

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:

401152362

Date Received:

12/07/2016

Oil and Gas Location Assessment

☐ New Location ☐ Refile ☒ Amend Existing Location Location#: 448902

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:

448902

Expiration Date:

01/12/2020

☐ 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: Justin Garrett
Phone: (303) 228 4449
Fax: ()
email: Justin.Garrett@nbleenergy.com

RECLAMATION FINANCIAL ASSURANCE

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

LOCATION IDENTIFICATION

Name: England Rydgren Number: L01 Tank
County: WELD
QuarterQuarter: NWSW Section: 8 Township: 4N Range: 64W Meridian: 6 Ground Elevation: 4829
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: 1975 feet FSL from North or South section line
79 feet FWL from East or West section line
Latitude: 40.325040 Longitude: -104.583710
PDOP Reading: 1.3 Date of Measurement: 10/24/2016
Instrument Operator's Name: Charles Scott

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)

331293

322698

310870

309757

FACILITIES

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

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

OTHER FACILITIES*

Other Facility Type

Number

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:

Four (4) 3-8" Flowline, One (1) 3-8" Gas Line - No proposed pipeline to be added to this site

CONSTRUCTION

Date planned to commence construction: 02/17/2017 Size of disturbed area during construction in acres: 0.50

Estimated date that interim reclamation will begin: 02/22/2017 Size of location after interim reclamation in acres: 0.50

Estimated post-construction ground elevation: 4829

DRILLING PROGRAM

Will a closed loop system be used for drilling fluids: _____

Is H₂S anticipated? _____

Will salt sections be encountered during drilling: _____

Will salt based mud (>15,000 ppm Cl) be used? _____

Will oil based drilling fluids be used? _____

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: Jeffrey & Mary Gardener

Phone: _____

Address: 22342 County Road 51

Fax: _____

Address: _____

Email: _____

City: Kersey State: CO Zip: 80644

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: oil and gas lease

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

Date of Rule 306 surface owner consultation 09/22/2016

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:	_____ Feet	185 Feet
Building Unit:	_____ Feet	185 Feet
High Occupancy Building Unit:	_____ Feet	5280 Feet
Designated Outside Activity Area:	_____ Feet	5280 Feet
Public Road:	_____ Feet	65 Feet
Above Ground Utility:	_____ Feet	31 Feet
Railroad:	_____ Feet	5280 Feet
Property Line:	_____ Feet	25 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: 10/26/2016

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: 62 – Terry fine sandy Loam, 0-3 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: 09/22/2016

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: 530 Feet

water well: 1040 Feet

Estimated depth to ground water at Oil and Gas Location 13 Feet

Basis for depth to groundwater and sensitive area determination:

This location is considered a sensitive area, based on depth of groundwater (SWL 13'), proximity to down-gradient surface water (Neres Canal is 530' SE of location), and there are occupied buildings within 1,000' of location.

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 _____

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 will be rerouting existing fence and increasing the disturbance by to the east to accommodate for the new VOC combustor.
The property line will be greater than 31' from the nearest piece of equipment.
4 Associated wells: RYDGREN 8-1 (API# 05-123-11897, LOC ID: 322698) located approx. 574' east of location, RYDGREN 8-31 (API# 05-123-20445, LOC ID: 331293) located approx. 2,108' east of location, ENGLAND 8-3-17 (API# 05-123-27160, LOC ID: 310870) located approx. 1,063' northeast of location, ENGLAND 8-35 (API# 05-123-25347, LOC ID: 309757) located approx. 1,387' southeast of location.
Existing Equipment includes: One (1) Separator, Two (2) Water Vaults, Two (2) Oil Tanks, One (1) VOC Combustor.
Total Equipment includes: One (1) Separator, Two (2) Water Vaults, Two (2) Oil Tanks, Two (2) VOC Combustors.

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

Signed: _____ Date: 12/07/2016 Email: RegulatoryNotification@nblenergy.com

Print Name: Justin Garrett Title: 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: Matthew Lee Director of COGCC Date: 1/13/2017

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

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Best Management Practices

No	BMP/COA Type	Description
1	Planning	Planning: Lighting will not be used on location during construction activities.
2	Planning	Planning: A VOC will be added to the existing production facility location, with an increase of disturbance of approximately 2,500 square feet east of the existing production tanks.
3	Traffic control	Traffic Control: Construction operations – Based on construction of adding one VOC and increasing disturbance area by approximately 2,500 square/feet, the need for dust suppression is unlikely. If dust suppression is needed, it could include a combination of water, magnesium chloride, or calcium chloride. Limited traffic speed will be used for dust mitigation.
4	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.
5	General Housekeeping	General Housekeeping: 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.
6	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.
7	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.
8	Construction	Construction: Fencing is not planned with this construction activity.
9	Construction	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.
10	Noise mitigation	Noise Mitigation: Construction operations – Construction activities will take place during the day, and there are no foreseen noise impacts associated with the construction and equipment being installed.

Total: 10 comment(s)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
2316037	RULE 306.E. CERTIFICATION
401152362	FORM 2A SUBMITTED
401162240	NRCS MAP UNIT DESC
401162241	ACCESS ROAD MAP
401162243	HYDROLOGY MAP
401162244	LOCATION PICTURES
401162246	LOCATION DRAWING
401162247	REFERENCE AREA MAP
401162249	REFERENCE AREA PICTURES
401162250	FACILITY LAYOUT DRAWING
401162252	OTHER
401166893	RULE 305A CERTIFICATION OF COMPLIANCE

Total Attach: 12 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed.	01/13/2017
OGLA	No comments to COGCC or LGD from the public. LGD commented on county requirements for the location. OGLA review complete and task passed.	01/10/2017
OGLA	Noble is amending this location by expanding the disturbed area and adding a VRU for emissions controls. The 1999 Google Earth Aerials the tank battery is present with 1 tank and 1 separator with the nearest building units approximately 400 feet north and 900 feet southeast of the location. In the 2004 aerial photo a new building unit is visible approximately 200 feet from this location. In the 2010 aerials, an additional tank and separator is visible on the location. The approval of this Form 2A does not exempt the Operator from the 600-series setback rules or other non-compliance issues at the time of construction of any equipment.	01/09/2017
OGLA	OGLA supervisor review - create location ID 448902 and change to an amended location.	01/09/2017
OGLA	Spoke with Operator via phone to discuss cultural distances. Distances on 2A were from edge of disturbance. Updated to be from nearest equipment to cultural object. Attached 306e certification letter.	01/04/2017
Permit	OGLA Review: Existing tank battery location with exception request for Rule 604.b. (1)A. adding a VOC equipment. Distances to cultural distances appear to be from the edge of disturbance and not from equipment - check with Operator.	01/03/2017
LGD	No comment.Minor change to location to add air pollution control device.This activity is similar to a workover or remediation and shouldnt warrant a permitting/comment process other than surface owner notification/agreement.Per Weld County Code, modifications to existing oil and gas locations to meet the terms of Compliance Orders are considered a Use by Right and no Weld Oil and Gas Location Assessment (WOGLA) is required.A building permit is required for the production facilities (tank battery, separators, pump jacks, compressors, generators, etc.) from the Department of Planning Services.Troy Swain, Weld Oil and Gas Liaison and LGD (970) 400-3579.	12/22/2016
Permit	Verified that 305.a letter is attached. Passed completeness.	12/14/2016
OGLA	Buffer Zone completeness review - contacted operator and pushed to Draft for 305.a certification letter, no other completeness issues were identified.	12/14/2016
Permit	Referred to OGLA Supervisor for Buffer and Exception Zone Review.	12/09/2016

Total: 10 comment(s)