



# Site Specific Final Reclamation Completion Notice – Cropland Drone Imagery

## Permit Closure Report – Cropland

**Location ID:** 306460

**Location Name:** DETTERER-66N67W/24NWSE

## Report Date:

8/21/2024

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 – Sugarbeets and corn

Crop 2023 – Sugarbeets and corn

## Inspection:

Performed by	H2E Inc.
Date	8/6/2024

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>	DETERER-66N67W/24NWSE - 306460			
<b>County</b>	WELD - #123			
<b>Well Information</b>	<b>Well Name:</b> DETERER #33-24			
	<b>Well API #:</b> 05-123-24707			
	<b>Lat/Long As Drilled:</b> 40.470640 / -104.840190			
	<b>Plug date &amp; Form 6S Doc. #:</b> 03/16/2020 - 402371658			
<b>Facility Entities</b>		Tank Battery		Pits
	X	Wells		On-Location Flowlines (Form 42): Doc. #
		Domestic Taps	X	Off-Location Flowlines (Form 44): Doc. #403912834
<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>	X	No		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>	No sundry notice pertaining to series 900-1200 rules was identified.			
<b>Drone Information</b>	<b>Make &amp; Model:</b> DJI M300			
	<b>Image Processing Software:</b> Pix4Dmapper			
	<b>Pilot Name &amp; FAA Certificate #:</b> Cameron Denison - 4729153			
	<b>Date of FAA Certificate Issuance:</b> 2/15/2024			



## Designated Land Use Observations

Previous Land Use	Current Land Use
Reference Imagery for Infrastructure: NAIP 2015	Remotely Sensed Imagery: 8/6/2024
Designation: Oil and Gas Facility	Designation: Cropland

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

NAIP Imagery from 2015 and 2023. Historic Google Earth imagery from 1985-2023.

## Site Observation Notes

No Additional Information

## Closure Information

This final reclamation completion notice is intended to close the DETTERER-66N67W/24NWSE location which consists of the DETTERER #33-24 (API # 05-123-24707) well head. This well head does not share a disturbance with any other wells or tank batteries. The associated tank battery has its own location ID (428879) which will remain open until final reclamation has been achieved.

The DETTERER-66N67W/24NWSE location is in Weld County, Colorado .66 miles northwest of the intersection of County Road 23.75 and County Road 64.75. There is one off location flowline associated with this well that transported crude oil to the associated tank battery. The flowline was removed in 2020 and passes through fields currently growing sugarbeets and corn.

DETTTERER #33-24 was reclaimed and returned to the landowner for agricultural use in 2020. The wellhead was accessed from two different temporary roads branching from residential/agricultural access roads off of County Road 23.75. The portions of the access road used specifically for wellhead access have been successfully reclaimed and returned to agriculture.

Two corrective actions (CA's) were identified during the records review. One corrective action was identified during an inspection on 2/6/2019 by Randy Silver and stated that the wellhead was missing signage and was not in compliance with Rule 210.b. The corrective action remained unaddressed for the remaining life of the well. However, a corrective action response was recorded following an inspection on 1/23/2020 where the CA to install signage was made, no inspection has occurred since this date to confirm the CA had been addressed. The second corrective action was discovered during the 4/25/2019 inspection by Erica Petrie, noting weeds around the wellhead. This CA was resolved by the following inspection on 1/23/2020.

No Remediation Workplan (Form 27-I) or Spill or Release (Form 19) were identified for the location.

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	2.23
Access Road	1.05
Flowline	Not Included
Tank Battery	Not Included
Well Pad	1.18



## Location Summary



<b>Name:</b>	DETERER-66N67W/24NWSE		
<b>Type</b>	Wellhead		
<b>Location ID</b>	306460		
<b>Operator / #</b>	PDC Energy / 69175		
<b>Field</b>	LAPOUDRE - #48125		
<b>County, State</b>	Weld, Colorado		
<b>Lat/Long</b>	40.470640 / -104.840190		
	Planned Location	X	As Drilled
<b>Location</b>	NWSE 24 6N67W 6		
<b>Facility Status - Date</b>	PA - 3/16/2020		
<b>Facility Entities</b>		Tank Battery	Pits
	X	Wells	X Off-Location Flowlines (Form 44)
		Domestic Taps	On-Location Flowlines (Form 42)
		Electric Utilities	
<b>Equipment on Site</b>	X	No	Yes
	If yes, list:		
	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>Variance Requests</b>	No variance requests.		
<b>Sundry Notice (Form 4)</b>	No sundry notice pertaining to series 900-1200 rules was identified.		
<b>Off-Location Flowlines (Form 44)</b>	<b>Form 44 Doc # &amp; Date:</b> 403912834 - 09/06/2024		
	<b>Purpose:</b> FLOWLINE SYSTEM ABANDONMENT VERIFICATION		
	<b>Abandonment Date:</b> 3/16/2020		
	<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 - 10/25/2024		
	<b>Flowline Type:</b> Wellhead Line		
	<b>Type of Fluids Transported:</b> Produced Fluids		
	<b>Start Point Location ID:</b> 330395		
	<b>Start Point Riser Lat/Long:</b> 40.485920 / -104.694920		
	<b>Equipment at Start Point:</b> Wellhead		
	<b>End Point Location ID:</b> 323627		
	<b>End Point Riser Lat/Long:</b> 40.482475 / -104.694819		
	<b>Equipment at End Point:</b> Separator		
<b>Field Inspection Form (Form INSP)</b>	<b>Form INSP Doc # &amp; Date:</b>		
	1/23/2020 - #679602226		
	4/24/2019 - #696300142		
	2/6/2019 - #688401236		
	<b>Status Summary:</b>		
	1/23/2020 - THIS IS A FOLLOW UP INSPECTION FOLLOW UP INSPECTION REQUIRED		
	4/24/2019 - THIS IS A FOLLOW UP INSPECTION FOLLOW UP INSPECTION REQUIRED		
	2/6/2019 - FOLLOW UP INSPECTION REQUIRED		
	<b>Inspected Facilities:</b>		
	1/23/2020 - #288972		
	4/24/2019 - #288972		
	2/6/2019 - #288972		
	<b>Inspection Status:</b>		
	1/23/2020 - TA		
	4/24/2019 - SI		
	2/6/2019 - SI		
	<b>Inspection Date &amp; Inspector:</b>		
	1/23/2020 - Santistevan, Brittani		
	4/24/2019 - PETRIE, ERICA		
	2/6/2019 - Silver, Randy		
	<b>Comments:</b>		
	1/23/2020 - No signage is posted to identify wellhead name/operator/emergency contact information. INSTALL SIGN TO COMPLY WITH RULE 210.B. (Corrective Action Date: March 6, 2019)		
	4/24/2019 - Well Detterer 33-24 has not had the Wellhead Signage posted per rule 210.b., see photo 2. Weeds at wellhead, Cite rule 603.f, see photo 2.		
	2/6/2019 - Well head is missing sign at time of inspection. Well has been shut in since April of 2017 well is 2 months away from needing MIT.		

<b>Inspection Corrective Actions (CAs)</b>	1/23/2020 - Install sign to comply with Rule 210.b. 4/24/2019 - Install sign to comply with Rule 210.b. Comply with Rule 603.f . (weeds) 2/6/2019 - Install sign to comply with Rule 210.b.		
<b>Environmental Incidents &amp; Remediation</b>	X	None	Spill or Release (Form 19)
		Remediation (Form 27/27A)	
<b>Spill or Release (Form 19)</b>	N/A		
<b>Site Investigation and Remediation Workplan (Form 27/27A)</b>	N/A		
<b>COGIS Tank Location Information (Scout Card)</b>	<b>Tank Battery Name:</b> Detterer FD Pad/25-2D		
	<b>Location ID:</b> 428879		
	<b>Status &amp; Date:</b> CL - 4/15/2020		
	<b>Lat/Long:</b> 40.464925 / -104.841117		
	<b>Notes:</b> N/A		
	<b>Form 4 Doc # &amp; Date:</b> No Form 4 on record for the tank battery location. <b>Purpose:</b> N/A		
<b>COGIS Well Information (Scout Card)</b>	<b>Well Name:</b> DETTERER #33-24 (API: 05-123-24707)		
	<b>Facility ID:</b> 288972		
	<b>Status &amp; Date:</b> PA - 3/16/2020		
	<b>Lat/Long:</b> 40.470640 / -104.840190		
	<b>Notes:</b> N/A		
	<b>Form 4 Doc # &amp; Date:</b> No applicable Form 4 on record for the well location. <b>Purpose:</b> N/A		

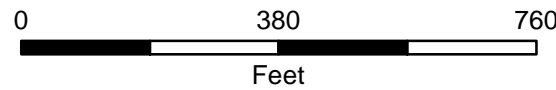
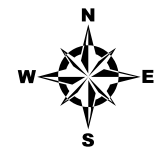
**Pre-Plugging Active Operations Location Overview**





## PDC Form 4 Final Reclamation - Pre Plugging Overview

DETTNER 33-24



Prepared by:



Editor: CDenison

File: PDC\_Drone\_Rec\_PrePlugging\_DDP

Scale: 1:3,400

Date: 11/11/2024

⊕ Well Head

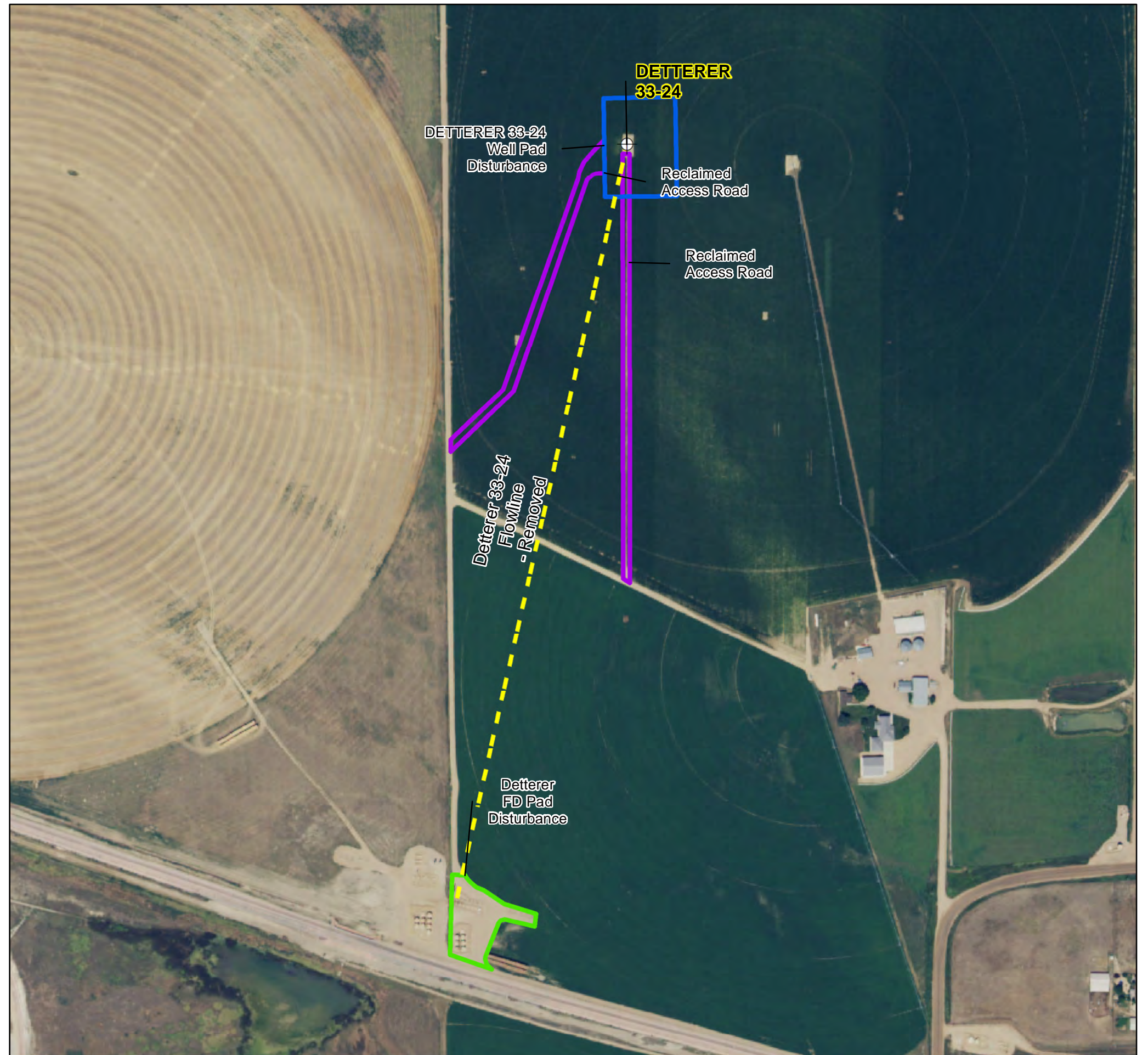
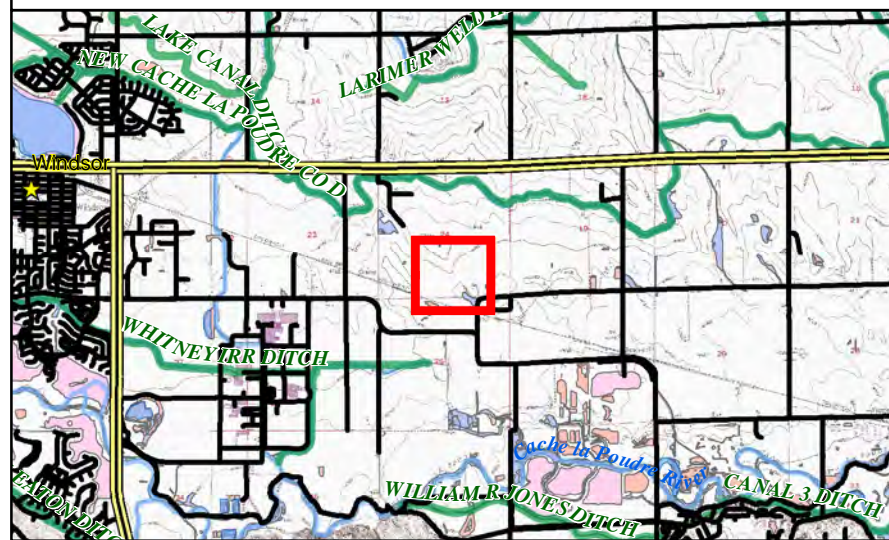
Reclaimed Tank Battery Disturbance

Reclaimed Well Pad Disturbance

Reclaimed Access Road Disturbance

Flowline - Removed

### NAIP 2015 Imagery

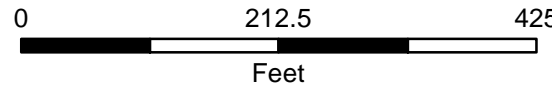
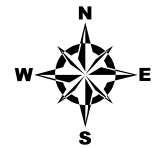






## PDC Form 4 Final Reclamation - Pre Plugging Overview

DETTNER 33-24



Prepared by:






Editor: CDenison

File: PDC\_Drone\_Rec\_PrePlugging\_DDP

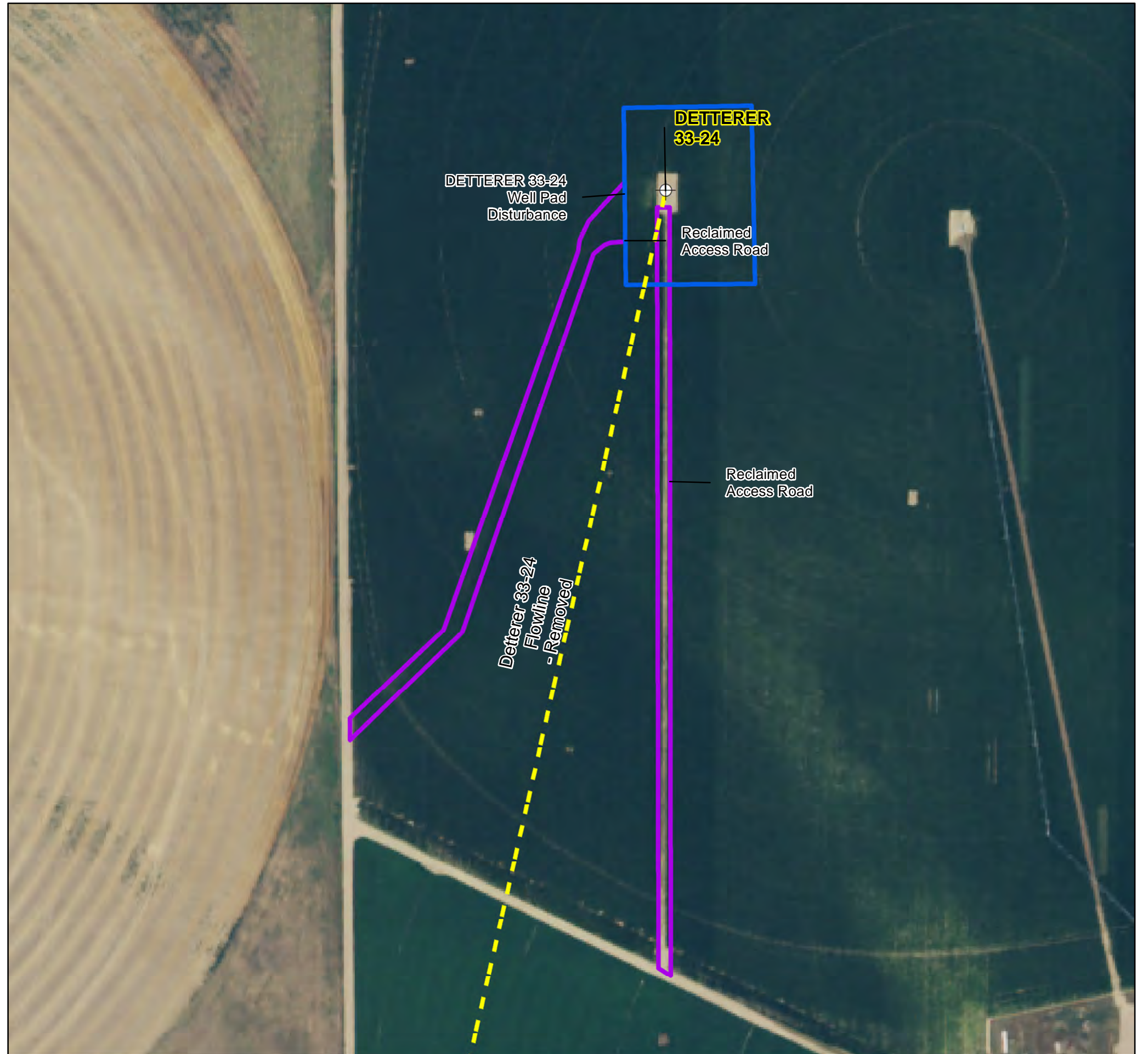
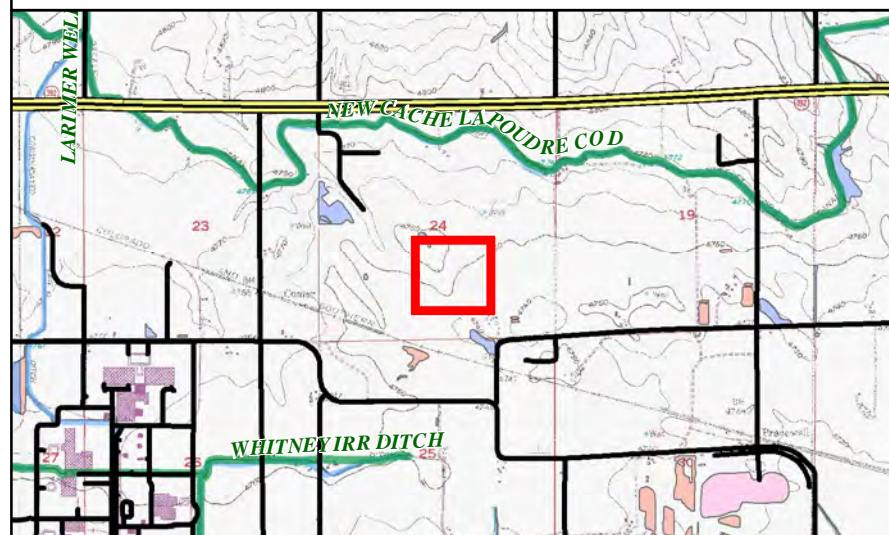
Scale: 1:1,900

Date: 11/11/2024

⊕ Well Head

-  Reclaimed Well Pad Disturbance
-  Reclaimed Access Road Disturbance
-  Flowline - Removed

### NAIP 2015 Imagery

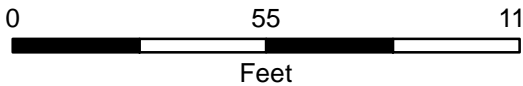






PDC Form 4 Final Reclamation - Pre Plugging Overview

DETTETER 33-24

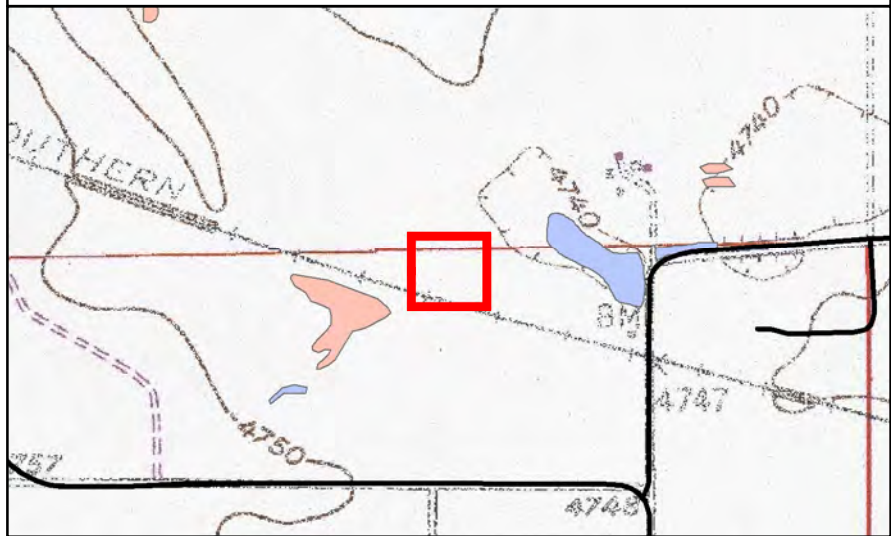


Editor: CDenison  
File: PDC\_Drone\_Rec\_PrePlugging\_DDP

Scale:1:500  
Date: 11/11/2024

- Well Head
- Reclaimed Tank Battery Disturbance
- Flowline - Removed

NAIP 2015 Imagery



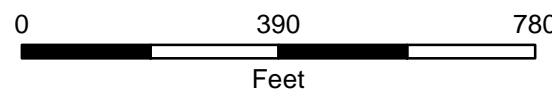
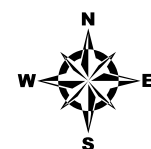
**Post-Plugging and Abandonment Location Overview**





# PDC Form 4 Final Reclamation - Post Plugging Overview

DETTERER 33-24



Prepared by:



Editor: CDenison

File: PDC\_Drone\_Rec\_PostPlugging\_DDP

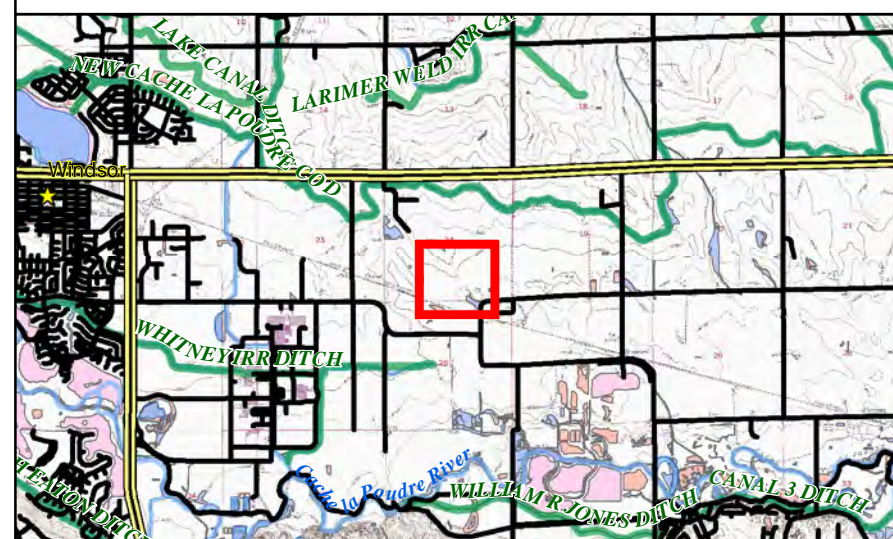
Scale: 1:3,500

Date: 11/11/2024

⊕ Well Head

- ▬ Reclaimed Tank Battery Disturbance
- ▬ Reclaimed Well Pad Disturbance
- ▬ Reclaimed Access Road Disturbance
- - Flowline - Removed

## 2024 Drone Imagery

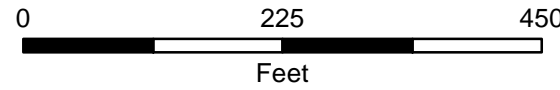
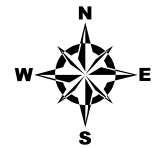






## PDC Form 4 Final Reclamation - Post Plugging Overview

DETTNER 33-24



Prepared by:



Editor: CDenison

File: PDC\_Drone\_Rec\_PostPlugging\_DDP

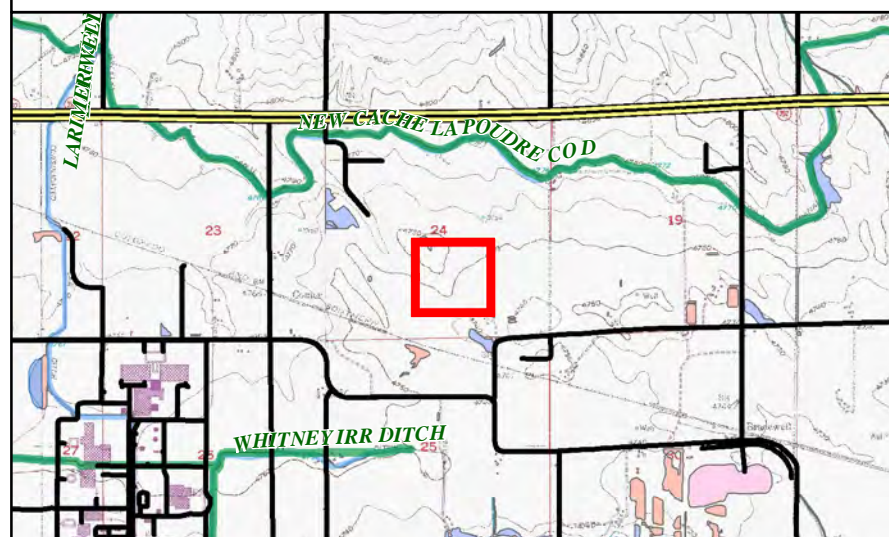
Scale: 1:2,000

Date: 11/11/2024

⊕ Well Head

- Reclaimed Well Pad Disturbance
- Reclaimed Access Road Disturbance
- Flowline - Removed

### 2024 Drone Imagery

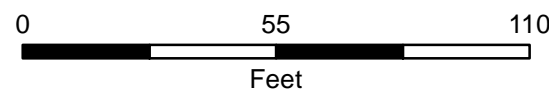
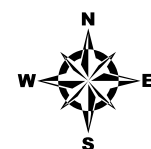






PDC Form 4 Final Reclamation - Post Plugging Overview

DETTERER 33-24



Prepared by:





Editor: CDenison


File: PDC\_Drone\_Rec\_PostPlugging\_DDP

Scale:1:500

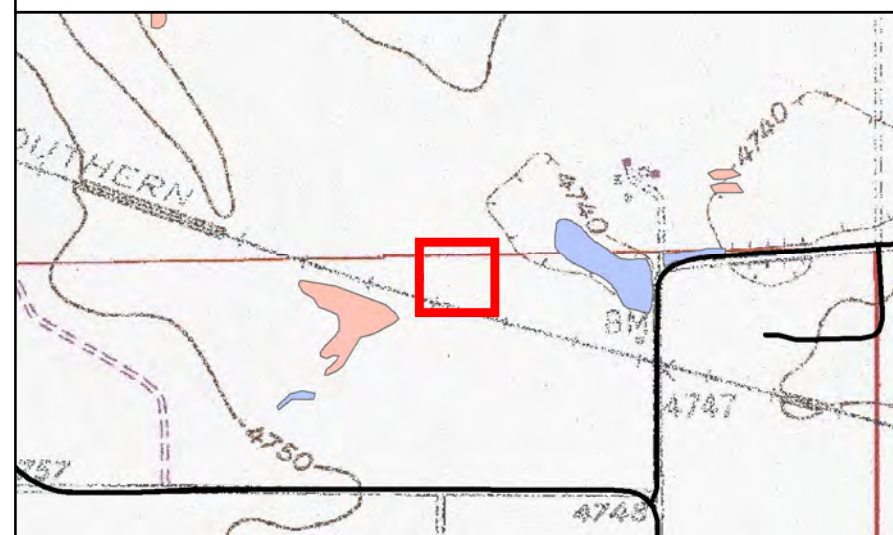
Date: 11/11/2024

 Well Head

 Reclaimed Tank Battery Disturbance

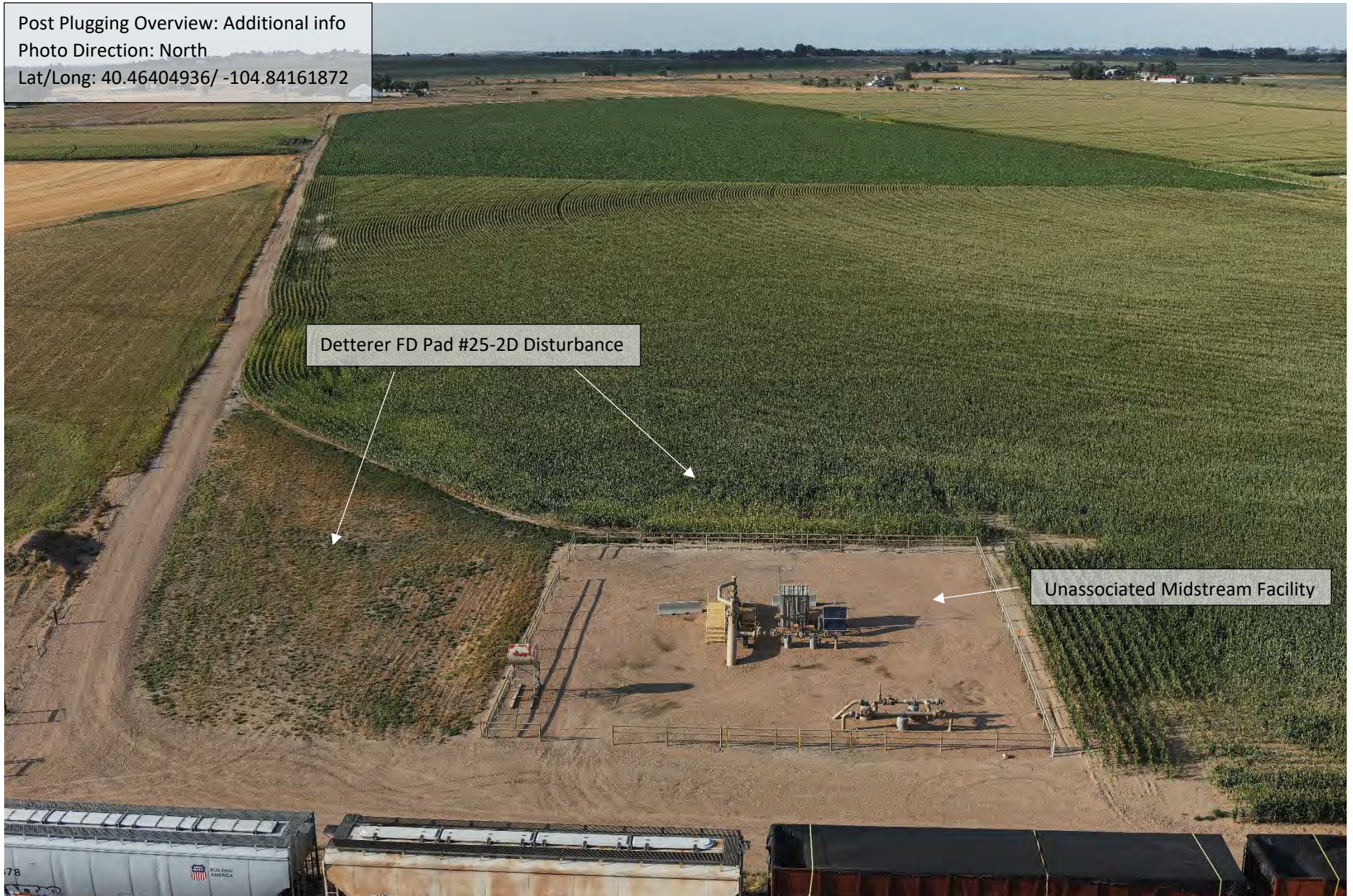
 Flowline - Removed

2024 Drone Imagery





Post Plugging Overview: Additional info  
Photo Direction: North  
Lat/Long: 40.46404936/ -104.84161872



Detterer FD Pad #25-2D Disturbance

Unassociated Midstream Facility



# Cardinal Direction Drone Photos of the Reclaimed Area

Photo Dates:

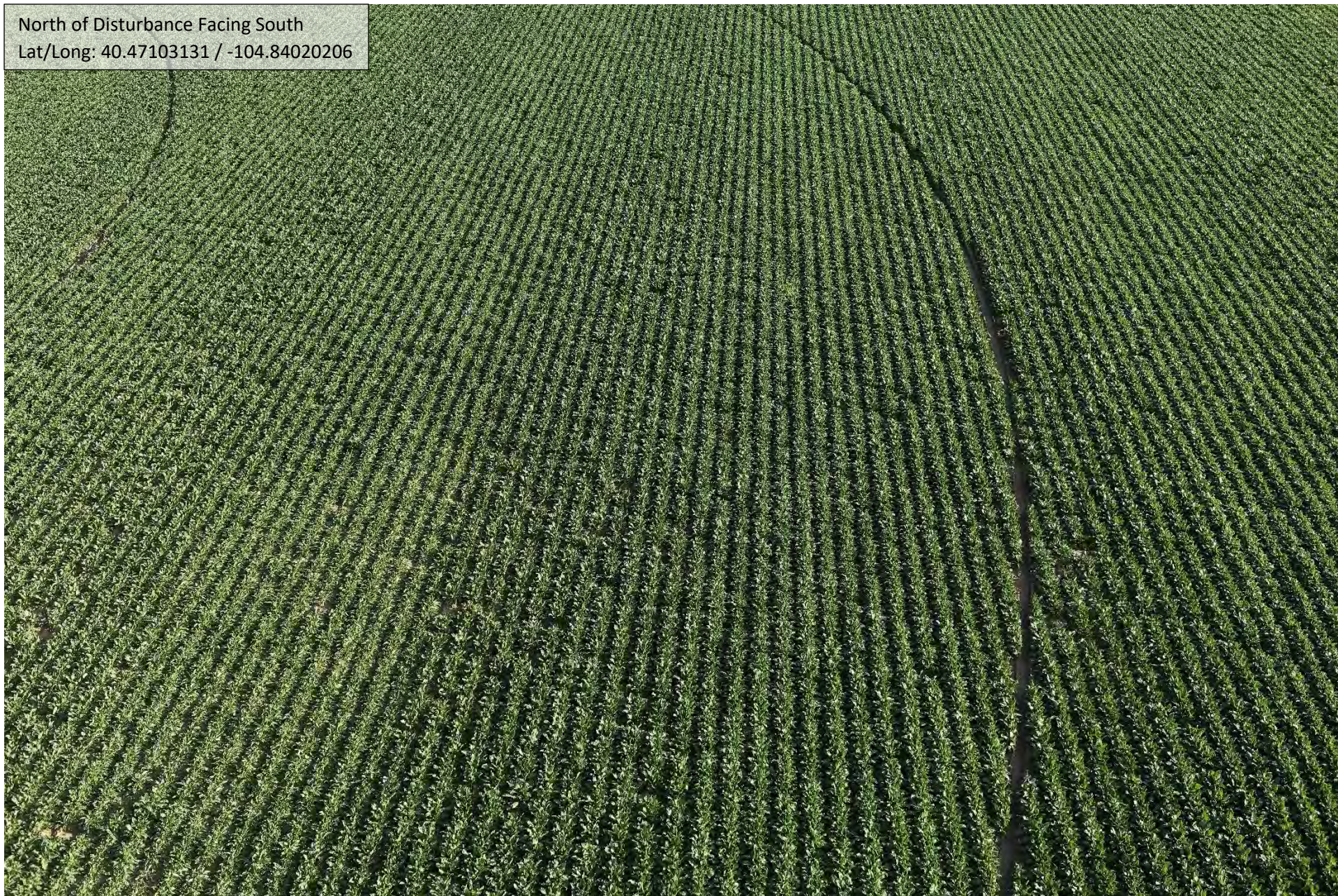
8/6/2024

Drone Photo Height:

85'

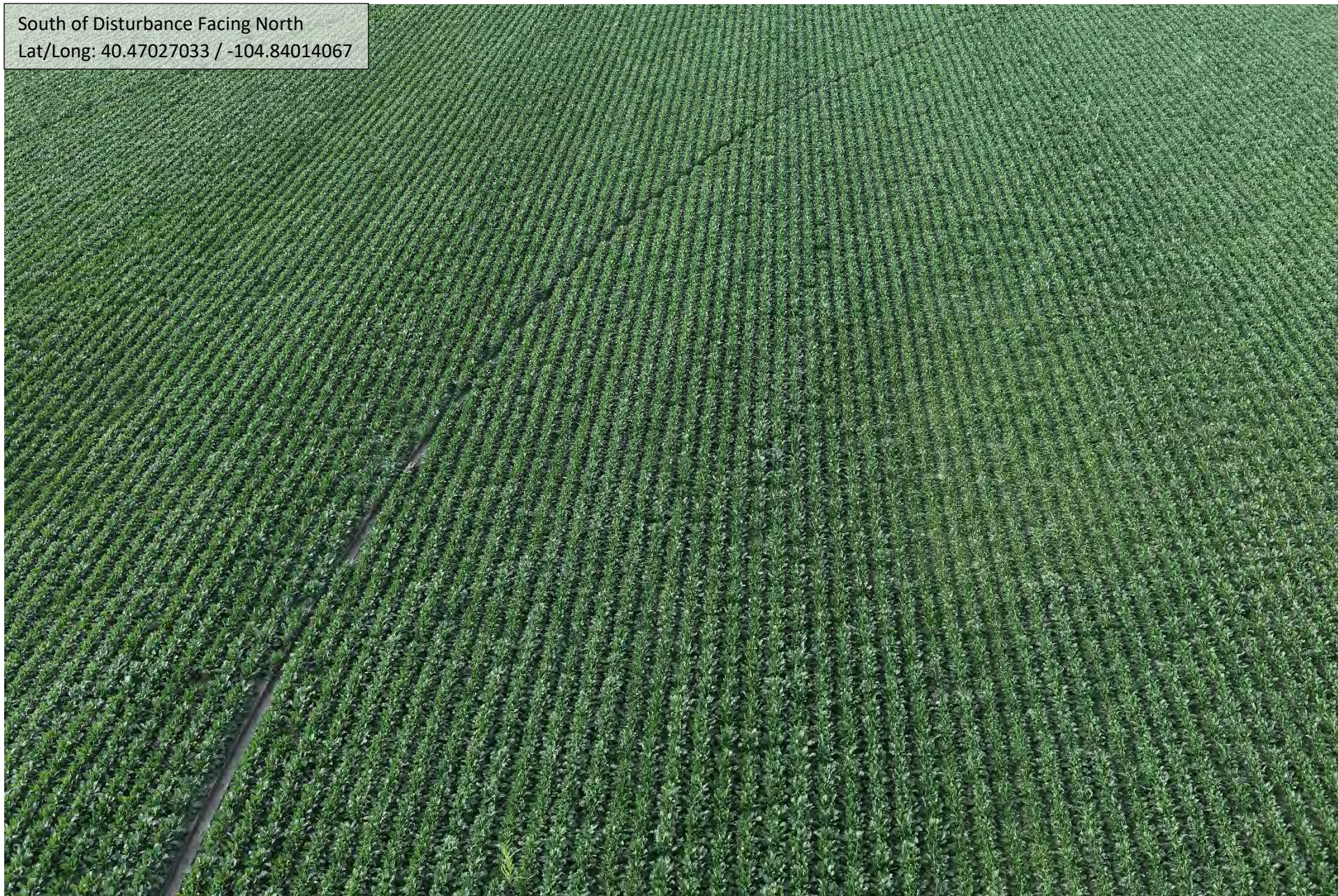


North of Disturbance Facing South  
Lat/Long: 40.47103131 / -104.84020206





South of Disturbance Facing North  
Lat/Long: 40.47027033 / -104.84014067



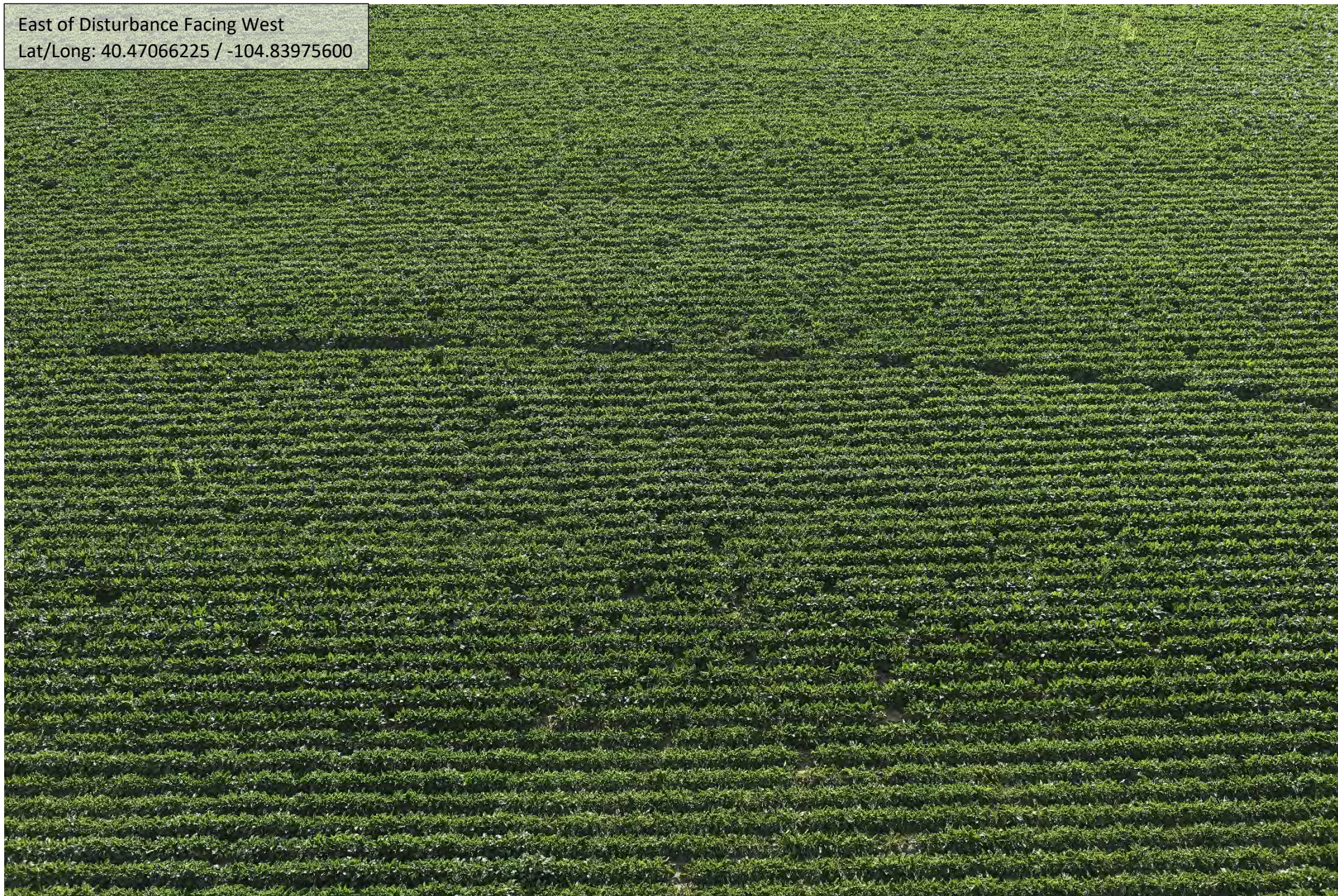


West of Disturbance Facing East  
Lat/Long: 40.47063381 / -104.84066117





East of Disturbance Facing West  
Lat/Long: 40.47066225 / -104.83975600





# Cardinal Direction Drone Photos of the Reference Area

Photo Dates:

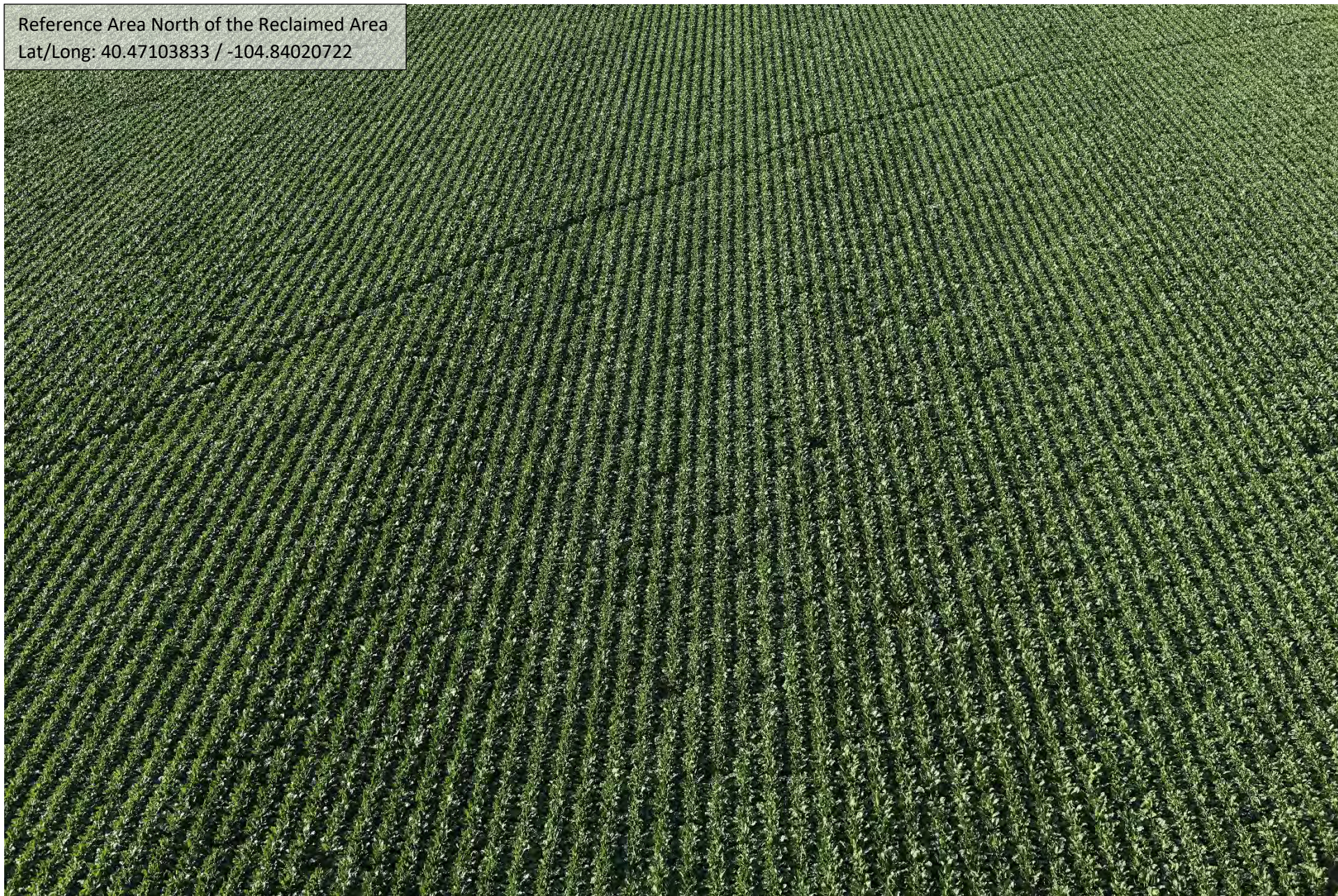
6/6/2024

Drone Photo Height:

85'

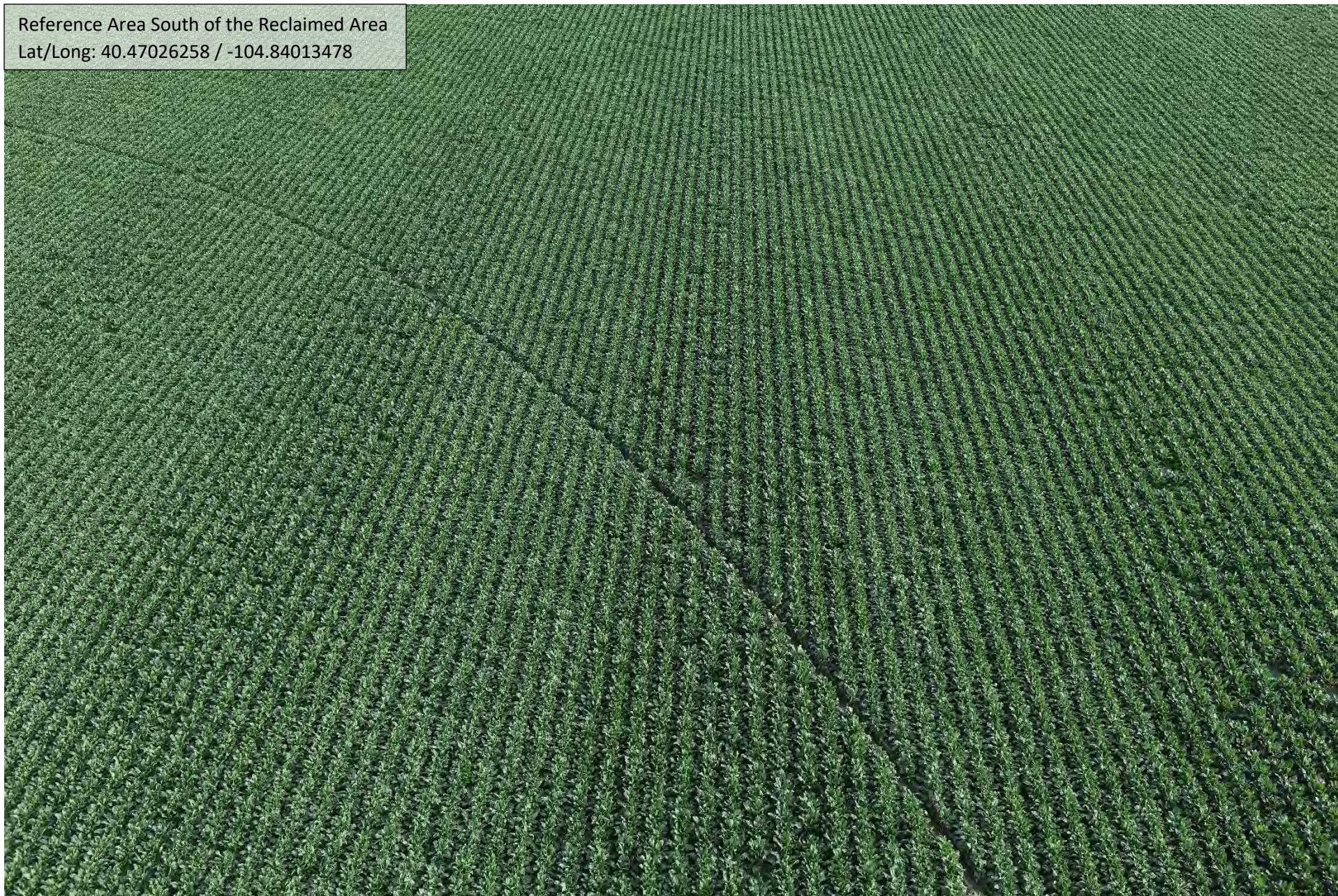


Reference Area North of the Reclaimed Area  
Lat/Long: 40.47103833 / -104.84020722





Reference Area South of the Reclaimed Area  
Lat/Long: 40.47026258 / -104.84013478





Reference Area West of the Reclaimed Area  
Lat/Long: 40.47063050 / -104.84067089





Reference Area East of the Reclaimed Area  
Lat/Long: 40.47066606 / -104.83974808

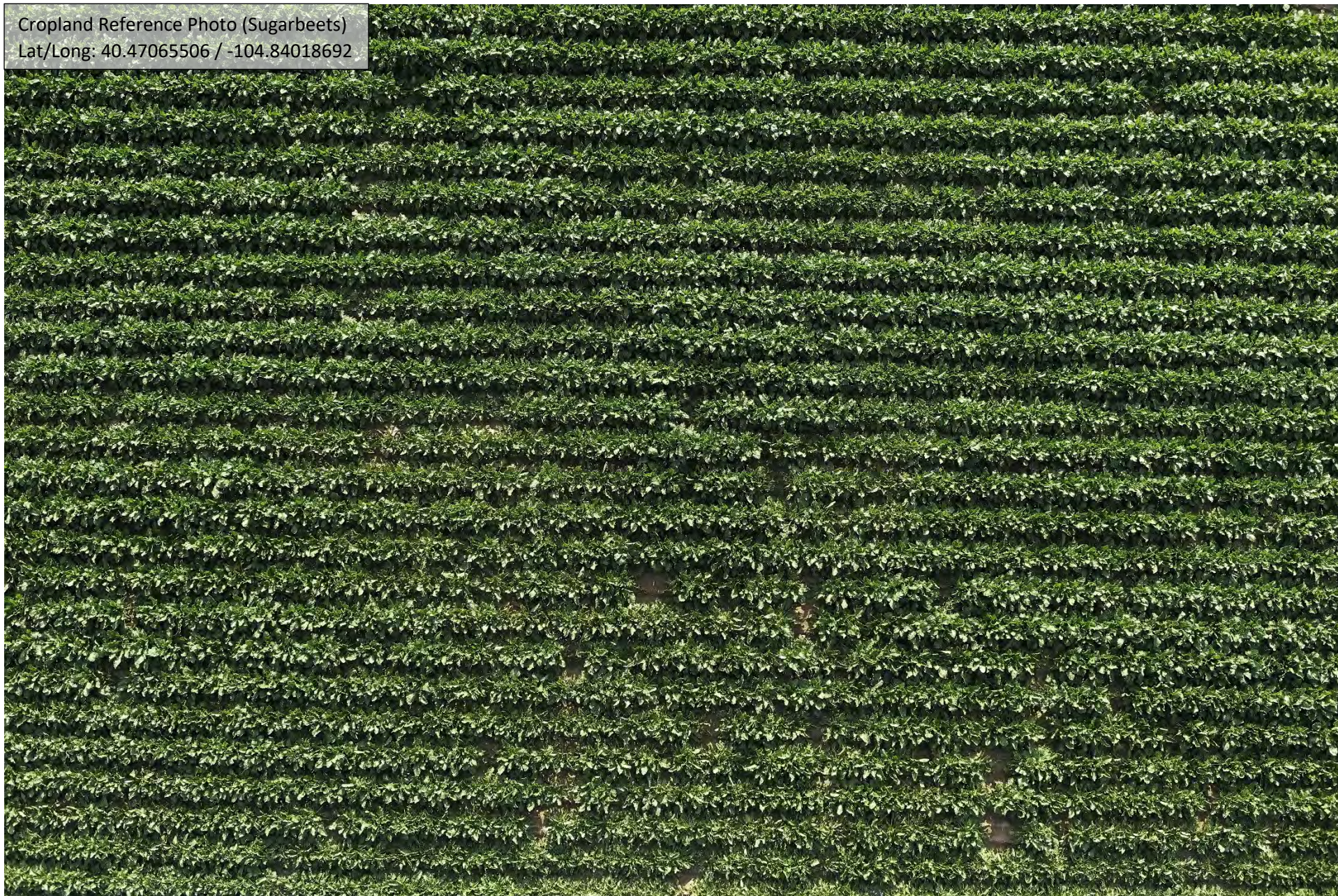




**Reference Photo for Cropland Growth Stage**



Cropland Reference Photo (Sugarbeets)  
Lat/Long: 40.47065506 / -104.84018692





Cropland Reference Photo (Corn) For Flowline Removal  
Lat/Long: 40.46432500 / -104.84056333

