

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:

400887987

0

Date Received:

10/30/2015

Oil and Gas Location Assessment

New Location  Refile  Amend Existing Location Location#: 322649

Submit signed original form. This Oil and Gas Location Assessment is to be submitted to the COGCC for approval prior to any ground disturbance activity associated with oil and gas operations. Approval of this Oil and Gas Location Assessment will allow for the construction of the below specified Location; however, it does not supersede any land use rules applied by the local land use authority. Please see the COGCC website at <http://cogcc.state.co.us/> for all accompanying information pertinent this Oil and Gas Location Assessment.

Location ID:

**322649**

Expiration Date:

**03/28/2019**

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: 10435  
Name: MENDELL NIOBRARA LLC  
Address: 2162 W EISENHOWER BLVD  
City: LOVELAND State: CO Zip: 80537

Contact Information

Name: PAUL GOTTLÖB  
Phone: (720) 420-5747  
Fax: ( )  
email: paul.gottlob@iptenergyservices.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20120099  Gas Facility Surety ID: \_\_\_\_\_  
 Waste Management Surety ID: \_\_\_\_\_

LOCATION IDENTIFICATION

Name: FIKE FACILITY & PAD Number: \_\_\_\_\_  
County: WELD  
Quarter: SWNW Section: 36 Township: 5N Range: 64W Meridian: 6 Ground Elevation: 4594

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: 2007 feet FNL from North or South section line  
145 feet FWL from East or West section line

Latitude: 40.357650 Longitude: -104.506790  
PDOP Reading: 2.0 Date of Measurement: 10/23/2015

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 #



## FACILITIES

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

|                       |                 |                      |                 |                      |                 |                  |                 |                               |                 |
|-----------------------|-----------------|----------------------|-----------------|----------------------|-----------------|------------------|-----------------|-------------------------------|-----------------|
| Wells                 | <u>6</u>        | Oil Tanks*           | <u>        </u> | Condensate Tanks*    | <u>6</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>6</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>1</u>        | VOC Combustor*       | <u>2</u>        | Flare*           | <u>        </u> | Pigging Station*              | <u>        </u> |

## OTHER FACILITIES\*

Other Facility Type

Number

| <u>Other Facility Type</u> | <u>Number</u>        |
|----------------------------|----------------------|
| <input type="text"/>       | <input type="text"/> |

\*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:

## CONSTRUCTION

Date planned to commence construction: 01/15/2016 Size of disturbed area during construction in acres: 6.60  
Estimated date that interim reclamation will begin: 04/15/2016 Size of location after interim reclamation in acres: 3.70  
Estimated post-construction ground elevation: 4592

## 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? No

## 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: FIKE, Marshall & Suzette Phone:

Address: P.O. Box 81

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

Address: \_\_\_\_\_

Email: \_\_\_\_\_

City: Jamestown State: CO Zip: 80455-0081

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: No

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 08/20/2015

### 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:                         | 1332 Feet        | 958 Feet                        |
| Building Unit:                    | 1534 Feet        | 1185 Feet                       |
| High Occupancy Building Unit:     | 5280 Feet        | 5280 Feet                       |
| Designated Outside Activity Area: | 5280 Feet        | 5280 Feet                       |
| Public Road:                      | 609 Feet         | 23 Feet                         |
| Above Ground Utility:             | 1753 Feet        | 1306 Feet                       |
| Railroad:                         | 5280 Feet        | 5280 Feet                       |
| Property Line:                    | 169 Feet         | 37 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.

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**

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: #4, Aquolls and Aquepts, flooded \_\_\_\_\_  
 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, 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: 250 Feet

water well: 1697 Feet

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

Basis for depth to groundwater and sensitive area determination:

Due to proximity and similar elevation to nearby wetlands and ponds this is determined to be a sensitive area.  
 Distance to nearest:  
 1. Downgradient surface water feature: 250' to the Marsh area NW (See Hydrology Map).  
 2. Water well: 1697' measured from the SHL of the most East planned well on the pad. Water Well Permit # 8882-F.  
 3. Estimated depth to ground water at Oil & Gas Location: 30' (Shallowest of a 1 Mile Radius of Water Wells)

Is the location in a riparian area:  No  Yes

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

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

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

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

**DESIGNATED SETBACK LOCATION EXCEPTIONS**

Check all that apply:

- Rule 604.a.(1)A. Exception Zone (within 500' of Building Unit)
- Rule 604.b.(1)A. Exception Location (existing or approved Oil & Gas Location now within a Designated Setback as a result of Rule 604.a.)
- Rule 604.b.(1)B. Exception Location (existing or approved Oil & Gas Location is within a Designated Setback due to Building Unit construction after Location approval)
- Rule 604.b.(2) Exception Location (SUA or site-specific development plan executed on or before August 1, 2013)
- Rule 604.b.(3) Exception Location (Building Units constructed after August 1, 2013 within setback per an SUA or site-specific development plan)

**RULE 502.b VARIANCE REQUEST**

- Rule 502.b. Variance Request from COGCC Rule or Spacing Order Number \_\_\_\_\_

ALL exceptions and variances require attached Request Letter(s). Refer to applicable rule for additional required attachments (e.g. waivers, certifications, SUAs).

**OPERATOR COMMENTS AND SUBMITTAL**

Comments Attached SUA was originally between the Surface Owners and Pico Niobrara, LLC - who is now Mendell Niobrara, LLC. As directed by COGCC's Doug Andrews - the well pad and nearby facility are being permitted together amending the existing location ID#322649. Actual disturbance will be for the well pad and tank battery, which will be separated by an undisturbed area - but all permitted as one location.

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

Signed: \_\_\_\_\_ Date: 10/30/2015 Email: paul.gottlob@iptenergyservices.com

Print Name: PAUL GOTTLOB Title: Regulatory & Engin. Tech.

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: 3/29/2016

**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

| <b>No</b> | <b>BMP/COA Type</b>                    | <b>Description</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-----------|----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1         | Planning                               | 604.c(2)M. Fencing: A meeting with the surface owner will determine a fencing plan.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 2         | Planning                               | 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. 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.                                                                                                                                                                                                                                                                                                                                                                                       |
| 3         | Planning                               | 604.c.(2)N. Control of fire hazards: All material that is considered a fire hazard shall be a minimum of 25' from the wellhead tanks or separators. Electrical equipment shall comply with API IRP 500 and will comply with the current national electrical code.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 4         | Traffic control                        | 604.c.(2)S. Access Roads: The access road will be constructed to accommodate local emergency vehicles. This road will be maintained for access at all times. Traffic will be routed to minimize local interruption. Dust control measures will also be utilized.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 5         | General Housekeeping                   | 604.c.(2)P. Trash Removal: All trash, debris and material not intrinsic to the operation of the oil and gas facility shall be removed and legally disposed of as applicable.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 6         | Material Handling and Spill Prevention | 604.c.(2)F. Leak Detection Plan: Pumper will visit the location daily and visually inspect all tanks and fittings for leaks. Additionally, monthly documented SPCCP inspections will be conducted pursuant to 40 CFR 112.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 7         | Material Handling and Spill Prevention | 604.c.(2)R Tank Specifications: Tanks will be designed, constructed and maintained in accordance with NFPA Code 30. The tanks will be visually inspected once a day for issues, and recorded inspections are conducted once a month.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 8         | Construction                           | 604.c.(3)B. Berm Construction. Tank berms shall 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. Tertiary containment, such as an earthen berm, will be installed around production facilities.                                                                                                                                                                                                                                                                                                                                                                      |
| 9         | Construction                           | 803 Light sources during all phases of operations will be directed downwards and away from occupied structures where possible. Once the drilling and completion rigs leave the site, there will be no permanently installed lighting on site. Lighting shall be mounted at compressor stations on a pole or building and directed downward to illuminate key areas within the facility, while minimizing the amount of light projected outside the facility.                                                                                                                                                                                                                                                                                                                                                                                             |
| 10        | Construction                           | 604.c.(2).Q. 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.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 11        | Construction                           | 604.c.(2).E. This will be a multi-well pad.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 12        | Emissions mitigation                   | 604.c.(2)C.i. Green Completions - Emission Control System: Test separators and associated flow lines and sand traps shall be installed on-site to accommodate green completions techniques pursuant to COGCC Rules. In the anticipated 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 non-combustible gases are present. Well will be tied into a nearby gas sales line as soon as possible. |
| 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.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

Total: 13 comment(s)

## Attachment Check List

| <u>Att Doc Num</u> | <u>Name</u>             |
|--------------------|-------------------------|
| 400887987          | FORM 2A SUBMITTED       |
| 400888175          | SURFACE AGRMT/SURETY    |
| 400888179          | NRCS MAP UNIT DESC      |
| 400888190          | NRCS MAP UNIT DESC      |
| 400923671          | ACCESS ROAD MAP         |
| 400923672          | ACCESS ROAD MAP         |
| 400923674          | OTHER                   |
| 400923686          | LOCATION PICTURES       |
| 400923687          | MULTI-WELL PLAN         |
| 400923690          | REFERENCE AREA MAP      |
| 400923693          | REFERENCE AREA PICTURES |
| 400923696          | OTHER                   |
| 400923708          | WASTE MANAGEMENT PLAN   |
| 400923722          | 30 DAY NOTICE LETTER    |
| 400925833          | LOCATION DRAWING        |
| 400925835          | HYDROLOGY MAP           |
| 400925837          | FACILITY LAYOUT DRAWING |
| 400926304          | FACILITY LAYOUT DRAWING |

Total Attach: 18 Files

### General Comments

| <u>User Group</u> | <u>Comment</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <u>Comment Date</u>       |
|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| Permit            | Final Review Complete.<br>Off Hold--SLB verified surface restoration bond.<br>Added related APD's that were re-submitted after original APD's were rejected.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 3/24/2016<br>3:55:46 PM   |
| Permit            | Form 10, CO, approved. Waiting on SLB verification of restoration bond.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 3/23/2016<br>8:51:32 AM   |
| Permit            | ON HOLD--notified operator that Form 10, CO, is required.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 3/21/2016<br>3:32:58 PM   |
| Permit            | On hold- State Land Board verified lease is in good order, waiting on verification of bond.<br><br>Waiting on operator to submit form 10 to change operator of existing location.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 12/23/2015<br>8:27:24 AM  |
| OGLA              | OGLA task passed.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 11/20/2015<br>8:56:17 AM  |
| LGD               | As of today's date 11/19/2015, the Weld County Oil and Gas Liaison/LGD has not been contacted by any nearby resident(s) regarding this proposed location. The County will respond to any nearby residents who have legitimate concerns or issues regarding a proposed location and attempt to facilitate a solution. Oil and Gas Exploration and Production activities are currently considered a Use by Right in the Agricultural Zoned District and no land use permitting is required by the County. A building permit is required for the production facilities from the Department of Planning Services. A new or expanded access from a county road or the use of a right-of-way requires a permit from the Department of Public Works. Troy Swain, Weld Oil and Gas Liaison (970) 353-6100, ext. 3579. | 11/19/2015<br>11:25:50 AM |
| OGLA              | OGLA review complete. Waiting on Public Comment period.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 11/18/2015<br>11:19:33 AM |
| Permit            | Passed completeness.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 10/30/2015<br>3:49:44 PM  |

Total: 8 comment(s)