

FORM  
2A

Rev  
02/20

# 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:

402289528

Date Received:

02/25/2020

## 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 <https://cogcc.state.co.us/> for all accompanying information pertinent this Oil and Gas Location Assessment.

Location ID:

**476815**

Expiration Date:

**06/07/2023**

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: 10661  
 Name: BISON OIL & GAS II LLC  
 Address: 518 17TH STREET #1800  
 City: DENVER    State: CO    Zip: 80202

### Contact Information

Name: Abigail Wenk  
 Phone: (720) 6446997  
 Fax: ( )  
 email: awenk@bisonog.com

### FINANCIAL ASSURANCE

- Plugging and Abandonment Bond Surety ID (Rule 706): 20190035     Gas Facility Surety ID (Rule 711): \_\_\_\_\_
- Waste Management Surety ID (Rule 704): \_\_\_\_\_

### LOCATION IDENTIFICATION

Name: Allred 8-59    Number: 30  
 County: WELD  
 Quarter: NENW    Section: 30    Township: 8N    Range: 59W    Meridian: 6    Ground Elevation: 4938

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: 682 feet FNL from North or South section line  
2225 feet FWL from East or West section line

Latitude: 40.638789    Longitude: -104.021999

GPS Quality Value: 1.3    Type of GPS Quality Value: PDOP    Date of Measurement: 01/03/2020

Instrument Operator's Name: ORION RICE, J.C.

### LOCAL GOVERNMENT INFORMATION

County: WELD    Municipality: N/A



## CONSTRUCTION

Date planned to commence construction: 08/01/2020 Size of disturbed area during construction in acres: 12.00  
Estimated date that interim reclamation will begin: 02/01/2021 Size of location after interim reclamation in acres: 10.50  
Estimated post-construction ground elevation: 4940

## 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: Marvin & Carlotta Allred Phone: \_\_\_\_\_

Address: 1930 E. 1300 S. Fax: \_\_\_\_\_

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

City: Gooding State: ID Zip: 83330

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 08/15/2017

If this Form 2A is associated with Drilling and Spacing Unit applications, list docket number(s): \_\_\_\_\_

## 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:	5280 Feet	5280 Feet
Building Unit:	5280 Feet	5280 Feet
High Occupancy Building Unit:	5280 Feet	5280 Feet
Designated Outside Activity Area:	5280 Feet	5280 Feet
Public Road:	716 Feet	284 Feet
Above Ground Utility:	2548 Feet	2494 Feet
Railroad:	5280 Feet	5280 Feet
Property Line:	346 Feet	216 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

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: 63: Tassel loamy fine sand, 5-20 percent slopes

NRCS Map Unit Name: 44: Olney fine sandy loam, 0-6 percent slopes

NRCS Map Unit Name: 54: Platner loam, 0-3 percent slopes

### 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: 01/16/2020

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: 196 Feet

water well: 2045 Feet

Estimated depth to ground water at Oil and Gas Location 63 Feet

Basis for depth to groundwater and sensitive area determination:

Basis for depth to ground water is DWR Permit #41866.  
Nearest surface water feature is dry roadside runoff ditch.

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 609

## 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	<p>The SHL of the Allred 8-59 30-31-1 was used as the lat/long for this pad.</p> <p>There are no building units within 1000' of this location, a Facility Layout drawing is not required.</p> <p>Operator certifies that the MLVTs will be designed and implemented consistent with the COGCC Policy on the Use of Modular Large Volume Tanks in Colorado. MLVT Design Package, certified and sealed by a licensed professional engineer, is available upon request.</p> <p>MLVT Information:  Vendor - Complete Energy Services  Manufacturer - MWS Tanks  Number and Size - 2 160' diameter tank  Timeframe on location - approximately 30 days</p>
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I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.  
Signed: \_\_\_\_\_ Date: 02/25/2020 Email: asolis@bisonog.com

Print Name: Ariana Solis Title: Regulatory Analyst

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: 6/8/2020

### 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>
Final Reclamation	The Operator shall submit reference area photos during the 2020 growing season. Photos shall be submitted via a Form 4 Sundry no later than November 1, 2020.

### Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Storm Water/Erosion Control	Storm water controls will be constructed around the perimeter of the site prior to construction. Typically, Bison Oil & Gas II utilizes a ditch and berm system of storm water control at its sites. BMPs used are determined prior to construction and may vary according to the location. Storm water controls will remain in place until the pad is stabilized or reaches final reclamation.
2	Material Handling and Spill Prevention	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.
3	Material Handling and Spill Prevention	Tank berms shall be constructed of steel walls with an engineered synthetic liner and designed to contain 100% of the capacity of the largest tank (or manifolded tanks) with the addition of rain water and additional freeboard to account for any small piping or equipment that may be in containment. Operator will place separators within secondary containment composed of steel berms with a minimum containment capacity of 100% of the single largest storage vessel inside the containment. The engineered secondary containment system will be constructed of a perimeter of walls around a flexible geotextile base. All components will then be sprayed with a polyurea liner technology or covered with an equivalent synthetic or engineered liner. This liner technology maintains impermeability and puncture resistance under exposure to UV rays, weather extremes, and chemicals commonly encountered in oil and natural gas production, and provides protection of the liner seams. All berms will be visually checked weekly to ensure proper working condition.
4	Material Handling and Spill Prevention	Operator shall install a 30mil reinforced polyethylene liner, or liner of comparable material, under the drilling rig and associated equipment for use during drilling operations.

5	Material Handling and Spill Prevention	Operator shall use a Supervisory Control and Data Acquisition (SCADA) system in conjunction with tank level indicators which have the ability to automatically shut in wells during an upset condition.
6	Dust control	Practices for control of fugitive dust caused by operations may include but are not limited to treating- roads and location with water, the use of speed restrictions, regular road maintenance, and silica dust controls when handling sand used in hydraulic fracturing operations.
7	Construction	All temporary & permanent lighting installed on location shall be directed downward to illuminate key areas within the facility, while minimizing the amount of light projected outside the facility.
8	Emissions mitigation	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.
9	Emissions mitigation	Tanks and all visible pipelines and valves etc. are inspected daily by company lease operators or contract operators, when possible. In addition, Bison Oil & Gas II conducts formal annual spill prevention inspections, and formal site-specific audits by third-party consultants to inspect for general site conditions as well as visible inspections for the condition of tanks, pipelines, and containment structures. Company lease operators and Production staff review production records, including volumes and pressures, looking for irregularities that may indicate a problem with a tank or pipeline. If an irregularity is detected that may indicate a potential release the suspect tank and/or pipeline(s) are removed from service, isolated, and either pressure tested or visibly inspected for indications of a potential leak.
10	Emissions mitigation	AVO inspections will occur weekly, and LDAR inspections are performed quarterly or at the required frequency of County or State regulations. All records will be kept readily available.
11	Odor mitigation	Drilling rig and completion equipment engine exhaust will be directed away from occupied buildings to assist in mitigating potential odors. Sealed tanks with pressure relief valves and emissions controls will be utilized for the production phase. Bison Oil & Gas II will use an invert-based drilling fluid with diesel or a similar fluid for the base oil. If odor complaints are received and it is determined that they are caused by the invert drilling fluid, then an odor neutralizing agent or similar product will be added to the mud system to eliminate the odor. Cuttings are removed daily, with the exception being conductor hole cuttings which remain on location to be used as dry mix for the wet cuttings.

12	Drilling/Completion Operations	<p>Operator has an MLVT Design Package, certified and sealed by a licensed professional engineer, which is on file in their office and available upon request. The site shall be prepared in accordance with the specifications of the design package prior to tank installation; including ensuring that proper compaction requirements have been met.</p> <p>The MLVT will be at least 75 feet from a wellhead, fired vessel, heater-treater, or a compressor with a rating of 200 horsepower or more. It will be placed at least 50 feet from a separator, well test unit, or other non-fired equipment. All liner seams will be welded and tested in accordance with applicable ASTM International standards. Operator or designated company representative will be present during initial filling of the MLVT and the contractor will supervise and inspect the MLVT for leaks during filling. Operator will comply with the testing and re-inspection requirements and associated written standard operating procedures (SOP) listed on the design package. Signs will be posted on the MLVT indicating that the contents are freshwater. The MLVT will be operated with a minimum of 1 foot of freeboard at all times. Access to the MLVT will be limited to operational personnel and authorized regulatory agency personnel.</p> <p>Operator or contractor will conduct daily visual inspections of the exterior wall and surrounding area for integrity deficiencies.</p> <p>Operator has developed a contingency plan/emergency response plan associated with the MLVT and it is on file at their office.</p> <p>Operator acknowledges and will comply with the Colorado Oil &amp; Gas Conservation Commission Policy on the Use of Modular Large Volume Tanks in Colorado dated June 13, 2014</p>
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Total: 12 comment(s)

### Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
2479260	OBJECTIVE CRITERIA REVIEW MEMO
2479261	LOCATION DRAWING
2479262	NRCS MAP UNIT DESC
402289528	FORM 2A SUBMITTED
402313327	NRCS MAP UNIT DESC
402313330	NRCS MAP UNIT DESC
402313331	SURFACE AGRMT/SURETY
402323642	ACCESS ROAD MAP
402323644	HYDROLOGY MAP
402323646	LOCATION PICTURES
402323647	MULTI-WELL PLAN
402323648	REFERENCE AREA MAP
402323649	REFERENCE AREA PICTURES

Total Attach: 13 Files

### General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Final Review	Final Review complete. The APDs and the Form 2A for the Allred OP 31-859 pad located in the southern portion of Section 31 (Location ID# 450183) are expired.	06/08/2020
OGLA	Updated NRCS attachment provided by operator.	06/08/2020
Final Review	Final Approval pending - referred to OGLA and Permitting staff for follow up.	06/03/2020
OGLA	Final Review is complete.	06/03/2020
OGLA	Updated Location Drawing received from operator and attached.	06/03/2020
OGLA	Requested clarification on the Location Drawing.	05/29/2020
OGLA	Requested and received updated Construction Start Date. Correspondence attached.	05/28/2020

OGLA	The Objective Criteria Review Memo (Doc# 2479260) is attached to this Form 2A. Following additional analysis arising out of the 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.	05/28/2020
OGLA	COGCC staff conducted its technical review of this Form 2A Oil and Gas Location Assessment within the context of SB 19-181 and the required Objective Criteria. This Form 2A met Objective Criteria # 5.c and 8.	05/28/2020
OGLA	Updated BMPs. Per conversation with operator, updated Local Government Information.	05/27/2020
OGLA	IN PROCESS – received requested information from Operator on 5/4/2020; COGCC review will resume and be conducted within 60 days (by 7/3/2020).	05/04/2020
OGLA	<p>ON HOLD: This application has been reviewed by COGCC staff and cannot be approved based on the information submitted; therefore, the COGCC is placing this form ON HOLD until additional information is received from the applicant.</p> <p>In compliance with § 24-65.1-108(1), C.R.S., the COGCC is providing this written request for all additional information necessary for the COGCC to respond to this application. The applicant may provide all requested additional information to COGCC via email. Upon receipt of all requested information, the COGCC will have 60 days in which to approve, deny, or request all additional information necessary to complete the regulatory review. If the applicant no longer requires this application be approved, the applicant may request to withdraw the application.</p> <p>In addition to all standard required information and attachments, the COGCC hereby confirms the following information is necessary for review:</p> <ol style="list-style-type: none"> <li>1. Please provide any updates to the WOGLA.</li> <li>2. Please confirm whether the existing land use is rangeland or CRP land.</li> <li>3. Downgradient surface water. Please let me know if you concur with changing the distance from 199 to 196 ft., in order to match the Hydrology Map.</li> <li>4. BMPs: <ol style="list-style-type: none"> <li>a. Lighting BMP. The current BMP only discusses permanent lighting. If temporary lighting will also be directed down and inwards, please include that in the BMP.</li> <li>b. Please provide any remote monitoring or remote shut-in BMPs.</li> <li>c. Please provide a basic stormwater BMP.</li> </ol> </li> </ol>	04/24/2020
OGLA	Passed Permit Review Spacing Order 535-760	04/23/2020
LGD	<p>This proposed oil and gas location is situated in the Agricultural Zone District of unincorporated Weld County. A 1041 Weld Oil and Gas Location Assessment (WOGLA) is required prior to constructing any improvements related to oil and gas exploration and production.</p> <p>The operator has applied for a WOGLA, and their application is under review. This application has been assigned the file number 1041WOGLA20-0008. All application files are viewable online through Weld County's E-Permit Center. A hearing has been scheduled for April 9th, 2020 before the Weld County Oil Gas Hearing Officer, for their consideration regarding this application.</p> <p>A building permit is required for the production facilities (tank battery, separators, pump jacks, compressors, generators, etc.) from the Department of Planning Services. Access points from County roads require an Access Permit from the Department of Public Works, which includes any necessary traffic control plans and Improvement Agreements. The use of County right-of-way requires a permit from the Department of Public Works.</p> <p>Jason Maxey Director, Oil Gas Energy Department and LGD 970-400-3580</p>	03/05/2020
OGLA	This Form has passed completeness.	02/28/2020

Total: 15 comment(s)