

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:

400999524

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Date Received:

06/22/2016

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:

447247

Expiration Date:

08/08/2019

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: ()

email: jan.kajiwara@nblenergy.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20030009

Gas Facility Surety ID: _____

Waste Management Surety ID: _____

LOCATION IDENTIFICATION

Name: LD19-16

Number: Tank

County: WELD

Quarter: SESE Section: 19 Township: 9N Range: 58W Meridian: 6 Ground Elevation: 4838

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: 783 feet FSL from North or South section line

469 feet FEL from East or West section line

Latitude: 40.731380 Longitude: -103.899310

PDOP Reading: 1.9 Date of Measurement: 01/11/2016

Instrument Operator's Name: Tevor Daley

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)

400999508

446247

400999515

FACILITIES

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

Wells _____	Oil Tanks* 8	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 _____	Separators* 19	Injection Pumps* _____	Cavity Pumps* _____	Gas Compressors* 4
Gas or Diesel Motors* _____	Electric Motors _____	Electric Generators* _____	Fuel Tanks* _____	LACT Unit* 1
Dehydrator Units* _____	Vapor Recovery Unit* _____	VOC Combustor* 10	Flare* _____	Pigging Station* _____

OTHER FACILITIES*

Other Facility Type

Number

Other Facility Type	Number
KO Drum	1
IA Compressor skid	1
Buyback meter	1
Allocation gas meter	1
Blowcase	4
Maintenance Tank	1
Scrubber	4
Heater Treater	2
Sales gas meter	2
Sand Catchers	19

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:

Sixteen (16) 2"-4" steel Three-phase flowlines, one (1) 8"-16" Steel Gas Gathering Line, One (1) 4"-12" Steel Oil line.

CONSTRUCTION

Date planned to commence construction: 09/01/2016 Size of disturbed area during construction in acres: 6.40

Estimated date that interim reclamation will begin: 05/01/2017 Size of location after interim reclamation in acres: 6.40

Estimated post-construction ground elevation: 4838

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: Timbro Ranch & Cattle Co Phone: _____

Address: PO Box 367 Fax: _____

Address: _____ Email: _____

City: Springfield State: NE Zip: 68059

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 01/04/2016

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	<u>5280</u> Feet
Building Unit:	_____ Feet	<u>5280</u> 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

High Occupancy Building Unit: _____ Feet 5280 Feet
 Designated Outside Activity Area: _____ Feet 5280 Feet
 Public Road: _____ Feet 5280 Feet
 Above Ground Utility: _____ Feet 5280 Feet
 Railroad: _____ Feet 5280 Feet
 Property Line: _____ Feet 251 Feet

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: _____

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 (onll 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 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: 31: Kim-Mitchell Complex, 0-6 % 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: 01/04/2016
 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: 915 Feet

water well: 790 Feet

Estimated depth to ground water at Oil and Gas Location 90 Feet

Basis for depth to groundwater and sensitive area determination:

Not a sensitive area, based on SWL and distance to surface water.

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

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 After construction is complete for the new facility and production is online from the new 14 wells listed below, Noble will reroute the existing Timbro LD19-73HN & Timbro LD29-78HN to the new facility. The purpose of the new facility is to handle all production in a centralized location that is associated with this development plan. Noble requests to keep the proposed production facility and the existing facility separate due to internal cost tracking and working interest owner conflicts. Noble will reclaim the existing Production Facility (Location ID: 430722) to COGCC 1003 Interim Reclamation standards beginning within the 2017 calendar year. During construction these locations may appear continuous but after reclamation has been conducted there will be a distinct difference in locations. Noble believes this will assist with inspections in the future.

Proposed wells producing at this site: Bennett LD19-785 (400999514), LD19-758 (400999509), LD19-765 (400999510), LD19-771 (400999512), LD19-777 (401027243), LD19-781 (400999513), Riley LD19-752 (400999521), LD19-715 (400999516), LD19-722 (400999517), LD19-738 (400999518), LD19-745 (400999520). Anni LD29-771 (401009990), LD29-463 (401009988), LD29-755 (401009984). Existing: Timbro LD19-73HN (API 05-123-36268) and Timbro LD29-78HN (API 05-123-36267). SUA attached for information only. Noble will provide via Sundry Notice, photos of the reference area during the growing season within 12-months of approval of the subject Form 2A.

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.
Signed: _____ Date: 06/22/2016 Email: regulatorynotification@nblenergy.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: 8/9/2016

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 submit a Form 4 Sundry for Location #430722 to remove that location's production facilities and update the after interim reclamation size of the disturbed area within one month of the Timbro LD 19-73HN & Timbro LD 29-78HN wells producing to this location.

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 and maintained 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	<p>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.</p> <p>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.</p> <p>3. The partially buried cement water vault will be installed above the spray in liner.</p> <p>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.</p>

Total: 4 comment(s)

Attachment Check List

Att Doc Num	Name
2477956	CORRESPONDENCE
400999524	FORM 2A SUBMITTED
401063078	SURFACE AGRMT/SURETY
401063079	ACCESS ROAD MAP
401063080	HYDROLOGY MAP
401063081	LOCATION DRAWING
401063082	LOCATION PICTURES
401063084	NRCS MAP UNIT DESC
401063085	WASTE MANAGEMENT PLAN
401063087	REFERENCE AREA MAP

Total Attach: 10 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed.	3/8/2016 8:17:06 AM
OGLA	IN PROCESS - Operator provided additional information as to why they wished to keep this as a New Location and separate from existing adjacent Location ID #430722. Operator agreed to change distance to nearest downgradient surface water feature and updated the Facilities list to remove the flare and add several meters. OGLA review complete and task passed.	3/3/2016 3:08:28 PM
OGLA	Operator responded requesting this 2A remain as a New Location and provided additional reasoning for this. OGLA responded requesting concurrence to add a COA requiring a Form 4 Sundry be submitted for existing Location #430722 to remove its production facilities when those existing wells begin producing to this location.	7/28/2016 1:31:46 PM
OGLA	ON HOLD - This 2A proposes new production facilities immediately adjacent to existing Noble Energy Location ID #430722. After which, the existing production facilities on Location #430722 are planned to be removed and the two existing wells on that location will produce to this new production facility. Therefore, requested concurrence from operator to make this 2A amend existing Location #430722 instead of creating a new location. To do this, operator needs to revise the Location Drawing, revise the Facilities list, and revise the size of the disturbed area. Additionally, requested concurrence to change distance to nearest downgradient surface water feature to what was on the original Form 2A for Location #430722. Requested operator provide a BMP regarding the use of a flare and indicate they will tie into the existing nearby gas line. Due by 8/27/16.	7/27/2016 10:50:25 AM
Permit	Permitting Review Complete.	7/18/2016 3:31:18 PM
LGD	Oil and Gas Exploration and Production activities are currently considered a Use by Right in the Agricultural Zoned Districts of Weld County and no land use permitting is required. A building permit is required for the production facilities (tank battery, separators, pump jacks, etc.) from the Department of Planning Services. Troy Swain, Weld Oil and Gas Liaison and LGD (970) 400-3579.	7/18/2016 9:00:08 AM
Permit	Passed completeness.	6/28/2016 10:24:07 AM
Permit	Checked box for Surety ID and deleted insufficient Reference Area Pictures attachment per operator request.	6/28/2016 10:23:03 AM
Permit	Returned to draft: -- Reference Area Pictures not in growing season	6/24/2016 3:27:59 PM

Total: 9 comment(s)