

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:

401817268

Date Received:

Oil and Gas Location Assessment

New Location Refile Amend Existing Location Location#: 449370

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:

449370

Expiration Date:

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: Craig Richardson
 Phone: (303) 228-4232
 Fax: ()
 email: regulatorynotification@nblenergy.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: A21 Number: Tank
 County: WELD
 Quarter: NWSW Section: 21 Township: 6N Range: 64W Meridian: 6 Ground Elevation: 4729

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: 1351 feet FSL from North or South section line
1157 feet FWL from East or West section line

Latitude: 40.467980 Longitude: -104.560440

PDOP Reading: 1.7 Date of Measurement: 09/26/2018

Instrument Operator's Name: Jake Stille

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? _____

Reuse Facility ID: _____ or Document Number: _____

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

SURFACE & MINERALS & RIGHT TO CONSTRUCT

Name: NCWYO Assets, LLC

Phone: _____

Address: 1625 Broadway, Suite 2200

Fax: _____

Address: _____

Email: _____

City: Denver State: CO Zip: 80202

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: Surface Use Agreement

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

Date of Rule 306 surface owner consultation 01/25/2018

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	925 Feet
Building Unit:	_____ Feet	997 Feet
High Occupancy Building Unit:	_____ Feet	3652 Feet
Designated Outside Activity Area:	_____ Feet	5280 Feet
Public Road:	_____ Feet	921 Feet
Above Ground Utility:	_____ Feet	954 Feet
Railroad:	_____ Feet	5280 Feet
Property Line:	_____ Feet	280 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: 07/18/2018

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.

Noble is amending this location to minimize the surface disturbance and impacts to adjacent Building Unit Owners. Noble has an executed Surface Use Agreement from the Surface Owner.

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: 51—Otero sandy loam, 1 to 3 percent slopes

NRCS Map Unit Name: 64—Thedalund loam, 1 to 3 percent 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: _____

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: 390 Feet

water well: 1023 Feet

Estimated depth to ground water at Oil and Gas Location 100 Feet

Basis for depth to groundwater and sensitive area determination:

Hydrology Map indicates a Ditch 390 feet west of site. Permit 61402 is the closest water well and best indication of depth to ground water (static water level). Permit 61402 has a static water level of 200 feet and is located approximately 1,023 feet south of the edge of disturbance. The average depth of the three closest wells is 100 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 318A

WILDLIFE

This location is included in a Wildlife Mitigation Plan

This location was subject to a pre-consultation meeting with CPW held on _____

Operator Proposed Wildlife BMPs

No BMP

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 There will be an addition of 11 wells producing into the Existing A21 Production Facility, In addition to the equipment listed above, ancillary equipment may be used on the production site temporarily, and may include Tanks, VOCs, Water Coolers, and Scrubbers, depending on the volume, temperature and nature of produced fluids.

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

Signed: _____ Date: _____ Email: julie.webb@nblenergy.com

Print Name: Julie Webb Title: Sr. Regulatory Analyst

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: _____

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.

Table with 2 columns: COA Type, Description

Best Management Practices

Table with 2 columns: No BMP/COA Type, Description. Contains 2 rows of Best Management Practices.

3	Traffic control	<p>COGCC Rule 604.c.(2)D. Traffic Plan.</p> <ul style="list-style-type: none"> • Traffic Control: • Speed limits will be enforced. The traffic plan and route will include mitigation of impacts from temporary operations by applying water or magnesium chloride as dust suppression within 1000' of occupied residences on Weld County Road 66 and County Road 53, and on lease roads as necessary in cooperation with the county.
4	General Housekeeping	<p>COGCC Rule 604.c.(2)P. Removal of surface trash.</p> <p>General Housekeeping:</p> <ul style="list-style-type: none"> • All surface trash, debris, scrap or discarded material connected with the operations of the property shall be removed from the premises or disposed of in a legal manner.
5	General Housekeeping	<p>Type: General Housekeeping</p> <p>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.</p>
6	Storm Water/Erosion Control	<p>Type: Stormwater/Erosion Control</p> <p>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.</p>
7	Material Handling and Spill Prevention	<p>COGCC Rule 604.c.(2)F. Leak Detection Plan.</p> <p>Material Handling and Spill Prevention:</p> <ul style="list-style-type: none"> • Noble Energy Inc. designs facilities to avoid releases and to be compliant with all regulations specific to leak detection and control (i.e. SPCC 40CFR112). Daily, monthly and annual inspections are performed at each facility to confirm operational integrity and regulatory compliance. Noble will perform maintenance if it is deemed necessary through any of the scheduled inspections. Automation technology is utilized to monitor any variations in pressures and fluid gauges which could indicate a leak.
8	Material Handling and Spill Prevention	<p>COGCC Rule 604.c.(2)N. Control of fire hazards.</p> <p>Material Handling and Spill Prevention:</p> <ul style="list-style-type: none"> • Any material not in use that might constitute a fire hazard shall be removed a minimum of twenty-five (25) feet from the wellhead, tanks and separator. Any electrical equipment installations inside the bermed area shall comply with API RP 500 classifications and comply with the current national electrical code as adopted by the State of Colorado. • Flammable liquids shall not be stored within fifty (50) feet of the wellbore, except for the fuel in the tanks of operating equipment or supply for injection pumps. Where terrain and location configuration do not permit maintaining this distance, additional equivalent safety measures will be taken.

9	Material Handling and Spill Prevention	<p>Type: Material Handling and Spill Prevention</p> <p>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.</p>
10	Construction	<p>COGCC Rule 604.c.(2)G. Berm construction.</p> <p>Construction:</p> <ul style="list-style-type: none"> • Berms or other secondary containment devices in Designated Setback Locations shall be constructed around crude oil, condensate, and produced water storage tanks and shall enclose an area sufficient to contain and provide secondary containment for one-hundred fifty percent (150%) of the largest single tank. Standard secondary-containment construction includes the installation of a contiguous spray liner installed and underlaying the entire tank battery, then anchored into the steel-walled containment berms. Berms or other secondary containment devices shall be sufficiently impervious to contain any spilled or released material. All berms and containment devices shall be inspected at regular intervals and maintained in good condition. No potential ignition sources shall be installed inside the secondary containment area unless the containment area encloses a fired vessel. Refer to American Petroleum Institute Recommended Practices, API RP - D16.
11	Construction	<p>COGCC Rule 604.c.(2)M. Fencing requirements.</p> <p>Construction:</p> <ul style="list-style-type: none"> • Unless otherwise requested by the Surface Owner, sites constructed within the Designated Setback location will be fenced to restrict access by unauthorized persons.
12	Construction	<p>COGCC Rule 604.c.(2)R. Tank specifications.</p> <p>Construction:</p> <ul style="list-style-type: none"> • All newly installed or replaced crude oil and condensate storage tanks shall be designed, constructed, and maintained in accordance with National Fire Protection Association (NFPA) Code 30 (2008 version). The operator shall maintain written records verifying proper design, construction, and maintenance, and shall make these records available for inspection by the Director. Only the 2008 version of NFPA Code 30 applies to this rule. This rule does not include later amendments to, or editions of, the NFPA Code 30. NFPA Code 30 may be examined at any state publication depository library. Upon request, the Public Room Administrator at the office of the Commission, 1120 Lincoln Street, Suite 801, Denver, Colorado 80203, will provide information about the publisher and the citation to the material.
13	Construction	<p>COGCC Rule 604.c.(2)S. Access roads.</p> <p>Construction:</p> <ul style="list-style-type: none"> • At the time of construction, all leasehold roads shall be constructed to accommodate local emergency vehicle access requirements, and shall be maintained in a reasonable condition. Noble Energy plans on building the access road off of WCR 53 for production facility construction activities.
14	Construction	<p>Standard Produced Water Vault Construction</p> <p>Type: Construction</p> <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.

15	Noise mitigation	COGCC Rule 604.c.(2)A. Noise. Noise Mitigation: <ul style="list-style-type: none"> • Temporary operations – Baseline surveys will be completed at the residences to the West. • Permanent facility – Sound walls will be installed around compressors that will be located at the A21 Production Facility. These sound walls will be utilized to block sound to the residence located west of the facility.
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Total: 15 comment(s)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
401817339	NRCS MAP UNIT DESC
401817341	LOCATION PICTURES
401817342	HYDROLOGY MAP
401817343	FACILITY LAYOUT DRAWING
401817344	ACCESS ROAD MAP
401817490	WASTE MANAGEMENT PLAN
401849398	LOCATION DRAWING
401849409	SURFACE AGRMT/SURETY
401937509	RULE 305A CERTIFICATION OF COMPLIANCE

Total Attach: 9 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
		Stamp Upon Approval

Total: 0 comment(s)

Public Comments

No public comments were received on this application during the comment period.