

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:

402638784

Date Received:

03/04/2022

APPLICATION FOR PERMIT TO:

☒ Drill ☐ Deepen ☐ Re-enter ☐ Recomplete and Operate

Amend ☐

TYPE OF WELL OIL ☐ GAS ☒ COALBED ☐ OTHER: Inert Gas

Refill ☐

ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐

Sidetrack ☐

Well Name: Sammons Well Number: 315310C
Name of Operator: VECTA OIL & GAS LTD COGCC Operator Number: 10267
Address: 575 UNION BLVD #208
City: LAKEWOOD State: CO Zip: 80228
Contact Name: Mathew Goolsby Phone: (303)618-7736 Fax: ()
Email: mdgoolsby@comcast.net

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20210089

WELL LOCATION INFORMATION

Surface Location

QtrQtr: NESW Sec: 10 Twp: 31S Rng: 53W Meridian: 6
Footage at Surface: 1323 Feet FSL 1329 Feet FWL
Latitude: 37.355100 Longitude: -103.350590
GPS Data: GPS Quality Value: 6.0 Type of GPS Quality Value: PDOP Date of Measurement: 02/25/2021
Ground Elevation: 5556
Field Name: WILDCAT Field Number: 99999

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: Twp: Rng: Footage at TPZ:
Measured Depth of TPZ: True Vertical Depth of TPZ: FNL/FSL FEL/FWL

Base of Productive Zone (BPZ)

Sec: Twp: Rng: Footage at BPZ:
Measured Depth of BPZ: True Vertical Depth of BPZ: FNL/FSL FEL/FWL

Bottom Hole Location (BHL)

Sec: Twp: Rng: Footage at BHL:
FNL/FSL FEL/FWL

LOCAL GOVERNMENT PERMITTING INFORMATION

County: LAS ANIMAS 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.? No

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: 02/11/2022

Comments: Robert Lucero (719-845-2577, robert.lucero@lasanimascounty.org) is the Oil & Gas Inspector for Las Animas county. The Sammons 315310C was determined to be in compliance with the county oil and gas regulations and approved by Mr. Lucero on February 11, 2022.

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.)

The south half of section 10, T31S, R53W and the west half of section 15, T31S, R53W, 6th PM.

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

Federal or State Lease # _____

SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 5280 Feet
Building Unit: 5280 Feet
Public Road: 1310 Feet
Above Ground Utility: 1390 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: 1320 Feet

OBJECTIVE FORMATIONS

Objective Formation(s)	Formation Code	Spacing Order Number(s)	Unit Acreage Assigned to Well	Unit Configuration (N/2, SE/4, etc.)
LYONS	LYNS			

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? No

If YES:

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

If NO:

Enter the minimum distance from the Completed Zone of this Well to the Lease Line of the described lease: 1320 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: 5280 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: 1414 Feet TVD at Proposed Total Measured Depth 1414 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: _____ Feet ☒ No well belonging to another operator within 1,500 feet

Will a closed-loop drilling system be used? No

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? No

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

<u>Casing Type</u>	<u>Size of Hole</u>	<u>Size of Casing</u>	<u>Grade</u>	<u>Wt/Ft</u>	<u>Csg/Liner Top</u>	<u>Setting Depth</u>	<u>Sacks Cmt</u>	<u>Cmt Btm</u>	<u>Cmt Top</u>
CONDUCTOR	17	13+3/8	K/J	54.5	0	30	16	30	0
SURF	12+1/4	8+5/8	J-55	24	0	305	180	305	0
1ST	7+7/8	5+1/2	J-55	15.5	0	1285	135	1285	0
OPEN HOLE	4+1/2				1285	1414			

☐ Conductor Casing is NOT planned

POTENTIAL FLOW AND CONFINING FORMATIONS

<u>Zone Type</u>	<u>Formation /Hazard</u>	<u>Top M.D.</u>	<u>Top T.V.D.</u>	<u>Bottom M.D.</u>	<u>Bottom T.V.D.</u>	<u>TDS (mg/L)</u>	<u>Data Source</u>	<u>Comment</u>
Groundwater	Dakota/water flow	0	0	210	210	0-500	DWR	Dakota aquifer/Potable water. At our surface elevation the likelihood of encountering water is only moderate. The zone will be protected with conductor pipe and 300 feet of surface casing.
Confining Layer	Morrison	210	210	418	418	1001-10000	DWR	The Morrison is a mix of rock types, with clay being the most common. Landowners claim that no potable water is ever found below the base of the Dakota in the area.
Confining Layer	Entrada	418	418	1202	1202	1001-10000	Field Scout Card	Considered a confining layer due to the amount of red shale. Occasional "Dockum" sand is encountered, but potable water has not been reported in the area. The sand has produced CO2 near Nina View 20 miles to the north.
Confining Layer	Blaine Anhydrite	1202	1202	1285	1285	1001-10000	Other	CGS, USGS, Field Scout Data- Mostly anhydrite with interbedded red shale and siltstone. Anhydrite is non-permeable (seal) and is probably important to the occurrence of helium in the underlying strata.
Hydrocarbon	Lyons	1285	1285	1414	1414	1001-10000	Electric Log Calculation	Also Field Scout Data for source.- (There are no Hydrocarbon zones in this well, but the form will not validate unless one is listed!) This is the objective formation for inert helium gas. No hydrocarbons occur in the area.

OPERATOR COMMENTS AND SUBMITTAL

Comments

This well is to be drilled with a truck-mounted rotary rig. At the surface, flat bedrock (Dakota Formation) is often exposed, so that in places there is little or no topsoil at all, and the location displays minimum topographical relief. To minimize disturbance and loss of what little topsoil is present, no cut and fill of the location pad is planned. Liners will be installed under the row of motors that includes the air compressors, fuel bunker, and generator to prevent surface contamination. A liner will also be installed under that portion of the rig that includes the motors (forward 2/3).

No pits will be dug, and no mud will be used for drilling. The well will be air or air/foam drilled, with a steel surface tank to capture bit cuttings. The only excavation will be for the installation of a 5' by 5' galvanized steel culvert as a wellhead cellar.

Well data is sparse for the area, with less than one well per township. However, none of the wells in this part of the county detected even a trace of hydrocarbons in the formations this well will penetrate, and any foam drilling will use organic surfactants, certified for potable water well applications.

This application is in a Comprehensive Area Plan _____ No _____ CAP #: _____
OGDP ID#: 480998 OGDP Name: Sammons Ranch Expiration Date: 02/23/2025
Location ID: 481718 Location Name: Sammons 315310C

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

Signed: _____ Print Name: Mathew Goolsby

Title: VP of Operations Date: 3/4/2022 Email: mdgoolsby@comcast.net

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: 5/10/2022
Expiration Date: 02/23/2025

API NUMBER

05 071 09921 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.

Condition of Approval

COA Type

Description

	1) If groundwater flow or hydrocarbon bearing zones are encountered during drilling, cement the production casing to 500' above the zone. 2) If dry hole, set minimum 100' plug across the Lyons formation top. Set 100' plug half in and half out of the surface casing shoe.
1 COA	

Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Drilling/Completion Operations	Vecta acknowledges Rule 408.e.(1) (2). This well is located in an agricultural area where groundwater is an important resource. There are no known freshwater aquifers below the Dakota formation. The 8-5/8" surface casing will be set at a minimum of 50 feet below the base of the Dakota. This casing and ALL other conductor and casing strings will be cemented from setting depth back to the surface. This will isolate all formations, and assure the Dakota aquifer is completely protected from any possibility of contamination.
2	Drilling/Completion Operations	Vecta acknowledges Rule 408.r. Requirement to log well. (Alternate Logs). The last casing run will be the 5 1/2" string set at 1285 feet. The well will be open-hole from this point to a TVD of 1414 feet. A GR/CBL will be run from the 5 1/2" casing shoe to surface. Additionally, a GR/Neutron log will be run from TVD to surface.

Total: 2 comment(s)

Attachment List

<u>Att Doc Num</u>	<u>Name</u>
402638784	FORM 2 SUBMITTED
402948841	WELL LOCATION PLAT
402948842	WELLBORE DIAGRAM

Total Attach: 3 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
OGLA	The following changes were made with Operator concurrence: - corrected setback distances for public road, above ground utility, and property line	05/10/2022
Engineer	Corrected drilling plan TVD & MD from 1600' to 1414' per data on wellbore diagram.	05/09/2022
Engineer	Offset water well check: COGCC evaluated offset water wells within one mile of this proposed well surface hole location. The deepest water well within one mile of this proposed surface hole location is 160'. Operator's proposed/ current surface casing will cover all current water wells within one mile of the surface hole location.	04/30/2022
Permit	Final Review Completed.	04/06/2022
OGLA	The Commission approved OGDG #480998 on 2/24/2022 for the Oil and Gas Location related to this Form 2. OGLA task passed.	03/10/2022
OGLA	Added Loc ID# 481718 to Submit tab.	03/10/2022
Permit	NOTE TO OGLA: Input location ID once available.	03/05/2022

Total: 7 comment(s)