Location Checklist

Operator / #	BAYSWATER EXPLORATION & PRODUCTION LLC / 10261			
Location ID & Name	302243 LARSON-67N66W/20NWNW			
County	Weld, CO			
Well Information	Well Name:		LARSON #20-11	
	Well API #:		05-123-28006	
	Lat/Long as Drilled:		40.565750 / -104.809390	
	Plug Date & Form 6s Doc #:		03/10/2020 & 402367184	
Facility Entities	X	Tank Battery (Off-Site)		Pits
	X	Wells	X	On-Location Flowlines (Form 42) Doc #: 402314430
		Domestic Taps	X	Off-Location Flowlines (Form 44) Doc #: 402477828
Equipment On-Site	X	None		Debris
		Pit mouse/rat holes, cellars backfilled		
Access Road	X	Regraded	X	Contoured
		Culverts removed	X	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)	X	No		Yes
On-Location Flowlines		No	X	Yes
Off-Location Flowlines		No	X	Yes
Inspection Corrective Actions		No	X	Yes – Resolved 2019
Sundry Notice	Form 4 Doc # & Date:	**No Form 4s were detected during the QA & QC Audit.**		
	Purpose:			
	Comments:			
	Attachments:			
Drone Information	Make & Model		DJI M300/DJI Mavic 3 Multispectral	
	Image Processing Software		Pix4dfields – RGB/Multispectral Imagery & Pix4dmatic – RGB Imagery	
	Pilot Name & FAA Certificate #		Sam Streeter, #4100157	
	Date of FAA Certificate Issuance		23 Dec 2023	

SITE-SPECIFIC QUALITY ASSURANCE & QUALITY CONTROL AUDIT

Final Reclamation Complete Notice – Cropland Drone Imagery

PERMIT CLOSURE REPORT – CROPLAND

Location ID 302243
Location Name LARSON-67N66W/20NWNW

Report Date

20 Dec 2024

Soil Sage has conducted a thorough data audit as part of our Quality Assurance and Quality Control (QA/QC) protocols. This report was developed in accordance with the ECMC Operator Guidance – Operator supplied cropland drone imagery and information for submitting a final reclamation complete notice.

Crop Year and Type

Crop 2024 – Corn

Quality Assurance & Quality Control Audit

Auditor	Soil Sage
Audit Date	22 Oct 2024

Audit Methodology

The following source materials were consulted during the QA and QC audit process:

- ✓ Site Permit Closures provided by Bayswater Exploration & Production
- ✓ Colorado Oil & Gas Information System – COGIS Database
- ✓ On-site Evaluation and Proprietary Soil Sage Drone Imagery data collection
- ✓ Review of legacy imagery for site location and facility parameters

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

Site Description

Name	LARSON-67N66W/20NWNW			
Location ID	302243			
Operator / #	BAYSWATER EXPLORATION & PRODUCTION LLC / 10261			
Field	COALBANK CREEK / 11449			
County, State	Weld, CO			
Lat/Long	40.565750 / -104.809390			
		Planned Location	X	As Drilled
Facility Status	CL	**Location**		NWNW 20 7N66W
Facility Status Date	03/10/2020			
Facility Entities	X	Tank Battery (Off-Site)		Pits
	X	Wells	X	Off-Location Flowlines (**Form 44**)
		Domestic Taps	X	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	X	Gravel Removed
		Pre-Existing: must provide supporting documentation		
Environment Incidents & Remediation	X	None		Spill or Release (**Form 19**)
		Remediation (**Form 27/27A**)		
Variance Requests	**No Variance Requests were detected during this QA & QC Audit.**			
Inspection Corrective Actions (CA)s	**Corrective Actions (CA)s were detected during the QA & QC Audit.** **CA Overall Status:** 2 of 2 CA Completed **CA-Approving Inspection Doc # & Date:** 679601876 & 11/07/2019 ○ **Inspector:** Brittani Santistevan **Form FIRR Doc # & Submittal Date:** 402193208 & 02/07/2020 ○ **Overall Status:** CAC ○ **Originating Field Inspection Report (FIR) Doc #:** 679601252 ○ **CA#:** 128634 **Date Completed:** 09/30/2019 Securely fasten all valves, pipes, and fittings to ensure good mechanical condition, inspect at regular intervals and maintain in good mechanical condition per Rule 605.d.			

	ECMC Decision: Approved via an AMI ○ **CA#:** 128635 **Date Completed: 09/30/2019** Install or repair required BMPs per Rule 1002.f. **ECMC Decision:** Approved via an AMI
	Complete ECMC Inspection Search Results: Link
Sundry Notice (Form 4)	**No Form 4s were detected during the QA & QC Audit.**
On Location Flowlines (Form 42)	**Form 42s were detected during the QA & QC Audit.** See individual scout card data for details.
Off-Location Flowlines (Form 44)	**Form 44 Doc # & Date:** 402477828 & 10/16/2020 ○ **Purpose:** Abandonment Verification ○ **Abandonment Date:** 01/13/2020 ○ **ECMC Approval Date & Signee:** 10/16/2020 & Jeff Robbins ○ **Operator Comments:** None ○ **Note:** This Form 44 includes data for three Off-Location Flowlines: 465760, 465761 and 465762. This Location is connected to 465760 below. **Flowline Facility Information** ○ **ECMC Flowline ID:** 465760 ○ **Operator Flowline ID:** Larson 20-11 ○ **Status & Date:** CL & 01/13/2020 ○ **Flowline Type:** Wellhead Line ○ **Type of Fluids Transported:** None Stated ○ **Start Point Location ID:** 302243 ○ **Start Point Riser Lat/Long:** 40.565750/-104.809390 (LARSON #20-11 Well) ○ **Equipment at Start Point:** Well ○ **End Point Location ID:** 418911 ○ **End Point Riser Lat/Long:** 40.567230/-104.807410 (LARSON TANK BATTERY/ Production Facilities) ○ **Equipment at End Point Riser:** Separator

Field Inspection Form (Form INSP)	**Form INSP Doc # & Date:** 679601876 & 11/07/2019 ○ **Status Summary:** THIS IS A FOLLOW UP INSPECTION. NO FOLLOW UP INSPECTION REQUIRED. ○ **Inspected Facilities:** LARSON-67N66W 20NWNW (Location) ○ **Inspection Status:** AC ○ **Inspection Date & Inspector:** 11/07/2019 by Brittani Santistevan ○ **Comments:** Adequate. SI. THIS IS A FOLLOW UP INSPECTION TO PREVIOUS INSPECTION DOC#: 679601252. All corrective actions assigned in previous inspection DOC#: 679601252 have been resolved. NO NEW CORRECTIVE ACTIONS WERE OBSERVED AT THE TIME OF REINSPECTION. Please review my inspection, photos, and previous inspection DOC#: 679601252 for additional information on this location. Form 10 DOC#: 402197499 (IN PROCESS) is in well file. Continuing Education Inspection. ○ **Attachments:** Inspection Photos Doc # 679601877 **Form INSP Doc # & Date:** 679601252 & 08/05/2019 ○ **Status Summary:** THIS IS A FOLLOW UP INSPECTION. FOLLOW UP INSPECTION REQUIRED. ○ **Inspected Facilities:** LARSON-67N66W 20NWNW (Location) ○ **Inspection Status:** AC ○ **Inspection Date & Inspector:** 07/29/2019 by Brittani Santistevan ○ **Comments:** Adequate. Stained soil at east separator. See attached photos. Shares containment with crude oil tanks. Erosion to location. This is a follow up inspection to DOC#: 679600867. 2 out of 3 corrective actions in inspection DOC#: 679600867 have been completed. Please see attached photos. Refer to previous inspection DOC#: 679600867 for further details. On Monday, July 29, 2019, at approximately 13:30, I, Inspector Brittani Santistevan, conducted an on-site inspection at LARSON/HILL PAD (Great Western), at location #: 302243 in WELD COUNTY Colorado. While there, I observed a shut in location. During this inspection the following possible compliance issues were observed: 1. Multiple areas to location have erosion. INSTALL OR REPAIR REQUIRED BMPs PER RULE 1002.F. (Corrective Action Date: July 1, 2019) See attached photos #4-6. 2. Stained soil at east separator house. SECURELY FASTEN ALL VALVES, PIPES, AND FITTINGS TO ENSURE GOOD MECHANICAL CONDITION, INSPECT IN REGULAR INTERVALS AND MAINTAIN IN GOOD MECHANICAL CONDITIONS PER RULE 605.D. (Corrective

	Action Date: August 29, 2019) See attached photos #7,8. A follow up on this site inspection needs to be conducted to ensure the compliance issues have been corrected to comply with COGCC rules. This is a summary of the inspection report. ○ **Attachments:** Inspection Photos Doc # 679601253
COGIS Tank Facilities Information (Scout Card)	**No Tank Battery documents were detected during this QA/QC Audit.** However, the Tank Battery is referenced in Field Inspection Doc # 679601252 with a Lat/Long of 40.567100/-104.807100 and is located at Location ID 418911.
COGIS Well Information (Scout Card)	**Well Name**: LARSON #20-11 **API#**: 05-123-28006 **FACILITY ID**: 297599 ○ **Status & Date**: PA & 03/10/2020 ○ **Lat/Long as Drilled**: 40.565750 / -104.809390 ○ **Form 6 Doc # & Date:** 402367184 & 10/19/2020 ○ **Form 42 Doc # & Date:** 402314430 & 02/16/2020 **Purpose:** START OF PLUGGING OPERATIONS - 48-hour notice required. Date: 02/18/2020.

ECMC Abbreviations: Location & Facility Status Codes, Inspection Types & Statuses and ECMC Help.

Audit Key Findings – Designation Land Use Observations

PREVIOUS LAND USE	CURRENT LAND USE
Reference Imagery for Infrastructure: Microsoft 21 Apr 2011	**Remotely Sensed Imagery:** 08 Sep 2024; 20 Nov 2024
Designation: Oil & Gas Facility	**Designation:** Cropland

The following imagery sources were reviewed during this Audit: EarthExplorer, DRCOG, USDA NAIP, ESRI, Google Earth and Soil Sage Remotely Sensed Imagery.

Site Observation Notes

No additional information.

In accordance with ECMC guidance, this cropland evaluation has demonstrated that this location has been returned to its original condition and crops are reflective of the cropland reference areas.

Closure Information

Location ID 302243 LARSON-67N66W/20NWNW is in Weld County, Colorado near the intersection of County Road 80 and County Road 27. There is one plugged and abandoned well (LARSON #20-11 API # 05-123-28006). There is an Off-Location Flowline between this well and the production facility at Location ID 418911.

There were Corrective Actions at this location on July 29th, 2019, due to multiple areas of the location eroding and stained soil at east separator house. This was resolved in September 2019 and an ECMC inspection approved the CA on November 7th, 2019.

LARSON #20-11 well (API # 05-123-28006) was plugged and abandoned on March 10th, 2020. The access road was reclaimed at this time. The related production facility, Location ID 418911, was closed and reclaimed at the same time.

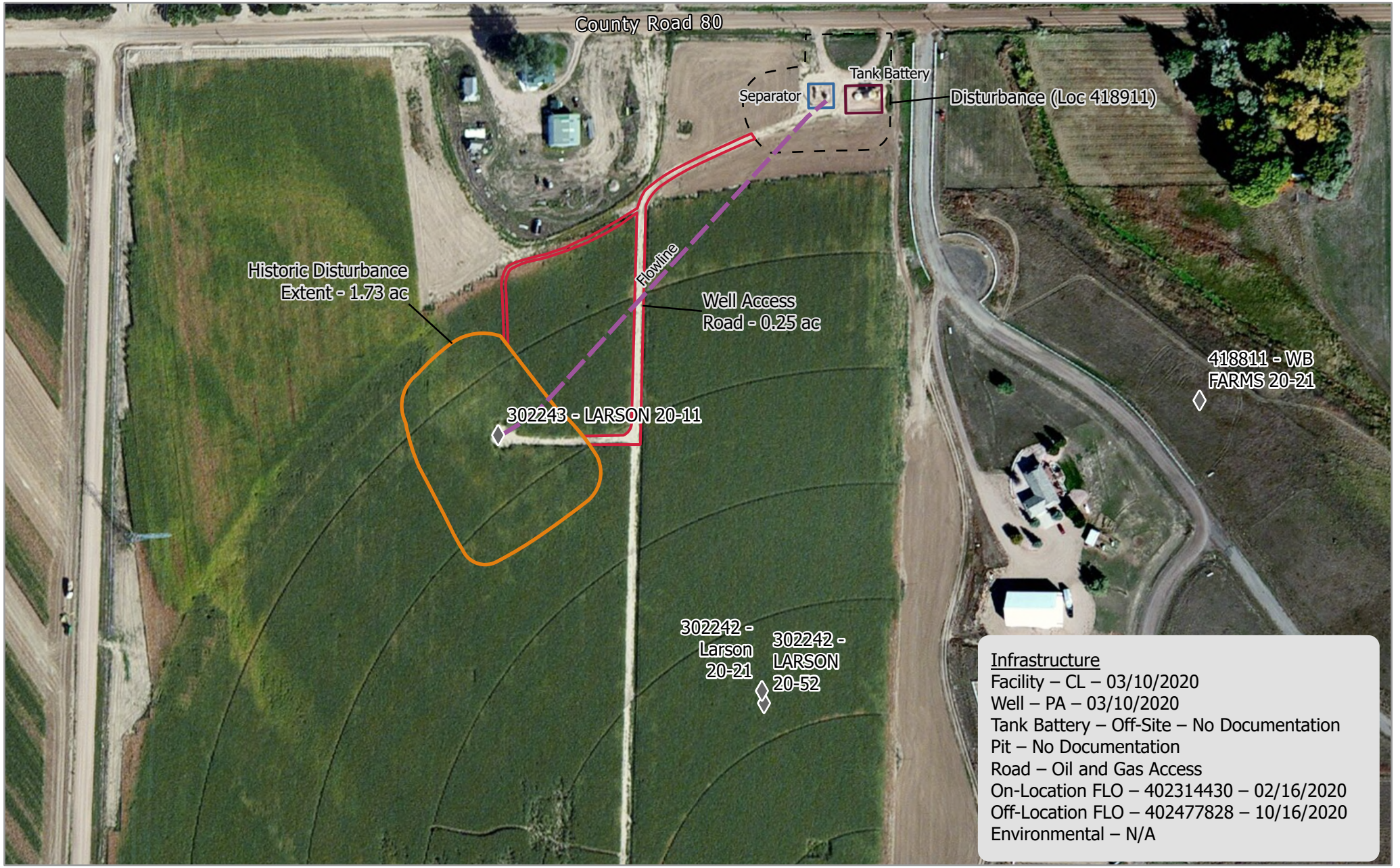
Soil Sage drone imagery confirms that no equipment was left on site at this location after reclamation activities occurred.

Summary Acreage Table

Description	Acres
Historic Disturbance Extent	1.98
Access Road	0.25
Flowline	Not Included
Tank Battery	Off-Site (Loc ID 418911)
Well Pad	1.73

Drone Information

Make	DJI
Model	M300/Mavic 3 Multispectral
Image Processing Software	Pix4dfields – RGB/Multispectral Imagery & Pix4dmatic – RGB Imagery
Pilot Name	Sam Streeter
Pilot FAA Certificate Number	4100157
Date of FAA Certificate Issuance	23 Dec 2023



Bayswater - 302243- LARSON 20-11
Map Extent - Pre-Plugging Overview

Imagery: Microsoft
Imagery Date: 21 Apr 2011
Map Date: 25 Nov 2024
Datum: WGS 1984 UTM Zone 13N
POC: Soil Sage

Wells
Flowline
Historic Disturbance Extent
Well Access Road
Tank Battery
Separator
Disturbance (Loc 418911)

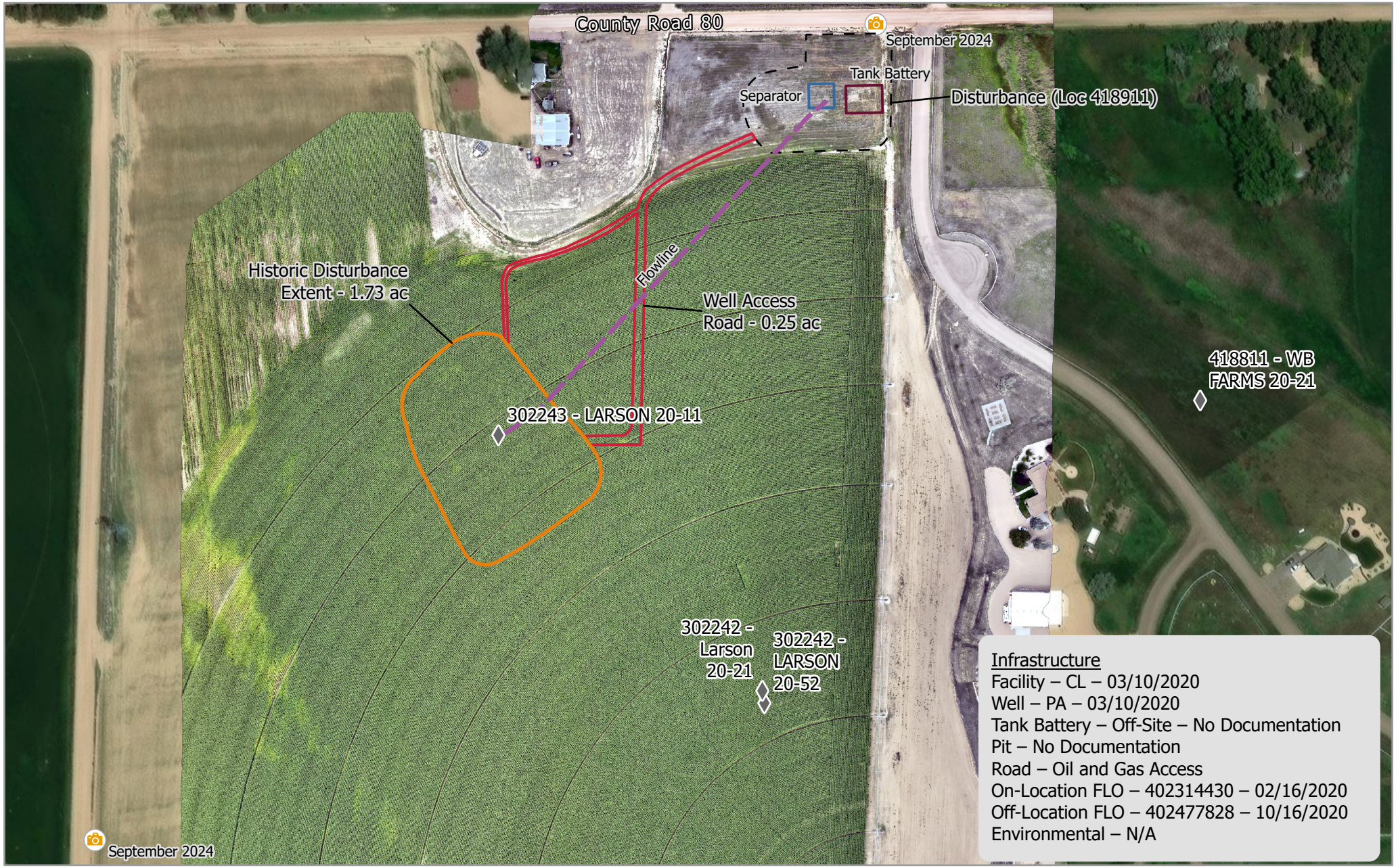
0 37.5 75 150 Meters

Total Disturbance:
1.98 Acres

Scale: 1:2,500

Pad Location:
40.565750
-104.809390

N



Bayswater - 302243- LARSON 20-11
Map Extent - Post-Plugging Overview

Imagery: RS Orthomosaic
Imagery Date: 8 Sep 2024
Map Date: 25 Nov 2024
Datum: WGS 1984 UTM Zone 13N
POC: Soil Sage

Wells
Observation Points
Flowline
Historic Disturbance Extent
Well Access Road
Tank Battery
Separator
Disturbance (Loc 418911)

0 37.5 75 150 Meters

Total Disturbance:
1.98 Acres

Scale: 1:2,500

Pad Location:
40.565750
-104.809390

N

Service Credits - Maxar

Cardinal Directional Drone Photos & Reference Area Photos

Site Investigation and Photos Date

08 Sep 2024

Drone Photo Height

175 feet

Cardinal directional photos of the site. Reference overview map.

In View – Well, Access Road, Flowline **NORTH** – 40.564134 / -104.809491

In View – Well, Access Road, Flowline **EAST** – 40.565807 / -104.810388

In View – Well, Access Road, Flowline **SOUTH** – 40.566298 / -104.809441

In View – Well, Access Road, Flowline **WEST** – 40.565699 / -104.808567

In View – Tank Battery (Loc ID 418911), Access Road, Flowline **NORTH –** 40.566478/-104.807716

In View – Tank Battery (Loc ID 418911), Access Road, Flowline **EAST –** 40.567101/-104.808538

In View – Tank Battery (Loc ID 418911), Access Road, Flowline **SOUTH –** 40.567653/-104.807533

In View – Tank Battery (Loc ID 418911), Access Road, Flowline **WEST –** 40.567285/-104.806659

In View – Well, Tank Battery (Loc ID 418911), Access Road, Flowline **NORTH –** 40.561225 / -104.809673

In View – Well, Tank Battery (Loc ID 418911), Access Road, Flowline **NORTHEAST –** 40.565609 / -104.810356

In View – Well, Tank Battery (Loc ID 418911), Access Road, Flowline **SOUTH –** 40.567653 / -104.807532

Well – Handheld Photographic Evidence

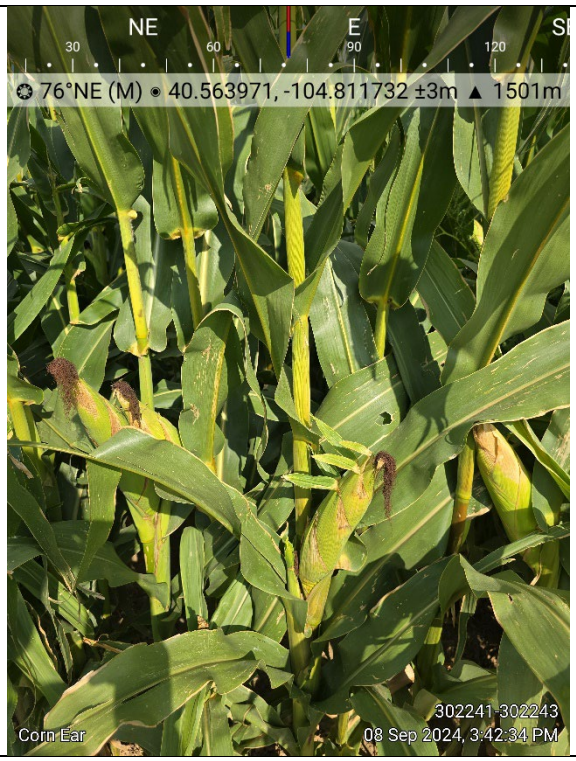
Site Investigation and Photos Date

08 Sep 2024

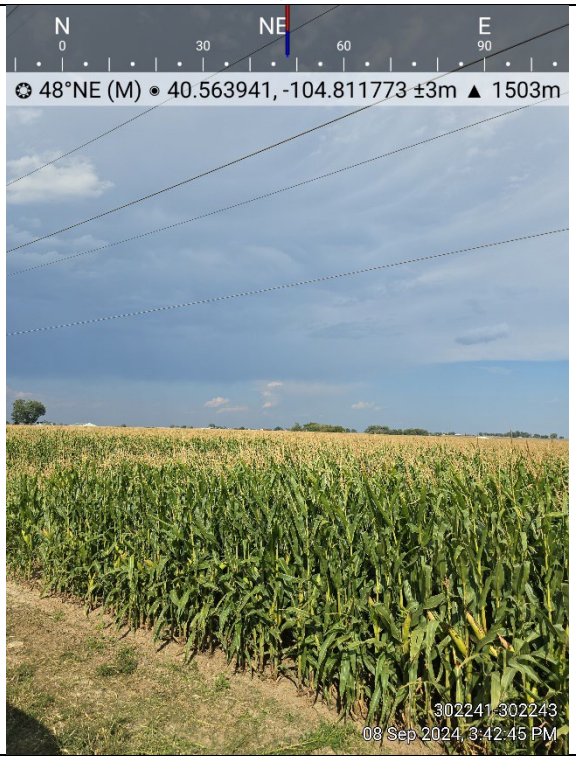
Handheld photos taken from the access road to the southwest looking towards Location ID 302243 wellhead. No handheld photos taken from Location ID 302243 wellhead location due to crop height.

	
Corn – 40.563973/-104.811739	Corn Tassel – 40.563972/-104.811724

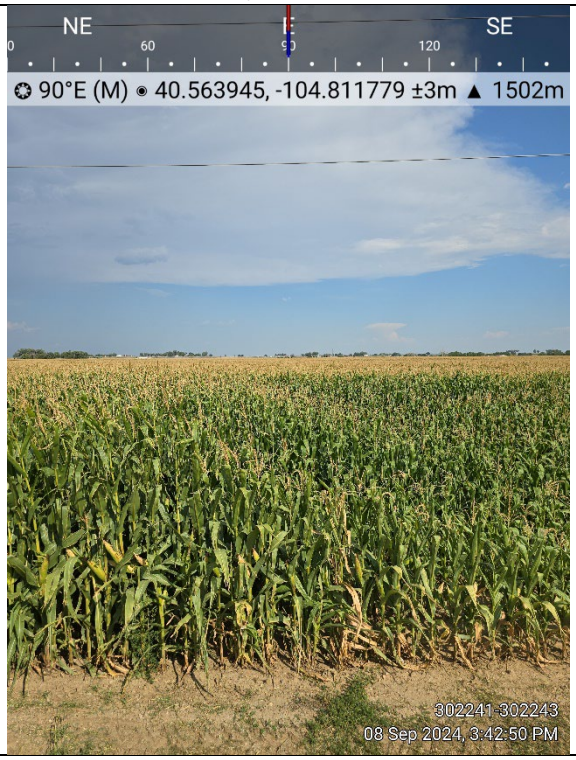
Corn Tassel – 40.563661/-104.811746



Corn Ear – 40.563971/-104.811732



Looking Northeast – 40.563941/-104.811773



Looking East – 40.563945/-104.811779

	
Looking Southeast – 40.563944/-104.811777	

Cardinal Directional Drone Photos Showing No Equipment Remaining

Site Investigation and Photos Date
20 Nov 2024

Drone Photo Height
250 feet

Cardinal directional photos of the site. Reference overview map.

In View – Well, Tank Battery (Loc ID 418911), Access Road, Flowline **NORTH** – 40.564925/-104.809428

In View – Well, Tank Battery, Access Road, Flowline **EAST** – 40.565667 / -104.810575

In View – Well, Access Road, Flowline **SOUTH** – 40.566324 / -104.809364

In View – Well, Access Road, Flowline **WEST** – 40.565721 / -104.807836

In View – Tank Battery (Loc ID 418911), Access Road, Flowline **NORTH** – 40.565715 / -104.807834

ATTACHMENTS

Maps and Figures

Area Maps

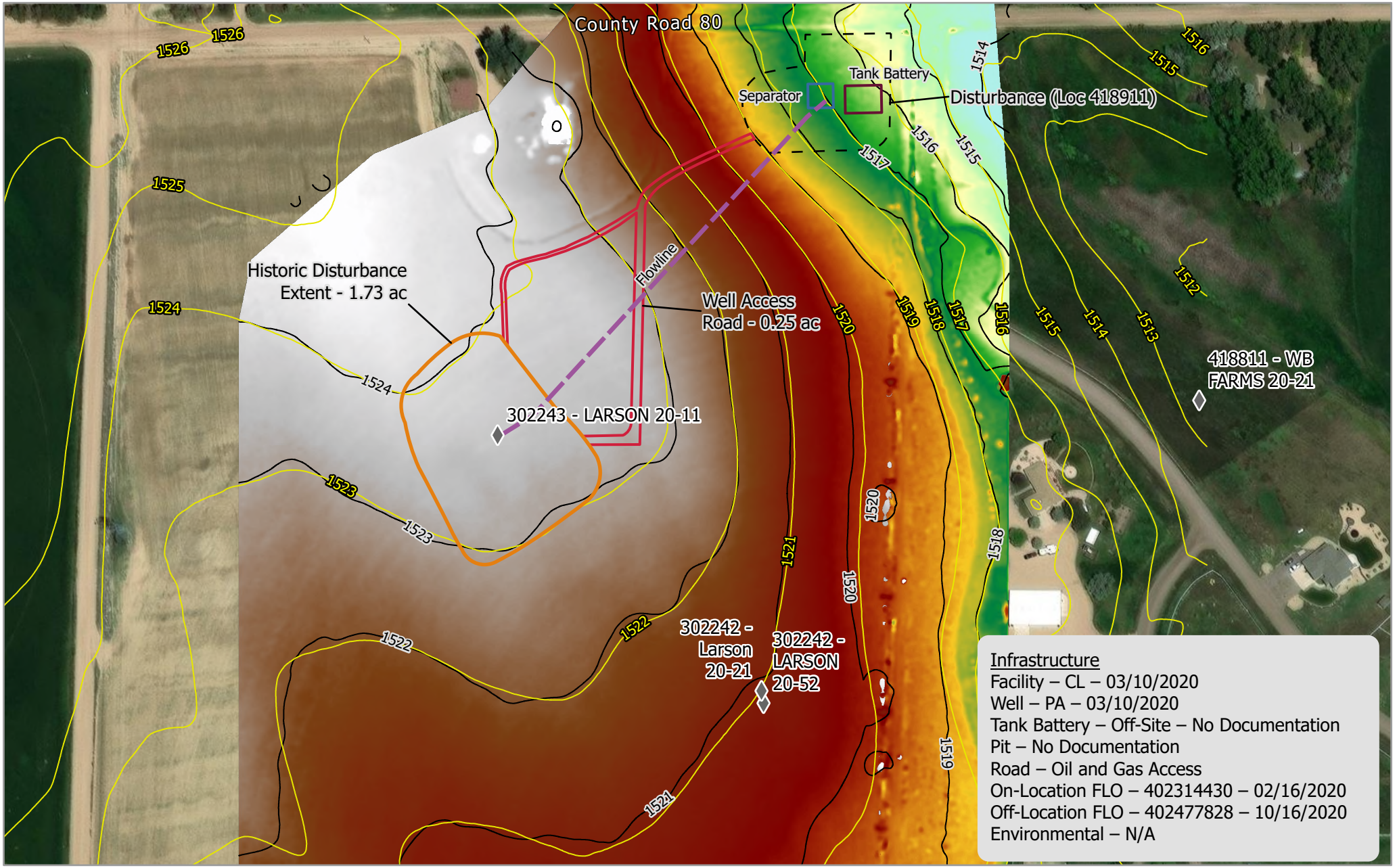
Elevation & Contours

Hydrology

Background Information

Natural Resources Conservation Service (NRCS) Map Unit Description

Reference Soil Document



Infrastructure
Facility – CL – 03/10/2020
Well – PA – 03/10/2020
Tank Battery – Off-Site – No Documentation
Pit – No Documentation
Road – Oil and Gas Access
On-Location FLO – 402314430 – 02/16/2020
Off-Location FLO – 402477828 – 10/16/2020
Environmental – N/A

Service Credits - Maxar, Microsoft

Bayswater - 302243- LARSON 20-11
Map Extent - Elevation & Contours

Imagery: CWCB, RS DSM
Imagery Date: 2018, 2024
Map Date: 25 Nov 2024
Datum: WGS 1984 UTM Zone 13N
POC: Soil Sage

Wells
Flowline
1 Meter Contours (2024)
1 Meter Contours (2018)
Historic Disturbance Extent
Well Access Road
Tank Battery
Separator
Disturbance (Loc 418911)
Elevation
Meters
1530
1513

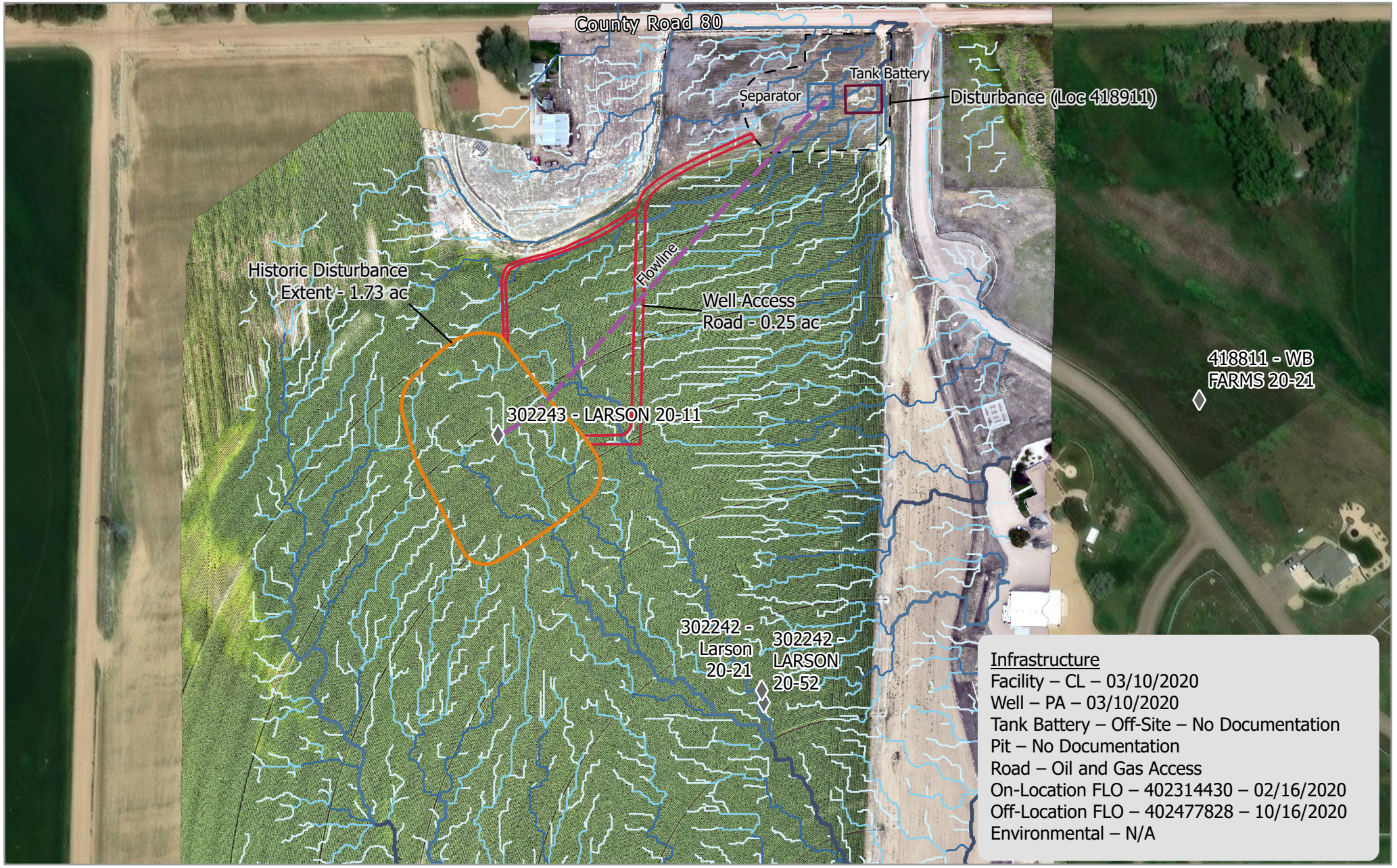
0 37.5 75 150 Meters

Total Disturbance:
1.98 Acres

Scale: 1:2,500

Pad Location:
40.565750
-104.809390

N



Service Credits - Maxar

Bayswater - 302243- LARSON 20-11
Map Extent - Hydrology

Imagery: RS DSM, RS Orthomosaic
Imagery Date: 20 Nov 2024, 8 Sep 2024
Map Date: 25 Nov 2024
Datum: WGS 1984 UTM Zone 13N
POC: Soil Sage

- Wells
- Flowline
- Historic Disturbance Extent
- Well Access Road
- Tank Battery
- Separator
- Disturbance (Loc 418911)

Stream Order
1
2
3
4
5

0 37.5 75 150 Meters

Total Disturbance: 1.98 Acres

Scale: 1:2,500

Pad Location: 40.565750 -104.809390

N

Soil Properties

USDA Soil Description

Reference Soil Information

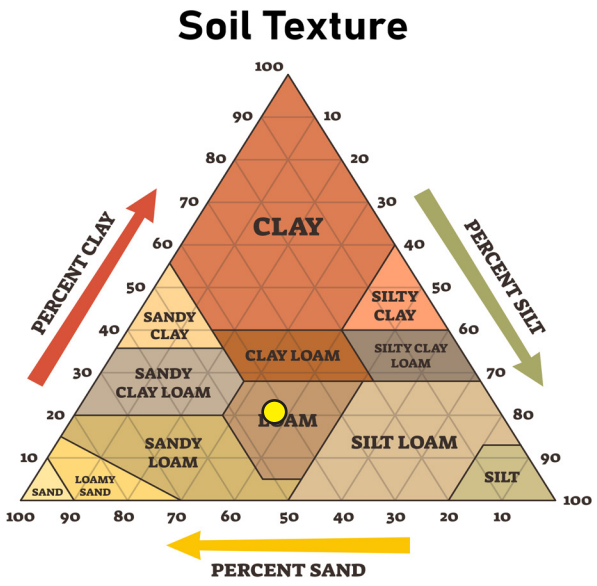
The location of the site is contained within two soil types, Kim Loam at two slopes.

Map Unit 32 Reference Soil information - Kim Loam

This soil is formed from mixed eolian deposits derived from sedimentary rock. Landform is alluvial fans and plains. Ecological Site Description is Loamy Plains. Soils are well-drained with a moderate water holding capacity, and slope 1 to 3 percent.

	Physical			Chemical			
Depth (in)	Texture	Bulk Density	Particle Size Percent sand, silt, clay	pH	EC	SAR	OM%
0-12	Loam	1.33	42-37-21	7.9	0.0	0.0	0.75
12-40	Loam	1.33	42-37-21	7.9	0.0	0.0	0.75
40-60	Fine Sandy Loam	1.43	65-20-15	7.9	0.0	0.0	0.25

Soil Texture Triangle reflect the 0-10 in depth



Erosion Potential (10 inches)

- K Factor, Whole soil - .28. Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

- Wind Erodibility Group – 4L. The soils assigned to group 1 are the most susceptible to wind erosion, and those assigned to group 8 are the least susceptible.

Soil Properties

USDA Soil Description

Reference Soil Information

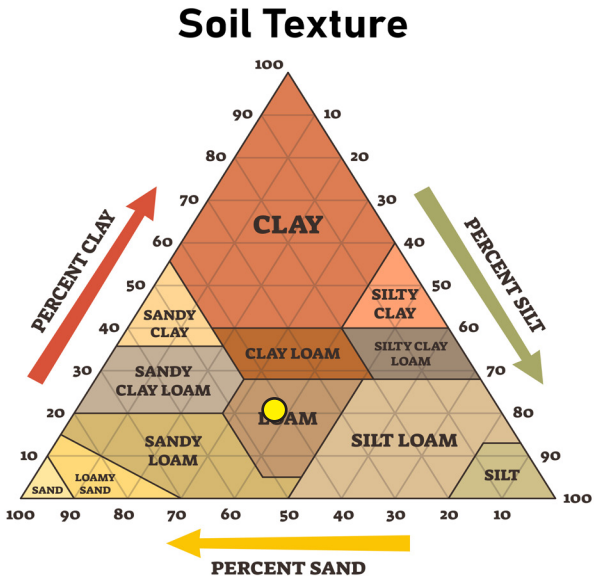
The location of the site is contained within two soil types, Kim Loam at two slopes.

Map Unit 33 Reference Soil information - Kim Loam

This soil is formed from mixed eolian deposits derived from sedimentary rock. Landform is alluvial fans and plains. Ecological Site Description is Loamy Plains. Soils are well-drained with a moderate water holding capacity, and slope 3 to 5 percent.

	Physical			Chemical			
Depth (in)	**Texture**	**Bulk Density**	**Particle Size Percent sand, silt, clay**	**pH**	**EC**	**SAR**	**OM%**
0-12	Loam	1.33	42-37-21	7.9	0.0	0.0	0.75
12-40	Loam	1.33	42-37-21	7.9	0.0	0.0	0.75
40-60	Fine Sandy Loam	1.43	65-20-15	7.9	0.0	0.0	0.25

Soil Texture Triangle reflect the 0-10 in depth



Erosion Potential (10 inches)

- K Factor, Whole soil - .28. Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

- Wind Erodibility Group – 4L. The soils assigned to group 1 are the most susceptible to wind erosion, and those assigned to group 8 are the least susceptible.

Soil Reference Information

There is a general relationship of soil bulk density to root growth based on soil texture. Bulk densities ideal for root growth are less than 1.60 g/cc for sandy textures, less than 1.40 g/cc for loamy textures, and less than 1.10 g/cc for clayey textures. Bulk densities that restrict root growth are greater than 1.80 g/cc for sandy textures, 1.65 g/cc for loamy textures, and 1.47 g/cc for clayey textures.

Vegetation

Reference vegetation – Loamy Plains Ecology

Climate

Average Annual Precipitation 14 to 17 inches annually

Average Annual Air Temperature 50 degrees F

Drought conditions in effect

Long-term effects of these latest drought events have yet to be determined. Growth of native cool-season plants begin about April 1 and continue to mid-June. Native warm-season plants begin growth about May 1 and continue to about August 15. Regrowth of cool-season plants occur in September in most years, depending on moisture.

Reference dynamics

The Reference State is characterized by co-dominant warm-season shortgrass (blue grama), and cool-season midgrass (western wheatgrass, green needlegrass). The Warm-Season Shortgrass State is characterized by a warm-season short bunchgrass (blue grama) and stoloniferous grass (buffalograss). The Increased Bare Ground State is characterized by early successional warm-season bunchgrass (Fendler threeawn), cool-season short bunchgrass (squirreltail), annual grasses, and annual forbs.

Drought has increased mortality of blue grama and buffalo grasses in some locations

The major grasses in the Reference Plant Community include western wheatgrass, green needlegrass, and blue grama. Western wheatgrass is a major cool-season grass in this plant community and is a valuable forage plant in late spring and/or early summer. Sub-dominant grasses include needle and thread, buffalograss, and sand dropseed. Major forbs include American vetch, upright prairie coneflower, scarlet globemallow, and dotted blazingstar (dotted gayfeather). A minor amount of shrubs such as fourwing saltbush and winterfat may also occur.

Well suited for carbon sequestration

Vegetation

Reference Vegetation – Loamy Plains Ecology

At Risk Plant Community

Key species from the Reference Plant Community, such as green needlegrass, western wheatgrass, American vetch, fourwing saltbush, and winterfat have been reduced in production. Blue grama and buffalograss have increased in abundance, are beginning to dominate the community, and will begin to exhibit a sod-bound appearance. Sand dropseed, red threeawn, sixweeks fescue, plains pricklypear, hairy false goldenaster, and bottlebrush squirreltail also have increased. This plant community is at risk of losing the cool-season grasses, key forbs such as American vetch and purple prairie clover, and key shrubs.

Total aboveground biomass has been reduced. Reduction of rhizomatous wheatgrass, nitrogen-fixing forbs, and the shrub component, and increased warm-season shortgrasses have begun to alter the biotic integrity of this community. Water and nutrient cycles may be impaired.

Loamy Plains Ecosystem Vegetative Community Composition

Common Name	Scientific Name
Western Wheatgrass	*Pascopyrum smithii*
Green Needlegrass	*Nassella viridula*
Indian Ricegrass	*Achnatherum hymenoides*
Needle and Thread	*Hesperostipa comata*
Blue Grama	*Bouteloua gracilis*
Buffalograss	*Bouteloua dactyloides*
Sand Dropseed	*Sporobolus cryptandrus*
Sideoats Grama	*Bouteloua curtipendula*
Little Bluestem	*Schizachyrium scoparium*
Little Barley	*Hordeum pusillum*
Sixweeks Fescue	*Vulpia octoflora*
American Vetch	*Vicia americana*
Purple Prairie Clover	*Dalea purpurea var. purpurea*
White Locoweed	*Oxytropis sericea*
Slimflower Scurfpea	*Psoralidium tenuiflorum*
Scarlet Globemallow	*Sphaeralcea coccinea*
Broadbeard Beardtongue	*Penstemon angustifolius*
Lacy Tansyaster	*Machaeranthera pinnatifida ssp. pinnatifida var. pinnatifida*
Dotted Blazing Star	*Liatris punctata*
Upright Prairie Coneflower	*Ratívida columnifera*
Rush Skeletonplant	*Lygodesmia juncea*