

FORM  
2A

Rev  
06/19

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:

401656230

Date Received:

05/31/2018

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:

**465461**

Expiration Date:

**06/18/2022**

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

Contact Information

Name: Jennifer Dixon  
Phone: (832) 486-3345  
Fax: ( )  
email: jennifer.a.dixon@cop.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: STATE MASSIVE Number: 5-65 2-3  
County: ARAPAHOE  
QuarterQuarter: SENE Section: 2 Township: 5S Range: 65W Meridian: 6 Ground Elevation: 5828  
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: 1885 feet FNL from North or South section line  
375 feet FEL from East or West section line  
Latitude: 39.647654 Longitude: -104.623836  
PDOP Reading: 1.6 Date of Measurement: 03/22/2018  
Instrument Operator's Name: CHAD MEIERS

LOCAL GOVERNMENT INFORMATION

County: ARAPAHOE Municipality: N/A

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: County

Does the local government with jurisdiction regulate the siting of Oil and Gas Locations, with respect to this COGCC application? If the local government has waived its right to precede the COGCC in siting determination, indicate by selecting "NO" here and selecting "Waived" 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: Administrative Energy Use by Special Review

The local government siting permit was filed on: 10/08/2018

The disposition of the application filed with the local government is: Approved

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:**                      **LOCATION ID #**                      **FORM 2A DOC #**                     



## FACILITIES

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

|                       |                   |                      |                   |                      |                   |                  |                   |                               |                   |
|-----------------------|-------------------|----------------------|-------------------|----------------------|-------------------|------------------|-------------------|-------------------------------|-------------------|
| Wells                 | <u>6</u>          | Oil Tanks*           | <u>7</u>          | Condensate Tanks*    | <u>          </u> | Water Tanks*     | <u>2</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>6</u>          | Separators*          | <u>7</u>          | Injection Pumps*     | <u>          </u> | Cavity Pumps*    | <u>          </u> | Gas Compressors*              | <u>1</u>          |
| Gas or Diesel Motors* | <u>          </u> | Electric Motors      | <u>9</u>          | Electric Generators* | <u>2</u>          | Fuel Tanks*      | <u>1</u>          | LACT Unit*                    | <u>1</u>          |
| Dehydrator Units*     | <u>          </u> | Vapor Recovery Unit* | <u>2</u>          | VOC Combustor*       | <u>2</u>          | Flare*           | <u>2</u>          | Pigging Station*              | <u>1</u>          |

## OTHER FACILITIES\*

| Other Facility Type        | Number |
|----------------------------|--------|
| Gas Lift Flow Control Skid | 1      |
| Power Rack                 | 1      |
| Combustor KO               | 2      |
| Transformer                | 1      |
| Gas Sales Meter            | 1      |
| PLC                        | 1      |
| Flare KO                   | 1      |

\*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 inch Carbon Steel Gas Pipeline 4 inch Carbon Steel Liquid Pipeline 4 inch Composite Water Pipeline The equipment indicated above may be installed for future use.

## CONSTRUCTION

Date planned to commence construction: 07/26/2019 Size of disturbed area during construction in acres: 13.83  
Estimated date that interim reclamation will begin: 04/01/2020 Size of location after interim reclamation in acres: 5.88  
Estimated post-construction ground elevation: 5829

## 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 facility.

Beneficial reuse or land application plan submitted? No

Reuse Facility ID: \_\_\_\_\_ or Document Number: \_\_\_\_\_

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

## SURFACE & MINERALS & RIGHT TO CONSTRUCT

Name: State Land Board

Phone: \_\_\_\_\_

Address: 1127 Sherman St 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 \_\_\_\_\_

## 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:                         | 5280 Feet | 5280 Feet                |
| Building Unit:                    | 5280 Feet | 5280 Feet                |
| High Occupancy Building Unit:     | 5280 Feet | 5280 Feet                |
| Designated Outside Activity Area: | 5280 Feet | 5280 Feet                |
| Public Road:                      | 5280 Feet | 5280 Feet                |
| Above Ground Utility:             | 327 Feet  | 568 Feet                 |
| Railroad:                         | 5280 Feet | 5280 Feet                |
| Property Line:                    | 375 Feet  | 4 Feet                   |
| School Facility::                 | 5280 Feet | 5280 Feet                |
| School Property Line:             | 5280 Feet | 5280 Feet                |
| Child Care Center:                | 5280 Feet | 5280 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** 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: Bresser-Truckton sandy loams, 5 to 20 percent slopes

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

NRCS Map Unit Name: Buick loam, 5 to 9 percent slopes

### 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: 0 Feet

water well: 3428 Feet

Estimated depth to ground water at Oil and Gas Location 25 Feet

Basis for depth to groundwater and sensitive area determination:

Nearest water well is the Rangeview Metro District well Permit # 48145-F 3428' due South of the location

Ground water depth was determined using SLB well permit #178112 4382' SW of location. Static water level of 25'

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 The diameter of the tanks used on this pad will be 15.6'. The location is designed to have 97' from the edge of the tank battery to the adjacent property line.

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.

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.

It is the intent of the County that operators utilize closed-loop or modified closed-loop systems for drilling and completion operations in order to minimize or eliminate the need for earthen pits; however, notwithstanding the foregoing, where appropriate, and subject to prior County approval, the County generally supports: 1) the use of unlined drilling pits when bentonite or a similar clay additive is used during the drilling process, and 2) the use of lined single- or multi-well water storage pits in order to minimize the transport of water and promote recycling, subject to the requirements set forth in this subsection. Permitted modified closed-loop systems include oil and gas wells where air or fresh water is used to drill through the surface casing interval, defined as fifty (50) feet below the depth of the deepest aquifer, and a closed loop system is used for the remainder of the drilling and/or completion or recompletion procedures. Multi-well pits are defined as lined, engineered pits, constructed over an engineered base, with construction or liner specifications meeting or exceeding Commission pit lining rules, that will serve the functions of drilling, completion, and/or flowback pits for more than one well.

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

Signed: \_\_\_\_\_ Date: 05/31/2018 Email: jennifer.a.dixon@cop.com

Print Name: Jennifer Dixon Title: Regulatory Coordinator

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: 6/19/2019

## 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   |
|----------|---|
|          | Location lies within an area of potential shallow groundwater. Operator shall line the production facilities.   |
|          | 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. |
|          | Operator shall comply with all requirements as set forth in the COGCC Notice to Operators for Interim Reclamation.  |

## Best Management Practices

| <b>No</b> | <b>BMP/COA Type</b> | <b>Description</b>  |
|-----------|---------------------|---|
| 1         |                     | <p>Conoco Phillips uses steel secondary containment structures to prevent the discharge of oil from crude oil storage tanks, produced water storage tanks, and portable storage containers.</p> <p>Secondary containment structures for crude oil and produced water storage tanks and separator/production skids are constructed with sufficient capacity to contain, at a minimum, the volume of the largest tank/vessel within the area plus sufficient freeboard for precipitation.</p> <p>All flowline and piping within the production facilities will be lined using a secondary liner.</p>                  |
| 2         |                     | Pollution control containers (spill boxes) are used on truck loading lines and are placed within the limits of the secondary containment system.  |
| 3         |                     | <p>To minimize the potential for release from the facilities, all facilities are capable of being remotely monitored and remotely shut down, which includes isolation at the well head.</p> <p>In addition, Conoco Phillips uses automatic shutdown pressure devices installed on process vessels with remote monitoring capabilities and installed on flowlines from well heads to facilities with remote monitoring capabilities.</p> <p>Automatic shutdown level devices are also installed on each tank with remote monitoring capabilities and are installed on all pressure vessels and liquid knockouts.</p> |
| 4         |                     | To minimize the potential for release into the underlying soils and groundwater, Conoco Phillips will use cathodic protection on buried steel lines to mitigate corrosion and will install engineered liner systems within the secondary steel containment systems for the tank batteries.  |

Total: 4 comment(s)

## Attachment Check List

| <b>Att Doc Num</b> | <b>Name</b>                      |
|--------------------|----------------------------------|
| 1010562            | LOCATION DRAWING                 |
| 1010564            | HYDROLOGY MAP                    |
| 1010669            | DIRECTOR CRITERIA REVIEW SUMMARY |
| 1638312            | SUA                              |
| 1638325            | OTHER                            |
| 401656230          | FORM 2A SUBMITTED                |
| 401656240          | MULTI-WELL PLAN                  |
| 401656407          | NRCS MAP UNIT DESC               |
| 401658313          | LOCATION PICTURES                |
| 401658327          | REFERENCE AREA MAP               |
| 401658329          | REFERENCE AREA PICTURES          |

Total Attach: 11 Files



## General Comments

| <u>User Group</u> | <u>Comment</u>  | <u>Comment Date</u> |
|-------------------|---|---------------------|
| OGLA              | The Director Objective Criteria Review Summary (Doc#1010669 ) is attached to this Form 2A. Following additional analysis of the Director Objective Criteria, the Director determined that this application meets the standard for the protection of public health, safety, welfare, the environment and wildlife resources set by SB 19-181.  | 06/14/2019          |
| Permit            | <ul style="list-style-type: none"> <li>-Changed the construction and the reclamation date to a future date</li> <li>-Corrected the distance to above ground utility to 327'</li> <li>-Attached the SUA PDF as per operator</li> <li>-Passed Permit Review</li> <li>-Passed Final Review</li> </ul>  | 06/11/2019          |
| Permit            | Operator provided local government siting permit status and school and childcare distances via the Local Government Information Google Form - information entered with operator concurrence.  | 06/06/2019          |
| OGLA              | Tanks are greater than 2 diameters from the property line.  | 11/29/2018          |
| OGLA              | <p>This Form 2A Location abuts the existing State Massive Location (Location ID #436514) to the north. Please provide an explanation as to why the existing Location is not being utilized and amended.</p> <ul style="list-style-type: none"> <li>- Due to topographic restraints, this Location requires tiering the construction of the Location and; therefore, the Operator is unable to utilize the existing Locatin.</li> </ul>  | 07/12/2018          |
| OGLA              | <p>Production Facility location differs from the Construction Layout to the Location Drawing.</p> <ul style="list-style-type: none"> <li>- Operator submitting updated Attachments.</li> <li>- Received updated Location Drawing, Access Road Map and Hydrology Map with the modified layout. - 11/29/2018.</li> </ul> <p>Changed the distance to the nearest surface water feature to 0 feet based on the drainage transecting the Location as shown on the Hydriology Map submittedby the Operator.</p> | 07/06/2018          |
| Permit            | Passed Completeness.  | 06/08/2018          |

Total: 7 comment(s)