



# Site Specific Final Reclamation Completion Notice – Cropland Drone Imagery

## Permit Closure Report – Cropland

**Location ID:** 328819

**Location Name:** HUNGENBERG-64N66W/13SWSW

## Report Date:

10/21/2024

H2E has conducted a thorough review of the data provided in this report. This report was developed in accordance with ECMC Operator Guidance – Operator supplied cropland drone imagery and information for submitting a final reclamation completion notice.

## Crop Year and Type

Crop 2024 – Cabbage

Crop 2023 – Cabbage

## Inspection:

Performed by	H2E, Incorporated
Date	9/16/2024

All pertinent data, imagery, and materials are included at the end of this report.

## Location Checklist



<b>Operator / #</b>	PDC ENERGY INC / 69175			
<b>Name / Location ID</b>	HUNGENBERG-64N66W/13SWSW / 328819			
<b>County</b>	Weld			
<b>Well Information</b>	<b>Well Name:</b> HUNGENBERG #13-13F			
	<b>Well API #:</b> 05-123-16473			
	<b>Lat/Long As Drilled:</b> 40.306390 / -104.731760			
	<b>Plug date &amp; Form 6S Doc. #:</b> 03/29/2022 - 403006607			
<b>Facility Entities</b>		Tank Battery		Pits
	X	Wells		On-Location Flowlines (Form 42): Doc. #
		Domestic Taps	X	Off-Location Flowlines (Form 44): Doc. # 403091890
<b>Equipment on Site</b>	X	None		Debris
		Pit mouse/rat holes, cellars backfilled		
<b>Access Road</b>	X	Regraded	X	Contoured
		Culverts removed		Gravel removed
		Pre-existing: must provide supporting documentation		
<b>Reclamation Status</b>	X	Location and associated disturbances reclaimed		
		Subsidence		
<b>Spills or Releases (Form 19)</b>	X	No		Yes
<b>Remediation (Form 27/27A)</b>		No	X	Yes
<b>On-Location Flowlines</b>	X	No		Yes
<b>Off-Location Flowlines</b>		No	X	Yes
<b>Inspection Corrective Actions</b>		No	X	Yes
<b>Sundry Notice (Form 4)</b>	N/A			
<b>Drone Information</b>	<b>Make &amp; Model:</b> DJI M300			
	<b>Image Processing Software:</b> Pix4Dmapper			
	<b>Pilot Name &amp; FAA Certificate #:</b> Peter Nelson - 4974559			
	<b>Date of FAA Certificate Issuance:</b> 3/19/2024			

## Location Summary



<b>Name:</b>	HUNGENBERG-64N66W/13SSWSW		
<b>Type</b>	Wellhead		
<b>Location ID</b>	328819		
<b>Operator / #</b>	PDC ENERGY INC / 69175		
<b>Field</b>	WATTENBERG		
<b>County, State</b>	Weld, Colorado		
<b>Lat/Long</b>	40.306390 / -104.731760		
	<input type="checkbox"/> Planned Location	<input checked="" type="checkbox"/> X	As Drilled
<b>Location</b>	SSWSW 13 4N66W 6		
<b>Facility Status - Date</b>	PA - 3/29/2022		
<b>Facility Entities</b>	<input type="checkbox"/>	Tank Battery	<input type="checkbox"/> Pits
	<input checked="" type="checkbox"/> X	Wells	<input checked="" type="checkbox"/> X Off-Location Flowlines
	<input type="checkbox"/>	Domestic Taps	<input type="checkbox"/> On-Location Flowlines
	<input type="checkbox"/>	Electric Utilities	
<b>Equipment on Site</b>	<input checked="" type="checkbox"/> X	No	<input type="checkbox"/> Yes
	If yes, list:		
	Pit mouse/rat holes, cellars backfilled		
<b>Access Road</b>	<input checked="" type="checkbox"/> X	Regraded	<input checked="" type="checkbox"/> X Contoured
	<input type="checkbox"/>	Culverts Removed	<input type="checkbox"/> Gravel Removed
	Pre-Existing (Must provide supporting documentation):		
<b>Variance Requests</b>	N/A		
<b>Sundry Notice (Form 4)</b>	N/A		
<b>Off-Location Flowlines (Form 44)</b>	<b>Form 44 Doc # &amp; Date:</b> 4403091890 - 06/28/2022		
	<b>Purpose:</b> Flowlines Abandoned		
	<b>Abandonment Date:</b> 03/31/2022		
	<b>ECMC Approval Date &amp; Signee:</b> N/A		
	<b>Operator Comments:</b> N/A		
	<b>Flowline Facility Information</b>		
	<b>ECMC Flowline ID:</b> 479253		
	<b>Operator Flowline ID:</b> PDC Flowline System		
	<b>Status &amp; Date:</b> AC - 9/25/2024		
	<b>Flowline Type:</b> Wellhead Line		
	<b>Type of Fluids Transported:</b> Methane Gas		
	<b>Start Point Location ID:</b> 328819		
	<b>Start Point Riser Lat/Long:</b> 40.306390 / -104.731760		
	<b>Equipment at Start Point:</b> Wellhead		
	<b>End Point Location ID:</b> 471377		
<b>End Point Riser Lat/Long:</b> 40.309245 / -104.731694			
<b>Equipment at End Point:</b> Separator			

<b>Field Inspection Form (Form INSP)</b>	<b>Form INSP Doc # &amp; Date:</b> 661600744 - 9/13/2012 680702868 - 10/5/2016 696501084 - 11/15/2019 697001828 - 08/14/2020 697002166 - 10/06/2020 697004492 - 09/03/2021 697005092 - 01/13/2022
	<b>Status Summary:</b> 661600744 - Satisfactory 680702868 - NO FOLLOW UP INSPECTION REQUIRED 696501084 - NO FOLLOW UP INSPECTION REQUIRED 697001828 - FOLLOW UP INSPECTION REQUIRED 697002166 - THIS IS A FOLLOW UP INSPECTION; NO FOLLOW UP INSPECTION REQUIRED 697004492 - NO FOLLOW UP INSPECTION REQUIRED 697005092 - NO FOLLOW UP INSPECTION REQUIRED
	<b>Inspected Facilities:</b> 661600744 - Well 680702868 - Well 696501084 - Well 697001828 - Well 697002166 - Well 697004492 - Well 697005092 - Well
	<b>Inspection Status:</b> 661600744 - PR 680702868 - PR 696501084 - PR 697001828 - PR 697002166 - PR 697004492 - PR 697005092 - SI
	<b>Inspection Date &amp; Inspector:</b> 661600744 - 02/29/2012 - Montoya, John 680702868 - 10/05/2016 - Peterson, Tom 696501084 - 11/15/2019 - Peterson, Tom 697001828 - 08/14/2020 - Peterson, Tom 697002166 - 10/06/2020 - Peterson, Tom 697004492 - 09/03/2021 - Peterson, Tom 697005092 - 01/13/2022 - Peterson, Tom
	<b>Comments:</b> 661600744 - None 680702868 - None 696501084 - None 697001828 - Wellhead sign lacked an emergency contact number and trash around the wellhead area. During this inspection the following possible compliance issues were observed: Rule 210.b. with a corrective action date of 11/16/2020, Rule 603.f. with a corrective action date of 11/16/2020. A follow up on this site inspection needs to be conducted to ensure the compliance issues have been corrected to comply with COGCC rules. 697002166 - Emergency contact number noted in prior inspection has been added to wellhead sign 697004492 - None 697005092 - None

<b>Inspection Corrective Actions (CAs)</b>	697001828 -Emergency contact number is not posted at wellhead. Broken concrete around wellhead		
<b>Environmental Incidents &amp; Remediation</b>		None	Spill or Release (Form 19)
	X	Remediation (Form 27/27A)	
<b>Spill or Release (Form 19)</b>	N/A		
<b>Site Investigation and Remediation Workplan (Form 27/27A)</b>	<b>Remediation Project #:</b> 21639		
	<b>Form 27 Initial Doc # &amp; Date:</b> 402904640 - 01/07/2022		
	<b>Purpose:</b> Decommissioning of Oil and Gas Facilities		
	<b>Notes:</b> This Form 27 serves as notification for the abandonment of the Hungenberg 13-13F wellhead and removal of the associated flowline. Abandonment activities are planned to begin the week of January 10, 2022. This schedule may be adjusted due to unforeseen circumstances, delays, and/or changes in weather.		
	<b>Form 27 Supplemental Docs # &amp; Date:</b> 403068934 - 06/24/2022		
	<b>Purpose:</b> Decommissioning of Oil and Gas Facilities; Request to leave elevated inorganics in situ.		
	<b>Operator Comments:</b> Analytical results indicated that constituent concentrations in all samples were in compliance with COGCC Table 915-1 standards, with exception to the pH value for sample WH01. Based on the absence of other indicators that a spill or release occurred, such as hydrocarbon exceedances or elevated EC and SAR in soil, the pH results at these locations is not associated with E&P activities. Additionally, pH was determined to be present in the native background samples at elevated levels. As such, PDC requests that pH not be considered a Table 915-1 contaminant of concern at this location and is requesting a No Further Action (NFA) determination for the Hungenberg 13-13F Wellhead.		
	<b>ECMC Comments:</b> Based on the information presented, the elevated pH sample from the area appears to be similar to background pH; therefore, elevated pH may not be associated with E&P activities. It appears that no further remedial action is necessary at this time and the COGCC approves the closure request. However, should future conditions at the site indicate contaminant concentrations in soils exceeding COGCC standards or background levels or if groundwater is found to be impacted, then further investigation and/or remediation activities may be required.		
	<b>ECMC COAs:</b> 1 COA		
	<b>Closure Request Approved:</b> Jason Kosola - 08/29/2022		
	<b>Final Resolution:</b> 08/29/2022		
<b>COGIS Tank Location Information (Scout Card)</b>	<b>Tank Battery Name:</b> HUNGENBERG/		
	<b>Location ID:</b> 471377		
	<b>Status &amp; Date:</b> AC - 4/6/2022		
	<b>Lat/Long:</b> 40.309245 / -104.731694		
	<b>Notes:</b> N/A		
<b>COGIS Well Information (Scout Card)</b>	<b>Form 4 Doc # &amp; Date:</b> N/A		
	<b>Purpose:</b> N/A		
	<b>Well Name:</b> HUNGENBERG #13-13F		
	<b>Facility ID:</b> 248672		
	<b>Status &amp; Date:</b> PA - 3/29/2022		
<b>COGIS Well Information (Scout Card)</b>	<b>Lat/Long:</b> 40.306390 / -104.731760		
	<b>Notes:</b> N/A		
	<b>Form 4 Doc # &amp; Date:</b> N/A		
	<b>Purpose:</b> N/A		



## Designated Land Use Observations

Previous Land Use	Current Land Use
Reference Imagery for Infrastructure: NAIP 2013	Remotely Sensed Imagery: 9/16/2024
Designation: Oil and Gas Facility	Designation: Cropland

### The following imagery sources were reviewed during this investigation:

NAIP Imagery 2013, 2023, and historic Google Earth Imagery.

## Site Observation Notes

No Additional Information

## Closure Information

This final reclamation completion notice is intended to close the HUNGENBERG-64N66W/13SWSW location which consists of the HUNGENBERG #13-13F (API # 05-123-16473) wellhead. This wellhead does not share a disturbance with any other wells or tank batteries. The associated tank battery has its own location ID (471377) which will remain open until final remediation has been achieved.

The HUNGENBERG-64N66W/13SWSW location is in Weld County, Colorado east of CR 35 and north of CR 44. There is one off location flowline associated with this well that transports methane gas to its associated tank battery.

HUNGENBERG #13-13F was reclaimed and returned to the landowner for agricultural use in 2022. The wellhead was accessed from an unnamed access road along CR 35 that led to the HUNGENBERG-64N66W/13SWSW location.

There are no spill/releases (Form 19) documented during our records review.

One Remediation Workplan (Form 27-I) was documented and identified during our records review (Doc. # 402904640). The workplan was filed on 01/07/2022 for "Decommissioning of Oil and Gas Facilities." On 06/24/2022 a Form 27-S (Doc. # 403068934) was filed to close remediation project number 21639. This remediation workplan was closed on 08/29/2022 by Jason Kosola.

There was one corrective action (CA) identified during our records review. On 08/14/2020 (Document # 697001828) the corrective action stated "Emergency contact number is not posted at wellhead. Broken concrete around wellhead." During the follow-up inspection on 10/06/2020 (Document # 697002166) the corrective has been addressed as the comment stated that "Emergency contact number noted in prior inspection has been added to wellhead sign" and the status summary was "no follow up inspection required."



Drone imagery confirms that no equipment was left on site at this location after reclamation activities occurred.

### Summary Acreage Table

Description	Acres
Historic Disturbance Extent	0.10
Access Road	0.08
Flowline	Not Included
Tank Battery	Not Included
Well Pad	0.02

# Pre-Plugging Active Operations Location Overview



### PDC Form 4 Final Reclamation - Pre Plugging Overview

Hungenberg 13-13F

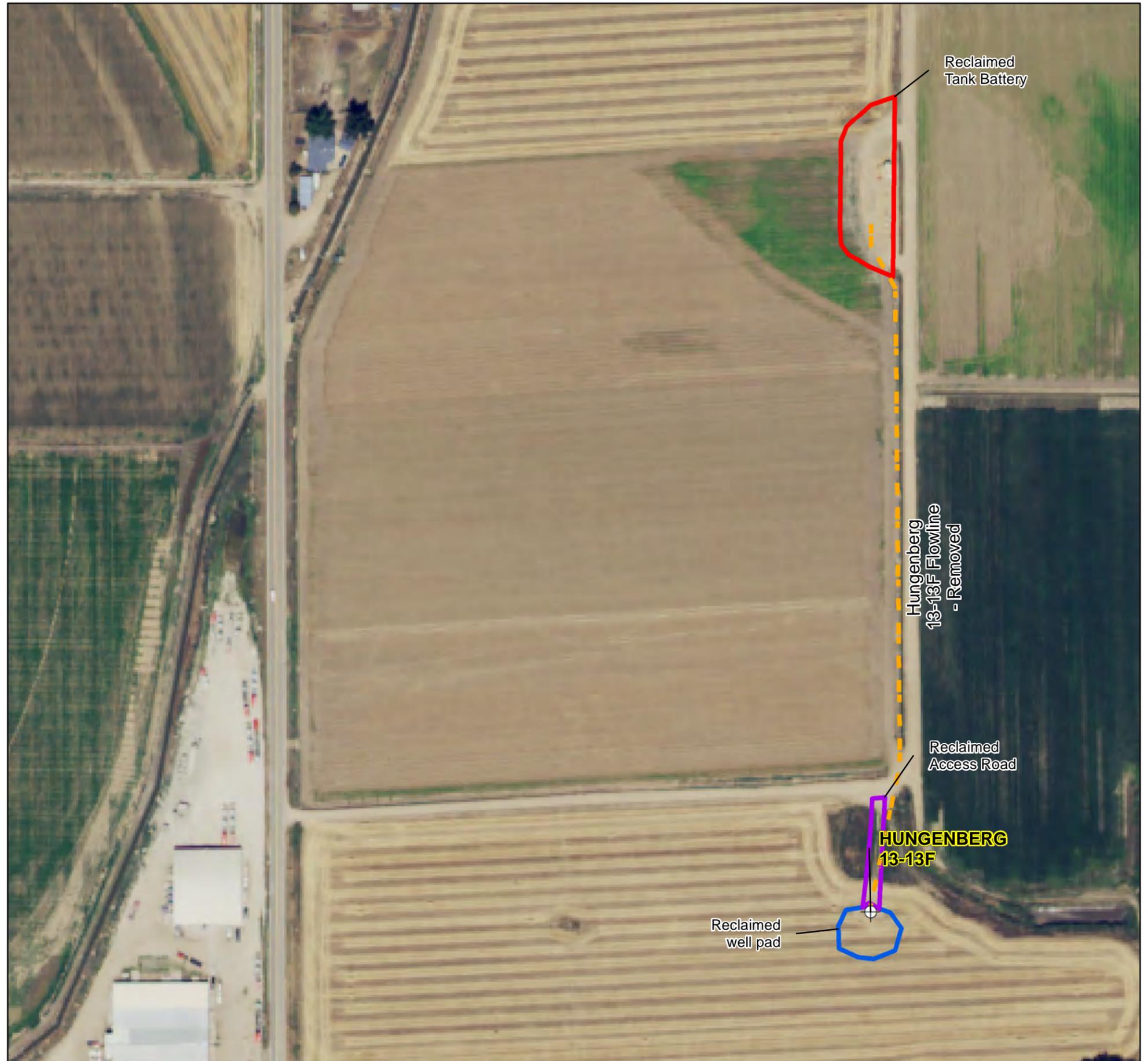
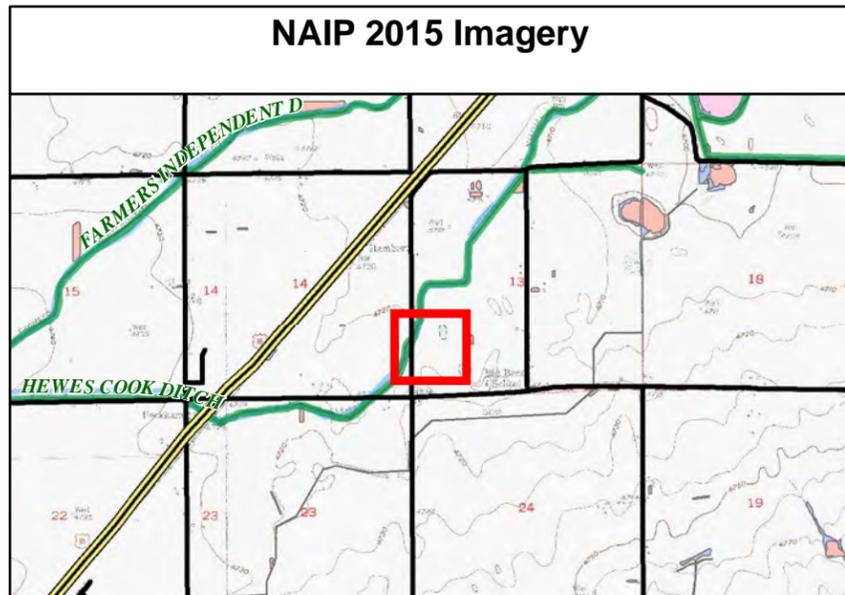


Editor: EJanak  
File: PDC\_Drone\_Rec\_PrePlugging\_DDP

Prepared by:  
Scale: 1:1,900  
Date: 11/5/2024

- Well Head
- Former Tank Battery Disturbance
- Reclaimed Well Pad Disturbance
- Reclaimed Access Road Disturbance
- Flowline - Abandoned

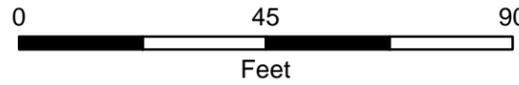
#### NAIP 2015 Imagery





PDC Form 4 Final Reclamation - Pre Plugging Overview

Hungenberg 13-13F

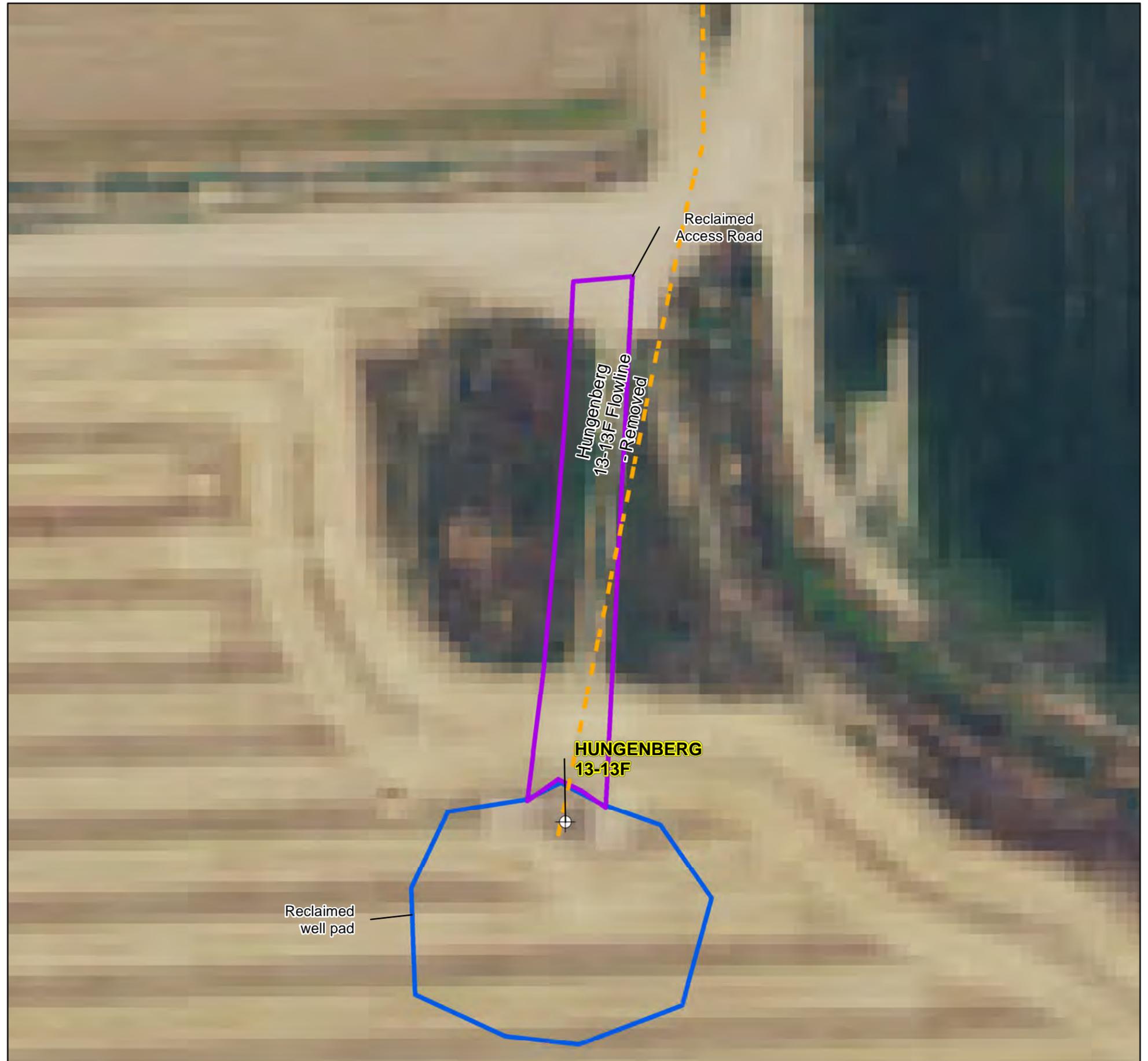
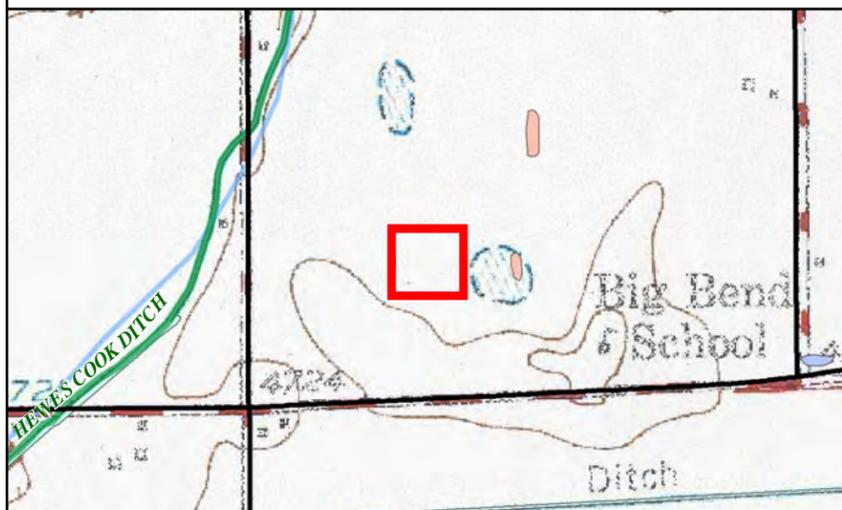


Editor: EJanak  
File: PDC\_Drone\_Rec\_PrePlugging\_DDP

Prepared by:  
Scale: 1:400  
Date: 11/5/2024

- Well Head
- Reclaimed Well Pad Disturbance
- Reclaimed Access Road Disturbance
- Flowline - Abandoned

NAIP 2015 Imagery

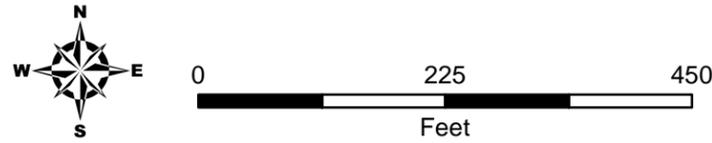


## Post-Plugging and Abandonment Location Overview



### PDC Form 4 Final Reclamation - Post Plugging Overview

Hungenberg 13-13F

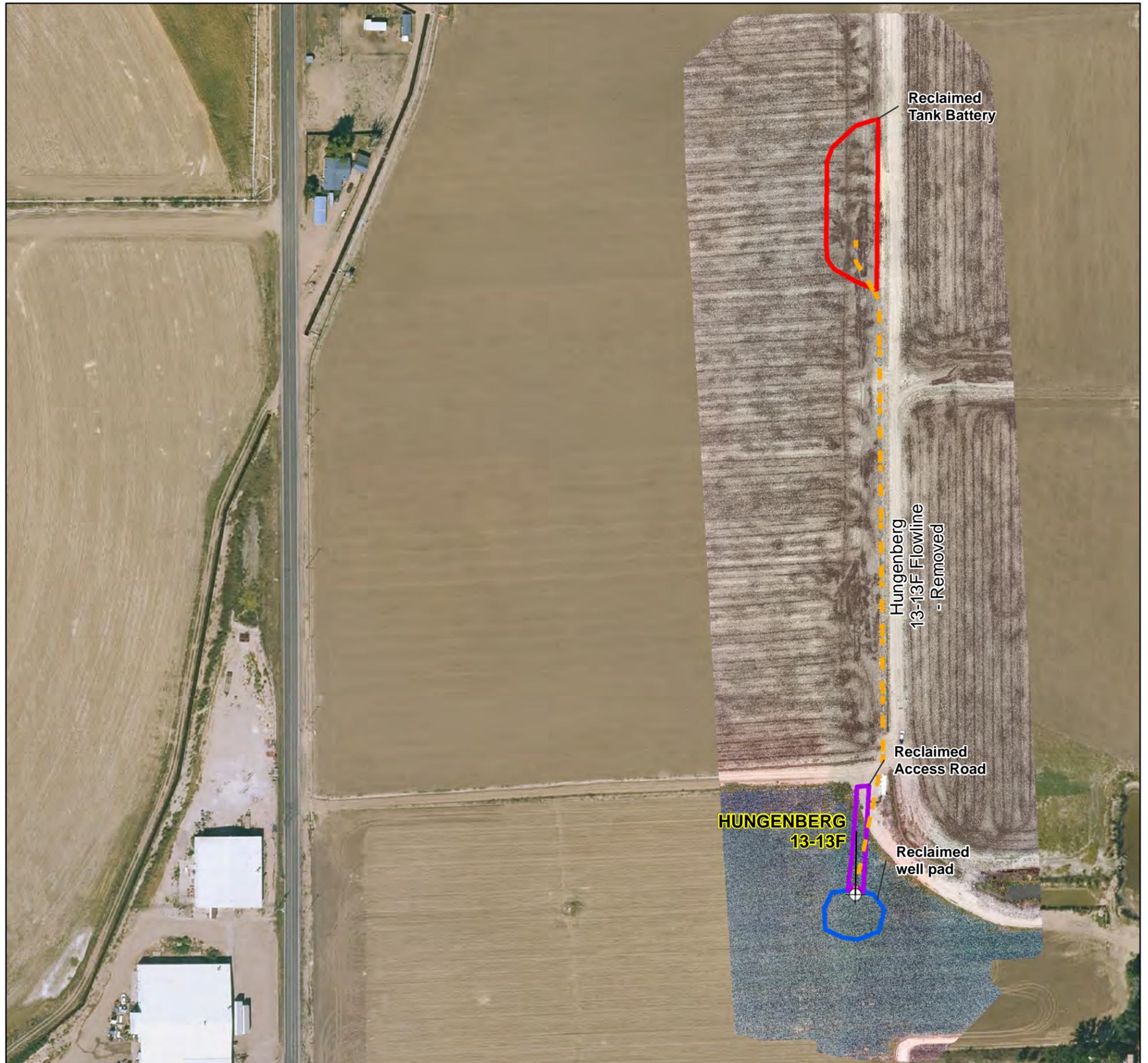
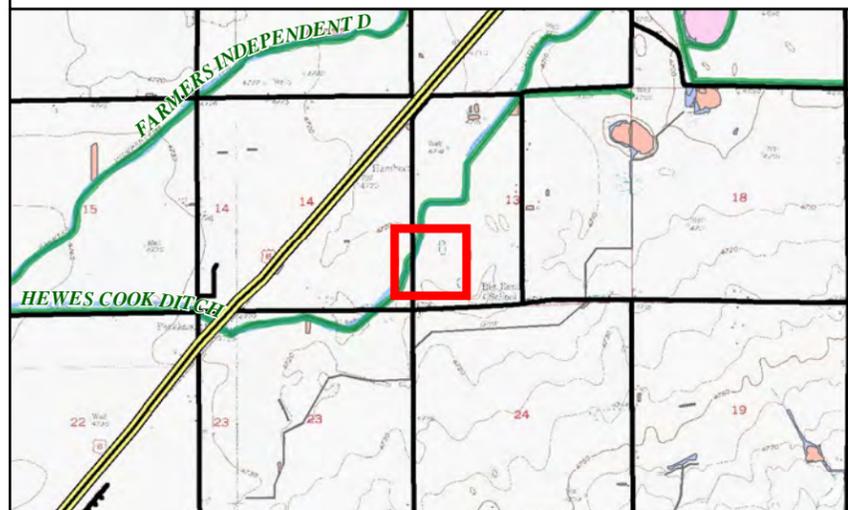


Editor: EJanak  
File: PDC\_Drone\_Rec\_PostPlugging\_DDP

Scale: 1:2,000  
Date: 11/5/2024

- Well Head
- Reclaimed Tank Battery Disturbance
- Reclaimed Well Pad Disturbance
- Reclaimed Access Road Disturbance
- Flowline - Abandoned

#### 2024 Drone Imagery





# PDC Form 4 Final Reclamation - Post Plugging Overview

Hungenberg 13-13F

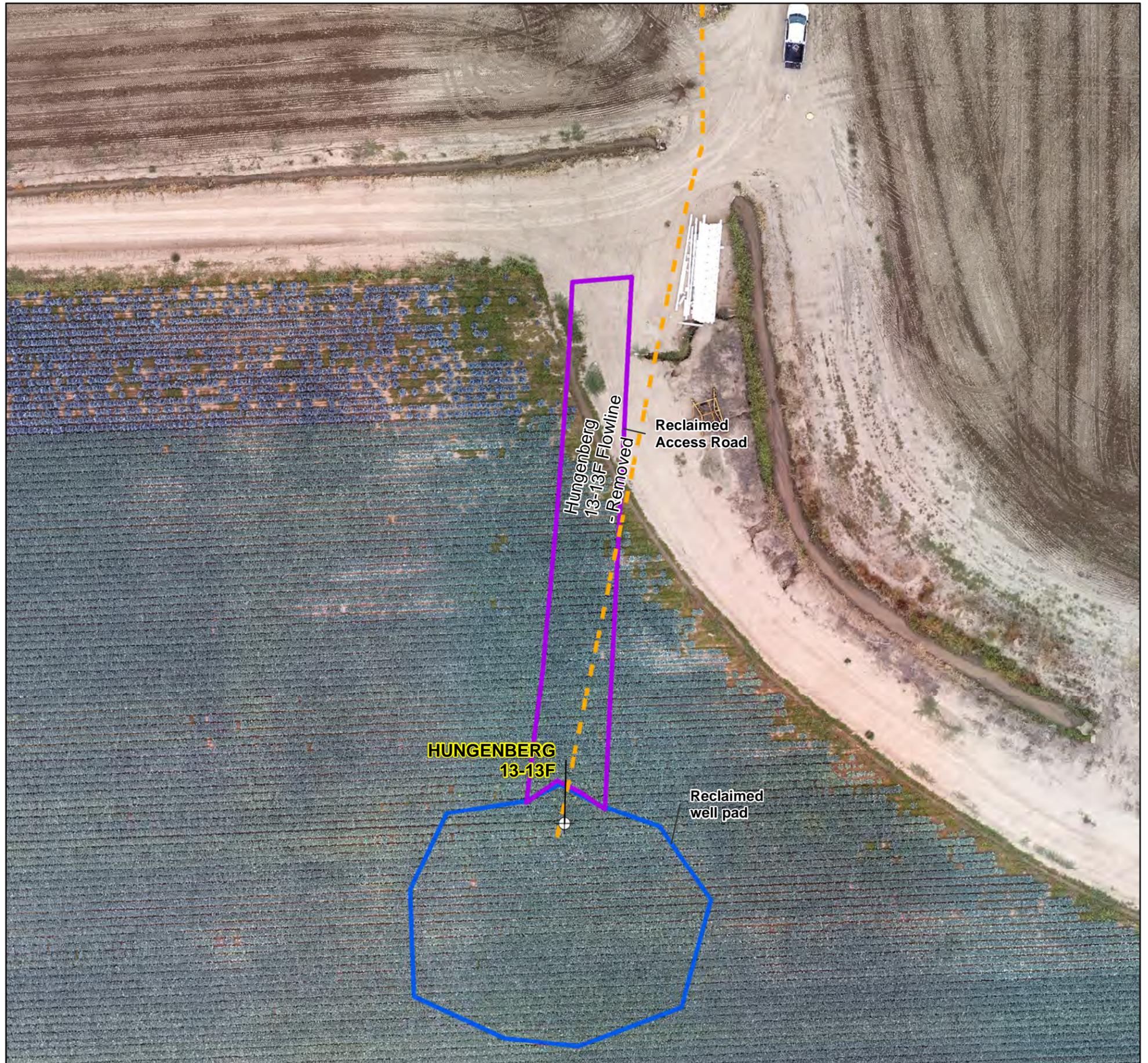
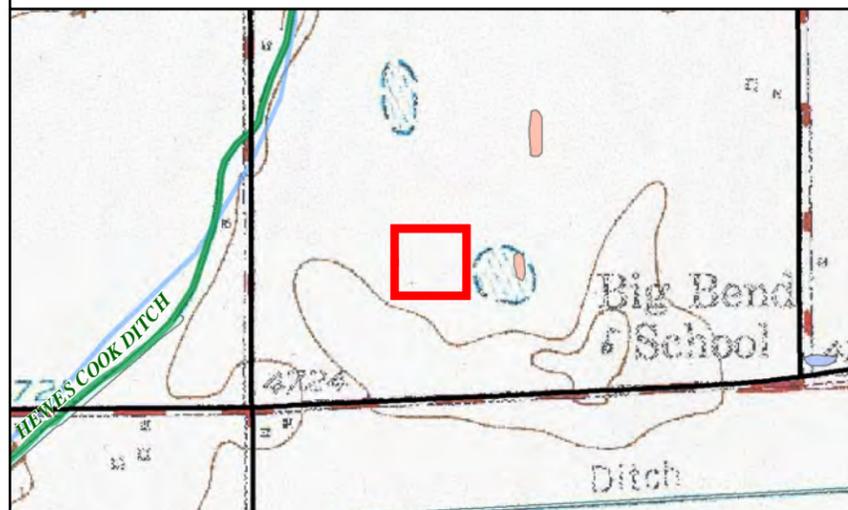


Editor: EJanak  
File: PDC\_Drone\_Rec\_PostPlugging\_DDP

Scale: 1:400  
Date: 11/5/2024

- Well Head
- Reclaimed Well Pad Disturbance
- Reclaimed Access Road Disturbance
- Flowline - Abandoned

## 2024 Drone Imagery



# Cardinal Direction Drone Photos of the Reclaimed Area

Photo Dates:

9/16/2024

Drone Photo Height:

100'

North of Disturbance Facing South  
Lat/Long: 40.30696764 / -104.73174442



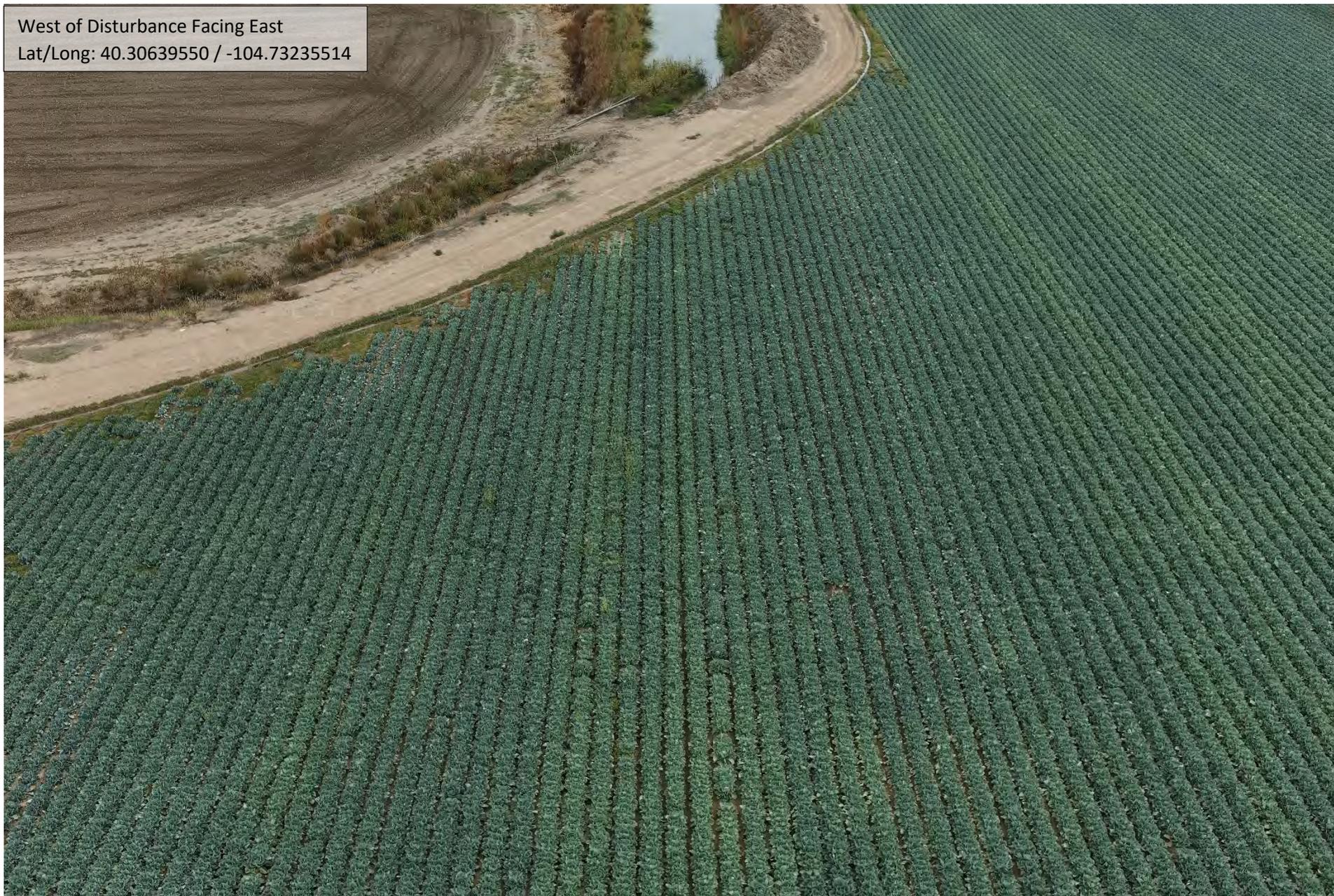
South of Disturbance Facing North  
Lat/Long: 40.30598308 / -104.73178939



East of Disturbance Facing West  
Lat/Long: 40.30643569 / -104.73114194



West of Disturbance Facing East  
Lat/Long: 40.30639550 / -104.73235514



# Cardinal Direction Drone Photos of the Reference Area

Photo Dates:

9/16/2024

Drone Photo Height:

100'

Reference Area North of the Reclaimed Area  
Lat/Long: 40.30697278 / -104.73175394



Reference Area South of the Reclaimed Area  
Lat/Long: 40.30597625 / -104.73178456



Reference Area West of the Reclaimed Area  
Lat/Long: 40.30639197 / -104.73236369



Reference Area East of the Reclaimed Area  
Lat/Long: 40.30643569/ -104.73113261



**Reference Photo for Cropland Growth Stage**

Cropland Reference Photo (Cabbage)  
Lat/Long: 40.30684500 / -104.73195500



09.16.2024