FORM 2B Rev 03/21

State of Colorado
Oil and Gas Conservation Commission

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CUMULATIVE IMPACTS DATA IDENTIFICATION

Per Rule 303, this form and all required components and attachments will be submitted for any Oil and Gas Development Plan.

Form Type: [X] **OGDP** [ ] **Partial 2B - Rule 803.b.(2).A UIC Conversion**

OPERATOR INFORMATION

OGCC Operator Number: 10633
Name of Operator: CRESTONE PEAK RESOURCES OPERATING LLC
Address: 1801 CALIFORNIA STREET #2500
City: DENVER State: CO Zip: 80202

Contact Name and Telephone:
Name: Kathy Denzer
Phone: (720) 822-8083
Email: RegulatoryState@crestonepr.com

OIL & GAS DEVELOPMENT PLAN INFORMATION

Oil & Gas Development Plan Name: Sky Ranch

Oil & Gas Development Plan Docket #:

Docket Number
210800130

Oil & Gas Development Plan ID #: Data not required

[ ] This OGDP is included in a Comprehensive Area Plan. CAP ID #:

OIL & GAS LOCATION DATA

1 Oil & Gas Location Name: Sky Ranch Number: 4-65 10-9 South Status: Proposed

OIL & GAS LOCATION INFORMATION

Form 2A Doc#: 402634194

Loc ID#: 0

Oil & Gas Location: QTRQTR: NESE Sec: 10 Twp: 4S Rng: 65W Meridian: 6

Total number of wells planned: 12

Operations Duration

Estimated total number of weeks to construct this Oil & Gas Location: 10

Estimated total number of weeks to drill all planned wells for this Oil & Gas Location: 20

Number of planned drilling occupations to drill all planned wells for this Oil & Gas Location: 1

Estimated total number of weeks to complete all planned wells for this Oil & Gas Location: 17

Number of planned completions occupations to complete all planned wells for this Oil & Gas Location: 1

Will there be simultaneous drilling and completions operations occurring at this Oil & Gas Location? No

Estimated total number of months the Oil & Gas Location will be active, prior to abandonment and reclamation: 240

Noise Impacts

Provide a qualitative evaluation of the incremental adverse noise impacts to the surrounding receptors during the pre-production activities at this Oil & Gas Location.

Receptors to noise imapcts for the Sky Ranch 4-65 10-9 South location will be the 2 nearby Residential Building Units (greater than 2,000') and wildlife. Noise originating from pre-production operations should not increase the ambient noise in the surrounding area due to the use of engineered sound walls.

Provide a qualitative evaluation of the incremental adverse noise impacts to the surrounding receptors during the production stage of this Oil & Gas Location.

Noise originating from production operations should not increase the ambient noise in the surrounding area.

Light Impacts

Provide a qualitative evaluation of the incremental adverse light impacts to the surrounding receptors during the pre-production activities at this Oil & Gas Location.

Light originating from pre-production operations will have minimal impact to receptors outside of the location.

Provide a qualitative evaluation of the incremental adverse light impacts to the surrounding receptors during the production stage of this Oil & Gas Location.

No night work will take place and no permanent lighting will be installed on the site during production activities. Increased light impacts will be minimal to receptors.

Odor Impacts

Provide a qualitative evaluation of the incremental adverse odor impacts to the surrounding receptors during the pre-production activities at this Oil & Gas Location.

There will be a temporary increase in odors during pre-production operations from equipment and traffic exhaust and fluid management during drilling and completions operations.

Provide a qualitative evaluation of the incremental adverse odor impacts to the surrounding receptors during the production stage of this Oil & Gas Location.

There will be minimal odor impacts during production operations.

WATER RESOURCES

[X] This Oil & Gas Location is listed as a sensitive area for water resources.

[X] This Oil & Gas Location is within 2,640 feet of a surface Water of the State.

Estimated depth to groundwater: 212

Estimated total planned on-location storage capacity of the Oil & Gas Location for:

	Number of Tanks	Total Volume (bbls)
Oil	6	3000
Condensate	0	0
Produced Water	2	1000
Other volumes of stored fluids, hydrocarbons, chemicals, or E&P Waste Fluids	4	50

List, with volumes, the “Other” fluids planned to be stored on the Oil & Gas Location, including, but not limited to: hydrocarbons, chemicals, or E&P Waste fluids.

Corrosion inhibitor at wellhead, paraffin chemical at well head, H2S scavenger at gas pipeline, chemical at separator area.

Potential Impacted Surface Water Resources

Provide the distance and direction of the contaminant migration pathway from the Oil & Gas Location to the nearest downstream riparian corridors, wetlands, and surface Waters of the State. Also provide an evaluation of the baseline condition of the nearest downstream riparian corridors, wetlands, and surface Waters of the State.
Enter 2,640 for distances greater than 1/2-mile. Distances are measured along the migration pathway, not a straight line from the edge of the Oil & Gas Location.

	Distance	Direction	Evaluation of Baseline Condition
Riparian Corridor	5280	SW	Not Applicable
Wetland	113	SW	Wetland is a riverine located along an intermittent stream.
Surface Waters of the State	113	SW	Waters of the State is a Wetland riverine located along an intermittent stream.

Potential Impacts to Public Water Resources
Provide the distance, direction, and evaluation of potential impacts to the nearest Public Water System Intake. Enter 5,280 for distances greater than 1-mile.

	Distance	Direction	Evaluation of Baseline Condition
Public Water System Intake	5280	SW	Not Applicable

Estimated Water Usage
Provide the estimated total volumes of the following that are anticipated to be used during the drilling and completions stage of the Oil & Gas Location activity.

Water Source	Volume (bbls)		Volume (bbls)		Volume (bbls)		
Surface Water	0	Recycled Water (Produced Water)	0	Unspecified Source	0	Percentage Recycled Water	0 %
Ground Water	42000	Recycled Water (non-Produced Water)	0	Total Water Usage	42000		

If an unspecified water source is planned to be used, provide a description of the source.

Not applicable.

Evaluate the measures being taken to reduce freshwater use, including reusing and recycling produced water.

Given the location near the Sky Ranch residential development, we do not plan to utilize produced water recycle for this location to reduce truck traffic in the area.

ECOSYSTEM & WILDLIFE RESOURCES

List High Priority Habitats (HPH) that occur within one mile of the Oil & Gas Location and list the distance from working pad surface. If the location is partially or entirely within a HPH list the distance as '0' and provide the estimated acreage disturbance of that HPH by the location construction.

High Priority Habitat (HPH) Name:	Distance	Estimated Acreage Disturbed
Aquatic Native Species Conservation WAters	3651	0

List total size of disturbed acreage and disturbed High Priority Habitat (HPH) area (in acres) during the Oil & Gas Location construction and after interim reclamation.

	Total Acreage (acres)	Total HPH Acreage (acres)
Construction	17.38	0
Post-interim Reclamation	9.9	0

Provide any further information regarding the location's HPH disturbance.

Not Applicable.

Provide the acreage of the existing land use types that occur within one mile of the Oil & Gas Location. Note: a circle with a one mile radius is approximately 2010 acres.

		Existing Acreage		Existing Acreage		Existing Acreage		Existing Acreage
Crop Land:	Irrigated	0	Non-Irrigated	2010	Conservation Reserve Program(CRP)	0		
Non-Crop Land:	Rangeland	0	Forestry	0	Recreation	0	Other	0
Subdivided:	Industrial	0	Commercial	0	Residential	0		

If any land use is industrial, provide a description of the use or operation of the industrial facilities.

Not Applicable.

If any land use is "Other", provide a description of the land use.

Not Applicable.

If any portion of the land use for the proposed oil and gas location includes Rangeland, Forestry, or Recreation, provide a list of the plant community or communities and estimated acreage disturbed for each:

	Estimated Disturbed Acreage		Estimated Disturbed Acreage		Estimated Disturbed Acreage		Estimated Disturbed Acreage
Disturbed Grassland		Shrub Land		Mountain Riparian		Wetland Aquatic	
Native Grassland	0	Plains Riparian		Forest Land		Alpine	

Provide a qualitative evaluation of incremental adverse impacts to ecosystems, including any plant communities, as a result of Oil and Gas Operations associated with the proposed Oil & Gas Location.

Potential adverse impacts to the ecosystem are anticipated to be minimal. (See Wildlife Protection Plan attached to Form 2A which includes a qualitative evaluation of potential adverse impacts to ecosystems, including vegetative communities, surface waters, and wildlife).

Soil Resources

List all soil map units that occur within the Oil & Gas Location and list the estimated total area (in acres) disturbance of each soil map unit.

NRCS Map Unit Name:	Estimated Disturbed Acreage
Fondis-Colby silt loams 3 to 5 percent slopes	7
Weld Silt Loam, 0 to 3 percent slopes	9
Renohill-Buick Loams, 3 to 9 percent slopes	2

PUBLIC WELFARE

[X] This Oil & Gas Location lies within a Disproportionately Impacted Community as defined in the 100-series rules.

Building Units within 1-mile	0'-2,000'	2,001'-5,280'
Total number of ResidentialBuilding Units:	0	1
Total Number of non-school AND non child care center High Occupancy Building Units:	0	0
Total number of School Facilities:	0	0
Total number of Child Care Centers:	0	0

Recreation and Scenic Value

List all State Parks, State Trust Lands, or State Wildlife Area within 1-mile of the Oil & Gas Location.

None.

List all Designated Outdoor Activity Areas within 1-mile of the Oil & Gas Location.

None.

List all mapped trails that support any of the following recreational activities within 1-mile of the Oil & Gas Location: Hiking, Biking, Horseback Riding, Motorcycle Riding, ATV Riding, OHV, Nordic Skiing, Snowmobiling, or Snowshoeing.

None.

AIR RESOURCES

Pre-Production Emissions

Complete the following chart based on the estimated total equipment emissions (in tons) for the Oil & Gas Location during the pre-production (construction, drilling, completions) stage for Criteria Pollutants by equipment type.

	NOx	CO	VOCs	Methane	Ethane	CO2	N2O
Process Heaters or Boilers	10.29	2.57	0.1	0.03	0	0	0.13
Storage Tanks	0.18	0.83	0.65	0	0	0	0
Venting or Blowdowns	0	0	0.5	1.05	0.37	0.04	0
Combustion Control Devices	0.2	0.89	1.64	3.43	1.2	362	0
Non-Road Internal Combustion Engines	248.32	207.61	38.18	1.67	0	41148	0.33
Drill Mud	0	0	2.59	5.41	1.9	0.19	0
Flowback or Completions	0.34	1.55	11.28	23.57	8.26	629	0
Loadout	0	0	0	0	0	0	0

Production Emissions

Complete the following chart based on the estimated full facility equipment emissions (in tons) for the Oil & Gas Location once the Oil & Gas Location has entered the production stage, for Criteria Pollutants. The table should be filled out based on ONE year of operation.

	NOx	CO	VOCs	Methane	Ethane	CO2	N2O
Stationary Engines or Turbines	12.65	25.3	8.85	10.2	4.36	4877	0.01
Process Heaters or Boilers	3.86	3.25	0.21	0.09	0.12	4638	0.09
Storage Tanks	0.49	2.25	36.48	0.79	4.32	1010.54	0
Dehydration Units	0	0	0	0	0	0	0

Pneumatic Pumps	0	0	0	0	0	0	0
Pneumatic Controllers	0	0	0	0	0	0	0
Separators	0	0	0	0	0	0	0
Fugitives			0.29	0.74	0.26	0.12	
Venting or Blowdowns	0	0	3.76	13.4	4.74	4.09	0
Combustion Control Devices	0	0	0	0	0	0	0
Loadout	0	0	5.7	0.05	0.06	0	0
Non-Road Internal Combustion Engines	0	0	0	0	0	0	0
Well Bradenhead	0	0	0.53	111.26	38.98	3.9	0
Well Maintenance	0	0	6.04	12.61	4.42	44.24	0

Diesel Vehicle Road Miles
Complete the following chart for diesel vehicle road miles during each stage of oil and gas location operations.

During Construction: 85845 During Completions: 1200000

During Drilling: 204000 During Interim Reclamation: 6000

During Production: 52000

PUBLIC HEALTH RESOURCES

Pre-Production Emissions
Complete the following chart based on the estimated total equipment emissions (in lbs) for the Oil & Gas Location during the pre-production (construction, drilling, completions) stage for Hazardous Air Pollutants (HAP).

	BEN	TOL	ETH	XYL	NHE	TMP	H2S	FDE	MET	HAP
Process Heaters or Boilers	0	6	0	0	0	0	0	63	0	70
Storage Tanks	0	0	0	0	0	0	0	0	0	0
Venting or Blowdowns	1	1	0	1	0	0	0	0	0	4
Combustion Control Devices	5	4	0	2	40	0	0	0	0	51
Non-Road Internal Combustion Engines	394	144	0	99	0	0	0	111	0	748
Drill Mud	7	6	0	3	63	0	0	0	0	80
Flowback or Completions	32	27	2	12	276	0	1	0	0	349
Loadout	0	0	0	0	0	0	0	0	0	0

Production Emissions
Complete the following chart based on the estimated total equipment emissions (in lbs) for the Oil & Gas Location once the Oil & Gas Location has entered the production stage, for Hazardous Air Pollutants (HAP). The table should be filled out based on ONE year of operation.

	BEN	TOL	ETH	XYL	NHE	TMP	H2S	FDE	MET	HAP
Stationary Engines or Turbines	140	49	2	17	0	0	0	1818	271	2298
Process Heaters or Boilers	0	0	0	0	139	0	0	6	0	145
Storage Tanks	398	282	30	91	2268	51	0	0	0	3121
Dehydration Units	0	0	0	0	0	0	0	0	0	0
Pneumatic Pumps	0	0	0	0	0	0	0	0	0	0
Pneumatic Controllers	0	0	0	0	0	0	0	0	0	0
Separators	0	0	0	0	0	0	0	0	0	0
Fugitives	4	4	0	2	7	0	0	0	0	16
Venting or Blowdowns	123	126	4	74	57	0	0	0	0	385
Combustion Control Devices	0	0	0	0	0	0	0	0	0	0
Non-Road Internal Combustion Engines	0	0	0	0	0	0	0	0	0	0
Loadout	21	0	0	0	175	0	0	0	0	196
Well Bradenhead	150	130	8	54	1302	1	0	0	0	1645
Well Maintenance	17	15	1	6	148	0	0	0	0	187

Provide a qualitative evaluation of any potential acute or chronic, short- or long-term incremental impacts to public health as a result of the estimated total pre-production hazardous air pollutant emissions.

Crestone contracted with an independent qualified third-party consulting firm, CTEH LLC., to design and perform studies to characterize the short-term impacts on local air quality and public health from discrete operational phases at four oil and gas well pads being developed in Weld County, Colorado: Big Horn, Cosslett, Echevarria, and Kugel well pads. The specific goals of this project were to: (1) collect a high-resolution data set of chemical concentrations in air near the well pad and the surrounding communities, and 2) evaluate the impact on risks to public health, if any, from the release of oil and gas-related compounds into the air during specific operational phases of well development. The complete study has been provided as an attachment in the Cumulative Impact Plan Section of this OGDP application and is titled "Community Exposure and Health Risk Assessment: Real Time Air Monitoring and Air Sampling, 12/11/2019."
The four phases of this study included all pre-production phases; drilling, completions, and flowback. The study was performed at locations where there were numerous building units and distance to building units were closer than this OGDP application for the Sky Ranch Pad. During the study, Crestone utilized the BMPs for all phases of operations similar to the BMPs in OGDP application. In some instances, the Sky Ranch OGDP application provided even more effective BMPs than the subjects of the public health study.
The following BMPs were employed during the time of the study and will also be employed at the Sky Ranch pad. Drilling Class Ill drilling fluid - oil based mud (odorless, no BTEX)
Mud Chillers - used to control cuttings odor while drilling through hydrocarbon bearing zones
Rotary steerable unit that reduces drilling time on-site
Local electrical power for drill rig - reduces air emissions, NOx
All equipment is on impermeable ground liners during drilling and completions
Continuous emissions monitoring for volatile organic compounds, PM, methane. Equipped with Summa Canister sampling capabilities in the event of an emissions detection event.
Completions:
Completions fleet fuel substitution - use compressed natural gas to reduce use of diesel fuel; up to 50% replacement when possible
Low-noise completion fleets - utilizing insulated engine housing and hospital grade mufflers
Continuous emissions monitoring for volatile organic compounds, PM, methane. Equipped with Summa Canister sampling apabilities in the event of an emissions detection event.
Flowback
Vapor Recovery Units are used during flowback operations and initial year of production
Closed-top oil tanks - used during flowback operations and drill out
Combustor used for tank vapors during flowback and drill out
LDAR surveys done weekly to confirm leak tightness
Continuous emissions monitoring for volatile organic compounds, PM, methane. Equipped with Summa Canister sampling capabilities in the event of an emissions detection event.
CTEH collected over 5,000 real-time measurements, along with 20 analytical samples, in communities around multiple well pads.
Findings from this dataset indicate:
The compounds that may be emitted during any or all operations that CTEH has studied are not expected to cause any short-term adverse health effects to nearby residents, including sensitive populations.
Real-time data indicate no adverse health risks to nearby communities, including sensitive individuals, from exposures to VOCs, H2S r PM that may be emitted from operational phases at the various Crestone well pads. Analytical air sampling detections for each analyte were below their acute health guideline value established by the federal Agency for Toxic Substances and Disease Registry ATSDR).
The CTEH study was conducted at operations that will be nearly identical to the Sky Ranch Pad OGDP. The conclusions above were based on a quantitative in-depth study of Crestone specific operations. Based on these measurements/conclusions and the fact that he Lone Tree North OGDP has nearly identical or better BMPs in place there are no expected short- or long-term incremental impacts to public health as a result of the estimated total hazardous air pollutant emissions during the pre-production phase of this Oil and Gas Location.

Provide a qualitative evaluation of any potential acute or chronic, short- or long-term incremental impacts to public health as a result of the estimated annual production hazardous air pollutant emissions.

Crestone contracted with an independent qualified third-party consulting firm, CTEH LLC., to design and perform studies to characterize the short-term impacts on local air quality and public health from discrete operational phases at four oil and gas well pads being developed in Weld County, Colorado: Big Horn, Cosslett, Echevarria, and Kugel well pads. The specific goals of this project were to: 1) collect a high-resolution data set of chemical concentrations air near the well pad and the surrounding communities, and (2) evaluate the impact on risks to public health, if any, from the release of oil and gas-related compounds into the air during specific operational phases of well development. The complete study has been provided as an attachment and is titled "Community Exposure and Health Risk Assessment: Real Time Air Monitoring and Air Sampling, 12/11/2019 ."

The phases of this study included studies of production locations that are designed very similar to the proposed application. The study was performed at locations where there were numerous building units and distance to building units were closer than this OGDP application for the Sky Ranch North Pad. The following BMPs were employed during the time of the study and will also be employed at the Sky Ranch North pad.
Production:
Oil pipeline tank away capacity, minimizes number of tanks associated emissions
Electric vapor recovery units
Instrument air actuated pneumatic controls
Vapor Recovery towers
Combustors to capture tank vapors
Continuous emissions monitoring for volatile organic compounds, PM, methane. Equipped with Summa Canister sampling capabilities in the event of an emissions detection event.
Leak detection and repair program as required under Regulation 7
CTEH collected over 5,000 real-time measurements, along with 20 analytical samples, in communities around multiple well pads.
Findings from this dataset indicate:
The compounds that may be emitted during any or all operations that CTEH has studied are not expected to cause any short-term adverse health effects to nearby residents, including sensitive populations.
Real-time data indicate no adverse health risks to nearby communities, including sensitive individuals, from exposures to VOCs, H2S r PM that may be emitted from operational phases at the various Crestone well pads. Analytical air sampling detections for each analyte were below their acute health guideline value established by the federal Agency for Toxic Substances and Disease Registry (ATSDR).
The CTEH study was conducted at operations that will be nearly identical to the Sky Ranch Pad OGDP. The conclusions above were based on a quantitative in-depth study of Crestone specific operations. Based on these measurements/conclusions and the fact that the Sky Ranch OGDP has nearly identical or better BMPs in place there are no expected short- or long-term incremental impacts to public health as a result of the estimated total hazardous air pollutant emissions during the pre-production phase of this Oil and Gas Location.

Dust Impacts
The following are the estimated number of truck trips traveling on or off the Oil & Gas Location.

Total	During Construction	During Drilling	During Completions	During Interim Reclamation	During Production
Monthly	10	1360	1200	72	200
Annual	120	4080	8000	108	17033

Estimated total pounds (lbs) of proppant to be used during completions activities. 0

Provide the type of proppant(s) that are planned to be used during completions activities.

40/70 mesh, 100 mesh

Provide an evaluation of the proposed proppant management system that will be used to minimize dust during completions activities, including the estimated amount of silica dust that will leave the Oil & Gas Location.

Utilize box system that has built in dust mitigation. Exposure limit testing by contractor indicates that no silica dust is expected to migrate off location during normal operations and weather conditions.

EXISTING OIL & GAS

Total number of oil & gas locations within 1-mile of the Oil & Gas Location:

	Total Number of Locations		Total Number of Wells
Active, built	7	Active, built	11
Permitted by COGCC, unbuilt	0	Permitted by COGCC, unbuilt	1
Permitted by Relevant Local Government & not COGCC, unbuilt	0	Proposed	0
Proposed	0	Plugged and Abandoned	1

Total acreage disturbance during construction of the active and proposed oil & gas locations within 1-mile of the proposed Oil & Gas Location: 54

Source for acreage total:

☐ Field Observation/Measurement

[X] COGCC Location Files

[ ] Aerial PhotosOther

[ ] Other

If "Other" is selected, please describe the source use to determine the acreage total for construction disturbance of the active and proposed oil & gas locations within 1-mile of the proposed Oil & Gas Location.

N/A

Total permitted capacity of on-location storage (in number of pits and tanks) of the active and proposed oil & gas locations within 1-mile of the Oil & Gas Location : NOTE: providing the existing number of pits and tanks on surrounding existing locations is optional.

Source for storage totals:

[ ] Field Observation/Measurement

[X] COGCC Location Files

[ ] Aerial PhotosOther

[ ] Other

	Permitted Onsite Storage Capacity	Existing Onsite Storage Capacity
Oil	37	31
Condensate	0	0
Produced Water	12	10
Pits	0	0

If "Other" is selected, please describe the source use to determine the tank totals for the active and proposed oil & gas locations within 1-mile of the proposed Oil & Gas Location.

N/A

2 Oil & Gas Location Name: Prosper Farms Number: 4-65 11-12 Status: Active, built

OIL & GAS LOCATION INFORMATION

Form 2A Doc#: 401415750

Loc ID#: 456540

Oil & Gas Location: QTRQTR: NWSW Sec: 11 Twp: 4S Rng: 65W Meridian: 6

Total number of wells planned: 0

Operations Duration

Estimated total number of weeks to construct this Oil & Gas Location: 0

Estimated total number of weeks to drill all planned wells for this Oil & Gas Location: 0

Number of planned drilling occupations to drill all planned wells for this Oil & Gas Location: 0

Estimated total number of weeks to complete all planned wells for this Oil & Gas Location: 0

Number of planned completions occupations to complete all planned wells for this Oil & Gas Location: 0

Will there be simultaneous drilling and completions operations occurring at this Oil & Gas Location? No

Estimated total number of months the Oil & Gas Location will be active, prior to abandonment and reclamation: 240

Noise Impacts

Provide a qualitative evaluation of the incremental adverse noise impacts to the surrounding receptors during the pre-production activities at this Oil & Gas Location.

None. This is an existing location. There will not be any future drilling activities on this pad. Production Only.

Provide a qualitative evaluation of the incremental adverse noise impacts to the surrounding receptors during the production stage of this Oil & Gas Location.

Noise during the production phase will be limited to well maintenance and inspections. There will be minimal impacts from noise.

Light Impacts

Provide a qualitative evaluation of the incremental adverse light impacts to the surrounding receptors during the pre-production activities at this Oil & Gas Location.

None. This is an existing location. There will not be any future drilling activities on this pad. Production Only.

Provide a qualitative evaluation of the incremental adverse light impacts to the surrounding receptors during the production stage of this Oil & Gas Location.

There are no permanent lights installed on the Prosper Farms 4-65 11-12 location. The only lights that will be on location are from trucks hauling water.

Odor Impacts

Provide a qualitative evaluation of the incremental adverse odor impacts to the surrounding receptors during the pre-production activities at this Oil & Gas Location.

None. This is an existing location. There will not be any future drilling activities on this pad. Production Only.

Provide a qualitative evaluation of the incremental adverse odor impacts to the surrounding receptors during the production stage of this Oil & Gas Location.

The odor during the production stage is minimal as indicated by the Emissions data. There is also minimal traffic during production.

WATER RESOURCES

[X] This Oil & Gas Location is listed as a sensitive area for water resources.

[X] This Oil & Gas Location is within 2,640 feet of a surface Water of the State.

Estimated depth to groundwater: 18

Estimated total planned on-location storage capacity of the Oil & Gas Location for:

	Number of Tanks	Total Volume (bbls)
Oil	7	3000
Condensate	0	0
Produced Water	2	1000
Other volumes of stored fluids, hydrocarbons, chemicals, or E&P Waste Fluids	0	0

List, with volumes, the “Other” fluids planned to be stored on the Oil & Gas Location, including, but not limited to: hydrocarbons, chemicals, or E&P Waste fluids.

N/A

Potential Impacted Surface Water Resources

Provide the distance and direction of the contaminant migration pathway from the Oil & Gas Location to the nearest downstream riparian corridors, wetlands, and surface Waters of the State. Also provide an evaluation of the baseline condition of the nearest downstream riparian corridors, wetlands, and surface Waters of the State.
Enter 2,640 for distances greater than 1/2-mile. Distances are measured along the migration pathway, not a straight line from the edge of the Oil & Gas Location.

	Distance	Direction	Evaluation of Baseline Condition
Riparian Corridor	5280	SW	Not Applicable
Wetland	422	NE	Wetland is a riverine located along an intermittent stream.
Surface Waters of the State	422	NE	Wetland is a riverine located along an intermittent stream.

Potential Impacts to Public Water Resources
Provide the distance, direction, and evaluation of potential impacts to the nearest Public Water System Intake. Enter 5,280 for distances greater than 1-mile.

	Distance	Direction	Evaluation of Baseline Condition
Public Water System Intake	5280	SW	Not Applicable.

Estimated Water Usage
Provide the estimated total volumes of the following that are anticipated to be used during the drilling and completions stage of the Oil & Gas Location activity.

Water Source	Volume (bbls)		Volume (bbls)		Volume (bbls)		
Surface Water	0	Recycled Water (Produced Water)	0	Unspecified Source	0	Percentage Recycled Water	0 %
Ground Water	0	Recycled Water (non-Produced Water)	0	Total Water Usage	0		

If an unspecified water source is planned to be used, provide a description of the source.

This is an existing location. There are no future drilling activities planned. Production Only.

Evaluate the measures being taken to reduce freshwater use, including reusing and recycling produced water.

This is an existing location. There are no future drilling activities planned. Production Only.

ECOSYSTEM & WILDLIFE RESOURCES

List High Priority Habitats (HPH) that occur within one mile of the Oil & Gas Location and list the distance from working pad surface. If the location is partially or entirely within a HPH list the distance as '0' and provide the estimated acreage disturbance of that HPH by the location construction.

High Priority Habitat (HPH) Name:	Distance	Estimated Acreage Disturbed
Aquatic Native Species Conservation Waters	4824	0

List total size of disturbed acreage and disturbed High Priority Habitat (HPH) area (in acres) during the Oil & Gas Location construction and after interim reclamation.

	Total Acreage (acres)	Total HPH Acreage (acres)
Construction	0	0
Post-interim Reclamation	6.92	0

Provide any further information regarding the location's HPH disturbance.

Provide the acreage of the existing land use types that occur within one mile of the Oil & Gas Location. Note: a circle with a one mile radius is approximately 2010 acres.

		Existing Acreage		Existing Acreage		Existing Acreage		Existing Acreage
Crop Land:	Irrigated	0	Non-Irrigated	0	Conservation Reserve Program(CRP)	0		
Non-Crop Land:	Rangeland	0	Forestry	0	Recreation	0	Other	0
Subdivided:	Industrial	0	Commercial	0	Residential	0		

If any land use is industrial, provide a description of the use or operation of the industrial facilities.

N/A

If any land use is "Other", provide a description of the land use.

N/A

If any portion of the land use for the proposed oil and gas location includes Rangeland, Forestry, or Recreation, provide a list of the plant community or communities and estimated acreage disturbed for each:

	Estimated Disturbed Acreage		Estimated Disturbed Acreage		Estimated Disturbed Acreage		Estimated Disturbed Acreage
Disturbed Grassland	0	Shrub Land	0	Mountain Riparian	0	Wetland Aquatic	0
Native Grassland	0	Plains Riparian	0	Forest Land	0	Alpine	0

Provide a qualitative evaluation of incremental adverse impacts to ecosystems, including any plant communities, as a result of Oil and Gas Operations associated with the proposed Oil & Gas Location.

N/A

Soil Resources

List all soil map units that occur within the Oil & Gas Location and list the estimated total area (in acres) disturbance of each soil map unit.

NRCS Map Unit Name:	Estimated Disturbed Acreage
Fondis-Colby, silt loams 3-5% Slopes	0
Adena-Colby, silt loams 1-5% slopes	0

PUBLIC WELFARE

[X] This Oil & Gas Location lies within a Disproportionately Impacted Community as defined in the 100-series rules.

Building Units within 1-mile	0'-2,000'	2,001'-5,280'
Total number of ResidentialBuilding Units:	0	1
Total Number of non-school AND non child care center High Occupancy Building Units:	0	0
Total number of School Facilities:	0	0
Total number of Child Care Centers:	0	0

Recreation and Scenic Value

List all State Parks, State Trust Lands, or State Wildlife Area within 1-mile of the Oil & Gas Location.

None

List all Designated Outdoor Activity Areas within 1-mile of the Oil & Gas Location.

None

List all mapped trails that support any of the following recreational activities within 1-mile of the Oil & Gas Location: Hiking, Biking, Horseback Riding, Motorcycle Riding, ATV Riding, OHV, Nordic Skiing, Snowmobiling, or Snowshoeing.

None

AIR RESOURCES

Pre-Production Emissions

Complete the following chart based on the estimated total equipment emissions (in tons) for the Oil & Gas Location during the pre-production (construction, drilling, completions) stage for Criteria Pollutants by equipment type.

	NOx	CO	VOCs	Methane	Ethane	CO2	N2O
Process Heaters or Boilers	0	0	0	0	0	0	0
Storage Tanks	0	0	0	0	0	0	0
Venting or Blowdowns	0	0	0	0	0	0	0
Combustion Control Devices	0	0	0	0	0	0	0
Non-Road Internal Combustion Engines	0	0	0	0	0	0	0
Drill Mud	0	0	0	0	0	0	0
Flowback or Completions	0	0	0	0	0	0	0
Loadout	0	0	0	0	0	0	0

Production Emissions

Complete the following chart based on the estimated full facility equipment emissions (in tons) for the Oil & Gas Location once the Oil & Gas Location has entered the production stage, for Criteria Pollutants. The table should be filled out based on ONE year of operation.

	NOx	CO	VOCs	Methane	Ethane	CO2	N2O
Stationary Engines or Turbines	7.96	15.91	5.57	6.41	2.74	3067.64	0.01
Process Heaters or Boilers	1.29	1.08	0.07	0.03	0.04	1545.88	0.03
Storage Tanks	0.16	0.75	12.16	0.26	1.44	336.85	0
Dehydration Units	0	0	0	0	0	0	0
Pneumatic Pumps	0	0	0	0	0	0	0
Pneumatic Controllers	0	0	0	0	0	0	0
Separators	0	0	0	0	0	0	0
Fugitives			0.1	0.25	0.09	0.04	
Venting or Blowdowns	0	0	3.76	13.4	4.74	4.09	0
Combustion Control Devices	0	0	0	0	0	0	0
Loadout	0	0	1.9	0.02	0.02	0	0

Non-Road Internal Combustion Engines	0	0	0	0	0	0	0
Well Bradenhead	0	0	0.18	37.09	12.99	1.3	0
Well Maintenance	0	0	2.01	4.2	1.47	14.75	0

Diesel Vehicle Road Miles
Complete the following chart for diesel vehicle road miles during each stage of oil and gas location operations.

During Construction: 0 During Completions: 0

During Drilling: 0 During Interim Reclamation: 0

During Production: 52000

PUBLIC HEALTH RESOURCES

Pre-Production Emissions
Complete the following chart based on the estimated total equipment emissions (in lbs) for the Oil & Gas Location during the pre-production (construction, drilling, completions) stage for Hazardous Air Pollutants (HAP).

	BEN	TOL	ETH	XYL	NHE	TMP	H2S	FDE	MET	HAP
Process Heaters or Boilers	0	0	0	0	0	0	0	0	0	0
Storage Tanks	0	0	0	0	0	0	0	0	0	0
Venting or Blowdowns	0	0	0	0	0	0	0	0	0	0
Combustion Control Devices	0	0	0	0	0	0	0	0	0	0
Non-Road Internal Combustion Engines	0	0	0	0	0	0	0	0	0	0
Drill Mud	0	0	0	0	0	0	0	0	0	0
Flowback or Completions	0	0	0	0	0	0	0	0	0	0
Loadout	0	0	0	0	0	0	0	0	0	0

Production Emissions
Complete the following chart based on the estimated total equipment emissions (in lbs) for the Oil & Gas Location once the Oil & Gas Location has entered the production stage, for Hazardous Air Pollutants (HAP). The table should be filled out based on ONE year of operation.

	BEN	TOL	ETH	XYL	NHE	TMP	H2S	FDE	MET	HAP
Stationary Engines or Turbines	88.13	31.12	1.38	10.88	0	0	0	1143.39	170.67	1445.57
Process Heaters or Boilers	0.05	0.09	0	0	46.38	0	0	1.93	0	48.45
Storage Tanks	132.77	94.11	10.02	30.42	756	17.13	0	0	0	1040.44
Dehydration Units	0	0	0	0	0	0	0	0	0	0
Pneumatic Pumps	0	0	0	0	0	0	0	0	0	0
Pneumatic Controllers	0	0	0	0	0	0	0	0	0	0
Separators	0	0	0	0	0	0	0	0	0	0
Fugitives	1.23	1.23	0.05	0.7	2.24	0	0	0	0	5.45
Venting or Blowdowns	123.12	126.4	4.4	74.33	56.63	0.01	0.04	0	0	384.93
Combustion Control Devices	0	0	0	0	0	0	0	0	0	0
Non-Road Internal Combustion Engines	0	0	0	0	0	0	0	0	0	0
Loadout	6.84	0.03	0	0	58.4	0	0	0	0	65.27
Well Bradenhead	49.95	43.19	2.82	18.11	434.01	0.24	0.01	0	0	548.32
Well Maintenance	5.66	4.89	0.32	2.05	49.19	0.03	0.1	0	0	62.24

Provide a qualitative evaluation of any potential acute or chronic, short- or long-term incremental impacts to public health as a result of the estimated total pre-production hazardous air pollutant emissions.

None. This is an existing location. There will not be any future drilling activities on this pad. Production Only.

Provide a qualitative evaluation of any potential acute or chronic, short- or long-term incremental impacts to public health as a result of the estimated annual production hazardous air pollutant emissions.

Crestone contracted with an independent qualified third-party consulting firm, CTEH LLC., to design and perform studies to characterize the short-term impacts on local air quality and public health from discrete operational phases at four oil and gas well pads being developed in Weld County, Colorado: Big Horn, Cosslett, Echevarria, and Kugel well pads. The specific goals of this project were to: 1) collect a high-resolution data set of chemical concentrations air near the well pad and the surrounding communities, and (2) evaluate the impact on risks to public health, if any, from the release of oil and gas-related compounds into the air during specific operational phases of well development. The complete study has been provided as an attachment and is titled "Community Exposure and Health Risk Assessment: Real Time Air Monitoring and Air Sampling, 12/11/2019 ."

The phases of this study included studies of production locations that are designed very similar to the proposed application. The study was performed at locations where there were numerous building units and distance to building units were closer than this OGDP application for the Sky Ranch North Pad. The following BMPs were employed during the time of the study and will also be employed at the Sky Ranch North pad.
Production:
Oil pipeline tank away capacity, minimizes number of tanks associated emissions
Electric vapor recovery units
Instrument air actuated pneumatic controls
Vapor Recovery towers
Combustors to capture tank vapors
Continuous emissions monitoring for volatile organic compounds, PM, methane. Equipped with Summa Canister sampling capabilities in the event of an emissions detection event.
Leak detection and repair program as required under Regulation 7
CTEH collected over 5,000 real-time measurements, along with 20 analytical samples, in communities around multiple well pads.
Findings from this dataset indicate:
The compounds that may be emitted during any or all operations that CTEH has studied are not expected to cause any short-term adverse health effects to nearby residents, including sensitive populations.
Real-time data indicate no adverse health risks to nearby communities, including sensitive individuals, from exposures to VOCs, H2S r PM that may be emitted from operational phases at the various Crestone well pads. Analytical air sampling detections for each analyte were below their acute health guideline value established by the federal Agency for Toxic Substances and Disease Registry (ATSDR).
The CTEH study was conducted at operations that will be nearly identical to the Sky Ranch Pad OGDP. The conclusions above were based on a quantitative in-depth study of Crestone specific operations. Based on these measurements/conclusions and the fact that the Sky Ranch OGDP has nearly identical or better BMPs in place there are no expected short- or long-term incremental impacts to public health as a result of the estimated total hazardous air pollutant emissions during the pre-production phase of this Oil and Gas Location.

Dust Impacts

The following are the estimated number of truck trips traveling on or off the Oil & Gas Location.

Total	During Construction	During Drilling	During Completions	During Interim Reclamation	During Production
Monthly	0	0	0	0	200
Annual	0	0	0	0	17033

Estimated total pounds (lbs) of proppant to be used during completions activities. 0

Provide the type of proppant(s) that are planned to be used during completions activities.

None. This is an existing location. There will not be any future drilling activities on this pad. Production Only.

Provide an evaluation of the proposed proppant management system that will be used to minimize dust during completions activities, including the estimated amount of silica dust that will leave the Oil & Gas Location.

None. This is an existing location. There will not be any future drilling activities on this pad. Production Only.

EXISTING OIL & GAS

Total number of oil & gas locations within 1-mile of the Oil & Gas Location:

	Total Number of Locations		Total Number of Wells
Active, built	7	Active, built	11
Permitted by COGCC, unbuilt	0	Permitted by COGCC, unbuilt	1
Permitted by Relevant Local Government & not COGCC, unbuilt	0	Proposed	0
Proposed	0	Plugged and Abandoned	1

Total acreage disturbance during construction of the active and proposed oil & gas locations within 1-mile of the proposed Oil & Gas Location: 54

Source for acreage total:

☐ Field Observation/Measurement

☒ COGCC Location Files

☐ Aerial PhotosOther

☐ Other

If "Other" is selected, please describe the source use to determine the acreage total for construction disturbance of the active and proposed oil & gas locations within 1-mile of the proposed Oil & Gas Location.

N/A

Total permitted capacity of on-location storage (in number of pits and tanks) of the active and proposed oil & gas locations within 1-mile of the Oil & Gas Location : NOTE: providing the existing number of pits and tanks on surrounding existing locations is optional.

Source for storage totals:

☐ Field Observation/Measurement
☒ COGCC Location Files
☐ Aerial PhotosOther
☐ Other

	Permitted Onsite Storage Capacity	Existing Onsite Storage Capacity
Oil	37	31
Condensate	0	0
Produced Water	12	10
Pits	0	0

If "Other" is selected, please describe the source use to determine the tank totals for the active and proposed oil & gas locations within 1-mile of the proposed Oil & Gas Location.

N/A

3 Oil & Gas Location Name: Sky Ranch 4-65 9-10 Number: 1H Status: Active, built

OIL & GAS LOCATION INFORMATION

Form 2A Doc#: 400572719

Loc ID#: 437367

Oil & Gas Location: QTRQTR: NENE Sec: 10 Twp: 4S Rng: 65W Meridian: 6

Total number of wells planned: 0

Operations Duration

Estimated total number of weeks to construct this Oil & Gas Location: 0

Estimated total number of weeks to drill all planned wells for this Oil & Gas Location: 0

Number of planned drilling occupations to drill all planned wells for this Oil & Gas Location: 0

Estimated total number of weeks to complete all planned wells for this Oil & Gas Location: 0

Number of planned completions occupations to complete all planned wells for this Oil & Gas Location: 0

Will there be simultaneous drilling and completions operations occurring at this Oil & Gas Location? No

Estimated total number of months the Oil & Gas Location will be active, prior to abandonment and reclamation: 240

Noise Impacts

Provide a qualitative evaluation of the incremental adverse noise impacts to the surrounding receptors during the pre-production activities at this Oil & Gas Location.

None. This is an existing location. There will not be any future drilling activities on this pad. Production only.

Provide a qualitative evaluation of the incremental adverse noise impacts to the surrounding receptors during the production stage of this Oil & Gas Location.

Impacts from noise to the receptors will be minimal in production phase.

Light Impacts

Provide a qualitative evaluation of the incremental adverse light impacts to the surrounding receptors during the pre-production activities at this Oil & Gas Location.

None. This is an existing location. There will not be any future drilling activities on this pad. Production only.

Provide a qualitative evaluation of the incremental adverse light impacts to the surrounding receptors during the production stage of this Oil & Gas Location.

There are no permanent lights on location during the production phase. There will be minimal incremental adverse impacts from light.

Odor Impacts

Provide a qualitative evaluation of the incremental adverse odor impacts to the surrounding receptors during the pre-production activities at this Oil & Gas Location.

None. This is an existing location. There will not be any future drilling activities on this pad. Production only.

Provide a qualitative evaluation of the incremental adverse odor impacts to the surrounding receptors during the production stage of this Oil & Gas Location.

Odor impacts during production are minimal.

WATER RESOURCES

[X] This Oil & Gas Location is listed as a sensitive area for water resources.

[X] This Oil & Gas Location is within 2,640 feet of a surface Water of the State.

Estimated depth to groundwater: 198

Estimated total planned on-location storage capacity of the Oil & Gas Location for:

	Number of Tanks	Total Volume (bbls)
Oil	3	1500
Condensate	0	0
Produced Water	1	500
Other volumes of stored fluids, hydrocarbons, chemicals, or E&P Waste Fluids	0	0

List, with volumes, the “Other” fluids planned to be stored on the Oil & Gas Location, including, but not limited to: hydrocarbons, chemicals, or E&P Waste fluids.

Potential Impacted Surface Water Resources

Provide the distance and direction of the contaminant migration pathway from the Oil & Gas Location to the nearest downstream riparian corridors, wetlands, and surface Waters of the State. Also provide an evaluation of the baseline condition of the nearest downstream riparian corridors, wetlands, and surface Waters of the State.
Enter 2,640 for distances greater than 1/2-mile. Distances are measured along the migration pathway, not a straight line from the edge of the Oil & Gas Location.

	Distance	Direction	Evaluation of Baseline Condition
Riparian Corridor	2640	NE	Forested/shrub riparian classified as Rp1SS. Greater than 1/2 mile from the location.
Wetland	2640	SE	Freshwater emergent wetland classified as PEM1A. Greater than 1/2 mile from the location.
Surface Waters of the State	886	W	Riverine habitat classified as R4SBC

Potential Impacts to Public Water Resources
Provide the distance, direction, and evaluation of potential impacts to the nearest Public Water System Intake. Enter 5,280 for distances greater than 1-mile.

	Distance	Direction	Evaluation of Baseline Condition
Public Water System Intake	5280	W	There are no public water intake within 5280.

Estimated Water Usage
Provide the estimated total volumes of the following that are anticipated to be used during the drilling and completions stage of the Oil & Gas Location activity.

Water Source	Volume (bbls)		Volume (bbls)		Volume (bbls)	
Surface Water	0	Recycled Water (Produced Water)	0	Unspecified Source	0	0 %

Ground Water	Recycled Water (non-Produced Water)	Total Water Usage	Percentage Recycled Water
0	0	0	

If an unspecified water source is planned to be used, provide a description of the source.

N/A

Evaluate the measures being taken to reduce freshwater use, including reusing and recycling produced water.

N/A

ECOSYSTEM & WILDLIFE RESOURCES

List High Priority Habitats (HPH) that occur within one mile of the Oil & Gas Location and list the distance from working pad surface. If the location is partially or entirely within a HPH list the distance as '0' and provide the estimated acreage disturbance of that HPH by the location construction.

High Priority Habitat (HPH) Name:	Distance	Estimated Acreage Disturbed
Aquatic Native Species Conservation Waters	4648	0

List total size of disturbed acreage and disturbed High Priority Habitat (HPH) area (in acres) during the Oil & Gas Location construction and after interim reclamation.

	Total Acreage (acres)	Total HPH Acreage (acres)
Construction	0	0
Post-interim Reclamation	3.39	0

Provide any further information regarding the location's HPH disturbance.

Provide the acreage of the existing land use types that occur within one mile of the Oil & Gas Location. Note: a circle with a one mile radius is approximately 2010 acres.

		Existing Acreage		Existing Acreage		Existing Acreage		Existing Acreage
Crop Land:	Irrigated	0	Non-Irrigated	2005	Conservation Reserve Program(CRP)	0		
Non-Crop Land:	Rangeland	0	Forestry	0	Recreation	0	Other	0
Subdivided:	Industrial	0	Commercial	0	Residential	4.25		

If any land use is industrial, provide a description of the use or operation of the industrial facilities.

N/A

If any land use is "Other", provide a description of the land use.

N/A

If any portion of the land use for the proposed oil and gas location includes Rangeland, Forestry, or Recreation, provide a list of the plant community or communities and estimated acreage disturbed for each:

	Estimated Disturbed Acreage		Estimated Disturbed Acreage		Estimated Disturbed Acreage		Estimated Disturbed Acreage
Disturbed Grassland	0	Shrub Land	0	Mountain Riparian	0	Wetland Aquatic	0
Native Grassland	0	Plains Riparian	0	Forest Land	0	Alpine	0

Provide a qualitative evaluation of incremental adverse impacts to ecosystems, including any plant communities, as a result of Oil and Gas Operations associated with the proposed Oil & Gas Location.

As this location is already constructed, there would be minimal adverse impacts to the ecosystems. This habitat would be unavailable for use for agricultural operations and by wildlife during the lifetime of the location. However, given the abundance of non-irrigated cropland within the county this small-scale disturbance is not likely to adversely impact wildlife that could use these habitats.

Soil Resources

List all soil map units that occur within the Oil & Gas Location and list the estimated total area (in acres) disturbance of each soil map unit.

NRCS Map Unit Name:	Estimated Disturbed Acreage
Adena-colby silt loams, 1-5% slopes	2
Weld-Deertail silt loams, 0-3% slopes	1.32

PUBLIC WELFARE

[X] This Oil & Gas Location lies within a Disproportionately Impacted Community as defined in the 100-series rules.

Building Units within 1-mile	0'-2,000'	2,001'-5,280'
Total number of ResidentialBuilding Units:	0	9
Total Number of non-school AND non child care center High Occupancy Building Units:	0	0
Total number of School Facilities:	0	0
Total number of Child Care Centers:	0	0

Recreation and Scenic Value

List all State Parks, State Trust Lands, or State Wildlife Area within 1-mile of the Oil & Gas Location.

None

List all Designated Outdoor Activity Areas within 1-mile of the Oil & Gas Location.

None

List all mapped trails that support any of the following recreational activities within 1-mile of the Oil & Gas Location: Hiking, Biking, Horseback Riding, Motorcycle Riding, ATV Riding, OHV, Nordic Skiing, Snowmobiling, or Snowshoeing.

None

AIR RESOURCES

Pre-Production Emissions

Complete the following chart based on the estimated total equipment emissions (in tons) for the Oil & Gas Location during the pre-production (construction, drilling, completions) stage for Criteria Pollutants by equipment type.

	NOx	CO	VOCs	Methane	Ethane	CO2	N2O
Process Heaters or Boilers	0	0	0	0	0	0	0
Storage Tanks	0	0	0	0	0	0	0
Venting or Blowdowns	0	0	0	0	0	0	0
Combustion Control Devices	0	0	0	0	0	0	0
Non-Road Internal Combustion Engines	0	0	0	0	0	0	0
Drill Mud	0	0	0	0	0	0	0
Flowback or Completions	0	0	0	0	0	0	0
Loadout	0	0	0	0	0	0	0

Production Emissions

Complete the following chart based on the estimated full facility equipment emissions (in tons) for the Oil & Gas Location once the Oil & Gas Location has entered the production stage, for Criteria Pollutants. The table should be filled out based on ONE year of operation.

	NOx	CO	VOCs	Methane	Ethane	CO2	N2O
Stationary Engines or Turbines	7.96	15.91	5.57	6.41	2.74	3067.64	0.01
Process Heaters or Boilers	0.32	0.27	0.02	0.01	0.01	386.47	0.01
Storage Tanks	0.04	0.19	3.04	0.07	0.36	84.21	0
Dehydration Units	0	0	0	0	0	0	0
Pneumatic Pumps	0	0	0	0	0	0	0
Pneumatic Controllers	0	0	0	0	0	0	0
Separators	0	0	0	0	0	0	0
Fugitives			0.02	0.06	0.02	0.01	
Venting or Blowdowns	0	0	3.76	13.4	4.74	4.09	0
Combustion Control Devices	0	0	0	0	0	0	0
Loadout	0	0	0.48	0	0	0	0

Non-Road Internal Combustion Engines	0	0	0	0	0	0	0
Well Bradenhead	0	0	0.04	9.27	3.25	0.33	0
Well Maintenance	0	0	0.05	1.05	0.37	3.69	0

Diesel Vehicle Road Miles
Complete the following chart for diesel vehicle road miles during each stage of oil and gas location operations.

During Construction: 0 During Completions: 0

During Drilling: 0 During Interim Reclamation: 0

During Production: 52000

PUBLIC HEALTH RESOURCES

Pre-Production Emissions
Complete the following chart based on the estimated total equipment emissions (in lbs) for the Oil & Gas Location during the pre-production (construction, drilling, completions) stage for Hazardous Air Pollutants (HAP).

	BEN	TOL	ETH	XYL	NHE	TMP	H2S	FDE	MET	HAP
Process Heaters or Boilers	0	0	0	0	0	0	0	0	0	0
Storage Tanks	0	0	0	0	0	0	0	0	0	0
Venting or Blowdowns	0	0	0	0	0	0	0	0	0	0
Combustion Control Devices	0	0	0	0	0	0	0	0	0	0
Non-Road Internal Combustion Engines	0	0	0	0	0	0	0	0	0	0
Drill Mud	0	0	0	0	0	0	0	0	0	0
Flowback or Completions	0	0	0	0	0	0	0	0	0	0
Loadout	0	0	0	0	0	0	0	0	0	0

Production Emissions
Complete the following chart based on the estimated total equipment emissions (in lbs) for the Oil & Gas Location once the Oil & Gas Location has entered the production stage, for Hazardous Air Pollutants (HAP). The table should be filled out based on ONE year of operation.

	BEN	TOL	ETH	XYL	NHE	TMP	H2S	FDE	MET	HAP
Stationary Engines or Turbines	88.13	31.12	1.38	10.88	0	0	0	1143.39	170.67	1445.57
Process Heaters or Boilers	0.01	0.02	0	0	11.59	0	0	0.48	0	12.11
Storage Tanks	33.19	23.53	2.5	7.6	189	4.28	0	0	0	260.11
Dehydration Units	0	0	0	0	0	0	0	0	0	0
Pneumatic Pumps	0	0	0	0	0	0	0	0	0	0
Pneumatic Controllers	0	0	0	0	0	0	0	0	0	0
Separators	0	0	0	0	0	0	0	0	0	0
Fugitives	0.33	0.34	0.01	0.19	0.57	0	0	0	0	1.45
Venting or Blowdowns	123.12	126.4	4.4	74.33	56.63	0.01	0.04	0	0	384.93
Combustion Control Devices	0	0	0	0	0	0	0	0	0	0
Non-Road Internal Combustion Engines	0	0	0	0	0	0	0	0	0	0
Loadout	1.71	0.01	0	0	14.6	0	0	0	0	16.32
Well Bradenhead	12.49	10.8	0.7	4.53	108.5	0.06	0	0	0	137.08
Well Maintenance	1.42	1.22	0.08	0.51	12.3	0.01	0.02	0	0	15.56

Provide a qualitative evaluation of any potential acute or chronic, short- or long-term incremental impacts to public health as a result of the estimated total pre-production hazardous air pollutant emissions.

None. This is an existing location. There will not be any future drilling activities on this pad. Production Only.

Provide a qualitative evaluation of any potential acute or chronic, short- or long-term incremental impacts to public health as a result of the estimated annual production hazardous air pollutant emissions.

Crestone contracted with an independent qualified third-party consulting firm, CTEH LLC., to design and perform studies to characterize the short-term impacts on local air quality and public health from discrete operational phases at four oil and gas well pads being developed in Weld County, Colorado: Big Horn, Cosslett, Echevarria, and Kugel well pads. The specific goals of this project were to: 1) collect a high-resolution data set of chemical concentrations air near the well pad and the surrounding communities, and (2) evaluate the impact on risks to public health, if any, from the release of oil and gas-related compounds into the air during specific operational phases of well development. The complete study has been provided as an attachment and is titled "Community Exposure and Health Risk Assessment: Real Time Air Monitoring and Air Sampling, 12/11/2019 ."

The phases of this study included studies of production locations that are designed very similar to the proposed application. The study was performed at locations where there were numerous building units and distance to building units were closer than this OGDP application for the Sky Ranch North Pad. The following BMPs were employed during the time of the study and will also be employed at the Sky Ranch North pad.
Production:
Oil pipeline tank away capacity, minimizes number of tanks associated emissions
Electric vapor recovery units
Instrument air actuated pneumatic controls
Vapor Recovery towers
Combustors to capture tank vapors
Continuous emissions monitoring for volatile organic compounds, PM, methane. Equipped with Summa Canister sampling capabilities in the event of an emissions detection event.
Leak detection and repair program as required under Regulation 7
CTEH collected over 5,000 real-time measurements, along with 20 analytical samples, in communities around multiple well pads.
Findings from this dataset indicate:
The compounds that may be emitted during any or all operations that CTEH has studied are not expected to cause any short-term adverse health effects to nearby residents, including sensitive populations.
Real-time data indicate no adverse health risks to nearby communities, including sensitive individuals, from exposures to VOCs, H2S r PM that may be emitted from operational phases at the various Crestone well pads. Analytical air sampling detections for each analyte were below their acute health guideline value established by the federal Agency for Toxic Substances and Disease Registry (ATSDR).
The CTEH study was conducted at operations that will be nearly identical to the Sky Ranch Pad OGDP. The conclusions above were based on a quantitative in-depth study of Crestone specific operations. Based on these measurements/conclusions and the fact that the Sky Ranch OGDP has nearly identical or better BMPs in place there are no expected short- or long-term incremental impacts to public health as a result of the estimated total hazardous air pollutant emissions during the pre-production phase of this Oil and Gas Location.

Dust Impacts

The following are the estimated number of truck trips traveling on or off the Oil & Gas Location.

Total	During Construction	During Drilling	During Completions	During Interim Reclamation	During Production
Monthly	0	0	0	0	200
Annual	0	0	0	0	17033

Estimated total pounds (lbs) of proppant to be used during completions activities. 0

Provide the type of proppant(s) that are planned to be used during completions activities.

N/A

Provide an evaluation of the proposed proppant management system that will be used to minimize dust during completions activities, including the estimated amount of silica dust that will leave the Oil & Gas Location.

N/A

EXISTING OIL & GAS

Total number of oil & gas locations within 1-mile of the Oil & Gas Location:

	Total Number of Locations		Total Number of Wells
Active, built	6	Active, built	13
Permitted by COGCC, unbuilt	0	Permitted by COGCC, unbuilt	0
Permitted by Relevant Local Government & not COGCC, unbuilt	1	Proposed	0
Proposed	1	Plugged and Abandoned	1

Total acreage disturbance during construction of the active and proposed oil & gas locations within 1-mile of the proposed Oil & Gas Location: 17.38

Source for acreage total:

☐ Field Observation/Measurement

☒ COGCC Location Files

☐ Aerial PhotosOther

☐ Other

If "Other" is selected, please describe the source use to determine the acreage total for construction disturbance of the active and proposed oil & gas locations within 1-mile of the proposed Oil & Gas Location.

Total permitted capacity of on-location storage (in number of pits and tanks) of the active and proposed oil & gas locations within 1-mile of the Oil & Gas Location : NOTE: providing the existing number of pits and tanks on surrounding existing locations is optional.

Source for storage totals:

☐ Field Observation/Measurement
☒ COGCC Location Files
☐ Aerial PhotosOther
☐ Other

	Permitted Onsite Storage Capacity	Existing Onsite Storage Capacity
Oil	34	34
Condensate	0	0
Produced Water	11	11
Pits	0	0

If "Other" is selected, please describe the source use to determine the tank totals for the active and proposed oil & gas locations within 1-mile of the proposed Oil & Gas Location.

4 Oil & Gas Location Name: Prosper Farms 4-65 11-12 Number: 1H Status: Active, built

OIL & GAS LOCATION INFORMATION

Form 2A Doc#: 402289833

Loc ID#: 436855

Oil & Gas Location: QTRQTR: NWNW Sec: 11 Twp: 4S Rng: 65W Meridian: 6

Total number of wells planned: 0

Operations Duration

Estimated total number of weeks to construct this Oil & Gas Location: 0

Estimated total number of weeks to drill all planned wells for this Oil & Gas Location: 0

Number of planned drilling occupations to drill all planned wells for this Oil & Gas Location: 0

Estimated total number of weeks to complete all planned wells for this Oil & Gas Location: 0

Number of planned completions occupations to complete all planned wells for this Oil & Gas Location: 0

Will there be simultaneous drilling and completions operations occurring at this Oil & Gas Location? No

Estimated total number of months the Oil & Gas Location will be active, prior to abandonment and reclamation: 240

Noise Impacts

Provide a qualitative evaluation of the incremental adverse noise impacts to the surrounding receptors during the pre-production activities at this Oil & Gas Location.

None. This is an existing location. There will not be any future drilling activities on this pad. Production only.

Provide a qualitative evaluation of the incremental adverse noise impacts to the surrounding receptors during the production stage of this Oil & Gas Location.

Impacts from noise to the receptors will be minimal in production phase.

Light Impacts

Provide a qualitative evaluation of the incremental adverse light impacts to the surrounding receptors during the pre-production activities at this Oil & Gas Location.

None. This is an existing location. There will not be any future drilling activities on this pad. Production only.

Provide a qualitative evaluation of the incremental adverse light impacts to the surrounding receptors during the production stage of this Oil & Gas Location.

There are no permanent lights on location during the production phase. There will be minimal incremental adverse impacts from light.

Odor Impacts

Provide a qualitative evaluation of the incremental adverse odor impacts to the surrounding receptors during the pre-production activities at this Oil & Gas Location.

None. This is an existing location. There will not be any future drilling activities on this pad. Production only.

Provide a qualitative evaluation of the incremental adverse odor impacts to the surrounding receptors during the production stage of this Oil & Gas Location.

Odor impacts during production are minimal.

WATER RESOURCES

[X] This Oil & Gas Location is listed as a sensitive area for water resources.

[X] This Oil & Gas Location is within 2,640 feet of a surface Water of the State.

Estimated depth to groundwater: 28

Estimated total planned on-location storage capacity of the Oil & Gas Location for:

	Number of Tanks	Total Volume (bbls)
Oil	3	1500
Condensate	0	0
Produced Water	1	500
Other volumes of stored fluids, hydrocarbons, chemicals, or E&P Waste Fluids	0	0

List, with volumes, the “Other” fluids planned to be stored on the Oil & Gas Location, including, but not limited to: hydrocarbons, chemicals, or E&P Waste fluids.

N/A

Potential Impacted Surface Water Resources

Provide the distance and direction of the contaminant migration pathway from the Oil & Gas Location to the nearest downstream riparian corridors, wetlands, and surface Waters of the State. Also provide an evaluation of the baseline condition of the nearest downstream riparian corridors, wetlands, and surface Waters of the State.
Enter 2,640 for distances greater than 1/2-mile. Distances are measured along the migration pathway, not a straight line from the edge of the Oil & Gas Location.

	Distance	Direction	Evaluation of Baseline Condition
Riparian Corridor	2640	NE	Forested/shrub riparian classified as Rp1SS. Greater than 1/2 mile from the location.
Wetland	657	SE	Riverine habitat. Classified as R4SBC.
Surface Waters of the State	732	W	Freshwater Pong classified as PUBGx.

Potential Impacts to Public Water Resources
Provide the distance, direction, and evaluation of potential impacts to the nearest Public Water System Intake. Enter 5,280 for distances greater than 1-mile.

	Distance	Direction	Evaluation of Baseline Condition
Public Water System Intake	5280	W	There are no public water system within 1 mile.

Estimated Water Usage
Provide the estimated total volumes of the following that are anticipated to be used during the drilling and completions stage of the Oil & Gas Location activity.

Water Source	Volume (bbls)		Volume (bbls)		Volume (bbls)		
Surface Water	0	Recycled Water (Produced Water)	0	Unspecified Source	0	Percentage Recycled Water	0 %
Ground Water	0		0	Total Water Usage	0		

Recycled Water
(non-Produced Water)

If an unspecified water source is planned to be used, provide a description of the source.

N/A

Evaluate the measures being taken to reduce freshwater use, including reusing and recycling produced water.

N/A

ECOSYSTEM & WILDLIFE RESOURCES

List High Priority Habitats (HPH) that occur within one mile of the Oil & Gas Location and list the distance from working pad surface. If the location is partially or entirely within a HPH list the distance as '0' and provide the estimated acreage disturbance of that HPH by the location construction.

High Priority Habitat (HPH) Name:	Distance	Estimated Acreage Disturbed
Aquatic Native Species Conservation Waters	5055	0

List total size of disturbed acreage and disturbed High Priority Habitat (HPH) area (in acres) during the Oil & Gas Location construction and after interim reclamation.

	Total Acreage (acres)	Total HPH Acreage (acres)
Construction	0	0
Post-interim Reclamation	3.18	0

Provide any further information regarding the location's HPH disturbance.

Provide the acreage of the existing land use types that occur within one mile of the Oil & Gas Location. Note: a circle with a one mile radius is approximately 2010 acres.

		Existing Acreage		Existing Acreage		Existing Acreage		Existing Acreage
Crop Land:	Irrigated	0	Non-Irrigated	2010	Conservation Reserve Program(CRP)	0		
Non-Crop Land:	Rangeland	0	Forestry	0	Recreation	0	Other	0
Subdivided:	Industrial	0	Commercial	0	Residential	0		

If any land use is industrial, provide a description of the use or operation of the industrial facilities.

N/A

If any land use is "Other", provide a description of the land use.

N/A

If any portion of the land use for the proposed oil and gas location includes Rangeland, Forestry, or Recreation, provide a list of the plant community or communities and estimated acreage disturbed for each:

	Estimated Disturbed Acreage		Estimated Disturbed Acreage		Estimated Disturbed Acreage		Estimated Disturbed Acreage
Disturbed Grassland	0	Shrub Land	0	Mountain Riparian	0	Wetland Aquatic	0
Native Grassland	0	Plains Riparian	0	Forest Land	0	Alpine	0

Provide a qualitative evaluation of incremental adverse impacts to ecosystems, including any plant communities, as a result of Oil and Gas Operations associated with the proposed Oil & Gas Location.

As this location is already constructed, there would be minimal adverse impacts to the ecosystems. This habitat would be unavailable for use for agricultural operations and by wildlife during the lifetime of the location. However, given the abundance of non-irrigated cropland within the county this small-scale disturbance is not likely to adversely impact wildlife that could use these habitats.

Soil Resources

List all soil map units that occur within the Oil & Gas Location and list the estimated total area (in acres) disturbance of each soil map unit.

NRCS Map Unit Name:	Estimated Disturbed Acreage
AdC - Adena-Colby silt loams, 1 to 5 percent slopes	1.5
WeB - Weld silt loam, 0 to 3 percent slopes	1.5

PUBLIC WELFARE

[X] This Oil & Gas Location lies within a Disproportionately Impacted Community as defined in the 100-series rules.

Building Units within 1-mile	0'-2,000'	2,001'-5,280'
Total number of ResidentialBuilding Units:	0	9
Total Number of non-school AND non child care center High Occupancy Building Units:	0	0
Total number of School Facilities:	0	0
Total number of Child Care Centers:	0	0

Recreation and Scenic Value

List all State Parks, State Trust Lands, or State Wildlife Area within 1-mile of the Oil & Gas Location.

None

List all Designated Outdoor Activity Areas within 1-mile of the Oil & Gas Location.

None

List all mapped trails that support any of the following recreational activities within 1-mile of the Oil & Gas Location: Hiking, Biking, Horseback Riding, Motorcycle Riding, ATV Riding, OHV, Nordic Skiing, Snowmobiling, or Snowshoeing.

None

AIR RESOURCES

Pre-Production Emissions

Complete the following chart based on the estimated total equipment emissions (in tons) for the Oil & Gas Location during the pre-production (construction, drilling, completions) stage for Criteria Pollutants by equipment type.

	NOx	CO	VOCs	Methane	Ethane	CO2	N2O
Process Heaters or Boilers	0	0	0	0	0	0	0
Storage Tanks	0	0	0	0	0	0	0
Venting or Blowdowns	0	0	0	0	0	0	0
Combustion Control Devices	0	0	0	0	0	0	0
Non-Road Internal Combustion Engines	0	0	0	0	0	0	0
Drill Mud	0	0	0	0	0	0	0
Flowback or Completions	0	0	0	0	0	0	0
Loadout	0	0	0	0	0	0	0

Production Emissions

Complete the following chart based on the estimated full facility equipment emissions (in tons) for the Oil & Gas Location once the Oil & Gas Location has entered the production stage, for Criteria Pollutants. The table should be filled out based on ONE year of operation.

	NOx	CO	VOCs	Methane	Ethane	CO2	N2O
Stationary Engines or Turbines	7.96	15.91	5.57	6.41	2.74	3067.64	0.01
Process Heaters or Boilers	0.32	0.27	0.02	0.01	0.01	386.47	0.01
Storage Tanks	0.04	0.19	3.04	0.07	0.36	84.21	0
Dehydration Units	0	0	0	0	0	0	0
Pneumatic Pumps	0	0	0	0	0	0	0
Pneumatic Controllers	0	0	0	0	0	0	0
Separators	0	0	0	0	0	0	0
Fugitives			0.02	0.06	0.02	0.01	
Venting or Blowdowns	0	0	3.76	13.4	4.74	4.09	0
Combustion Control Devices	0	0	0	0	0	0	0
Loadout	0	0	0.48	0	0	0	0

Non-Road Internal Combustion Engines	0	0	0	0	0	0	0
Well Bradenhead	0	0	0.04	9.27	3.25	0.33	0
Well Maintenance	0	0	0.5	1.05	0.37	3.69	0

Diesel Vehicle Road Miles
Complete the following chart for diesel vehicle road miles during each stage of oil and gas location operations.

During Construction: 0 During Completions: 0

During Drilling: 0 During Interim Reclamation: 0

During Production: 52000

PUBLIC HEALTH RESOURCES

Pre-Production Emissions
Complete the following chart based on the estimated total equipment emissions (in lbs) for the Oil & Gas Location during the pre-production (construction, drilling, completions) stage for Hazardous Air Pollutants (HAP).

	BEN	TOL	ETH	XYL	NHE	TMP	H2S	FDE	MET	HAP
Process Heaters or Boilers	0	0	0	0	0	0	0	0	0	0
Storage Tanks	0	0	0	0	0	0	0	0	0	0
Venting or Blowdowns	0	0	0	0	0	0	0	0	0	0
Combustion Control Devices	0	0	0	0	0	0	0	0	0	0
Non-Road Internal Combustion Engines	0	0	0	0	0	0	0	0	0	0
Drill Mud	0	0	0	0	0	0	0	0	0	0
Flowback or Completions	0	0	0	0	0	0	0	0	0	0
Loadout	0	0	0	0	0	0	0	0	0	0

Production Emissions
Complete the following chart based on the estimated total equipment emissions (in lbs) for the Oil & Gas Location once the Oil & Gas Location has entered the production stage, for Hazardous Air Pollutants (HAP). The table should be filled out based on ONE year of operation.

	BEN	TOL	ETH	XYL	NHE	TMP	H2S	FDE	MET	HAP
Stationary Engines or Turbines	88.13	31.12	1.38	10.88	0	0	0	1143.39	170.67	1445.57
Process Heaters or Boilers	0.01	0.02	0	0	11.59	0	0	0.48	0	12.11
Storage Tanks	33.19	23.53	2.5	7.6	189	4.28	0	0	0	260.11
Dehydration Units	0	0	0	0	0	0	0	0	0	0
Pneumatic Pumps	0	0	0	0	0	0	0	0	0	0
Pneumatic Controllers	0	0	0	0	0	0	0	0	0	0
Separators	0	0	0	0	0	0	0	0	0	0
Fugitives	0.33	0.34	0.01	0.19	0.57	0	0	0	0	1.45
Venting or Blowdowns	123.12	126.4	4.4	74.33	56.63	0.01	0.04	0	0	384.93
Combustion Control Devices	0	0	0	0	0	0	0	0	0	0
Non-Road Internal Combustion Engines	0	0	0	0	0	0	0	0	0	0
Loadout	1.71	0.01	0	0	14.6	0	0	0	0	16.32
Well Bradenhead	12.49	10.8	0.7	4.53	108.5	0.06	0	0	0	137.08
Well Maintenance	1.42	1.22	0.08	0.51	12.3	0.01	0.02	0	0	15.56

Provide a qualitative evaluation of any potential acute or chronic, short- or long-term incremental impacts to public health as a result of the estimated total pre-production hazardous air pollutant emissions.

None. This is an existing location. There will not be any future drilling activities on this pad. Production Only.

Provide a qualitative evaluation of any potential acute or chronic, short- or long-term incremental impacts to public health as a result of the estimated annual production hazardous air pollutant emissions.

Crestone contracted with an independent qualified third-party consulting firm, CTEH LLC., to design and perform studies to characterize the short-term impacts on local air quality and public health from discrete operational phases at four oil and gas well pads being developed in Weld County, Colorado: Big Horn, Cosslett, Echevarria, and Kugel well pads. The specific goals of this project were to: 1) collect a high-resolution data set of chemical concentrations air near the well pad and the surrounding communities, and (2) evaluate the impact on risks to public health, if any, from the release of oil and gas-related compounds into the air during specific operational phases of well development. The complete study has been provided as an attachment and is titled "Community Exposure and Health Risk Assessment: Real Time Air Monitoring and Air Sampling, 12/11/2019 ."

The phases of this study included studies of production locations that are designed very similar to the proposed application. The study was performed at locations where there were numerous building units and distance to building units were closer than this OGDP application for the Sky Ranch North Pad. The following BMPs were employed during the time of the study and will also be employed at the Sky Ranch North pad.
Production:
Oil pipeline tank away capacity, minimizes number of tanks associated emissions
Electric vapor recovery units
Instrument air actuated pneumatic controls
Vapor Recovery towers
Combustors to capture tank vapors
Continuous emissions monitoring for volatile organic compounds, PM, methane. Equipped with Summa Canister sampling capabilities in the event of an emissions detection event.
Leak detection and repair program as required under Regulation 7
CTEH collected over 5,000 real-time measurements, along with 20 analytical samples, in communities around multiple well pads.
Findings from this dataset indicate:
The compounds that may be emitted during any or all operations that CTEH has studied are not expected to cause any short-term adverse health effects to nearby residents, including sensitive populations.
Real-time data indicate no adverse health risks to nearby communities, including sensitive individuals, from exposures to VOCs, H2S r PM that may be emitted from operational phases at the various Crestone well pads. Analytical air sampling detections for each analyte were below their acute health guideline value established by the federal Agency for Toxic Substances and Disease Registry (ATSDR).
The CTEH study was conducted at operations that will be nearly identical to the Sky Ranch Pad OGDP. The conclusions above were based on a quantitative in-depth study of Crestone specific operations. Based on these measurements/conclusions and the fact that the Sky Ranch OGDP has nearly identical or better BMPs in place there are no expected short- or long-term incremental impacts to public health as a result of the estimated total hazardous air pollutant emissions during the pre-production phase of this Oil and Gas Location.

Dust Impacts

The following are the estimated number of truck trips traveling on or off the Oil & Gas Location.

Total	During Construction	During Drilling	During Completions	During Interim Reclamation	During Production
Monthly	0	0	0	0	200
Annual	0	0	0	0	17033

Estimated total pounds (lbs) of proppant to be used during completions activities. 0

Provide the type of proppant(s) that are planned to be used during completions activities.

N/A.

Provide an evaluation of the proposed proppant management system that will be used to minimize dust during completions activities, including the estimated amount of silica dust that will leave the Oil & Gas Location.

N/A

EXISTING OIL & GAS

Total number of oil & gas locations within 1-mile of the Oil & Gas Location:

	Total Number of Locations		Total Number of Wells
Active, built	6	Active, built	13
Permitted by COGCC, unbuilt	0	Permitted by COGCC, unbuilt	0
Permitted by Relevant Local Government & not COGCC, unbuilt	0	Proposed	0
Proposed	1	Plugged and Abandoned	1

Total acreage disturbance during construction of the active and proposed oil & gas locations within 1-mile of the proposed Oil & Gas Location: 17.38

Source for acreage total:

☐ Field Observation/Measurement

☒ COGCC Location Files

☐ Aerial PhotosOther

☐ Other

If "Other" is selected, please describe the source use to determine the acreage total for construction disturbance of the active and proposed oil & gas locations within 1-mile of the proposed Oil & Gas Location.

Total permitted capacity of on-location storage (in number of pits and tanks) of the active and proposed oil & gas locations within 1-mile of the Oil & Gas Location : NOTE: providing the existing number of pits and tanks on surrounding existing locations is optional.

Source for storage totals:

☐ Field Observation/Measurement
☒ COGCC Location Files
☐ Aerial PhotosOther
☐ Other

	Permitted Onsite Storage Capacity	Existing Onsite Storage Capacity
Oil	40	34
Condensate	0	0
Produced Water	13	11
Pits	0	0

If "Other" is selected, please describe the source use to determine the tank totals for the active and proposed oil & gas locations within 1-mile of the proposed Oil & Gas Location.

OIL & GAS DEVELOPMENT PLAN-SCALE DATA

List High Priority Habitats (HPH) that are estimated be disturbed by the construction of new roads, including access roads, pipelines, and utilities for this OGDP, along with the estimated disturbed acreage of each HPH.

No HPH Identified

List the total estimated of disturbed acreage and the total disturbed High Priority Habitat (HPH) area (in acres) during construction and the acreage that will remain disturbed after interim reclamation of the following for the entire OGDP:

	Construction			Post-interim Reclamation	
	Total Acreage (acres)	Total HPH Acreage (acres)		Total Acreage (acres)	Total HPH Acreage (acres)
New roads, including access roads	0	0	New roads, including access roads	0	0
Pipelines	0	0	Pipelines	0	0
Utilities	0	0	Utilities	0	0

Provide any further information regarding the HPH disturbance from the construction of new roads, including access roads, pipelines, and utilities for this OGDP.

Not Applicable.

Number of miles of the existing lease road that are planned to be used to access these location(s): 1.5

BENEFICIAL IMPACT INFORMATION

Equipment and Facility Removal

Total number of existing wells that are planned to be plugged and abandoned as part of this OGDP: 0

Total number of existing locations that are planned to be closed and undergo final reclamation as part of this OGDP: 0

Total number of acres that are planned to be reclaimed through the closing of existing locations: 0

Total number of existing pits that are planned to be closed and undergo final reclamation as part of this OGDP: 0

Total number of tanks planned to be removed from existing locations through the approval of this OGDP:

Oil Tanks: 0
Condensate Tanks: 0
Produced Water Tanks: 0

Estimated number of vehicle trips that are planned to be prevented from the above mentioned facility closures and equipment upgrades (on an annual basis): 0

Provide a qualitative evaluation of any incremental beneficial impacts to the surrounding community directly and indirectly from this OGDP.

Operator plans to continue to maintain the gravel road.

Provide a qualitative evaluation of any incremental beneficial impacts to the surrounding wildlife and ecosystems directly and indirectly from this OGDP.

There will be no beneficial impacts to the surrounding wildlife and ecosystems directly and indirectly from this OGDP.

MITIGATION INFORMATION

Item	Impacted Resource	Mitigation Description
1	Public Health Resources	In addition to gas pipeline already in place, Operator has committed to the construction and installation of oil pipeline prior to the production phase for this project. In addition, all non-potable water used for hydraulic fracturing will be transported to the well site by temporary above-ground water lines.
2	Air Resources	Operator is committed to continuous air monitoring and is committed to green completions and complies with EPA Reduced Emission Completion rules for oil and gas.

OPERATOR COMMENTS AND SUBMITTAL

Print Name: Andrea Gross Title: Permit Agent

Email: agross@upstreampm.com Date: 08/04/2021

Based on the information provided herein, this Cumulative Impacts Data Identification Form 2B complies with COGCC Rules and is hereby accepted into the Cumulative Impacts Data Evaluation Repository (CIDER database).
Contact OGLA Staff for consultation.

COGCC Approved: **Director of COGCC** Date:

Attachment Check List

Att Doc Num	Name

Total Attach: 0 Files

General Comments

User Group	Comment	Comment Date
OGLA	Returned to draft per operator request.	12/21/2021

Total: 1 comment(s)