

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

Additional explanation of local process:

WOGLA19-0183 approved 10/11/2019.

LOCATION SURFACE & MINERALS & RIGHT TO CONSTRUCT

Surface Ownership: Fee State Federal Indian

The Surface Owner is: is the mineral owner beneath the location.

(check all that apply)

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 by this Well: Yes

The right to construct the Oil and Gas Location is granted by: applicant is owner

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

LEASE INFORMATION

Using standard QtrQtr, Sec, Twp, Rng format, describe one entire mineral lease that will be produced by this well (Describe lease beneath surface location if produced. Attach separate description page or map if necessary.)

Mineral and Lease Information:

Township 1 North, Range 65 West Section 31

Lots 31 to 36 and Lots 41-47

See attached mineral lease plat

Total Acres in Described Lease: 65 Described Mineral Lease is: Fee State Federal Indian

Federal or State Lease # _____

Distance from Completed Portion of Wellbore to Nearest Lease Line of described lease: 0 Feet

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 871 Feet

Building Unit: 871 Feet

High Occupancy Building Unit: 5280 Feet

Designated Outside Activity Area: 5280 Feet

Public Road: 324 Feet

Above Ground Utility: 755 Feet

Railroad: 1672 Feet

Property Line: 310 Feet

School Facility: 5142 Feet

School Property Line: 5142 Feet

Child Care Center: 2978 Feet

INSTRUCTIONS:

- All measurements shall be provided from center of the Proposed Well to nearest of each cultural feature as described in Rule 303.a.(5).

- 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.

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: 08/16/2019

SPACING and UNIT INFORMATION

Distance from completed portion of proposed wellbore to nearest completed portion of offset wellbore permitted or completed in the same formation: 199 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 460 Feet (Enter 5280 for distance greater than 1 mile.)

Federal or State Unit Name (if appl): _____ Unit Number: _____

SPACING & FORMATIONS COMMENTS

1N 65W Sec 30 E/2, Sec 31 E/2
 1S 65W Sec 6 All, Sec 7 All
 1S 66W Sec 1 E/2, Sec 12 E/2

If this Form 2 is associated with a Drilling and Spacing Unit application, provide docket number: _____

OBJECTIVE FORMATIONS

| <u>Objective Formation(s)</u> | <u>Formation Code</u> | <u>Spacing Order Number(s)</u> | <u>Unit Acreage Assigned to Well</u> | <u>Unit Configuration (N/2, SE/4, etc.)</u> |
|-------------------------------|-----------------------|--------------------------------|--------------------------------------|---|
| NIOBRARA | NBRR | 407-2957 | 2560 | 30-31E2 6-7ALL1-12E2 |

DRILLING PROGRAM

Proposed Total Measured Depth: 17155 Feet

Distance from the proposed wellbore to nearest existing or proposed wellbore belonging to another operator, including plugged wells:

Enter distance if less than or equal to 1,500 feet: 99 Feet No well belonging to another operator within 1,500 feet

Will a closed-loop drilling system be used? Yes

Is H₂S gas reasonably expected to be encountered during drilling operations at concentrations greater than or equal to 100 ppm? No (If Yes, attach an H₂S Drilling Operations Plan)

Will salt sections be encountered during drilling? No

Will salt based (>15,000 ppm Cl) drilling fluids be used? No

Will oil based drilling fluids be used? Yes

BOP Equipment Type: Annular Preventor Double Ram Rotating Head None

GROUNDWATER BASELINE SAMPLING AND MONITORING AND WATER WELL SAMPLING

Water well sampling required per Rule 318A

DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE Drilling Fluids Disposal Methods: Commercial Disposal

Cuttings Disposal: OFFSITE Cuttings Disposal Method: Commercial Disposal

Other Disposal Description:

Please see Waste Management Plan attached to Form 2A.

Beneficial reuse or land application plan submitted? No

Reuse Facility ID: _____ or Document Number: _____

CASING PROGRAM

| Casing Type | Size of Hole | Size of Casing | Wt/Ft | Csg/Liner Top | Setting Depth | Sacks Cmt | Cmt Btm | Cmt Top |
|-------------|--------------|----------------|-------|---------------|---------------|-----------|---------|---------|
| CONDUCTOR | 24 | 16 | 65 | 0 | 80 | 70 | 80 | 0 |
| SURF | 13+1/2 | 9+5/8 | 36 | 0 | 1700 | 462 | 1700 | 0 |
| 1ST | 8+1/2 | 5+1/2 | 20 | 0 | 17155 | 2154 | 17155 | |

Conductor Casing is NOT planned

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)

GREATER WATTENBERG AREA LOCATION EXCEPTIONS

Check all that apply:

- Rule 318A.a. Exception Location (GWA Windows).
- Rule 318A.c. Exception Location (GWA Twinning).

RULE 502.b VARIANCE REQUEST

Rule 502.b. Variance Request from COGCC Rule or Spacing Order Number _____

OTHER LOCATION EXCEPTIONS

Check all that apply:

Rule 318.c. Exception Location from Rule or Spacing Order Number _____

Rule 603.a.(2) Exception Location (Property Line Setback).

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: The distance to the nearest well completed or permitted in the same formation was measured to the County Line 3130-02H measured in 2D using GIS mapping. The distance from the proposed wellbore to nearest existing or proposed wellbore belonging to another operator was measured to the Leehl 30-4 (API# 123-39470) (AL Status) operated by Extracation Oil and Gas (100160). The distance was measured in 2D using the COGCC GIS Map.

Exceptions:
Verdad self-waives Rule 318A.a. Windows and Rule 318A.c. Twinning location exceptions

Attachments:
NO SUA attached as Verdad (Applicant) is the surface owner.

This application is in a Comprehensive Drilling Plan No CDP #: _____

Location ID: 474767

Is this application being submitted with an Oil and Gas Location Assessment application? No

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

Signed: _____ Print Name: Allison Schieber

Title: Sr Regulatory Analyst Date: 5/27/2020 Email: regulatory@verdadresources.c

Operator must have a valid water right or permit allowing for industrial use or purchased water from a seller that has a valid water right or permit allowing for industrial use, otherwise an application for a change in type of use is required under Colorado law. Operator must also use the water in the location set forth in the water right decree or well permit, otherwise an application for a change in place of use is required under Colorado law. Section 37-92-103(5), C.R.S. (2011).

Based on the information provided herein, this Application for Permit-to-Drill complies with COGCC Rules, applicable orders, and SB 19-181 and is hereby approved.

COGCC Approved:  Director of COGCC Date: 8/19/2020

Expiration Date: 08/18/2022

| |
|-------------------|
| API NUMBER |
| 05 123 51165 00 |

Conditions Of Approval

All representations, stipulations and conditions of approval stated in the Form 2A for this location shall constitute representations, stipulations and conditions of approval for this Form 2 Permit-to-Drill and are enforceable to the same extent as all other representations, stipulations and conditions of approval stated in this Permit-to-Drill.

| <u>COA Type</u> | <u>Description</u> |
|--------------------------------|---|
| Drilling/Completion Operations | If the location has not been built by the Form 2A (Doc #402092786) expiration date of 04/01/2023, Operator must Refile the Form 2A for approval prior to location construction. |
| Drilling/Completion Operations | This Permit to Drill is approved subject to all the BMPs and COAs on the most recently approved Form 2A and any subsequently approved Form 4 for the Oil and Gas Location (Location ID 474767). The most recently approved Form 2A and any subsequent Form 4s containing applicable COAs for this location shall be posted onsite during construction, drilling, and completions operations. |
| Drilling/Completion Operations | Operator acknowledges the proximity of the listed non-operated well. Operator assures that this offset well will be remediated per the DJ Basin Horizontal Offset Policy (option 4). Operator will submit a Form 42 ("OTHER- AS SPECIFIED BY PERMIT CONDITION") stating that appropriate mitigation will be completed, during the hydraulic stimulation of this well. 05-123-07782, SACK-HIETT 1 (operator will not complete County Line 3130-06H within 1500' of this well - estimated between 1280' FSL and 680' FSL based on preliminary trajectory) |
| Drilling/Completion Operations | Per COGCC Order 1-232, Bradenhead tests shall be performed according to the following schedule and Form 17 submitted within 10 days of each test: 1) Within 60 days of rig release, prior to stimulation. If any pressure greater than 200 psi, must contact COGCC engineer prior to stimulation. 2) If a delayed completion, 6 months after rig release and prior to stimulation. If any pressure greater than 200 psi, must contact COGCC engineer prior to stimulation. 3) A post-production test within 60 days after first sales, as reported on the Form 10, Certificate of Clearance. |
| Drilling/Completion Operations | Operator acknowledges the proximity of the listed non-operated wells. Operator assures that this offset list will be remediated per the DJ Basin Horizontal Offset Policy (option 3). Operator will submit a Form 42 ("OFFSET MITIGATION COMPLETED") stating what appropriate mitigation occurred and that it has been completed, prior to the hydraulic stimulation of this well. 123-15312, DREYER 32-1 123-14807, SAWYER/POWELL 32-4 001-09250, HSR-MILE HIGH 6-6 001-06702, ADAM TEN LTD 1 |
| Drilling/Completion Operations | Operator acknowledges the proximity of the non-operated listed well. Operator agrees to: provide mitigation option 1 or 2 (per the DJ Basin Horizontal Offset Policy) to mitigate the situation, ensure all applicable documentation is submitted based on the selected mitigation option chosen, and submit a Form 42 ("OFFSET MITIGATION COMPLETED") stating that appropriate mitigation occurred and that it has been completed, prior to the hydraulic stimulation of this well. 05-123-13340, MARGUERITE B LEHL A-1 |
| Drilling/Completion Operations | 1) Submit Form 42 electronically to COGCC 48 hours prior to MIRU (spud notice) for the first well activity with a rig on the pad and provide 48 hour spud notice via Form 42 for all subsequent wells drilled on the pad. 2) Comply with Rule 317.j. and provide cement coverage from TD to a minimum of 200' above Niobrara. Verify coverage with cement bond log. 3) Oil-based drilling fluid is to be used only after all fresh water aquifers are covered. |

Best Management Practices

| No | BMP/COA Type | Description |
|-----------|--------------------------------|---|
| 1 | Drilling/Completion Operations | Operator will perform anti-collision evaluation of all active (producing, shut-in, of temporarily abandoned) offset wellbores that have the potential of being within 150' feet of the proposed well prior to drilling operations. Notice shall be given to all offset operators prior to drilling. |
| 2 | Drilling/Completion Operations | Rule 604.c.1: Upon initial rig-up and at least once every thirty (30) days during drilling operations thereafter, pressure testing of the casing string and each component of the blowout prevention equipment including flange connections shall be performed to seventy percent (70%) of working pressure or seventy percent (70%) of the internal yield of casing, whichever is less. Pressure testing shall be conducted and the documented results shall be retained by the operator for inspection by the Director for a period of one (1) year. Activation of the pipe rams for function testing shall be conducted on a daily basis when practicable. |
| 3 | Drilling/Completion Operations | Alternative Logging Program - One of the first wells drilled on the pad will be logged with Open Hole Resistivity Log and Gamma Ray Log from the kick-off point to into the surface casing. All wells on the pad will have a cement bond log with gamma-ray run on production casing (or on intermediate casing if production liner is run) into the surface casing. The horizontal portion of every well will be logged with a measured-while-drilling gamma-ray log. The form 5, Completion Report, for each well on the pad will list all logs run and have those logs attached. The Form 5 for a well without open-hole logs shall clearly state "Alternative Logging Program - No open-hole logs were run" and shall clearly identify (by API#, well name & number) the well in which open-hole logs were run. |
| 4 | Drilling/Completion Operations | Operator will comply with COGCC policy on bradenhead monitoring during Hydraulic Fracturing Treatment in the Greater Wattenberg Area per policy dated May 29, 2012. |

Total: 4 comment(s)

Applicable Policies and Notices to Operators

Notice Concerning Operating Requirements for Wildlife Protection.
http://cogcc.state.co.us/documents/reg/Policies/Wildlife_Notice.pdf

Attachment Check List

| Att Doc Num | Name |
|--------------------|----------------------------|
| 402099167 | FORM 2 RESUBMITTED |
| 402406280 | FORM 2 REJECTED |
| 402407099 | OffsetWellEvaluations Data |
| 402407111 | MINERAL LEASE MAP |
| 402407113 | WELL LOCATION PLAT |
| 402412030 | DIRECTIONAL DATA |
| 402412037 | DEVIATED DRILLING PLAN |
| 402412224 | EXCEPTION LOC REQUEST |
| 402470724 | OFFSET WELL EVALUATION |

Total Attach: 9 Files

General Comments

| User Group | Comment | Comment Date |
|-------------------|--|---------------------|
| Permit | Secondary Permit review complete. | 08/12/2020 |
| Permit | With operator concurrence, the Cultural Distances were updated. | 08/12/2020 |
| Permit | IN PROCESS – received requested information from Operator on 08/11/2020; COGCC review will resume and be conducted within 60 days (by 10/10/2020). | 08/11/2020 |

| | | |
|----------------------|--|------------|
| Permit | <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> <p>1. Updated Cultural Distances to reflect the re-spacing of the County Line Pad.</p> | 08/06/2020 |
| Permit | Final Review Completed. | 08/04/2020 |
| Permit | Permit review complete. | 08/03/2020 |
| Permit | <p>Distance to Nearest Designated Outside Activity Area is incorrect.</p> <p>With operator concurrence, the distance was corrected to 5280 ft.</p> | 07/27/2020 |
| Permit | COGCC has determined there have been no substantive changes to the location since the previous Objective Criteria comment and Public Comment Consideration comment were placed on this Form 2. Those comments still stand as valid for this previously rejected Form 2. | 07/27/2020 |
| Permit | Passed Completeness. | 06/09/2020 |
| Permit | <ol style="list-style-type: none"> 1. Deviated Drilling Plan has been corrected. 2. The Directional Data imported has been corrected. 3. WOGLA submittal date has been corrected to 7/31/2019. 4. Cultural Distances have been corrected. 5. Mineral Lease Description has been corrected. 6. Unnecessary language has been removed. | 06/08/2020 |
| Permit | Returned to draft per operator request. | 05/28/2020 |
| Permit (Rejected) | <p>This application has been reviewed by COGCC staff and cannot be approved based on the information submitted; therefore, the COGCC is rejecting this application consistent with the Rejection Process – Form 2 and 2A (May 21, 2019) posted in the Form 2 and Form 2A Instructions section of our website. In compliance with § 24-65.1-108(1), C.R.S., the COGCC is returning this application to the applicant to remedy the deficiencies. The applicant may resubmit this application for COGCC review; upon determination of completeness for any resubmitted application, the COGCC will have 60 days in which to approve, deny, or request all additional information necessary to complete the regulatory review.</p> <p>In addition to all standard required information and attachments, the COGCC hereby confirms the following information is necessary prior to determination of completeness:</p> <ol style="list-style-type: none"> 1. Deviated Drilling Survey attachment does not have the correct map view, and has incorrect survey point data. 2. The Directional Data imported for the well path is incorrect. 3. The WOGLA submittal date does not match the approved 2A, Doc #402092786. Please confirm date of submittal. 4. The Cultural Distances for the High Occupancy Building Unit and the School Facility do not match. 5. The Mineral Lease Description does not match the Township and Range of the Mineral Lease attachment, and is not in the standard qtr/qtr, township, range language. 6. Completed portion of wellbore will cross the mineral lease described, operator comment stating “The completed portion of the wellbore does not penetrate the described lease but the lease is within the unit” is not necessary. | 05/27/2020 |
| Permit | <p>Deviated Drilling Survey and Directional Data is incorrect.</p> <p>Mineral Lease description does not match Mineral Lease attachment.</p> | 05/26/2020 |
| Permit | COGCC conducted the technical review for the related Oil and Gas Location Assessment | 05/26/2020 |

| | | |
|----------|--|------------|
| | permit, Form 2A document #402092786 under the statutory authority provided through SB 19-181, including the Objective Criteria. The Director approved the Form 2A on 4/2/2020, establishing Location ID #474767 subject to conditions included in the permit. The well proposed by this related Form 2 was contemplated during COGCC's review of the Form 2A. The Objective Criteria Review Memo (Doc# 2316639) can be found in the document file for this Location. | |
| Engineer | Emailed operator regarding offset well mitigation 19-May-2020. Operator agreed with offset well mitigation assesment 20-Jul-2020. | 05/21/2020 |
| OGLA | Public Comments received for this Form 2 are summarized and addressed in the Public Comment Consideration Memo (Doc# 2316640) saved in the file for Oil and Gas Location ID# 474767. | 05/20/2020 |
| Permit | Passed completeness. | 04/09/2020 |
| Permit | Section number for BHL does not match Well Location Plat. Location ID missing. Returned to draft per operator request. | 10/24/2019 |
| Permit | Return to draft per operator request. | 09/19/2019 |

Total: 19 comment(s)