

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:

401515579

(SUBMITTED)

Date Received:

01/18/2018

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: KIT TINCHER
 Phone: (303) 881-2336
 Fax: ()
 email: KIT.TINCHER@NICKELROADOPERATING.COM

RECLAMATION FINANCIAL ASSURANCE

- Plugging and Abandonment Bond Surety ID: 20170087 Gas Facility Surety ID: _____
- Waste Management Surety ID: _____

LOCATION IDENTIFICATION

Name: DEHAAN SOUTH Number: WELL PAD
 County: WELD
 Quarter: SWSW Section: 17 Township: 7N Range: 65W Meridian: 6 Ground Elevation: 4908

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: 1129 feet FSL from North or South section line
540 feet FWL from East or West section line

Latitude: 40.570841 Longitude: -104.694543

PDOP Reading: 1.5 Date of Measurement: 12/07/2017

Instrument Operator's Name: 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 #

Well Site is served by Production Facilities

401528729

FACILITIES

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

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

OTHER FACILITIES*

Other Facility Type

Number

Other Facility Type	Number

Those facilities indicated by an asterisk () shall be used to determine the distance from the Production Facility to the nearest cultural feature on the Cultural Setbacks Tab.

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

12 flowlines (3" steel flowline)
12 oil production lines (3" steel flowline)
12 water production lines (2" poly flowline)
12 backpressure lines (2" poly flowline)
1 gas sales line (6" steel sales line)

CONSTRUCTION

Date planned to commence construction: 10/01/2018

Size of disturbed area during construction in acres: 6.20

Estimated date that interim reclamation will begin: 05/01/2019

Size of location after interim reclamation in acres: 3.00

Estimated post-construction ground elevation: 4908

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? No

Reuse Facility ID: _____ or Document Number: _____

Centralized E&P Waste Management Facility ID, if applicable: _____

SURFACE & MINERALS & RIGHT TO CONSTRUCT

Name: MARGARET DEHAAN Phone: _____

Address: P.O. BOX 40 Fax: _____

Address: _____ Email: _____

City: MEAD State: CO Zip: 80642

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 11/10/2017

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:	756 Feet	_____ Feet
Building Unit:	883 Feet	_____ Feet
High Occupancy Building Unit:	5280 Feet	_____ Feet
Designated Outside Activity Area:	5280 Feet	_____ Feet
Public Road:	524 Feet	_____ Feet
Above Ground Utility:	520 Feet	_____ Feet
Railroad:	5280 Feet	_____ Feet
Property Line:	63 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: 12/27/2017

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.

PAD WAS LOCATED AS PROPOSED BASED ON SURFACE OWNER'S PREFERENCE AND IN ACCORDANCE WITH THE EXECUTED SURFACE USE AGREEMENT. THE PROPOSED LOCATION MINIMIZES IMPACT TO EXISTING PIVOT IRRIGATED CROP LAND.

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: 64 - Thedalund loam, 1 to 3 percent slopes

NRCS Map Unit Name: _____

NRCS Map Unit Name: _____

PLANT COMMUNITY:

Complete this section only if any portion of the disturbed area of the location's current land use is on non-crop land.

Are noxious weeds present: Yes No

Plant species from: NRCS or, field observation Date of observation: _____

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: 500 Feet

water well: 1825 Feet

Estimated depth to ground water at Oil and Gas Location 129 Feet

Basis for depth to groundwater and sensitive area determination:

PERMIT #26262 IS NEAREST WATER WELL. PERMIT # 220484--A IS NEAREST WELL WITH STATIC WATER LEVEL DATA (APPROX. 2240' SE OF LOC) - USED AS BASIS FOR DEPTH TO GROUNDWATER AT OIL AND GAS LOCATION.

Is the location in a riparian area: No Yes

Was an Army Corps of Engineers Section 404 permit filed No Yes If yes attach permit.

Is the location within a Rule 317B Surface Water Supply Area buffer No zone:

If the location is within a Rule 317B Surface Water Supply Area buffer have all public water supply systems within 15 miles been notified: _____

Is the Location within a Floodplain? No Yes Floodplain Data Sources Reviewed (check all that apply)

Federal (FEMA)

State

County

Local

Other _____

GROUNDWATER BASELINE SAMPLING AND MONITORING AND WATER WELL SAMPLING

Water well sampling required per Rule 318A

WILDLIFE

- This location is included in a Wildlife Mitigation Plan
- This location was subject to a pre-consultation meeting with CPW held on _____

Operator 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 MLVT manufacturer / vendor: Rain for Rent, Inc. or Resource West, Inc.
 Small MLVT Size/volume - 157' diameter/42,000 bbl
 Anticipated time frame on location is up to 4 months.

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

Signed: _____ Date: 01/18/2018 Email: JEN@JENLINDLLC.COM

Print Name: JENNIFER LIND Title: REGULATORY SPECIALIST

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.

<u>COA Type</u>	<u>Description</u>

Best Management Practices

<u>No BMP/COA Type</u>	<u>Description</u>
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) and minimizing impacts to existing irrigated crop land.

2	Traffic control	Access roads will be constructed to accommodate local emergency vehicles. This road will be maintained for access at all times. A traffic plan will be done if request by Weld County as part of the local permitting process.
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	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
5	General Housekeeping	Guy line anchors will be used and shall be brightly marked pursuant to Rule 604.c(2)Q. 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.
6	Storm Water/Erosion Control	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. 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.
7	Material Handling and Spill Prevention	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. 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.
8	Dust control	805.c. Nickel Road will 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 highwind 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.
9	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.
10	Construction	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.
11	Construction	A permanent fencing plan will be agreed upon by the surface owner and the applicant.
12	Construction	Nickel Road will install sound walls around the perimeter of the pad location during drilling and completion operations.

13	Odor mitigation	805. Oil & gas facilities and equipment will 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	<ul style="list-style-type: none"> - 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. - The MLVT will be located a minimum of 75 feet from a wellhead, fired vessel, heatertreater, 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. - All liner seams will be welded and tested in accordance with applicable ASTM International standards. - Operator will be present during initial filling of the MLVT and the contractor will supervise and inspect the MLVT for leaks during filling. - Operator will comply with the testing and re-inspection requirements and associated written standard operating procedures (SOP) listed on the design package. - Signs will be posted on the MLVT indicating that the contents are freshwater. - The MLVT will be operated with a minimum of 1 foot of freeboard at all times. - Access to the MLVT will be limited to operational personnel and authorized regulatory agency personnel. - Operator or contractor will conduct daily visual inspections of the exterior wall and surrounding area for integrity deficiencies. - Operator has developed a contingency plan/emergency response plan associated with the MLVT and it is on file at their office. - Tanks will be filled using a local water source through temporary waterlines. No water will be trucked to location. - 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. - 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.
15	Drilling/Completion Operations	Loadlines: All loadlines shall be bullplugged or capped.
16	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. All gas shall be directed to the sales line or shut in and conserved if a sales lines is unavailable.
17	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.
18	Interim Reclamation	Nickel Road will 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.

19	Final Reclamation	<p>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.</p>
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Total: 19 comment(s)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
401515579	FORM 2A SUBMITTED
401517802	ACCESS ROAD MAP
401517803	HYDROLOGY MAP
401517804	OTHER
401517805	LOCATION PICTURES
401517807	LOCATION DRAWING
401517809	PRE-APPLICATION NOTIFICATION CERTIFICATION
401517811	WASTE MANAGEMENT PLAN
401518381	MULTI-WELL PLAN
401518397	NRCS MAP UNIT DESC
401518450	SURFACE AGRMT/SURETY
401529505	FACILITY LAYOUT DRAWING

Total Attach: 12 Files

General Comments

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

Total: 0 comment(s)

Public Comments

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

