

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:

401360759

**(SUBMITTED)**

Date Received:

08/11/2017

## Oil and Gas Location Assessment

New Location     Refile     Amend Existing Location    Location#: \_\_\_\_\_

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

Location ID:

Expiration Date:

This location assessment is included as part of a permit application.

### CONSULTATION

This location is included in a Comprehensive Drilling Plan. CDP # \_\_\_\_\_

This location is in a sensitive wildlife habitat area.

This location is in a wildlife restricted surface occupancy area.

This location includes a Rule 306.d.(1)A.ii. variance request.

### Operator

Operator Number: 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: Missouri

Number: 31

County: WELD

Quarter: SESE    Section: 31    Township: 1N    Range: 65W    Meridian: 6    Ground Elevation: 5037

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: 861 feet FSL from North or South section line

955 feet FEL from East or West section line

Latitude: 40.002890      Longitude: -104.700700

PDOP Reading: 1.6      Date of Measurement: 07/06/2017

Instrument Operator's Name: Kyle Daley

## 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 20 Oil Tanks\* 20 Condensate Tanks\* \_\_\_\_\_ Water Tanks\* 10 Buried Produced Water Vaults\* \_\_\_\_\_  
Drilling Pits \_\_\_\_\_ Production Pits\* \_\_\_\_\_ Special Purpose Pits \_\_\_\_\_ Multi-Well Pits\* \_\_\_\_\_ Modular Large Volume Tanks \_\_\_\_\_  
Pump Jacks \_\_\_\_\_ Separators\* 20 Injection Pumps\* \_\_\_\_\_ Cavity Pumps\* \_\_\_\_\_ Gas Compressors\* \_\_\_\_\_  
Gas or Diesel Motors\* \_\_\_\_\_ Electric Motors \_\_\_\_\_ Electric Generators\* \_\_\_\_\_ Fuel Tanks\* \_\_\_\_\_ LACT Unit\* \_\_\_\_\_  
Dehydrator Units\* \_\_\_\_\_ Vapor Recovery Unit\* 5 VOC Combustor\* \_\_\_\_\_ Flare\* \_\_\_\_\_ Pigging Station\* \_\_\_\_\_

## OTHER FACILITIES\*

Other Facility Type

Number

<u>Other Facility Type</u>	<u>Number</u>
ECD	4
VRT	4

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

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

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: 11/01/2017 Size of disturbed area during construction in acres: 11.30

Estimated date that interim reclamation will begin: 05/01/2018 Size of location after interim reclamation in acres: 3.95

Estimated post-construction ground elevation: 5038

## 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? 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: Confluence DJ LLC

Phone: 303-226-9500

Address: 1001 17th St., Suite 1250

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

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

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

City: Denver State: CO Zip: 80202

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: applicant is owner

Surface damage assurance if no agreement is in place: \_\_\_\_\_ Surface Surety ID: \_\_\_\_\_

Date of Rule 306 surface owner consultation \_\_\_\_\_

### 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:	560 Feet	640 Feet
Building Unit:	642 Feet	560 Feet
High Occupancy Building Unit:	5280 Feet	5280 Feet
Designated Outside Activity Area:	5280 Feet	5280 Feet
Public Road:	487 Feet	487 Feet
Above Ground Utility:	477 Feet	528 Feet
Railroad:	2011 Feet	1789 Feet
Property Line:	363 Feet	176 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: 07/11/2017

## 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.

The location was chosen based on COGCC safety setbacks and constraints of an existing nearby well and facilities on the parcel. The chosen location was the only place on the parcel, which Confluence owns, that would have the least number of building units within the buffer zone. Confluence is utilizing an existing access road and a portion of the existing location to minimize additional surface disturbance.

## SOIL

List all soil map units that occur within the proposed location. attach the National Resource Conservation Service (NRCS) report showing the "Map Unit Description" report listing the soil typical vertical profile. This data is to be used when segregating topsoil.

The required information can be obtained from the NRCS web site at <http://soildatamart.nrcs.usda.org/> or from the COGCC web site GIS Online map page found at <http://colorado.gov/cogcc>. Instructions are provided within the COGCC web site help section.

NRCS Map Unit Name: Map Unit 5: Ascalon sandy loam, 0 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: 458 Feet

water well: 865 Feet

Estimated depth to ground water at Oil and Gas Location 580 Feet

Basis for depth to groundwater and sensitive area determination:

Basis for depth to ground water was determined from Water Well 51244-F location in NENE of Section 6 T1S R65W.

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	Target Species	BMP Type	Description
1	Bald Eagle	Wildlife - Minimization	The operator will preclude new oil and gas operations within 0.25 mile of any CPW-identified active bald eagle nest site (COGCC RSO
2	Bald Eagle	Wildlife - Minimization	The operator will preclude new oil and gas operations within 0.25 mile of any CPW-identified inactive bald eagle nest site
3	Bald Eagle	Wildlife - Minimization	The operator agrees to preclude any new oil and gas operations within any mapped bald eagle winter concentration areas between November 15 and March 15

### 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 We have spoken with Brandon Marette with Colorado Parks and Wildlife regarding the sensitive wildlife habitat. Confluence will continue to work with CPW on a mitigation plan. Confluence held a neighborhood meeting on July 27 in Weld County. Approximately 10 people attended.

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

Signed: \_\_\_\_\_ Date: 08/11/2017 Email: agross@upstreampm.com

Print Name: Andrea Gross Title: Permit Agent

Based on the information provided herein, this Application for Permit-to-Drill complies with COGCC Rules and applicable orders and is hereby approved.

COGCC Approved: \_\_\_\_\_ Director of COGCC Date: \_\_\_\_\_

### Conditions Of Approval

All representations, stipulations and conditions of approval stated in this Form 2A for this location shall constitute representations, stipulations and conditions of approval for any and all subsequent operations on the location unless this Form 2A is modified by Sundry Notice, Form 4 or an Amended Form 2A.

<b>COA Type</b>		<b>Description</b>
<b>Best Management Practices</b>		
<b>No</b>	<b>BMP/COA Type</b>	<b>Description</b>
1	Planning	Confluence 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 building units.
2	Planning	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.
3	Planning	Light Pollution: Sound walls will block temporary lighting.
4	Traffic control	Confluence plans to utilize the existing access road currently used by Crestone Peak for their vertical well, the Adam Ten #1-A, in the SESE Sec 31. This road heads north into location from Weld County Road 2, and will be maintained for access at all times.  A traffic plan will be completed if requested by Weld County as part of the local permitting process.
5	General Housekeeping	Fencing: The well site will be adequately fenced to restrict access by unauthorized persons. A permanent fencing plan will be agreed upon by the applicant, who is also the surface owner, and with consideration toward the ideas of offsetting building unit owners.
6	General Housekeeping	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.
7	General Housekeeping	Guy line anchors: All guy line anchors 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.
8	General Housekeeping	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.
9	Wildlife	Wildlife: Confluence will consult with the agency/-ies required to understand timing stipulations and equipment modifications to avoid 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.  Confluence will not conduct drilling and/or completions operations from January to March per recommendation from CPW.
10	Storm Water/Erosion Control	Stormwater/Erosion Control: 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: While site is under construction, an inspection is required at least every 14 calendar days; Post storm event inspections must be conducted within 24 hours after the end of any precipitation or snowmelt event that causes surface erosion. 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	Material Handling and Spill Prevention	Loadlines: All loadlines shall be bullplugged or capped.
12	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.
13	Material Handling and Spill Prevention	<p>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.</p> <p>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.</p>
14	Dust control	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	<p>Noise Mitigation:</p> <p>Baseline noise monitoring and testing will be conducted prior to the commencement of construction. Sound mitigation will be designed based on the results of the study to meet or exceed COGCC noise requirements. During completion activities, onsite equipment shall be positioned to take full advantage of the sound mitigation measures provided by the sound walls, well pad grading, and surrounding topography. Sound wall(s) will remain in place through the end of completions operations.</p> <p>Confluence anticipates using a hay bale sound wall for appraisal drilling (1-2 well program), and engineered sound walls for full development drilling (remaining 18-19 wells).</p>
16	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. Confluence will utilize an Emission Control Devices to reduce odor emissions during production.
17	Drilling/Completion Operations	Closed Loop System will be used for drilling and fluid management. No reserve pit will be used.
18	Drilling/Completion Operations	Pit restrictions. Not applicable. A Closed Loop System will be used for drilling.

19	Drilling/Completion Operations	Green Completions - Emission Control Systems: Test separators and associated flow lines and sand traps shall be installed on-site to accommodate green completions techniques pursuant to COGCC Rules where reservoir pressure, formation productivity, and wellbore conditions are likely to enable the well to be capable of naturally flowing hydrocarbon gas in flammable or greater concentrations at a stabilized rate in excess of five hundred (500) MCFD to the surface against an induced surface backpressure of five hundred (500) psig or sales line pressure, whichever is greater. In the absence of a viable gas sales line, the flowback gas shall be thermally oxidized in an emissions control device (ECD), which will be installed and kept in operable condition for least the first 90-days of production pursuant to CDPHE rules. This ECD shall have an adequate capacity for 1.5 times the largest flowback within a 10-mile radius, will be flanged to route gas to other or permanent oxidizing equipment and shall be provided with the equipment needed to maintain combustions where noncombustible gases are present. All salable quality gas shall be directed to the sales line as soon as practicable or shut in and conserved.
20	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.
21	Drilling/Completion Operations	Drill Stem Test: Not applicable. No drill stem tests are planned.
22	Drilling/Completion Operations	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.
23	Interim Reclamation	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.
24	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.
25	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.
26	Material Handling and Spill Prevention	Tank specifications: Tanks shall be constructed and maintained in accordance with the National Fire Protection Association Code 30 (2008 version). All tanks will be visually inspected once a day for issues. Recorded inspections will be conducted once a month pursuant to 40 CFR §112.

Total: 26 comment(s)

### Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
401360759	FORM 2A SUBMITTED
401367052	ACCESS ROAD MAP
401367053	CONST. LAYOUT DRAWINGS
401367057	FACILITY LAYOUT DRAWING
401367058	HYDROLOGY MAP
401367061	LOCATION DRAWING
401367105	MULTI-WELL PLAN
401367107	NRCS MAP UNIT DESC
401380051	LOCATION PICTURES
401380052	WASTE MANAGEMENT PLAN
401380053	RULE 305A CERTIFICATION OF COMPLIANCE

Total Attach: 11 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.

