

FORM

2

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:

400708317

APPLICATION FOR PERMIT TO:

☒ Drill
 ☐ Deepen
 ☐ Re-enter
 ☐ Recomplete and Operate

Date Received:

10/15/2014

TYPE OF WELL OIL ☒ GAS ☐ COALBED ☐ OTHER Lateral HoleRefilling ☐ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐Sidetrack ☒Well Name: Beaver 5-65 34-35Well Number: 2HName of Operator: CONOCO PHILLIPS COMPANYCOGCC Operator Number: 19160Address: P O BOX 2197City: HOUSTONState: TXZip: 77252-2197Contact Name: Justin CarlilePhone: (281)206-5770Fax: (281)647-1935Email: ali.savage@conocophillips.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20100227

WELL LOCATION INFORMATION

QtrQtr: SWNE Sec: 35 Twp: 5S Rng: 65W Meridian: 6Latitude: 39.576600Longitude: -104.631350
 Footage at Surface: 1373 feet FNL/FSL FNL 2278 feet FEL/FWL FEL
Field Name: WILDCATField Number: 99999Ground Elevation: 6087County: ARAPAHOE

GPS Data:

Date of Measurement: 06/30/2014 PDOP Reading: 1.2 Instrument Operator's Name: Dallas NielsenIf well is ☐ Directional ☒ Horizontal (highly deviated) **submit deviated drilling plan.**
 Footage at Top of Prod Zone: FNL/FSL 2210 FNL 2200 FWL 2210 FNL 525 FWL 2210
 Sec: 35 Twp: 5S Rng: 65W Sec: 34 Twp: 5S Rng: 65W

LOCATION SURFACE & MINERALS & RIGHT TO CONSTRUCT

Surface Ownership: ☐ Fee ☒ State ☐ Federal ☐ IndianThe Surface Owner is: ☒ is the mineral owner beneath the location.(check all that apply) ☒ 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 ☐ IndianThe Minerals beneath this Oil and Gas Location will be developed by this Well: YesThe right to construct the Oil and Gas Location is granted by: oil and gas lease

Surface damage assurance if no agreement is in place: _____

Surface Surety ID: _____

LEASE INFORMATION

Using standard QtrQtr, Sec, Twp, Rng format, describe one entire mineral lease that will be produced by this well (Describe lease beneath surface location if produced. Attach separate description page or map if necessary.)

See Attached

Total Acres in Described Lease: 21037 Described Mineral Lease is: ☐ Fee ☒ State ☐ Federal ☐ Indian
Federal or State Lease # 1960.12
Distance from Completed Portion of Wellbore to Nearest Lease Line of described lease: 600 Feet

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 4643 Feet
Building Unit: 4730 Feet
High Occupancy Building Unit: 5280 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 3880 Feet
Above Ground Utility: 3939 Feet
Railroad: 5280 Feet
Property Line: 1373 Feet

INSTRUCTIONS:

- All measurements shall be provided from center of the Proposed Well to nearest of each cultural feature as described in Rule 303.a.(5).
- 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: _____

SPACING and UNIT INFORMATION

Distance from Completed Portion of Wellbore to Nearest Wellbore Permitted or Completed in the same formation: 13841 Feet
Distance from Completed Portion of Wellbore to Nearest Unit Boundary 600 Feet (Enter 5280 for distance greater than 1 mile.)
Federal or State Unit Name (if appl): _____ Unit Number: _____

SPACING & FORMATIONS COMMENTS

OBJECTIVE FORMATIONS

Objective Formation(s)	Formation Code	Spacing Order Number(s)	Unit Acreage Assigned to Well	Unit Configuration (N/2, SE/4, etc.)
NIOBRARA	NBRR	535-514	960	W/2 S. 35, All S. 34

DRILLING PROGRAM

Proposed Total Measured Depth: 15370 Feet
Distance to nearest permitted or existing wellbore penetrating objective formation: 653 Feet (Including plugged wells)
Will a closed-loop drilling system be used? Yes
Is H₂S gas reasonably expected to be encountered during drilling operations at concentrations greater than or equal to 100 ppm? No (If Yes, attach an H₂S Drilling Operations Plan)
Will salt sections be encountered during drilling? No

Will salt based (>15,000 ppm Cl) drilling fluids be used? No

Will oil based drilling fluids be used? Yes

BOP Equipment Type: ☒ Annular Preventor ☒ Double Ram ☒ Rotating Head ☐ None

GROUNDWATER BASELINE SAMPLING AND MONITORING AND WATER WELL SAMPLING

Water well sampling required per Rule 609

DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE Drilling Fluids Disposal Methods: Recycle/reuse

Cuttings 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:

CASING PROGRAM

Casing Type	Size of Hole	Size of Casing	Wt/Ft	Csg/Liner Top	Setting Depth	Sacks Cmt	Cmt Btm	Cmt Top
CONDUCTOR	24+0/0	16+0/0	39.7	0	100	50	100	0
SURF	13+1/2	9+5/8	36	0	2521	780	2521	0
1ST	8+3/4	5+1/2	23	0	15370	1840	15370	2521

☐ Conductor Casing is NOT planned

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)

GREATER WATTENBERG AREA LOCATION EXCEPTIONS

Check all that apply:

- ☐ Rule 318A.a. Exception Location (GWA Windows).
- ☐ Rule 318A.c. Exception Location (GWA Twinning).

RULE 502.b VARIANCE REQUEST

☐ Rule 502.b. Variance Request from COGCC Rule or Spacing Order Number


OTHER LOCATION EXCEPTIONS

Check all that apply:

- ☐ Rule 318.c. Exception Location from Rule or Spacing Order Number
- ☐ Rule 603.a.(2) Exception Location (Property Line Setback).

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 application is in a Comprehensive Drilling Plan _____ CDP #: _____	
Location ID: _____	
Is this application being submitted with an Oil and Gas Location Assessment application? _____ Yes	
I hereby certify all statements made in this form are, to the best of my knowledge, true, correct, and complete.	
Signed: _____ Print Name: Justin Carlile	
Title: Regulatory Specialist Date: 10/15/2014 Email: ali.savage@conocophillips.com	
Operator must have a valid water right or permit allowing for industrial use or purchased water from a seller that has a valid water right or permit allowing for industrial use, otherwise an application for a change in type of use is required under Colorado law. Operator must also use the water in the location set forth in the water right decree or well permit, otherwise an application for a change in place of use is required under Colorado law. Section 37-92-103(5), C.R.S. (2011).	
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: 3/16/2015	
Expiration Date: 03/15/2017	
<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> API NUMBER 05 005 07241 01 </div>	

Conditions Of Approval

All representations, stipulations and conditions of approval stated in the Form 2A for this location shall constitute representations, stipulations and conditions of approval for this Form 2 Permit-to-Drill and are enforceable to the same extent as all other representations, stipulations and conditions of approval stated in this Permit-to-Drill.

COA Type

Description

	FOR LATERAL 2) Comply with Rule 317.i and provide cement coverage from TD to a minimum of 200' above Niobrara. Verify coverage with cement bond log. 3) Comply with Rule 321. Run and submit Directional Survey from TD to base of surface casing. Ensure that the wellbore complies with setback requirements in commission orders or rules prior to producing the well.
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Best Management Practices

No BMP/COA Type

Description

1	Drilling/Completion Operations	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.
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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 addition to any requirements stated above, multi-well pits will be lined per the Commission's lining standards. If a multi-well pit is planned for use over a 2-year or greater period, the pit will be double-lined with leak detection. Fluids stored in multi-well pits will be circulated through a four-phase separator or an API-approved settling tank or similar equipment prior to such fluids entering the pit, specifically designed to remove solids and reduce hydrocarbon content and emissions. Retention time in a settling tank and the volume of the tank must be sufficient to separate out any floating, dissolved, or emulsified hydrocarbon phases. Lined multi-well pits may be inspected and/or reviewed on an as-needed basis, over the life of the pit, to determine if the water to be stored in the pit or already stored in the pit meets the definition of fresh water or brine water. 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 from the surface of the pit every six months. Additional requirements, such as fencing, may be required by the County, pre- or post-construction, if such a pit is determined by the County to be adversely impacting residences, water wells, or wildlife habitats and migrations.

	<p>g. Technological Advances: The County may require additional measures, if new technological methods for pit construction or maintenance are developed pre- or post-construction and such methods are technologically sound, economically practical, and reasonably available to the Operator.</p> <p>3. Berms. Berms shall be inspected by Operator on a weekly basis for evidence of discharge. Berms shall be inspected within 48 hours of a precipitation event.</p> <p>4. Regular Meetings to Monitor and Discuss MOU Issues. The County and Operator agree to meet quarterly or as necessary, to monitor and discuss any pertinent issues associated with oil and gas facilities within the County.</p> <p>5. Water Supply and Quality. In an effort to reduce truck traffic, where feasible, the Operator will identify a water source lawfully available for industrial use, including oil and gas development, close to the facility location, to be utilized by Operator and its suppliers. Operator will comply with the Colorado Department of Public Health and Environment requirements concerning water quality. Where feasible, temporary surface water lines are encouraged and will be utilized. Operator may be permitted to utilize County Road Right-of-Way, and County drainage culverts, where practical, for the laying and operation of temporary water li</p>
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Total: 1 comment(s)

Applicable Policies and Notices to Operators

Notice Concerning Operating Requirements for Wildlife Protection.

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
2238333	DEVIATED DRILLING PLAN
2238334	WELL LOCATION PLAT
400708317	FORM 2 SUBMITTED
400708328	OffsetWellEvaluations Data
400708330	LEGAL/LEASE DESCRIPTION
400789510	DIRECTIONAL DATA
400806551	OffsetWellEvaluations Data
400806556	OffsetWellEvaluations Data
400806558	OffsetWellEvaluations Data

Total Attach: 9 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed. No LGD or public comment received.	3/16/2015 8:09:20 AM
Permit	Operator revised top of zone and BHL to avoid offset well mitigation. Operator revised Deviated Drilling Plan, Well Location Plat and Deviated Drilling spreadsheet.	2/9/2015 2:04:08 PM
Permit	Operator added Spacing Order 535-514.	11/11/2014 9:30:35 AM
Permit	This application is for a HZ sidetrack off pilot well DocNum 400708298.	11/11/2014 8:04:42 AM
Permit	Passed Completeness	10/17/2014 9:04:35 AM

Total: 5 comment(s)