

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:

400546916

Date Received:

Oil and Gas Location Assessment

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

Submit signed original form. 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:

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: P O BOX 2197

City: HOUSTON State: TX Zip: 77252-2197

Contact Information

Name: Justin Carlile

Phone: (281) 206-5770

Fax: (281) 647-1935

email: justin.carlile@conocophillips.com

RECLAMATION FINANCIAL ASSURANCE

☒ Plugging and Abandonment Bond Surety ID: 20100227 ☐ Gas Facility Surety ID: _____

☐ Waste Management Surety ID: _____

LOCATION IDENTIFICATION

Name: State Massive Number: 1H

County: ARAPAHOE

QuarterQuarter: SENE Section: 2 Township: 5S Range: 65W Meridian: 6 Ground Elevation: 5857

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: 1371 feet FNL from North or South section line

407 feet FEL from East or West section line

Latitude: 39.649067 Longitude: -104.623936

PDOP Reading: 1.2 Date of Measurement: 09/10/2013

Instrument Operator's Name: Loren Shanks

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 | 2 | Oil Tanks | 6 | Condensate Tanks | 1 | Water Tanks | 2 | Buried Produced Water Vaults | |
| Drilling Pits | | Production Pits | | Special Purpose Pits | | Multi-Well Pits | | Temporary Large Volume Above Ground Tanks | |
| Pump Jacks | 2 | Separators | 2 | Injection Pumps | | Cavity Pumps | 1 | | |
| Gas or Diesel Motors | | Electric Motors | | Electric Generators | 1 | Fuel Tanks | | Gas Compressors | 1 |
| Dehydrator Units | 2 | Vapor Recovery Unit | 2 | VOC Combustor | 1 | Flare | 1 | LACT Unit | 2 |
| | | | | | | | | Pigging Station | 2 |

OTHER FACILITIES

Other Facility Type

Number

| | |
|--|--|
| | |
|--|--|

Per Rule 303.b.(3)C, description of all oil, gas, and/or water pipelines:

Possible future plans involve having a gas, water and oil lines leaving the pad from a sales meter. The gas and oil lines would be 4 inches in diameter and made of carbon steel. The water line would be 4.5 inches in diameter and made of composite (Fiberspar or similar product).

CONSTRUCTION

Date planned to commence construction: 04/21/2014

Size of disturbed area during construction in acres: 6.70

Estimated date that interim reclamation will begin: 07/21/2014

Size of location after interim reclamation in acres: 5.00

Estimated post-construction ground elevation: 5853

DRILLING PROGRAM

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

Is H₂S 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: <u>State Land Board</u> | Phone: _____ |
| Address: <u>1127 Sherman St #300</u> | Fax: _____ |
| Address: _____ | Email: _____ |
| City: <u>Denver</u> State: <u>CO</u> Zip: <u>80203</u> | |

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

Distance to nearest:

Building: 1346 Feet
Building Unit: 5280 Feet
High Occupancy Building Unit: 5280 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 3846 Feet
Above Ground Utility: 1944 Feet
Railroad: 5280 Feet
Property Line: 407 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.

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.

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: _____

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: Buick loam, 3 to 5 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: 1278 Feet

water well: 3905 Feet

Estimated depth to ground water at Oil and Gas Location 80 Feet

Basis for depth to groundwater and sensitive area determination:

Water well: Static level 25', Perforated casing (top) 20', Perforated Casing (Bottom) 80'

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: _____

GROUNDWATER BASELINE SAMPLING AND MONITORING AND WATER WELL SAMPLING

Water well sampling required per Rule 609

DESIGNATED SETBACK LOCATION EXCEPTIONS

Check all that apply:

- ☐ Rule 604.a.(1)A. Exception Zone (within 500' of Building Unit)
- ☐ 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

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

Signed: _____ Date: _____ Email: justin.carlile@conocophillips.com

Print Name: Justin Carlile 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: _____

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

| | | |
|---|--------------------------------|---|
| 1 | Drilling/Completion Operations | <p>MEMORANDUM OF UNDERSTANDING</p> <p>This Memorandum of Understanding ("MOU") is made and entered into this ____ day of _____, 2013, by and between Arapahoe County, a Colorado County ("County") with an address of 5334 S. Prince St., Littleton, Colorado 80120 and ("Operator"), with an address of _____. The Operator and the County may be referred to individually as a "Party" or collectively as the "Parties."</p> <p>BACKGROUND</p> <p>A. Operator is the owner or lessee of oil and gas leasehold and/or mineral interests within unincorporated parts of the County, and, as of the time of the execution of this MOU, has the right and intent to further develop its oil and gas leasehold and/or mineral interests within said portion of the County.</p> <p>B. The intent of this MOU is to provide the conditions under which Operator will develop and operate future oil and gas facilities or newly expanded facilities in the unincorporated portions of the County, in order to foster the efficient and economic production of oil and gas resources, to protect human health, safety and welfare and to protect the environment and wildlife resources, while at the same time providing for a predictable and expeditious administrative process for obtaining County land use approvals and permits for oil and gas facilities. The terms "facility" or "facilities" are defined here as including oil and gas wellsites, flowlines, tank batteries, compressor stations, pits/ponds, below-grade tanks, dehydration units, vapor recovery units (VRUs), and associated roads. Pipelines and gathering systems, other than flowlines, as well as salt water disposal wells and injection wells are excluded. Locations with more than one of the above mentioned types of equipment will also be considered to be one facility. Unless indicated otherwise, the definitions of terms used in the MOU shall be the same as in the Colorado Oil and Gas Conservation Commission's ("Commission") Rules.</p> <p>NOW, THEREFORE, the Parties agree as follows:</p> <p>1. Intent to Supplement Commission Rules and Regulations. The Parties recognize that pursuant to the Colorado Oil and Gas Conservation Act, C.R.S. §§ 34-60-101, et seq. ("Act"), the Commission regulates the development and production of oil and gas resources in Colorado, and the Act authorizes the Commission to adopt statewide rules and regulations. The provisions of this MOU are intended to supplement and add to the Commission's rules and regulations. To the extent that any of the provisions of this MOU are in conflict with the Act or COGCC rules and regulations, the stricter standards shall govern.</p> <p>2. Operator's Pit Practices within the County. The Operator will comply, at a</p> |
|---|--------------------------------|---|

minimum, with the following pit practices, after the date of this MOU:

a. Preferred Option: 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.

b. Water Storage Pits to Contain Fresh Water or Brine Water: Water stored in pits approved by the County and allowed under Commission Rules, must meet the definition of fresh water or brine water, except for water stored in pits listed in 2c below. Fresh water is defined as containing total dissolved solids (TDS) less than or equal to 5,000 milligrams/liter (mg/l). Brine water is defined as water produced from an oil and/or gas well with TDS of greater than 5,000 mg/l. The Operator is required to remove all free and visible oil within 24 hours of discovery. Upon closure of the pit, the Operator will ensure the protection of the public health and environment by following all Commission pit closure rules, including collecting analytical data to ensure compliance with state standards. As long as the pit is open and containing fluid, a representative water sample shall be taken every six months from the surface of the pit fluids, the first sample to be taken within 6 months of the pit becoming operational. Water quality data will also include an analysis of Sodium Adsorption Ratio (SAR). The County will review water quality data provided by the Operator every six (6) months. TDS, pH, and specific conductance can be measured with a field meter. TEPH (total extractable petroleum hydrocarbons), BTEX (Benzene, Toluene, Ethylbenzene, and Xylenes), and SAR will be analyzed by an accredited laboratory. If the presence of TEPH and/or BTEX is indicated after County review and/or inspection, other water quality analyses may be required by the County.

c. Additional Pits that Require County Review and Approval: Skimming, settling, percolation, evaporation, and any type of netted pits are generally discouraged by the County; however such pits may be approved on a case-by-case basis through the Use by Special Review ("USR") process. A copy of the Pit Plan submitted to the Commission will be provided to the County at the same time as the plans are submitted to the Commission. Construction of these pits will be preceded by collection of "baseline" soil samples from the center of the planned pit at 6 and 18 inches depth. Soil samples will be analyzed for pH, Sodium Adsorption Ratio (SAR), and Electrical Conductivity (EC). The Operator shall stake and photograph from the center of the planned pit (toward north, south, east, and west directions) for inclusion in the County's copy of the Pit Plan. Upon closure of these pits, pH, SAR, EC, BTEX (Benzene, Toluene, Ethylbenzene, and Xylenes), and TEPH (total extractable petroleum hydrocarbons) analyses may be required if there is evidence of leaks or spills in the immediate area of the pits.

d. Pits That Do Not Require County Approval: Flare, Emergency, Plugging, and Workover pits will not require county review or approval prior to construction (unless within 1/4 mile of a residence as set forth below); however, the County will be copied on the notification(s) sent to the Commission and any pit plans, remediation plans, or analytical results submitted to the Commission.

e. Pit Setbacks: All pit construction within ¼ mile of a residence or water well is generally discouraged by the County and may have additional County requirements, such as fencing. Such pits will be reviewed on a case-by-case basis by the County.

f. Multi-Well Pits: In additi

Total: 1 comment(s)

Attachment Check List

Att Doc Num

Name

| | |
|-----------|-------------------------|
| 400546930 | NRCS MAP UNIT DESC |
| 400547248 | FACILITY LAYOUT DRAWING |
| 400547249 | ACCESS ROAD MAP |
| 400547251 | CONST. LAYOUT DRAWINGS |
| 400547252 | HYDROLOGY MAP |
| 400547254 | LOCATION DRAWING |
| 400547255 | LOCATION PICTURES |
| 400547256 | MULTI-WELL PLAN |
| 400547257 | REFERENCE AREA MAP |
| 400547258 | REFERENCE AREA PICTURES |

Total Attach: 10 Files

General Comments

User Group

Comment

Comment Date

| | | |
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Total: 0 comment(s)