



BISON IV OPERATING, LLC

SANDY BAY OGD

BARRACUDA PAD

&

TRIGGERFISH PAD

DUST MITIGATION PLAN



Bison IV Operating, LLC
SANDY BAY OGDG DUST MITIGATION PLAN

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Article I. Introduction

Location Information

This document provides site-specific dust mitigation information for the Barracuda Pad and Triggerfish Pad within the Sandy Bay OGD. The information in this document relates specifically to the time during the construction, drilling, completion, interim reclamation, and production of the fifteen (15) proposed horizontal wells associated with the Barracuda Pad and the eight (8) proposed horizontal wells associated with the Triggerfish Pad. One Dust Mitigation Plan for the Sandy Bay OGD is being submitted to satisfy the two (2) locations associated with the OGD. The best management practices and cumulative impacts included in this plan are pertinent to all locations, however, site-specific information for each location is included.

The Barracuda Pad and Triggerfish Pad will both utilize the same existing access point approximately 1.0 miles west of the intersection of County Road 74 and County Road 79 on the north side of the road. From the existing access point, a shared lease road will continue north and will be used to access both pads. The Barracuda Pad will be in the SWSW of Section 33, Township 7 North, Range 62 West, and is located on parcel 071533000002 owned by Jerry W Cass. The Triggerfish Pad will be in the SWSE Section 29, Township 7 North, Range 62 West, and is located on parcel 071529000008 owned by Hiram T Hill. Both Pads are zoned Agricultural within Weld County's Ag-Rural planning area and are currently used for grazing. 1041WOGLA's are being filed for each pad in conjunction with this OGD application.

Construction of the proposed Barracuda Location, with associated cut and fill slopes, would initially disturb approximately 20.0 acres. The working pad surface (WPS) during the construction phase will be 10.1 acres. Following the interim reclamation of 9.8 acres, the total Barracuda Location residual surface disturbance will be reduced to approximately 10.2 acres. The total residual surface disturbance of 10.2 acres includes the production pad working surface, seeded topsoil pile, and seeded detention pond area.

Construction of the proposed Triggerfish Location, with associated cut and fill slopes, would initially disturb approximately 16.0 acres. The working pad surface (WPS) during the construction phase will be 8.5 acres. Following the interim reclamation of 9.5 acres, the total Triggerfish Location residual surface disturbance will be reduced to approximately 6.5 acres. The total residual surface disturbance of 6.5 acres includes the production pad working surface, seeded topsoil pile, and seeded detention pond area.

The proposed production facility equipment for the Barracuda Pad and Triggerfish Pad will be located within the Working Pad Surface adjacent to the wells and will consist of oil tanks, produced water tanks, separators, vapor recovery towers (VRT), oil polishers, surge vessels, gas lift compressors, vapor recovery units (VRU), oil and water LACTs, scrubbers, knockouts, blower/oxygen destructors, instrument air skids, gas lift meters, sales gas meters, electrical skids, and emission control devices (ECD).

Pending approval from Weld County and the ECMC, the project schedule is as follows:

Barracuda Location

Phase	Duration (days)	Estimated Start Date
Construction	+/- 30 days	2 nd Quarter 2024
Drilling	+/- 105 days	2 nd Quarter (June) 2024
Completion	+/- 67 days	4 th Quarter (November) 2024
Flowback	+/- 10 days	1 st Quarter (January) 2025
Production	Ongoing +/- 30 years	1 st Quarter (January) 2025
Interim Reclamation	+/- 30 days	1 st Quarter (February) 2025*

**or the first favorable weather/growing season.*



Triggerfish Location

Phase	Duration (days)	Estimated Start Date
Construction	+/- 30 days	3 rd Quarter (August) 2024
Drilling	+/- 60 days	3 rd Quarter (September) 2024
Completion	+/- 40 days	4 th Quarter (December) 2024
Flowback	+/- 10 days	1 st Quarter (January) 2025
Production	Ongoing +/- 30 years	1 st Quarter (January) 2025
Interim Reclamation	+/- 30 days	1 st Quarter (February) 2025*

**or the first favorable weather/growing season.*

Article II. Dust Mitigation Plan Specific Data

Soils

Barracuda Pad Soil type(s):

72—Vona loamy sand 3-9% slopes (72)
44—Olney loamy sand 0-3% slopes (42)

Triggerfish Pad Soil type(s):

44—Olney fine sandy loam, 0 to 6 percent slopes
72—Vona loamy sand, 3 to 9 percent slopes
74—Vona loamy sand, 5 to 9 percent slopes

The total area of soil disturbance including access, in acres, for each location is:

Barracuda Pad: Approximately 20.2 acres (*20.0 acres pad disturbance + 0.2 acres access road*).

Triggerfish Pad: Approximately 20.3 acres (*16.0 acres pad disturbance + 4.3 acres access road*).

The Haul Route is directly onto County Road 74 which is a maintained gravel county road as depicted on the Haul Route Map.

The access road is not paved.



Truck Traffic

Vehicle traffic associated with the Sandy Bay OGDG will range from passenger cars and pickups to semi-truck/trailers and tandem truck vehicles. It is anticipated that construction will commence at the Barracuda Location in the 2nd quarter of 2024 and in the 3rd quarter of 2024 for the Triggerfish Location. These anticipated start dates will result in portions of the construction, drilling, completion, interim reclamation, and production phases being completed concurrently at both locations. The wells at each Sandy Bay Location will be drilled consecutively during one occupation (no demobilization and remobilizations of drill rigs). The combined total anticipated vehicle traffic associated with the Sandy Bay sites is summarized below, and a detailed description of anticipated vehicle traffic for each site is included in the tables.

During the construction phase, the expected number of per day roundtrips is estimated to be approximately 20 passenger cars/pickups, 5 single unit trucks, and 49 - 58 semi-truck/trailers.

During the drilling phase, the expected number of per day roundtrips is estimated to be approximately 14 passenger cars/pickups, 6 single unit trucks, and 14 semi-truck/trailers.

During the completion phase, the expected number of per day roundtrips is estimated to be approximately 40 passenger cars/pickups, 5-7 single unit trucks, and 40 - 288 semi-truck/trailers.

During the flowback phase, the expected number of per day roundtrips is estimated to be approximately 11 passenger cars/pickups, 5 single unit trucks, and 6 semi-truck/trailers.

During the interim reclamation phase, the expected number of per day roundtrips is estimated to be approximately 10 passenger cars/pickups and 0 semi-truck/trailers.

There are anticipated to be 4 passenger cars/pickups roundtrips per day and 0 annual truck trips during the life of production for this location, which is estimated to last for 30 years. This location will be tied into a gathering system resulting in no truck trips.



Barracuda Location

Phase of Development	# of Vehicle Roundtrips (per day)	Passenger car equivalent roundtrips (per day)
Construction Phase: earthwork of pad/facility & access road (30 days +/-)		
Passenger Vehicles ⁽¹⁾	13	13
Single Unit Trucks ⁽²⁾	3	5
Multiple Unit Trucks ⁽³⁾	32 – 38	113
TOTAL roundtrips per day =	57	131
Drilling Phase (90 - 150 days +/-, ~6 - 10 days/well)		
Passenger Vehicles ⁽¹⁾	9	9
Single Unit Trucks ⁽²⁾	4	8
Multiple Unit Trucks ⁽³⁾	9	27
TOTAL roundtrips per day =	22	44
Completion Phase (60 days +/-, ~15 days/4-well zipper frac)		
Passenger Vehicles ⁽¹⁾	26	26
Single Unit Trucks ⁽²⁾	3 – 4	8
Multiple Unit Trucks ⁽³⁾	26-188 ⁽⁴⁾	75 – 563
TOTAL roundtrips per day =	55 – 218	109 – 597
Flowback Phase (5 – 10 days +/-)		
Passenger Vehicles ⁽¹⁾	7	7
Single Unit Trucks ⁽²⁾	3	5
Multiple Unit Trucks ⁽³⁾	4	12
TOTAL roundtrips per day =	14	24
Interim Reclamation (30 days +/-)		
Passenger Vehicles ⁽¹⁾	5	5
Single Unit Trucks ⁽²⁾	0	0
Multiple Unit Trucks ⁽³⁾	0	0
TOTAL roundtrips per day =	5	5
Production/Operations Phase (ongoing for life of well, assuming facility is tied-in to distribution/collection system)		
Passenger Vehicles ⁽¹⁾	2	2
Single Unit Trucks ⁽²⁾	0	0
Multiple Unit Trucks ⁽³⁾	0	0
TOTAL roundtrips per day =	2	2

⁽¹⁾ **Passenger Vehicle:** < 20'; gross vehicle weight: 4,500 – 8,500 lbs (Source: CDOT State Highway Access Code [SHAC]), includes standard pickup trucks

⁽²⁾ **Single Unit Truck:** 20' – 40'; gross vehicle weight: 10,000 – 20,000 lbs; = 2 passenger car equivalents (CDOT SHAC)

⁽³⁾ **Multiple Unit Truck:** >40'; gross vehicle weight: 50,000 – 70,000 lbs; = 3 passenger car equivalents (CDOT SHAC)

⁽⁴⁾ **Multiple unit truck volume during the completion phase dependent upon water transport options, i.e., temporary layflat line vs. trucking water to location.**



Triggerfish Location

Phase of Development	# of Vehicle Roundtrips (per day)	Passenger car equivalent roundtrips (per day)
Construction Phase: earthwork of pad/facility & access road (30 days +/-)		
Passenger Vehicles ⁽¹⁾	7	7
Single Unit Trucks ⁽²⁾	2	3
Multiple Unit Trucks ⁽³⁾	17 – 20	60
TOTAL roundtrips per day =	29	70
Drilling Phase (48 - 80 days +/-, ~6 - 10 days/well)		
Passenger Vehicles ⁽¹⁾	5	5
Single Unit Trucks ⁽²⁾	2	4
Multiple Unit Trucks ⁽³⁾	5	14
TOTAL roundtrips per day =	12	23
Completion Phase (30 days +/-, ~15 days/4-well zipper frac)		
Passenger Vehicles ⁽¹⁾	14	14
Single Unit Trucks ⁽²⁾	2 – 3	4
Multiple Unit Trucks ⁽³⁾	14 – 100 ⁽⁴⁾	40 – 300
TOTAL roundtrips per day =	30 – 116	58 – 318
Flowback Phase (5 – 10 days +/-)		
Passenger Vehicles ⁽¹⁾	4	4
Single Unit Trucks ⁽²⁾	2	3
Multiple Unit Trucks ⁽³⁾	2	6
TOTAL roundtrips per day =	8	13
Interim Reclamation (30 days +/-)		
Passenger Vehicles ⁽¹⁾	5	5
Single Unit Trucks ⁽²⁾	0	0
Multiple Unit Trucks ⁽³⁾	0	0
TOTAL roundtrips per day =	5	5
Production/Operations Phase (ongoing for life of well, assuming facility is tied-in to distribution/collection system)		
Passenger Vehicles ⁽¹⁾	2	2
Single Unit Trucks ⁽²⁾	0	0
Multiple Unit Trucks ⁽³⁾	0	0
TOTAL roundtrips per day =	2	2

⁽¹⁾ **Passenger Vehicle:** < 20'; gross vehicle weight: 4,500 – 8,500 lbs (Source: CDOT State Highway Access Code [SHAC]), includes standard pickup trucks

⁽²⁾ **Single Unit Truck:** 20' – 40'; gross vehicle weight: 10,000 – 20,000 lbs; = 2 passenger car equivalents (CDOT SHAC)

⁽³⁾ **Multiple Unit Truck:** >40'; gross vehicle weight: 50,000 – 70,000 lbs; = 3 passenger car equivalents (CDOT SHAC)

⁽⁴⁾ Multiple unit truck volume during the completion phase dependent upon water transport options, i.e., temporary layflat line vs. trucking water to location.



Article III. Best Management Practices

Bison will employ the following practices for control of fugitive dust caused by their operations:

- Bison will minimize the amount of fugitive dust through the use of speed restrictions. All vehicles will be subject to a speed limit of 15 MPH on all lease roads to minimize dust.
- Bison uses traffic signs when leaving the location to remind drivers of specific routes to utilize.
- Armoring working surfaces with road base.
- Automation of the wells and production facilities which provides the ability to monitor the site and complete basic tasks remotely instead of a physical trip to the site.
- Restriction of construction activity during high-wind days.
- Silica dust from handling sand used in hydraulic fracturing operations will be mitigated by utilization of the enclosed Sand Box type sand delivery method.
- Bison will stabilize the topsoil stockpiles utilizing vehicle tracking perpendicular to slope angle for short term stabilization and drill seed/crimped straw mulch application for longer term stabilization measures to suppress fugitive dust caused solely by wind.
- Bison will work diligently to ensure all disturbed surfaces due to oil and gas operations are properly stabilized to minimize any dust migration.
- Bison will primarily utilize water and/or commercial dust suppressants to limit and creation and spread of fugitive dust on access road and pad locations. While Bison plans to use freshwater for dust suppression efforts, in some situations, chemical-based palliatives may be considered as a necessary long-term dust mitigation solution. Should chemical soil binding compounds such as magnesium chloride or similar products be used, Bison will maintain the requisite safety data sheets (SDS) and make said SDS documentation available to state and local government officials.
- Bison will use only fresh water (potable or non-potable) to conduct dust suppression activities within 300 feet of the ordinary high-water mark of any water body.

Operators will not use any of the following fluids for dust suppression:

- Produced water
- E&P Waste or hazardous waste
- Crude oil or any oil not specifically designed for road maintenance.
- Solvents
- Any process fluids

Article IV. Cumulative Dust Impacts



Where circumstances dictate, Bison will work to minimize cumulative dust impacts resulting from site operations. Such situations may include nearby Oil and Gas truck traffic, sharing of unpaved roads, as well as other major sources of dust in the area which may or may not be derived from Oil and Gas activities. As necessary, Bison will work with offset operators and any other dust source activities within a reasonable proximity to actively manage cumulative dust impacts.

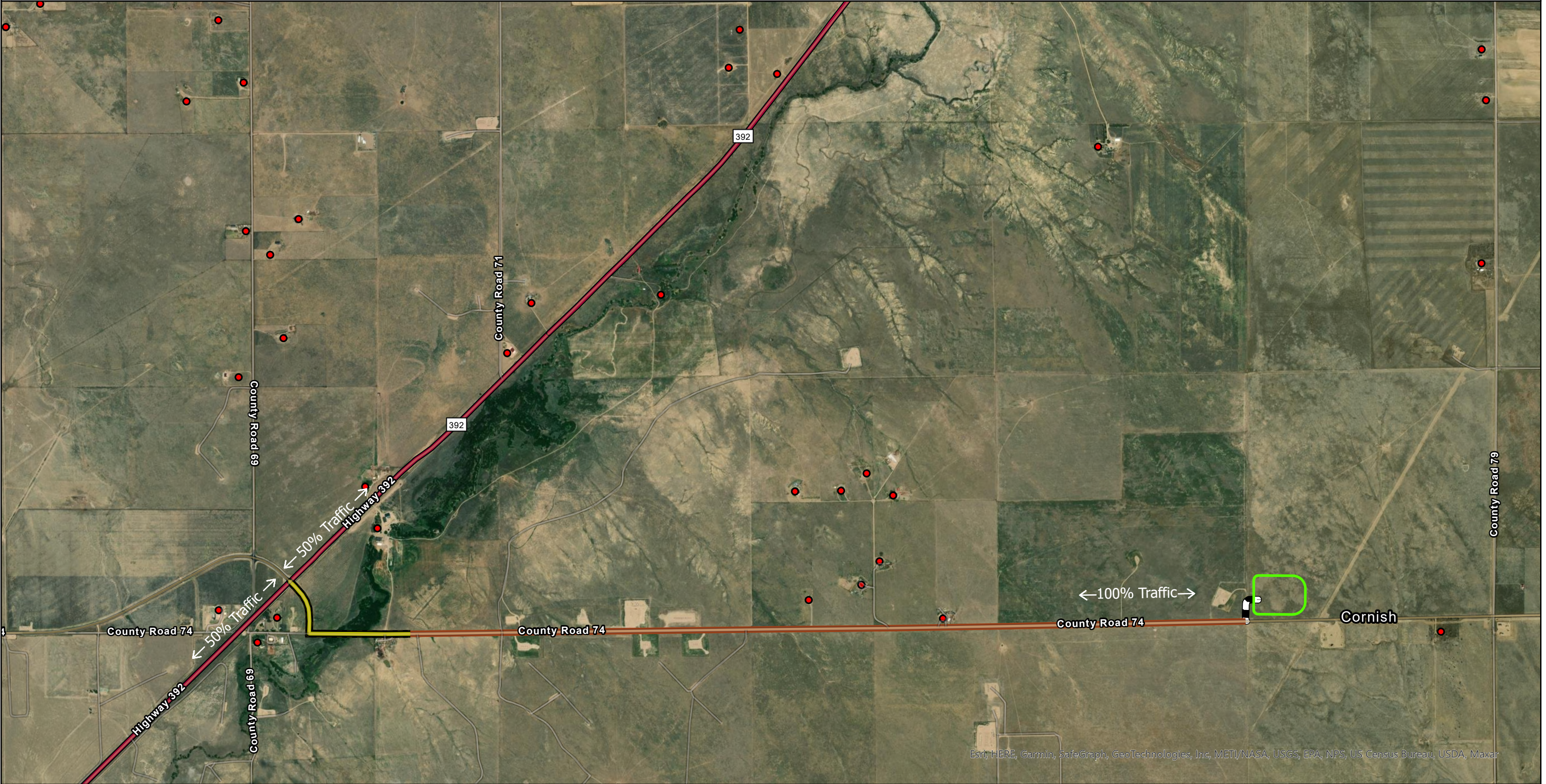
Article V. Exhibits

Please see Haul Route Map for the haul route

BISON IV OPERATING, LLC
BARRACUDA PAD
SECTION 33, T7N R62W, 6th P.M.
WELD COUNTY, COLORADO









Map Location: C:\Users\ybeam\Documents\ArcGIS\Projects\Bison 4\Triggerfish\Triggerfish_HaulRouteMap_231013.aprx

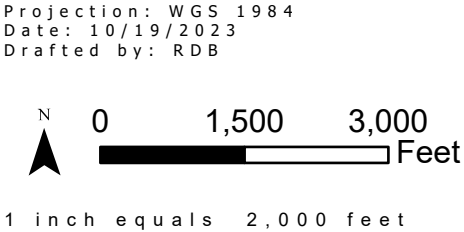


Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc., METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, Maxar

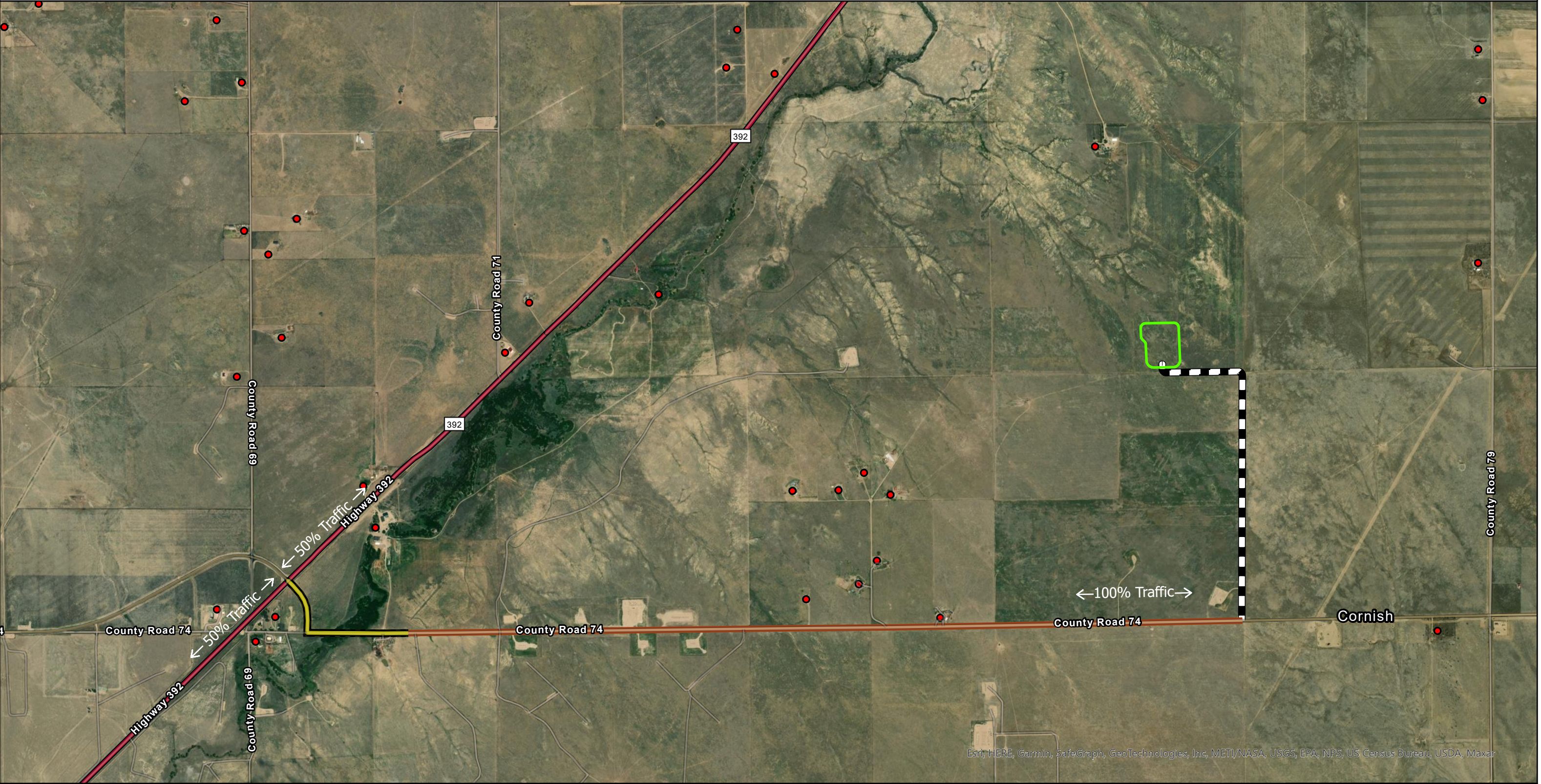
HAUL ROUTE MAP

- | | | |
|-----------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
|  Proposed Oil & Gas Location |  Unpaved Road (County) |  State Highway |
|  Proposed Access Road |  Paved Road (County) |  Address Point |

There are no school facilities, future school facilities, or child care centers in which the haul route passes.



BISON IV OPERATING, LLC
TRIGGERFISH PAD
SECTION 29, T7N R62W, 6th P.M.
WELD COUNTY, COLORADO



HAUL ROUTE MAP

-  Proposed Oil & Gas Location
-  Proposed Access Road
-  Unpaved Road (County)
-  Paved Road (County)
-  State Highway
-  Address Point

There are no school facilities, future school facilities, or child care centers in which the haul route passes.

Projection: WGS 1984
Date: 10/13/2023
Drafted by: RDB

N

0 1,500 3,000 Feet

1 inch equals 2,000 feet