

State of Colorado
Oil and Gas Conservation Commission1120 Lincoln Street, Suite 801, Denver, Colorado 80203
Phone: (303) 894-2100 Fax: (303) 894-2109

Document Number:

401146268

Date Received:

01/23/2017

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:

449965

Expiration Date:

04/08/2020☒ 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: 96155

Name: WHITING OIL & GAS CORPORATION

Address: 1700 BROADWAY STE 2300

City: DENVER State: CO Zip: 80290

Contact Information

Name: Michael Brown

Phone: (307) 237-9310

Fax: ()

email: ml_brown@bresnan.net

RECLAMATION FINANCIAL ASSURANCE

☒ Plugging and Abandonment Bond Surety ID: 20030110☐ Gas Facility Surety ID: _____☐ Waste Management Surety ID: _____

LOCATION IDENTIFICATION

Name: Razor

Number: 27IW Pad

County: WELD

QuarterQuarter: NESE Section: 27 Township: 10N Range: 58W Meridian: 6 Ground Elevation: 4775

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: 2531 feet FSL from North or South section line

1312 feet FEL from East or West section line

Latitude: 40.808764 Longitude: -103.846414

PDOP Reading: 1.4 Date of Measurement: 11/25/2015

Instrument Operator's Name: Greg Weimer

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 #

Well Site is served by Production Facilities

433999

FACILITIES

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

| | | | | | | | | | |
|-----------------------|---|----------------------|--|----------------------|--|------------------|--|-------------------------------|--|
| Wells | 4 | Oil Tanks* | | Condensate Tanks* | | Water Tanks* | | Buried Produced Water Vaults* | |
| Drilling Pits | | Production Pits* | | Special Purpose Pits | | Multi-Well Pits* | | Modular Large Volume Tanks | |
| Pump Jacks | 4 | Separators* | | Injection Pumps* | | Cavity Pumps* | | Gas Compressors* | |
| Gas or Diesel Motors* | | Electric Motors | | Electric Generators* | | Fuel Tanks* | | LACT Unit* | |
| Dehydrator Units* | | Vapor Recovery Unit* | | VOC Combustor* | | Flare* | | Pigging Station* | |

OTHER FACILITIES*

Other Facility Type

Number

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:

The approximate length of pipeline to be constructed is 640 feet to the Razor 271 Pad. All displaced materials shall be placed back into the cleared route once construction is completed. Pipeline construction will not block or change the natural course of any drainage. The pipeline will be buried wherever possible. The pipeline will be buried a minimum of 30" below the surface at all locations. Pipeline trenches shall be maintained in order to correct settlement and erosion. The pipelines will be a 8" or 6" production and 6" or 4" test. All lines will be welded steel.

CONSTRUCTION

Date planned to commence construction: 03/01/2017 Size of disturbed area during construction in acres: 5.06

Estimated date that interim reclamation will begin: 09/01/2017 Size of location after interim reclamation in acres: 3.50

Estimated post-construction ground elevation: 4771

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? No

DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE

Drilling Fluids Disposal Method: Commercial Disposal

Cutting Disposal: ONSITE

Cuttings Disposal Method: Other

Other Disposal Description:

Remediation

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: Betty Jean Castor

Phone: _____

Address: c/o Wells Fargo Bank

Fax: _____

Address: PO Box 5383

Email: _____

City: Denver State: CO Zip: 80217

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: | 2425 Feet | Feet |
| Building Unit: | 5280 Feet | Feet |
| High Occupancy Building Unit: | 5280 Feet | Feet |
| Designated Outside Activity Area: | 5280 Feet | Feet |
| Public Road: | 3981 Feet | Feet |
| Above Ground Utility: | 218 Feet | Feet |
| Railroad: | 5280 Feet | Feet |
| Property Line: | 297 Feet | 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: 27—Epping silt loam

NRCS Map Unit Name: 31—Kim-Mitchell

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: 11/25/2015

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: 1533 Feet

water well: 2262 Feet

Estimated depth to ground water at Oil and Gas Location 37 Feet

Basis for depth to groundwater and sensitive area determination:

Water Well Permit #78166 Located from topo sheet, not COGCC coordinates.

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

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

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

Signed: _____ Date: 01/23/2017 Email: ml_brown@bresnan.net

Print Name: Michael Brown Title: Agent

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: Matthew Lee Director of COGCC Date: 4/9/2017

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 manage noxious weeds in accordance with a weed management plan, if required by the Colorado Noxious Weed Act, to prevent the spread of noxious weeds and to eradicate or control, as necessary, existing noxious weeds. |
| | Operator shall minimize post-completion disturbance per Rule 1003. |
| | Onsite treatment and reuse of drill cuttings must be successfully completed prior to the indicated date that Interim Reclamation will begin. In the event that treatment and reuse of drill cuttings is not completed prior to this date, Operator shall submit a 502.b Variance Request Letter to extend the time period or dispose of the drill cuttings at commercial facility. |

Best Management Practices

| <u>No</u> | <u>BMP/COA Type</u> | <u>Description</u> |
|------------------|--|---|
| 1 | Storm Water/Erosion Control | Stormwater management plans (SWMP) are in place to address construction, drilling and operations associated with oil and gas development throughout the State of Colorado. BMPs will be constructed as necessary to prevent stormwater from leaving the construction site. BMPs used will vary according to the location, and will remain until the pad is reclaimed. |
| 2 | Material Handling and Spill Prevention | <p>Spill Prevention Control and Countermeasures (SPCC) plans are in place to address any possible spill associated with oil and gas operations throughout the State of Colorado.</p> <ul style="list-style-type: none"> • Materials and fluids will be stored in a neat and orderly fashion. • Waste will be collected regularly and disposed of at an offsite facility. • Prompt cleanup is required of spills to minimize waste materials entering the stormwater runoff. • Drip pans will be used during fueling and maintenance to contain spills or leaks. • Cleanup of trash and discarded material will be done at the end of the work day. • Cleanup will consist of monitoring the road, location and any other work areas. • Material to be cleaned up includes trash, scrap, and contaminated soil. |

Total: 2 comment(s)

Attachment Check List

| <u>Att Doc Num</u> | <u>Name</u> |
|---------------------------|-------------------------|
| 401146268 | FORM 2A SUBMITTED |
| 401146680 | NRCS MAP UNIT DESC |
| 401146684 | NRCS MAP UNIT DESC |
| 401146689 | ACCESS ROAD MAP |
| 401146715 | LOCATION DRAWING |
| 401146717 | LOCATION PICTURES |
| 401146722 | REFERENCE AREA MAP |
| 401163406 | WASTE MANAGEMENT PLAN |
| 401163500 | REFERENCE AREA PICTURES |
| 401163858 | HYDROLOGY MAP |
| 401163859 | MULTI-WELL PLAN |

Total Attach: 11 Files

General Comments

| <u>User Group</u> | <u>Comment</u> | <u>Comment Date</u> |
|-------------------|---|---------------------|
| Permit | Final review complete. LGD and public comments received and included with permit application. | 04/07/2017 |
| Permit | Initial permitting review complete. | 04/06/2017 |
| Permit | Operator confirms this location will have 4 wells permitted on it; currently only 2 APDs are in process. The remaining two APDs will be submitted at a later date. | 04/06/2017 |
| OGLA | <p>The following comment was received by COGCC staff prior to the Public Comment period:</p> <p>Subject: CPW recommends Burrowing Owl Survey Text: In T10N, R58W, Sec. 27 (NESE and NWSW), there is an extensive prairie dog town, which is potential burrowing owl habitat. The burrowing owl is currently listed as a state threatened species. Should initial site disturbance occur within a prairie dog town during the burrowing owl's nesting season (March 15 to October 31), CPW recommends that the operator conduct a burrowing owl survey. One survey consists of three site visits each separated by one week.</p> <p>Burrowing owl survey protocol - https://cpw.state.co.us/Documents/WildlifeSpecies/LivingWithWildlife/RecommendedSurveyOwls.pdf</p> <p>If you have any questions, please feel free to contact me.</p> <p>Name: CO Parks and Wildlife - Brandon Marette (NE Region Energy Liaison) E-mail: brandon.marette@state.co.us Phone: 303-291-7327</p> | 02/16/2017 |
| OGLA | OGLA task passed. | 02/15/2017 |
| OGLA | OGLA review complete. Waiting on Public Comment period. | 02/09/2017 |
| LGD | This proposed oil and gas facility is located in unincorporated Weld County. The COGCC Form 2A for this location was submitted on or before February 1, 2017 and the proposed location is considered a Use by Right in the Agricultural Zoned District with no Weld Oil and Gas Location Assessment (WOGLA) required. A building permit is required for the production facilities (tank battery, separators, pump jacks, compressors, generators, etc.) from the Department of Planning Services. Access points from a County road require an Access Permit from the Department of Public Works, which includes any necessary traffic control plans and Improvement Agreements. The use of a right-of-way requires a Right-Of-Way Permit from the Department of Public Works. Troy Swain, Weld Oil/Gas Liaison and LGD (970) 400-3579. | 01/26/2017 |
| Permit | Operator corrected longitude to -103.846414. | 01/25/2017 |
| Permit | Passes completeness. Question on qtr/qtr designation and longitude. | 01/25/2017 |

Total: 9 comment(s)