



Final Reclamation Complete Notice – Cropland Drone Imagery Addendum

PERMIT CLOSURE REPORT – CROPLAND

Location ID 448568

Location Name Bliss 10-33 TB Loc./

Report Date

11 Feb 2025

Crop Year and Type

Crop 2024 – Corn

Site Description

Name	Bliss 10-33 TB Loc./	
Location ID	448568	
Operator / #	EXTRACTION OIL & GAS INC / 10459	
Field	GREELEY / 32760	
County, State	Weld, CO	
Lat/Long	40.435597/-104.665682	

Addendum Report

This addendum addresses the Field Inspection Form Document # [718700047](#) data 2/6/2025 Corrective Action - Fail reclamation due to tank battery is not reflective of the adjacent reference areas as evidenced by stunted crop growth which could be a result of soil suitability or compaction issues.

Site Conditions 2022 - 2024

448568 Bliss is situated within a continuously cultivated cornfield that is flood irrigated from north to south. This site has been monitored for several years prior to recommending closure. Throughout this period, observations have consistently shown that the field area east of the farm road does not drain effectively during the irrigation season. The following photos document these findings during the 2022 and 2023 growing seasons and crop off prior to the 2024 growing season.

Site Investigation – August 2023

The west-facing drone image from August 2023 shows a ditch running along the road, with the eastern section of the field inundated with irrigation water, while the area west of the road remains relatively dry. Additionally, the location of the ponded water aligns with the extent of the former oil and gas disturbance extent. However, this is a correlation rather than an indication of causation related to past oil and gas activities. Our observation also indicates the water in the road ditch flows from west to east.



August 2023 Drone Photo - Facing West

The north-facing drone image from August 2023 shows ponded water, along with stunted and yellowing corn, extending along the county road and beyond the boundaries of the former oil and gas disturbance.



August 2023 Drone Photo - Facing North

The east-facing drone imagery from August 2023 depicts another angle of the flooding/ponding area. In this image there is a small circle of yellow corn that can be seen that overlaps where the previous disturbance extent.

In a flood irrigation system, crops along the gradient from uphill to downhill typically remain green, provided the landscape is uniform with no visible undulations. However, small depressions in lower-elevation areas can lead to water pooling, causing localized yellowing and stunted growth.

Even a depression of less than 1 cm in elevation can result in standing water, leading to chlorosis in corn. This constitutes a *de minimis* loss that would not occur if water were not backing up into the field. Given the minimal impact, moving equipment into the field to address these areas would likely cause more harm than allowing the farmer to continue regular operations.

Additionally, this image effectively illustrates that where water has pooled, no corn is growing east of the road, whereas the west side remains dry and unaffected.



2023 - Facing East

The south-facing drone imagery from August 2023 depicts the water pooled on the east side of the farm road and along the county road, and not to the west side. Further illustrating the landscape dynamics taking place at the edge of this corn field.



2023 - Facing South

Site Investigation – 2022

The north-facing drone imagery from August 2022 shows ponding water in the same location, further illustrating that during this growing season, water backed up even further into the field and along the road. This reinforces that the ponding and resulting stunted crop growth are due to the field's characteristics rather than a direct impact of past oil and gas activities. While the affected area aligns with the previous disturbance extent, this is a correlation, not causation. Additionally, the imagery shows that the impacted area along the road extends beyond the historical disturbance boundary.



2022 - Facing North

The east-facing drone imagery from August 2022 illustrates that the road ditch is full, and water is backing up into the field. The water extends farther north into the field than the oil and gas disturbance, while the west side of the road remains dry.



2022 - Facing East

Site Investigation – 2024

The east-facing drone imagery from March 2024 shows that the field is uniformly furrowed, with no visible evidence of the facility's impact once the crop is removed. The image also indicates that the soil maintains consistent color and texture throughout. Additionally, the photo captures the farmer driving on and off the farm road near the area where the water pools, highlighting an impact from routine farming activities. Ground observations in March 2024 confirmed that all gravel had been removed from the previous disturbance extent.



Drone Photo March 2024 - Facing East

The south-facing imagery from March 2024 illustrates the uniformity of the rows across the field including the disturbance. Overlapping the disturbance there are tire tracks compacting the area along the road at the entrance of the field. These are caused by the farmer and can lead to some of the lack of growth along the field.



Drone Photo March 2024 - Facing South

Summary

Site investigations conducted from 2022 to 2024 demonstrate that 448568 Bliss met reclamation standards for cropland when compared to the reference area within the same field. Using a reference area east of the farm road—rather than the west side—illustrates that the recovery area is affected by the same standing water conditions as the rest of the field. Any stunted, missing, or yellowing corn is a result of natural water pooling in this field, rather than any lingering impact from previous disturbances.