

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:

401790824

Date Received:

10/31/2018

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:

460293

Expiration Date:

10/28/2024

This location assessment is included as part of a permit application.

CONSULTATION

This location is included in a Comprehensive Drilling Plan. CDP # 11984

- 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: Holly Hill
Phone: (303) 228 4232
Fax: ()
email: CDPNBLPermitting@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: C29-03 Number: Pad
County: WELD
Quarter: NENW Section: 29 Township: 4N Range: 64W 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: 330 feet FNL from North or South section line
2443 feet FWL from East or West section line

Latitude: 40.289770 Longitude: -104.575430
PDOP Reading: 1.8 Date of Measurement: 08/31/2018

Instrument Operator's Name: Alan Hnizdo

Name: Brenda Johnson Phone: _____
 Address: 24630 County Road 42 Fax: _____
 Address: _____ Email: _____
 City: Kersey State: CO Zip: 80644-9134

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 _____

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:	541 Feet	614 Feet
Building Unit:	541 Feet	614 Feet
High Occupancy Building Unit:	5280 Feet	5280 Feet
Designated Outside Activity Area:	5280 Feet	5280 Feet
Public Road:	319 Feet	316 Feet
Above Ground Utility:	304 Feet	302 Feet
Railroad:	5280 Feet	5280 Feet
Property Line:	133 Feet	303 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: 10/17/2018

- 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.

Noble has placed the meter building as far as practicable from the Building Unit based on the distance necessary to be located near the flowline corridor to the west.

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: 44 - Olney loamy sand, 1 to 3 percent slopes

NRCS Map Unit Name: 72 - Vona loamy sand, 0 to 3 percent slopes

NRCS Map Unit Name: 73 - Vona loamy sand, 3 to 5 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: 08/26/2018

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, Chokeycherry)
- 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: 32 Feet

water well: 138 Feet

Estimated depth to ground water at Oil and Gas Location 72 Feet

Basis for depth to groundwater and sensitive area determination:

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 zone: 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 318A

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

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.

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.

The attached Waste Management Plan contains information regarding the management and disposal of water-based fluids and cuttings.

Building Unit owner signed waiver of 30-day pre-app notice period.

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

Signed: _____ Date: 10/31/2018 Email: CDPNBLPermitting@nblenergy.com

Print Name: Ann Feldman Title: Regulatory Manager

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: 12/21/2018

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>
	This Form 2A and related Form 2s are approved subject to the Noble Mustang CDP accepted by Commission Order # 1-228.
	The Approved Form 2A permit will be posted at the location during construction, drilling, and completions operations.

Best Management Practices

No	BMP/COA Type	Description
1	Planning	Lighting on well pad locations is considered temporary and will be used during drilling, completion and construction activities. Temporary lighting will be directed downward, inward, and shielded towards location to avoid glare on public roads and building units within 1,000 feet. Lighting will be turned off when practical, i.e., no operations being conducted.
2	Planning	Where technologically feasible and economically practicable, Noble shall consolidate wells to create multi-well pads, including shared locations with other operators. Multi-well production facilities shall be located as far as possible from Building Units. <ul style="list-style-type: none"> • The pad shall be constructed in such a manner that noise mitigation may be installed and removed without disturbing the site or landscaping. • Pads shall have all weather access roads to allow for operator and emergency response.
3	Planning	Upon initial rig-up and at least once every thirty (30) days during drilling operations thereafter, pressure testing of the casing string and each component of the blowout prevention equipment including flange connections shall be performed to seventy percent (70%) of working pressure or seventy percent (70%) of the internal yield of casing, whichever is less. Pressure testing shall be conducted and the documented results shall be retained by the operator for inspection by the Director for a period of one (1) year. Activation of the pipe rams for function testing shall be conducted on a daily basis when practicable.
4	Planning	Adequate blowout prevention equipment shall be used on all well servicing operations. <ul style="list-style-type: none"> • Backup stabbing valves shall be required on well servicing operations during reverse circulation. Valves shall be pressure tested before each well servicing operation using both low-pressure air and high-pressure fluid.
5	Planning	Closed chamber drill stem tests shall be allowed. All other drill stem tests shall require approval by the Director.
6	Planning	The operator shall identify the location of the wellbore with a permanent monument as specified in Rule 319.a.(5). The operator shall also inscribe or imbed the well number and date of plugging upon the permanent monument.
7	Planning	Where possible, operators shall provide for the development of multiple reservoirs by drilling on existing pads or by multiple completions or commingling in existing wellbores (see Rule 322). If any operator asserts it is not possible to comply with, or requests relief from, this requirement, the matter shall be set for hearing by the Commission and relief granted as appropriate.
8	Planning	Baseline Sampling and Monitoring : Initial baseline samples and a subsequent monitoring sample shall be collected pursuant with the Rules unless excepted typically from one (1) Available Water Source in the governmental quarter section in which a new Oil and Gas Well, the first well on a Multi-Well Site, or a Dedicated Injection Well is located. If a sampling location has previously been established within the governmental quarter section, and sampled within the prior sixty (60) months before spudding, no initial baseline sample is required. <ul style="list-style-type: none"> • Except as provided in subpart (4)B.i, of the Rules, initial sampling shall be conducted within 12 months prior to setting conductor pipe in an Oil and Gas Well or the first well on a Multi-Well Site, or commencement of drilling a Dedicated Injection Well. • One subsequent sampling event shall be conducted at the initial (or previously established) sample location between six (6) and twelve (12) months following completion of the Well or Dedicated Injection Well, or the last Well on a Multi-Well Site. Wells that are drilled and abandoned without ever producing hydrocarbons are exempt from subsequent monitoring sampling under this subpart (4)D.ii.
9	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 42, and on lease roads as necessary in cooperation with the county.

10	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 storm water 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 pick up trash, scrap debris, other discarded materials, and any contaminated soil. These materials will be disposed of properly.
11	General Housekeeping	Within ninety (90) days after a well is plugged and abandoned, the well site shall be cleared of all non-essential equipment, trash, and debris. For good cause shown, an extension of time may be granted by the Director.
12	Storm Water/Erosion Control	Stormwater 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.
13	Material Handling and Spill Prevention	Due to using a closed loop system, pits will not be used.
14	Material Handling and Spill Prevention	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. <ul style="list-style-type: none"> • 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.
15	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.
16	Construction	Unless otherwise requested by the Surface Owner, well sites constructed within the Designated Setback location will be fenced to restrict access by unauthorized persons.
17	Construction	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 42 for Drilling and Completion activities.
18	Noise mitigation	Temporary operations – Baseline surveys will be completed at the residences to the northeast. Engineered sound walls no less than 16' tall will be used along the appropriate sides for well pad to mitigate noise impacts to these residences. The use of equipment specific sound walls will be used as necessary around rig generators in the event of sound impacts during operations.

19	Emissions mitigation	<p>The operator shall employ sand traps, surge vessels, separators, and tanks during flowback and cleanout operations to safely maximize resource recovery and minimize releases to accommodate green completions techniques.</p> <p>Operator will use an enclosed combustion device with a 98% design destruction efficiency for hydrocarbons.</p> <p>When commercial quantities of salable quality gas are achieved at each well, the gas shall be immediately directed to the sales line or wells will be shut in and gas 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. The Rule 912 notice and approval requirements apply regardless of a variance from Rule 805.b.(3)C.</p>
20	Drilling/Completion Operations	<p>Closed loop drilling systems are required within the Buffer Zone Setback.</p> <ul style="list-style-type: none"> • Pits are not allowed on Oil and Gas Locations within the Buffer Zone Setback, except fresh water storage pits, reserve pits to drill surface casing, and emergency pits as defined in the 100-Series Rules. • Fresh water pits within the Exception Zone shall require prior approval of a Form 15 pit permit. In the Buffer Zone, fresh water pits shall be reported within 30-days of pit construction. • Fresh water storage pits within the Buffer Zone Setback shall be conspicuously posted with signage identifying the pit name, the operator's name and contact information, and stating that no fluids other than fresh water are permitted in the pit. Produced water, recycled E&P waste, or flowback fluids are not allowed in fresh water storage pits. • Fresh water storage pits within the Buffer Zone Setback shall include emergency escape provisions for inadvertent human access.
21	Drilling/Completion Operations	All loadlines will be bullplugged or capped.
22	Drilling/Completion Operations	All guy line anchors left buried for future use shall be identified by a marker of bright color not less than four (4) feet in height and not greater than one (1) foot east of the guy line anchor.
23	Interim Reclamation	All interim and final reclamation activities will comply with Noble's Topsoil Management Plan.

Total: 23 comment(s)

Attachment Check List

Att Doc Num	Name
1010577	WASTE MANAGEMENT PLAN
1010578	FACILITY LAYOUT DRAWING
1010579	LOCATION DRAWING
401779827	MULTI-WELL PLAN
401790824	FORM 2A SUBMITTED
401792493	LOCATION PICTURES
401794349	SURFACE AGRMT/SURETY
401818081	PRE-APPLICATION NOTIFICATION CERTIFICATION
401821863	RULE 306.E. WAIVER

Total Attach: 9 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Final Review	OFF HOLD: •Final permitting review complete. Sent to Final Approval.	12/19/2018
OGLA	Operator has moved the Gas Lift Meter Building further from the Buidling Unit.. Per Operator request, revised the Cultural Distances from the Production Facilities. Uploaded the revised Location Drawing, Facility Layout Drawing and the revised Waste Management Plan.	12/17/2018
Final Review	•Attached corrected Multi-Well Plan from Operator.	12/04/2018
Final Review	ON HOLD - for APD corrections in Final Approval.	12/04/2018
Permit	Permitting Review Complete.	11/16/2018
OGLA	11/12/2018 - location does not fall within 'Sensitive Wildlife Habitat' or 'Restricted Surface Occupancy' areas; therefore, no CPW consultation is required; 11/12/2018 - initiated / completed Form 2A review by Dave Kubeczko; placed Noble Mustang CDP (Commission Order #1-228) and required posting of Form 2A (during construction, drilling, and completions operations) COAs on the Form 2A; SUA contains surface owner waiver for 150-foot setback for a well from a property line (page 3, Section 5. Consents and Waivers., Subsection B., 1st paragraph, 2nd sentence), operator will be submitting an exception location request letter for the Form 2 #401790831, Johnson C32-715; operator's BMPs are compliant with the CDP; added OGLA task for John Noto for final Buffer Zone review. 11/23/18 - passed OGLA Form 2A review by Dave Kubeczko with Noble Mustang CDP and required posting of Form 2A COAs; operator's proposed BMPs are sufficient. Missing Odor BMP - MMH Missing WMP - 11/12/2018 MMH - Uploaded revised Waste Management Plan - 12/18/2018 Removed APB BMPs - 11/12/2018 MMH Missing Siting Rationale - Added the following Siting Rationale: Noble has placed the meter building as far as practicable from the Building Unit based on the distance necessary to be located near the flowline corridor to the west. 12/17/2018 MMH	11/12/2018
OGLA	Passed completeness	11/02/2018
OGLA	Appears operator has supplied requested attachments (Facility Layout Drawing, waiver from Rule 305.a.(2) 30 day pre-application notification, and waivers for Rule 305.a.(2) - Exception Zone and Buffer Zone Setback Notice to Surface Owner and Building Unit Owners; Rule 305.c.(2) - Buffer Zone Notice to Building Unit Owners).	11/02/2018
OGLA	Did not pass completeness review. Missing Facility Layout Drawing, missing waiver from Rule 305.a.(2) 30 day pre-application notification. Pushed to Draft, contacted operator via phone call.	11/01/2018
OGLA	Initial Completeness. Missing Facility Layout Drawing. Well Location only. Referred to OGLA Supervisor.	11/01/2018
Permit	Referred to OGLA supervisor for buffer zone review	11/01/2018

Total: 11 comment(s)