

FORM
2

Rev
12/20

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:

403010004

(SUBMITTED)

Date Received:

04/28/2022

APPLICATION FOR PERMIT TO:

Drill Deepen Re-enter Recomplete and Operate

Amend

Refile

Sidetrack

TYPE OF WELL OIL GAS COALBED OTHER: _____

ZONE TYPE SINGLE ZONE MULTIPLE ZONES COMMINGLE ZONES

Well Name: State Antelope Well Number: 44-14-3HN
 Name of Operator: BONANZA CREEK ENERGY OPERATING COMPANY LLC COGCC Operator Number: 8960
 Address: 410 17TH STREET SUITE #1400
 City: DENVER State: CO Zip: 80202
 Contact Name: Jeff Annable Phone: (303)312-8529 Fax: ()
 Email: jannable@civiresources.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20120018

WELL LOCATION INFORMATION

Surface Location

QtrQtr: SWNW Sec: 2 Twp: 5N Rng: 62W Meridian: 6
 Footage at Surface: 1848 Feet FNL/FSL 333 Feet FEL/FWL
 Latitude: 40.431690 Longitude: -104.298840
 GPS Data: GPS Quality Value: 1.6 Type of GPS Quality Value: PDOP Date of Measurement: 05/24/2021
 Ground Elevation: 4647
 Field Name: WATTENBERG Field Number: 90750

Well Plan: is Directional Horizontal (highly deviated) Vertical

If Well plan is Directional or Horizontal attach Deviated Drilling Plan and Directional Data.

Subsurface Locations

Top of Productive Zone (TPZ)

Sec: 3 Twp: 5N Rng: 62W Footage at TPZ: 700 FSL 470 FEL
 Measured Depth of TPZ: 7126 True Vertical Depth of TPZ: 6109 FNL/FSL FEL/FWL

Base of Productive Zone (BPZ)

Sec: 3 Twp: 5N Rng: 62W Footage at BPZ: 677 FSL 470 FWL
 Measured Depth of BPZ: 11451 True Vertical Depth of BPZ: 6109 FNL/FSL FEL/FWL

Bottom Hole Location (BHL)

Sec: 3 Twp: 5N Rng: 62W Footage at BHL: 677 FSL 470 FWL
 FNL/FSL FEL/FWL

LOCAL GOVERNMENT PERMITTING INFORMATION

County: WELD Municipality: N/A

Is the Surface Location of this Well in an area designated as one of State interest and subject to the requirements of § 24-65.1-108 C.R.S.? Yes

Per § 34-60-106(1)(f)(I)(A) C.R.S., the following questions pertain to the Relevant Local Government approval of the siting of the proposed Oil and Gas Location.

SB 19-181 provides that when "applying for a permit to drill," operators must include proof that they sought a local government siting permit and the disposition of that permit application, or that the local government does not have siting regulations. § 34-60-106(1)(f)(I)(A) C.R.S.

Does the Relevant Local Government regulate the siting of Oil and Gas Locations, with respect to this Location? Yes No

If yes, in checking this box, I hereby certify that an application has been filed with the local government with jurisdiction to approve the siting of the proposed oil and gas location.

The disposition of the application filed with the Relevant Local Government is: Approved Date of Final Disposition: 10/11/2021

Comments: Approved permit #1041WOGLA21-0010

SURFACE AND MINERAL OWNERSHIP AT WELL'S OIL & GAS LOCATION

Surface Owner of the land at this Well's Oil and Gas Location: Fee State Federal Indian

Mineral Owner beneath this Well's Oil and Gas Location: Fee State Federal Indian

Surface Owner Protection Financial Assurance (if applicable): _____ Surety ID Number (if applicable): _____

MINERALS DEVELOPED BY WELL

The ownership of all the minerals that will be developed by this Well is (check all that apply):

- Fee
 State
 Federal
 Indian
 N/A

LEASE INFORMATION

Using standard QtrQtr, Section, Township, Range format describe one entire mineral lease as follows:

* If this Well is within a unit, describe a lease that will be developed by the Well.

* If this Well is not subject to a unit, describe the lease that will be produced by the Well.

(Attach a Lease Map or Lease Description or Lease if necessary.)

T5N R62W
Sec 2-ALL

Total Acres in Described Lease: 640 Described Mineral Lease is: Fee State Federal Indian

Federal or State Lease # OG-108513

SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 5280 Feet
Building Unit: 5280 Feet
Public Road: 5280 Feet
Above Ground Utility: 1742 Feet

INSTRUCTIONS:

- Specify all distances per Rule 308.b.(1).
- 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 – as defined in 100 Series Rules.

Railroad: 5280 Feet
Property Line: 333 Feet

OBJECTIVE FORMATIONS

Objective Formation(s)	Formation Code	Spacing Order Number(s)	Unit Acreage Assigned to Well	Unit Configuration (N/2, SE/4, etc.)
NIOBRARA	NBRR	407-3311	805	T5NR62W SEC 2: W2W2, SEC 3-ALL

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

SUBSURFACE MINERAL SETBACKS

Enter 5280 for distance greater than 1 mile.

Is this Well within a unit? Yes

If YES:

Enter the minimum distance from the Completed Zone of this Well to the Unit Boundary: 470 Feet

Enter the minimum distance from the Completed Zone of this Well to the Completed Zone of an offset Well within the same unit permitted or completed in the same formation: 633 Feet

If NO:

Enter the minimum distance from the Completed Zone of this Well to the Lease Line of the described lease: _____ Feet

Enter the minimum distance from the Completed Zone of this Well to the Completed Zone of an offset Well producing from the same lease and permitted or completed in the same formation: _____ Feet

Exception Location

If this Well requires the approval of a Rule 401.c Exception Location, enter the Rule or spacing order number and attach the Exception Location Request and Waivers. _____

SPACING & FORMATIONS COMMENTS

DRILLING PROGRAM

Proposed Total Measured Depth: 11451 Feet TVD at Proposed Total Measured Depth 6109 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: 670 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 Plan unless a plan was already submitted with the Form 2A per Rule 304.c.(10).

Will there be hydraulic fracture treatment at a depth less than 2,000 feet in this well? No

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

Beneficial reuse or land application plan submitted? _____

Reuse Facility ID: _____ or Document Number: _____

CASING PROGRAM

Casing Type	Size of Hole	Size of Casing	Grade	Wt/Ft	Csg/Liner Top	Setting Depth	Sacks Cmt	Cmt Btm	Cmt Top
CONDUCTOR	24	16	N/A	42	0	80	100	80	0
SURF	12+1/4	9+5/8	J-55	36	0	1500	400	1500	0
1ST	8+1/2	5+1/2	P-110	20	0	11451	1450	11451	1500

Conductor Casing is NOT planned

POTENTIAL FLOW AND CONFINING FORMATIONS

Zone Type	Formation /Hazard	Top M.D.	Top T.V.D.	Bottom M.D.	Bottom T.V.D.	TDS (mg/L)	Data Source	Comment
Groundwater	Laramie-Fox Hills	24	24	249	249	0-500	Electric Log Calculation	Grace State 2-1 (05-123-10130-0000)
Confining Layer	Pierre Formation	249	249	460	459			
Groundwater	Upper Pierre	460	459	1471	1419	501-1000	Electric Log Calculation	Grace State 2-1 (05-123-10130-0000)
Confining Layer	Base of Upper Pierre	1471	1419	3573	3269			
Hydrocarbon	Parkman Sandstone	3573	3269	3993	3639			Not productive in this area.
Confining Layer	Pierre Formation	3993	3639	4709	4269			
Hydrocarbon	Sussex Sandstone	4709	4269	5016	4539			Not productive in this area.
Confining Layer	Pierre Formation	5016	4539	5146	4654			
Hydrocarbon	Shannon Sandstone	5146	4654	5334	4819			Not productive in this area.
Confining Layer	Pierre Formation	5334	4819	6779	6019			
Subsurface Hazard	Sharon Springs	6779	6019	7126	6109			Sloughing Shales
Hydrocarbon	Niobrara	7126	6109	11451	6109			

OPERATOR COMMENTS AND SUBMITTAL

Comments

The nearest offset Well within the same unit permitted or completed in the same formation is the proposed State Antelope X-D-3HN.

This distance was measured in 2-dimensional space. The nearest existing or proposed wellbore belonging to another operator is the Wells Ranch AF05-625, API #05-123-42136.

This application is in a Comprehensive Area Plan _____ CAP #: _____
 Oil and Gas Development Plan Name State Antelope B-2 Pad OGDP ID#: 481212
 Location ID: 159738

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

Signed: _____ Print Name: Jeff Annable

Title: Lead, Regulatory Date: 4/28/2022 Email: jannable@civiresources.com

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: _____
 Expiration Date: _____

API NUMBER
05

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>

Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Drilling/Completion Operations	Alternative Logging Program: An existing well on the pad was logged with open-hole resistivity log with gamma-ray log from the kick-off point 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 state "Alternative Logging Program - No open-hole logs were run" and shall clearly identify the type of log and the well (by API#) in which open-hole logs were run.
2	Drilling/Completion Operations	Anti-collision: Operator will perform an anti-collision evaluation of all active (producing, shut in, or temporarily abandoned) offset wellbores that have the potential of being within 150 feet of a proposed well prior to drilling operations for the proposed well. Notice shall be given to all offset operators prior to drilling.

Total: 2 comment(s)

Attachment List

<u>Att Doc Num</u>	<u>Name</u>
403025459	DEVIATED DRILLING PLAN
403025460	WELL LOCATION PLAT
403025461	DIRECTIONAL DATA
403030403	OffsetWellEvaluations Data

Total Attach: 4 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.

