

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:

401262390

Date Received:

04/19/2017

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:

451622

Expiration Date:

08/02/2020

☒ 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: 19160
Name: CONOCO PHILLIPS COMPANY
Address: P O BOX 2197
City: HOUSTON State: TX Zip: 77252-2197

Contact Information

Name: Jennifer Dixon
Phone: (701) 264-4041
Fax: ()
email: jennifer.a.smith@Conocophillips.com

RECLAMATION FINANCIAL ASSURANCE

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

LOCATION IDENTIFICATION

Name: State Challenger 5-65 2-3 Number: 3BYH
County: ARAPAHOE
QuarterQuarter: NWSW Section: 1 Township: 5S Range: 65W Meridian: 6 Ground Elevation: 5843
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: 1514 feet FSL from North or South section line
1165 feet FWL from East or West section line
Latitude: 39.642569 Longitude: -104.618422
PDOP Reading: 1.5 Date of Measurement: 01/16/2017
Instrument Operator's Name: Dallas Nielsen

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>1</u>	Oil Tanks*	<u>5</u>	Condensate Tanks*	<u> </u>	Water Tanks*	<u>1</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>1</u>	Separators*	<u>1</u>	Injection Pumps*	<u> </u>	Cavity Pumps*	<u> </u>	Gas Compressors*	<u> </u>
Gas or Diesel Motors*	<u> </u>	Electric Motors	<u> </u>	Electric Generators*	<u> </u>	Fuel Tanks*	<u> </u>	LACT Unit*	<u>1</u>
Dehydrator Units*	<u>1</u>	Vapor Recovery Unit*	<u>1</u>	VOC Combustor*	<u>2</u>	Flare*	<u>1</u>	Pigging Station*	<u>1</u>

OTHER FACILITIES*

Other Facility Type

Number

Switchrack

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: 10/01/2017 Size of disturbed area during construction in acres: 14.85

Estimated date that interim reclamation will begin: 04/01/2018 Size of location after interim reclamation in acres: 6.11

Estimated post-construction ground elevation: 5840

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 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: State Board of Land Commi

Phone: _____

Address: 1127 Sherman Street

Fax: _____

Address: Suite 300

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:	4075 Feet	3716 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:	1488 Feet	1338 Feet
Above Ground Utility:	1506 Feet	1109 Feet
Railroad:	5280 Feet	5280 Feet
Property Line:	1165 Feet	790 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: Bresser-Truckton sandy loams, 5 to 20 percent slopes

NRCS Map Unit Name: Bresser-Truckton sandy loams, 3 to 5 percent slopes

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: _____ 0 Feet

water well: _____ 1886 Feet

Estimated depth to ground water at Oil and Gas Location _____ 8 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	<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>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>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.</p> <p>Additional Reference Area pictures will be taken during growing season and submitted via Sundry Notice within a year of approval of Form 2A.</p> <p>The acreage breakdown is as follows: This number included: 2.15 acres for access road that should not have been included in the original total (correcting our total initial disturbance to 14.85 acres) .8 of an acre for top soil and spoil piles (pile heights are dictated by local county requirements) .2 of an acre for sediment basin 7.67 acres for construction area, drainage ditches, cut and fill sloping and misc BMPs 4.13 acres of gravel pad for operations area 1.98 acres of gravel road entry 8.74 acres of the 14.85 acres will be seeded and mulched to stabilize the soil once construction is completed leaving 6.11 acres of gravel pad and roadway. This pad is designed to minimize redisturbance for a phase two expansion to include up to four additional wells. Prior to phase two construction, the 2A will be amended to reflect the changes to the current OGLA. During phase two expansion, 9.58 additional acres will be disturbed, 4.76 of which will be reseeded and mulched. Leaving a total gravel pad and roadway size of 10.93 acres with 11.5 acres of cut/fill and BMPs that are reseeded and mulched, approximately 1.5 acres will be contoured and returned to the surface owner as part of interim reclamation.</p>
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I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.

Signed: _____ Date: 04/19/2017 Email: jennifer.a.smith@Conocophillips.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: 8/3/2017

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

	Operator shall comply with all requirements as set forth in the COGCC Notice to Operators for Interim Reclamation. Operator concurrence - 08/01/2017
	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 employ stormwater controls around the drainage located along the northern portion of the disturbance to prevent migration of stormwater, sediment or other contaminants into the creek to the north of the Location.

Best Management Practices

No BMP/COA Type

Description

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Attachment Check List

Att Doc Num

Name

1010247	CORRESPONDENCE
401262390	FORM 2A SUBMITTED
401262570	ACCESS ROAD MAP
401262571	CONST. LAYOUT DRAWINGS
401262572	HYDROLOGY MAP
401262574	LOCATION DRAWING
401262576	LOCATION PICTURES
401262577	MULTI-WELL PLAN
401262579	REFERENCE AREA MAP
401262580	REFERENCE AREA PICTURES
401262584	OTHER
401279747	NRCS MAP UNIT DESC
401279757	NRCS MAP UNIT DESC

Total Attach: 13 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Final Review	IN PROCESS - OGLA added COAs for interim reclamation.	08/03/2017
Final Review	ON HOLD for clarification of area of disturbance and interim reclamation details.	07/25/2017
Permit	Final review complete. No LGD or public comment received.	07/21/2017
Permit	State Land Board has been contacted to verify surface restoration bond and/or lease; SLB confirms there is no objection to this permit application.	07/21/2017
OGLA	<p>Per Operator request, added the following acreage breakdown to the Submit Tab:</p> <p>This number included:</p> <p>2.15 acres for access road that should not have been included in the original total (correcting our total initial disturbance to 14.85 acres)</p> <p>.8 of an acre for top soil and spoil piles (pile heights are dictated by local county requirements)</p> <p>.2 of an acre for sediment basin</p> <p>7.67 acres for construction area, drainage ditches, cut and fill sloping and misc BMPs</p> <p>4.13 acres of gravel pad for operations area</p> <p>1.98 acres of gravel road entry</p> <p>8.74 acres of the 14.85 acres will be seeded and mulched to stabilize the soil once construction is completed leaving 6.11 acres of gravel pad and roadway.</p> <p>This pad is designed to minimize redisturbance for a phase two expansion to include up to four additional wells. Prior to phase two construction, the 2A will be amended to reflect the changes to the current OGLA.</p> <p>During phase two expansion, 9.58 additional acres will be disturbed, 4.76 of which will be reseeded and mulched. Leaving a total gravel pad and roadway size of 10.93 acres with 11.5 acres of cut/fill and BMPs that are reseeded and mulched, approximately 1.5 acres will be contoured and returned to the surface owner as part of interim reclamation.</p>	06/23/2017
Permit	<p>Updated Operator Contact and Submitter Info per Operator request.</p> <p>Initial permitting review complete.</p>	06/20/2017
OGLA	<p>Operator is working on compliance with the Interim Reclamation NTO for multiple phases of development of this Location.</p> <p>Location is planned for multi-phase development of additional wells. Operator will be submitting modified attachments for this Location.</p> <p>- No modifications. Operator submitted a summary breakdown of the acreages. - 06/19/2017</p> <p>- Changed acreages based on the Operator breakdown.</p>	06/07/2017
OGLA	<p>Changed Depth to Groundwater to 8 feet based on the static water level reported at DWR Water Well Permit #48445.</p> <p>Changed Sensitive Area to YES. Operator uses a pitless system. No additional COAs for groundwater protection are warranted at this time.</p> <p>Unchecked the State floodplain box as the COGIS Floodplain Layer are the Federal FEMA Maps.</p> <p>Changed distance to the nearest surface water feature to 0 feet based on the drainage that transects the northern portion of the pad.</p>	06/07/2017
Permit	Passed Completeness.	05/17/2017
Permit	<p>Returned to Draft</p> <p>Need NRCS data attached</p>	04/24/2017

Total: 10 comment(s)