

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:

400500307

Date Received:

10/30/2013

Oil and Gas Location Assessment

New Location Refile Amend Existing Location Location#: _____

Submit signed original form. 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:

435818

Expiration Date:

01/09/2017

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: Susan Miller

Phone: (303) 228-4246

Fax: (303) 228-4286

email: smiller@nobleenergyinc.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20030009 Gas Facility Surety ID: _____

Waste Management Surety ID: _____

LOCATION IDENTIFICATION

Name: RICO

Number: LC29-74-1HNA M

County: WELD

Quarter: SWSE Section: 29 Township: 9N Range: 59W Meridian: 6 Ground Elevation: 4871

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: 340 feet FSL from North or South section line

2092 feet FEL from East or West section line

Latitude: 40.714940 Longitude: -103.999940

PDOP Reading: 1.9 Date of Measurement: 07/30/2013

Instrument Operator's Name: Bradley Laman

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)

400500307

422428

400499540

400500368

FACILITIES

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

Wells	7	Oil Tanks	40	Condensate Tanks		Water Tanks	22	Buried Produced Water Vaults	2
Drilling Pits		Production Pits		Special Purpose Pits		Multi-Well Pits		Temporary Large Volume Above Ground Tanks	
Pump Jacks	7	Separators	13	Injection Pumps	2	Cavity Pumps			
Gas or Diesel Motors		Electric Motors		Electric Generators		Fuel Tanks		Gas Compressors	5
Dehydrator Units		Vapor Recovery Unit		VOC Combustor	7	Flare	1	LACT Unit	2
								Pigging Station	

OTHER FACILITIES

Other Facility Type

Number

Other Facility Type	Number
Flare Liquid Knockout	1
Maintenance Tank	1
Meter Building	10
Blowcase	5
Scrubber	2
Off Spec Oil Heater Treater	1
Sand Catcher	13
Condensate Vessel	1
Natural Gas Gen Set	1
Flare Gas Knockout Tank	2
Instrument Air Skid	1

Per Rule 303.b.(3)C, description of all oil, gas, and/or water pipelines:

Thirteen 4" steel three-phase flowlines running from wellhead(s) to production facility to be located on pad. Two 3" steel gas lift lines from wellhead(s) to compressors, approximately 300'.

CONSTRUCTION

Date planned to commence construction: 12/15/2013 Size of disturbed area during construction in acres: 27.33

Estimated date that interim reclamation will begin: 06/14/2014 Size of location after interim reclamation in acres: 18.06

Estimated post-construction ground elevation: 4871

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? No

DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE Drilling Fluids Disposal Method: Recycle/reuse

Cutting Disposal: OFFSITE Cuttings Disposal Method: Beneficial reuse

Other Disposal Description:

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: Ptasnik Land Co

Phone: _____

Address: 4815 S Vine St

Fax: _____

Address: _____

Email: _____

City: Englewood State: CO Zip: 80113

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 07/20/2013

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

Distance to nearest:

Building: 5280 Feet
Building Unit: 5280 Feet
High Occupancy Building Unit: 5280 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 5280 Feet
Above Ground Utility: 5280 Feet
Railroad: 5280 Feet
Property Line: 340 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.

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.

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: _____

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: 29: Haverson loam, 0-3% slopes
NRCS Map Unit Name: 37: Midway clay loam, 0-9% slopes
NRCS Map Unit Name: 31: Kim-Mitchell complex, 0-6% 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: 07/30/2013
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: 1625 Feet

water well: 628 Feet

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

Basis for depth to groundwater and sensitive area determination:

Well site near high point in landscape, adjacent to rock outcropping, with no nearby streams. There are several area stock wells that report depth to ground water at 40 feet and 140 feet. Top of perforated casing depths are reported at 199 feet, 50 feet, 120 feet. Indications are that the wells are completed in unconfined areas. An isolated prairie pothole wetland is located 1625 feet to the SE. The nearest down gradient stream is 10,329 feet to the SW (Wild Horse Creek). There is an inactive ditch 4,467 feet to the west. The nearest mapped floodplain is the S. Platte, 25 miles to the South. The nearest mapped riparian area is along the S. Platte, 25 miles to the South. The nearest well (stock) is 628 feet northeast. The 660 foot determination is for domestic wells, not stock wells.

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: _____

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 Building Unit)
- 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

The following (7) wells will be drilled from this pad: Rico LC29-74-1HNA (REF), Tina LC29-77-1HNC, Trisha LC29-76HNB, Rico LC29-76-1HNC, Trisha LC29-75HNB, Tina LC29-75-1HNA, Trisha LC29-74HNB.
 Production facility located on this pad will service the following (13) wells: Rico LC29-72-1HNA (REF), Tina LC29-73-1HNC, Trisha LC29-73HNB; Rico LC29-74-1HNA (REF), Tina LC29-77-1HNC, Trisha LC29-76HNB, Rico LC29-76-1HNC, Trisha LC29-75HNB, Tina LC29-75-1HNA, Trisha LC29-74HNB; Trisha LC29-77HNB (REF), Trisha LC29-78HNB, Rico LC29-78-1HNC.

Due to expected higher liquid production additional tanks will be required for this facility location. In order to reduce the impact of additional tanks, Noble plans to reduce storage requirements to 3-days of production from the typical 5-days. Noble will also change tank size to 750 bbls from the typical 500 bbls.
 Each well will also require an individual separator which results in the need for more disturbance. Based on Noble's current proposal, disturbance for each well in Section 29 is 1.4+ acres (these wells are long laterals which develop two sections, 20 and 29),

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.
 Signed: _____ Date: 10/30/2013 Email: Regulatorynotification@nobleenergyinc.com
 Print Name: Susan Miller 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:  Director of COGCC Date: 1/10/2014

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>
	Provide a Form 42 Notice of Construction to COGCC 48-hours prior to commencement of construction activities

Best Management Practices

No	BMP/COA Type	Description
1	General Housekeeping	General 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 pick up 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. 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 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>WATER VAULT BMP:</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.

Total: 4 comment(s)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
1668043	NRCS MAP UNIT DESC
1668044	FACILITY LAYOUT DRAWING
1668045	CORRESPONDENCE
2157351	LOCATION DRAWING
2157389	SURFACE AGRMT/SURETY
400500307	FORM 2A SUBMITTED
400500597	ACCESS ROAD MAP
400500599	HYDROLOGY MAP
400500601	LOCATION PICTURES
400500608	MULTI-WELL PLAN
400500619	REFERENCE AREA MAP
400500621	REFERENCE AREA PICTURES
400500624	NRCS MAP UNIT DESC
400504032	WASTE MANAGEMENT PLAN

Total Attach: 14 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	No LGD or public comments. Final Review--passed.	1/9/2014 8:34:45 AM
OGLA	IN PROCESS - Operator provided missing NRCS SOil Map Descriptions, additional information of the size of the disturbed area after interim reclamation, and a sclaed Facility Layout Drawing. OGLA task passed.	1/8/2014 3:00:32 PM
OGLA	Follow-up email to operator requesting further info on size of disturbance after interim reclamation and a Facility Layout Drawing. Duen 1/16/14.	1/6/2014 12:47:30 PM
Permit	SUA submitted.	12/17/2013 7:27:22 AM
Permit	Oper. sub. revised loc. drawing. WO SUA.	12/2/2013 10:21:59 AM
OGLA	ON HOLD - Requested missing NRCS Soil Descriptions, further information on size of disturbace after interim reclamation, and Facility Layout Drawing. Due by 12/11/13.	11/11/2013 11:25:13 AM
Permit	This form has passed completeness.	10/31/2013 2:54:40 PM
Permit	Returned to draft: If the surface owner is not the mineral owner then the right to constrict cannot be the O&G lease. Please change to bond and provide the bond #. Remove the extra verbiage pertaining to the lease.	10/31/2013 1:39:44 PM

Total: 8 comment(s)