

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:

401441194

(REJECTED)

Date Received:

10/30/2017

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:

Expiration Date:

☒ 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: 10669

Name: NICKEL ROAD OPERATING LLC

Address: 999 18TH STREET #3370

City: DENVER State: CO Zip: 80202

Contact Information

Name: Andrew Haney

Phone: (720) 315-8487

Fax: ()

email: andrew.haney@nickelroadoperating.com

RECLAMATION FINANCIAL ASSURANCE

☒ Plugging and Abandonment Bond Surety ID: 20170087

☐ Gas Facility Surety ID: _____

☐ Waste Management Surety ID: _____

LOCATION IDENTIFICATION

Name: Noble

Number: 3N68W5

County: WELD

Quarter: NWSW Section: 5 Township: 3N Range: 68W Meridian: 6 Ground Elevation: 5102

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: 2340 feet FSL from North or South section line

810 feet FWL from East or West section line

Latitude: 40.254008 Longitude: -105.033646

PDOP Reading: 1.5 Date of Measurement: 09/18/2017

Instrument Operator's Name: Jason Dahlman

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 #

FACILITIES

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

| | | | | | | | | | |
|-----------------------|----|----------------------|----|----------------------|--|------------------|---|-------------------------------|---|
| Wells | 12 | Oil Tanks* | 24 | Condensate Tanks* | | Water Tanks* | 6 | Buried Produced Water Vaults* | |
| Drilling Pits | | Production Pits* | | Special Purpose Pits | | Multi-Well Pits* | | Modular Large Volume Tanks | 2 |
| Pump Jacks | | Separators* | 12 | Injection Pumps* | | Cavity Pumps* | | Gas Compressors* | |
| Gas or Diesel Motors* | | Electric Motors | | Electric Generators* | | Fuel Tanks* | | LACT Unit* | |
| Dehydrator Units* | | Vapor Recovery Unit* | 2 | VOC Combustor* | | Flare* | | Pigging Station* | |

OTHER FACILITIES*

Other Facility Type

Number

| | |
|----------------------|---|
| ECD | 4 |
| Vapor Recovery Tower | 4 |

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:

1 flowline, oil production line, water production line and a backpressure line, each battery will have a gas sales line. Flowlines and oil production lines are 3" steel Sched 80 FB PE DRL. Water and low-pressure gas vent lines are 2" SDR 7 poly material. Gas sales lines are normally 6" steel FBE.

CONSTRUCTION

Date planned to commence construction: 03/01/2018 Size of disturbed area during construction in acres: 9.80
Estimated date that interim reclamation will begin: 06/01/2018 Size of location after interim reclamation in acres: 4.60
Estimated post-construction ground elevation: 5102

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? 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:

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: Vernon & Alice Noble

Phone: _____

Address: 17400 County Road 3

Fax: _____

Address: _____

Email: _____

City: Berthoud State: CO Zip: 80513

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 10/03/2017

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: | 549 Feet | 658 Feet |
| Building Unit: | 549 Feet | 658 Feet |
| High Occupancy Building Unit: | 5280 Feet | 5280 Feet |
| Designated Outside Activity Area: | 5280 Feet | 5280 Feet |
| Public Road: | 797 Feet | 686 Feet |
| Above Ground Utility: | 782 Feet | 671 Feet |
| Railroad: | 5280 Feet | 5280 Feet |
| Property Line: | 306 Feet | 38 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: 10/30/2017

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.

Please see the attached Siting Rationale.

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: Map Unit 79: Weld loam, 1 to 3 percent slopes

NRCS Map Unit Name: Map Unit 82: Wiley-Colby complex, 1 to 3 percent 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, 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: _____ 1 Feet

water well: _____ 2111 Feet

Estimated depth to ground water at Oil and Gas Location _____ 67 Feet

Basis for depth to groundwater and sensitive area determination:

Sensitive area was marked yes due to the proximity to a nearby irrigation ditch. Depth to ground water was determined from Water Well Permit 72302.

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

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 _____

Operator Proposed Wildlife BMPs

No BMP

CPW Proposed Wildlife BMPs

No BMP

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 The Building Unit owners have waived the 30 day pre-application notification. The waivers are enclosed in the 305.a.(2) certification.

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

Signed: _____ Date: 10/30/2017 Email: agross@upstreampm.com

Print Name: Andrea Gross Title: Permit Agent

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: _____

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

| | |
|--|--|
| | |
|--|--|

Best Management Practices

| No | BMP/COA Type | Description |
|----|--|---|
| 1 | Planning | Nickel Road is constructing this multi-well pad which is located in a manner allowing for resource development and extraction while maintaining the highest distances possible from the offsetting residential area(s). |
| 2 | Traffic control | <p>Access roads will be constructed to accommodate local emergency vehicles. This road will be maintained for access at all times.</p> <p>A traffic plan will be done if request by Weld County as part of the local permitting process.</p> |
| 3 | General Housekeeping | 804. Visual Impacts: All long term facility structures will be painted a color that enables the facilities to blend in with the natural background color of the landscape, as seen from a viewing distance and location typically used by the public |
| 4 | General Housekeeping | Operator will maintain appearance with garbage clean-up; a trash bin will be located on site to accumulate waste by the personnel drilling the wells. Site will have unused equipment, trash and junk removed immediately. |
| 5 | General Housekeeping | <p>Guy line anchors will be used and shall be brightly marked pursuant to Rule 604.c(2)Q.</p> <p>All guy line anchors left buried for future use will 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.</p> |
| 6 | Storm Water/Erosion Control | <p>"- Operator will implement and maintain BMPs to control stormwater runoff in a manner that minimizes erosion, transport of sediment offsite, and site degradation. Flowlines will be co-located to the maximum extent practicable and any erosion problems that arise due to the construction of any pipeline(s) will be mitigated. Location will be covered under Nickel Road Operating's field wide permit, currently pending approval through CDPHE. Typical stormwater BMPs installed include a diversion ditch and berm with sediment traps and installation of wattles where necessary."</p> |
| 7 | Storm Water/Erosion Control | Berm Construction: A steel containment berm or structure will be erected around the oil and water storage tanks. The berm will enclose an area sufficient to contain and provide secondary containment for 150% of the largest single tank. The berm will be inspected at least every 14 calendar days while the site is under construction and within 24 hours of a precipitation event. Inspection records will be kept on file for a minimum of three (3) years from expiration or inactivation of permit coverage. These records will be made available to the regulatory agencies upon request. |
| 8 | Material Handling and Spill Prevention | <p>To ensure protection for the surface during fracturing treatment, the location will be specifically constructed to contain any releases or spills. Secondary containment from any chemical spills or leaks will surround any trucks that carry, mix, or add chemicals to the flow stream as well as connections that could possibly leak fluid. If any spill or release occur, every reasonable step will be taken to quickly remediate the disturbed area.</p> <p>Pumper will visit the location daily and visually inspect all tanks and fittings for leaks. Additionally, monthly documented SPCCP inspections are conducted pursuant to 40 CFR §112.</p> |
| 9 | Dust control | 805.c. Operator 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 may be used. |
| 10 | Construction | 803. Permanent lighting will be installed around the facility to allow both the operator and haulers to conduct safe operations at night. All lights will be directed down and inward toward the location or shielded so no light pollution leaves the location. |

| | | |
|----|--------------------------------|--|
| 11 | Construction | A permanent fencing plan will be agreed upon by the surface owner and the applicant. |
| 12 | Noise mitigation | -Operator will install sound walls during drilling and completion if it is determined they will be required based on the results of a Sound Study. If sound walls are required, the location and number of the walls will be determined based on the results of Sound Study. |
| 13 | Odor mitigation | - 805. Oil & gas facilities and equipment shall be operated in such a manner that odors and dust do not constitute a nuisance or hazard to public welfare. Operator is in the process of implementing a new base fluid for Oil Base Mud systems. The aromatics and BTEX concentrations are much less than that of generic diesel. With these two things being the major contributors to the odor from diesel, this should lead to less odor at the drill site caused by OBM. |
| 14 | Drilling/Completion Operations | - Operator will have MLVT Design Package, certified and sealed by a licensed professional engineer, complete prior to pad construction. The design package will be made available upon request. The site shall be prepared in accordance with the specifications of the design package prior to tank installation; including ensuring that proper compaction requirements have been met. |
| 15 | Drilling/Completion Operations | - The MLVT will be located a minimum of 75 feet from a wellhead, fired vessel, heater-treater, or a compressor with a rating of 200 horsepower or more. It will be located at a minimum of 50 feet from a separator, well test unit, or other non-fired equipment. |
| 16 | Drilling/Completion Operations | - All liner seams will be welded and tested in accordance with applicable ASTM International standards. |
| 17 | Drilling/Completion Operations | - Operator will be present during initial filling of the MLVT and the contractor will supervise and inspect the MLVT for leaks during filling. |
| 18 | Drilling/Completion Operations | - Operator will comply with the testing and re-inspection requirements and associated written standard operating procedures (SOP) listed on the design package. |
| 19 | Drilling/Completion Operations | - Signs will be posted on the MLVT indicating that the contents are freshwater. |
| 20 | Drilling/Completion Operations | - The MLVT will be operated with a minimum of 1 foot of freeboard at all times. |
| 21 | Drilling/Completion Operations | - Access to the MLVT will be limited to operational personnel and authorized regulatory agency personnel. |
| 22 | Drilling/Completion Operations | - Operator or contractor will conduct daily visual inspections of the exterior wall and surrounding area for integrity deficiencies. |
| 23 | Drilling/Completion Operations | - Operator has developed a contingency plan/emergency response plan associated with the MLVT and it is on file at their office. |
| 24 | Drilling/Completion Operations | - Tanks will be filled using a local water source through temporary waterlines. No water will be trucked to location. |
| 25 | Drilling/Completion Operations | - A fabric reinforced liner will be utilized. In the event that a tank breach were to occur, the fabric reinforced liner will prevent a "zippering" failure from occurring. The liner will meet the specifications per the design package. |
| 26 | Drilling/Completion Operations | - Operator acknowledges and will comply with the Colorado Oil & Gas Conservation Commission Policy on the Use of Modular Large Volume Tanks in Colorado dated June 13, 2014. |
| 27 | Drilling/Completion Operations | Loadlines: All loadlines shall be bullplugged or capped. |

| | | |
|----|--------------------------------|--|
| 28 | Drilling/Completion Operations | Green Completions - Emission Control Systems: Test separators and associated flow lines and sand traps shall be installed on-site to accommodate green completions techniques pursuant to COGCC Rules where reservoir pressure, formation productivity, and wellbore conditions are likely to enable the well to be capable of naturally flowing hydrocarbon gas in flammable or greater concentrations at a stabilized rate in excess of five hundred (500) MCFD to the surface against an induced surface backpressure of five hundred (500) psig or sales line pressure, whichever is greater. In the absence of a viable gas sales line, the flowback gas shall be thermally oxidized in an emissions control device (ECD), which will be installed and kept in operable condition for least the first 90-days of production pursuant to CDPHE rules. This ECD shall have an adequate capacity for 1.5 times the largest flowback within a 10 mile radius, will be flanged to route gas to other or permanent oxidizing equipment and shall be provided with the equipment needed to maintain combustions where noncombustible gases are present. All salable quality gas shall be directed to the sales line as soon as practicable or shut in and conserved. |
| 29 | Drilling/Completion Operations | Control of Fire Hazards: Nickel Road and its contractor's employ best management practices during the drilling and production of its wells and facilities. They will comply with appropriate COGCC and any county rules concerning fire and safety. Nickel Road will ensure that any flammable liquids will remain no less than 50 feet from the wellhead (s), tanks and separator(s) except for fuel in tanks or operating equipment. Any electrical equipment installations inside the bermed area will comply with API RP 500 classifications and comply with the current electrical code as adopted by Colorado. |
| 30 | Interim Reclamation | - Operator shall be responsible for segregating the topsoil, backfilling, re-compacting, reseeding, and re-contouring the surface of any disturbed area so as not to interfere with Owner's operations and shall reclaim such area to be returned to pre-existing conditions as best as possible with control of all noxious weeds. |
| 31 | Final Reclamation | Identification of Plugged and Abandoned Wells: Nickel Road will identify the location of the wellbore with a permanent monument as specified in Rule 319.a.(5). Nickel Road will inscribe or imbed the well number and date of plugging upon the permanent monument. Pursuant to Rule 319.a.(5), once the well has been plugged and abandoned, Nickel Road will identify the location of the wellbore with a permanent monument that will detail the well name and date of plugging. |

Total: 31 comment(s)

Attachment Check List

| <u>Att Doc Num</u> | <u>Name</u> |
|---------------------------|--|
| 401441194 | FORM 2A SUBMITTED |
| 401441700 | ACCESS ROAD MAP |
| 401441702 | FACILITY LAYOUT DRAWING |
| 401441703 | HYDROLOGY MAP |
| 401441705 | LOCATION DRAWING |
| 401441708 | LOCATION PICTURES |
| 401441709 | NRCS MAP UNIT DESC |
| 401441720 | WASTE MANAGEMENT PLAN |
| 401444356 | PRE-APPLICATION NOTIFICATION CERTIFICATION |
| 401444358 | SITING RATIONALE |
| 401452053 | MULTI-WELL PLAN |

Total Attach: 11 Files

General Comments

| <u>User Group</u> | <u>Comment</u> | <u>Comment Date</u> |
|-------------------|----------------|---------------------|
| | | Stamp Upon Approval |

Total: 0 comment(s)

REJECTED

Public Comments

No public comments were received on this application during the comment period.

REJECTED