

FORM  
2A

Rev  
08/19

# 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:

401814376

Date Received:

11/02/2018

## Oil and Gas Location Assessment

New Location     Refile     Amend Existing Location    Location#: 449486

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:

**449486**

Expiration Date:

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: 19160  
 Name: CONOCO PHILLIPS COMPANY  
 Address: 925 N ELDRIDGE PARKWAY  
 City: HOUSTON      State: TX      Zip: 77079

### Contact Information

Name: Liang Yu  
 Phone: (832) 4866014  
 Fax: ( )  
 email: Liang.Yu@conocophillips.com

### FINANCIAL ASSURANCE

- Plugging and Abandonment Bond Surety ID (Rule 706): 20100227       Gas Facility Surety ID (Rule 711): \_\_\_\_\_
- Waste Management Surety ID (Rule 704): \_\_\_\_\_

### LOCATION IDENTIFICATION

Name: Lone Tree 4-65 15-16      Number: 3BH  
 County: ARAPAHOE  
 Quarter: SENE    Section: 15    Township: 4S    Range: 65W    Meridian: 6    Ground Elevation: 5693

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: 1869 feet FNL from North or South section line  
600 feet FEL from East or West section line

Latitude: 39.706008      Longitude: -104.643033

PDOP Reading: 1.4      Date of Measurement: 10/17/2018

Instrument Operator's Name: Melinda Lundquist

### LOCAL GOVERNMENT INFORMATION

County: ARAPAHOE      Municipality: AURORA

Per § 34-60-106 (1)(f)(I)(A), the following questions pertain to the "local government with jurisdiction to approve the siting of the proposed oil and gas location."

The local government with jurisdiction is: \_\_\_\_\_

Does the local government with jurisdiction regulate the siting of Oil and Gas Locations, with respect to this location? If the local government does regulate the siting, but has waived its right to precede the COGCC in siting determination, indicate by selecting "YES" here and selecting "Waived" for the disposition below.  Yes  No

If yes, in checking this box, I hereby certify that an application has been filed with the local government with jurisdiction to approve the siting of the proposed oil and gas location.

The local government siting permit type is: \_\_\_\_\_

The local government siting permit was filed on: \_\_\_\_\_

The disposition of the application filed with the local government is: \_\_\_\_\_

Additional explanation of local process:

### 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:	<u>LOCATION ID #</u>	<u>FORM 2A DOC #</u>
<input type="checkbox"/>	_____	_____

## FACILITIES

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

Wells	<u>10</u>	Oil Tanks*	<u>3</u>	Condensate Tanks*	<u>      </u>	Water Tanks*	<u>3</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>      </u>
Pump Jacks	<u>10</u>	Separators*	<u>2</u>	Injection Pumps*	<u>      </u>	Cavity Pumps*	<u>      </u>	Gas Compressors*	<u>2</u>
Gas or Diesel Motors*	<u>      </u>	Electric Motors	<u>      </u>	Electric Generators*	<u>1</u>	Fuel Tanks*	<u>      </u>	LACT Unit*	<u>1</u>
Dehydrator Units*	<u>      </u>	Vapor Recovery Unit*	<u>2</u>	VOC Combustor*	<u>1</u>	Flare*	<u>1</u>	Pigging Station*	<u>1</u>

## OTHER FACILITIES\*

### Other Facility Type

### Number

Other Facility Type	Number
Transformer	1
Bulk Treater	2
Knockout Drum	2
Recycle Pump	1
Valve Manifold	1
Facility PLC	1
VRT	1
Flare Knockout Drum	1
Production Unit	1
Gas Meter	2

\*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:

Future pipelines will consist of:

4" Carbon Steel Gas Pipeline  
 4" Carbon Steel Liquid Pipeline  
 4" Composite Water Pipeline

The equipment indicated above may be installed for future use.

## CONSTRUCTION

Date planned to commence construction: 09/28/2021 Size of disturbed area during construction in acres: 11.00

Estimated date that interim reclamation will begin: 03/28/2022 Size of location after interim reclamation in acres: 4.00

Estimated post-construction ground elevation: 5693

## 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:

Drilling cuttings will be taken by a certified transport company and disposed of at a certified disposal 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: Melcor/TC Aurora LLC

Phone: 303-920-9400

Address: 9750 W Cambridge Place

Fax: \_\_\_\_\_

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

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

City: Littleton State: CO Zip: 80127-5906

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 \_\_\_\_\_

If this Form 2A is associated with Drilling and Spacing Unit applications, list docket number(s): \_\_\_\_\_

## 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:	1283 Feet	859 Feet
Building Unit:	1548 Feet	1156 Feet
High Occupancy Building Unit:	5280 Feet	5280 Feet
Designated Outside Activity Area:	5280 Feet	5280 Feet
Public Road:	1619 Feet	1259 Feet
Above Ground Utility:	1128 Feet	740 Feet
Railroad:	5280 Feet	5280 Feet
Property Line:	600 Feet	225 Feet
School Facility::	1999 Feet	1999 Feet
School Property Line:	1999 Feet	1999 Feet
Child Care Center:	1999 Feet	1999 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, Designated Outside Activity Area, School Facility, and Child Care Center – as defined in 100 Series Rules.  
 -For measurement purposes only, Production Facilities should only include those items with an asterisk(\*) on the Facilities Tab.

## SCHOOL SETBACK INFORMATION

Was Notice required under Rule 305.a.(4)?  Yes  No

## 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: Weld silt loam, 0 to 3 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: \_\_\_\_\_

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: 754 Feet

water well: 1571 Feet

Estimated depth to ground water at Oil and Gas Location 212 Feet

Basis for depth to groundwater and sensitive area determination:

Depth to groundwater was determined by DWR Permit #51506

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 \_\_\_\_\_

### Operator Proposed Wildlife BMPs

No BMP

### CPW Proposed Wildlife BMPs

No BMP

## 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 is an amendment of an existing location for the Lone Tree 4-65 15-16 3BH. Location ID #449486. The number of wells has increased from 1 to 9 wells.
- Reference Point for the location are based on the existing Lone Tree 4-65 15-16 3BH (API # 05-005-07261)

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. BMP's will vary according to location and will remain in place until the pad reaches final reclamation.

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.

Technical feasibility of reaching the northernmost well from the southern pad is very low given the step out and angle required to access the minerals. The step out would potentially be as far as 4,250'. We have not achieved a step out even half this long in ConocoPhillips Niobrara acreage. This would complicate our artificial lift capabilities as well as introduce drilling risk due to the existing well that is already in place. This would introduce completions risk due to increased frictional component at the proposed angle when running a Coil Tubing Unit. This also increases the chance of the CTU becoming stuck downhole.

ConocoPhillips has applied for the local permits for both the Lone tree North and Lone tree South (401814376, 401764963) with the City of Aurora. Each permit application has gone through several rounds of review and no major concerns have been raised by the City. The permits are ready for an administrative approval decision, but the City of Aurora has indicated that it will not approve the permits until ConocoPhillips and the City of Aurora agree on a list of comprehensive Best Management Practices (BMPs). ConocoPhillips and the City of Aurora are currently in negotiations on an Operator Agreement and associated BMPs.

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

Signed: \_\_\_\_\_ Date: 11/02/2018 Email: adoebele@uintahgroup.com

Print Name: Amy Doebele Title: Authorized Agent

Based on the information provided herein, this Oil and Gas Location Assessment complies with COGCC Rules, applicable orders, and SB 19-181 and is hereby approved.

COGCC Approved: \_\_\_\_\_ Director of COGCC Date: \_\_\_\_\_

### 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>

### 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>
1010644	ACCESS ROAD MAP
1010645	REFERENCE AREA MAP
1010646	HYDROLOGY MAP
1010648	LOCATION DRAWING
401814376	FORM 2A SUBMITTED
401822110	SURFACE AGRMT/SURETY
401822133	NRCS MAP UNIT DESC
401822134	CONST. LAYOUT DRAWINGS
401822463	MULTI-WELL PLAN
401822472	EQUIPMENT LIST
401822475	LOCATION PICTURES
401822486	REFERENCE AREA PICTURES

Total Attach: 12 Files

## General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
OGLA	<p>Access Road Map, Reference Area Map and the Hydrology Map do not show the updated pad design.</p> <ul style="list-style-type: none"> <li>- Received the Access Road and Reference Area Map. 03/22/2019</li> <li>- Received the Hydrology Map. 03/28/2019</li> </ul> <p>Changed the distance to the nearest surface water feature to 754 feet based on the updated Hydrology Map.</p> <p>Why are we not combining the Lone Tree Location proposed under Form 2A Document #401764963 with this Location as it is being amended? Is there a potential for consolidation of the production facilities with the onsite production for the adjacent Location ID #437388 or consolidate all production facilities on the southern proposed Location Document #401764963? This would eliminate excess surface disturbance and place production further from the Building Unit located to the north.</p> <ul style="list-style-type: none"> <li>- Waiting on Operator 02/25/2019</li> <li>- Per Operator, added the following:</li> </ul> <p>Technical feasibility of reaching the northernmost well from the southern pad is very low given the step out and angle required to access the minerals. The step out would potentially be as far as 4,250'. We have not achieved a step out even half this long in ConocoPhillips Niobrara acreage. This would complicate our artificial lift capabilities as well as introduce drilling risk due to the existing well that is already in place. This would introduce completions risk due to increased frictional component at the proposed angle when running a Coil Tubing Unit. This also increases the chance of the CTU becoming stuck downhole. - 03/21/2019</p> <p>Operator is in communication with the City of Aurora. Operator will be submitting a summary of the local permitting process. - 03/28/2018            Waiting on update. - 04/11/2019            Received and added - 04/11/2019</p>	01/24/2019
Permit	Passed completeness.	11/13/2018

Total: 2 comment(s)

## **Public Comments**

No public comments were received on this application during the comment period.