



Site Specific Final Reclamation Completion Notice – Cropland Drone Imagery

Permit Closure Report – Cropland

Location ID: 330395

Location Name: LEAFGREN-66N65W/17NWSW

Report Date:

8/16/2024

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 – Corn

Crop 2023 – Corn

Inspection:

Performed by	H2E Incorporated
Date	8/2/2024

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

Location Checklist



Operator / #	PDC ENERGY INC / 69175		
Name / Location ID	LEAFGREN-66N65W/17NWSW - 330395		
County	WELD #123		
Well Information	Well Name: LEAFGREN #13-17		
	Well API #: 05-123-19035		
	Lat/Long As Drilled: 40.485920 / -104.694920		
	Plug date & Form 6S Doc. #: 01/15/2021 - 402592160		
Facility Entities		Tank Battery	Pits
	X	Wells	On-Location Flowlines (Form 42): Doc. #
		Domestic Taps	X Off-Location Flowlines (Form 44): Doc. #402814346
Equipment on Site	X	None	Debris
		Pit mouse/rat holes, cellars backfilled	
Access Road	X	Regraded	X Contoured
		Culverts removed	Gravel removed
		Pre-existing: must provide supporting documentation	
Reclamation Status	X	Location and associated disturbances reclaimed	
		Subsidence	
Spills or Releases (Form 19)	X	No	Yes
Remediation (Form 27/27A)		No	X Yes
On-Location Flowlines	X	No	Yes
Off-Location Flowlines		No	X Yes
Inspection Corrective Actions	X	No	Yes
Sundry Notice (Form 4)	No sundry notice pertaining to series 900-1200 rules was identified.		
Drone Information	Make & Model: DJI M300		
	Image Processing Software: Pix4Dmapper		
	Pilot Name & FAA Certificate #: Cameron Denison - 4729153		
	Date of FAA Certificate Issuance: 2/15/2024		



Designated Land Use Observations

Previous Land Use	Current Land Use
Reference Imagery for Infrastructure: NAIP 2013	Remotely Sensed Imagery: 8/6/2024
Designation: Oil and Gas Facility	Designation: Cropland

The following imagery sources were reviewed during this investigation:

NAIP Imagery 2009, 2023, and historical Google Earth Imagery.

Site Observation Notes

No Additional Information

Closure Information

This final reclamation completion notice is intended to close the LEAFGREN-66N65W/17NWSW location which consists of the LEAFGREN #13-17 (API: 05-123-19035) well. This well head does not share a disturbance with any other wells or tank batteries. The associated tank battery has its own location ID (323627) which will remain open until final reclamation has been achieved.

The LEAFGREN #13-17 location is in Weld County, Colorado ~0.35 miles northeast of the intersection of County Road 68 and County Road 39. There is one off location flowline associated with this well that transports produced fluids to the associated tank battery. The flowline was removed and reclaimed in 2021 in sequence with the plugging and abandonment of the well. The wellhead was accessed from the south by a .23 mile long two-track path which was reclaimed and returned to agriculture along with the well and flowline disturbances.

A Remediation Workplan (Form 27-I) was documented on 02/03/2021 for Pit or PW vessel closure, Wellhead Closure, and Flowline Removal. On 1/06/2022 a Form 27-S (Doc. # 402903271) was filed, stating the remediation workplan was closed by Rick Allsion on 01/11/2022.

There were no spills/releases or corrective actions identified during our records review.

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	1.0
Access Road	0.52
Flowline	Not Included
Tank Battery	Not Included
Well Pad	0.48

Location Summary



Name:	LEAFGREN-66N65W/17NWSW		
Type	Wellhead		
Location ID	330395		
Operator / #	PDC Energy / 69175		
Field	EATON - #19350		
County, State	Weld, Colorado		
Lat/Long	40.485920 / -104.694920		
	Planned Location	X	As Drilled
Location	NWSW 17 6N65W 6		
Facility Status - Date	PA - 1/15/2021		
Facility Entities		Tank Battery	Pits
	X	Wells	X Off-Location Flowlines (Form 44)
		Domestic Taps	On-Location Flowlines (Form 42)
		Electric Utilities	
Equipment on Site	X	No	Yes
		If yes, list:	
		Pit mouse/rat holes, cellars backfilled	
Access Road	X	Regraded	X Contoured
		Culverts Removed	Gravel Removed
		Pre-Existing (Must provide supporting documentation):	
Variance Requests	No variance requests.		
Sundry Notice (Form 4)	No sundry notice pertaining to series 900-1200 rules was identified.		
Off-Location Flowlines (Form 44)	Form 44 Doc # & Date: 402839937 - 10/13/2021		
	Purpose: FLOWLINE SYSTEM ABANDONMENT VERIFICATION		
	Abandonment Date: 2/26/2021		
	ECMC Approval Date & Signee: N/A		
	Operator Comments: N/A		
	Flowline Facility Information		
	ECMC Flowline ID: 479253		
	Operator Flowline ID: PDC Flowline System		
	Status & Date: AC - 11/19/2024		
	Flowline Type: Wellhead Line		
	Type of Fluids Transported: Produced Fluids		
	Start Point Location ID: 330395		
	Start Point Riser Lat/Long: 40.485920 / -104.694920		
	Equipment at Start Point: Wellhead		
	End Point Location ID: 323627		
	End Point Riser Lat/Long: 40.482475 / -104.694819		
Equipment at End Point: Separator			
	Form INSP Doc # & Date:		
	2/18/2016 - 673802901		
	3/16/2019 - 696100522		
	Status Summary:		
	2/18/2016 - NO FOLLOW UP INSPECTION REQUIRED		
	3/16/2019 - NO FOLLOW UP INSPECTION REQUIRED		

Field Inspection Form (Form INSP)	Inspected Facilities: 2/18/2016 - WELL 3/16/2019 - WELL		
	Inspection Status: 2/18/2016 - PR 3/16/2019 - SI		
	Inspection Date & Inspector: 2/18/2016 - Gomez, Jason 3/16/2019 - Evins, Bret		
	Comments: 2/18/2016 - No Corrective Actions observed. 3/16/2019 - No Corrective Actions observed.		
Inspection Corrective Actions (CAs)	No Corrective Actions		
Environmental Incidents & Remediation	<input type="checkbox"/>	None	<input type="checkbox"/> Spill or Release (Form 19)
	<input checked="" type="checkbox"/>	Remediation (Form 27/27A)	
Spill or Release (Form 19)	N/A		
Site Investigation and Remediation Workplan (Form 27/27A)	Remediation Project #: 16642		
	Form 27 Initial Doc # & Date: 402590068 - 02/03/2021		
	Purpose: 909.c.(1), Rule 905: Pit or PW vessel closure Wellhead Closure and Flowline Removal		
	Notes: This Form 27 serves as notification for the abandonment of the Leafgren 13-17 wellhead and removal of the associated flowline. Abandonment activities are planned to begin the week of February 8, 2021. This schedule may be adjusted due to unforeseen circumstances, delays, and/or changes in weather. Applicable Form 42/44 document number: 402588474		
	Form 27 Supplemental Docs # & Date: 402903271 - 01/06/2022		
	Purpose: Rule 913.c.(9): Decommissioning of Oil and Gas Facilities. Rule 915.b: Request to leave elevated inorganics in situ.		
	Operator Comments: Analytical results indicated that constituent concentrations in all soil samples collected were in compliance with COGCC Table 915-1 standards, with exception to the pH value in soil sample WH01 @ 2.5'. Based on the absence of other indicators that a spill or release occurred, such as hydrocarbon detections or elevated EC and SAR in soil, the pH result at this location is not associated with E&P activities. 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 Leafgren 13-17 wellhead.		
ECMC Comments: No comments			

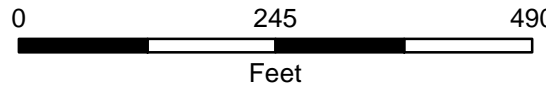
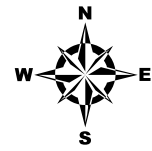
	<p>ECMC COAs: Based on the information presented, it appears that no further action is necessary at this time and the COGCC approves the closure request. However, should future conditions at the site indicate contaminant concentrations in soils exceeding COGCC standards or if groundwater is found to be impacted, then further investigation and/or remediation activities may be required.</p>
	<p>Closure Request Approved: 01/11/2022</p>
	<p>Final Resolution: 01/11/2022 - RICK ALLISON</p>
<p>COGIS Tank Location Information (Scout Card)</p>	<p>Tank Battery Name: LEAFGREN-66N65W/17SWSW</p>
	<p>Location ID: 323627</p>
	<p>Status & Date: AC - 3/12/2021</p>
	<p>Lat/Long: 40.482670 / -104.694920</p>
	<p>Notes: N/A</p>
	<p>Form 4 Doc # & Date: N/A</p> <p>Purpose: N/A</p>
<p>COGIS Well Information (Scout Card)</p>	<p>Well Name: LEAFGREN #13-17 (API: 05-123-19035)</p>
	<p>Facility ID: 251232</p>
	<p>Status & Date: PA - 1/15/2021</p>
	<p>Lat/Long: 40.485920 / -104.694920</p>
	<p>Notes: N/A</p>
	<p>Form 4 Doc # & Date: N/A</p> <p>Purpose: N/A</p>

Pre-Plugging Active Operations Location Overview



PDC Form 4 Final Reclamation - Pre Plugging Overview

LEAFGREN 13-17

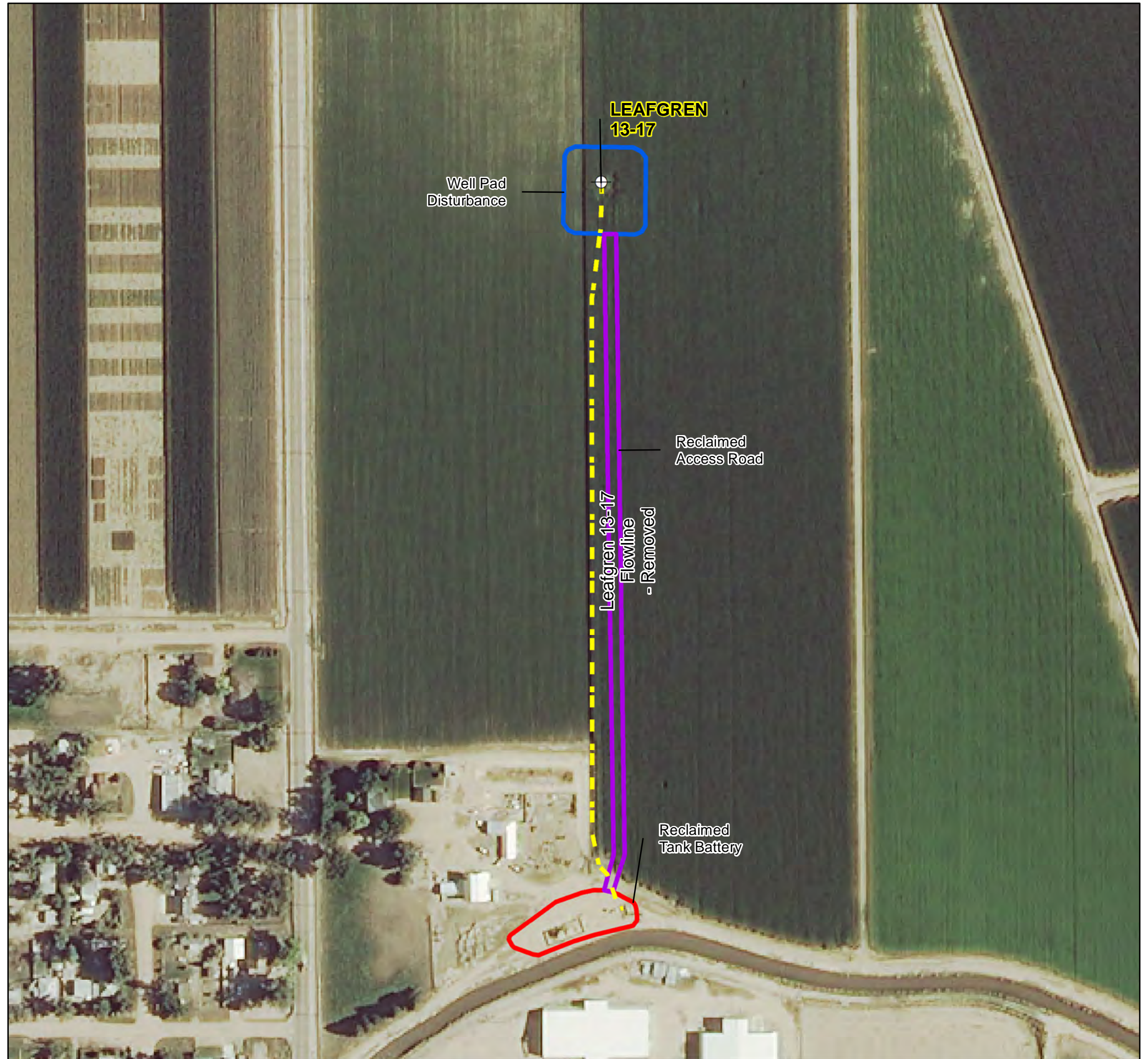
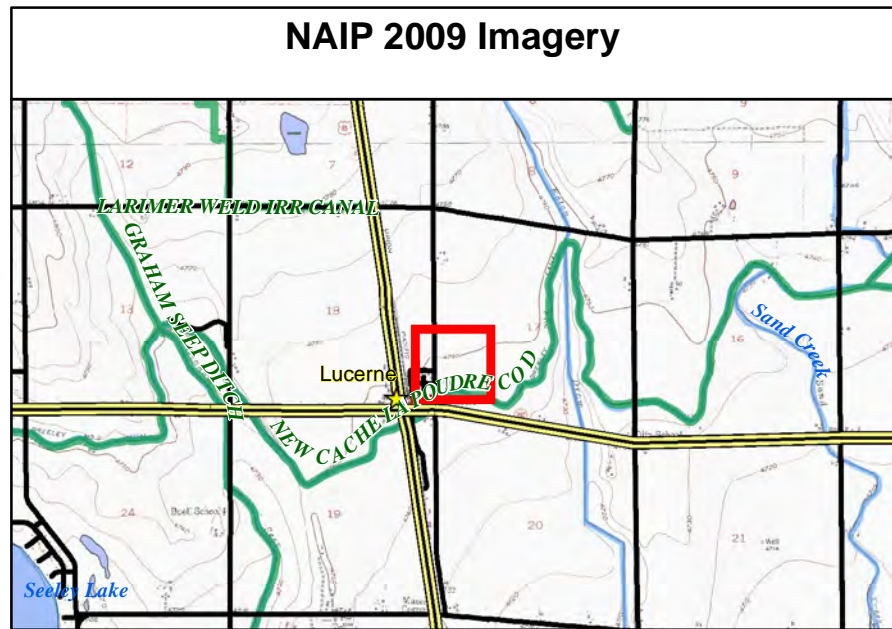


Editor: EJanak
File: PDC_Drone_Rec_PrePlugging_DDP

Prepared by:
Scale: 1:2,200
Date: 12/5/2024

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

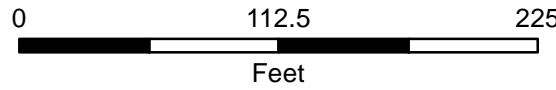
NAIP 2009 Imagery





PDC Form 4 Final Reclamation - Pre Plugging Overview

LEAFGREN 13-17

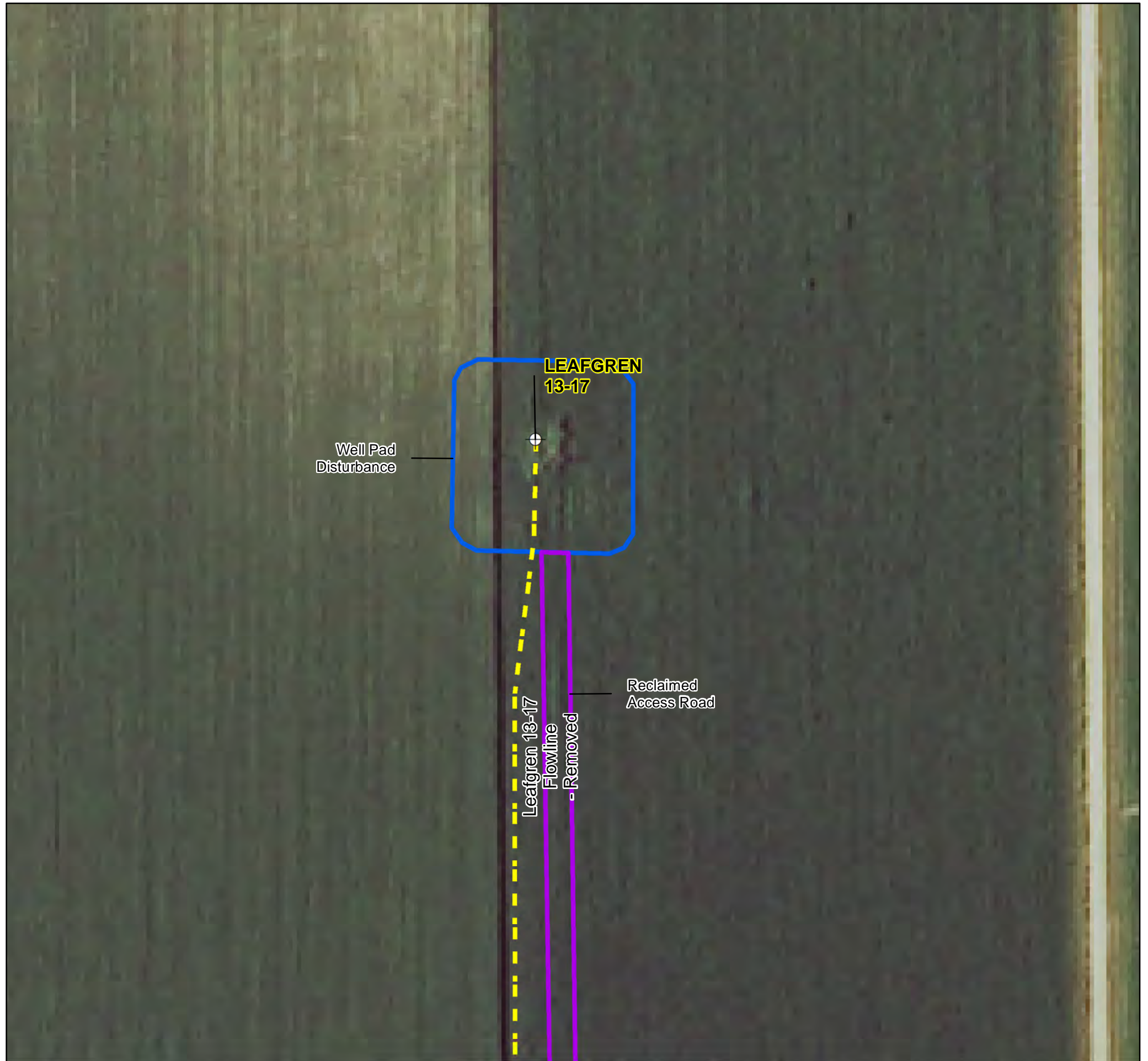
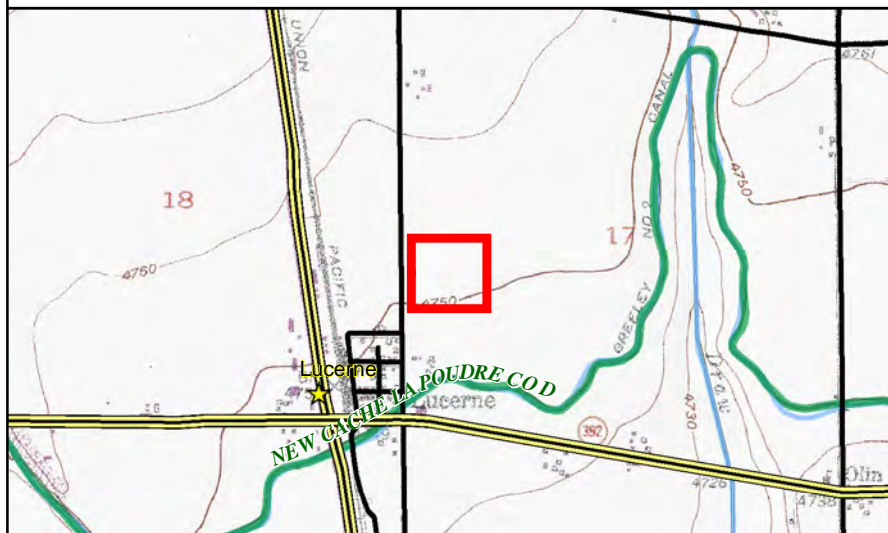


Editor: EJanak
File: PDC_Drone_Rec_PrePlugging_DDP

Prepared by:
Scale: 1:1,000
Date: 12/5/2024

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

NAIP 2009 Imagery

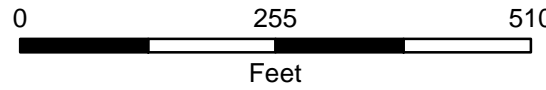
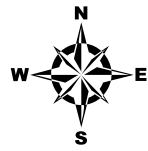


Post-Plugging and Abandonment Location Overview



PDC Form 4 Final Reclamation - Post Plugging Overview

LEAFGREN 13-17

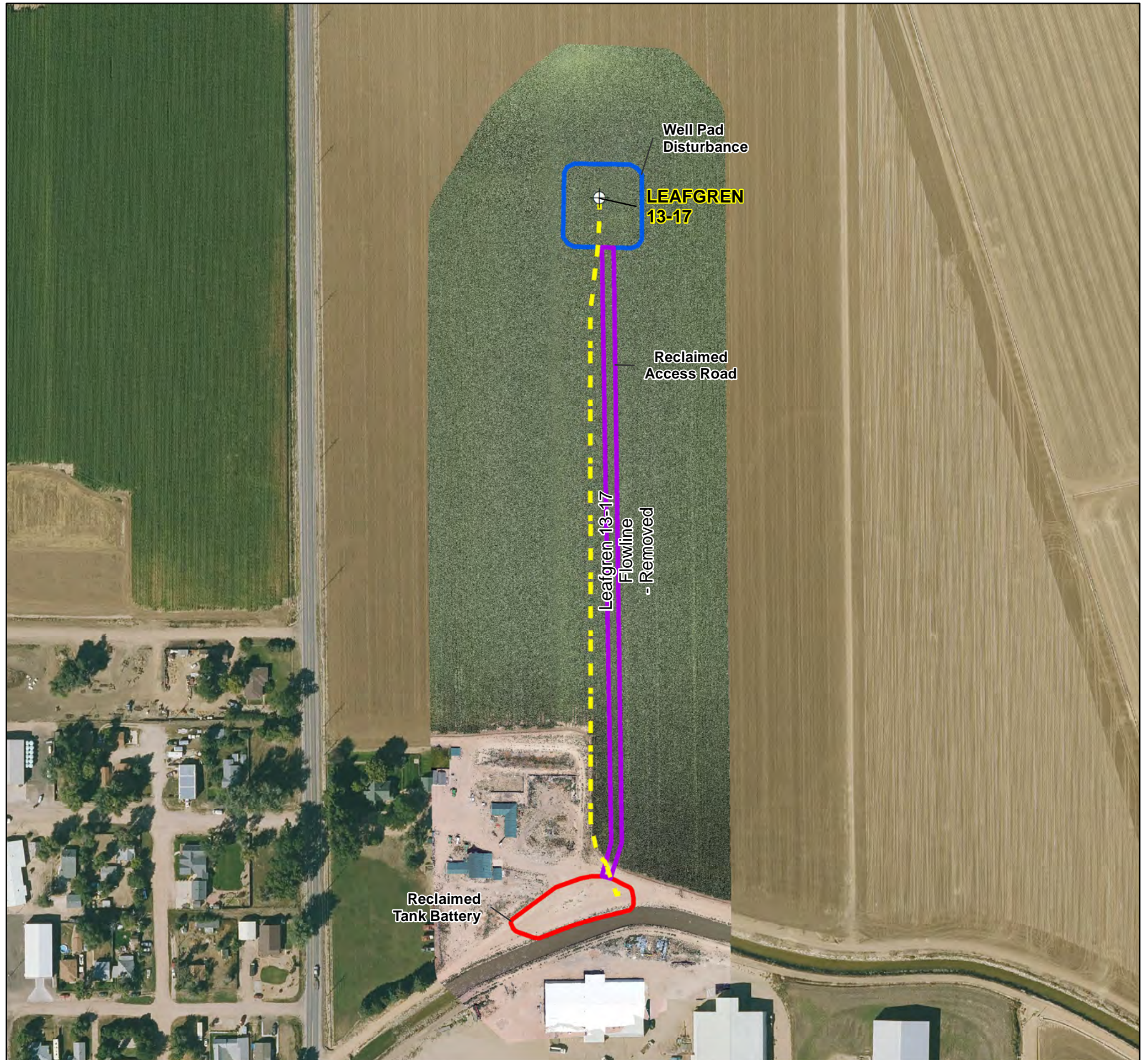
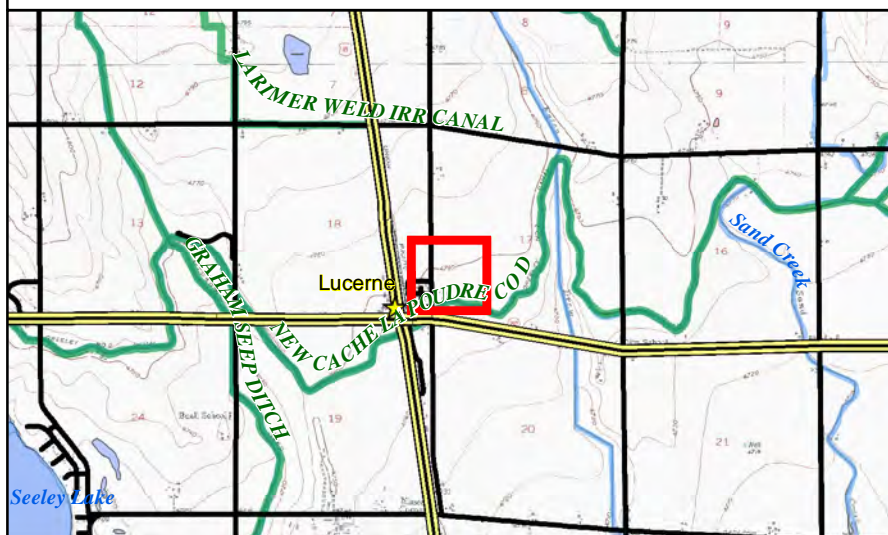


Editor: EJanak
File: PDC_Drone_Rec_PostPlugging_DDP

Scale: 1:2,300
Date: 12/5/2024

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

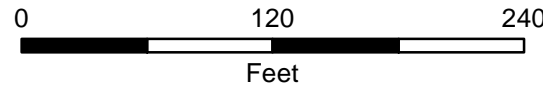
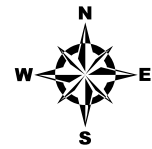
2024 Drone Imagery





PDC Form 4 Final Reclamation - Post Plugging Overview

LEAFGREN 13-17



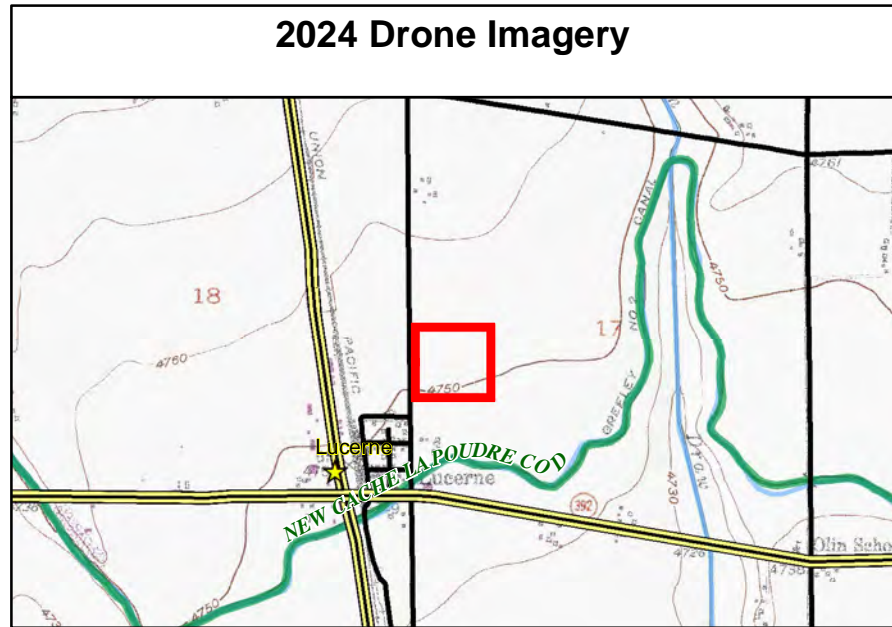
Prepared by:

Editor: EJanak
File: PDC_Drone_Rec_PostPlugging_DDP

Scale: 1:1,100
Date: 12/5/2024

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

2024 Drone Imagery



Cardinal Direction Drone Photos of the Reclaimed Area

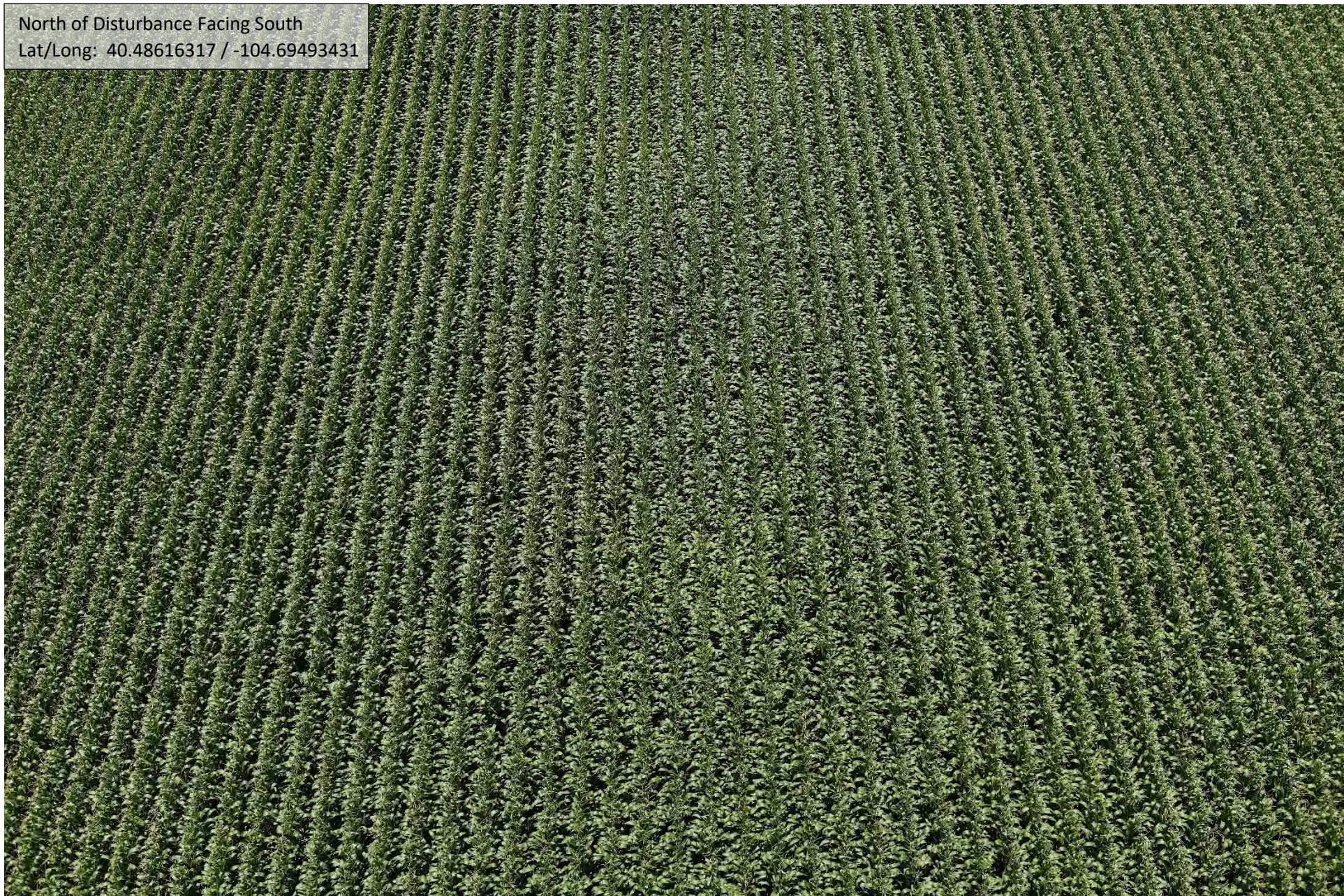
Photo Dates:

8/2/2024

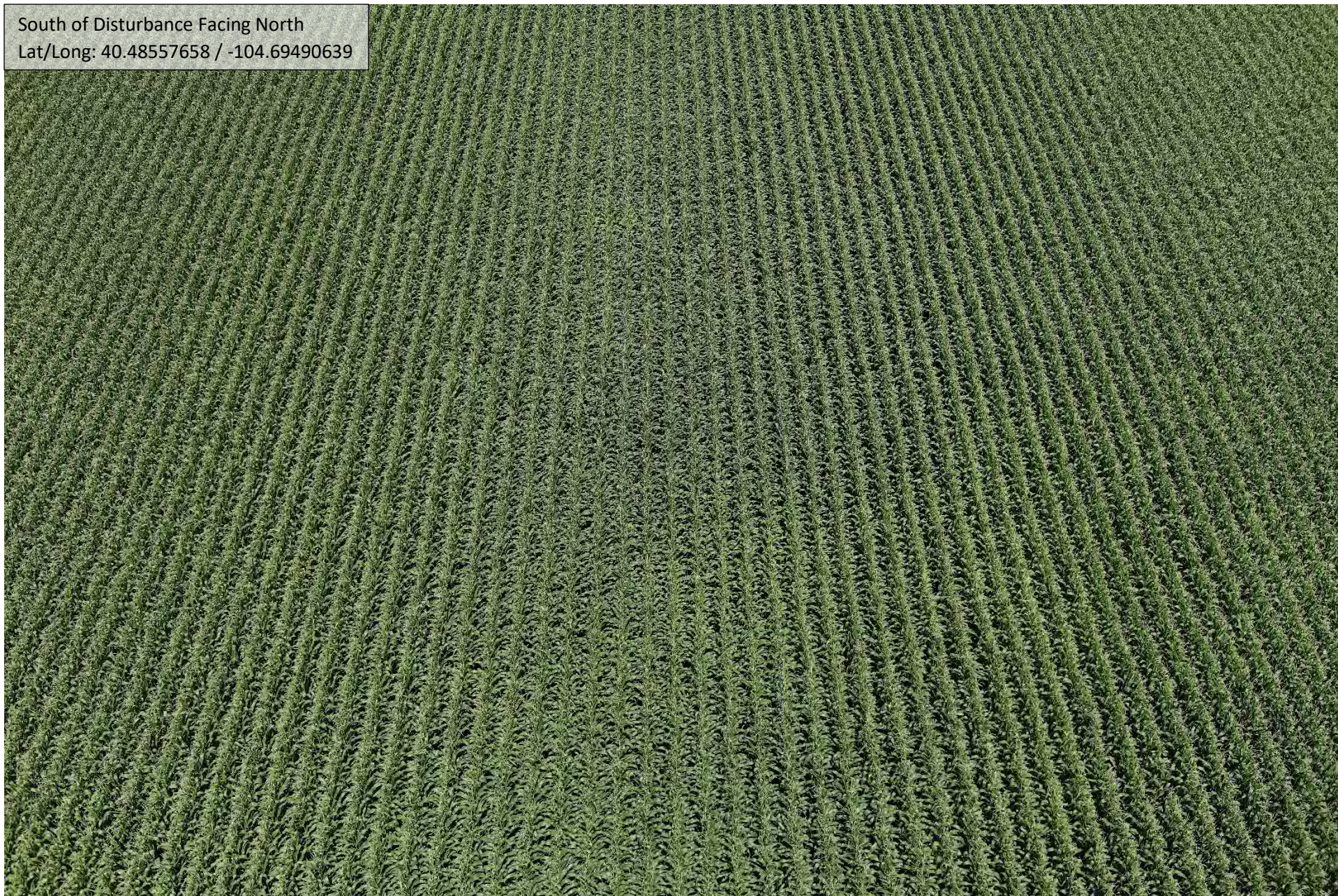
Drone Photo Height:

100'

North of Disturbance Facing South
Lat/Long: 40.48616317 / -104.69493431



South of Disturbance Facing North
Lat/Long: 40.48557658 / -104.69490639



West of Disturbance Facing East

Lat/Long: 40.48586242 / -104.69591364



East of Disturbance Facing West

Lat/Long: 40.48596939 / -104.69436397



Cardinal Direction Drone Photos of the Reference Area

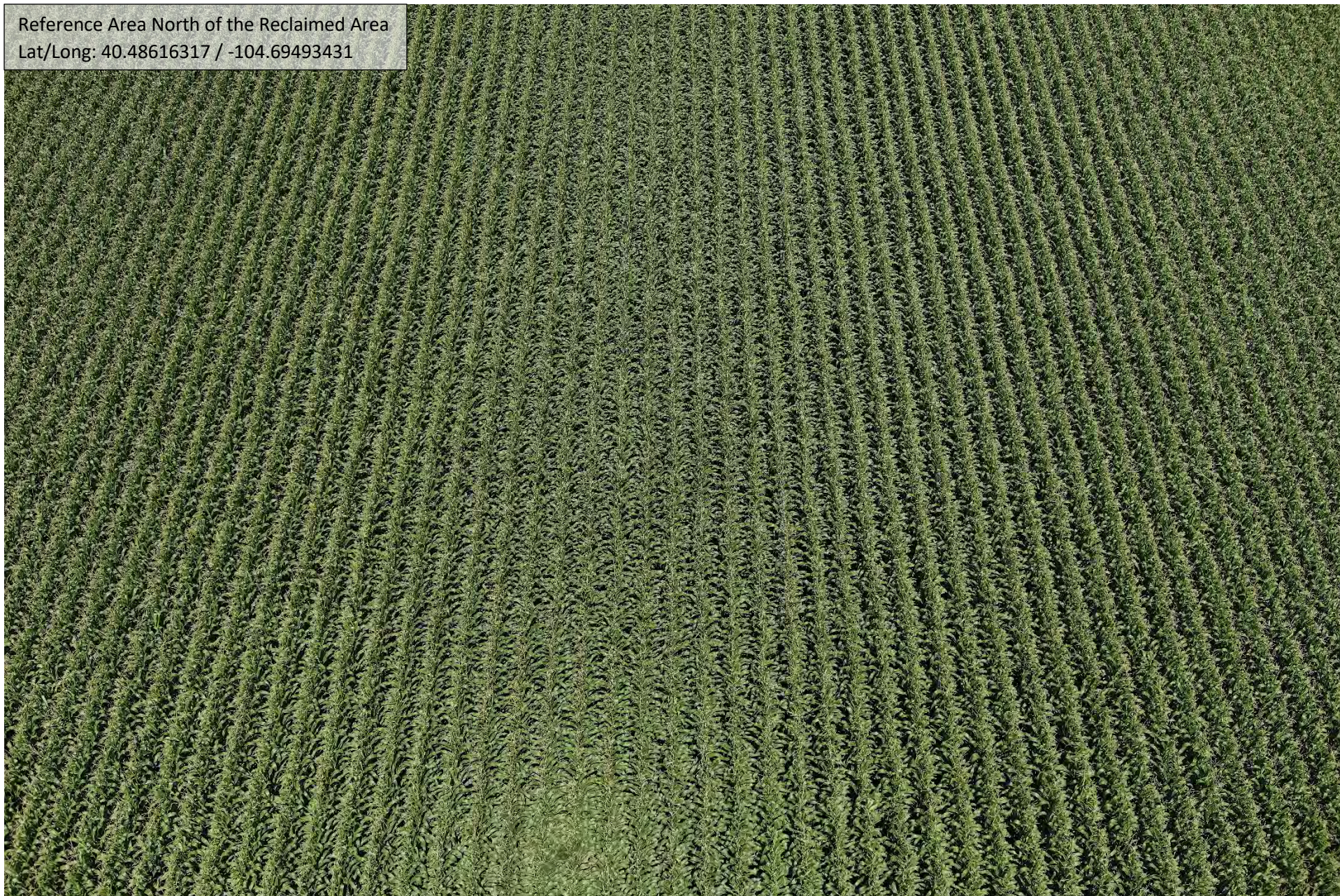
Photo Dates:

8/2/2024

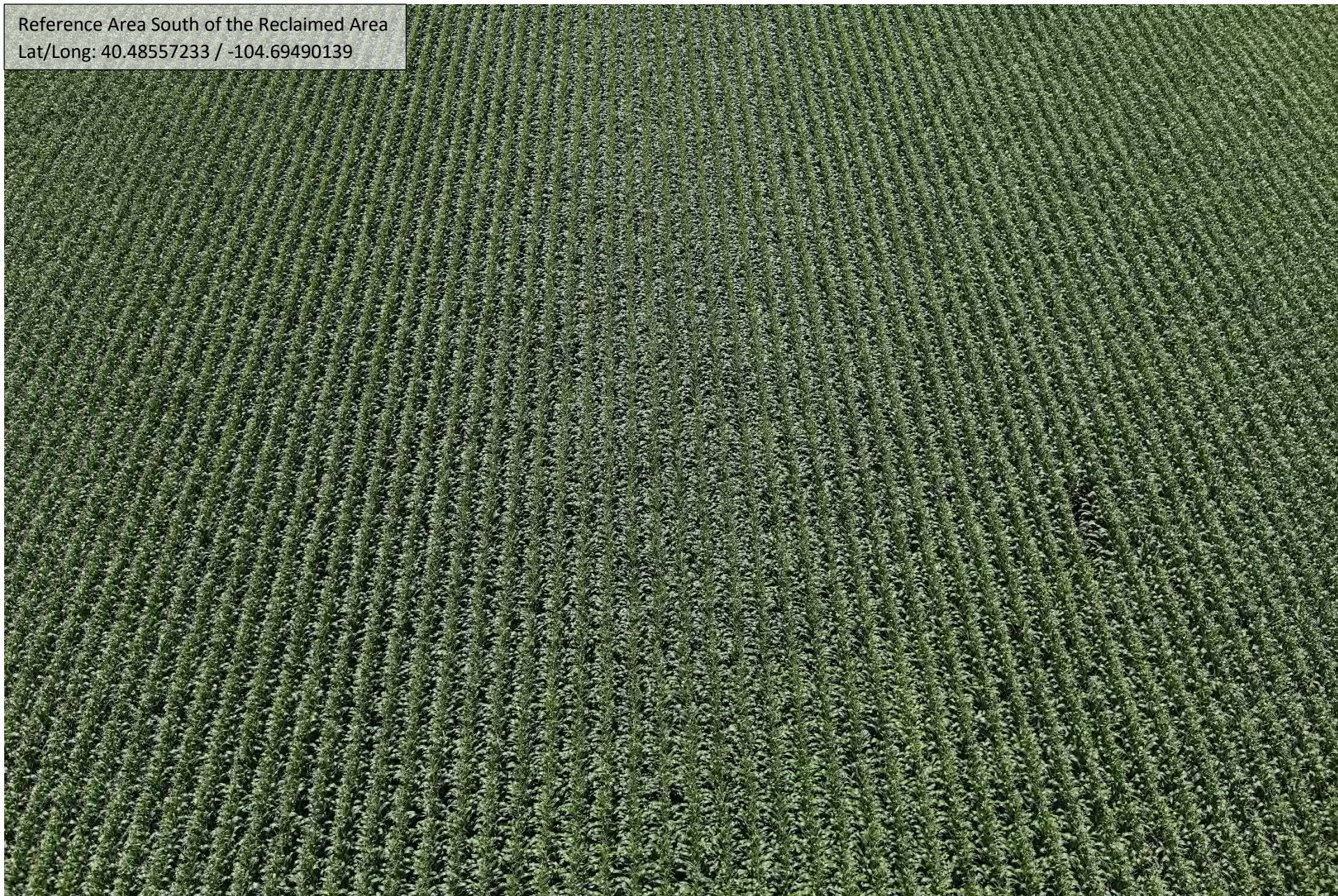
Drone Photo Height:

100'

Reference Area North of the Reclaimed Area
Lat/Long: 40.48616317 / -104.69493431



Reference Area South of the Reclaimed Area
Lat/Long: 40.48557233 / -104.69490139



Reference Area West of the Reclaimed Area
Lat/Long: 40.48592650 / -104.69538100



Reference Area East of the Reclaimed Area
Lat/Long: 40.48597408 / -104.69435714



Reference Photo for Cropland Growth Stage

Cropland Reference Photo (Corn)
Lat/Long: 40.48813000 / -104.69607500

