

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:

401716922

Date Received:

08/01/2018

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:

**457713**

Expiration Date:

**10/01/2021**

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: 26580  
 Name: BURLINGTON RESOURCES OIL & GAS LP  
 Address: 600 N DAIRY ASHFORD RD  
 City: HOUSTON    State: TX    Zip: 77079

Contact Information

Name: Liang Yu  
 Phone: (832) 486-6014  
 Fax: ( )  
 email: liang.yu@cop.com

FINANCIAL ASSURANCE

- Plugging and Abandonment Bond Surety ID (Rule 706): 19920030     Gas Facility Surety ID (Rule 711): \_\_\_\_\_
- Waste Management Surety ID (Rule 704): \_\_\_\_\_

LOCATION IDENTIFICATION

Name: Schuh    Number: 3-65 21-20  
 County: ADAMS  
 Quarter: SESE    Section: 21    Township: 3S    Range: 65W    Meridian: 6    Ground Elevation: 5595

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: 1311 feet FSL from North or South section line  
475 feet FEL from East or West section line

Latitude: 39.772651    Longitude: -104.661137

PDOP Reading: 1.4    Date of Measurement: 11/08/2017

Instrument Operator's Name: Chad Meiers



## 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:

Drilling cuttings will be taken by a certified transport company and disposed of at a certified facility.

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: Davene King Schuh Phone: \_\_\_\_\_

Address: 8725 E. Via Del Arbor Dr Fax: \_\_\_\_\_

Address: \_\_\_\_\_ Email: \_\_\_\_\_

City: Scottsdale State: AZ Zip: 85258

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 \_\_\_\_\_

## 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:	1649 Feet	1347 Feet
Building Unit:	1916 Feet	1604 Feet
High Occupancy Building Unit:	5280 Feet	5280 Feet
Designated Outside Activity Area:	5280 Feet	5280 Feet
Public Road:	475 Feet	600 Feet
Above Ground Utility:	449 Feet	573 Feet
Railroad:	5280 Feet	5280 Feet
Property Line:	475 Feet	600 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

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: \_\_\_\_\_

- 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.

## 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 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: Adena Loam, 0 to 3 percent slopes

NRCS Map Unit Name: Adena loam, 3 to 5 percent slopes

NRCS Map Unit Name: Adena-Colby association, Moderately sloping

**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: 95 Feet

water well: 1653 Feet

Estimated depth to ground water at Oil and Gas Location 12 Feet

Basis for depth to groundwater and sensitive area determination:

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

Spill prevention control and countermeasure plan is in place to address construction, drilling and operations associated with oil and gas development throughout the state of Colorado in accordance with CFR 112.

Storm Water Management Plan (SWMP) will be in place to address construction, drilling and operations associated with oil and gas development through the state of Colorado in accordance with CDPHE General Permit Rules.

Burlington Resources uses a closed loop, pitless system for their drilling fluids. They use tanks and shakers, recondition and reuse the fluids on the next location.

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

Signed: \_\_\_\_\_ Date: 08/01/2018 Email: jennifer.a.dixon@cop.com

Print Name: Jennifer Dixon Title: Regulatory Coordinator

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: 10/2/2018

## 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

	Operator shall comply with all requirements as set forth in the COGCC Notice to Operators for Interim Reclamation.
	Operator shall comply with 1000-Series Rules for Interim Reclamation. All areas not in use for production activities shall be reclaimed in accordance with the 1000-Series Rules within 6 months of the spud date for the approved well. In the event additional operations are to occur within 12 months of the spud date, Operator shall submit a Rig Schedule showing a scheduled timeline of additional drilling operations via Form 4 Sundry. If additional drilling operations have not commenced at 12 months, Operator shall submit a Variance Request via Form 4 Sundry for compliance with additional bonding requirements as identified in the NTO for Interim Reclamation prior to the 12 month deadline.

## Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Storm Water/Erosion Control	Location lies within proximity to surface water. Operator shall use tertiary containment along the cross- and down-gradient perimeters of the Location.
2	Emissions mitigation	Green Completions -Test separators and associated flow lines, sand traps and emission control systems shall be installed on-site to accommodate green completions techniques. When commercial quantities of salable quality gas are achieved at each well, the gas shall be immediately directed to a sales line or shut in and conserved. If a sales line is unavailable or other conditions prevent placing the gas into a sales line, the operator shall not produce the wells without an approved variance per Rule 805.b. (3)C.

Total: 2 comment(s)

## Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
1010492	LOCATION DRAWING
401716922	FORM 2A SUBMITTED
401719397	ACCESS ROAD MAP
401719402	HYDROLOGY MAP
401719409	LOCATION PICTURES
401719411	MULTI-WELL PLAN
401719436	NRCS MAP UNIT DESC
401720921	CONST. LAYOUT DRAWINGS

Total Attach: 8 Files

## General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final review complete.	10/01/2018

<p>OGLA</p>	<p>Location Reference Point and Well APD surface locations do not agree. Reference point for a Wellsite Location must be a well. Location Drawing identifies the Reference Point as Well #3-65 21-20 3AH, having a Lat/Long of 39.772651, -104.661137, respectively. Location Reference Point is reported having a Lat/Long of 39.772650, -104.660959, respectively. Please verify the correct Location Reference Point and correct Lat/Long.</p> <p>Per Operator verification, the location reference point should be 39.772651, -104.661137 which is the 3AH point.  - Corrected the Location Reference Point - 09/28/2018</p> <p>Surface Footages for the Location Reference Point do not agree with the Surface Footages reported for the identified Reference Point Well (APD). Location Reference Point is reported as 1312 FSL and 425 FEL. Surface Footages for the respective APD are reported as 1311 FSL and 475 FEL. Please verify the correct Surface Footages.</p> <p>Per Operator verification, the surface footage should be 1311 FSL, 475 FEL.  - Corrected the surface footage - 09/28/2018</p> <p>Cultural Distances reported on the 2A do not agree with the Distances reported on the APDs.  - Changed the distance from the well to the nearest building and Building Unit to 1649 feet and 1916 feet, respectively, based on the distances reported on the APDs. - Operator concurrence - 08/31/2018  - Per Operator request, changed the Cultural Distances from the Well to the nearest Public Road, Above Ground Utility and Property Line to 475, 449 and 475, respectively. - 08/31/2018</p> <p>Changed the distance to the nearest Surface Water Feature to 95 feet based on the distance reported on the Hydrology Map submitted by the Operator. - Operator concurrence - 08/31/2018</p> <p>Location lies within a Sensitive Area with potential shallow groundwater. Operator used a pitless, closed-loop system. Additional Conditions of Approval for the protection of groundwater are not warranted at this time.</p> <p>Per Operator request, added the following to the Submit Tab:  "Burlington Resources uses a closed loop, pitless system for their drilling fluids. They use tanks and shakers, recondition and reuse the fluids on the next location."</p> <p>Per Operator request:  Removed MLVTs from the Facilities List as the Operator will no longer be using MLVTs at this Location. - 09/04/2018  Removed the MLVT language from the Submit Tab as the Operator will not be using MLVTs at this Location. - 09/04/2018  Uploaded modified Location Drawing with the MLVTs removed. - 09/26/2018</p> <p>Per Operator request, changed the size of disturbance after interim reclamation to 5.47 acres.</p>	<p>08/30/2018</p>
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OGLA	<p>Moved the following BMPs to the Submit Tab as they are not enforceable BMPs under COGCC Rules.</p> <p>Spill prevention control and countermeasure plan is in place to address construction, drilling and operations associated with oil and gas development throughout the state of Colorado in accordance with CFR 112.</p> <p>Storm Water Management Plan (SWMP) will be in place to address construction, drilling and operations associated with oil and gas development through the state of Colorado in accordance with CDPHE General Permit Rules.</p> <p>Added the following BMP to the Operator BMP List.  Green Completions -Test separators and associated flow lines, sand traps and emission control systems shall be installed on-site to accommodate green completions techniques. When commercial quantities of salable quality gas are achieved at each well, the gas shall be immediately directed to a sales line or shut in and conserved. If a sales line is unavailable or other conditions prevent placing the gas into a sales line, the operator shall not produce the wells without an approved variance per Rule 805.b.(3)C.</p>	08/30/2018
Permit	Passed permitting.	08/02/2018
Permit	Corrected plugging bond number. Passed completeness.	08/01/2018

Total: 5 comment(s)