

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:

400887597

0

Date Received:

12/21/2015

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:

445237

Expiration Date:

03/28/2019

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: 100322
 Name: NOBLE ENERGY INC
 Address: 1625 BROADWAY STE 2200
 City: DENVER State: CO Zip: 80202

Contact Information

Name: Jan Kajiwara
 Phone: (303) 228-4092
 Fax: (303) 228-4286
 email: jan.kajiwara@nblenergy.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20030009 Gas Facility Surety ID: _____
 Waste Management Surety ID: _____

LOCATION IDENTIFICATION

Name: LC24-6 Number: Tank
 County: WELD
 Quarter: SENE Section: 24 Township: 9N Range: 59W Meridian: 6 Ground Elevation: 4864

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: 2040 feet FNL from North or South section line
1770 feet FWL from East or West section line

Latitude: 40.738020 Longitude: -103.929350

PDOP Reading: 1.8 Date of Measurement: 05/08/2014

Instrument Operator's Name: Owen McKee

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 # |
| Production Facilities Location serves Well(s) | _____ | 400887588 |
| | _____ | 400887596 |
| | _____ | 400887592 |
| | _____ | 400887582 |

FACILITIES

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

| | | | | |
|-----------------------------|------------------------------|------------------------------|------------------------|---------------------------------------|
| Wells _____ | Oil Tanks* _____ 8 | Condensate Tanks* _____ | Water Tanks* _____ 10 | Buried Produced Water Vaults* _____ 2 |
| Drilling Pits _____ | Production Pits* _____ | Special Purpose Pits _____ | Multi-Well Pits* _____ | Modular Large Volume Tanks _____ |
| Pump Jacks _____ | Separators* _____ 11 | Injection Pumps* _____ | Cavity Pumps* _____ | Gas Compressors* _____ 2 |
| Gas or Diesel Motors* _____ | Electric Motors _____ | Electric Generators* _____ 2 | Fuel Tanks* _____ | LACT Unit* _____ 1 |
| Dehydrator Units* _____ | Vapor Recovery Unit* _____ 5 | VOC Combustor* _____ 11 | Flare* _____ 1 | Pigging Station* _____ |

OTHER FACILITIES*

| | |
|----------------------------|---------------|
| Other Facility Type | Number |
|----------------------------|---------------|

| Other Facility Type | Number |
|---------------------|--------|
| heater treater | 1 |
| IA compressor skid | 1 |
| blowcase | 3 |
| sand catchers | 11 |
| maintenance tank | 1 |
| meter buildings | 6 |
| scrubber | 2 |
| knockout drums | 4 |
| VRT | 2 |

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:

One (1) 8" steel oil gathering line, one (1) 16" steel gas gathering line

CONSTRUCTION

Date planned to commence construction: 05/01/2016 Size of disturbed area during construction in acres: 19.30
 Estimated date that interim reclamation will begin: 01/01/2017 Size of location after interim reclamation in acres: 8.00
 Estimated post-construction ground elevation: 4864

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: _____ Drilling Fluids Disposal Method: _____

Cutting Disposal: _____ Cuttings Disposal Method: _____

Other Disposal Description:

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: Timbro Ranch & Cattle LLC

Phone: _____

Address: P.O. Box 367

Fax: _____

Address: _____

Email: _____

City: Springfield State: NE Zip: 68059

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: No

The right to construct this Oil and Gas Location is granted by: Surface Use Agreement

Surface damage assurance if no agreement is in place: _____ Surface Surety ID: _____

Date of Rule 306 surface owner consultation 04/10/2014

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: | _____ Feet | 5280 Feet |
| Building Unit: | _____ Feet | 5280 Feet |
| High Occupancy Building Unit: | _____ Feet | 5280 Feet |
| Designated Outside Activity Area: | _____ Feet | 5280 Feet |
| Public Road: | _____ Feet | 2094 Feet |
| Above Ground Utility: | _____ Feet | 2040 Feet |
| Railroad: | _____ Feet | 5280 Feet |
| Property Line: | _____ Feet | 103 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.

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 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: 31: Kim-Mitchell Complex, 0 to 6 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: 04/22/2014

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: 2059 Feet

water well: 3411 Feet

Estimated depth to ground water at Oil and Gas Location 87 Feet

Basis for depth to groundwater and sensitive area determination:

Based on distance to surface water and water wells, we have determined this not a sensitive area. Nearest water well Permit 37155.

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 N/A

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 Due to property located in the W/2NW/4 of Sec. 24 owned by USA, the access road to this location will track from the north thru Sec. 13. Noble's tanks will be in compliance with COGCC Rule 605.a(2).

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.
 Signed: _____ Date: 12/21/2015 Email: regulatorynotification@nobleenergyinc.com
 Print Name: Jan Kajiwara Title: Regulatory Analyst III

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: 3/29/2016

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.

| <u>COA Type</u> | <u>Description</u> |
|------------------------|---------------------------|
| | |

Best Management Practices

| No | BMP/COA Type | Description |
|----|--|---|
| 1 | General Housekeeping | Housekeeping will consist of neat and orderly storage of materials and fluids. Wastes will be temporarily stored in sealed containers and regularly collected and disposed of at offsite, suitable facilities. If spills occur prompt cleanup is required to minimize any commingling of waste materials with stormwater runoff. Routine maintenance will be limited to fueling and lubrication of equipment. Drip pans will be used during routine fueling and maintenance to contain spills or leaks. Any waste product from maintenance will be containerized and transported offsite for disposal or recycling. There will be no major equipment overhauls conducted onsite. Equipment will be transported offsite for major overhauls. Cleanup of trash and discarded materials will be conducted at the end of each work day. Cleanup will consist of patrolling the roadway, access areas, and other work areas to pickup trash, scrap debris, other discarded materials, and any contaminated soil. These materials will be disposed of properly. |
| 2 | Storm Water/Erosion Control | Stormwater management plans (SWMP) are in place to address construction, drilling and operations associated with Oil & Gas development throughout the state of Colorado in accordance with Colorado Department of Public Health and Environment (CDPHE) General Permit No. COR- 038637. BMP's will be constructed around the perimeter of the site prior to, or at the beginning of construction. BMP's used will vary according to the location, and will remain in place and maintained until the pad reaches final reclamation. |
| 3 | Material Handling and Spill Prevention | Spill Prevention Control and Countermeasures (SPCC) plans are in place to address any possible spill associated with Oil & Gas operations throughout the state of Colorado in accordance with CFR 112. |
| 4 | Construction | <ol style="list-style-type: none"> 1. A contiguous spray liner will be installed and will underlay the entire tank battery. The location of a partially buried cement water vault will be excavated prior to liner install. 2. A 60 bbl cement water vault will be utilized to collect excess produced water from oil tanks. Produced water in the vault will be removed as needed and disposed of in an approved UIC disposal well. The cement water vault is one piece with no seams designed to minimize potential for leaks. All piping associated with the use of the water vault will be aboveground and visually inspected on a regular basis. 3. The partially buried cement water vault will be installed above the spray in liner. 4. A sized steel secondary containment ring will be installed surrounding the entire tank battery. Sand and gravel bedding will be installed to protect the liner prior to placing equipment in the containment area. |

Total: 4 comment(s)

Attachment Check List

| <u>Att Doc Num</u> | <u>Name</u> |
|--------------------|-------------------------|
| 2477813 | CORRESPONDENCE |
| 2477814 | FACILITY LAYOUT DRAWING |
| 2477815 | CORRESPONDENCE |
| 400887597 | FORM 2A SUBMITTED |
| 400900244 | LOCATION PICTURES |
| 400900246 | LOCATION DRAWING |
| 400900249 | REFERENCE AREA PICTURES |
| 400900250 | REFERENCE AREA MAP |
| 400900251 | HYDROLOGY MAP |
| 400900252 | ACCESS ROAD MAP |
| 400900258 | NRCS MAP UNIT DESC |
| 400900259 | WASTE MANAGEMENT PLAN |
| 400922022 | SURFACE AGRMT/SURETY |

Total Attach: 13 Files

General Comments

| <u>User Group</u> | <u>Comment</u> | <u>Comment Date</u> |
|-------------------|---|--------------------------|
| Permit | Final Review Completed. | 3/21/2016 11:37:51 AM |
| OGLA | IN PROCESS - Operator provided a scaled Facility Layout Drawing and indicated the after interim reclamation size to be 8 acres. Weld County LGD has indicated this location is a Use By Right. OGLA review complete and task passed. | 2/10/2016 2:14:42 PM |
| OGLA | ON HOLD - Requested a scaled Facility Layout Drawing to better understand why such a large surface disturbance is being proposed. Becasue no wells are proposed on this location, the data fields indicating permit applications are included, the drilling waste management program info, and the applicable groundwater baseline sampling rule on the 2A were cleared. Due by 2/14/16. | 1/14/2016 3:19:17 PM |
| LGD | Oil and Gas Exploration and Production activities are currently considered a Use by Right in the Agricultural Zoned District and no land use permitting is required by the County. A building permit is required for the production facilities (tank battery, separators, and pump jacks) from the Department of Planning Services. A new or expanded access from a county road or the use of a right-of-way requires a permit from the Department of Public Works. Troy Swain, Weld Oil and Gas Liaison and LGD (970) 353-6100, ext. 3579. | 1/7/2016 9:49:34 AM |
| Permit | Passed completeness. | 12/23/2015 8:45:24 AM |

Total: 5 comment(s)