

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:

401268356

(SUBMITTED)

Date Received:

Oil and Gas Location Assessment

New Location Refile Amend Existing Location Location#: 443962

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:

443962

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: 10518
 Name: CONFLUENCE DJ LLC
 Address: 1001 17TH STREET #1250
 City: DENVER State: CO Zip: 80202

Contact Information

Name: Andrea Gross
 Phone: (303) 942-0506
 Fax: ()
 email: agross@upstreampm.com

RECLAMATION FINANCIAL ASSURANCE

- Plugging and Abandonment Bond Surety ID: 20160056 Gas Facility Surety ID: _____
- Waste Management Surety ID: _____

LOCATION IDENTIFICATION

Name: Flaherty Number: 18-I
 County: WELD
 Quarter: NWSW Section: 18 Township: 4N Range: 62W Meridian: 6 Ground Elevation: 4546

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: 2189 feet FSL from North or South section line
160 feet FWL from East or West section line

Latitude: 40.311237 Longitude: -104.376041

PDOP Reading: 1.3 Date of Measurement: 09/16/2015

Instrument Operator's Name: Alan Hnizdo

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>21</u>	Oil Tanks*	<u>36</u>	Condensate Tanks*	<u> </u>	Water Tanks*	<u>10</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>19</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>10</u>	VOC Combustor*	<u> </u>	Flare*	<u> </u>	Pigging Station*	<u> </u>

OTHER FACILITIES*

Other Facility Type

Number

ECD	<u>5</u>
Vapor Recovery Tower	<u>5</u>

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:

2" and/or 3" Schedule 40 steel flowlines, carrying oil, gas, and water from wellheads to production equipment and sales.

CONSTRUCTION

Date planned to commence construction: 05/01/2017 Size of disturbed area during construction in acres: 12.20

Estimated date that interim reclamation will begin: 11/01/2017 Size of location after interim reclamation in acres: 8.00

Estimated post-construction ground elevation: 4546

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: Matthew D. Falherty

Phone: _____

Address: 3422 Purcell St.

Fax: _____

Address: _____

Email: _____

City: Brighton State: CO Zip: 80601

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 04/25/2017

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:	743 Feet	553 Feet
Building Unit:	1523 Feet	1163 Feet
High Occupancy Building Unit:	5280 Feet	5280 Feet
Designated Outside Activity Area:	5280 Feet	5280 Feet
Public Road:	515 Feet	85 Feet
Above Ground Utility:	482 Feet	51 Feet
Railroad:	5280 Feet	5280 Feet
Property Line:	160 Feet	21 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: _____

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: 70-Valent Sand, 3 to 9 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: Sand bluestem, Prairie sandreed, Blue grama, Sand dropseed, Switchgrass, Little bluestem, needleandthread, plains pricklypear, Sand sagebrush, Sedge and Yucca

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: 21 Feet

water well: 1837 Feet

Estimated depth to ground water at Oil and Gas Location 24 Feet

Basis for depth to groundwater and sensitive area determination:

Sensitive area was checked due to the close proximity to the canal. Basis for depth to groundwater was based on water well permit 155188.

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 zone: 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

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

Confluence is permitting eight (8) additional wells on the Flaherty southwestern previously constructed well pad. This existing pad will also house production facilities for all sixteen (16) wells being permitted, after it is expanded as indicated by the location plats.

Confluence is also constructing a multi-well pad northeast of the current pad. This northeastern pad will house eight (8) wellheads only (i.e. no production facilities), which will minimize the disturbance area.

Confluence is aware of the new Weld County WOGLA and will submit the necessary paperwork for that permit.

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

Signed: _____ Date: _____ 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

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Best Management Practices

No	BMP/COA Type	Description
1	Planning	<p>In order to reduce surface disturbance, Confluence is permitting eight (8) additional wells on the Flaherty southwestern previously constructed well pad. This existing pad will also house production facilities for all sixteen (16) wells being permitted, after it is expanded as indicated by the location plats.</p> <p>Confluence is also constructing a multi-well pad northeast of the current pad. This northeastern pad will house eight (8) wellheads only (i.e. no production facilities), which will minimize the disturbance area.</p>
2	Planning	<p>Visual Mitigation: Pursuant to Rule 804, the tank battery shall be painted in uniform, non-contrasting, non-reflective color tones with the colors matched to, but slightly darker than the surrounding landscape.</p>
3	Traffic control	<p>An access road from the highway to the southwestern pad already exists, and is maintained for access at all times.</p> <p>When the northeastern pad is constructed, it will be connected to the southwestern existing pad via a road that will be able to accommodate emergency vehicles, and will also be maintained.</p> <p>A traffic plan already exists with Weld County and will continue to be adhered to.</p>
4	General Housekeeping	<p>Fencing: The well site will be adequately fenced to restrict access by unauthorized persons. A permanent fencing plan will be agreed upon by the surface owner and the applicant.</p>
5	General Housekeeping	<p>Removal of Surface Trash: Confluence agrees that all trash, refuse pipe, equipment, liquids, chemicals or other materials that are not necessary for the continued operations of the wells will be removed and disposed of no later than 30 days after completion. No such items will be burned or buried on location.</p>
6	General Housekeeping	<p>All guy line anchors 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>
7	General Housekeeping	<p>Well site cleared: Within 90 days subsequent to the time of plugging and abandonment of the entire site, superfluous debris and equipment shall be removed from the site.</p>
8	Wildlife	<p>Wildlife: The proposed oil and gas wells are not within a sensitive wildlife habitat. Confluence, to the extent possible, will not cause significant degradation of wildlife. All open vent exhaust stacks on any production equipment shall be designed to prevent entry by birds and bats and will be equipped to discourage nesting or perching.</p>
9	Storm Water/Erosion Control	<p>Confluence will maintain a Stormwater Management Plan with site specific measures to assess erosion control. Confluence will make thorough inspections, in accordance with the requirements set forth by CDPHE Water Quality Division (WQD). The inspection schedule is as follows:</p> <p>While site is under construction, an inspection is required at least every 14 calendar days;</p> <p>Post storm event inspections must be conducted within 24 hours after the end of any precipitation or snowmelt event that causes surface erosion.</p> <p>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.</p>
10	Material Handling and Spill Prevention	<p>Loadlines: All loadlines shall be bullplugged or capped.</p>

11	Material Handling and Spill Prevention	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.
12	Material Handling and Spill Prevention	Leak Detection Plan: To ensure protection for the surface during construction, drilling, completions, and production, 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. Should any spill or release occur, every reasonable step will be taken to quickly remediate the disturbed area. Once the wells are producing, a 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.
13	Material Handling and Spill Prevention	Control of Fire Hazards: Confluence and its contractors 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. Confluence will ensure that any flammable material will remain no less than 25 feet from the wellhead(s), tanks and separator(s). 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.
14	Dust control	Dust mitigation measures shall include but are not limited to the use of speed restrictions, regular road maintenance, restrictions of construction activities during high wind days, and silica dust controls when handling sand used in hydraulic fracturing operations. The additional access road will be constructed with road base aggregate material. Additional management practices such as road surfacing, wind breaks and barriers may be used.
15	Noise mitigation	Noise Mitigation: Confluence will abide by all COGCC noise standards for all activities.
16	Emissions mitigation	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.
17	Odor mitigation	Odor Mitigation: Confluence will comply with Rule 805 and Department of Public Health and Environment, Air Quality Control Commission, Regulation No. 2 Odor Emission, 5 C.C.R. 1001-4, Regulation No. 3 (5 C.C.R. 1001-5), and Regulation No. 7 Section XVII.B.1 (a-c) and Section XII. They will utilize an Emission Control Devices to reduce odor emissions during production.
18	Drilling/Completion Operations	Pit Level Indicators: Not applicable. A Closed Loop System will be used for drilling and fluid management. No pit will be used.
19	Drilling/Completion Operations	Drill Stem Test: Not applicable. No drill stem tests are planned.
20	Drilling/Completion Operations	Light sources during all phases of operations will be directed downward or shielded so no light pollution leaves the facility, should light pollution becomes an issue at any time during the construction, drilling, completion or production of these wells.

21	Interim Reclamation	Rehabilitation of unneeded, previously disturbed areas will consist of back sloping, and contouring all cut/fill slopes. These areas will be reseeded. The portions of the cleared well site not needed for operational and safety purposes will be recontoured to the original contour if feasible, or if not feasible, to an interim contour that blends with the surrounding topography as much as possible. Sufficient level area will remain for setup of a workover rig and to park equipment. In some cases, rig anchors may need to be pulled and reset after recontouring to allow for maximum interim reclamation.
22	Final Reclamation	Identification of Plugged and Abandoned Wells: Confluence will identify the location of the wellbore with a permanent monument as specified in Rule 319.a.(5). Confluence will inscribe or imbed the well number and date of plugging upon the permanent monument.
23	Final Reclamation	Pursuant to Rule 319.a.(5), once the well has been plugged and abandoned, Confluence will identify the location of the wellbore with a permanent monument that will detail the well name and date of plugging.

Total: 23 comment(s)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
401268668	HYDROLOGY MAP
401268671	ACCESS ROAD MAP
401268673	LOCATION DRAWING
401268674	LOCATION PICTURES
401268679	MULTI-WELL PLAN
401268683	REFERENCE AREA MAP
401268684	REFERENCE AREA PICTURES
401268685	SURFACE AGRMT/SURETY
401268689	WASTE MANAGEMENT PLAN
401268709	NRCS MAP UNIT DESC

Total Attach: 10 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.

