

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:

400548991

Date Received:

06/06/2014

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:

438088

Expiration Date:

07/11/2017

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) 4286
email: jkajiwara@nobleenergyinc.com

RECLAMATION FINANCIAL ASSURANCE

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

LOCATION IDENTIFICATION

Name: Little State Number: LD11-75-1BHN P

County: WELD

Quarter: SWSE Section: 2 Township: 9N Range: 58W Meridian: 6 Ground Elevation: 4677

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: 465 feet FSL from North or South section line

1953 feet FEL from East or West section line

Latitude: 40.774600 Longitude: -103.828710

PDOP Reading: 1.5 Date of Measurement: 09/06/2013

Instrument Operator's Name: Brian Rottinghaus

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)

400575873

400548467

FACILITIES

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

| | | | | | | | | | |
|----------------------|-----------------|---------------------|-----------------|----------------------|-----------------|-----------------|-----------------|---|-----------------|
| Wells | <u>10</u> | Oil Tanks | <u>62</u> | Condensate Tanks | <u> </u> | Water Tanks | <u>25</u> | Buried Produced Water Vaults | <u>6</u> |
| Drilling Pits | <u> </u> | Production Pits | <u> </u> | Special Purpose Pits | <u> </u> | Multi-Well Pits | <u> </u> | Temporary Large Volume Above Ground Tanks | <u> </u> |
| Pump Jacks | <u>10</u> | Separators | <u>41</u> | Injection Pumps | <u> </u> | Cavity Pumps | <u> </u> | | |
| Gas or Diesel Motors | <u> </u> | Electric Motors | <u> </u> | Electric Generators | <u> </u> | Fuel Tanks | <u> </u> | Gas Compressors | <u>10</u> |
| Dehydrator Units | <u> </u> | Vapor Recovery Unit | <u> </u> | VOC Combustor | <u>6</u> | Flare | <u>1</u> | LACT Unit | <u>1</u> |
| | | | | | | | | Pigging Station | <u> </u> |

OTHER FACILITIES

Other Facility Type

Number

| | |
|--------------------------------|----|
| 300 bbl Steel Maintenance Tank | 1 |
| 300 gal cement vault | 4 |
| LACT recycle pump | 2 |
| Compressor and Volume Bottle | 1 |
| Heater treater | 1 |
| Scrubber | 1 |
| Blowcase | 11 |
| Flare Knockout Tank | 1 |
| Sand Catchers | 42 |
| Combustor Knockout Tank | 1 |
| Meter Building Skids | 12 |
| Sale Gas Scrubber | 1 |
| Coriolis Meters | 87 |

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

82 approx 4" steel three phase flowlines, 3 approx 3" steel gas lift lines, 1 approx 12" steel oil gathering line

CONSTRUCTION

Date planned to commence construction: 11/01/2014 Size of disturbed area during construction in acres: 29.60

Estimated date that interim reclamation will begin: 12/18/2014 Size of location after interim reclamation in acres: 24.80

Estimated post-construction ground elevation: 4677

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: Recycle/reuse

Cutting Disposal: OFFSITE Cuttings Disposal Method: Beneficial reuse

Other Disposal Description:

Beneficial reuse or land application plan submitted? Yes

Reuse Facility ID: _____ or Document Number: 2614238

Centralized E&P Waste Management Facility ID, if applicable: _____

SURFACE & MINERALS & RIGHT TO CONSTRUCT

Name: 2001 Properties LLC

Phone: _____

Address: 22791 HWY 39

Fax: _____

Address: _____

Email: _____

City: Weldona State: CO Zip: 80653

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: Bond

Surface damage assurance if no agreement is in place: Blanket Surface Surety ID: 20030012

Date of Rule 306 surface owner consultation 10/23/2013

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: 4083 Feet
Building Unit: 4083 Feet
High Occupancy Building Unit: 5280 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 5280 Feet
Above Ground Utility: 4102 Feet
Railroad: 5280 Feet
Property Line: 465 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 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: 61-STONEHAM FINE SANDY LOAM, 0-6% SLOPES

NRCS Map Unit Name: 31-KIM-MITCHELL COMPLEX, 0-6% 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: 10/23/2013

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: 20 Feet

water well: 3500 Feet

Estimated depth to ground water at Oil and Gas Location 30 Feet

Basis for depth to groundwater and sensitive area determination:

Due to the proximity to an unnamed ditch to the NE, Noble considers this area sensitive. Nearest water well is permit no. 283726, stock water well.

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 Wells located within the disturbed area: Little State LD1175-1BHN (pad well), LD11-74-1AHN, LD11-74-1BHN, LD11-74HN, Tripucka State LD02-74-1AHN, LD02-74-1BHN, LD02-74HN, LD02-75-1AHN, LD02-75-1BHN, LD02-75HN. Production facility will be located within the disturbed area and will also serve the following wells: Gonsoulin State LD11-76-1AHN, LD11-76HN, LD11-77--1BHN, Moses State LD11-77-1AHN, LD11-77HN, LD11-78-1AHN, LD11-78-1BHN, 11-78HN, Sharpe State LD02-77-1AHN, LD02-77HN, LD02-78-1AHN, LD02-78-1BHN, LD02-78HN, LD02-79-1BHN, Upchurch State LD02-76-1AHN, LD02-76-1BHN, LD02-76HN, LD02-77-1BHN, Davis State LD02-72-1AHN, LD02-72-1BHN, LD02-72HN, LD02-73-1AHN, LD02-73-1BHN, LD02-73HN, Gradishar State LD11-72-1AHN, LD11-72-1BHN, LD11-72HN, LD11-73-1AHN, LD11-73-1BHN, LD11-73HN. Building 180'S is a Noble operated meter house. Size of disturbed area during construction in acres: 29.6. Size of location after interim reclamation in acres: 24.8: acreage for the Production Facility will be 20.5 acres post reclamation, the post reclamation for the well pad will be 4.3 acres.

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.
Signed: _____ Date: 06/06/2014 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: Matthew Lee Director of COGCC Date: 7/12/2014

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> |
|------------------------|---|
| | Operator shall provide notice to COGCC 48 hours prior to commencing construction of this Oil and Gas Location via Form 42. |
| | Operator must implement site-specific best management practices in accordance with good engineering practices, including, but not limited to, construction of a berm or diversion dike, site grading, or other comparable measures, sufficient to protect swale/intermittent stream located 20 feet northeast of the edge of the disturbed area of the oil and gas location from a release of drilling, completion, produced fluids, and chemical products. |

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 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 | Water Vault BMP: 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

| Att Doc Num | Name |
|--------------------|-------------------------|
| 1668410 | CORRESPONDENCE |
| 400548991 | FORM 2A SUBMITTED |
| 400600618 | ACCESS ROAD MAP |
| 400600619 | HYDROLOGY MAP |
| 400600622 | LOCATION PICTURES |
| 400600623 | MULTI-WELL PLAN |
| 400600624 | NRCS MAP UNIT DESC |
| 400600625 | SENSITIVE AREA MAP |
| 400600626 | REFERENCE AREA PICTURES |
| 400600627 | WASTE MANAGEMENT PLAN |
| 400600631 | LOCATION DRAWING |
| 400600632 | FACILITY LAYOUT DRAWING |

Total Attach: 12 Files

General Comments

| <u>User Group</u> | <u>Comment</u> | <u>Comment Date</u> |
|-------------------|--|--------------------------|
| Permit | No LGD or public comments. Final Review--passed. | 7/11/2014 8:52:40 AM |
| OGLA | IN PROCESS - Operated provided a BMP on the installation of the buried produced water vault, updated the date construction will start, changed the distance to the nearest Building, and confirmed the distance to the nearest downgradient surface water feature is from the edge of the disturbed area, whereas on the Location Drawing and Hydrology map that distance is from the reference point. No Public Comments. OGLA task passed. | 7/10/2014 3:25:44 PM |
| OGLA | ON HOLD - Requested a BMP on construction of the buried produced water vaults, update the date of construction start, change the distance to the nearest Building, and clarify distance to nearest surface water feature and nearest water well. Due by 7/20/14. | 6/20/2014 2:47:37 PM |
| Permit | Corrected right to construct to surface bond. | 6/13/2014 10:22:34 AM |
| Permit | Passed completeness. | 6/9/2014 11:10:15 AM |

Total: 5 comment(s)