

DIRECTOR'S RECOMMENDATION:

Docket #220500093

Crestone Peak Resources Operating LLC, ("Crestone"); Operator Number 10633

Prosper Farms 4-65 2-1-6 OGD (OGDP ID #482697)

Pursuant to Rule 306, the Director submits to the Commission this recommendation for approval of this Crestone Peak Oil and Gas Development Plan located in Arapahoe County.

The underlying permit documents in support of this Recommendation may be found through the Colorado Oil and Gas Conservation Commission (COGCC) website under "[Permits](#)".

Prosper Farms 4-65 2-1-6 OGD (OGDP ID #482697)

Form 2C #403001349

Form 2A #403001067

Form 2B #403001345

All supporting hearing documents, including Crestone's Prosper Farms OGD hearing application, may be found in COGCC's eFilings System under Docket No. 220500093.

BACKGROUND

On May 10, 2022, Crestone Peak Resources (Crestone) submitted an application for an Oil and Gas Development Plan (OGDP) with the Colorado Oil and Gas Conservation Commission (COGCC). Staff returned the Form 2A to DRAFT status twice for the applicant to make corrections prior to the Director determining the application was complete on August 9, 2022. Revisions were coordinated between Staff and the applicant throughout the technical review process. This Recommendation is based on information finalized in the Form 2A, the Form 2B, and the hearing application as of November 4, 2022. No additional revisions will be made to the application prior to the Commission Hearing scheduled for November 16, 2022.

PROPOSED DEVELOPMENT

The proposed Prosper Farms 4-65 2-1-6 OGD ("Prosper Farms OGD") includes application lands in unincorporated Arapahoe County, with the city of Aurora being to the north, south, and immediately west, and will be approximately 3,200 acres in Township 4 South, Range 65 West, all of Sections 1, 2, 3, and 4, and Township 4 South, Range 64 West, all of Section 6. The setting is in a sparsely to moderately populated area, with the proposed surface location within an agricultural area as zoned by Arapahoe County. The proposed surface location will be an expansion of the existing Prosper Farms 4-65 2-1 4AH Location (Location ID #443722) that currently has two producing horizontal wells, is inside of the OGD's mineral lands, and is

approximately 4 miles east of the E-470 tollway and half of a mile south of Interstate 70 (I-70), as can be seen below in Figure 1.

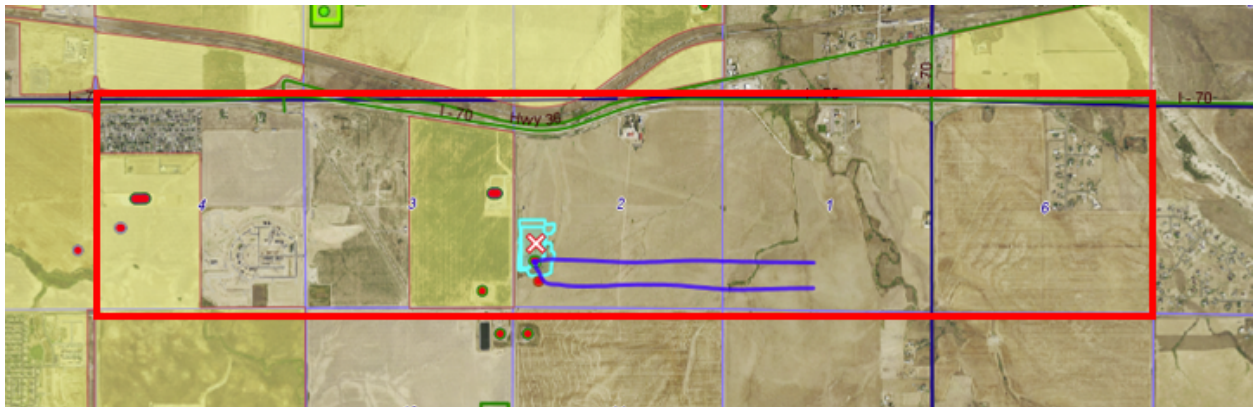


Figure 1: OGD Application Lands are outlined in red, the proposed Location expansion is outlined in light blue, and the two existing producing wellbores are shown as purple lines. The municipal boundaries of the City of Aurora are shaded in yellow.

Crestone plans to develop oil and gas at the Prosper Farms location from an additional 11 new horizontal wells in the Niobrara formation, for a total of 13 horizontal wells on the Location. The additional 11 wells will be hydraulically fractured. The OGD also includes two existing/built Locations, the Property Reserve 4-65 3-4 (Location ID# 456535) and the Property Reserve 4-65 3-4 1H (Location ID# 437752), which are both on the west side of Hayesmount Road and across the street from the Prosper Farms Location. The two Property Reserve Locations have a combined total of 5 existing producing wells in sections 3 and 4 (see Figure 2 below); these wells will continue to produce the same Drilling and Spacing Unit (DSU) as four of the new wells proposed on the Prosper Farms Location. No additional surface expansion or subsurface operations are being requested on either of the two Property Reserve Locations; these two Locations and their associated five wells are being included in this OGD due to the shared development of this DSU by the wells on all three Locations.

The 11 new wells on the proposed Prosper Farms location are planned to be drilled with a rig powered by diesel generators. Crestone has committed to using (IOGP) Group III drilling fluids and drilling mud chillers to minimize odors. The drill cuttings will be stored in closed containers (tanks), and will be trucked offsite to a commercial disposal site. Produced water will be stored onsite in two tanks and will be trucked off the location. Gas that is produced from the additional 11 horizontal wells will be connected by flowline to the operational gas pipeline on the existing location, and then off location from there. Crestone plans to have an oil pipeline in place prior to the production phase of the new wells, but has not committed to this with a Best Management Practice (BMP).

Crestone estimates that reconstruction and expansion of the Location will commence in January 2023. Drilling and completion of the wells will occur from March through October 2023.

Surface Lands:

The proposed location lies on FEE surface, and is inside of the mineral development area. The Operator's right to construct is granted through a Surface Use Agreement. The OGDG requires approximately 24.74 acres of total disturbance as follows:

- Oil and Gas location disturbance
 - Prosper Farms 4-65 2-1-6: 24.57 acres (approximately 12.68 acres for the Working Pad Surface (WPS)); interim reclamation will reduce the operational pad down to 16.68 acres.
- Access Road disturbance of 0.17 acres (approximately 122 ft.).
- Flowlines will be contained on the location.

DRILLING AND SPACING CONSIDERATIONS

Crestone is requesting the development of FEE minerals covering approximately 3,200 total acres from the Niobrara formation as follows:

- Modify an Existing DSU {Order 535-1092}, (DSU #1)
 - Order 535-1092 established 1,920 acres for oil and gas development from the Niobrara Formation with 460 foot unit boundary setbacks and 150 foot interwell setbacks.
 - Crestone seeks to modify Order 535-1092 in the following manner:
 - Increase the total wells in the unit to nine (9) wells; and
 - Modify the unit boundary setback to 330 feet and maintain the 150 foot interwell setback.
- Modify Existing DSU {Orders 535-460, 535-906, 535-1168, and 535-1288}, (DSU #2)
 - Order 535-460 established 1,280 acres for oil and gas development from the Niobrara Formation with 460 foot unit boundary setbacks and 960 foot interwell setbacks. Orders 535-906, 535-1168, and 535-1288 further modified the setbacks and well count of DSU#2.
 - Crestone seeks to modify DSU#2 in the following manner:
 - Increase the total wells in the unit to nine (9) wells; and
 - Modify the setbacks to: unit boundary setback of 330 feet and interwell setback of 150 feet.

There are seven (7) existing wells producing the Niobrara formation within the application lands and within the proposed amended DSUs; those wells will remain subject to their originally permitted spacing, and will be included in this OGDG since they develop the same DSUs as the proposed new wells.

This spacing, as outlined in Crestone's second amended Hearing Application, complies with applicable COGCC rules and Staff appreciates the utilization of two large, existing DSUs for these application lands, eliminating the need for multiple individual wellbore spacing units.

FINANCIAL ASSURANCE

Staff confirmed that Crestone has a valid blanket plugging bond on record consistent with Rule 702.

PUBLIC COMMENTS

Pursuant to Rule 303.d.(1).A.ii, the Public Comment Period was open for 30 days from August 9, 2022 through September 8, 2022. No public comments were received on the Form 2A or through the eFiling system during the Public Comment Period.

LOCAL GOVERNMENT PERMITTING AND PRE-APPLICATION CONSULTATIONS

Relevant Local and Proximate Governments:

Arapahoe County is the relevant local government for the OGD. The city of Aurora is the proximate local government to the proposed OGD.

Local Permit with Arapahoe County:

A local permit was filed for the proposed location with Arapahoe County on March 30, 2022, and was approved on October 11, 2022.

ADMINISTRATIVE CONSIDERATIONS

Condition of Approval (COA):

During Staff's review of the Noise Mitigation Plan, it was determined that Crestone had committed to an updated plan if ambient noise adjustments occur during subsequent ambient noise monitoring, therefore, Staff added the following COA to the Form 2A:

If ambient noise adjustments occur due to subsequent ambient noise monitoring, a Form 4 Sundry will be submitted with the updated Noise Mitigation Plan and must be approved prior to new activity.

Discussion on OGD Locations and Wells within the Box Elder CAP:

Staff notes that DSU #2 (sections 3 and 4 in the west half of the OGD) are within Crestone's recently approved Box Elder Comprehensive Area Plan (CAP) development area (see Figure 2 below). Even though the two existing Property Reserve locations and their associated five existing horizontal wells are within the CAP lands and are currently producing minerals in sections 3 and 4, neither the Locations nor the wells were included in the CAP application, and are therefore not subject to the CAP. Crestone confirmed to Staff that none of the oil or gas production volumes reported for the 18 total wells in the Prosper Farms OGD will be attributed to the Box Elder CAP. Crestone did not provide information to Staff about why the Property Reserve Locations and wells were excluded from the Box Elder CAP even though the Locations and wells are within the CAP's lands. But Crestone did confirm that the Prosper Farms location was excluded from the CAP because the Location is in unincorporated Arapahoe County, whereas the CAP only included surface locations within the City of Aurora.

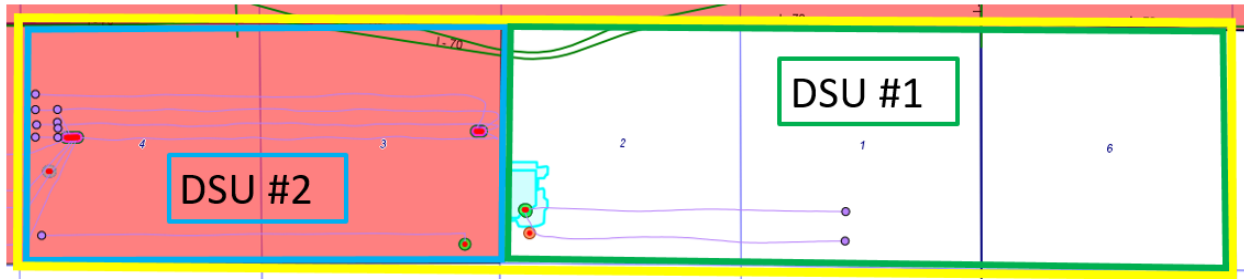


Figure 2: The Prosper Farms OGD is outlined in yellow. DSU #2 is entirely inside Crestone's Box Elder CAP mineral development area, which is shaded in red. The two existing Property Reserve Locations and their five producing horizontals are also within the CAP lands in sections 3 and 4, but are not subject to the CAP. The proposed Prosper Farms Location expansion is shown in light blue just east and outside of the CAP lands in DSU #1. Four new wells proposed on the Prosper Farms Location will develop DSU #2 in the CAP area, but will not be subject to the CAP. Seven new wells proposed on the Prosper Farms Location will develop DSU #1 outside the CAP area.

COGCC STAFF'S TECHNICAL REVIEW HIGHLIGHTS

This section addresses issues related to public health, safety, welfare, the environment, and wildlife resources, as required by the Oil and Gas Conservation Act, 34-60-106(2.5)(a), for the Crestone Prosper Farms OGD.

Alternative location Analysis (ALA) Considerations

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.

Public Health, Safety, and Welfare Considerations

During completeness review of the OGD no Residential Building Units (RBUs) were identified within 2,000 feet of the Working Pad Surface (WPS); further technical review concluded that the closest RBU is 3,857 ft. from the proposed expansion. In addition, there are no High Occupancy Building Units (HOBUs), School Facilities, or Child Care Centers within one mile of the proposed WPS. The proposed OGD is within a Disproportionately Impacted Community, however there are no RBUs, HOBUs, or School Facilities within 2000 ft. of the WPS.

Staff has determined that the proposed site-specific BMPs will adequately minimize and/or mitigate potential adverse impacts to public health, safety and welfare. This includes the use of sound walls around the perimeter of the location through flowback and a quiet completions fleet during hydraulic fracturing to minimize sound, lighting that is angled downward and on sensors to minimize light, and the use of a closed loop, pitless mud system, mud chillers, and IOGP Group III drilling fluids to minimize odors. Crestone has also committed to using a rig liner, and secondary containment on tanks for spill containment and prevention of material leaking into the surrounding area. No permanent lighting is proposed for this location once the completions stage has been completed.

Staff does not anticipate any significant potential direct adverse impacts to public health, safety, and welfare.

Environmental Resource Considerations

Water Resources:

Crestone has indicated on the Form 2A the proposed location is within a Sensitive Area for water resources based on a drainage that is directly adjacent to the WPS. The drainage was verified by two biologists with RPG, and it was determined that it does not meet the criteria to be classified as a stream under Rule 1202.a.(3). The nearest constructed water well is 1,458 ft. to the southwest, and the nearest downgradient Surface Waters of the State is over a mile away and is a Riverine habitat. The nearest downgradient wetland is 3,850 ft. to the southeast.

Crestone has provided containment and stormwater mitigation measures that include using a rig liner during the drilling of the 11 additional wells on location, secondary containment (tank liners), and constructing sediment basins and sediment traps along the low points of the proposed location. Sediment basins and sediment traps will be inspected weekly. Based on this information, Staff concludes the risk of impacts 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 the proposed location for the potential for adverse impacts to wildlife resources through desktop review and Crestone's Wildlife Protection Plan. The proposed location is not within a CPW-mapped HPH. The closest CPW mapped HPH is an Aquatic Native Species Conservation Water over a mile to the southwest of the WPS. There are no potential wetlands at, or adjacent to the WPS; the adjacent drainage ditch does not have associated wetlands.

Crestone has provided BMPs for noise and light, including utilizing a sound walls around the perimeter of the location through flowback and a quiet completions fleet during hydraulic fracturing to minimize sound, lighting that is angled downward and on sensors to minimize light during all phases of activity, and no permanent lighting after activity has concluded.

Staff concludes that there are no significant potential direct adverse impacts to wildlife resources. Crestone 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 OGD'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 OGD complies with all applicable requirements of the Commission's Rules and recommends approval by the Commission.

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 Number:

403001067

Date Received:

05/10/2022

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: **443722**

OGDP ID:

Expiration Date:

☐ New Location ☐ Refile ☒ Amend Existing Location # 443722

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
220500093		

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: 10633

Name: CRESTONE PEAK RESOURCES OPERATING LLC

Address: 1801 CALIFORNIA STREET #2500

City: DENVER State: CO Zip: 80202

Contact Information

Name: Kathy Denzer

Phone: (303) 312-8131

Fax: ()

email: kdenzer@civiresources.com

FINANCIAL ASSURANCE

- ☒ Plugging and Abandonment Bond Surety ID (Rule 706): 20160104 ☐ Gas Facility Surety ID (Rule 711): _____
- ☐ Waste Management Surety ID (Rule 704): _____

LOCATION IDENTIFICATION

Name: Prosper Farms Number: 4-65 2-1-6

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.

Quarter: SWSW Section: 2 Township: 4S Range: 65W Meridian: 6 Ground Elevation: 5630

Latitude: 39.730066 Longitude: -104.638730

GPS Quality Value: 1.4 Type of GPS Quality Value: PDOP Date of Measurement: 06/11/2015

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: ARAPAHOE 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: Yes

Date Relevant Local Government permit application submitted: 03/30/2022

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

Status/disposition date: 10/11/2022

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: Diane Kocis Contact Phone: 720-874-6650

Contact Email: dkocis@arapahoegov.com

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.

Type of Proximate Govt	County	Municipality	Contact Name	Contact Phone	Contact Email
Municipality		Aurora	Jeffrey Moore	303-739-7676	jsmoore@auroragov.org

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:

The Arapahoe County permit was approved and recorded on October 11, 2022.

RELEVANT LOCAL GOVERNMENT OR FEDERAL PRE-APPLICATION CONSULTATION

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.

- | | |
|---|--|
| <input type="checkbox"/> i. WPS < 2,000 feet from RBU/HOB | <input type="checkbox"/> vi.aa. WPS within a surface water supply area |
| <input type="checkbox"/> ii. WPS < 2,000 feet from School/Child Care Center | <input type="checkbox"/> vi.bb. WPS < 2,640 feet from Type III or GUDI well |
| <input type="checkbox"/> iii. WPS < 1,500 feet from DOAA | <input type="checkbox"/> vii. WPS within/immediately upgradient of wetland/riparian corridor |
| <input type="checkbox"/> iv. WPS < 2,000 feet from jurisdictional boundary and PLG objects/requests ALA | <input type="checkbox"/> viii. WPS within HPH and CPW did not waive |
| <input type="checkbox"/> | <input type="checkbox"/> |

v. WPS within a Floodplain

ix. Operator using Surface bond

☐ x. WPS < 2,000 feet from RBU/HOBUS/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: Prosper Farms Investments

Phone: 303-893-4288

Address: 5651 N. Broadway

Fax: _____

Address: _____

Email: jvogel@vogelassoc.com

City: Denver State: CO Zip: 80216

Surface Owner at this Oil and Gas Location: ☒ Fee ☐ State ☐ Federal ☐ Indian

Check only one:

☐ The Operator/Applicant is the surface owner.

☒ 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: ☒ 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: _____

SITE EQUIPMENT LIST

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

Wells	<u>13</u>	Oil Tanks	<u>6</u>	Condensate Tanks	<u>0</u>	Water Tanks	<u>2</u>	Buried Produced Water Vaults	<u>0</u>
Drilling Pits	<u>0</u>	Production Pits	<u>0</u>	Special Purpose Pits	<u>0</u>	Multi-Well Pits	<u>0</u>	Modular Large Volume Tank	<u>0</u>
Pump Jacks	<u>0</u>	Separators	<u>13</u>	Injection Pumps	<u>0</u>	Heater-Treaters	<u>0</u>	Gas Compressors	<u>0</u>
Gas or Diesel Motors	<u>0</u>	Electric Motors	<u>0</u>	Electric Generators	<u>0</u>	Fuel Tanks	<u>0</u>	LACT Unit	<u>1</u>
Dehydrator Units	<u>0</u>	Vapor Recovery Unit	<u>8</u>	VOC Combustor	<u>0</u>	Flare	<u>0</u>	Enclosed Combustion Devices	<u>2</u>
Meter/Sales Building	<u>1</u>	Pigging Station	<u>0</u>			Vapor Recovery Towers	<u>1</u>		

OTHER PERMANENT EQUIPMENT

Permanent Equipment Type	Number
Gas Buyback Meter	<u>1</u>
Recycle Pump	<u>1</u>
Instrument Air Skid	<u>1</u>
Combuster Knockout	<u>2</u>
Communications Tower	<u>1</u>
Sales Gas Scrubber	<u>1</u>
Bulk Treater	<u>2</u>
Oil Pump Skid	<u>1</u>
Gas Lift	<u>2</u>
Gas Lift Compressor	<u>2</u>
Electrical Rack	<u>3</u>
Fuel Gas Scrubber	<u>1</u>

OTHER TEMPORARY EQUIPMENT

Temporary Equipment Type	Number
Water Tank	<u>25</u>
Oil Tank	<u>5</u>

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.

From the wellheads, carbon steel flowlines run to inlet separators. High pressure gas from the inlet separators is sent down the sales gas line to a third party. The liquid from the inlet separators is carried to bulk treater for further processing. Low pressure gas off the inlet separators is sent to a vapor recovery unit to compress the low pressure gas so it can be sent down the high pressure sales line to a third party. Oil from the bulk treater is transferred to a vapor recovery tower then to tanks for storage. Water from the inlet separators and bulk treater is transferred to the water tanks for storage.

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:	3671	Feet	NE					
Residential Building Unit (RBU):	3857	Feet	NE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
High Occupancy Building Unit(HOBU)	5280	Feet	W	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Designated Outside Activity Area:	5280	Feet	NE					
Public Road:	170	Feet	W					
Above Ground Utility:	213	Feet	W					
Railroad:	3138	Feet	N					
Property Line:	158	Feet	W					
School Facility:	5280	Feet	SW					
Child Care Center:	5280	Feet	SW					
Disproportionately Impacted (DI) Community:	0	Feet	E					
RBU, HOBU, or School Facility within a DI Community.	5280	Feet	NE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>

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	<u>0</u>	<u>0</u>	<u>0</u>
Residential Building Units	<u>0</u>	<u>0</u>	<u>0</u>
High Occupancy Building Units	<u>0</u>	<u>0</u>	<u>0</u>
School Properties	<u>0</u>	<u>0</u>	<u>0</u>
School Facilities	<u>0</u>	<u>0</u>	<u>0</u>
Designated Outside Activity Areas	<u>0</u>	<u>0</u>	<u>0</u>

CONSTRUCTION

Size of disturbed area during construction in acres: 24.57

Size of location after interim reclamation in acres: 16.68

Estimated post-construction ground elevation: 5633

DRILLING PROGRAM

Will a closed-loop drilling system be used? Yes

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

Will salt sections be encountered during drilling: No

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

Will oil based drilling fluids be used? Yes

DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE

Drilling Fluids Disposal Method: Commercial Disposal

Cutting Disposal: OFFSITE

Cuttings Disposal Method: Commercial Disposal

Other Disposal Description:

Beneficial reuse or land application plan submitted? 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:

Dry Farm Class IIB,IIC,IIIB,IVA

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

Dry Farm Class IIB,IIC,IIIB,IVA

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

If Final Land Use includes Non-Crop Land (as checked above), the following information is required:

Describe landowner's designated final land use(s):

Reference Area Latitude: _____ Reference Area Latitude: _____

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

< No row provided >

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: AdC - Adena-Colby Silt Loams, 1 to 5 percent slopes

NRCS Map Unit Name: WeB - Weld Silt Loam, 0 to 3 percent slopes

NRCS Map Unit Name: WrB - Weld-Deertrail Silt Loams, 0 to 3 percent slopes

GROUNDWATER AND WATER WELL INFORMATION

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

water well: 1458 Feet SW

Spring or Seep: 5280 Feet S

Estimated depth to shallowest groundwater that can be encountered at this Oil and Gas Location: 150 Feet

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

Basis for depth to groundwater was determined by Water Well Permit #69973 located in T4S R65W Sec. 2: NWNE.

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? No

Provide the distance and direction to the nearest downgradient wetland, measured from the Working
Pad Surface: 3850 Feet SE

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

The surface waters of the State is identified as a Riverine habitat and is classified as a R4SBC.

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):

☒ Federal (FEMA) ☐ State ☐ County ☐ Local

☐ Other

Does this proposed Oil and Gas Location lie within a Sensitive Area for water resources, as defined in the

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?

N/A

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?

N/A

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? Yes

Operator Proposed BMPs

No BMP

CDPHE Proposed COAs OR BMPs

No BMP

PLANS

Total Plans Uploaded: 15

- ☐ (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
- ☒ (5) Dust Mitigation Plan consistent with the requirements of Rule 427.a
- ☒ (6) Transportation Plan
- ☒ (7) Operations Safety Management Program consistent with the requirements of Rule 602.d
- ☒ (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
- ☒ (11) Waste Management Plan consistent with the requirements of Rule 905.a.(4)
- ☐ (12) Gas Capture Plan consistent with the requirements of Rule 903.e
- ☒ (13) Fluid Leak Detection Plan
- ☒ (14) Topsoil Protection Plan consistent with the requirements of Rule 1002.c
- ☒ (15) Stormwater Management Plan consistent with the requirements of Rule 1002.f
- ☒ (16) Interim Reclamation Plan consistent with the requirements of Rule 1003
- ☒ (17) Wildlife Plan consistent with the requirements of Rule 1201
- ☒ (18) Water Plan
- ☒ (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: _____

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.

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

OPERATOR COMMENTS AND SUBMITTAL

operations, gas will be routed to a combustion device until such a time that normal operations can resume. Should Upset Conditions occur for 24 cumulative hours, Operator will seek Director's verbal approval to continue to flare beyond 24 cumulative hours and will subsequently file a Form 04 Sundry within seven (7) days to report the Upset Condition and the safety concern associated therewith.

Flowback: unsalable gas is not anticipated during flowback operations; natural gas infrastructure has been constructed to service this pad and all gas produced during initial production will be produced into pipeline. In the unlikely event that Upset Conditions are encountered during initial production, gas will be routed to a combustion device until such a time that normal operations can resume. Should Upset Conditions occur for 24 cumulative hours, Operator will seek Director's verbal approval to continue to flare beyond 24 cumulative hours and will subsequently file a Form 04 Sundry within seven (7) days to report the Upset Condition and the safety concern associated therewith.

Temporary oil and water tanks will be on location for approximately 4 months.

Sections 3 and 4 were originally developed from two sites within the City of Aurora, the Property Reserve 1H and the Property Reserve North. Those two sites' surface locations are located within the Box Elder CAP lands, and are considered "legacy/no expansion" sites in the current CAP application.

The Prosper Farms 2-1 surface location is located in unincorporated Arapahoe County, outside of the CAP boundary, and is not considered a CAP site. While developing sections 3 and 4 (CAP minerals) from an additional Property Reserve 3 – 4 (CAP) well side in E2 Section 3 (while limiting Prosper Farms 2-1 to eastward-facing drilling only) would allow for neater partitioning into CAP/non-CAP sites, the consolidation of the west-facing wells onto the Prosper Farms 2-1 was considered a superior plan for surface impacts. The Prosper Farms 2-1 surface location – outside City of Aurora - precludes it from being incorporated into the Aurora-based Box Elder CAP.

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

Signed: _____ Date: 05/10/2022 Email: agross@upstreampm.com

Print Name: Andrea Gross Title: Permit Agent

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.

COA Type

Description

Noise mitigation	If ambient noise adjustments occur due to subsequent ambient noise monitoring, a Form 4 Sundry will be submitted with the updated Noise Mitigation Plan and must be approved prior to new activity.
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1 COA

No	BMP/COA Type	Description
1	Traffic control	<p>Traffic will be reduced during completion operations by using temporary above ground water lines to deliver water.</p> <p>Haul routes were designated and developed in consultation with the County. A Road Maintenance agreement is in place with the County.</p> <p>Commercial reasonable dust control measures will be used as needed following local requirements.</p> <p>In order to establish a baseline condition and post construction condition of the Access Road prior to the initial and post construction of a Well Site, Crestone will provide video recording or photographs of the condition of the Access Road to ensure the roads remain safe for public use. If road damage has occurred, Crestone will either be responsible for repair or will pay the County for such repairs.</p> <p>The County has the right to reasonably restrict the hours during which vehicles and equipment may be moved on the Roads covered by the Road Damage Agreement (see attached) for the protection of public health, safety and welfare.</p>
2	General Housekeeping	<p>All drill cuttings generated during drilling operations are transported offsite with proper manifesting for disposal at facilities properly permitted to receive E&P waste. Drilling fluids will be stored on-site and recycled for use in future drilling operations.</p> <p>All surface trash, debris and material not intrinsic to the operation of the oil and gas facility shall be removed stored in a roll off container or other trash bin and disposed of at a commercial solid waste disposal location.</p> <p>Waste will be stored on location in compatible container or containment devices designed or engineered for the purposes for which they will be utilized. These containers will be inspected on a regular basis to ensure that no undue wear, structural issues, sever rust, other defects, which may impact their effectiveness.</p> <p>If there are unanticipated hazardous waste streams not listed in the attached Waste Streams Spreadsheet, the hazardous waste will be stored and disposed of in compliance with all rules and regulations applicable to that specific waste.</p> <p>CPR minimizes the generation of waste by ensuring that material products are fully used for their intended purpose. If unused materials remain following an activity, contractors are required to take unused product with them for reuse at the next applicable project. Contractors are contractually required to comply with applicable material and waste management practices.</p>

3	Wildlife	<p>If a trench is left open for more than 5 consecutive days during pipeline construction, CPR will install wildlife escape ramps at a minimum of one ramp per ¼ mile of trench. CPR will use CPW-recommended seed mixes for interim and final reclamation when consistent with the Surface Owner's approval and any local soil conservation district requirements.</p> <p>CPR will use CPW-recommended fence designs with consistent with the Surface Owner's approval and any Relevant Local Government requirements.</p> <p>CPR will conduct all vegetation removal necessary for Oil and Gas Operations outside of the nesting season for migratory birds (April 1 to August 31). For any vegetation removal that must be scheduled between April 1 to August 31, CPR will implement appropriate hazing or other exclusion measures prior to April 1. If hazing or other exclusion measures are not implemented, CPR will assign a qualified contractor to conduct pre-construction nesting migratory bird surveys within the approved disturbance area prior to any vegetation removal during the nesting season. If active nest(s) are located, CPR will establish work zone buffers around active nests.</p> <p>If operations will begin more than approximately six months past the field survey date and between March 15 and October 31, additional burrowing owl habitat surveys will be conducted by qualified biologists to ensure no new suitable habitat has been established. If new habitat is identified, burrowing owl surveys will be initiated and CPW will be consulted prior to the start of construction as needed.</p> <p>If work begins between February 1 and August 15, raptor nesting surveys will be conducted by qualified biologists within approximately one week of the start of construction.</p> <p>If work begins between April 1 and August 31, migratory bird nesting surveys will be conducted by qualified biologists within one week of the start of construction.</p> <p>If operations will begin between February 1 and August 31, nesting surveys will be conducted by qualified biologists in accordance with agency-recommended protocols.</p> <p>If active nests are observed within applicable CPW-recommended species-specific buffers, CPW will be consulted and appropriate mitigation measures will be implemented as needed.</p>	
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4	Storm Water/Erosion Control	<p>Reinforced rock for culverts (RRCs) shall be utilized upstream and downstream of the culverts. Reinforced rock berms (RRBs) will also be placed intermittently along the flowline of the roadside ditches. The RRBs will be placed in the interim reclamation phase, while the RRCs will be placed during active construction, and maintained throughout interim reclamation.</p> <p>The stabilized staging area shall be used for equipment storage, parking, a loading/unloading zone, portable toilets, construction trailer, waste collection, and material stockpile and storage. The stabilized staging area will essentially be the perimeter of the working surface during construction.</p> <p>Where the tributary disturbed area is greater than 1 acre, a sediment basin will be planned for the well site at the low point of the pad. It will be implemented at the downstream termination of the diversion ditches. The basin will contain silt from the upstream cut and fill slopes around the drill pad. Periodic maintenance of the pond may be necessary to remove accumulated silt and debris. Sediment basins shall be installed before the site grading begins.</p> <p>Where the tributary disturbed area is less than 1 acre a sediment trap will be planned for the well site at the low point of the pad. It may be implemented at the downstream termination of the diversion ditches. The trap will contain silt from the upstream fill slopes around the pad. Periodic maintenance of traps may be necessary to remove accumulated silt and debris. Sediment traps shall be installed before site grading begins.</p> <p>Unlined diversion ditches will be constructed at the toe of the cut and fill slopes along the boundaries of the pad. These ditches will capture sediment laden runoff from the slopes and channel it into sediment basins and/or traps. In the fill slope application, the material excavated for the ditch shall be compacted and bermed on the downhill side for an additional layer of protection. Diversion ditches shall be installed before grading work begins on the fill slopes and as soon as the site grading is complete on the cut slopes.</p> <p>Cut and fill slopes adjacent to the pad and access road swales shall be stabilized with SM. It shall be applied after grading is complete in the final phase. If the seeding and mulching application does not provide adequate stabilization for the area where slopes exceed 4:1, then more robust bmp's shall be utilized.</p> <p>9" diameter sediment control logs shall be used on the downstream perimeter of the spoil and topsoil stockpiles per manufacturer specifications. Sediment control logs shall be installed in the interim phase once stockpiles have been created.</p> <p>In lieu of a VTC, the contractor shall install an asphalt apron where a proposed access road intersects a paved public roadway. If the public roadway is gravel, a VTC is not necessary. VTC or asphalt apron shall be installed in the initial phase before the site grading begins.</p> <p>Type-m riprap shall be installed downstream of all culverts for a width of 4 times the culvert diameter and a length of 4 times the culvert diameter. Riprap shall be installed in the interim phase, following culvert or outfall installation.</p> <p>Steep slopes shall be protected with straw coconut blankets where indicated on the SWMP plan or where seeding and mulching application is not effective. Blanket shall be installed with seeding during the final phase.</p>	
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5	Material Handling and Spill Prevention	<p>Frequent and thorough inspections throughout all stages of operations.</p> <p>Procedures and training on equipment use in place to avoid and mitigate spills.</p> <p>Double-walled storage tanks will be used where applicable.</p> <p>Continuous monitoring and third-party systems will be used to track fluid volumes and monitor for leaks.</p> <p>Rig will be placed on an impervious plastic liner including four-inch to six-inch high berm walls.</p> <p>Closed loop drilling systems will be utilized.</p> <p>Temporary portable containers (e.g., drums) are stored inside plastic-lined or other impervious containment.</p> <p>General secondary containment (impervious liner) will be placed under equipment.</p> <p>Active drilling fluid tanks will be equipped with a third-party measurement and alarm system (Pason Pit Volume Totalizer) to track tank volumes and changes during the drilling operation.</p> <p>Fluid storage tanks on the location will be equipped with mechanical (visual) level indicators that are inspected by operation personnel.</p> <p>Third-party continuous monitoring on integral systems in addition to routine inspections. In the event of an upset condition, Operators are notified and respond immediately.</p> <p>Regular preventative maintenance schedules followed for equipment.</p> <p>Qualified third-party inspectors will inspect equipment to evaluate compliance with COGCC Rules and Regulations and applicable technical standards.</p> <p>Secondary containment will be installed with an impervious liner.</p> <p>Secondary containment will be sized to 150% of the largest storage tank.</p> <p>Production tanks will be lined where applicable.</p> <p>Pressure and Integrity testing prior to placing equipment into service.</p> <p>All equipment will be installed and tested in accordance with applicable American Society of Mechanical Engineers (ASME) and American Petroleum Institute (API) standards.</p> <p>Underground piping on the facility will be electronically inspected prior to installation using coating deficiency detectors per COGCC 1102.I.(1).</p> <p>Flowlines will be inspected by a qualified third-party inspector who is trained in accordance with 1102.h prior to placing into service.</p> <p>Flowlines will be integrity tested per 1100 Series Rules.</p> <p>All production tanks are built in accordance with API 12F standards.</p> <p>Produced water production tanks at the facility utilize an internal liner.</p> <p>Test ports for integrity testing are installed on insulated tanks.</p> <p>Inspections of all production equipment including temporary equipment.</p> <p>Routine operational checks on the facility.</p> <p>Documented weekly inspections.</p> <p>Audio, Visual, Olfactory (AVO) inspections in accordance with COGCC Rule 609.d. and Air Quality Control Commission Regulation 7</p> <p>Annual Spill Prevention and Control Countermeasure Inspections.</p> <p>Periodic operator training on spill prevention best management practices and equipment operations.</p> <p>Fluid handling equipment will have valves and caps to mitigate leaks.</p> <p>Internal and External Tank integrity Inspections.</p> <p>Annual separator and flow through process equipment cleanouts and integrity evaluations.</p> <p>Pressure testing of all flowlines.</p> <p>Response to all spills and release in accordance with COGCC 900 Series Rules including timely reporting, response, and investigation.</p>	
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6	Dust control	<p>Application of fresh water to disturbed areas during earth moving activities.</p> <p>Application of fresh water or magnesium chloride to graveled surfaces of the Site and associated roads.</p> <p>Use of high-quality construction materials such as crushed granite road base, which generates less dust than other aggregates.</p> <p>Limit disturbance of natural vegetation to only that area that is reasonably necessary for construction.</p> <p>Re-establishment of vegetation on disturbed areas not graveled.</p> <p>Covered storage containers to be used for sand, silica, proppant or similar material during hydraulic fracturing.</p> <p>Establish speed limit on all access roads of 20MPH or less. Personnel failing to comply will be subject to disciplinary action.</p> <p>Establish speed limit on the Site of 5MPH or less. Personnel failing to comply will be subject to disciplinary action.</p> <p>Curtail scope of work during high wind conditions (sustained winds 25MPH or greater).</p> <p>Regular road maintenance will include adding gravel and grading when needed per the executed Road Maintenance Agreement between the Operator and City of Aurora.</p> <p>Additional management practices such as road surfacing, natural wind breaks and barriers, or automation of wells to reduce truck traffic may also be utilized to minimize fugitive dust emissions.</p> <p>Crestone will use a rock base tracking pad at the access point to help remove dirt and prevent debris from collecting on all access roads. As necessary, Crestone will sweep roads nearest the access point of dirt and debris to maintain a clean entrance.</p> <p>Vertically track the stockpile by heavy equipment to prevent wind and water erosion.</p> <p>During construction, salvaged topsoil will be seeded and monitored for erosion and the establishment of undesirable and noxious weeds routinely.</p> <p>Seeding and straw mulch application will occur on the long-term topsoil storage stockpile during interim reclamation.</p>	
7	Noise mitigation	<p>At the time of this NMP, Patterson Rig 345 is scheduled to be utilized for the drilling of the Prosper Farms - Property Reserve location. Rigs have been designed and equipped with sound mitigating equipment including devices to minimize squeaking from the draw works brakes. The drill phase is scheduled to last, at this time, for approximately 75 days.</p> <p>A quiet frac fleet will be used during the completion phase. The frac is scheduled, at this time, to last for approximately 75 days.</p> <p>Idling Equipment – While idling engine/equipment, maintain at the lowest frequency possible, as well as, in a position/location that will prevent sound from carrying to nearby residents.</p> <p>Unnecessary Sounds – Unnecessary sounds such as honking the horn, revving vehicle engines, loud music, and unwarranted metal hammering/banging are all examples of sound that can create nuisance; failure to eliminate unnecessary sound from location will be subject to an internal compliance assessment if reported by a landowner.</p>	

8	Odor mitigation	<p>Drilling rig engine exhausts are pointed straight up so as not to be directed towards any occupied buildings.</p> <p>To mitigate the effects of odor from Crestone's operations, Crestone employ only International Association of Oil & Gas Producers (IOGP) Group III drilling base fluids with <0.5 weight % aromatics and will not use drilling fluids based on diesel. These Group III drilling fluids are odorless and contain no BTEX.</p> <p>Drilling mud chillers are used to keep drilling fluid temperatures low. Low drilling fluid temperatures reduce the volume of fluid vaporized into the air.</p> <p>All drilling fluids will be routed through a closed loop system.</p> <p>No open earthen pits to store fluids or drill cuttings.</p> <p>Drill piping is wiped down each time the drilling operation "trips" out of the hole.</p> <p>Drill cuttings are placed in metal bins and covered to minimize odors prior to being transported to the designated waste management facilities.</p> <p>During the hydraulic fracturing process, diesel-fueled equipment is placed in away that exhausts are pointed straight up to not direct exhaust towards any occupied buildings.</p> <p>Tier II or Tier IV diesel engines are used during hydraulic fracturing operations where available.</p> <p>During operations, tanks are sealed with a thief hatch to prevent emissions.</p> <p>Emission Control Devices (Combustors) will be used to combust any flash gas from tanks.</p> <p>During oil loadout operations, a Truck Loadout Vapor Recovery (TLVR) system will be used to capture and direct odorous air contaminants and emissions to a combustor.</p>	
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9	Drilling/Completion Operations	<p>Most work operations will take place 7-days a week & 24-hour a day. Care will be taken to keep lighting levels at the specified levels on the lighting plans while providing safe, well-lit working areas during night-time and other low-light conditions. Care will also be taken to prevent unintended light from leaving the site and becoming a hazard or nuisance to the public or surrounding wildlife habitat.</p> <p>During the Pad Construction Operations, no night-time work is anticipated. Daylight work will be performed during this work operation.</p> <p>No permanent lighting is proposed for this project. All lighting shall conform to Federal, State, and Industry recognized standards for both on-site workplace safety and off-site public protection (OSHA, FAA, COGCC, IESNA, and ANSI). No direct light, except those governed by FAA standards, shall shine beyond the boundaries of the WPS, especially onto public roads, adjacent properties, and/or high priority habitats. All lighting shall conform with all COGCC, county, municipal, and any applicable governing body's standards.</p> <p>Temporary lighting will be 2-head LED flood lights mounted to the 32-foot walls and 4-head LED flood lights on mobile 25-foot telescoping towers (BUG Rating is B3-U3-G5). All lighting will be capable of adjustment and will be directed inward and between 45-65° downward towards working areas on the WPS. No light should shine above the horizontal plane passing through the center point of the light source. Lights will be shielded with a photometric diffusion fabric or membrane tint to prevent direct or reflected direct light from leaving the site.</p> <p>Wall Panels (e.g., visual/sound walls) will be placed along the perimeter of the WPS and will be removed following Flowback Operations.</p> <p>For workplace safety, no direct or reflected direct light shall shine towards the entrance of the WPS.</p> <p>Watch for and remove glare and reflection points during all work operations of the project from temporary or permanent structures, temporary lighting, vehicles, construction equipment, and clothing/PPE.</p> <p>Any lighting damaged and/or improperly directed or angled will be promptly fixed and/or corrected to conform to the lighting plan.</p> <p>Equipment shall be operated and/or orientated and/or shielded in such a manner that lights permanently affixed to equipment do not shine above the horizontal plane passing through the center point of the light source or shine beyond the boundary of the WPS.</p> <p>For all work operations, once temporary lighting is in place, a lighting self-audit of the site will be performed to ensure that no unintended light will leave the site and become a hazard or a nuisance.</p> <p>For any change to the lighting during any work operations, a lighting self-audit of the site will be performed to ensure that no unintended light will leave the site and become a hazard or a nuisance.</p> <p>For non-working or shut-down days where no personnel are on-site or in working areas, non-essential temporary lighting will be turned off. If no personnel are on-site and essential temporary lighting is needed, the essential temporary lighting will be inspected every 24 hours.</p> <p>All redundant, unused, or not-needed lights will be turned off.</p> <p>Any additional light units used to address workplace safety concerns that are not shown on the lighting photometric plans will be verified by a lighting engineer to ensure that the modified lighting will remain within the required lighting standards stated in this report.</p>	
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10	Interim Reclamation	<ul style="list-style-type: none"> - Seeding and mulch application will be completed within 24 hours of seedbed preparation, weather permitting. - The seed mix will be drill seeded throughout the interim reclamation area. - All seed will be certified weed free and pure live seed (PLS) rated per federal, state, county, and municipal standards. - Certified weed free grass or wheat origin straw mulch will be uniformly applied at rate of 3,000 lbs./ per acre to cover 100% of the seed bed. - Mulch will be properly anchored to the soil surface using a commercial straw crimper with a final orientation northwest to southeast on slopes less than 8% and on contour on greater slopes. - Hydraulically applied tackifier/Ecomatrix BFM will be applied at a rate of 1,000 lbs./ per acre to sufficiently secure straw mulch through the first growing season on slopes greater than 8%, stabilize soils and increase moisture retention, promote seed germination and establishment, and assist in erosion prevention. - Topsoil horizon depth will be identified based on changes in physical characteristics. - Topsoil will be separated from the disturbance area to the depth of the topsoil horizon. - Salvaged topsoil will be stockpiled, seeded with cover crop grasses, and the location marked or documented. - Topsoil will NOT be comingled with subsoil materials during recontouring and subsoil preparation operations. - The grade of the interim reclamation area is between 0-2%. - The surface elevation will be returned as close to the original relative position and contour as practicable during pad size reduction and grading operations. - Seeding will be completed with range-type drill methods. - Certified weed free grass or wheat origin straw will be utilized for mulching operations. - Mowing operations will be commenced when the height of weeds exceeds 6 inches or before seed development. - Herbicide applications will be utilized as needed to treat prostrate, low growing, or perennial noxious weed species for which mowing methods are ineffective. - Herbicide applications will be spot-specific. - A landscape assessment will be conducted prior to ground disturbance to ensure that the recontoured reclamation surface matches pre-disturbance grade and topography. - Any preexisting drainage features will be reestablished during recontouring. - Reseeding will be completed with species consistent with the adjacent plant community. - The selected seed mix for this location is the Loamy Plains Seed Mix. - Crestone will consult with the surface owner regarding the planned seed mix. - Seeding will occur throughout the interim reclamation area and long-term soil stockpiles. - A wildlife fence will be installed to mitigate wildlife access to the interim reclamation area. - A preexisting privacy fence will be installed around the working surface site perimeters. 	
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Total: 10 comment(s)

Attachment List

<u>Att Doc Num</u>	<u>Name</u>
2473616	LOCATION DRAWING
2473617	DIRECTIONAL WELL PLAT
2473618	RELATED LOCATION AND FLOWLINE MAP
2473619	OTHER
403001067	FORM 2A SUBMITTED
403037830	SURFACE AGRMT/SURETY
403037833	ACCESS ROAD MAP
403037847	CULTURAL FEATURES MAP
403037857	LOCATION PICTURES
403037858	NRCS MAP UNIT DESC
403039469	PRELIMINARY PROCESS FLOW DIAGRAMS
403087998	LOCATION AND WORKING PAD GIS SHP
403088015	GEOLOGIC HAZARD MAP
403088172	HYDROLOGY MAP
403088174	LAYOUT DRAWING
403088195	WILDLIFE HABITAT DRAWING

Total Attach: 16 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Final Review	The Director has determined that the OGDG 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.	11/04/2022
OGLA	With operator concurrence, the following was corrected: Corrected Location Drawing uploaded. Corrected Related Location and Flowline attachment uploaded. Corrected Directional Well Plat was uploaded. Uploaded local government permit. Distance to nearest spring or seep was corrected to 5280 ft. Mineral Owner beneath this Oil and Gas Location corrected to FEE. Information regarding Arapahoe local government process was corrected. Corrected Transportation Plan uploaded. Corrected Emergency Response Plan was uploaded. Corrected Noise Mitigation Plan was uploaded. Corrected Fluid Leak Detection Plan was uploaded. Will the Operator install and administer an air quality monitoring program at this Location corrected to Yes.	10/27/2022
OGLA	The Director has determined this OGDG application is complete. Form pushed to IN PROCESS.	08/09/2022
OGLA	Returned to DRAFT for the following reasons: Plan and Attachments corrections	07/27/2022
OGLA	Returned to DRAFT for the following reasons: Plan and Attachments corrections Data Field corrections	06/15/2022
OGLA	The following changes were made with Operator concurrence: - changed the date of the local government permit application from 3/9/2022 to 3/30/2022	06/06/2022

Total: 6 comment(s)

Public Comments

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