: 80203

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: Yes

The right to construct this Oil and Gas Location is granted by: oil and gas lease

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

Date of Rule 306 surface owner consultation 05/12/2017

## 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:	2540 Feet	2320 Feet
Building Unit:	2540 Feet	2320 Feet
High Occupancy Building Unit:	5280 Feet	5280 Feet
Designated Outside Activity Area:	5280 Feet	5280 Feet
Public Road:	613 Feet	492 Feet
Above Ground Utility:	550 Feet	429 Feet
Railroad:	5280 Feet	5280 Feet
Property Line:	610 Feet	594 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: 70 Valent sand, 3 to 9 percent slopes

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: 08/10/2016

List individual species: Cheat Grass, Russian Thistle, Common Sunflower, Downy Brome, Sand sagebrush, Indian ricegrass.

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: 475 Feet

water well: 2043 Feet

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

Basis for depth to groundwater and sensitive area determination:

State of Colorado Water Resources Board Permit #172113

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

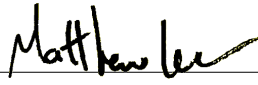
Comments This Form 2A amended to revise the proposed wells from 5 to 4.

MLVT details for the tanks to be used on the SSH J-18 location:  
Manufacturer or vendor = HydroLogistics  
Size of tanks (3) = 13,300 bbl - 89' dia each  
Anticipated timeframe tanks will be on location = December 16, 2017 thru January 15, 2018

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.  
Signed: \_\_\_\_\_ Date: 05/16/2017 Email: bdodek@bonanzacrk.com

Print Name: Brian Dodek 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: 7/19/2017

## 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.

### COA Type

### Description

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## Best Management Practices

No	BMP/COA Type	Description
1	Planning	Operator shall submit a Form 42 to the COGCC 48 hours prior to commencement of construction activities.
2	Drilling/Completion Operations	Bonanza Creek Energy acknowledges and will comply with the "COGCC Policy On the Use of Modular Large Volume Tanks in Colorado" dated June 13, 2014.

Total: 2 comment(s)

## Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
401254440	FORM 2A SUBMITTED
401284938	NRCS MAP UNIT DESC
401284939	WASTE MANAGEMENT PLAN
401284946	MULTI-WELL PLAN
401284950	REFERENCE AREA PICTURES
401284957	LOCATION PICTURES
401284961	LOCATION DRAWING
401284987	ACCESS ROAD MAP
401284990	REFERENCE AREA MAP
401284995	HYDROLOGY MAP

Total Attach: 10 Files

## General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review complete. Amended 2A submitted to update number of wells on location.	07/19/2017
OGLA	Per Operator request, added the following information to the Submit Tab.  MLVT details for the tanks to be used on the SSH J-18 location: Manufacturer or vendor = HydroLogistics Size of tanks (3) = 13,300 bbl - 89' dia each Anticipated timeframe tanks will be on location = December 16, 2017 thru January 15, 2018	07/18/2017
OGLA	Per Operator request, added the following BMP.  Bonanza Creek Energy acknowledges and will comply with the "COGCC Policy On the Use of Modular Large Volume Tanks in Colorado" dated June 13, 2014.	07/18/2017
Permit	State Land Board verified surface restoration bond and lease.	07/13/2017
Permit	Requested SLB verification of surface restoration bond and lease.	07/04/2017
OGLA	Original 2A was for 26 wells, not 5. The original 2A had 3 MLVTs on the form. The amended shows MLVTs on the Hydrology Map but not the Location Drawing or the Facilities List. - Per Operator request, added three MLVTs to the Facilities List. - 07/18/2017 Location has production facilities and a Remote Production Facility. Will the Location be producing onsite? - Per Operator request, removed the Remote Production Facility as the Location will produce onsite. - 07/11/2017	06/26/2017
OGLA	Changed distance to the nearest surface water feature to 475 feet based on the intermittent drainage shown on the COGIS Map and on the Hydrology Map submitted by the operator.	06/26/2017
Permit	Passed Completeness.	06/06/2017
Permit	Returned to draft for: -Number of wells on the Facilities Tab does not match multi-well plan.	05/25/2017

Total: 9 comment(s)