

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:

401167795

Date Received:

01/26/2017

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:

**449369**

Expiration Date:

**02/26/2020**

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: Susan Miller

Phone: (303) 228-4246

Fax: ( )

email: susan.miller@nbleenergy.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20030009

Gas Facility Surety ID: \_\_\_\_\_

Waste Management Surety ID: \_\_\_\_\_

LOCATION IDENTIFICATION

Name: A21-13

Number: Pad

County: WELD

Quarter: SWSW Section: 21 Township: 6N Range: 64W Meridian: 6 Ground Elevation: 4723

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: 919 feet FSL from North or South section line

1050 feet FWL from East or West section line

Latitude: 40.466780    Longitude: -104.560830

PDOP Reading: 3.2    Date of Measurement: 11/10/2016

Instrument Operator's Name: Brian Rottinghaus

## 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 #

Well Site is served by Production Facilities

401177144

## FACILITIES

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

Wells <u>8</u>	Oil Tanks* <u>      </u>	Condensate Tanks* <u>      </u>	Water Tanks* <u>      </u>	Buried Produced Water Vaults* <u>      </u>
Drilling Pits <u>      </u>	Production Pits* <u>      </u>	Special Purpose Pits <u>      </u>	Multi-Well Pits* <u>      </u>	Modular Large Volume Tanks <u>      </u>
Pump Jacks <u>      </u>	Separators* <u>      </u>	Injection Pumps* <u>      </u>	Cavity Pumps* <u>      </u>	Gas Compressors* <u>      </u>
Gas or Diesel Motors* <u>      </u>	Electric Motors <u>      </u>	Electric Generators* <u>      </u>	Fuel Tanks* <u>      </u>	LACT Unit* <u>      </u>
Dehydrator Units* <u>      </u>	Vapor Recovery Unit* <u>      </u>	VOC Combustor* <u>      </u>	Flare* <u>      </u>	Pigging Station* <u>      </u>

## OTHER FACILITIES\*

Other Facility Type

Number

Gas Lift Meter building

2

\*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:

(8) 2" - 4" steel three-phase flowlines, (2) 2" - 4" steel Gas Lift lines, (1) temporary 12" poly line to supply site with fresh water.

## CONSTRUCTION

Date planned to commence construction: 04/01/2017 Size of disturbed area during construction in acres: 6.80

Estimated date that interim reclamation will begin: 10/01/2017 Size of location after interim reclamation in acres: 3.40

Estimated post-construction ground elevation: 4723

## DRILLING PROGRAM

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

Is H<sub>2</sub>S 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? Yes

## DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE

Drilling Fluids Disposal Method: Commercial Disposal

Cutting Disposal: OFFSITE

Cuttings Disposal Method: Commercial Disposal

Other Disposal Description:

Drilling waste disposal information added to address non-oil based mud and fluids used in non-producing portion of wellbore.

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: NCWYO Associates

Phone:

Address: 1625 Broadway

Fax: \_\_\_\_\_

Address: Suite 2200

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 09/10/2016

### 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.

	<b>From WELL</b>	<b>From PRODUCTION FACILITY</b>
Building:	766 Feet	_____ Feet
Building Unit:	825 Feet	_____ Feet
High Occupancy Building Unit:	3242 Feet	_____ Feet
Designated Outside Activity Area:	5280 Feet	_____ Feet
Public Road:	845 Feet	_____ Feet
Above Ground Utility:	833 Feet	_____ Feet
Railroad:	5280 Feet	_____ Feet
Property Line:	486 Feet	_____ 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: 12/08/2016

**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 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, 1-3% slopes

NRCS Map Unit Name: 64: Thedalund loam, 1-3% 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, 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: 208 Feet

water well: 606 Feet

Estimated depth to ground water at Oil and Gas Location 60 Feet

Basis for depth to groundwater and sensitive area determination:

Based on the distance to the nearest downgradient surface water feature, water well (permit no. 221886-A) and the depth to groundwater, Noble determined this site is sensitive. Water Well permit no. 61402 was not found in the field.

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 A21-13 Pad, 8 wells consists of: Kona A19-636 Ref, doc no. 401167858, Kona A19-630, doc no. 401167845, Kona A19-624, doc no. 401167875, Kona A19-616, doc no. 401167892; Harper A21-618, doc no. 401167911, Harper A21-626, doc no. 401167927, Harper A21-631, doc no. 401168020, Harper A21-637, doc no. 401168039.  
Access to the existing PDC well will be routed around to the west and south side of the proposed disturbance.  
The ditch within the proposed disturbance area will be filled in during operations.  
Please see Surface Use Agreement attached.  
Per a conversation with Barbara Westerdale, Noble is submitting the Pad Form 2A, and the Facility Form 2A, prior to the submittal of the subject Form 2's, which will be submitted approximately 2/10/17.

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

Signed: \_\_\_\_\_ Date: 01/26/2017 Email: regulatorynotification@nblenergy.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: Matthew Lee Director of COGCC Date: 2/27/2017

### 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

	The Approved Form 2A permit will be posted at the location during construction, drilling, and completions operations.
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### Best Management Practices

No	BMP/COA Type	Description
1	Planning	<p>COGCC Rule 318A.f(2) Groundwater sampling and monitoring. Baseline Sampling and Monitoring</p> <ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>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.</li> </ul>
2	Planning	<p>COGCC Rule 604.c.(2)E. Multiwell Pads.</p> <p>Planning:</p> <ul style="list-style-type: none"> <li>Noble Energy Inc. has consolidated 22 wells on 2 multi-well pads and one multi-well production facility as far as possible away from Building Units.</li> <li>Well pads shall be constructed in such a manner that noise mitigation may be installed and removed without disturbing the site or landscaping.</li> <li>Pads shall have all weather access roads to allow for operator and emergency response.</li> </ul>
3	Planning	<p>COGCC Rule 604.c.(2)I. BOPE testing for drilling operations.</p> <p>Planning:</p> <ul style="list-style-type: none"> <li>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.</li> </ul>
4	Planning	<p>COGCC Rule 604.c.(2)J. BOPE for well servicing operations.</p> <p>Planning:</p> <ul style="list-style-type: none"> <li>Adequate blowout prevention equipment shall be used on all well servicing operations.</li> <li>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.</li> </ul>
5	Planning	<p>COGCC Rule 604.c.(2)L. Drill stem tests.</p> <p>Planning:</p> <ul style="list-style-type: none"> <li>Closed chamber drill stem tests shall be allowed. All other drill stem tests shall require approval by the Director.</li> </ul>
6	Planning	<p>COGCC Rule 604.c.(2)U. Identification of plugged and abandoned wells.</p> <p>Planning:</p> <ul style="list-style-type: none"> <li>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.</li> </ul>
7	Planning	<p>COGCC Rule 604.c.(2)V. Development from existing well pads.</p> <p>Planning:</p> <ul style="list-style-type: none"> <li>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.</li> </ul>

8	Planning	<p>COGCC Rule 803 Lighting Planning:</p> <ul style="list-style-type: none"> <li>• Lighting on location is considered temporary and will be used during construction, drilling, and completion activities. Permanent lighting will not be installed and utilized during normal production operations. 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.</li> </ul>
9	Planning	<p>COGCC Rule 805.c Fugitive Dust Planning:</p> <ul style="list-style-type: none"> <li>• 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.</li> </ul>
10	Traffic control	<p>COGCC Rule 604.c.(2)D. Traffic Plan. Traffic Control:</p> <p>A traffic plan will be coordinated with the local jurisdiction prior to commencement of operations. Dust suppression could include a combination of water, magnesium chloride, or calcium chloride. Limited traffic speed could also be used for dust mitigation.</p> <ul style="list-style-type: none"> <li>• Temporary operations – Dust suppression will be used on county roads 53 and 66 and new access roads if needed.</li> <li>• Facility Maintenance Operations - Production of the location will use a new access road, which will be sited as part of the traffic plan. Dust suppression will be used on county roads 53 and 66 and new access roads if needed.</li> </ul>
11	General Housekeeping	<p>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.</p>
12	General Housekeeping	<p>COGCC Rule 604.c.(2)P. Removal of surface trash. General Housekeeping:</p> <ul style="list-style-type: none"> <li>• 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.</li> </ul>
13	General Housekeeping	<p>COGCC Rule 604.c.(2)T. Well site cleared. General Housekeeping:</p> <ul style="list-style-type: none"> <li>• 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.</li> </ul>
14	Storm Water/Erosion Control	<p>Stormwater management plans (SWMP) are in place to address construction, drilling and operations associated with Oil &amp; 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.</p>
15	Material Handling and Spill Prevention	<p>Spill Prevention Control and Countermeasures (SPCC) plans are in place to address any possible spill associated with Oil &amp; Gas operations throughout the state of Colorado in accordance with CFR 112.</p>



16	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"> <li>• 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.</li> </ul>
17	Material Handling and Spill Prevention	<p>COGCC Rule 604.c.(2)K. Pit level indicators.</p> <p>Material Handling and Spill Prevention:</p> <ul style="list-style-type: none"> <li>• Due to using a closed loop system pits will not be used.</li> </ul>
18	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"> <li>• 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.</li> </ul>
19	Construction	<p>COGCC Rule 604.c.(2)M. Fencing requirements.</p> <p>Construction:</p> <ul style="list-style-type: none"> <li>• Unless otherwise requested by the Surface Owner, well sites constructed within the Designated Setback location will be fenced to restrict access by unauthorized persons.</li> </ul>
20	Construction	<p>COGCC Rule 604.c.(2)S. Access roads.</p> <p>Construction:</p> <ul style="list-style-type: none"> <li>• 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.</li> </ul>
21	Noise mitigation	<p>COGCC Rule 604.c.(2)A. Noise.</p> <p>Noise Mitigation:</p> <ul style="list-style-type: none"> <li>• Temporary operations – Baseline surveys will be completed at residences within 1,000' of wellheads. Engineered sound walls (height based on sound survey results) may be used along the E side of the A21-12 pad and S and E sides of the A21-13 pad. The use of equipment specific sound walls might be required around rig generators in the event of sound impacts during operations.</li> </ul>
22	Emissions mitigation	<p>COGCC Rule 604.c.(2).C. Green Completions – Emission Control Systems.</p> <p>Emissions Mitigation:</p> <ul style="list-style-type: none"> <li>• Flow lines, separators, and sand traps capable of supporting green completions as described in Rule 805 shall be installed at any Oil and Gas Location at which commercial quantities of gas are reasonably expected to be produced based on existing adjacent wells within 1 mile.</li> <li>• Uncontrolled venting shall be prohibited in an Urban Mitigation Area.</li> <li>• Temporary flowback flaring and oxidizing equipment shall include the following: <ul style="list-style-type: none"> <li>o Adequately sized equipment to handle 1.5 times the largest flowback volume of gas experienced in a ten (10) mile radius;</li> <li>o Valves and porting available to divert gas to temporary equipment or to permanent flaring and oxidizing equipment; and</li> <li>o Auxiliary fuel with sufficient supply and heat to sustain combustion or oxidation of the gas mixture when the mixture includes non-combustible gases.</li> </ul> </li> </ul>

23	Drilling/Completion Operations	<p>COGCC Rule 604.c.(2)B. Closed Loop Drilling Systems – Pit Restrictions.</p> <p>Drilling/Completion Operations:</p> <ul style="list-style-type: none"> <li>• Closed loop drilling systems are required within the Buffer Zone Setback.</li> <li>• 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.</li> <li>• 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.</li> <li>• 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&amp;P waste, or flowback fluids are not allowed in fresh water storage pits.</li> <li>• Fresh water storage pits within the Buffer Zone Setback shall include emergency escape provisions for inadvertent human access.</li> </ul>
24	Drilling/Completion Operations	<p>COGCC Rule 604.c.(2)H. Blowout preventer equipment (“BOPE”).</p> <p>Drilling/Completion Operations:</p> <ul style="list-style-type: none"> <li>• Blowout prevention equipment for drilling operations in a Designated Setback Location shall consist of (at a minimum): <ul style="list-style-type: none"> <li>o Rig with Kelly. Double ram with blind ram and pipe ram; annular preventer or a rotating head.</li> <li>o Rig without Kelly. Double ram with blind ram and pipe ram.</li> </ul> </li> </ul> <p>Mineral Management certification or Director approved training for blowout prevention shall be required for at least one (1) person at the well site during drilling operations.</p>
25	Drilling/Completion Operations	<p>COGCC Rule 604.c.(2)O. Loadlines.</p> <p>Drilling/Completion Operations:</p> <ul style="list-style-type: none"> <li>• All loadlines will be bullplugged or capped.</li> </ul>
26	Drilling/Completion Operations	<p>COGCC Rule 604.c.(2)Q. Guy line anchors.</p> <p>Drilling/Completion Operations:</p> <ul style="list-style-type: none"> <li>• 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.</li> </ul>

Total: 26 comment(s)

### Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
2478157	CORRESPONDENCE
2478160	RULE 306.E. CERTIFICATION
401167795	FORM 2A SUBMITTED
401186644	NRCS MAP UNIT DESC
401186647	ACCESS ROAD MAP
401186648	FACILITY LAYOUT DRAWING
401186654	HYDROLOGY MAP
401186659	LOCATION DRAWING
401186660	LOCATION PICTURES
401186663	MULTI-WELL PLAN
401186665	WASTE MANAGEMENT PLAN
401186666	WASTE MANAGEMENT PLAN
401193802	PRE-APPLICATION NOTIFICATION CERTIFICATION
401194980	SURFACE AGRMT/SURETY

Total Attach: 14 Files

### General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review complete.	02/27/2017
OGLA	Operator provided the Rule 306.e. Certification Letter. OGLA task passed.	02/27/2017
OGLA	IN PROCESS - Operator provided comment indicating the non-OBM portion of the drilling fluids and cuttings will be disposed of differently the the OBM and concurred with removing those BMPs that pertain only to production facilities.  OGLA review complete and waiting on Public Comment period.	02/24/2017
OGLA	The proposed disturbance area is in an irrigated crop field and approximately 450 feet from the prairie dog town identified in the southwest corner of Section 21. This places it beyond the 150 foot buffer for Burrowing Owls nesting habitat.	02/23/2017
OGLA	ON HOLD - Request operator's concurrence to remove mention of Beneficial Reuse of drill cuttings nad fluids as they will be disposed offsite at a commercial facility and remove those BMPs that pertain only to production facilities. Due by 3/23/17.	02/23/2017
LGD	This proposed oil and gas facility is located in the Agricultural Zoned District of unincorporated Weld County.As of today's date, February 23, 2017, the Weld County Oil and Gas Liaison/LGD has not been contacted regarding this proposed location.The initial COGCC Form 2A for this location was submitted on or before February 1, 2017, therefore, the proposed location is considered a Use by Right with no Weld Oil and Gas Location Assessment (WOGLA) required.A building permit is required for the production facilities (tank battery, separators, pump jacks, compressors, generators, etc.) from the Department of Planning Services.Access points from County roads require an Access Permit from the Department of Public Works, which includes any necessary traffic control plans and Improvement Agreements.The use of a right-of-way requires a Right-Of-Way Permit from the Department of Public Works.Troy Swain, Weld Oil/Gas Liaison and LGD (970) 400-3579.	02/23/2017
Permit	Permitting Review Complete.	02/21/2017
Permit	Passes completeness.	02/06/2017
Permit	Returned to draft: --complete Waste Management Section of form.	02/03/2017
OGLA	Did not pass Buffer Zone completeness review. Drilling waste management program is missing. Return to Draft.	01/30/2017
Permit	Referred to OGLA Supervisor for Buffer Zone Review.	01/27/2017

Total: 11 comment(s)