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: 10518
Name of Operator: CONFLUENCE DJ LLC
Address: 1001 17TH STREET #1250
City: DENVER State: CO Zip: 80202

Contact Name and Telephone:
Name: Brittany Rothe
Phone: (303) 226-9519
Email: brothe@confluencelp.com

OIL & GAS DEVELOPMENT PLAN INFORMATION

Oil & Gas Development Plan Name: Bigfoot 11

Oil & Gas Development Plan Docket #:

Docket Number
211000207

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: Bigfoot Number: 11 Status: Proposed

OIL & GAS LOCATION INFORMATION

Form 2A Doc#: 402590255
Loc ID#:
Oil & Gas Location: QTRQTR: NWSW Sec: 11 Twp: 4N Rng: 63W Meridian: 6
Total number of wells planned: 16

Operations Duration

Estimated total number of weeks to construct this Oil & Gas Location: 4
Estimated total number of weeks to drill all planned wells for this Oil & Gas Location: 18
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: 13
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: 417

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.

Noise impacts during pre-production activities will be during the construction, drilling and completions phases. There is a state highway adjacent to the location and the surrounding areas are all agriculture. There are no RBUs within 1 mile. Receptors of noise impacts could be agriculture operations and wildlife. There are 2 HPHs within 2,000' of the location.

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 production will not increase ambient noise. Noise from traffic and equipment will be minimal.

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.

The greatest potential for light impacts would occur during the drilling phase of the proposed project. A sound wall would be constructed on the south side of the working pad surface and would serve to shield vehicle drivers on Highway 34 from light sources during the drilling and completion phases of the project. Receptors to the north, east, and west of the project would be exposed to project-related light sources during the construction phase.

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

There will be no permanent lights installed on the Bigfoot 11 location, so during the production phase of the operation, 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.

Odor impacts during pre-production operations will be generated from vehicle emissions. The operator intends to use oil based muds but will use "odor armor" to mitigate the odor.

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

Odor during the production stage will be minimal. Traffic will significantly decrease in 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: 11

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

	Number of Tanks	Total Volume (bbls)
Oil	0	0
Condensate	12	6000
Produced Water	4	2000
Other volumes of stored fluids, hydrocarbons, chemicals, or E&P Waste Fluids	1	300

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.

Hydrocarbons; the LACT's will divert oil samples to this tank prior to sending oil down the pipeline.

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	NW	There are no riparian corridors within 1/2 mile of the location.
Wetland	2640	NW	There are no wetlands within 1 mile of the location.
Surface Waters of the State	1430	NW	

70 Ranch Reservoir. This raw reservoir was build in 2019. It is lined with 7 million square feet of a synthetic material. The reservoir is used for water storage and now holds close to 5,550 acre-feet of water. The 70 Ranch Reservoir is located on private land.

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	SE	N/A

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	2160000	Recycled Water (Produced Water)	0	Unspecified Source	0	Percentage Recycled Water	0 %
Ground Water	16000	Recycled Water (non-Produced Water)	0	Total Water Usage	217600 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.

Confluence utilizes advanced hydraulic fracture modeling to optimize frac volumes and sand schedule to generate the best frac with the least amount of water necessary.

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
Mule Deer Severe Winter Range	2225	0
Pronghorn Winter Concentration	663	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	17.67	0
Post-interim Reclamation	7.35	0

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

N/A

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	70	Non-Irrigated	534	Conservation Reserve Program(CRP)	0		
Non-Crop Land:	Rangeland	682	Forestry	0	Recreation	0	Other	108
Subdivided:	Industrial	21	Commercial	14	Residential	0		

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

Oil & Gas

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

Surface Waters (Pond)

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.

Construction of the Bigfoot 11 location would result in the initial disturbance of approximately 17.67 acres of non-irrigated cropland, with a working pad surface of 10.32 acres and a production pad area of 6.9 acres of long-term disturbance after interim reclamation. 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 Weld County and the broader DJ Basin, this small-scale disturbance is not likely to adversely impact wildlife that could use these habitats, nor is it likely to result in substantial cumulative impacts to the shortgrass prairie and sandhill steppe vegetative communities.

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
NRCS Map Unit 70: Valent Sanbd, 3 to 9 percent slopes	17.67

PUBLIC WELFARE

☐ 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	0
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.

There are no state parks, state trust lands, or state wildlife area within 1- mile of the Location.

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

There are no Designated Outdoor Activity Areas within 1- mile of the Location.

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.

There are no mapped trails that support any recreational activities within 1-mile of the Location.

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	0.08	0.35	1.01	0.05	0.23	2.69	0
Venting or Blowdowns	0	0	0	0	0	0	0
Combustion Control Devices	0.15	0.7	0.98	1.04	0.47	4.62	0
Non-Road Internal Combustion Engines	1.04	0.22	0.08	0	0	38.82	0
Drill Mud	0	0	2.82	4.88	1.83	0.38	0
Flowback or Completions	0	0	0	0	0	0	0
Loadout	0.07	0.32	0.99	361.14	662.21	1173.69	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	0	0	0	0	0	0	0
Process Heaters or Boilers	9.22	7.75	0.51	0.21	0.1	11066.2	0.2
Storage Tanks	0.4	1.7	10.2	0.245	1.774	0.272	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			0.5	0.51	0.23	0.05	
Venting or Blowdowns	0	0	0.73	1.26	0.27	0.15	0
Combustion Control Devices	0.2	0.7	0.3	0.55	0.21	0.04	0
Loadout	0	0	0	0	0	0	0
Non-Road Internal Combustion Engines	0	0	0	0	0	0	0
Well Bradenhead	0	0	0	0	0	0	0
Well Maintenance	0	0	0	0	0	0	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: 56872
During Completions: 257279
During Drilling: 70295
During Interim Reclamation: 14348
During Production: 7877010

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	0.01	0.01	0	0	0.01	0	0	0	0	0.04
Venting or Blowdowns	0	0	0	0	0	0	0	0	0	0
Combustion Control Devices	0	0	0	0	0.02	0	0	0	0	0.03
Non-Road Internal Combustion Engines	0	0	0	0	0	0	0	0	0	0
Drill Mud	0.006	0.007	0.001	0.007	0.045	0	0	0	0	0.066
Flowback or Completions	0	0	0	0	0	0	0	0	0	0
Loadout	0.56	0.42	0	0.14	0.15	0	0	0	0	1.27

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	0	0	0	0	0	0	0	0	0	0
Process Heaters or Boilers	0	0	0	0	0.17	0	0	0	0	0.17
Storage Tanks	0.0435	0.014	0.001	0.0035	0.147	0.0005	0	0	0	0.21
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	0.0045	0	0	0	0.008	0	0	0	0	0.01
Venting or Blowdowns	0	0	0	0	0.01	0	0	0	0	0.01
Combustion Control Devices	0	0	0	0	0.00342	0	0	0	0	0.00342
Non-Road Internal Combustion Engines	0	0	0	0	0	0	0	0	0	0
Loadout	0	0	0	0	0	0	0	0	0	0
Well Bradenhead	0	0	0	0	0	0	0	0	0	0
Well Maintenance	0	0	0	0	0	0	0	0	0	0

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.

CDPHE's February 21, 2017 report titled "Assessment of Potential Public Health Effects from Oil and Gas operations in Colorado" evaluated over 10,000 air samples in regions of Colorado where people are living near oil and natural gas development. It concluded that all measured air concentrations were below short- and long-term safe levels. In addition the CTEH, LLC July 28, 2020 report titled "Compilation of Benzene Measurements Near Wellpads in Colorado: A Comparison to Heath Guideline Exposure Values" compiled over 6,500 air samples of benzene during various operational phases. Their findings showed 99.9% of measured values were below the acute valve for benzene of 9 ppb. Based on these reports and findings, it is not anticipated that the proposed operations will present any potential acute or chronic, short- or long-term incremental impacts to public health.

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.

CDPHE's February 21, 2017 report titled "Assessment of Potential Public Health Effects from Oil and Gas operations in Colorado" evaluated over 10,000 air samples in regions of Colorado where people are living near oil and natural gas development. It concluded that all measured air concentrations were below short- and long-term safe levels. In addition the CTEH, LLC July 28, 2020 report titled "Compilation of Benzene Measurements Near Wellpads in Colorado: A Comparison to Heath Guideline Exposure Values" compiled over 6,500 air samples of benzene during various operational phases. Their findings showed 99.9% of measured values were below the acute valve for benzene of 9 ppb. Based on these reports and findings, it is not anticipated that the proposed operations will present any potential acute or chronic, short- or long-term incremental impacts to public health.

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	1000	749	2806	825	524
Annual	4902	3300	12274	407	6288

Estimated total pounds (lbs) of proppant to be used during completions activities. 86400000

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

30/50 sand & 100 mesh sand

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.

When handling sand used in hydraulic fracturing operations, Confluence's vendors will use an advanced Containerized Sand System for proppant delivery, storage on location, and delivery to the blender and frac fluid system. The containers use gravity (not pneumatics) to drop sand directly into the blender's sand hopper, basically eliminating dust generation. This system also removes people and equipment from the proppant handling operations during fracturing treatments, considerably reducing exposures and EHS risks to individuals from dust generated by older sand handling equipment (like conveyor belts). Remote controls are used to efficiently open and close sand gates on the bins to further reduce silica dust creation. Zero pounds of silica dust are anticipated to migrate off the Bigfoot 11 location during completions operations.

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	30
Permitted by COGCC, unbuilt	0	Permitted by COGCC, unbuilt	11
Permitted by Relevant Local Government & not COGCC, unbuilt	0	Proposed	0
Proposed	0	Plugged and Abandoned	0

Total acreage disturbance during construction of the active and proposed oil & gas locations within 1-mile of the proposed Oil & Gas Location: 31

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	20	20
Condensate	49	49
Produced Water	21	21
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: 70 Ranch Number: 10 East Status: Active, built

OIL & GAS LOCATION INFORMATION

Form 2A Doc#: 401169408

Loc ID#: 451960

Oil & Gas Location: QTRQTR: SENE Sec: 10 Twp: 4N Rng: 63W Meridian: 6

Total number of wells planned: 2

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: 0

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 light installed on the 70 Ranch East 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: 11

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

	Number of Tanks	Total Volume (bbls)
Oil	0	0
Condensate	0	0
Produced Water	0	0
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	W	There are no riparian corridors within 1/2 mile of the location.
Wetland	637	E	According to the Wetlands Inventory, there is a Riverine 637' East of the WPS.
Surface Waters of the State	779	NW	70 Ranch Reservoir. This raw reservoir was built in 2019. It is lined with 7 million square feet of a synthetic material. The reservoir is used for water storage and holds close to 5,550 acre-feet of water. The 70 Ranch Reservoir is located on private land.

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

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
Pronghorn Winter Concentration	705	0
Mule Deer Severe Winter Range	2970	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	6.6	0

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

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

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		Non-Irrigated		Conservation Reserve Program(CRP)	0		
Non-Crop Land:	Rangeland		Forestry	0	Recreation	0	Other	0
Subdivided:	Industrial	0	Commercial		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 Weld County and the broader DJ Basin, this small-scale disturbance is not likely to adversely impact wildlife that could use these habitats, nor is it likely to result in substantial cumulative impacts to the shortgrass prairie and sandhill steppe vegetative communities.

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
70-Valent Sand, 3 to 9 percent slopes	0

PUBLIC WELFARE

☐ 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	0
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	0	0	0	0	0	0	0
Process Heaters or Boilers	0	0	0	0	0	0	0
Storage Tanks	0	0	0	0	0	0	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			0.01	0	0	0.001	
Venting or Blowdowns	0	0	0	0	0	0	0
Combustion Control Devices	0	0	0	0	0	0	0
Loadout	0	0	0	0	0	0	0
Non-Road Internal Combustion Engines	6.18	10.42	0.08	0	0	0	0
Well Bradenhead	0	0	0	0	0	0	0
Well Maintenance	0	0	0.03	0	0	0	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: 2977

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	0	0	0	0	0	0	0	0	0	0
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
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	6.5	0	0	0	1.05	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	4.43	0	0	0	0	0	0	0	0	0
Loadout	0	0	0	0	0	0	0	0	0	0
Well Bradenhead	0	0	0	0	0	0	0	0	0	0
Well Maintenance	4.5	0	0	0	1.05	0	0	0	0	0

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.

The wellsite consists of two wellheads and associated artificial lift equipment (pumpjack and engine). The engines are exempt from permitting requirements by the CDPHE-APCD due to their low emissions. Fugitives from the wellheads are insignificant based on the small number of components. Potential venting of gas from well maintenance activities result in insignificant emissions relative to the Bigfoot 11 facility. There are no other sources of emissions at this wellsite.

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	71
Annual	0	0	0	0	852

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	4	Active, built	37
Permitted by COGCC, unbuilt	0	Permitted by COGCC, unbuilt	12
Permitted by Relevant Local Government & not COGCC, unbuilt	0	Proposed	16
Proposed	1	Plugged and Abandoned	7

Total acreage disturbance during construction of the active and proposed oil & gas locations within 1-mile of the proposed Oil & Gas Location: 52.37

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
- ☒

	Permitted Onsite Storage Capacity	Existing Onsite Storage Capacity
Oil	44	44
Condensate	28	28

COGCC Location Files

☐ Aerial PhotosOther

☐ Other

Produced Water	27	27
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	0.46	0	New roads, including access roads	0.46	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.

N/A

Number of miles of the existing lease road that are planned to be used to access these location(s): 0.07

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

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

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

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

There will be beneficial impacts to the surrounding community in the form of taxes paid by the operator.

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

N/A

MITIGATION INFORMATION

No Mitigation Measures Listed

OPERATOR COMMENTS AND SUBMITTAL

Print Name: Andrea Gross Title: Permit Agent

Email: agross@upstreampm.com Date: 10/29/2021

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 for: - Surface Waters of the State - evaluation: listing the name of the nearest surface water is not an evaluation of the baseline condition. - Disturbance acreage listed as "0", but the Form 2A indicates disturbance. - Noise impacts - Production: citing existing noise impacts as a reason of non-concern is not a satisfactory evaluation of the increase in adverse noise impacts.	11/24/2021

Total: 1 comment(s)