

FORM
2A

Rev
04/18

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:

401721170

Date Received:

09/27/2018

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:

460646

Expiration Date:

01/11/2022

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: 1001 NOBLE ENERGY WAY
 City: HOUSTON State: TX Zip: 77070

Contact Information

Name: LOGAN BOUGHAL
 Phone: (832) 6397447
 Fax: ()
 email: LOGAN.BOUGHAL@NBLENERG
Y.COM

FINANCIAL ASSURANCE

- Plugging and Abandonment Bond Surety ID (Rule 706): 20030009 Gas Facility Surety ID (Rule 711): _____
- Waste Management Surety ID (Rule 704): _____

LOCATION IDENTIFICATION

Name: LD15-17 PAD Number: _____
 County: WELD
 Quarter: SENE Section: 15 Township: 9N Range: 58W Meridian: 6 Ground Elevation: 4680

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: 1392 feet FNL from North or South section line
335 feet FEL from East or West section line

Latitude: 40.754870 Longitude: -103.841950

PDOP Reading: 1.3 Date of Measurement: 10/20/2016

Instrument Operator's Name: AARON RIVERTA

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)

401721169

FACILITIES

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

Wells	4	Oil Tanks*	4	Condensate Tanks*		Water Tanks*	4	Buried Produced Water Vaults*	2
Drilling Pits		Production Pits*		Special Purpose Pits		Multi-Well Pits*		Modular Large Volume Tanks	
Pump Jacks	4	Separators*	8	Injection Pumps*		Cavity Pumps*		Gas Compressors*	5
Gas or Diesel Motors*		Electric Motors		Electric Generators*	4	Fuel Tanks*		LACT Unit*	4
Dehydrator Units*		Vapor Recovery Unit*	7	VOC Combustor*	4	Flare*		Pigging Station*	2

OTHER FACILITIES*

Other Facility Type

Number

Other Facility Type	Number
TEMPORARY FRAC TANKS	20
HEATER TREATER	4
COOLED WATER CIRCULATING PUMPS	8
GAS LIFT METER BUILDING	1
OIL SURGE DRUM	1
IA SKID	1
KNOCKOUT VESSELS	4
MAINTANCE TANK	1
METER BUILDING	13
PUMPS	7
SCRUBBERS	14

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:

- Eight (8) 2-4" Steel Three Phase Flowlines
- Six (6) 2-4" Steel Gas Lift Line
- Three (3) 3-8" Poly Temporary lines for fresh water
- Two (2) 8-16" Steel Oil Line
- Two (2) 8-16" Steel Gas Gathering Line
- Two (2) 4-8" Steel Produced Water Line

CONSTRUCTION

Date planned to commence construction: 12/01/2018 Size of disturbed area during construction in acres: 21.20
Estimated date that interim reclamation will begin: 05/01/2019 Size of location after interim reclamation in acres: 10.60
Estimated post-construction ground elevation: 4680

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: Commercial Disposal

Cutting Disposal: OFFSITE Cuttings Disposal Method: Commercial Disposal

Other Disposal Description:

Drilling waste disposal information added to address non-oil based mud and fluids in non-producing portion of wellbore.

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

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: 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 03/03/2016

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:	3802 Feet	3555 Feet
Building Unit:	4173 Feet	3910 Feet
High Occupancy Building Unit:	5280 Feet	5280 Feet
Designated Outside Activity Area:	5280 Feet	5280 Feet
Public Road:	4258 Feet	3220 Feet
Above Ground Utility:	323 Feet	576 Feet
Railroad:	5280 Feet	5280 Feet
Property Line:	335 Feet	26 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

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: _____

- 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.

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: 57 - Renohill-Shingle complex, 3 to 9 percent slopes

NRCS Map Unit Name: 36 - Manzanola clay loam, 0 to 3 percent slopes

NRCS Map Unit Name: 5 - Ascalon sandy loam, 5 to 9 percent slopes

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: 05/07/2018

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: 141 Feet

water well: 3074 Feet

Estimated depth to ground water at Oil and Gas Location 40 Feet

Basis for depth to groundwater and sensitive area determination:

Permit 156891 is the closest water well and best indication of depth to ground water (static water level). Permit 156891 has a depth of 16 feet and is located approximately 3,040 feet southwest of the edge of disturbance. The average depth of the three closest wells with known static water levels is 39.7 feet.

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 Noble respectfully submits this location assessment application which consists of 4 wells. 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.

Please see attached On-Site Water Recycling Program Summary, as Noble Energy Inc. plans to use third-party mobile recycling units for recycling exploration and production waste. The recycling will support development areas DP207 and DP209 in the Denver-Julesburg (DJ) Basin. This plan is submitted in accordance with the Colorado Oil and Gas Conservation Commission (COGCC) Rule 907.a.(3). Noble will treat E&P waste generated from their operations and use the treated water in the development of DP207 and DP209. These mobile treatment systems will not accept wastes from third parties.

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

Signed: _____ Date: 09/27/2018 Email: LOGAN.BOUGHAL@NBLENERGY.COM

Print Name: LOGAN BOUGHAL Title: REGULATORY ANALYST II

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: 1/12/2019

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

COA Type	Description
	Green Completions -Test separators and associated flow lines, sand traps and emission control systems shall be installed on-site to accommodate green completions techniques. When commercial quantities of salable quality gas are achieved at each well, the gas shall be immediately directed to a sales line or shut in and conserved. If a sales line is unavailable or other conditions prevent placing the gas into a sales line, the operator shall not produce the wells without an approved variance per Rule 805.b.(3)C.

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) and General Permit No.'s: COR03N578; COR03N579; COR03N580; and COR03O059. BMP's will be constructed around the perimeter of the site prior to, or at the beginning of construction. Specific BMP's used may include stockpile stabilization, grading, sediment traps, and perimeter barriers based on final construction design and will remain in place until the pad reaches final reclamation.
3	Dust control	Noble shall employ practices for control of fugitive dust caused by their operations. Such practices shall include but are not limited to the use of speed restrictions, regular road maintenance, restriction of construction activity during high- wind days, and silica dust controls when handling sand used in hydraulic fracturing operations. Additional management practices such as road surfacing, wind breaks and barriers, or automation of wells to reduce truck traffic may also be used if technologically feasible and economically reasonable to minimize fugitive dust emissions.
4	Noise mitigation	Operations involving pipeline or gas facility installation or maintenance, or the use of a drilling rig, are subject to the maximum permissible noise levels for light industrial Zones, as measured at the nearest Building Unit. Short-term increases shall be allowable as described in 802.c. Stimulation or re-stimulation operation and Production Facilities are governed by Rule 802.

Total: 4 comment(s)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
2478905	CORRESPONDENCE
2478924	CORRESPONDENCE
401721170	FORM 2A SUBMITTED
401754511	NRCS MAP UNIT DESC
401754512	NRCS MAP UNIT DESC
401754513	NRCS MAP UNIT DESC
401754514	ACCESS ROAD MAP
401754517	ACCESS ROAD MAP
401754523	HYDROLOGY MAP
401754525	LOCATION DRAWING
401754526	LOCATION PICTURES
401754527	MULTI-WELL PLAN
401754528	REFERENCE AREA MAP
401754529	REFERENCE AREA PICTURES
401769928	WASTE MANAGEMENT PLAN
401776764	WASTE MANAGEMENT PLAN
401788594	SURFACE AGRMT/SURETY

Total Attach: 17 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Final Review	•Final permitting review complete. Sent to Final Approval.	01/07/2019
Permit	•Initial permitting review complete and task passed.	12/23/2018
OGLA	Operator revised the size of the location after interim reclamation. OGLA review completed and task passed.	12/04/2018
OGLA	Met w/ operator to discuss size of disturbance area. Operator will provide additional attachments and comments to explain their need for a large disturbance area.	11/06/2018
Permit	Passed completeness.	10/11/2018
Permit	Returned to draft: - missing drilling waste management program - wrong surface use agreement	10/03/2018

Total: 6 comment(s)