PLANNING COMMISSION WORK SESSION AGENDA

December 22, 2022 at 10:00 AM
Commissioners Meeting Room - 401 Main Street, Suite 309, Walsenburg, CO 81089

Office: 719-738-3000 ex 200 | Fax: 719-738-3996

Join via Zoom: https://us02web.zoom.us/j/82550511219 | **Meeting ID:** 825-5051-1219

1. **ROLL CALL**
2. **PLEDGE OF ALLEGIANCE**
3. **READING OF MINUTES**
4. **ACTION ITEMS**
5. **LGD UPDATES**
6. **OLD BUSINESS**
7. **NEW BUSINESS**
   - **a.** 1041 Regulations Review
   - **b.** Helium Exploration
8. **DISCUSSIONS**
   - **a.** Add Roadway Design and Construction Standards to Land Use Code. See Resolution 15-07
   - **b.** Seismic Regulations
9. **ADJOURNMENT**
10. **UPCOMING MEETINGS**

MEMORANDUM

MEETING TYPE: Planning Commission Work Session

MEETING DATE: December 22, 2022

ITEM NAME: 1041 Regulations Review

SUBMITTED BY: Sky Tallman

SUMMARY:

Huerfano County's 1041 regulations are found in Section 7 of the Land Use Code. Included in the packet is a draft of an application form, which is an updated version of the form the County used in previous applications. It has been updated to reflect our current code sections and requirements.

Sections that may be of interest to review include:

7.01.10 Definitions

7.02.04 Factors to be considered at designation hearings

7.03.01 – 7.03.02 deal with water and sewage systems.

7.04.11 (A) General Approval Requirements

7.04.11 (B) Standards for approval of all permit applications

7.04.11 (C) Standards for approval of municipal and industrial water projects.

7.04.11 (D) Standards for approval of new domestic water and sewage treatment systems and major extensions of existing domestic water and sewage treatment systems.

7.04.11 (E) Standards for new utilities

7.04.11 (F) Standards for site selection of new communities.

7.04.11 (G) Standards for Development in natural resource areas

7.04.11 (H) Standards for development in flood hazard areas

7.04.11 (I) Standards for development in geologic hazard areas

Huerfano County Land Use Department
401 Main Street, Suite 340
Walsenburg, Colorado 81089
(719) 738-3000 ext. 103

1041 APPLICATION FOR A PERMIT TO CONDUCT A DESIGNATED ACTIVITY OF STATE INTEREST OR TO ENGAGE IN DEVELOPMENT IN DESIGNATED AREA OF STATE INTEREST

Date:_____
Applicant Name:_____Telephone: _____
Applicant Email: _____
Project Title: _____

Fee: $300

*Submit this form along with a General Land Use Application.

1. Matter of State Interest.

The applicant requests that a permit be issued for each of the items checked below:

A permit to engage in development in one or more of the following areas of state interest:	**A permit to conduct one or more of the following activities of state interest:**
o Mineral resource areas	o Site selection and construction of major new domestic water and sewage treatment systems
o Geologic hazard areas	o Major extensions of existing domestic water and sewage treatment systems
o Wildfire hazard areas	o Site selection and development of solid waste disposal sites
o Flood hazard areas	o Site selection of airports
o Historical and archaeological resource areas	o Site selection of rapid or mass transit facilities
o Significant wildlife areas habitats	o Site selection of arterial highways and interchanges and collector highways
o Shore lands of major publicly—owned reservoirs	o Site selection and construction of major facilities of a public utility
o Areas around airports	o Site selection and development of new communities
o Areas around major facilities of a public utility	o Efficient utilization of municipal and industrial water projects
o Areas around interchanges involving arterial highways	o Conduct of nuclear detonations
o Areas around rapid or mass transit facilities	

2. Proposed Activity or Development. Description of the specific activity or development proposed:

_____
_____
_____
_____
_____

(attach additional sheets as necessary)

3. General Description. A general, nonlegal description, of the tract of land upon which the activity or development is to be conducted (attach additional sheets as necessary):

_____
_____
_____
_____

4 .Owners and Interests. Set out below the names of those persons holding recorded legal, equitable, contractual and option interests and any other person known to the applicant having an interest (including sub-surface interests) in the property described above, as well as the nature and extent of those interests for each person, provided that such recorded interests shall be limited to those which are recorded in the County Recorder 's Office of this jurisdiction, the land office of the Bureau of Land Management for this State, the Office of the State Board of Land Commissioners of the Department of Natural Resources, or the Secretary of State's Office of this State . (Attach additional sheets as necessary)

_____ _____
_____ _____
_____ _____
_____ _____
_____ _____

5.Submission Requirements Submission requirements are described in **§**7.04.07 of the Huerfano County Land Use Regulations. List below all attachments identified by the letter or number corresponding with reference to paragraph and section numbers in **§**7.04.07 described by title below:

_____ _____
_____ _____
_____ _____
_____ _____
_____ _____

6. Comprehensive Plan.
Explain how the proposed project is supported by the Huerfano County Comprehensive Plan and other adopted plans and intergovernmental agreements. See: (§7.01.02(B)(14), §7.01.02(B)(19), §7.02.04(H), §7.04.11(B)(14):

_____
_____
_____
_____

7. Design and Performance Standards. The attached analyses show that each of the design, capacity and performance standards for each of the activities or areas checked in paragraph 1 above will be adequate to meet current and future needs and will meet all standards for approval of the application. The individual analyses and materials provided shall be identified by reference to the appropriate paragraph or section numbers corresponding to the standard in §7 of the Land Use Code which they are intended to support, including all additional standards applicable to the proposed project type(s). See also standards for approval of a permit application in §7.04.11.

_____ _____
_____ _____
_____ _____
_____ _____
_____ _____

8. List any cultural resources associated with the site, including but not limited to: historical structures or sites and archaeological artifacts or sites.

List all additional attachments:

_____ _____
_____ _____
_____ _____
_____ _____
_____ _____

Duration of Permit. The applicant requests a permit for a period of: _____
_____

Application Fee: An application fee of _____ accompanies this application.

BY: _____
(name)

_____
(title)

What is helium?
Helium is the second most abundant element in the universe after hydrogen. It is a colorless and odorless inert gas that has unique properties.

What makes helium so unique?
Of all the elements, helium is the most stable; it will not burn or react with other elements. Helium has the lowest melting and boiling points. It exists as a gas, except under extreme conditions. At temperatures near absolute zero, helium is a fluid; most materials are solid when cooled to such low temperatures.

Where does helium come from?
Helium is a non-renewable natural resource that is most commonly recovered from natural gas deposits. Geologic conditions in Texas, Oklahoma, and Kansas make the natural gas in these areas some of the most helium-rich in the world (with concentrations between 0.3 percent and 2.7 percent).

What is helium used for, and why is it a strategic natural resource?
Perhaps the most familiar use of helium is as a safe, non-flammable gas to fill party and parade balloons. However, helium is a critical component in many fields, including scientific research, medical technology, high-tech manufacturing, space exploration, and national defense. Here are a few examples:

- The medical field uses helium in essential diagnostic equipment such as MRI's. Helium-neon lasers are used in eye surgery.
- National defense applications include rocket engine testing, scientific balloons, surveillance craft, air-to-air missile guidance systems, and more.
- Helium is used to cool thermographic cameras and equipment used by search and rescue teams and medical personnel to detect and monitor certain physiological processes.
- Various industries use helium to detect gas leaks in their products. Helium is a safe tracer gas because it is inert. Manufacturers of aerosol products, tires, refrigerators, fire extinguishers, air conditioners and other devices use helium to test seals before their products come to market.
- Cutting edge space science and research requires helium. NASA uses helium to keep hot gases and ultra-cold liquid fuel separated during lift-off of rockets.
- Arc welding uses helium to create an inert gas shield. Similarly, divers and others working under pressure can use a mix of helium and oxygen to create a safe artificial breathing atmosphere.
- Helium is a protective gas in titanium and zirconium production and in growing silicon and germanium crystals.
- Since helium doesn't become radioactive, it is used as a cooling medium for nuclear reactors.

- Cryogenics, superconductivity, laser pointers, supersonic wind tunnels, cardiopulmonary resuscitation pumps, monitoring blimps used by the Border Patrol, and liquid fuel rockets all require helium in either their manufacture or use.

For many of these applications, there is no substitute for helium. Helium is a non-renewable resource found in recoverable quantities in only a few locations around the world, many of which are being depleted. Accordingly, the U.S. has important economic and national security interests in ensuring a reliable supply of helium.

As Local Govt Designee I have researched Helium exploration

I have contacted the COGCC

I have reviewed the permit application submitted by Vecta Oil and Gas LTD (Vecta) to drill 2 helium wells in Las Animas County

From form 2A COGCC permit application

Vecta O&G, Ltd. proposes to develop up to 4 exploratory (wildcat) conventional vertical helium gas wells, flowlines, and access on existing disturbed rangeland in rural Las Animas County. The development avoids impacts to public health, safety, welfare, the environment, and wildlife by exhibiting the following:

(1) Inert helium gas extraction with no known oil or natural gas entrained with the helium resource. The finding is based

on historical well log and scout information for this location.

(2) No hydrocarbons or hazardous air pollutants associated with the helium gas wells.

(3) The nearest residence is approximately 0.75 miles away from the nearest Sammons Ranch well (315315C).

(4) Each well pad contains a single well with 160-acre pad spacing.

(5) Well pad footprints are limited to approximately 1.1 acres during 7-10 days of drilling and will be reclaimed to

approximately 0.2 acres during interim reclamation.

(6) Conventional vertical well drilling requires no fracking or proppant.

(7) The wells generate no produced water. There is no on-site storage of produced water, oil, natural gas, or condensate.

(8) The nearest waterbody is > 0.5 mi away.

(9) There is no high priority habitat or mapped species of concern within 1 mile.

Wells have been planned to be on center in a quarter section. All of the drawings submitted with the application indicate

that the well is on center. However, the well plots in the following quarter-quarter section: NE ¼ SW ¼, Section 10.

This is from the for 2A for a well in las animas county

Following are the the people at the COGCC I have spoken to

- Communications Officer **Castle, Megan** (303) 513-2713 **megan.castle@state.co.us**
- Region (170) Compliance Supervisor **Quint, Craig**

  Craig Quint - DNR <craig.quint@state.co.us>,

- **Western Region Engineering Supervisor**

  Burger, Craig (303) 894-2100 x5687

  (970) 319-4194 (cell) craig.burger@state.co.us

- Area (120) Compliance Specialist

  Beardslee, Tom (970) 420-3935

  tom.beardslee@state.co.us

There are only 7 facilities in the use to process helium to a liquid that can then be transported overseas for sale

Helium is extracted thru air drilling wells that run 1200 fo to 2500 feet in depth there is not fracking

As the helium is captured as a gas it has to be processed to extract only the helium Other components to the gas extracted is nitrogen and natural gas The extracted gas is processed on site The natural gas has to be captured and somehow sent to a point of sale because it cannot be released to the air due to potential environmental damage Methane

The natural gas may also be put into an injection well

It is not clear how the well in las animas is dealing with this natural gas component and I am looking into that

When the extracted helium is still a gas it is loaded onto tube trailers and transported to one of the 7 helium lignifying plants in the us one in chyanne Colo is the closest

Upon speaking to Mr Quint

Extracted gas is about 2% helium The rest is natural gas and maybe nitrogen and in area [illegible] has worked and they process the natural gas

When reviewing the form 2c that was submitted to the cogcc by the company in LasAnimas there was no mention of natural gas

Mr Quint was asked about this and if there was natural gas comingling with helium what was the extraction method they were going to use

Mr Quint spoke with to operator in Las Animas. They have determined, by test holes apparently, that the Helium that is extracted in these 2 well will have only nitrogen as a comingle Nitrogen is released into the atmosphere

The helium is placed into tubes and transported by ground to a processing facility as previous described

Finally

Helium is regulated under the same permitting requirements of natural gas Helium drilling would also be under our oil and gas reg in our land use regulations I have been told that dust mitigation is a concern at these sites

I am communicating with the COGCC regarding a form 2 for the las animas wells. That addresses down hole issues.

Dust Mitigation Plan

Sammons Ranch

Helium Gas Well 315310C

Vecta Oil & Gas Ltd.

January 2022

1.0 Introduction

This Dust Mitigation Plan (Plan) has been prepared by Vecta Oil & Gas, Ltd. (Vecta) for its Sammons Ranch helium gas well development in Las Animas County, Colorado. The Plan addresses the Colorado Oil & Gas Conservation Commission (COGCC) requirement at Rule 304.c.(5) to prepare a Dust Mitigation Plan and the dust mitigation criteria in Rule 427.

2.0 Soil Type

Soil types are listed in Table 1.

Table 1. Soil Type

Disturbance	Soil Type	Description
Oil and Gas Location	*WC – Plughat-Villegreen Complex*	1 to 4 percent slopes; weathered from sandstone; A-horizon topsoil of 0 to 6 inches of loam and silt loam; depths of 3 to 9 inches are silty clay loam; well drained.
	WeB – Wiley Silt Loam	0 to 3 percent slopes; A-horizon topsoil of 0 to 4 inches of silt loam; depths of 4 to 9 inches are silty clay loam; well drained.
Access	*BaA – Baca Silt Loam*	0 to 3 percent slopes; A-horizon topsoil of 0 to 3 inches of silt loam; depths of 3 to 6 inches are silty clay loam; well drained.
	WC – Plughat-Villegreen Complex	See Above
	WeB – Wiley Silt Loam	See Above
Flowline	Same as Access	Same as Access

Source: Natural Resources Conservation Service, National Cooperative Soil Survey.

3.0 Vehicle Speed Limit to Minimize Dust

Sammons Ranch will be accessed using Colorado Highway 109, an existing section of unpaved ranch road, and new access. Drivers will be instructed to maintain a speed of 15 mph on Sammons Ranch roads to minimize fugitive dust, road wear, and erosion.

4.0 Area of Soil Disturbance

The areas of soil disturbance are shown in Table 2. Interim reclamation will reduce the well pad size to approximately 0.2 acre and stabilize and revegetate the area in accordance with COGCC Rule 1003.

Table 2. Area of Disturbance

Disturbance[1]	Soil Type	Disturbance (ac)
Oil and Gas Location	*WC – Plughat-Villegreen Complex*	0.35
	WeB – Wiley Silt Loam	0.75
Access	*BaA – Baca Silt Loam*	0.35
	WC – Plughat-Villegreen Complex	0.35
	WeB – Wiley Silt Loam	0.20

[1]Flowline will be constructed within the road disturbance.

5.0 Whether Access Roads are Paved

Access will be provided by paved Highway 109 and unpaved Sammons Ranch roads.

6.0 Anticipated Truck Trips

Table 3 lists anticipated truck trips. Truck trips are considered travel in and out of the location, not round trip. Each location is expected to require 1 day to construct. Well drilling and completion are expected to require up to 10 days. The short durations will limit vehicle trips and minimize fugitive dust. The access roads have no nearby receptors; the nearest residence is greater than 1 mile away.

Table 3. Anticipated Truck Trips

Phase	Truck Trips
Construction (Total)	2
Drilling (Total)	12
Completion (Total)	12
Production (Per Month)	30

7.0 Plan for Suppressing Fugitive Dust Caused Solely by Wind

Because well pad construction is expected to require 1 day to complete, scheduling will consider the potential for a high wind warning issued for eastern Las Animas County to avoid this period. After pad construction, fugitive dust will be minimized during well drilling and completion because a single mobilization for the drill rig and other equipment is needed to support a conventional vertical helium gas well. Traffic and parking on the well pad will be staged to minimize travel across the pad from light duty trucks. After well drilling and completion, a water truck will be used to wet the pad surface in areas not targeted for interim reclamation if the areas fail to stabilize and form a crust.

8.0 Best Management Practices

Best management practices to minimize fugitive dust are shown in Table 4.

Table 4. Best Management Practices

	Best Management Practices
Speed Restrictions	• Speeds will be limited to 15 mph on the Sammons Ranch access roads.
Regular Road Maintenance	• Regular inspection will occur for the Sammons Ranch access roads for evidence of inadequate drainage and formation of potholes. • Grading, blading, and filling potholes will be performed to maintain the road surface and discourage vehicles from widening the roadway or contributing to erosion.
Restricting Construction Activity During High Wind Days	• The 1-day well pad construction will be scheduled to avoid high-wind warnings issued for eastern Las Animas County.

	Best Management Practices
Dust Suppression	• Blowing soil and failure of the soil to stabilize and form a crust on the location during construction and after interim reclamation will indicate that a dust suppression BMP is needed. In that event, a water truck will be used to wet the pad surface to form a crust.
Interim Reclamation	• Area not needed for production will be reclaimed in accordance with Rule 1003.
Dust Tracking	• Aggregate will be placed at the apron where the Sammons Ranch access road ties into Highway 109. The aggregate will serve as a wheel shaker to reduce dirt from being tracked onto the paved road.
Topsoil Stockpile	• The stockpile will be mounded with a slope of approximately 1:3 to prevent loose soils and promote vegetative growth. • Vehicle tracking perpendicular to the slope angle will be used to improve short term stabilization. • Vegetation will be allowed to establish, with crimped straw mulching, in order to stabilize the stockpile, outcompete weeds, and promote soil microbial activity.

COLORADO
Oil & Gas Conservation Commission
Department of Natural Resources

DIRECTOR'S RECOMMENDATION

Vecta Oil & Gas LTD (Vecta), Operator ID #10267. Sammons Ranch OGDP, OGDP ID #480998, Form 2C 402710215, Form 2A 402640997, 402693280, 402695913, 402696494, Form 2B 402679835 , Docket # 210600096

Pursuant to Rule 306, the Director submits to the Commission this recommendation for the Vecta Sammons Ranch OGDP located in Las Animas County.

BACKGROUND

On June 16, 2021, Vecta Oil and Gas LTD (Vecta) filed an application for an Oil and Gas Development Plan (OGDP) with the Colorado Oil and Gas Conservation Commission (COGCC). Staff returned the Form 2As to the operator on 7/16/2021 and 10/1/2021 to make corrections prior to the determination the application was complete on October 28, 2021. Multiple revisions were coordinated between Staff and the applicant throughout the technical review process. This recommendation is based on the information in the four Form 2As, the Form 2B, and the hearing application as of January 28, 2022. No additional revisions will be made to the application prior to the Commission hearing scheduled for February 16, 2022.

Vecta Sammons OGDP Proposed Development:
The proposed OGDP includes 640-acres of application lands in Township 31 South, Range 53 West, Sections 10 and 15. The OGDP is sited in a rural rangeland area of Las Animas County, approximately 5 1/2 miles north of the Town of Kim on the Eastern Plains.

Vecta proposes four new Oil and Gas Locations that will each have a single vertical exploratory (wildcat) well for helium production. No other production or associated equipment is planned for the locations, as the helium will be transported via pipeline to an off-location skid mounted helium unit located on private property, where it will be purified, compressed, and loaded onto a tube trailer for transport. Vecta does not anticipate that petroleum hydrocarbons will be associated with the helium.

Surface Lands:
The proposed Oil and Gas Locations lie on Fee Surface and are located inside of the mineral development area. The operator's right to construct is granted through a Surface Use Agreement (SUA) signed on December 30, 2020. Each proposed location requires disturbance of 1.1 acre (to be reclaimed to 0.2 acres after interim reclamation). The access roads require a total disturbance of 2.6 acres.

Mineral Lands and Development:
Vecta has proposed wells for this OGDP with the intent to develop Fee minerals as follows:.

- Four vertical wells to produce helium gas from the Lyons Formation, at an estimated depth of approximate 1,400 feet.
- The four wells will be drilled according to Rule 401.b for well completions less than 2,500 feet in depth (must be located more than 200 feet from a lease line and more than 300 feet from other wells in the same source of supply).
- No Drilling and Spacing Unit is being requested and none is required for this development.

Financial Assurance:
Staff confirmed that Vecta has a valid blanket plugging bond of $60,000 for this OGDP. No additional bonding is required per current COGCC Rules.

LOCAL GOVERNMENT PERMITTING AND PRE-APPLICATION CONSULTATIONS

Relevant Local and Proximate Governments:
Las Animas County is the relevant local government for the OGDP. There are no proximate local governments to the proposed OGDP.

Local Permit with Las Animas County:
Vecta indicated that a permit application was submitted by Vecta to the Las Animas County Land Use Department on 1/25/2022. An official approved permit has not yet been issued and local permits are not attached to the Form 2As. Staff has requested Vecta provide the local permit once approved; a Condition of Approval has been added to the Form 2A for the Operator to submit the approved local permit within 14 days of receipt if it is not issued prior to Form 2A approval.

EXEMPTION REQUESTS AND ADMINISTRATIVE CONSIDERATIONS

Lesser Impact Area Exemption Request Summary:
Vecta requested from the Director a Lesser Impact Area Exemption for the “Noise Mitigation Plan” (Rule 304.c.(2)) and the “Light Mitigation Plan” (Rule 304.c.(3)) based on a lack of proximate potential receptors that may be adversely impacted by noise or light. The nearest Residential Building Unit (RBU) is 3960 feet southwest of the Working Pad Surface (WPS) of the proposed Sammons 315315C location. An abandoned former homestead approximately 2180 feet west of the proposed Sammons 315310C was determined to be uninhabitable based on a photograph provided to Staff, and was thus not regarded as a RBU. There are no High Priority Habitats (HPH) within a mile of the proposed locations.

The planned wells will be drilled with an air rotary drilling system. Air rotary drilling systems are often used to drill groundwater wells and are more similar in size to workover rigs (typically truck or trailer mounted) than the larger drilling rigs used for deeper, horizontal drilling (such as those seen commonly in the DJ Basin). Due to the shallow nature of the planned wells, actual drilling times are estimated to be seven to ten days per well. Construction and drilling will take place

during daylight hours only, notwithstanding any unplanned circumstance that may require nighttime operations.

Based on Staff's review of information provided in the "Lesser Impact Area Exemption Request" attachment during the Form 2A 'Completeness Review', Staff determined that the potential noise and light impacts to the public and wildlife will be so minimal as to cause no concern. Therefore, the Director granted the Lesser Impact Area Exemption Request for both plans on October 21, 2021. Vecta is required to comply with all applicable noise and light mitigation requirements per Rules 423 and 424. Due to the scale of operations, daylight operations only, and the distance between the locations and any receptors, Staff did not request any additional noise- or light-related BMPs.

COA - Reference Area Pictures:
If the final land use for a proposed Location includes rangeland, Rule 304.b.(9).B requires an applicant to provide Reference Area Pictures in order to document the type, density, and quality of vegetation currently present in a nearby reference location that is considerably similar to the proposed location. These Reference Area Pictures are used during the interim and final reclamation processes to aid the operator and Reclamation Staff in ensuring reclaimed conditions meet or exceed that observed prior to construction. Vecta was unable to provide Reference Area Pictures that adequately showcased the vegetation in the height of the growing season. Pursuant to Rule 304.b.(9).B.ii, an applicant may submit these Pictures up to 12 months after the Form 2A. Staff added a COA on each of the four Form 2As to require Vecta to submit these pictures timely and appropriately via a Form 4 Sundry.

PUBLIC COMMENTS

The public comment period was open for 30 days from October 28, 2021 to November 28, 2021, per Rule 303.d.(1).A.ii. No public comments were received on the Form 2As during the Public Comment Period. No public comments were received in the eFiling system as of 1/27/2022.

COGCC STAFF'S TECHNICAL REVIEW HIGHLIGHTS

This section addresses issues related to siting, public health, safety, welfare, the environment, and wildlife resources, within the context of SB 19-181 for Vecta's proposed locations in the Sammons Ranch OGDP.

Alternative Location Analysis (ALA)

The proposed location does not meet any of the criteria listed in Rule 304.b.(2); an ALA was not required and none was submitted. Staff identified no significant concerns regarding the siting of the OGDP or any of the four proposed Locations.

Public Health, Safety, and Welfare Considerations

Staff confirmed there are no Residential Building Units (RBUs), High Occupancy Building Units, School Facilities, or Child Care Centers within 2,000 feet of any of the four proposed Locations. Only one proposed location (Sammons 315315C) has an RBU within one mile; that RBU is approximately 3,960 feet southwest of the WPS. The OGDP is not within a Disproportionately Impacted (DI) Community, nor are any of the Locations within 2,000 feet of a Building Unit within a DI Community.

While the location falls under the regulatory authority of the COGCC, Vecta will not be producing hydrocarbon liquid or hydrocarbon gas, but instead plans to produce helium gas. No hydrocarbons are anticipated to be encountered during the drilling of this well and no hydrocarbons are anticipated to be produced or will be stored at this proposed location.

Staff concludes that there are no significant potential direct adverse impacts to public health, safety, and welfare.

Environmental Resource Considerations

Water Resources:
The Operator indicated that the proposed Oil and Gas Locations do not lie within a Sensitive Area for water resources due to the proximity to surface water and estimated depth to groundwater greater than 100 feet below ground surface. There is a shortage of information about water depths near these locations, with the nearest water well (permit 251880–), reported as a dry hole to 160 feet. The nearest water wells with measured static water levels are along Two Butte Creek, approximately 180 feet lower in elevation than the proposed locations.

An unnamed drainage to Two Butte Creek runs southeast of the Sammons 315310D location, at a distance of approximately 16 feet. Vecta provided recent photographs showing the drainage, which is highly disturbed by cattle grazing, lacks an ordinary high water mark, and is not a Waters of the State (see Location Pictures attachment doc# 402696754 on Form 2A doc# 402696494). Although Staff has no significant concern about water resources related to this small drainage, Staff conducted additional evaluation of the stormwater controls at the 315310D to ensure a reduction in the risk of sediment or chemicals from that location reaching the drainage and moving to Two Butte Creek, approximately 3,550 feet to the east.

A similar, unnamed, drainage to Two Butte Creek runs southeast of the Sammons 315315C, at a distance of approximately 630 feet. This drainage has a small man-made impoundment (stock pond) for livestock watering. Staff reviewed aerial imagery of the stock pond taken intermittently over a period of approximately 18 years (via Google Earth Pro). Three out of nine images clearly indicated water was present. This drainage (and any water released from the stock pond) flow southeast approximately 3,490 feet to a confluence with Two Butte Creek.

Site Specific Measures to Address Water Resources:

Vecta provided BMPs to ensure the protection of groundwater at the location. Staff has reviewed those BMPs and included them on the Form 2A. A summary of Vecta's relevant minimization and mitigation measures includes:

1. Wattles or silt fence will be placed on the downgradient side of the Oil and Gas Location.
2. The temporary fuel tank used for well drilling will have integrated secondary containment.
3. The drill rig and motors will have liners underneath.

COGCC Staff Analysis of Water Resource Considerations:

Based on this information, Staff concludes the risk of contamination from this location to groundwater and surface water features will be minimized by the successful implementation of the proposed BMPs.

Wildlife Resource Considerations

Staff evaluated each Location's potential for adverse impacts to wildlife resources through desktop review and Vecta's Wildlife Protection Plan. None of the four proposed locations are in, or within one mile of, a Colorado Parks and Wildlife (CPW) mapped High Priority Habitat (HPH), and no state or federal threatened or endangered species are mapped in the area.

Staff concludes that there are no significant potential direct adverse impacts to wildlife resources. Vecta will comply with all applicable 1200-Series Rules regarding the protection of wildlife resources.

DIRECTOR'S RECOMMENDATION:

The Director has obtained and fully reviewed all required and supplemental information necessary to evaluate the OGDP's proposed operation and its potential impacts on public health, safety, welfare, the environment and wildlife resources. Through this review, the Director has determined that this OGDP complies with all applicable requirements of the Commission's Rules. The Director recommends that the Commission approve the Vecta Sammons Ranch OGDP.

FORM 2A Rev 01/21

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 Num
402640997

Date Received:
06/16/2021

Oil and Gas Location Assessment

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:
OGDP ID:
Expiration Date:

[X] New Location [ ] Refile [ ] Amend Existing Location #

If this Location assessment is a component of an Oil and Gas Development Plan (OGDP) application, enter the OGDP docket number(s).

Docket Number	OGDP ID	OGDP Name
210600096		

If this Location assessment is part of an approved Oil and Gas Development Plan, enter the OGDP ID number(s).

<No existing OGDP number provided>

CONSULTATION

[ ] This location is included in a Comprehensive Area Plan (CAP). CAP ID #
[ ] This Location or its associated new access road, utility, or Pipeline corridor meets Rule 309.e.(2).A, B, or C.
[ ] This Location is within 2,640 feet of a GUDI or Type III Well per Rule 411.b.(4).
[ ] This Location includes a Rule 309.e.(2).E variance request.
[ ] This location includes a Rule 309.f.(1).A.ii. variance request.

Operator

Operator Number: 10267
Name: VECTA OIL & GAS LTD
Address: 575 UNION BLVD #208
City: LAKEWOOD State: CO Zip: 80228

Contact Information

Name: Mathew Goolsby
Phone: (303) 618-7736
Fax: ( )
email: mdgoolsby@comcast.net

FINANCIAL ASSURANCE

[X] Plugging and Abandonment Bond Surety ID (Rule 706): 20210089
[ ] Gas Facility Surety ID (Rule 711):
[ ] Waste Management Surety ID (Rule 704):

LOCATION IDENTIFICATION

Name: Sammons Number: 315310C

Provide the location description and the latitude and longitude of a single point near the center of the Working Pad Surface as a reference for this Location.

QuarterQuarter: NESW Section: 10 Township: 31S Range: 53W Meridian: 6 Ground Elevation: 5556

Latitude: 37.355100 Longitude: -103.350590

GPS Quality Value: 6.0 Type of GPS Quality Value: PDOP Date of Measurement: 02/25/2021

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 #
☐		

RELEVANT LOCAL GOVERNMENT SITING INFORMATION

County: LAS ANIMAS Municipality: N/A

Per § 34-60-106 (1)(f)(I)(A), the following questions pertain to the "Relevant Local Government approval of the siting of the proposed oil and gas location."

This proposed Oil and Gas Location is in an area designated as one of State interest and subject to the requirements of § 24-65.1-108, C.R.S. No

Does the Relevant Local Government regulate the siting of Oil and Gas Locations, with respect to this location? Yes

A siting permit application has been submitted to the Relevant Local Government for this proposed Oil and Gas Location: No

Date Relevant Local Government permit application submitted: 01/25/2022

Current status or disposition of the Relevant Local Government permit application for this proposed Oil and Gas Location: In Process

Status/disposition date:

If Relevant Local Government permit has been approved or denied, attach final decision document(s).
Provide the contact information for the Relevant Local Government point of contact for the local permit associated with this proposed Oil and Gas Location:

Contact Name: Robert Lucero, Land Use Officer Contact Phone: 719.845.2577

Contact Email: robert.lucero@lasanimascounty.org

PROXIMATE LOCAL GOVERNMENT INFORMATION

For every Proximate Local Government (PLG) associated with this proposed Oil and Gas Location, provide the PLG's point of contact and their contact information.

< No row provided >

FEDERAL PERMIT INFORMATION

A Federal drilling permit (or related siting application) has been submitted for this proposed Oil and Gas Location: No

Date submitted:

Current status or disposition of the Federal drilling permit (or related siting application) for this proposed Oil and Gas Location:

Status/disposition Date:

If Federal agency permit has been approved or denied, attach the final decision document(s).
Provide the contact information of the Federal point of contact for the Federal permit associated with this proposed Oil and Gas Location.

Contact Name: Contact Phone:

Contact Email: Field Office:

Additional explanation of local and/or federal process:

LOCAL GOVERNMENT INFORMATION:
Vecta provided 30-day notice to Las Animas County on February 21, 2021. Vecta has been in communication with the county regarding local permitting. At the county's direction, we will provide Form 2A data after submittal to the COGCC. County permitting consists of a 14-day administrative review.

RELEVANT LOCAL GOVERNMENT OR FEDERAL PRE-APPLICATION CONSULTATION

Item 7b.

Complete this section for any pre-application consultation related to this proposed Oil and Gas Location that occurred prior to the submission of this Form 2A. If a pre-application Formal Consultation Process occurred, attach a Consultation Summary.

Did a pre-application Formal Consultation Process occur with the Relevant Local Government per Rule 301.f.(3)? No

Date of local government consultation:

Did a pre-application Formal Consultation Process occur with the Federal land manager per Rule 301.f.(3)? No

Date of federal consultation:

Was an ALA that satisfies Rule 304.b.(2).C (or substantially equivalent information per Rule 304.e) developed during a federal or local government permit application process? If yes, attach the ALA to the Form 2A. No

ALA APPLICABILITY AND CRITERIA

Complete this section for any pre-application consultation related to this proposed Oil and Gas Location that occurred prior to the submission of this Form 2A. If a pre-application Formal Consultation Process occurred, attach a Consultation Summary.

Does the proposed Oil and Gas Location meet any of the criteria listed in Rule 304.b.(2)B? No

If YES, indicate by checking the box for every Rule 304.b.(2).B criterion met by this proposed Location, and attach an ALA. See Rule 304.b.(2).B.i-x for full text of criteria.

- ☐ i. WPS < 2,000 feet from RBU/HOBU
- ☐ ii. WPS < 2,000 feet from School/Child Care Center
- ☐ iii. WPS < 1,500 feet from DOAA
- ☐ iv. WPS < 2,000 feet from jurisdictional boundary and PLG objects/requests ALA
- ☐ v. WPS within a Floodplain
- ☐ vi.aa. WPS within a surface water supply area
- ☐ vi.bb. WPS < 2,640 feet from Type III or GUDI well
- ☐ vii. WPS within/immediately upgradient of wetland/riparian corridor
- ☐ viii. WPS within HPH and CPW did not waive
- ☐ ix. Operator using Surface bond
- ☐ x. WPS < 2,000 feet from RBU/HOBU/School within a DIC

Is the proposed Oil and Gas Location within the exterior boundaries of the Southern Ute Indian Reservation, and the Tribe objects to the Location or requests an ALA? If YES, attach an ALA to the Form 2A. No

Operator requests the Director waive the ALA requirement per Rule 304.b.(2).A.i: ☐

Provide an explanation for the waiver request, and attach supporting information (if necessary).

ALTERNATIVE LOCATIONS DASHBOARD

List every alternative location reviewed and included in the ALA. Provide a latitude and longitude for the approximate center of the alternative location, all Rule 304.b.(2).B Criteria met, if a variance would be required to permit the location, and a brief comment on the key points of the alternative location.

304.b.(2).B.i-x Criteria Met:

< No row provided >

SURFACE & MINERAL OWNERSHIP

Surface Owner Info:

Name: Monte Sammons Phone: 719.643.5405

Address: 23200 County Rd 199.1 Fax:

Address: Email: triangle4@hotmail.com

City: Kim State: CO Zip: 81049

Surface Owner at this Oil and Gas Location: [X] Fee [ ] State [ ] Federal [ ] Indian

Check only one:

- [ ] The Operator/Applicant is the surface owner.
- [X] The Operator has a signed Surface Use Agreement for this Location – attach SUA.
- [ ] All operations on this Oil & Gas Location will develop the minerals beneath the Location, and the surface owner owns the minerals beneath this Location and is committed to an oil and gas lease – attach lease map or provide lease description.
- [ ] All operations on this Oil & Gas Location will develop the minerals beneath the Location, and the Operator intends to use a surface bond per Rule 703 to secure access to this Location – attach lease map or provide lease description.

Surface Owner protection Financial Assurance type: N/A Surety ID Number:

Mineral Owner beneath this Oil and Gas Location: [X] Fee [ ] State [ ] Federal [ ] Indian

Minerals beneath this Oil and Gas Location will be developed from or produced to this Oil and Gas Location: Yes

Lease description if necessary: All the S/2 Section 10, T31S, R53W, and All the W/2 Section 15, T31S, R53W, 6 PM

SITE EQUIPMENT LIST

Indicate the number and type of major equipment components planned for use on this Oil and Gas Location:

Wells	1	Oil Tanks	0	Condensate Tanks	0	Water Tanks	0	Buried Produced Water Vaults	0
Drilling Pits	0	Production Pits	0	Special Purpose Pits	0	Multi-Well Pits	0	Modular Large Volume Tank	0
Pump Jacks	0	Separators	0	Injection Pumps	0	Heater-Treaters	0	Gas Compressors	0
Gas or Diesel Motors	0	Electric Motors	0	Electric Generators	0	Fuel Tanks	0	LACT Unit	0
Dehydrator Units	0	Vapor Recovery Unit	0	VOC Combustor	0	Flare	0	Enclosed Combustion Devices	0
Meter/Sales Building	0	Pigging Station	0			Vapor Recovery Towers	0		

OTHER PERMANENT EQUIPMENT

Permanent Equipment Type	Number
Well Head	1

OTHER TEMPORARY EQUIPMENT

Temporary Equipment Type	Number
30 day diesel genset for well devel	1
Temporary rig fuel tank	1

GAS GATHERING COMMITMENT

Operator commits to connecting to a gathering system by the Commencement of Production Operations? Yes

If the answer is NO, a Gas Capture Plan consistent with the requirements of Rule 903.e MUST be attached on the Plans tab.

FLOWLINE DESCRIPTION

Per Rule 304.b.(6), provide a description of all onsite and off-location oil, gas, and/or water flowlines.

4" diameter HDPE underground flowline for inert helium gas

CULTURAL DISTANCE AND DIRECTION

Provide the distance and direction to the nearest cultural feature as measured from the edge of the Working Pad Surface.

	Distance		Direction	Rule 604.b Conditions Satisfied (check all that apply): 604.b. (1)	604.b. (2)	604.b. (3)	Details of Condition(s)	604.b. (4)
Building:	5280	Feet	SW					
Residential Building Unit (RBU):	5280	Feet	SW	☐	☐	☐		☐
High Occupancy Building Unit(HOBU)	5280	Feet	S	☐	☐	☐		☐
Designated Outside Activity Area:	5280	Feet	S					
Public Road:	1210	Feet	W					
Above Ground Utility:	1290	Feet	W					
Railroad:	5280	Feet	W					
Property Line:	1220	Feet	N					
School Facility:	5280	Feet	S					
Child Care Center:	5280	Feet	S					
Disproportionately Impacted (DI) Community:	5280	Feet	W					
RBU, HOBU, or School Facility within a DI Community.	5280	Feet	W	☐	☐	☐		☐

RULE 604.a.(2). EXCEPTION LOCATION REQUEST

☐ Operator requests an Exception Location Request from Rule 604.a.(2) [well is less than 150 feet from a property line]. Exception Location Request Letter and Waiver signed by offset Surface Owner(s) must be attached.

CULTURAL FEATURE INFORMATION REQUIRED BY RULE 304.b.(3).B.

Provide the number of each Cultural feature identified within the following distances, as measured from the Working Pad Surface:

	0-500 feet	501-1,000 feet	1,001-2,000 feet
Building Units	0	0	0
Residential Building Units	0	0	0
High Occupancy Building Units	0	0	0
School Properties	0	0	0
School Facilities	0	0	0
Designated Outside Activity Areas	0	0	0

CONSTRUCTION

Size of disturbed area during construction in acres: 1.10

Size of location after interim reclamation in acres: 0.20

Estimated post-construction ground elevation: 5556

DRILLING PROGRAM

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 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? No

DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: _____ Drilling Fluids Disposal Method: _____

Cutting Disposal: OFFSITE Cuttings Disposal Method: Commercial Disposal

Other Disposal Description:

1) Well will be drilled with air. NO DRILLING MUD WILL BE USED.

Beneficial reuse or land application plan submitted? No

Reuse Facility ID: _____ or Document Number: _____

Centralized E&P Waste Management Facility ID, if applicable: _____

CURRENT LAND USE

Current Land Use: check all that apply per Rule 304.b.(9).

Crop Land: ☐ Irrigated ☐ Non-Irrigated ☐ Conservation Reserve Program (CRP)

Non-Crop Land: ☒ Rangeland ☐ Forestry ☐ Recreation ☐ Other

Subdivided: ☐ Industrial ☐ Commercial ☐ Residential

Describe the current land use:

Rangeland

Describe the Relevant Local Government's land use or zoning designation:

Agricultural

Describe any applicable Federal land use designation:

N/A

FINAL LAND USE

Final Land Use: check all that apply per Rule 304.b.(9).

Crop Land: ☐ Irrigated ☐ Non-Irrigated ☐ Conservation Reserve Program (CRP)

Non-Crop Land: ☒ Rangeland ☐ Forestry ☐ Recreation ☐ Other

Subdivided: ☐ Industrial ☐ Commercial ☐ Residential

REFERENCE AREA INFORMATION

Item 7b.

If Final Land Use includes Non-Crop Land (as checked above), the following information is required:
Describe landowner's designated final land use(s):

Rangeland

Reference Area Latitude: 37.355640 Reference Area Latitude: -103.350590

Provide a list of plant communities and dominant vegetation found in the Reference Area.

Plant Community	Dominant vegetation
Disturbed Grassland	Sand Dropseed
Disturbed Grassland	Blue Grama
Disturbed Grassland	Red Threeawn
Disturbed Grassland	Western Wheatgrass
Disturbed Grassland	Buffalo Grass
Disturbed Grassland	Rabbitbrush

Noxious weeds present: No

SOILS

List all soil map units that occur within the maximum extent of the proposed Oil and Gas Location. Attach the National Resource Conservation Service (NRCS) report showing the "Map Unit Description" listing the typical vertical soil profile(s). This data is to be used when segregating topsoil.

The required information can be obtained from the NRCS website at https://www.nrcs.usda.gov/wps/portal/nrcs/surveylist/soils/survey/state/ or from the COGCC website GIS Online map page. Instructions are provided within the COGCC website help section.

NRCS Map Unit Name: WC - Plughat-Villegreen Complex

NRCS Map Unit Name: WeB - Wiley Silt Loam

NRCS Map Unit Name:

GROUNDWATER AND WATER WELL INFORMATION

Provide the distance and direction, as measured from the Working Pad Surface, to the nearest:

water well: 2150 Feet SW

Spring or Seep: 5280 Feet NE

Estimated depth to shallowest groundwater that can be encountered at this Oil and Gas Location: 168 Feet

Basis for estimated depth to and description of shallowest groundwater occurrence:

Well No. 246019-A was drilled in Section 11 to 35' with a static water level of 19'. Well No. 80461-A was drilled in Section 14 to 100' with a static water level of 15'. These wells are not representative. The wells were drilled approximately 130' lower in elevation than Sammons Ranch in creek bottom lands adjacent to Twin Butte Creek.

A more representative Well No. 251880 in Section 9 was drilled to 160' but was a dry hole. A representative well, Well No. 306362 in Section 13, was drilled to 200' with a static water level of 140'. Since this static water level is approximately 28' lower in elevation than Sammons Ranch, Vecta estimated the approximate depth to groundwater at Sammons Ranch as 168'.

SURFACE WATER AND WETLANDS

Provide the distance and direction to the nearest downgradient surface Waters of the State, as defined 5280 Feet E

in the 100-Series Rules, measured from the Working Pad Surface:

If less than 2,640 feet, is the Waters of the State identified above within 15 stream miles upstream of a Public Water System intake?

Provide the distance and direction to the nearest downgradient wetland, measured from the Working Pad Surface: 5280 Feet E

Provide a description of the nearest downgradient surface Waters of the State:

The nearest downgradient surface waters of the state is Two Butte Creek, an intermittent stream. An ephemeral feature upstream of Two Butte Creek is heavily disturbed from historical cattle grazing.

If the proposed Oil and Gas Location is within a Rule 411.a Surface Water Supply Area buffer zone, select the buffer zone type:

Public Water System Administrator - Contact Name Email

If the proposed Oil and Gas Location is within a Rule 411.b GUDI/Type III buffer zone, select the buffer zone type:

Public Water System Administrator - Contact Name Email

Is a U.S. Army Corps of Engineers Section 404 permit required for the proposed Oil and Gas Location, access road, or associated pipeline corridor? No

If a U.S. Army Corps of Engineers Section 404 permit is required, provide the permit status, and permit number if available:

Is the Location within a Floodplain? No Floodplain Data Sources Reviewed (check all that apply):

[X] Federal (FEMA) [X] State [X] County [ ] Local

[ ] Other

Does this proposed Oil and Gas Location lie within a Sensitive Area for water resources, as defined in the 100-Series Rules? No

CONSULTATION, WAIVERS, AND EXCEPTIONS

When Rule 309.e.(2) Consultation must occur, check all that apply:

- [ ] This location is included in a Wildlife Mitigation Plan
- [ ] This Oil and Gas Location or associated new access road, utility, or pipeline corridor falls within federally designated critical habitat or an area with a known occurrence for a federal or Colorado threatened or endangered species. Provide description in Comments section of Submit tab.
- [ ] This Oil and Gas Location or associated new access road, utility, or pipeline corridor falls within an existing conservation easement established wholly or partly for wildlife habitat. Provide description in Comments section of Submit tab.

When Rule 309.e.(3) Consultation is not required, check all that apply:

- [ ] This Oil and Gas Location has been included in a previously approved, applicable Wildlife Protection Plan.
- [ ] This Oil and Gas Location has been included in a previously approved, applicable Wildlife Mitigation Plan.
- [ ] This Oil and Gas Location has been included in a previously approved, applicable conservation plan.

Pre-application Consultation:

- [ ] A pre-application consultation with CPW, regarding this Oil and Gas Location, occurred on:

CPW Waivers and Exceptions (check all that apply and attach all CPW waivers to this Form 2A):

- [ ] The applicant has obtained a Rule 304.b.(2).B.viii CPW waiver for the requirement to complete an ALA.
- [ ] The applicant has obtained a Rule 309.e.(2).G CPW waiver and consultation is not required.
- [ ]

The applicant has obtained a Rule 309.e.(5).D.i CPW waiver and is requesting an exception from Rule 1202.c.(1).R.

☐ The applicant has obtained a Rule 309.e.(5).D.ii CPW waiver and is requesting an exception from Rule 1202.c.(1).S.

☐ The applicant has obtained a Rule 309.e.(5).D.iii CPW waiver of Rule 1202.c.(1).T.

☐ The applicant has obtained a Rule 309.e.(5).D.iv CPW waiver and is requesting an exception from Rule 1202.c.(1) in accordance with an approved CAP.

☐ The applicant has obtained a Rule 1202.a CPW waiver.

☐ The applicant has obtained a Rule 1202.b CPW waiver.

☐ In accordance with Rule 1203.a.(3), the applicant requests an exception from compensatory mitigation

Rule(s): _____

HIGH PRIORITY HABITAT AND COMPENSATORY MITIGATION

This Oil and Gas Location, associated access roads, utility, or Pipeline corridor falls wholly or partially within the following High Priority Habitats (Note: dropdown options are abbreviated - see Rule 1202 for full rule text):

< No row provided >

The following questions are for Oil and Gas Locations that cause the density to exceed one Oil and Gas Location per square mile in Rule 1202.d High Priority Habitat:

Direct Impacts:

Is Compensatory Mitigation required per Rule 1203.a for this Oil and Gas Location? No

Is a Compensatory Mitigation Plan proposed to address direct impacts for this Oil and Gas Location? No

Have all Compensatory Mitigation Plans been approved for this Location? No

If not, what is the current status of each Plan?

No HPHs apply to this location, access roads, or flowline corridor.

Is a Compensatory Mitigation Fee proposed for this Oil and Gas Location? No

Direct impact habitat mitigation fee amount: $ _____

Indirect Impacts:

Is Compensatory Mitigation required per Rule 1203.d for this Oil and Gas Location? No

Is a Compensatory Mitigation Plan proposed to address indirect impacts for this Oil and Gas Location? No

Have all Compensatory Mitigation Plans been approved for this Location? No

If not, what is the current status of each Plan?

No HPHs apply to this location.

Is a Compensatory Mitigation Fee proposed for this Oil and Gas Location? No

Indirect impact habitat mitigation fee amount: $ _____

Operator Proposed Wildlife BMPs

No BMP

CPW Proposed Wildlife BMPs

No BMP

AIR QUALITY MONITORING PROGRAM

Will the Operator install and administer an air quality monitoring program at this Location? No

Operator Proposed BMPs

No BMP

CDPHE Proposed COAs OR BMPs

No BMP

PLANS

Total Plans Uploaded: 13

- [ ] (1) Emergency Spill Response Program consistent with the requirements of Rules 411.a.(4).B, 411.b.(5).B, & 602.j
- [ ] (2) Noise Mitigation Plan consistent with the requirements of Rule 423.a
- [ ] (3) Light Mitigation Plan consistent with the requirements of Rule 424.a
- [ ] (4) Odor Mitigation Plan consistent with the requirements of Rule 426.a
- [X] (5) Dust Mitigation Plan consistent with the requirements of Rule 427.a
- [X] (6) Transportation Plan
- [X] (7) Operations Safety Management Program consistent with the requirements of Rule 602.d
- [X] (8) Emergency Response Plan consistent with the requirements of Rule 602.j
- [ ] (9) Flood Shut-In Plan consistent with the requirements of Rule 421.b.(1)
- [ ] (10) Hydrogen Sulfide Drilling Operations Plan consistent with the requirements of Rule 612.d
- [X] (11) Waste Management Plan consistent with the requirements of Rule 905.a.(4)
- [X] (12) Gas Capture Plan consistent with the requirements of Rule 903.e
- [X] (13) Fluid Leak Detection Plan
- [X] (14) Topsoil Protection Plan consistent with the requirements of Rule 1002.c
- [X] (15) Stormwater Management Plan consistent with the requirements of Rule 1002.f
- [X] (16) Interim Reclamation Plan consistent with the requirements of Rule 1003
- [X] (17) Wildlife Plan consistent with the requirements of Rule 1201
- [X] (18) Water Plan
- [X] (19) Cumulative Impacts Plan
- [ ] (20) Community Outreach Plan
- [ ] (21) Geologic Hazard Plan

VARIANCE REQUESTS

Check all that apply:

- [ ] This proposed Oil and Gas Location requires the approval of a Rule 502.a variance from COGCC Rule or Commission

Order number: NO

Item 7b.

ALL exceptions and variances require attached Request Letter(s). Refer to applicable rule for additional required attachments (e.g. waivers, certifications, SUAs).

RULE 304.d LESSER IMPACT AREA EXEMPTION REQUESTS

Check the boxes below for all Exemptions being requested. Lesser Impact Area Exemption Request must be attached, and will include all requested exemptions.

- ☐ 304.b.(1). Local Government Siting Information
- ☐ 304.b.(2). Alternative Location Analysis
- ☐ 304.b.(3). Cultural Distances
- ☐ 304.b.(4). Location Pictures
- ☐ 304.b.(5). Site Equipment List
- ☐ 304.b.(6). Flowline Descriptions
- ☐ 304.b.(7). Drawings
- ☐ 304.b.(8). Geographic Information System (GIS) Data
- ☐ 304.b.(9). Land Use Description
- ☐ 304.b.(10). NRCS Map Unit Description
- ☐ 304.b.(11). Best Management Practices
- ☐ 304.b.(12). Surface Owner Information
- ☐ 304.b.(13). Proximate Local Government
- ☐ 304.b.(14). Wetlands
- ☐ 304.b.(15). Schools and Child Care Centers
- ☐ 304.c.(1). Emergency Spill Response Program
- ☒ 304.c.(2). Noise Mitigation Plan
- ☒ 304.c.(3). Light Mitigation Plan
- ☐ 304.c.(4). Odor Mitigation Plan
- ☐ 304.c.(5). Dust Mitigation Plan
- ☐ 304.c.(6). Transportation Plan
- ☐ 304.c.(7). Operations Safety Management Program
- ☐ 304.c.(8). Emergency Response Plan
- ☐ 304.c.(9). Flood Shut-In Plan
- ☐ 304.c.(10). Hydrogen Sulfide Drilling Operations Plan
- ☐ 304.c.(11). Waste Management Plan
- ☐ 304.c.(12). Gas Capture Plan
- ☐ 304.c.(13). Fluid Leak Detection Plan
- ☐ 304.c.(14). Topsoil Protection Plan
- ☐ 304.c.(15). Stormwater Management Plan
- ☐ 304.c.(16). Interim Reclamation Plan
- ☐ 304.c.(17). Wildlife Plan
- ☐ 304.c.(18). Water Plan
- ☐ 304.c.(19). Cumulative Impacts Plan
- ☐ 304.c.(20). Community Outreach Plan
- ☐ 304.c.(21). Geologic Hazard Plan

OPERATOR COMMENTS AND SUBMITTAL

Comments	Vecta O&G, Ltd. proposes to develop up to 4 exploratory (wildcat) conventional vertical helium gas wells, flowlines, and access on existing disturbed rangeland in rural Las Animas County. The development avoids impacts to public health, safety, welfare, the environment, and wildlife by exhibiting the following: (1) Inert helium gas extraction with no known oil or natural gas entrained with the helium resource. The finding is based on historical well log and scout information for this location. (2) No hydrocarbons or hazardous air pollutants associated with the helium gas wells. (3) The nearest residence is approximately 0.75 miles away from the nearest Sammons Ranch well (315315C). (4) Each well pad contains a single well with 160-acre pad spacing. (5) Well pad footprints are limited to approximately 1.1 acres during 7-10 days of drilling and will be reclaimed to approximately 0.2 acres during interim reclamation. (6) Conventional vertical well drilling requires no fracking or proppant. (7) The wells generate no produced water. There is no on-site storage of produced water, oil, natural gas, or condensate. (8) The nearest waterbody is > 0.5 mi away. (9) There is no high priority habitat or mapped species of concern within 1 mile. Wells have been planned to be on center in a quarter section. All of the drawings submitted with the application indicate that the well is on center. However, the well plots in the following quarter-quarter section: NE ¼ SW ¼, Section 10.

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.
Signed: _____ Date: 06/16/2021 Email: mdgoolsby@comcast.net

Print Name: Mathew Goolsby Title: Vice President-Operations

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: _____

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.

Condition of Approval

COA Type	Description
Planning	Prior to the commencement of construction, Operator will submit, by Form 4 Sundry, the Relevant Local Government permit approval.
Planning	Operator will submit a Form 4 Sundry to include Reference Area Pictures consisting of 5 color photographs of the Reference Area, including 4 taken from each cardinal direction, and 1 taken from above the Reference Area. Each photograph will be identified by date taken, Well or Oil and Gas Location name, and direction of view. The photographs will be taken during the peak growing season and will clearly depict vegetation cover and diversity. These photographs may be submitted at any time up to twelve (12) months after the approval of this Form 2A.
2 COAs	

Best Management Practices

No	BMP/COA Type	Description
1	Traffic control	• Drivers will observe posted speed limits to protect public and driver safety. • Drivers will observe posted speed limits on unpaved roads to avoid or minimize fugitive dust. • Drivers will be instructed to maintain vehicle speeds of 15 mph on unpaved roads. • Drivers will cover and secure loads to prevent debris from entering roadways. • Vehicles will be maintained in good working condition to avoid excess emissions and safety concerns.

2	Storm Water/Erosion Control	Structural • Wattles or silt fence will be placed on the downgradient side of the Oil and Gas Location. • Stormwater diversions will be created when there is evidence of ponding or erosion runnels. • The temporary fuel tank used for well drilling will have integrated secondary containment. The drill rig and motors will have liners underneath. Non-Structural • Waste materials will be bagged or containerized to avoid contact with precipitation. • The well pad will be inspected for excessive erosion. Where needed, areas will be recompacted. • Vehicles and equipment will be monitored for leaks during well development. • Ingress, egress, and parking will occur in designated areas. • Spill response materials and absorbents will be containerized and available on site. • The location will be inaccessible to the public to prevent unauthorized access and excessive wear on access roads. • Stabilization and revegetation will be performed as part of interim reclamation. • During well development, stormwater monitoring will be performed daily. Areas that require correction for stormwater control will be addressed or repaired promptly. • During production, an operator will be onsite an estimated 2-3 times per week. Site inspection will identify areas that require maintenance or repair to control stormwater and correct excessive erosion on the well pad or access roads. Stormwater inspection will be performed at least every 7 days during well production and every 30 days after interim reclamation.
3	Material Handling and Spill Prevention	• Site personnel will be trained in detecting and addressing spills that may occur on site. • Spills or releases will be investigated, controlled, or contained, in accordance with Rule 912.a. • If a spill or release meets criteria in Rule 912.b, it will be reported as specified in the rule. • A catastrophic loss of freshwater will be bermed using the skid steer available on site. • Equipment and transfer lines will be monitored daily during well drilling and completion for signs of drips, leaks, or spills, which will be promptly corrected. • Flowlines will be installed consistent with Rule 1102. In accordance with Rule 1104, before a flowline is put into service, it will be pressure tested to maximum pressure for AVO leak detection. • The operator will maintain shutoff valves on helium gas flowlines in accordance with Rule 1103.a. • Per Rule 1104.c, the operator will conduct a monthly AVO survey to detect failures or signs of leaks from the wellhead and flowline. • The operator will conduct annual flowline integrity testing in accordance with Rule 1104.f. • Site personnel will be instructed on procedures for documenting and recordkeeping inspections and testing.

4	Dust control	Speed Restrictions • Speeds will be limited to 15 mph on the Sammons Ranch access roads. Regular Road Maintenance • Regular inspection will occur for the Sammons Ranch access roads for evidence of inadequate drainage and formation of potholes. • Grading, blading, and filling potholes will be performed to maintain the road surface and discourage vehicles from widening the roadway or contributing to erosion. Restricting Construction Activity During High Wind Days • The 1-day well pad construction will be scheduled to avoid high-wind warnings issued for eastern Las Animas County. Phase Truck Trips Construction (Total)2 Drilling (Total) 12 Completion (Total) 12 Production (Per Month) 30 Dust Suppression • Blowing soil and failure of the soil to stabilize and form a crust on the location during construction and after interim reclamation will indicate that a dust suppression BMP is needed. In that event, a water truck will be used to wet the pad surface to form a crust. Interim Reclamation • Area not needed for production will be reclaimed in accordance with Rule 1003. Dust Tracking • Aggregate will be placed at the apron where the Sammons Ranch access road ties into Highway 109. The aggregate will serve as a wheel shaker to reduce dirt from being tracked onto the paved road. Topsoil Stockpile • The stockpile will be mounded with a slope of approximately 1:3 to prevent loose soils and promote vegetative growth. • Vehicle tracking perpendicular to the slope angle will be used to improve short term stabilization. • Vegetation will be allowed to establish, with crimped straw mulching, in order to stabilize the stockpile, outcompete weeds, and promote soil microbial activity.
5	Interim Reclamation	Topsoil Protection Short-Term • Vegetation removal and soil disturbance on the Oil and Gas Location will be minimized to the area sufficient to site and level a water well-sized drill rig and equipment for shallow vertical well drilling. • The operator will salvage and segregate topsoil based on soil characteristics of texture, color, structure, consistency, and organic matter. • Salvaged topsoil will be mounded on the Oil and Gas Location with a slope of approximately 1:3. • Vehicle tracking perpendicular to the slope angle will be used to improve short term stabilization. • Topsoil will be protected from contamination by stockpiling it in a location free from drilling, fuel storage, and parking. • Soil removed during flowline trenching will be segregated based on changes in physical characteristics. The soil layers will be windrowed adjacent to the trench. • Soils from the flowline trench will be replaced promptly in the same order in which they were removed. Long-Term • The topsoil stockpile will be protected from compaction by designating it with surveyor staking and flagging as topsoil for reclamation. • The topsoil stockpile will be protected from wind degradation by mounding at an approximately 1:3 steepness to prevent loose soils while promoting continued microbial activity. • The topsoil stockpile will be protected from erosion by ensuring that stormwater controls and diversions are installed, as needed, to divert stormwater away from the stockpile. • Vegetation will be allowed to establish, with crimped straw mulching, in order to stabilize the stockpile, outcompete weeds, and promote soil microbial activity. • The duration of stockpiled topsoil is not anticipated to exceed one growing season because the Oil and Gas Location will support a single vertical helium gas well. Reclamation will occur during the first growing season after the well is drilled.

6	Interim Reclamation	• Topsoil - Topsoil will be stockpiled on the location and will be restored on the reclaimed area. Salvaged topsoil will be replaced and contoured to maximize erosion control and soil stability. • Erosion control – Erosion controls will be installed and maintained to prevent stormwater runoff and erosion. Erosion controls are shown on Form 2A, Construction Layout Drawing and Facility Layout Drawing. • Weed control – The location will be monitored for the presence of invasive weeds. Invasive weeds will be treated to prevent them from establishing. • Seed mix – The operator will use the certified weed-free seed mix identified by NRCS and approved by the landowner. • Seeding method and Timing – Drill seeding or other method appropriate to promote vegetative success will be conducted during the first favorable growing season after well drilling is complete. • Fencing – Fencing will be installed around the wellhead. • Recontouring - Disturbed areas will be recontoured to blend with the pre-disturbance surface and restore natural drainage patterns. • Monitoring – The location will be monitored for vegetative success. It will be reseeded where needed to establish 80 percent of pre-disturbance cover.

Total: 6 comment(s)

Attachment List

Att Doc Num	Name
1347857	LOCATION PICTURES
1347858	NRCS MAP UNIT DESC
1347871	SURFACE USE AGREEMENT
2369383	CORRESPONDENCE
402640997	FORM 2A SUBMITTED
402690346	SURFACE AGRMT/SURETY
402690347	MINERAL LEASE MAP
402690350	CORRESPONDENCE
402709800	LOCATION DRAWING
402709805	ACCESS ROAD MAP
402709806	CULTURAL FEATURES MAP
402709809	REFERENCE AREA MAP
402802340	HYDROLOGY MAP
402802342	RELATED LOCATION AND FLOWLINE MAP
402802344	PRELIMINARY PROCESS FLOW DIAGRAMS
402802345	LAYOUT DRAWING
402802346	LESSER IMPACT AREA EXEMPTION REQUEST
402822059	GEOLOGIC HAZARD MAP
402824194	WILDLIFE HABITAT DRAWING
402833962	LOCATION AND WORKING PAD GIS SHP
402833965	OTHER

Total Attach: 21 Files

General Comments

User Group	Comment	Comment Date
OGLA	The Director has determined that the OGDP application that this Form is a component of meets all requirements of Rule 306.a. The Director's Recommendation has been attached to the Form 2A.	01/28/2022
OGLA	Updated requested information from 1/7 and 1/20. Received and attached updated SUA information. Received verbal concurrence to change depth to water description and add temporary fuel tank to equipment.	01/28/2022
OGLA	BMPs were transferred to the Form 2A from the plans.	01/20/2022
OGLA	Additional Information Requested on: 8. Plugging and Abandonment Bond 9. Relevant Local Government permit application. 10. Surface Use Agreement 11. Depth to water. 12. CDPHE BMPs 13. Verification of distances to property lines. 14. Verification of distances to surface waters.	01/20/2022
OGLA	Additional information requested from operator for: 1. Dust Mitigation Plan tracking BMP 2. Water Plan water source 3. Water Plan water storage 4. Cumulative Impacts Plan. Foraging animal and migratory bird pathway impacts. 5. Cumulative Impacts Plan. Soil impacts. 6. Location Pictures. Include aerial image with field of view of photos. 7. NRCS Map Unit Description. Remove excess soil types.	01/07/2022
OGLA	The Director has determined this OGDP application is complete. Form pushed to IN PROCESS.	10/28/2021
OGLA	Lesser Impact Area exemption from Rule 304.c.(2) Noise Mitigation Plan. The Director granted the exemption request on October 21 based on the distances to RBUs, the short duration of construction and drilling activities and the plans for daylight only construction. The operator must comply with the noise levels specified in Rule 423-1.	10/27/2021
OGLA	Lesser Impact Area exemption from Rule 304.c.(3) Light Mitigation Plan. The Director granted the exemption request on October 21 based on the distances to RBUs, the short duration of construction and drilling activities, and the plans for daylight only construction.	10/27/2021
OGLA	This Form has been returned to Draft for the following: 1. Revision to Topsoil Protection Plan 2. Revision to Cumulative Impacts Plan 3. GIS shape file upload.	10/01/2021
OGLA	This Form has been returned to Draft for the following: 1. Revisions to multiple attachments. 2. Revisions to multiple plans. A spreadsheet with the issues listed above was created and sent to the operator.	07/16/2021

Total: 10 comment(s)

Public Comments

No public comments were received on this application during the comment period.

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

Item 7b.

Document Nur
402638784

Date Received:`
03/04/2022

APPLICATION FOR PERMIT TO:

[X] **Drill** [ ] Deepen [ ] Re-enter [ ] Recomplete and Operate

Amend [ ]
Refile [ ]
Sidetrack [ ]

TYPE OF WELL OIL [ ] GAS [X] COALBED [ ] OTHER: Inert Gas

ZONE TYPE SINGLE ZONE [X] MULTIPLE ZONES [ ] COMMINGLE ZONES [ ]

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 (FNL/FSL) 1329 Feet FWL (FEL/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) [X] 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: FNL/FSL FEL/FWL

Measured Depth of TPZ: True Vertical Depth of TPZ:

Base of Productive Zone (BPZ)

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

Measured Depth of BPZ: True Vertical Depth of BPZ:

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? [X] Yes [ ] No

[X] 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: [X] Fee [ ] State [ ] Federal [ ] Indian

Mineral Owner beneath this Well's Oil and Gas Location: [X] 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):

- [X] 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: [X] 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 H_2S 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

Casing Type	Size of Hole	Size of Casing	Grade	Wt/Ft	Csg/Liner Top	Setting Depth	Sacks Cmt	Cmt Btm	Cmt Top
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

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	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

No	BMP/COA Type	Description
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

Att Doc Num	Name
402638784	FORM 2 SUBMITTED
402948841	WELL LOCATION PLAT
402948842	WELLBORE DIAGRAM

Total Attach: 3 Files

General Comments

User Group	Comment	Comment Date
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 OGDP #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)

FORM 2A Rev 01/21

State of Colorado
Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203
Phone: (303) 894-2100 Fax: (303) 894-2109

Oil and Gas Location Assessment

Document Num: 402695913

Date Received: 06/16/2021

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: **481716**

OGDP ID: **480998**

Expiration Date: **02/23/2025**

[X] New Location [ ] Refile [ ] Amend Existing Location # _____

If this Location assessment is a component of an Oil and Gas Development Plan (OGDP) application, enter the OGDP docket number(s).

Docket Number	OGDP ID	OGDP Name
210600096		

If this Location assessment is part of an approved Oil and Gas Development Plan, enter the OGDP ID number(s).

OGDP ID Number	OGDP Name
480998	Sammons Ranch

CONSULTATION

[ ] This location is included in a Comprehensive Area Plan (CAP). CAP ID # _____

[ ] This Location or its associated new access road, utility, or Pipeline corridor meets Rule 309.e.(2).A, B, or C.

[ ] This Location is within 2,640 feet of a GUDI or Type III Well per Rule 411.b.(4).

[ ] This Location includes a Rule 309.e.(2).E variance request.

[ ] This location includes a Rule 309.f.(1).A.ii. variance request.

Operator

Operator Number: 10267

Name: VECTA OIL & GAS LTD

Address: 575 UNION BLVD #208

City: LAKEWOOD State: CO Zip: 80228

Contact Information

Name: Mathew Goolsby

Phone: (303) 618-7736

Fax: ( )

email: mdgoolsby@comcast.net

FINANCIAL ASSURANCE

[X] Plugging and Abandonment Bond Surety ID (Rule 706): 20210089

[ ] Gas Facility Surety ID (Rule 711): _____

[ ] Waste Management Surety ID (Rule 704): _____

LOCATION IDENTIFICATION

Name: Sammons Number: 315315A

Provide the location description and the latitude and longitude of a single point near the center of the Working Pad Surface as a reference for this Location.

QuarterQuarter: NWNW Section: 15 Township: 31S Range: 53W Meridian: 6 Ground Elevation: 5566

Latitude: 37.347800 Longitude: -103.350630

GPS Quality Value: 6.0 Type of GPS Quality Value: PDOP Date of Measurement: 02/25/2021

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 #
☐		

RELEVANT LOCAL GOVERNMENT SITING INFORMATION

County: LAS ANIMAS Municipality: N/A

Per § 34-60-106 (1)(f)(I)(A), the following questions pertain to the "Relevant Local Government approval of the siting of the proposed oil and gas location."

This proposed Oil and Gas Location is in an area designated as one of State interest and subject to the requirements of § 24-65.1-108, C.R.S. No

Does the Relevant Local Government regulate the siting of Oil and Gas Locations, with respect to this location? Yes

A siting permit application has been submitted to the Relevant Local Government for this proposed Oil and Gas Location: No

Date Relevant Local Government permit application submitted: 01/25/2022

Current status or disposition of the Relevant Local Government permit application for this proposed Oil and Gas Location: In Process

Status/disposition date:

If Relevant Local Government permit has been approved or denied, attach final decision document(s).
Provide the contact information for the Relevant Local Government point of contact for the local permit associated with this proposed Oil and Gas Location:

Contact Name: Robert Lucero, Land Use Officer Contact Phone: 719.845.2577

Contact Email: robert.lucero@lasanimascounty.org

PROXIMATE LOCAL GOVERNMENT INFORMATION

For every Proximate Local Government (PLG) associated with this proposed Oil and Gas Location, provide the PLG's point of contact and their contact information.

< No row provided >

FEDERAL PERMIT INFORMATION

A Federal drilling permit (or related siting application) has been submitted for this proposed Oil and Gas Location: No

Date submitted:

Current status or disposition of the Federal drilling permit (or related siting application) for this proposed Oil and Gas Location:

Status/disposition Date:

If Federal agency permit has been approved or denied, attach the final decision document(s).
Provide the contact information of the Federal point of contact for the Federal permit associated with this proposed Oil and Gas Location.

Contact Name: Contact Phone:

Contact Email: Field Office:

Additional explanation of local and/or federal process:

LOCAL GOVERNMENT INFORMATION:
Vecta Oil and Gas, Ltd (Vecta) provided 30-day notice to Las Animas County on February 21, 2021. Vecta has been in communication with the county regarding local permitting. At the county's direction, we will provide Form 2A data after submittal to the COGCC. County permitting consists of a 14-day administrative review.

RELEVANT LOCAL GOVERNMENT OR FEDERAL PRE-APPLICATION CONSULTATION

Item 7b.

Complete this section for any pre-application consultation related to this proposed Oil and Gas Location that occurred prior to the submission of this Form 2A. If a pre-application Formal Consultation Process occurred, attach a Consultation Summary.

Did a pre-application Formal Consultation Process occur with the Relevant Local Government per Rule 301.f.(3)? No

Date of local government consultation:

Did a pre-application Formal Consultation Process occur with the Federal land manager per Rule 301.f.(3)? No

Date of federal consultation:

Was an ALA that satisfies Rule 304.b.(2).C (or substantially equivalent information per Rule 304.e) developed during a federal or local government permit application process? If yes, attach the ALA to the Form 2A. No

ALA APPLICABILITY AND CRITERIA

Complete this section for any pre-application consultation related to this proposed Oil and Gas Location that occurred prior to the submission of this Form 2A. If a pre-application Formal Consultation Process occurred, attach a Consultation Summary.

Does the proposed Oil and Gas Location meet any of the criteria listed in Rule 304.b.(2)B? No

If YES, indicate by checking the box for every Rule 304.b.(2).B criterion met by this proposed Location, and attach an ALA. See Rule 304.b.(2).B.i-x for full text of criteria.

- ☐ i. WPS < 2,000 feet from RBU/HOBU
- ☐ ii. WPS < 2,000 feet from School/Child Care Center
- ☐ iii. WPS < 1,500 feet from DOAA
- ☐ iv. WPS < 2,000 feet from jurisdictional boundary and PLG objects/requests ALA
- ☐ v. WPS within a Floodplain
- ☐ vi.aa. WPS within a surface water supply area
- ☐ vi.bb. WPS < 2,640 feet from Type III or GUDI well
- ☐ vii. WPS within/immediately upgradient of wetland/riparian corridor
- ☐ viii. WPS within HPH and CPW did not waive
- ☐ ix. Operator using Surface bond
- ☐ x. WPS < 2,000 feet from RBU/HOBU/School within a DIC

Is the proposed Oil and Gas Location within the exterior boundaries of the Southern Ute Indian Reservation, and the Tribe objects to the Location or requests an ALA? If YES, attach an ALA to the Form 2A. No

Operator requests the Director waive the ALA requirement per Rule 304.b.(2).A.i: ☐

Provide an explanation for the waiver request, and attach supporting information (if necessary).

ALTERNATIVE LOCATIONS DASHBOARD

List every alternative location reviewed and included in the ALA. Provide a latitude and longitude for the approximate center of the alternative location, all Rule 304.b.(2).B Criteria met, if a variance would be required to permit the location, and a brief comment on the key points of the alternative location.

304.b.(2).B.i-x Criteria Met:

< No row provided >

SURFACE & MINERAL OWNERSHIP

Surface Owner Info:

Name: Monte Sammons Phone: 719.643.5405

Address: 23200 County Rd 199.1 Fax:

Address: Email: triangle4@hotmail.com

City: Kim State: CO Zip: 81049

Surface Owner at this Oil and Gas Location: [X] Fee [ ] State [ ] Federal [ ] Indian

Check only one:

- [ ] The Operator/Applicant is the surface owner.
- [X] The Operator has a signed Surface Use Agreement for this Location – attach SUA.
- [ ] All operations on this Oil & Gas Location will develop the minerals beneath the Location, and the surface owner owns the minerals beneath this Location and is committed to an oil and gas lease – attach lease map or provide lease description.
- [ ] All operations on this Oil & Gas Location will develop the minerals beneath the Location, and the Operator intends to use a surface bond per Rule 703 to secure access to this Location – attach lease map or provide lease description.

Surface Owner protection Financial Assurance type: N/A Surety ID Number:

Mineral Owner beneath this Oil and Gas Location: [X] Fee [ ] State [ ] Federal [ ] Indian

Minerals beneath this Oil and Gas Location will be developed from or produced to this Oil and Gas Location: Yes

Lease description if necessary: All the S/2 Section 10, T31S, R53W, and all the W/2 Section 15, T31S, R53W, 6 PM.

SITE EQUIPMENT LIST

Indicate the number and type of major equipment components planned for use on this Oil and Gas Location:

Wells	1	Oil Tanks	0	Condensate Tanks	0	Water Tanks	0	Buried Produced Water Vaults	0
Drilling Pits	0	Production Pits	0	Special Purpose Pits	0	Multi-Well Pits	0	Modular Large Volume Tank	0
Pump Jacks	0	Separators	0	Injection Pumps	0	Heater-Treaters	0	Gas Compressors	0
Gas or Diesel Motors	0	Electric Motors	0	Electric Generators	0	Fuel Tanks	0	LACT Unit	0
Dehydrator Units	0	Vapor Recovery Unit	0	VOC Combustor	0	Flare	0	Enclosed Combustion Devices	0
Meter/Sales Building	0	Pigging Station	0			Vapor Recovery Towers	0		

OTHER PERMANENT EQUIPMENT

Permanent Equipment Type	Number
Well Head	1

OTHER TEMPORARY EQUIPMENT

Temporary Equipment Type	Number
Temporary Rig Fuel Tank	1
30 day diesel genset for well devel	1

GAS GATHERING COMMITMENT

Operator commits to connecting to a gathering system by the Commencement of Production Operations? Yes

If the answer is NO, a Gas Capture Plan consistent with the requirements of Rule 903.e MUST be attached on the Plans tab.

FLOWLINE DESCRIPTION

Per Rule 304.b.(6), provide a description of all onsite and off-location oil, gas, and/or water flowlines.

4" diameter HDPE underground flowline for inert helium gas

CULTURAL DISTANCE AND DIRECTION

Provide the distance and direction to the nearest cultural feature as measured from the edge of the Working Pad Surface.

	Distance		Direction	Rule 604.b Conditions Satisfied (check all that apply): 604.b. (1)	604.b. (2)	604.b. (3)	Details of Condition(s)	604.b. (4)
Building:	5280	Feet	SW					
Residential Building Unit (RBU):	5280	Feet	SW	☐	☐	☐		☐
High Occupancy Building Unit(HOBU)	5280	Feet	S	☐	☐	☐		☐
Designated Outside Activity Area:	5280	Feet	S					
Public Road:	1210	Feet	W					
Above Ground Utility:	1290	Feet	W					
Railroad:	5280	Feet	W					
Property Line:	2470	Feet	E					
School Facility:	5280	Feet	S					
Child Care Center:	5280	Feet	S					
Disproportionately Impacted (DI) Community:	5280	Feet	W					
RBU, HOBU, or School Facility within a DI Community.	5280	Feet	W	☐	☐	☐		☐

RULE 604.a.(2). EXCEPTION LOCATION REQUEST

☐ Operator requests an Exception Location Request from Rule 604.a.(2) [well is less than 150 feet from a property line]. Exception Location Request Letter and Waiver signed by offset Surface Owner(s) must be attached.

CULTURAL FEATURE INFORMATION REQUIRED BY RULE 304.b.(3).B.

Provide the number of each Cultural feature identified within the following distances, as measured from the Working Pad Surface:

	0-500 feet	501-1,000 feet	1,001-2,000 feet
Building Units	0	0	0
Residential Building Units	0	0	0
High Occupancy Building Units	0	0	0
School Properties	0	0	0
School Facilities	0	0	0
Designated Outside Activity Areas	0	0	0

CONSTRUCTION

Size of disturbed area during construction in acres: 1.10

Size of location after interim reclamation in acres: 0.20

Estimated post-construction ground elevation: 5566

DRILLING PROGRAM

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 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? No

DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: _____ Drilling Fluids Disposal Method: _____

Cutting Disposal: OFFSITE Cuttings Disposal Method: Commercial Disposal

Other Disposal Description:

1) Well will be drilled with air. NO DRILLING MUD WILL BE USED.

Beneficial reuse or land application plan submitted? No

Reuse Facility ID: _____ or Document Number: _____

Centralized E&P Waste Management Facility ID, if applicable: _____

CURRENT LAND USE

Current Land Use: check all that apply per Rule 304.b.(9).

Crop Land: ☐ Irrigated ☐ Non-Irrigated ☐ Conservation Reserve Program (CRP)

Non-Crop Land: ☒ Rangeland ☐ Forestry ☐ Recreation ☐ Other

Subdivided: ☐ Industrial ☐ Commercial ☐ Residential

Describe the current land use:

Rangeland

Describe the Relevant Local Government's land use or zoning designation:

Agricultural

Describe any applicable Federal land use designation:

N/A

FINAL LAND USE

Final Land Use: check all that apply per Rule 304.b.(9).

Crop Land: ☐ Irrigated ☐ Non-Irrigated ☐ Conservation Reserve Program (CRP)

Non-Crop Land: ☒ Rangeland ☐ Forestry ☐ Recreation ☐ Other

Subdivided: ☐ Industrial ☐ Commercial ☐ Residential

REFERENCE AREA INFORMATION

Item 7b.

If Final Land Use includes Non-Crop Land (as checked above), the following information is required:
Describe landowner's designated final land use(s):

Rangeland

Reference Area Latitude: 37.347800 Reference Area Latitude: -103.349950

Provide a list of plant communities and dominant vegetation found in the Reference Area.

Plant Community	Dominant vegetation
Disturbed Grassland	Western Wheatgrass
Disturbed Grassland	Red Threeawn
Disturbed Grassland	Blue Grama
Disturbed Grassland	Buffalo Grass

Noxious weeds present: No

SOILS

List all soil map units that occur within the maximum extent of the proposed Oil and Gas Location. Attach the National Resource Conservation Service (NRCS) report showing the "Map Unit Description" listing the typical vertical soil profile(s). This data is to be used when segregating topsoil.

The required information can be obtained from the NRCS website at https://www.nrcs.usda.gov/wps/portal/nrcs/surveylist/soils/survey/state/ or from the COGCC website GIS Online map page. Instructions are provided within the COGCC website help section.

NRCS Map Unit Name: WC - Plughat-Villegreen Complex

NRCS Map Unit Name: BaA - Baca Silt Loam

NRCS Map Unit Name:

GROUNDWATER AND WATER WELL INFORMATION

Provide the distance and direction, as measured from the Working Pad Surface, to the nearest:

water well: 2800 Feet NW

Spring or Seep: 5280 Feet NE

Estimated depth to shallowest groundwater that can be encountered at this Oil and Gas Location: 168 Feet

Basis for estimated depth to and description of shallowest groundwater occurrence:

Well No. 246019-A was drilled in Section 11 to 35' with a static water level of 19'. Well No. 80461-A was drilled in Section 14 to 100' with a static water level of 15'. These wells are not representative. The wells were drilled approximately 130' lower in elevation than Sammons Ranch in creek bottom lands adjacent to Twin Butte Creek.

A more representative Well No. 251880 in Section 9 was drilled to 160' but was a dry hole. A representative well, Well No. 306362 in Section 13, was drilled to 200' with a static water level of 140'. Since this static water level is approximately 28' lower in elevation than Sammons Ranch, Vecta estimated the approximate depth to groundwater at Sammons Ranch as 168'.

SURFACE WATER AND WETLANDS

Provide the distance and direction to the nearest downgradient surface Waters of the State, as defined 5280 Feet SE

in the 100-Series Rules, measured from the Working Pad Surface:

If less than 2,640 feet, is the Waters of the State identified above within 15 stream miles upstream of a Public Water System intake?

Provide the distance and direction to the nearest downgradient wetland, measured from the Working

Pad Surface: 5280 Feet SE

Provide a description of the nearest downgradient surface Waters of the State:

The nearest downgradient surface waters of the state is Two Butte Creek, an intermittent stream. An ephemeral feature upstream of Two Butte Creek is heavily disturbed from historical cattle grazing.

If the proposed Oil and Gas Location is within a Rule 411.a Surface Water Supply Area buffer zone, select the buffer zone type:

Public Water System Administrator - Contact Name Email

If the proposed Oil and Gas Location is within a Rule 411.b GUDI/Type III buffer zone, select the buffer zone type:

Public Water System Administrator - Contact Name Email

Is a U.S. Army Corps of Engineers Section 404 permit required for the proposed Oil and Gas Location, access road, or associated pipeline corridor? No

If a U.S. Army Corps of Engineers Section 404 permit is required, provide the permit status, and permit number if available:

Is the Location within a Floodplain? No Floodplain Data Sources Reviewed (check all that apply):

[X] Federal (FEMA) [X] State [X] County [ ] Local

[ ] Other

Does this proposed Oil and Gas Location lie within a Sensitive Area for water resources, as defined in the 100-Series Rules? No

CONSULTATION, WAIVERS, AND EXCEPTIONS

When Rule 309.e.(2) Consultation must occur, check all that apply:

- [ ] This location is included in a Wildlife Mitigation Plan
- [ ] This Oil and Gas Location or associated new access road, utility, or pipeline corridor falls within federally designated critical habitat or an area with a known occurrence for a federal or Colorado threatened or endangered species. Provide description in Comments section of Submit tab.
- [ ] This Oil and Gas Location or associated new access road, utility, or pipeline corridor falls within an existing conservation easement established wholly or partly for wildlife habitat. Provide description in Comments section of Submit tab.

When Rule 309.e.(3) Consultation is not required, check all that apply:

- [ ] This Oil and Gas Location has been included in a previously approved, applicable Wildlife Protection Plan.
- [ ] This Oil and Gas Location has been included in a previously approved, applicable Wildlife Mitigation Plan.
- [ ] This Oil and Gas Location has been included in a previously approved, applicable conservation plan.

Pre-application Consultation:

- [ ] A pre-application consultation with CPW, regarding this Oil and Gas Location, occurred on:

CPW Waivers and Exceptions (check all that apply and attach all CPW waivers to this Form 2A):

- [ ] The applicant has obtained a Rule 304.b.(2).B.viii CPW waiver for the requirement to complete an ALA.
- [ ] The applicant has obtained a Rule 309.e.(2).G CPW waiver and consultation is not required.
- [ ] The applicant has obtained a Rule 309.e.(5).D.i CPW waiver and is requesting an exception from Rule 1202.c.(1).R.

☐ The applicant has obtained a Rule 309.e.(5).D.ii CPW waiver and is requesting an exception from Rule 1202.c.(1).S.

☐ The applicant has obtained a Rule 309.e.(5).D.iii CPW waiver of Rule 1202.c.(1).T.

☐ The applicant has obtained a Rule 309.e.(5).D.iv CPW waiver and is requesting an exception from Rule 1202.c.(1) in accordance with an approved CAP.

☐ The applicant has obtained a Rule 1202.a CPW waiver.

☐ The applicant has obtained a Rule 1202.b CPW waiver.

☐ In accordance with Rule 1203.a.(3), the applicant requests an exception from compensatory mitigation

Rule(s): _____

HIGH PRIORITY HABITAT AND COMPENSATORY MITIGATION

This Oil and Gas Location, associated access roads, utility, or Pipeline corridor falls wholly or partially within the following High Priority Habitats (Note: dropdown options are abbreviated - see Rule 1202 for full rule text):

< No row provided >

The following questions are for Oil and Gas Locations that cause the density to exceed one Oil and Gas Location per square mile in Rule 1202.d High Priority Habitat:

Direct Impacts:

Is Compensatory Mitigation required per Rule 1203.a for this Oil and Gas Location? No

Is a Compensatory Mitigation Plan proposed to address direct impacts for this Oil and Gas Location? No

Have all Compensatory Mitigation Plans been approved for this Location? No

If not, what is the current status of each Plan?

No HPHs apply to this location, access roads, or flowline corridor.

Is a Compensatory Mitigation Fee proposed for this Oil and Gas Location? No

Direct impact habitat mitigation fee amount: $ _____

Indirect Impacts:

Is Compensatory Mitigation required per Rule 1203.d for this Oil and Gas Location? No

Is a Compensatory Mitigation Plan proposed to address indirect impacts for this Oil and Gas Location? No

Have all Compensatory Mitigation Plans been approved for this Location? No

If not, what is the current status of each Plan?

No HPHs apply to this location.

Is a Compensatory Mitigation Fee proposed for this Oil and Gas Location? No

Indirect impact habitat mitigation fee amount: $ _____

Operator Proposed Wildlife BMPs

No BMP

CPW Proposed Wildlife BMPs

No BMP

AIR QUALITY MONITORING PROGRAM

Will the Operator install and administer an air quality monitoring program at this Location? No

Operator Proposed BMPs

No	BMP Target	CDPHE Recommendation	COGCC Action
1	Air		
	Description	Operator will properly maintain vehicles and equipment	
	CDPHE Comment		
2	Water		
	Description	Stormwater inspections: Operator will conduct weekly stormwater inspections during normal operations	
	CDPHE Comment		
3	Waste		
	Description	Operator will properly characterize and dispose of all waste (i.e. the specific landfill/waste disposal location allows for acceptance of the waste stream)	
	CDPHE Comment		

CDPHE Proposed COAs OR BMPs

No BMP

PLANS

Total Plans Uploaded: 13

- [ ] (1) Emergency Spill Response Program consistent with the requirements of Rules 411.a.(4).B, 411.b.(5).B, & 602.j
- [ ] (2) Noise Mitigation Plan consistent with the requirements of Rule 423.a
- [ ] (3) Light Mitigation Plan consistent with the requirements of Rule 424.a
- [ ] (4) Odor Mitigation Plan consistent with the requirements of Rule 426.a
- [X] (5) Dust Mitigation Plan consistent with the requirements of Rule 427.a
- [X] (6) Transportation Plan
- [X] (7) Operations Safety Management Program consistent with the requirements of Rule 602.d
- [X] (8) Emergency Response Plan consistent with the requirements of Rule 602.j
- [ ] (9) Flood Shut-In Plan consistent with the requirements of Rule 421.b.(1)
- [ ] (10) Hydrogen Sulfide Drilling Operations Plan consistent with the requirements of Rule 612.d
- [X] (11) Waste Management Plan consistent with the requirements of Rule 905.a.(4)
- [X] (12) Gas Capture Plan consistent with the requirements of Rule 903.e
- [X] (13) Fluid Leak Detection Plan
- [X] (14) Topsoil Protection Plan consistent with the requirements of Rule 1002.c
- [X] (15) Stormwater Management Plan consistent with the requirements of Rule 1002.f
- [X] (16) Interim Reclamation Plan consistent with the requirements of Rule 1003
- [X] (17) Wildlife Plan consistent with the requirements of Rule 1201
- [X] (18) Water Plan
- [X] (19) Cumulative Impacts Plan

- [ ] (20) Community Outreach Plan
- [ ] (21) Geologic Hazard Plan

VARIANCE REQUESTS

Check all that apply:

- [ ] This proposed Oil and Gas Location requires the approval of a Rule 502.a variance from COGCC Rule or Commission

Order number: NO

ALL exceptions and variances require attached Request Letter(s). Refer to applicable rule for additional required attachments (e.g. waivers, certifications, SUAs).

RULE 304.d LESSER IMPACT AREA EXEMPTION REQUESTS

Check the boxes below for all Exemptions being requested. Lesser Impact Area Exemption Request must be attached, and will include all requested exemptions.

- [ ] 304.b.(1). Local Government Siting Information
- [ ] 304.b.(2). Alternative Location Analysis
- [ ] 304.b.(3). Cultural Distances
- [ ] 304.b.(4). Location Pictures
- [ ] 304.b.(5). Site Equipment List
- [ ] 304.b.(6). Flowline Descriptions
- [ ] 304.b.(7). Drawings
- [ ] 304.b.(8). Geographic Information System (GIS) Data
- [ ] 304.b.(9). Land Use Description
- [ ] 304.b.(10). NRCS Map Unit Description
- [ ] 304.b.(11). Best Management Practices
- [ ] 304.b.(12). Surface Owner Information
- [ ] 304.b.(13). Proximate Local Government
- [ ] 304.b.(14). Wetlands
- [ ] 304.b.(15). Schools and Child Care Centers

- [ ] 304.c.(1). Emergency Spill Response Program
- [x] 304.c.(2). Noise Mitigation Plan
- [x] 304.c.(3). Light Mitigation Plan
- [ ] 304.c.(4). Odor Mitigation Plan
- [ ] 304.c.(5). Dust Mitigation Plan
- [ ] 304.c.(6). Transportation Plan
- [ ] 304.c.(7). Operations Safety Management Program
- [ ] 304.c.(8). Emergency Response Plan
- [ ] 304.c.(9). Flood Shut-In Plan
- [ ] 304.c.(10). Hydrogen Sulfide Drilling Operations Plan
- [ ] 304.c.(11). Waste Management Plan
- [ ] 304.c.(12). Gas Capture Plan
- [ ] 304.c.(13). Fluid Leak Detection Plan
- [ ] 304.c.(14). Topsoil Protection Plan
- [ ] 304.c.(15). Stormwater Management Plan
- [ ] 304.c.(16). Interim Reclamation Plan
- [ ] 304.c.(17). Wildlife Plan
- [ ] 304.c.(18). Water Plan
- [ ] 304.c.(19). Cumulative Impacts Plan
- [ ] 304.c.(20). Community Outreach Plan
- [ ] 304.c.(21). Geologic Hazard Plan

OPERATOR COMMENTS AND SUBMITTAL

Comments

Vecta O&G, Ltd. proposes to develop up to 4 exploratory (wildcat) conventional vertical helium gas wells, flowlines, a access on existing disturbed rangeland in rural Las Animas County. The development avoids impacts to public health, safety, welfare, the environment, and wildlife by exhibiting the following:
(1) Inert helium gas extraction with no known oil or natural gas entrained with the helium resource. The finding is based on historical well log and scout information for this location.
(2) No hydrocarbons or hazardous air pollutants associated with the helium gas wells.
(3) The nearest residence is approximately 0.75 miles away from the nearest Sammons Ranch well (315315C).
(4) Each well pad contains a single well with 160-acre pad spacing.
(5) Well pad footprints are limited to approximately 1.1 acres during 7-10 days of drilling and will be reclaimed to approximately 0.2 acres during interim reclamation.
(6) Conventional vertical well drilling requires no fracking or proppant.
(7) The wells generate no produced water. There is no on-site storage of produced water, oil, natural gas, or condensate.
(8) The nearest waterbody is > 0.5 mi away.
(9) There is no high priority habitat or mapped species of concern within 1 mile.

Wells have been planned to be on center in a quarter section. All of the drawings submitted with the application indicate that the well is on center. However, the well plots in the following quarter-quarter section: NW ¼ NW ¼, Section 15.

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.
Signed: _____ Date: 06/16/2021 Email: mdgoolsby@comcast.net

Print Name: Mathew Goolsby Title: Vice President-Operations

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: 3/8/2022

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.

Condition of Approval

COA Type	Description
Planning	Within 30 days of receipt of the approved local permit, Operator will submit the approved permit via Form 4 Sundry.
Planning	Operator will submit a Form 4 Sundry to include Reference Area Pictures consisting of 5 color photographs of the Reference Area, including 4 taken from each cardinal direction, and 1 taken from above the Reference Area. Each photograph will be identified by date taken, Well or Oil and Gas Location name, and direction of view. The photographs will be taken during the peak growing season and will clearly depict vegetation cover and diversity. These photographs may be submitted at any time up to twelve (12) months after the approval of this Form 2A.
2 COAs	

Best Management Practices

No	BMP/COA Type	Description
1	Traffic control	• Drivers will observe posted speed limits to protect public and driver safety. • Drivers will observe posted speed limits on unpaved roads to avoid or minimize fugitive dust. • Drivers will be instructed to maintain vehicle speeds of 15 mph on unpaved roads. • Drivers will cover and secure loads to prevent debris from entering roadways. • Vehicles will be maintained in good working condition to avoid excess emissions and safety concerns.

2	Storm Water/Erosion Control	Structural • Wattles or silt fence will be placed on the downgradient side of the Oil and Gas Location. • Stormwater diversions will be created when there is evidence of ponding or erosion runnels. • The temporary fuel tank used for well drilling will have integrated secondary containment. The drill rig and motors will have liners underneath. Non-Structural • Waste materials will be bagged or containerized to avoid contact with precipitation. • The well pad will be inspected for excessive erosion. Where needed, areas will be recompacted. • Vehicles and equipment will be monitored for leaks during well development. • Ingress, egress, and parking will occur in designated areas. • Spill response materials and absorbents will be containerized and available on site. • The location will be inaccessible to the public to prevent unauthorized access and excessive wear on access roads. • Stabilization and revegetation will be performed as part of interim reclamation. • During well development, stormwater monitoring will be performed daily. Areas that require correction for stormwater control will be addressed or repaired promptly. • During production, an operator will be onsite an estimated 2-3 times per week. Site inspection will identify areas that require maintenance or repair to control stormwater and correct excessive erosion on the well pad or access roads. Stormwater inspection will be performed at least every 7 days during well production and every 30 days after interim reclamation.
3	Material Handling and Spill Prevention	• Site personnel will be trained in detecting and addressing spills that may occur on site. • Spills or releases will be investigated, controlled, or contained, in accordance with Rule 912.a. • If a spill or release meets criteria in Rule 912.b, it will be reported as specified in the rule. • A catastrophic loss of freshwater will be bermed using the skid steer available on site. • Equipment and transfer lines will be monitored daily during well drilling and completion for signs of drips, leaks, or spills, which will be promptly corrected. • Flowlines will be installed consistent with Rule 1102. In accordance with Rule 1104, before a flowline is put into service, it will be pressure tested to maximum pressure for AVO leak detection. • The operator will maintain shutoff valves on helium gas flowlines in accordance with Rule 1103.a. • Per Rule 1104.c, the operator will conduct a monthly AVO survey to detect failures or signs of leaks from the wellhead and flowline. • The operator will conduct annual flowline integrity testing in accordance with Rule 1104.f. • Site personnel will be instructed on procedures for documenting and recordkeeping inspections and testing.

4	Dust control	Speed Restrictions • Speeds will be limited to 15 mph on the Sammons Ranch access roads. Regular Road Maintenance • Regular inspection will occur for the Sammons Ranch access roads for evidence of inadequate drainage and formation of potholes. • Grading, blading, and filling potholes will be performed to maintain the road surface and discourage vehicles from widening the roadway or contributing to erosion. Restricting Construction Activity During High Wind Days • The 1-day well pad construction will be scheduled to avoid high-wind warnings issued for eastern Las Animas County. Phase Truck Trips Construction (Total) 2 Drilling (Total) 12 Completion (Total) 12 Production (Per Month) 30 Dust Suppression • Blowing soil and failure of the soil to stabilize and form a crust on the location during construction and after interim reclamation will indicate that a dust suppression BMP is needed. In that event, a water truck will be used to wet the pad surface to form a crust. Interim Reclamation • Area not needed for production will be reclaimed in accordance with Rule 1003. Dust Tracking • Aggregate will be placed at the apron where the Sammons Ranch access road ties into Highway 109. The aggregate will serve as a wheel shaker to reduce dirt from being tracked onto the paved road. Topsoil Stockpile • The stockpile will be mounded with a slope of approximately 1:3 to prevent loose soils and promote vegetative growth. • Vehicle tracking perpendicular to the slope angle will be used to improve short term stabilization. • Vegetation will be allowed to establish, with crimped straw mulching, in order to stabilize the stockpile, outcompete weeds, and promote soil microbial activity.
5	Interim Reclamation	Topsoil Protection Short-Term • Vegetation removal and soil disturbance on the Oil and Gas Location will be minimized to the area sufficient to site and level a water well-sized drill rig and equipment for shallow vertical well drilling. • The operator will salvage and segregate topsoil based on soil characteristics of texture, color, structure, consistency, and organic matter. • Salvaged topsoil will be mounded on the Oil and Gas Location with a slope of approximately 1:3. • Vehicle tracking perpendicular to the slope angle will be used to improve short term stabilization. • Topsoil will be protected from contamination by stockpiling it in a location free from drilling, fuel storage, and parking. • Soil removed during flowline trenching will be segregated based on changes in physical characteristics. The soil layers will be windrowed adjacent to the trench. • Soils from the flowline trench will be replaced promptly in the same order in which they were removed. Long-Term • The topsoil stockpile will be protected from compaction by designating it with surveyor staking and flagging as topsoil for reclamation. • The topsoil stockpile will be protected from wind degradation by mounding at an approximately 1:3 steepness to prevent loose soils while promoting continued microbial activity. • The topsoil stockpile will be protected from erosion by ensuring that stormwater controls and diversions are installed, as needed, to divert stormwater away from the stockpile. • Vegetation will be allowed to establish, with crimped straw mulching, in order to stabilize the stockpile, outcompete weeds, and promote soil microbial activity. • The duration of stockpiled topsoil is not anticipated to exceed one growing season because the Oil and Gas Location will support a single vertical helium gas well. Reclamation will occur during the first growing season after the well is drilled.

6	Interim Reclamation	• Topsoil - Topsoil will be stockpiled on the location and will be restored on the reclaimed area. Salvaged topsoil will be replaced and contoured to maximize erosion control and soil stability. • Erosion control – Erosion controls will be installed and maintained to prevent stormwater runoff and erosion. Erosion controls are shown on Form 2A, Construction Layout Drawing and Facility Layout Drawing. • Weed control – The location will be monitored for the presence of invasive weeds. Invasive weeds will be treated to prevent them from establishing. • Seed mix – The operator will use the certified weed-free seed mix identified by NRCS and approved by the landowner. • Seeding method and Timing – Drill seeding or other method appropriate to promote vegetative success will be conducted during the first favorable growing season after well drilling is complete. • Fencing – Fencing will be installed around the wellhead. • Recontouring - Disturbed areas will be recontoured to blend with the pre-disturbance surface and restore natural drainage patterns. • Monitoring – The location will be monitored for vegetative success. It will be reseeded where needed to establish 80 percent of pre-disturbance cover.

Total: 6 comment(s)

Attachment List

Att Doc Num	Name
1347863	CULTURAL FEATURES MAP
1347864	NRCS MAP UNIT DESC
1347865	LOCATION PICTURES
2369381	SURFACE USE AGREEMENT
2369385	CORRESPONDENCE
2369388	DIRECTOR'S RECOMMENDATION
402695913	FORM 2A APPROVED
402696336	SURFACE AGRMT/SURETY
402696343	CORRESPONDENCE
402696419	MINERAL LEASE MAP
402709858	LOCATION DRAWING
402709861	ACCESS ROAD MAP
402709868	REFERENCE AREA MAP
402802455	HYDROLOGY MAP
402802457	RELATED LOCATION AND FLOWLINE MAP
402802460	LAYOUT DRAWING
402802461	PRELIMINARY PROCESS FLOW DIAGRAMS
402802462	LESSER IMPACT AREA EXEMPTION REQUEST
402822083	GEOLOGIC HAZARD MAP
402824191	WILDLIFE HABITAT DRAWING
402833978	LOCATION AND WORKING PAD GIS SHP
402977577	FORM 2A SUBMITTED
402977581	PUBLIC COMMENT-0

Total Attach: 23 Files

General Comments

User Group	Comment	Comment Date
OGLA	OGDP ID# 480998 and this form are approved by Commission Order Number 573-1.	03/03/2022
OGLA	The Director has determined that the OGDP application that this Form is a component of meets all requirements of Rule 306.a. The Director's Recommendation has been attached to the Form 2A.	01/28/2022
OGLA	Updated requested information from 1/7 and 1/20. Received and attached updated SUA information. Received verbal concurrence to change depth to water description and add temporary fuel tank to equipment.	01/28/2022
OGLA	Additional Information Requested on: 8. Plugging and Abandonment Bond 9. Relevant Local Government permit application. 10. Surface Use Agreement 11. Depth to water. 12. CDPHE BMPs 13. Verification of distances to property lines. 14. Verification of distances to surface waters.	01/20/2022
OGLA	Additional information requested from operator for: 1. Dust Mitigation Plan tracking BMP 2. Water Plan water source 3. Water Plan water storage 4. Cumulative Impacts Plan. Foraging animal and migratory bird pathway impacts. 5. Cumulative Impacts Plan. Soil impacts. 6. Location Pictures. Include aerial image with field of view of photos. 7. NRCS Map Unit Description. Remove excess soil types.	01/07/2022
OGLA	The Director has determined this OGDP application is complete. Form pushed to IN PROCESS.	10/28/2021
OGLA	Lesser Impact Area exemption from Rule 304.c.(2) Noise Mitigation Plan. The Director granted the exemption request on October 21 based on the distances to RBUs, the short duration of construction and drilling activities, and the plans for daylight only construction. The operator must comply with the noise levels specified in Rule 423-1.	10/28/2021
OGLA	Lesser Impact Area exemption from Rule 304.c.(3) Light Mitigation Plan. The Director granted the exemption request on October 21 based on the distances to RBUs, the short duration of construction and drilling activities, and the plans for daylight only construction.	10/28/2021
OGLA	This Form has been returned to Draft for the following: 1. Revision to Topsoil Protection Plan 2. Revision to Cumulative Impacts Plan 3. GIS shape file upload.	10/01/2021
OGLA	This Form has been returned to Draft for the following: 1. Revisions to multiple attachments. 2. Revisions to multiple plans. A spreadsheet with the issues listed above was created and sent to the operator.	07/16/2021

Total: 10 comment(s)