

State of Colorado
Oil and Gas Conservation Commission1120 Lincoln Street, Suite 801, Denver, Colorado 80203
Phone: (303) 894-2100 Fax: (303) 894-2109

Document Number:

401548407

Date Received:

02/20/2018

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:

465636

Expiration Date:

06/25/2022☒ 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: 1600 STOUT STREET SUITE 1850

City: DENVER State: CO Zip: 80202

Contact Information

Name: JENNIFER LIND

Phone: (303) 406-1117

Fax: ()

email: JENNIFER.LIND@NICKELROAD
OPERATING.COM

FINANCIAL ASSURANCE

- ☒ Plugging and Abandonment Bond Surety ID (Rule 706): 20170087 ☐ Gas Facility Surety ID (Rule 711): _____
- ☐ Waste Management Surety ID (Rule 704): _____

LOCATION IDENTIFICATION

Name: ELDER

Number: PAD

County: WELD

Quarter: NWSW Section: 11 Township: 7N Range: 65W Meridian: 6 Ground Elevation: 4867

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: 2462 feet FSL from North or South section line

435 feet FWL from East or West section line

Latitude: 40.587679 Longitude: -104.637752

PDOP Reading: 1.4 Date of Measurement: 01/25/2018

Instrument Operator's Name: DAHLMAN

LOCAL GOVERNMENT INFORMATION

County: WELD

Municipality: N/A

Per § 34-60-106 (1)(f)(I)(A), the following questions pertain to the "local government with jurisdiction to approve the siting of the proposed oil and gas location."

The local government with jurisdiction is: County

Does the local government with jurisdiction regulate the siting of Oil and Gas Locations, with respect to this COGCC application? If the local government has waived its right to precede the COGCC in siting determination, indicate by selecting "NO" here and selecting "Waived" below.

☒ Yes ☐ No

If yes, in checking this box, I hereby certify that an application has been filed with the local government with jurisdiction to approve the siting of the proposed oil and gas location. ☒

The local government siting permit type is: WOGLA

The local government siting permit was filed on: 03/22/2019

The disposition of the application filed with the local government is: Approved

Additional explanation of local process:

WOGLA approved on 6/14/19.

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 <u>48</u>	Oil Tanks* <u>12</u>	Condensate Tanks* <u> </u>	Water Tanks* <u>6</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>48</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>1</u>
Dehydrator Units* <u> </u>	Vapor Recovery Unit* <u>4</u>	VOC Combustor* <u> </u>	Flare* <u> </u>	Pigging Station* <u> </u>

OTHER FACILITIES*

<u>Other Facility Type</u>	<u>Number</u>
Gas Sales Meter	1
VRT	4
ECD	6

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:

48 flowlines (2" schedule 160 flowline)
1 VRT line (4" schedule 40 flowline)
1 low pressure gas line (4" schedule 40 flowline)
1 gas supply line (2" schedule 80 flowline)
1 jumper line (2" schedule 80 flowline to 4" schedule 40 flowline)
1 oil production line header (4" schedule 40 flowline)
1 water production line header (4" schedule 80 flowline)
1 maintenance line (2" schedule 80 flowline)
2 gas lift lines (3" schedule 80 flowline)
1 gas sales line (4" schedule 40 flowline)

CONSTRUCTION

Date planned to commence construction: 06/01/2019 Size of disturbed area during construction in acres: 12.30
Estimated date that interim reclamation will begin: 01/01/2020 Size of location after interim reclamation in acres: 8.70
Estimated post-construction ground elevation: 4867

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:

PLEASE SEE ATTACHED WASTE MANAGEMENT PLAN.

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: CASEY J. ELDER

Phone: _____

Address: 20725 HWY 14

Fax: _____

Address: _____

Email: _____

City: AULT State: CO Zip: 80610

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 01/17/2018

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:	2618 Feet	2647 Feet
Building Unit:	2618 Feet	2647 Feet
High Occupancy Building Unit:	5280 Feet	5280 Feet
Designated Outside Activity Area:	5280 Feet	5280 Feet
Public Road:	1818 Feet	2006 Feet
Above Ground Utility:	1784 Feet	1972 Feet
Railroad:	5280 Feet	5280 Feet
Property Line:	181 Feet	22 Feet
School Facility::	5280 Feet	5280 Feet
School Property Line:	5280 Feet	5280 Feet
Child Care Center:	5280 Feet	5280 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, Designated Outside Activity Area, School Facility, and Child Care Center – as defined in 100 Series Rules.

-For measurement purposes only, Production Facilities should only include those items with an asterisk(*) on the Facilities Tab.

SCHOOL SETBACK INFORMATION

Was Notice required under Rule 305.a.(4)? ☐ Yes ☒ No

DESIGNATED SETBACK LOCATION INFORMATION

Check all that apply. This location is within a:

- ☐ Buffer Zone
- ☐ Exception Zone
- ☐ Urban Mitigation Area

- Buffer Zone - as described in Rule 604.a.(2), within 1,000' of a Building Unit.

- Exception Zone - as described in Rule 604.a.(1), within 500' of a Building Unit.

- Urban Mitigation Area - as defined in 100-Series Rules.

- Large UMA Facility – as defined in 100-Series Rules.

Pre-application Notifications (required if location is within 1,000 feet of a building unit):

Date of Rule 305.a.(1) Urban Mitigation Area Notification to Local Government: _____

Date of Rule 305.a.(2) Buffer Zone Notification to Building Unit Owners: _____

FOR MULTI-WELL PADS AND PRODUCTION FACILITIES WITHIN DESIGNATED SETBACK LOCATIONS ONLY:

☐ Check this box if this Oil and Gas Location has or will have Production Facilities that serve multiple wells (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 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: 9 - AVAR FINE SANDY LOAM

NRCS Map Unit Name: 19 - COLOMBO CLAY LOAM, 0 TO 1 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: 01/25/2018

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: 0 Feet

water well: 2180 Feet

Estimated depth to ground water at Oil and Gas Location 30 Feet

Basis for depth to groundwater and sensitive area determination:

NEAREST WATER WELL RECEIPT: 9062880, PERMIT #: 21924--, USED AS BASIS FOR DEPTH TO GROUNDWATER AT OIL AND GAS LOCATION. NEAREST DOWNGRADIANT WATER FEATURE IS DRAINAGE SWALE GOING THROUGH PROPOSED 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 _____

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

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

Signed: _____ Date: 02/20/2018 Email: JENNIFER.LIND@NICKELROADOPERATING.COM

Print Name: JENNIFER LIND Title: REG & ENV MANAGER

Based on the information provided herein, this Oil and Gas Location Assessment complies with COGCC Rules, applicable orders, and SB 19-181 and is hereby approved.

COGCC Approved:  _____ Director of COGCC Date: 6/26/2019

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**

	If Modular Large Volume Tanks (MLVTs) are used to support completions operations, Operator will ensure compliance with the COGCC June 13, 2014 Policy on the Use of Modular Large Volume Tanks in Colorado. If completions are supported by mobile, temporary frac tanks, operator will conduct routine inspections of tanks, pipes, and manifolds to prevent leaks from causing erosion, site degradation, or offsite flow.
	This Form 2A has been approved prior to commission approval of the DSU (Docket #190600378). If the final agency action is denial of the DSU, then the location will be immediately subject to 1000 series reclamation for interim and final reclamation as applicable.
	Operator must implement site-specific best management practices in accordance with good engineering practices, including, but not limited to, construction of a berm or diversion dike, site grading, or other comparable measures, sufficient to protect Owl Creek located 560 feet southeast of the oil and gas location from a release of drilling, completion, produced fluids, and chemical products.
	Green Completions -Test separators and associated flow lines, sand traps and emission control systems shall be installed on-site to accommodate green completions techniques. When commercial quantities of salable quality gas are achieved at each well, the gas shall be immediately directed to a sales line or shut in and conserved. If a sales line is unavailable or other conditions prevent placing the gas into a sales line, the operator shall not produce the wells without an approved variance per Rule 805.b.(3)C.

Best Management Practices

No	BMP/COA Type	Description
1	General Housekeeping	<p>- 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</p> <p>- 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.</p>
2	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.</p> <p>Typical stormwater BMPs installed include a diversion ditch and berm with sediment traps and installation of wattles where necessary.</p>
3	Dust control	<p>- 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 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.</p>
4	Construction	<p>- 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.</p>
5	Construction	<p>603.h.(1)B - The wells located on this pad will be equipped with remote shut-in capabilities prior to commencing production. Remote shut-in capabilities include the ability to shut-in the well from outside the relevant Floodplain via automation controls.</p> <p>603.h.(1)C & 603.h.(2)C - Secondary containment around tanks will be constructed of steel rings with a synthetic or engineered liner and designed to contain 150% of the capacity of the largest tank. All berms will be visually checked periodically to ensure proper working condition. Secondary containment devices shall be sufficiently impervious to contain any spilled or released material.</p> <p>603.h.(2)B - All oil and produced water tanks and separation equipment will be anchored to the ground. Anchors will be engineered to support the tanks and separation equipment and to resist flotation, collapse, lateral movement, or subsidence.</p>
6	Noise mitigation	<p>-Operator will complete a sound study at this pad location prior to construction activities. Sound walls will be installed according to sound study recommendations and will remain in place during drilling and completion operations.</p>
7	Odor mitigation	<p>- 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.</p>
8	Interim Reclamation	<p>- 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.</p>

Total: 8 comment(s)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
2478880	CORRESPONDENCE
2479012	MULTI-WELL PLAN
2479081	ACCESS ROAD MAP
2479082	OTHER
2479083	FACILITY LAYOUT DRAWING
2479084	HYDROLOGY MAP
2479085	LOCATION DRAWING
2479086	REFERENCE AREA MAP
2479087	REFERENCE AREA PICTURES
2479088	CORRESPONDENCE
2479095	DIRECTOR OBJECTIVE CRITERIA REVIEW MEMO
401548407	FORM 2A SUBMITTED
401549646	NRCS MAP UNIT DESC
401549647	LOCATION PICTURES
401549649	SURFACE AGRMT/SURETY
401756952	WASTE MANAGEMENT PLAN

Total Attach: 16 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Final Review	Based on OGLA comment from 5/31/2019, removed references to MLVTs in Operator's comment on the Submit Tab. Added COA regarding MLVT policy and use of frac tanks. Removed operator comment regarding reference area photos, since they were already provided.	06/22/2019
OGLA	The Director Objective Criteria Review Summary (Doc #2479095) is attached to this Form 2A. Following additional analysis of the Director Objective Criteria, the Director determined that this application meets the standard for the protection of public health, safety, welfare, the environment and wildlife resources set by SB 19-181.	06/20/2019
OGLA	Operator provided updated Local Government information indicating the WOGLA, a Weld County Flood Permit, and CDOT Access Permit have been approved.	06/18/2019
Permit	COGCC Staff has added the Local Government siting permit information and the School and Childcare Center distances provided by the operator.	06/14/2019
OGLA	Director Objective Criteria 8 - Operator has indicated they have an approved Site Safety and Emergency Action Plan from Weld County. Director Objective Criteria 5c - Operator concurred with a COA to protect the proximate downgradient surface water feature. Waiting on Local Government information.	05/31/2019
OGLA	Operator provided a revised Location Drawing, Access Road Map, Hydrology Map, Reference Area Map & Reference Area Pictures. Operator also revised the Facilities count and removed the MLVTs.	05/31/2019
OGLA	Operator provided a revised Facility Layout Drawing and a Construction Drawing depicting changes to the location to address initially being within a mapped floodplain. Location disturbance area moved to be outside the mapped floodplain. However the following Director's Objective Criteria still appear to apply: 5.c. - Sensitive Area for water resources due to proximate surface water features and Criteria 8 - 18 tanks or greater than 5,200 barrels of hydrocarbon and produced liquid storage. Changes in the layout of the location to get out of the mapped floodplain requires the operator to also update the Location Drawing, Access Road Map, Hydrology Map, & Reference Area Map. Contacted operator to discuss.	05/24/2019
Permit	With operators concurrence removed checks on boxes for surface owner is mineral owner. Changed Right to construct to SUA and unchecked the boxes. Final Review Completed.	04/30/2019
Permit	Permitting Review Complete.	04/26/2019
OGLA	No Public Comments. OGLA task passed.	11/05/2018
OGLA	IN PROCESS - Operator provide a Reference Area Map attachment, removed the unnecessary 305.a attachment, provided the size/volume of the MLVTs. indicated Yes the location is in a floodplain, & provide floodplain BMPs. OGLA review complete. Waiting on Public Comment period.	11/01/2018
OGLA	ON HOLD - Requested operator provide the required Reference Area Map & Reference Area Pictures attachment, remove the unnecessary 305.a attachment, provide the size/volume of the MLVTs. check Yes the location is in a floodplain, & provide floodplain BMPs. Due by 11/29/18.	10/29/2018
Permit	Passed Completeness	10/13/2018
Permit	Returned to draft per Permitting Supervisor.	02/28/2018

Total: 14 comment(s)