

SITE-SPECIFIC QUALITY ASSURANCE & QUALITY CONTROL AUDIT

Permit Closure Type – Final



PERMIT CLOSURE REPORT – RANGELAND

Location ID 320337

Location Name WWC-61S68W9SESE

Report Date

28 Mar 2023

Soil Sage has conducted a thorough data audit as part of our Quality Assurance and Quality Control (QA/QC) protocols. The audit revealed this site has gone through a land use change.

Initial Job Assignment

Client	CIVITAS Resources
Work Assignment	179 Site Permit Closures
Date	July 20, 2022

Quality Assurance & Quality Control Audit

Auditor	Soil Sage
Audit Date	12/12/2022

Audit Methodology

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

- ✓ Site Permit Closures provided by CIVITAS Resources
- ✓ 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	WWC-61S68W9SESE		
Location ID	320337		
Operator / #	EXTRACTION OIL & GAS INC / 10459		
Field	WATTENBERG / 90750		
County, State	ADAMS, CO		
Lat/Long	39.973600 / -105.000050		
	As Planned	X	As Drilled
Facility Status	CL	Location	SESE 9 1S68W
Facility Status Date	01/28/2017	Access Road	Oil & Gas Access
Facility Entities	X	Tank Battery	Pits
	X	Wells	Off-Location Flowlines (Form 44)
		Domestic Taps	X On-Location Flowlines (Form 42)
Equipment Remaining on Site	X	None	Debris or Non-Oil & Gas
		List of Equipment:	
Environment Incidents & Remediation		None	Spill or Release (Form 19)
	X	Remediation (Form 27/27A)	
Inspection Corrective Actions (CA)s	<p>Corrective Actions (CA)s Overall Status: 0 of 1 Completed</p> <ul style="list-style-type: none"> ○ Overall Status: Unknown ○ No CA Resolving Documents were found for this inspection during this QA & QC Audit. <p>Originating Field Inspection Report (FIR) Doc #: 674902725 & 04/17/2019</p> <ul style="list-style-type: none"> ○ 1 CA, CA Date: 05/15/2023 ○ Overall Final Reclamation: Fail <p>Complete COGCC Inspection Search Results: Link</p>		
Sundry Notice (Form 4)	Form 4s exist for Related Facilities – See individual scout card data for report details.		
On Location Flowlines (Form 42)	Form 42s exist for Related Facilities – See individual scout card data for report details.		
Off-Location Flowlines (Form 44)	No Form 44s were detected during this QA & QC Audit.		
Site Investigation and Remediation Workplan (Form 27/27A)	<p>Remediation Project #: 10061</p> <p>Form 27A Supplemental Doc # & Date: 401303285 & 07/24/2017</p> <ul style="list-style-type: none"> ○ Closure Request Approved: 07/24/2017 by Chris Canfield ○ Final Resolution: Case closed 07/24/2017 		

	<p>Form 27 Initial Doc# & Date: 401204084 & 02/23/2017</p> <ul style="list-style-type: none"> ○ Purpose: Pit or PW vessel closure, Facility decommissioning in support of final reclamation. ○ Operator Comments: This Form 27 prepared for the purpose of generating a remediation project number to support decommissioning of the well site and production equipment associated with final reclamation of this location. Should soil or groundwater impacts be identified during removal of the produced water vessel, or while decommissioning other related production equipment at this location, required notifications will be completed for each discovery, including preparation of a Form 19. ○ Type of Waste Requiring Remediation: E&P Waste, Produced Water, Oil, Condensate ○ Impacted Media: Soils ○ Impacted Type: Undetermined ○ Facility ID: 320337 ○ Facility Type: Location ○ Site Investigation Plan Start Date: 02/27/2017
<p>Field Inspection Form (Form INSP)</p>	<p>Form INSP – Doc # & Date – 674902725 & 04/17/2019</p> <ul style="list-style-type: none"> ○ Status Summary: Follow Up Inspection Required, Corrective Action Response Required ○ Inspected Facilities: Well WWC 2-9 ○ Inspection Status: PA ○ Inspection Date & Inspector: 03/29/2019 by Russell Beam ○ Comments: This is a Final Reclamation Inspection for the PA Well. Well was plugged 1/28/2017. This location is not in compliance due to parts of the access road remain and the reclamation is not at percent cover and has non-uniform establishment of perennial cover. Reclamation rules require reclamation activities to be conducted within twelve months of plugging on non-cropland. Well was plugged 1/28/2017 and work should have been completed by 1/28/2018 – CA Date 1/28/2018. Operator is directed to perform corrective actions outlined on this inspection report immediately. ○ Reference: Inspection Photos Doc #674902764 <p>Form INSP Doc # & Date: 667600145 & 02/17/2017</p> <ul style="list-style-type: none"> ○ Status Summary: No Follow Up Inspection Required ○ Inspected Facilities: Well WWC 2-9

	<ul style="list-style-type: none"> ○ Inspection Status: PA ○ Inspection Date & Inspector: 02/07/2017 by Adam Kraich ○ Comments: Well has been P&A'd, flowline, separator, and battery still on location. Form 42 was submitted 1/16/17.
COGIS Tank Facilities Information (Scout Card)	<p>No Tank Battery forms were detected during this QA & QC Audit.</p> <p>Inspection Form Doc #667600145 on 02/17/2017 refers to the tank battery, stating that it was still present at the location on 02/07/2017.</p>
COGIS Well Information (Scout Card)	<p>Well Name: WWC #2-9</p> <p>API#: 05-001-09042</p> <p>FACILITY ID: 203483</p> <ul style="list-style-type: none"> ○ Status & Date: PA & 01/28/2017 ○ Lat/Long As Drilled: 39.973600 / -105.000050 ○ Form 6 Subsequent Doc # & Date: 401219265 & 07/12/2018 ○ Form 42 Doc # & Date: 401351129 & 07/24/2017 Purpose: Flowlines Abandoned per Rule 1103 on 02/28/2017 ○ Form 42 Doc # & Date: 401185258 & 01/16/2017 Purpose: Start of Plugging Operations – 48-Hour Notice Required ○ Form 4 Doc # & Date: 400952959 & 02/16/2016 Purpose: Interim reclamation complete, site ready for inspection. Approved: 02/16/2016 by Chris Binschus

COGCC Abbreviations: [Location & Facility Status Codes](#), [Inspection Types & Statuses](#) and [COGCC Help](#).

Audit Key Findings – Designation Land Use Observations

PREVIOUS LAND USE	CURRENT LAND USE
<p>Reference Imagery for Infrastructure:</p> <p>DRCOG 2010</p>	<p>Remotely Sensed Imagery:</p> <p>24 September 2022</p>
<p>Designation:</p> <p>Oil and Gas Facilities</p>	<p>Designation:</p> <p>Rangeland</p>

The following imagery sources were reviewed during this audit:

EarthExplorer, DRCOG 2002 - 2014, NAIP Imagery 2011, 2013, 2015, 2017, 2019, 2021, ESRI Maxar and Remotely Sensed Imagery Sep 2022

Closure Information

Google Earth Imagery from 06/2017 shows the tank battery and associated facilities are gone. However, no documentation was found to confirm the removal.

Summary Acreage Table

Description	Acres
Total Disturbance Extent	0.74
○ Access Road	Included
○ Flowline	Included
○ Tank Battery	Included
○ Well Pad	Included

ATTACHMENTS

Recommendation

Monitoring – Field Site Visit 24 Sept 2022

Vegetation Evaluation and Site Imagery

Site Evaluation

Site Reference

Natural Resources Conservation Service (NRCS) Map Unit Description

Reference Soil Document

Ecological Site Descriptions

Maps and Figures

Area Maps

Previous Infrastructure Overview

Current Site Overview

Hydrology

Elevation & Contours

Slope

NDVI

NDRE

NAIP NDVI Composite

Recommendations

Monitoring Change Over Time

Date of Sampling – 24 Sep 2022

Vegetation

The site evaluation results indicate the reference vegetative recovery target for NDVI reflected 76% and the reference vegetation recovery target for NDRE reflected 19%. The recovery status for the reclaim extent was at a 3% surplus for NDVI and 36% surplus for NDRE. These data are based on fall vegetative growth.

The site evaluation indicates the no presents of weeds within the reference and reclaim extent.

Vegetation recovery for the access road was calculated within the reference extent and reflects the same values as the recovery status above.

The target recovery was based on one reference extents that fall within the same soil types. Typical land use was observed in this area similar vegetation properties.

Recommendation

No recommendations.

Reference Extent Vegetation Observations

Percent cover is determined using random sampling methods within the vegetation extent and using a sampling hoop of 0.5 sq meters in size.

Native or Endemic in the surrounding area

Alfalfa

Invasive

None observed.

Recovery Extent Vegetation Observations

Native or Endemic in the surrounding area

Alfalfa

Invasive

None observed.

NDVI - NDRE Stats	Name							
Date	WWC							
Type	NDVI Class	Reference Percent Cover	Class Sum	Target Recovery 80%	Target - Weed 0%	Reclaimed Percent Cover	Class Sum	Deficit/Surplus
Veg	1	16.42				44.16		
Veg	2	78.68	95.10	76.08	76.08	34.44	78.60	2.52
Non-Veg	3	5.55				16.04		
Non-Veg	4	0.03				6.02		
Non-Veg	5	0.00	5.57			0.40	22.46	

NDVI Red Edge
Date

Type	NDRE Class	Reference Percent Cover	Class Sum	Target Recovery 80%	Target - Weed 0%	Reclaimed Percent Cover	Class Sum	Deficit/Surplus
Veg	1	0.63				14.64		
Veg	2	23.17	23.81	19.05	19.05	40.76	55.40	36.36
Non-Veg	3	69.33				32.34		
Non-Veg	4	7.52				12.43		
Non-Veg	5	0.02	76.87			0.89	45.66	

Weed Inventory	Class	Reclaimed Percent Cover	Class Sum	Weed Cover 0%	Reclaimed Class Sum	NDVI Actual	Actual - Target %
Veg	1	44.16					
Veg	2	34.44	78.60	0.00	78.60	78.60	2.52
Non-Veg	3	16.04					
Non-Veg	4	6.02					
Non-Veg	5	0.40	22.46				

Change Detection

Normalized Difference Vegetation (NDVI)

Section will primarily focus on the NDVI imagery for vegetation reference and current analytics.

The composite NAIP NDVI imagery from 2010-2020, this data set does not contain the NDVI values to perform statistical analysis. The imagery foot print encompasses the site extent and a vegetation reference extent for vegetative analysis.

Remotely sensed data was gathered on 24 Sep 2022, which reflects the current vegetative cover statistics.

NDVI calculations used the Near Infrared and Red bands and the NDRE used the RedEdge band and the Near Infrared from the multispectral sensors. The NDVI reflects the measurements from the plant's topmost layer of leaves, typically used during spring emergence into mid-season growth. The NDRE reflects the measurements from permanent or later stage growth due to its ability to measure further down into the canopy. Both analytics were calculated to establish the baseline.

The percent cover calculations reflect the vegetation from the reference area and the reclaimed area. The data reflects 5 bands of reflectance. Classes reflect vegetative and non-vegetative areas. The recovery matrix, which is 80% of the reference vegetation were calculated. The recovery calculation indicate the current rate of recovery at the time of sampling.

All measurements are based on the reclaimed area, the reference area extent and the weed inventory at the time of analysis.

Weed Summary Reference

Common Name	Weed List Type	Percent Cover (%)
None observed		

Weed Summary Recovery

Common Name	Weed List Type	Percent Cover (%)
None observed		

Weed Inventory Criteria

- Each site is accessed for noxious weeds and common weeds
- Data are aggregated using point locations coupled with percent cover assessments and area measurements as needed
- Governance - Colorado Department of Agriculture - Colorado Noxious Weeds List, effective October 2020
- List A - Designated for eradication, List B - Designed to stop the continued spread, List C - Facilitate more integrated effective weed management, Watch List - Determined to pose a potential threat to ag and natural productivity.
- Common - designates weeds that do not fall within the Colorado Department of Agriculture lists
- Other - designates other identified weeds at the site

Weed Pressure

No current weed pressure was observed in reclaim extent.

Hydrology

Hydrology – Stream Orders 1 – 5 are present - dominant streams are orders are 1, 2 and 3. Order 3-5 are present in locations that have the potential for soil erosion represented by gullying and riling that follow the elevation gradient from high to low within the current reclaim extent. These could be major runoff areas for gullying and soil erosion with heavy precipitation events. Soil texture in the area is primarily a loam/clay. Minor streams are present within the previous pad area and an order 4 stream along the previous road to the north, within the reclaim extent. Contour lines indicate a slight variation within the disruption extent.

Ponding - potential ponding can occurring were water follows the elevation gradients in low lying areas, which are southeast of the reclaim extent. No evidence of ponding was observed. The flow directions is from the higher elevation to the west flowing east flowing the natural gradient.

Soil/Erosion

Exposed soils have moderate susceptible to water erosion and in the moderate susceptible group for wind erosion due to ecosystem dynamics and vegetative cover.

Site Recommendation and Re-Evaluation

This site statically meets the revegetation target rate within the reclaim and road extent. Recommend for permit closure.

Seed Mix

Vegetation Seed Mix

No Additional reclamation procedures are recommended at this time.

Current land use is agricultural crop alfalfa

Reclaim Area Protocol

Time Frame	Activity	Specifications	Site Totals
Sep 2022	Monitoring	Common weeds Present	
Spring 2023	Permit Closure	Recommend for permit closure	

Site Photos

Reference

39.973713, -105.000485



North

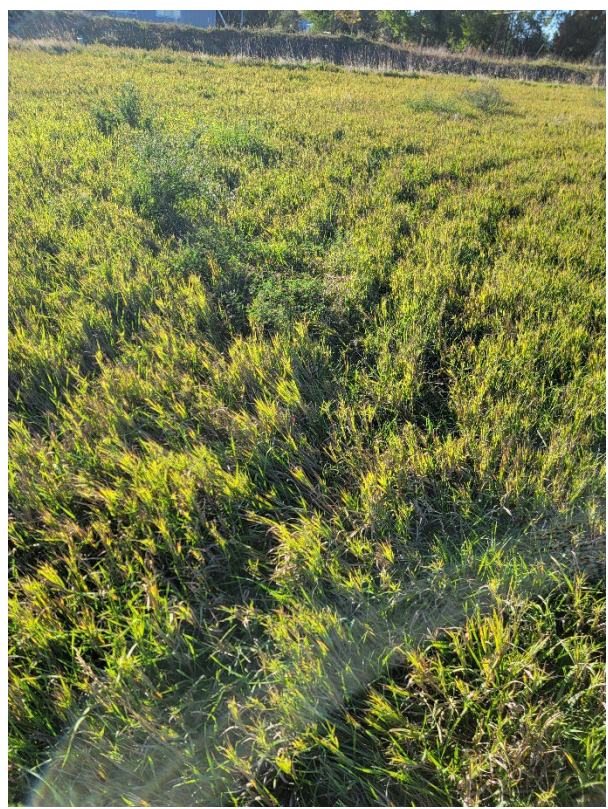


East

Soil Sage



South



West



Vegetation - Alfalfa

Soil Sage

Recovery

39.973807, -104.999836



North



East

Soil Sage



South



West



Vegetation – Alfalfa

Access Road

39.973986, -105.001425



Access Road Recovery



Access Road

SITE EVALUATION REPORT



SITE DESCRIPTION

SOIL SAGE

CLIENT - CIVITAS Resources

DATE: 28 Mar 2023

Operator/ #	EXTRACTION OIL & GAS INC - 10459	County / State	ADAMS, CO
Location ID / Name	320337 - WWC- 61S68W9SESE	Field ID	WATTENBERG 90750
Facility Status	CL	Status Date	01/28/2017
Disturbance Extent	0.74	Road Extent / Acres	0.10
Reclaimed Extent / Acres	0.38	Reference Extent / Acres	0.44
Reclaim Weed Percent	None Observed	Reference Weed Percent	None Observed
		Coordinates Lat/Long	39.973600 -105.000050

Reference Descriptions Imagery

Chronological

2010 - DRCOG

2017 - LandSat/Copernicus

2022 – Remotely Sensed Imagery Ortho, DSM, NDVI, NDRE

Map List

DRCOG 2010

Landsat/Copernicus 2017

NAIP 2010 – 2020 NDVI Composite

2014 -2020 Elevation Contour

2020 Slope

2022 RS Overview

2022 RS Hydrology

2022 RS NDVI

2022 RS NDRE

Landscape Summary

2010 – DRCOG

- Landuse mixed used, non-agricultural, disturbance, reclaim and road extent present

2017 – Landsat

- Landuse mixed use, non-agricultural, disturbance, reclaim and road extent present

2022 – Drone imagery from 24 Sep 2022 – orthomosaic and DSM

- Landuse mixed use, agricultural reclaim extent not visible
-

2014 - USGS Elevation

2020 - DRCOG Elevation

- Slope - 0-3% slope range
- Contouring lines 1m
- Elevation gradients 1589 - 1627 m (5213 - 5338 ft)

2022 – Drone imagery from 24 Sep 2022 – NDVI /NDRE (vegetation analysis)

Soil Properties

USDA Soil Description

Reference Soil Information

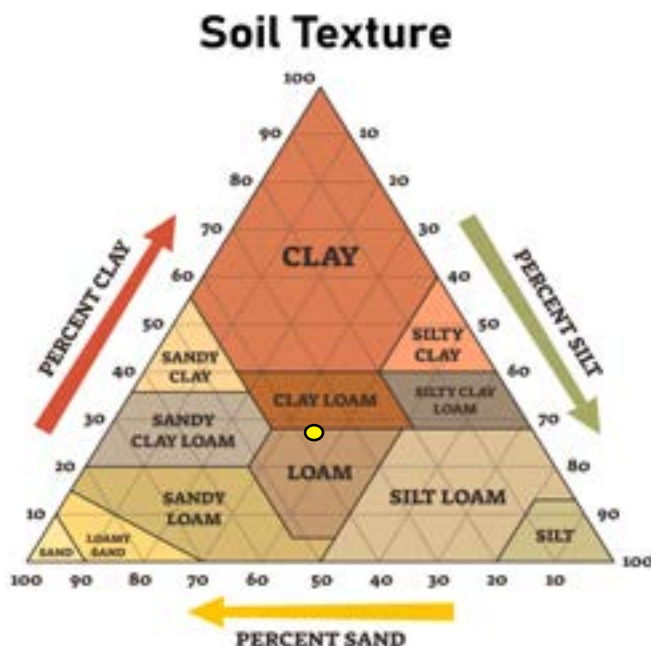
The location of the site is contained within one soil type, Platner loam.

Map Unit PIB Reference Soil information - Platner loam

This soil is formed from mixed eolian deposits over tertiary aged alluvium derived from igneous, metamorphic and sedimentary rock. Landform is interfluves, with the Loamy Plains Ecological Site. Soils are well drained with a moderate water holding capacity, and slope 0-3 percent.

Depth (in)	Physical			Chemical			
	Texture	Bulk Density	Partical Size Percent sand, silt, clay	pH	EC	SAR	OM%
0-10	Loam, Clay	1.39	38-35-27	7.4	0.5	0.0	1.50
10-20	Clay	1.36	30-30-40	7.6	0.5	0.0	1.50
20-30	Loam	1.55	44-32-24	8.3	0.5	0.0	0.68
30-40	Sandy Clay Loam	1.55	61-19-20	8.5	0.5	0.0	0.50
40-50	Sandy Clay Loam	1.58	61-19-20	8.5	0.5	0.0	0.50
50 +	Sandy Clay Loam	1.58	61-19-20	8.5	0.5	0.0	0.50

Soil Texture Triangle reflect the 0-10 in depth



Erosion Potential (10 inches)

- K Factor, Whole soil - .43. 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 – 5. 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

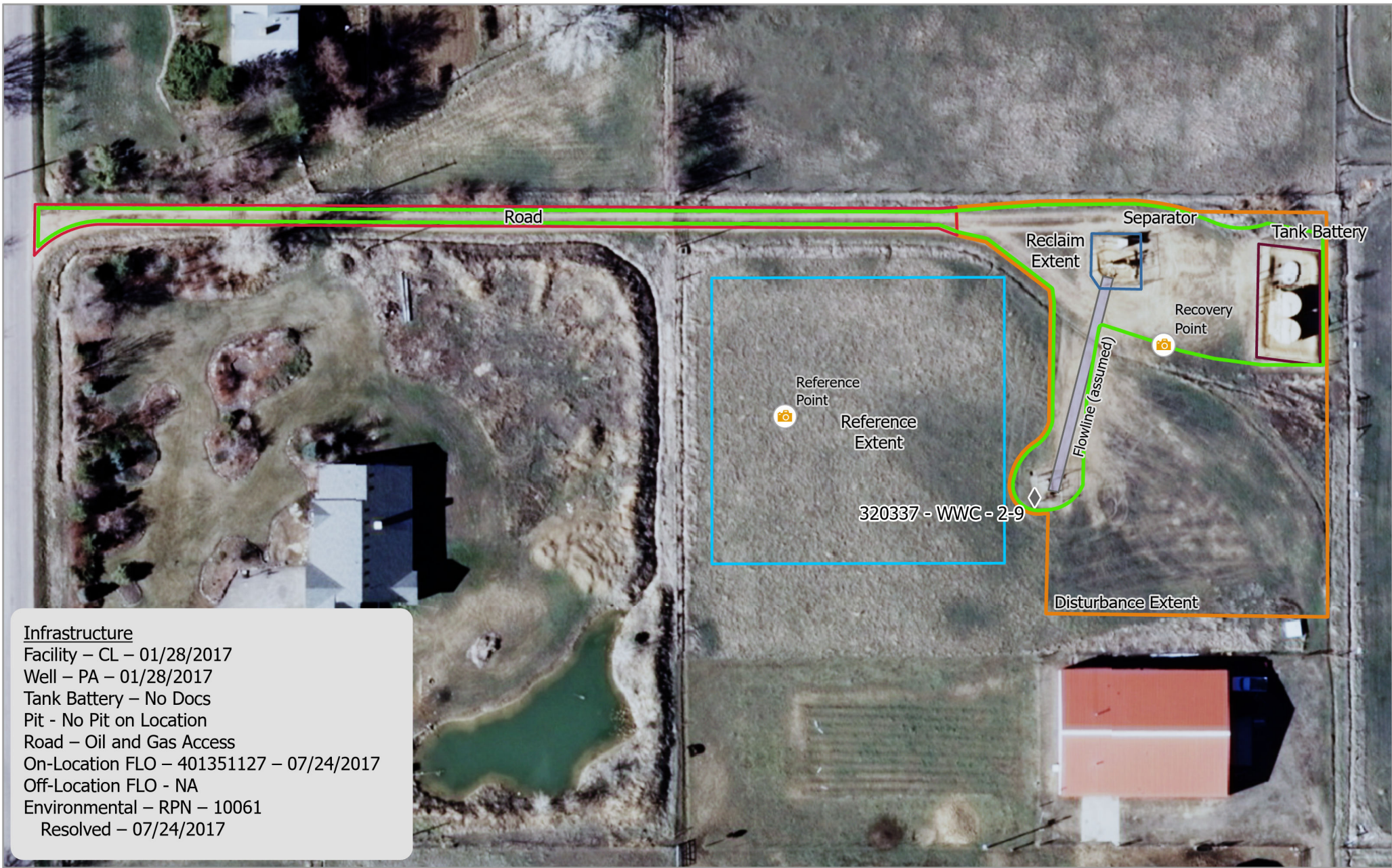
At Risk Plant Community

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

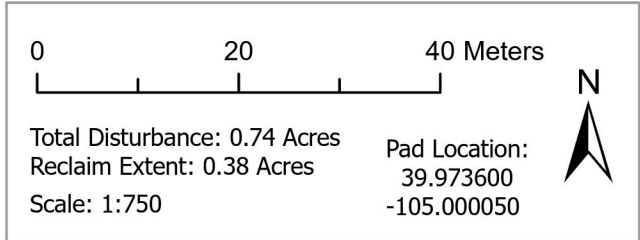
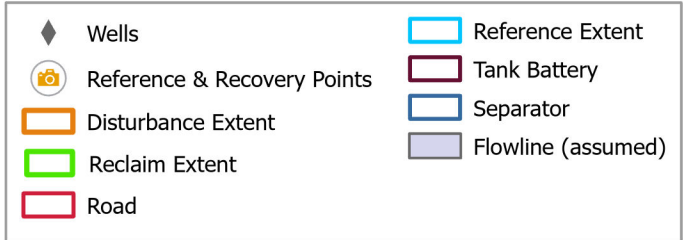


Infrastructure

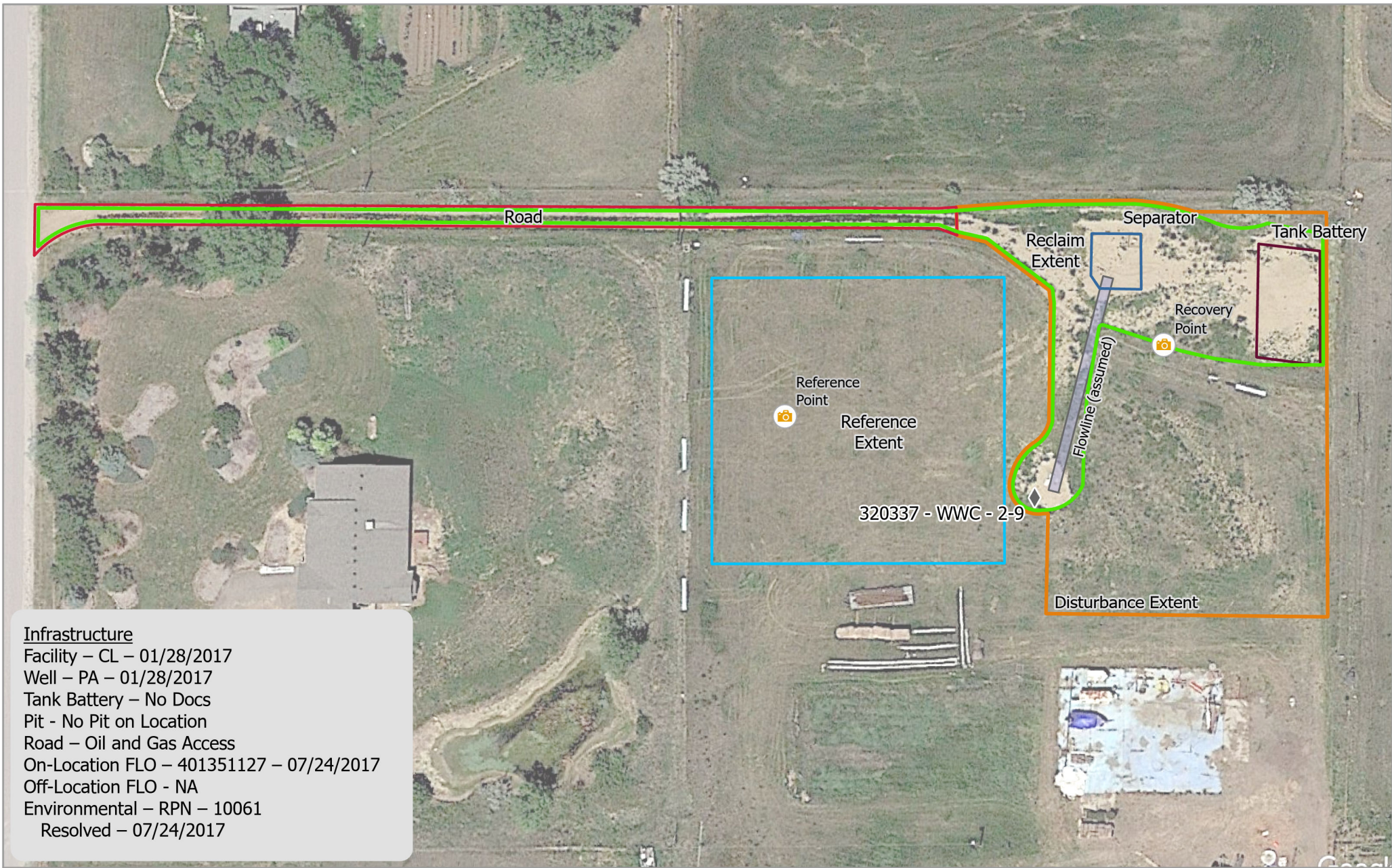
Facility – CL – 01/28/2017
 Well – PA – 01/28/2017
 Tank Battery – No Docs
 Pit - No Pit on Location
 Road – Oil and Gas Access
 On-Location FLO – 401351127 – 07/24/2017
 Off-Location FLO - NA
 Environmental – RPN – 10061
 Resolved – 07/24/2017

**CIV - 320337- WWC 2-9
Map Extent - DRCOG 2010**

Imagery: DRCOG
 Imagery Date: 2010
 Map Date: 26 Mar 2023
 Datum: WGS 1984 UTM Zone 13N
 POC: Soil Sage



Service Credits -



Infrastructure

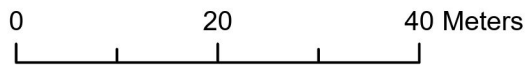
- Facility – CL – 01/28/2017
- Well – PA – 01/28/2017
- Tank Battery – No Docs
- Pit - No Pit on Location
- Road – Oil and Gas Access
- On-Location FLO – 401351127 – 07/24/2017
- Off-Location FLO - NA
- Environmental – RPN – 10061
- Resolved – 07/24/2017

CIV - 320337 - WWC 2-9
Map Extent-Landsat/Copernicus 2017

Imagery: Landsat/Copernicus
 Imagery Date: 9 June 2017
 Map Date: 26 Mar 2023
 Datum: WGS 1984 UTM Zone 13N
 POC: Soil Sage

Legend

- ◆ Wells
- 📷 Reference & Recovery Points
- 🟠 Disturbance Extent
- 🟢 Reclaim Extent
- 🔴 Road
- 🟤 Tank Battery
- 🔵 Separator
- 🟡 Reference Extent
- 🟣 Flowline (assumed)



Total Disturbance: 0.74 Acres
 Reclaim Extent: 0.38 Acres
 Scale: 1:750

Pad Location:
 39.973600
 -105.000050



Service Credits -



Infrastructure
 Facility – CL – 01/28/2017
 Well – PA – 01/28/2017
 Tank Battery – No Docs
 Pit - No Pit on Location
 Road – Oil and Gas Access
 On-Location FLO – 401351127 – 07/24/2017
 Off-Location FLO - NA
 Environmental – RPN – 10061
 Resolved – 07/24/2017

**CIV - 320337- WWC 2-9
 Map Extent - Overview**

Imagery: RS Orthomosaic & DSM
 Imagery Date: 24 Sep 2022
 Map Date: 24 Mar 2023
 Datum: WGS 1984 UTM Zone 13N
 POC: Soil Sage

Legend

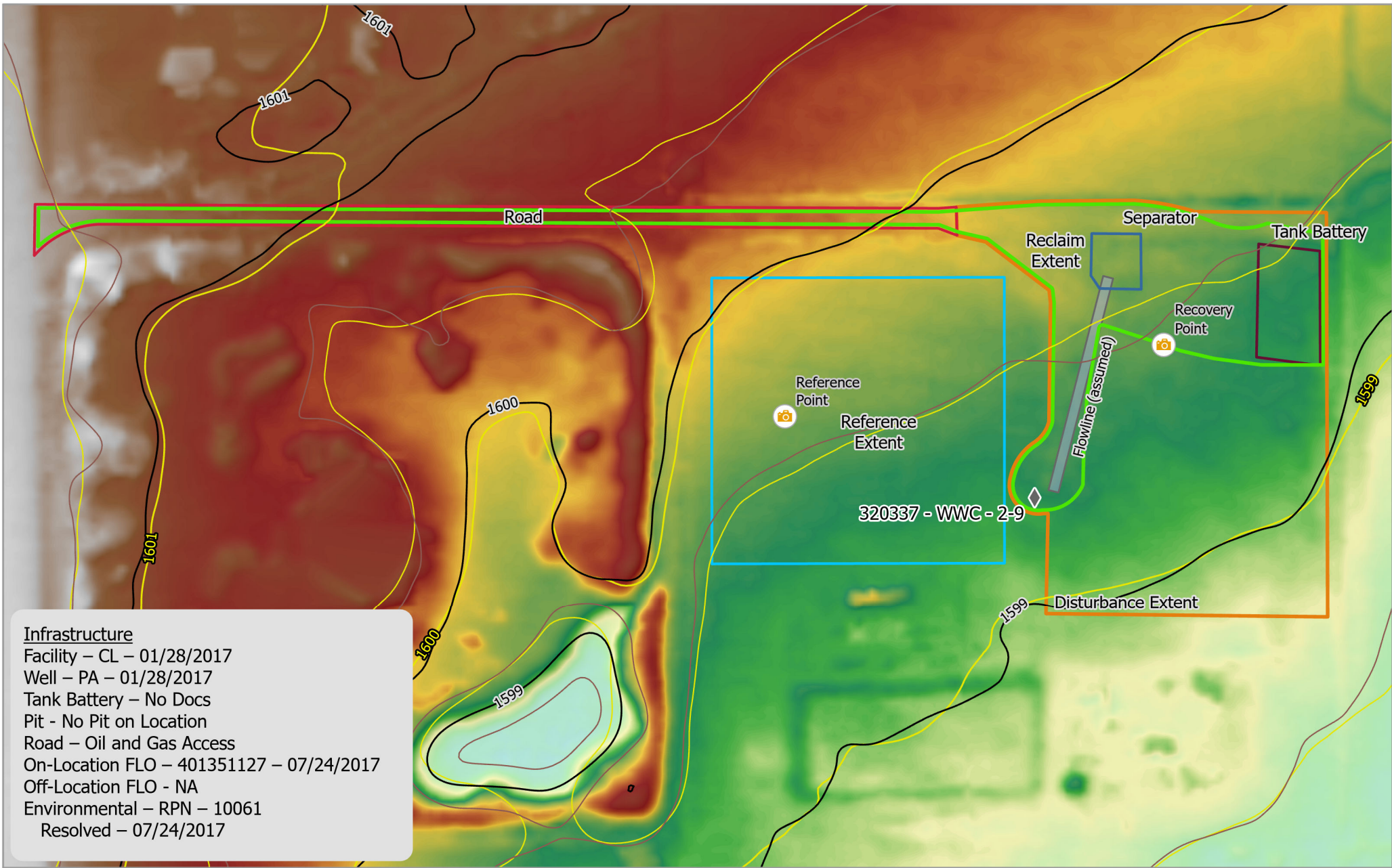
◆ Wells	▭ Road
📷 Reference & Recovery Points	▭ Tank Battery
▭ Disturbance Extent	▭ Separator
▭ Reclaim Extent	▭ Reference Extent
	▭ Flowline (assumed)

0 20 40 Meters

Total Disturbance: 0.74 Acres Pad Location:
 Reclaim Extent: 0.38 Acres 39.973600
 Scale: 1:750 -105.000050



Service Credits - Maxar, Microsoft



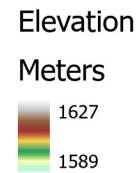
Infrastructure

Facility – CL – 01/28/2017
 Well – PA – 01/28/2017
 Tank Battery – No Docs
 Pit - No Pit on Location
 Road – Oil and Gas Access
 On-Location FLO – 401351127 – 07/24/2017
 Off-Location FLO - NA
 Environmental – RPN – 10061
 Resolved – 07/24/2017

CIV - 320337- WWC 2-9
Map Extent - Elevation & Contours

Imagery: DRCOG Elevation
 Imagery Date: 2020, 2014
 Map Date: 26 Mar 2023
 Datum: WGS 1984 UTM Zone 13N
 POC: Soil Sage

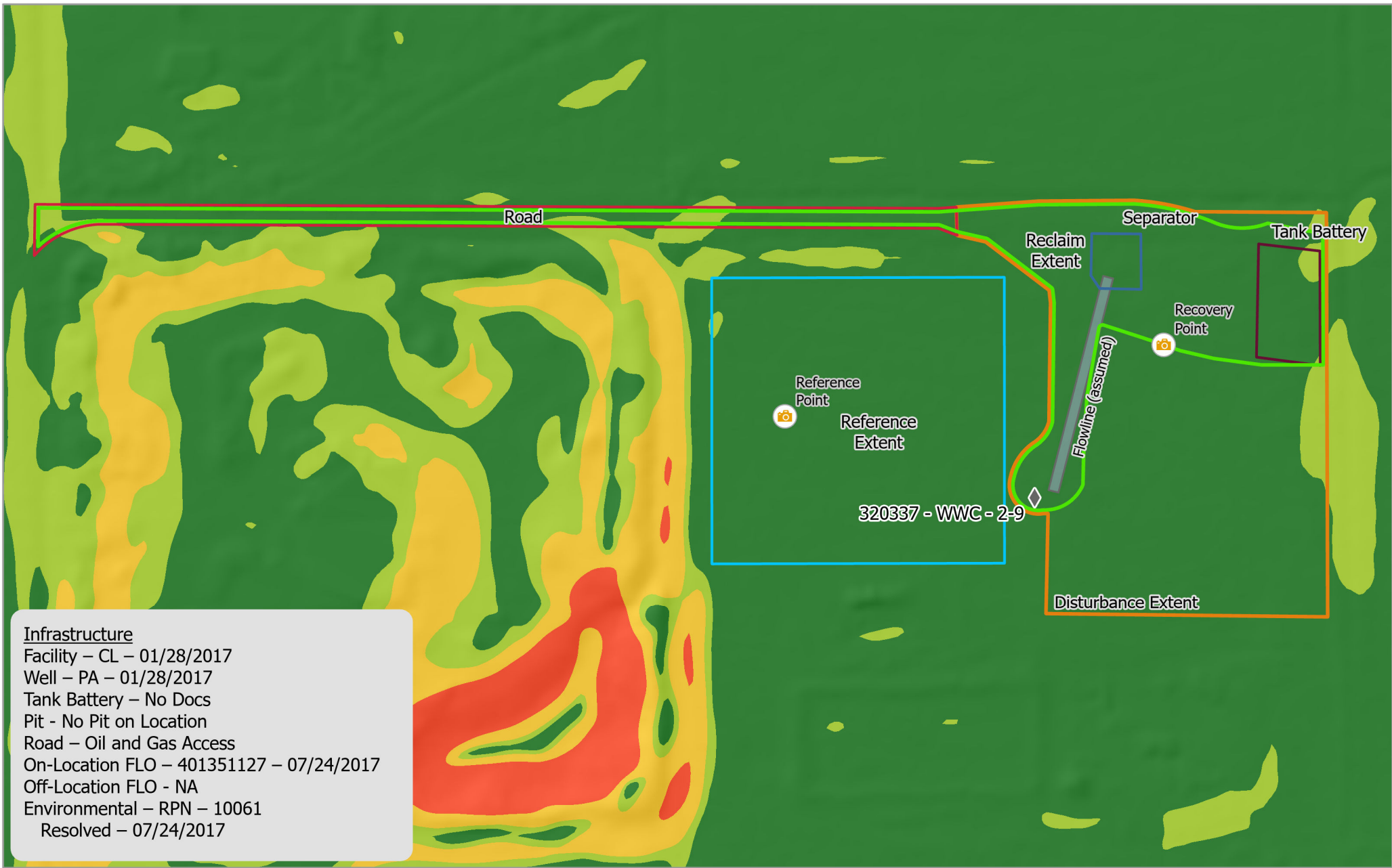
- ◆ Wells
- 📷 Reference & Recovery Points
- ~ 1 Meter Contours (2020)
- ~ 50 cm Contours (2020)
- ~ 1 Meter Contours (2014)
- ~ 50 cm Contours (2014)
- ▭ Disturbance Extent
- ▭ Road
- ▭ Reference Extent
- ▭ Tank Battery
- ▭ Separator
- ▭ Reclaim Extent
- ▭ Flowline (assumed)



0 20 40 Meters

Total Disturbance: 0.74 Acres
 Reclaim Extent: 0.38 Acres
 Scale: 1:750

Pad Location:
 39.973600
 -105.000050



Infrastructure
 Facility – CL – 01/28/2017
 Well – PA – 01/28/2017
 Tank Battery – No Docs
 Pit - No Pit on Location
 Road – Oil and Gas Access
 On-Location FLO – 401351127 – 07/24/2017
 Off-Location FLO - NA
 Environmental – RPN – 10061
 Resolved – 07/24/2017

CIV - 320337- WWC 2-9
Map Extent - Slope

Imagery: DRCOG Elevation
 Imagery Date: 2020
 Map Date: 26 Mar 2023
 Datum: WGS 1984 UTM Zone 13N
 POC: Soil Sage

◆ Wells	▭ Flowline (assumed)
📍 Reference & Recovery Points	▭ Separator
▭ Disturbance Extent	Slope (percent)
▭ Reclaim Extent	🟢 <3
▭ Reference Extent	🟡 3 - 5
▭ Road	🟠 5 - 10
▭ Tank Battery	🔴 >10

0 20 40 Meters

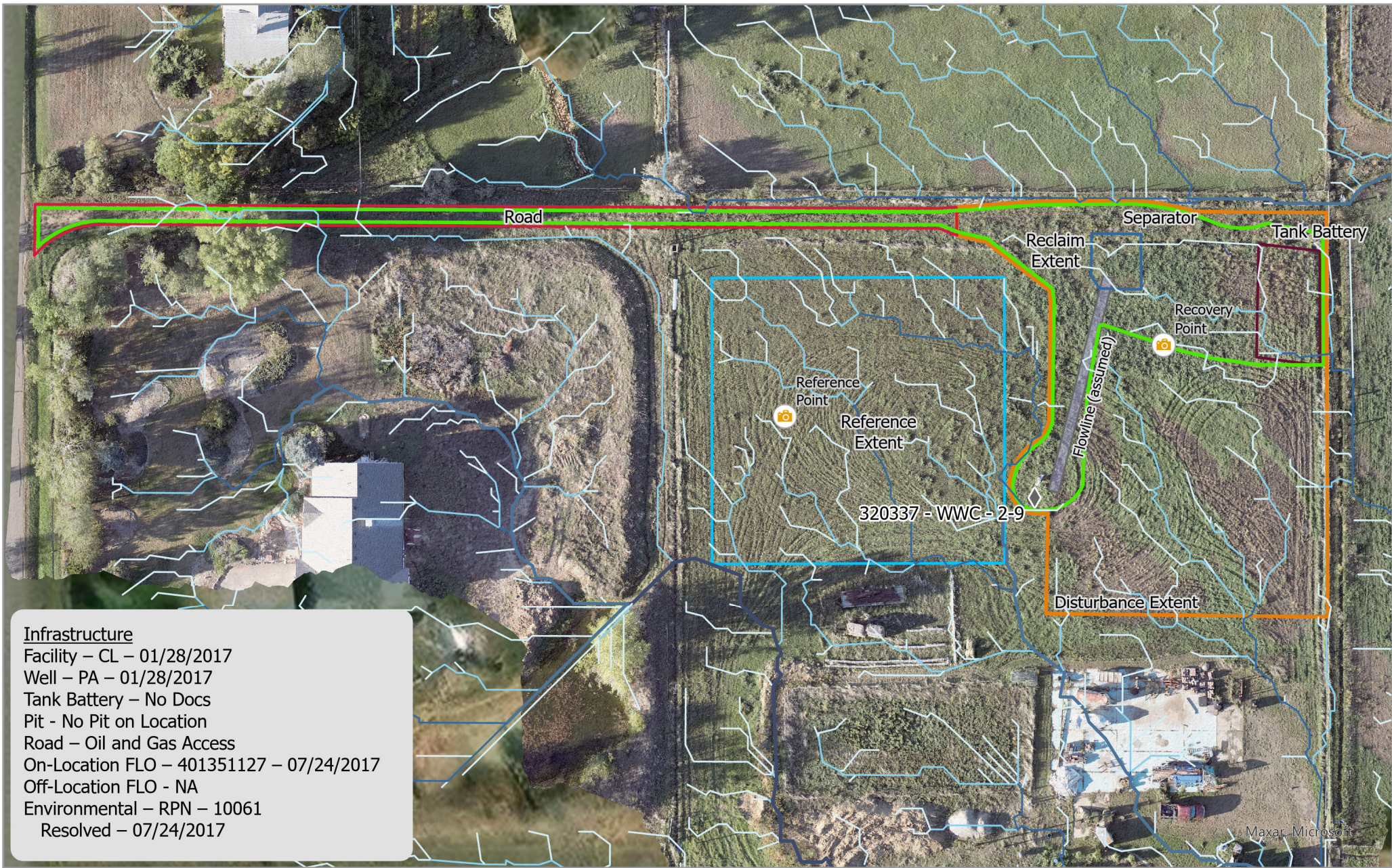
Total Disturbance: 0.74 Acres
 Reclaim Extent: 0.38 Acres
 Scale: 1:750

Pad Location:
 39.973600
 -105.000050

N



Service Credits -



Infrastructure

Facility – CL – 01/28/2017
 Well – PA – 01/28/2017
 Tank Battery – No Docs
 Pit - No Pit on Location
 Road – Oil and Gas Access
 On-Location FLO – 401351127 – 07/24/2017
 Off-Location FLO - NA
 Environmental – RPN – 10061
 Resolved – 07/24/2017

**CIV - 320337- WWC 2-9
Map Extent - Hydrology**

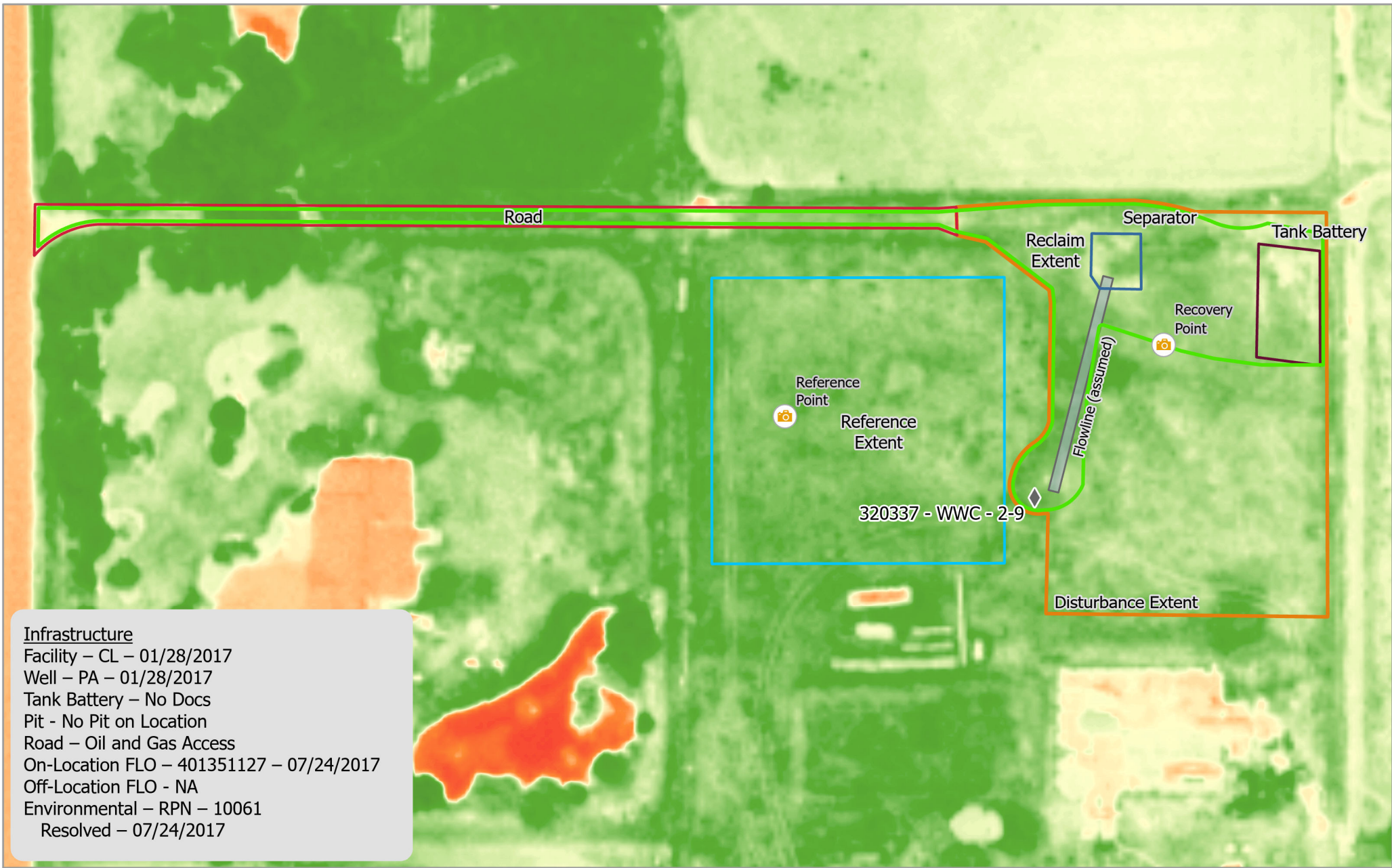
Imagery: DRCOG Elevation
 Imagery Date: 2020
 Map Date: 26 Mar 2023
 Datum: WGS 1984 UTM Zone 13N
 POC: Soil Sage

◆ Wells	▭ Separator	Stream Order
📷 Reference & Recovery Points	▭ Tank Battery	— 1
▭ Disturbance Extent	▭ Reference Extent	— 2
▭ Reclaim Extent	▭ Flowline (assumed)	— 3
▭ Road		— 4
		— 5

0 20 40 Meters

Total Disturbance: 0.74 Acres Pad Location:
 Reclaim Extent: 0.38 Acres 39.973600
 Scale: 1:750 -105.000050





Infrastructure
 Facility – CL – 01/28/2017
 Well – PA – 01/28/2017
 Tank Battery – No Docs
 Pit - No Pit on Location
 Road – Oil and Gas Access
 On-Location FLO – 401351127 – 07/24/2017
 Off-Location FLO - NA
 Environmental – RPN – 10061
 Resolved – 07/24/2017

CIV - 320337- WWC 2-9
Map Extent - NAIP NDVI Composite

Imagery: USDA NAIP
 Imagery Date: 2010-2021
 Map Date: 26 Mar 2023
 Datum: WGS 1984 UTM Zone 13N
 POC: Soil Sage

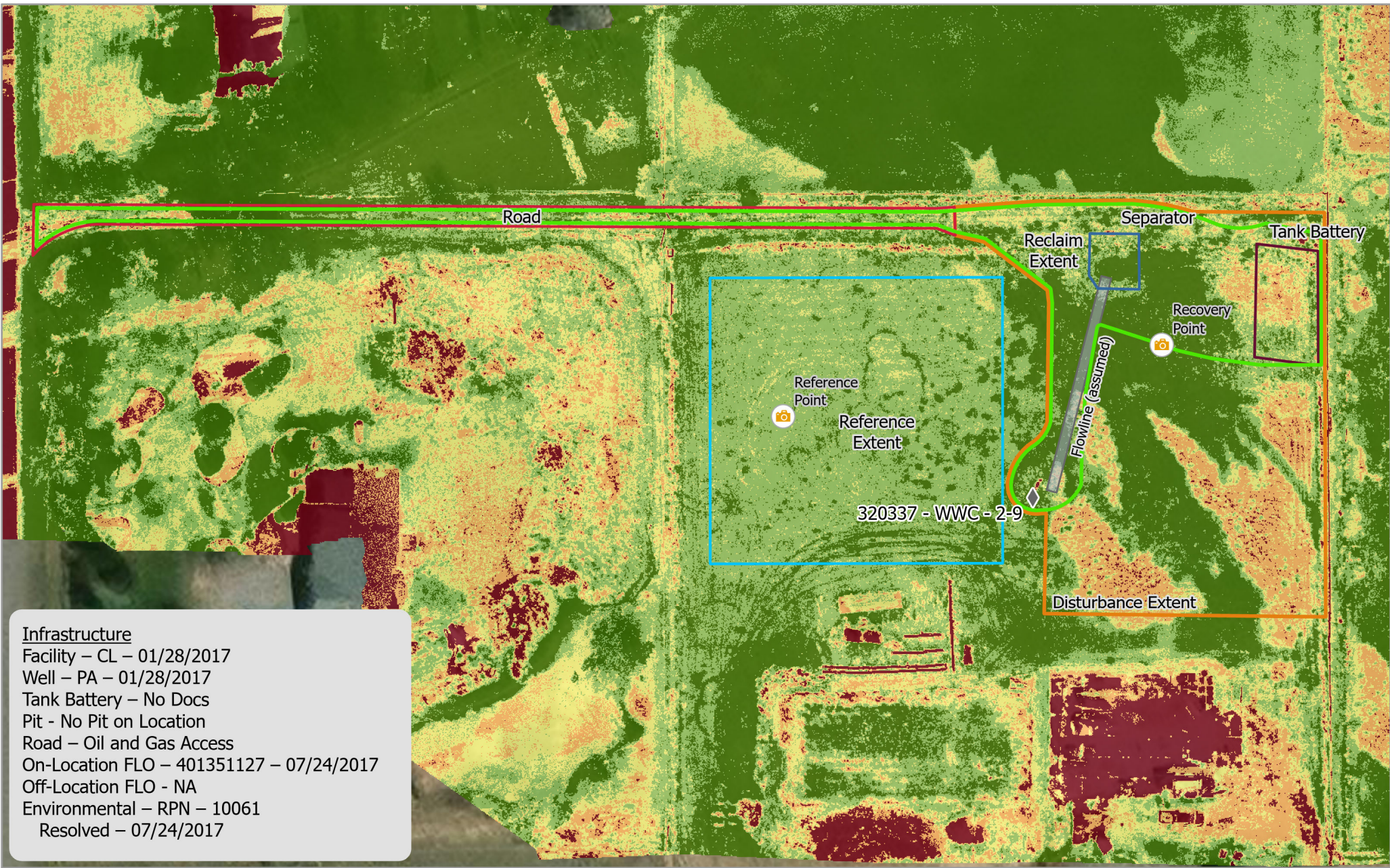
◆ Wells	□ Road
📷 Reference & Recovery Points	□ Tank Battery
□ Disturbance Extent	□ Separator
□ Reclaim Extent	□ Flowline (assumed)
□ Reference Extent	

0 20 40 Meters

Total Disturbance: 0.74 Acres Pad Location: 39.973600
 Reclaim Extent: 0.38 Acres -105.000050
 Scale: 1:750



Service Credits - Esri, USDA Farm Service Agency



Infrastructure

Facility – CL – 01/28/2017
 Well – PA – 01/28/2017
 Tank Battery – No Docs
 Pit - No Pit on Location
 Road – Oil and Gas Access
 On-Location FLO – 401351127 – 07/24/2017
 Off-Location FLO - NA
 Environmental – RPN – 10061
 Resolved – 07/24/2017

CIV - 320337- WWC 2-9
Map Extent - NDVI

Imagery: RS Multispectral
 Imagery Date: 24 Sep 2022
 Map Date: 25 Mar 2023
 Datum: WGS 1984 UTM Zone 13N
 POC: Soil Sage

Wells	Reference Extent	NDVI Classes
Reference & Recovery Points	Tank Battery	
Disturbance Extent	Separator	1-Veg
Reclaim Extent	Flowline (assumed)	2-Veg
Road		3-Non Veg
		4-Non Veg
		5-Non Veg

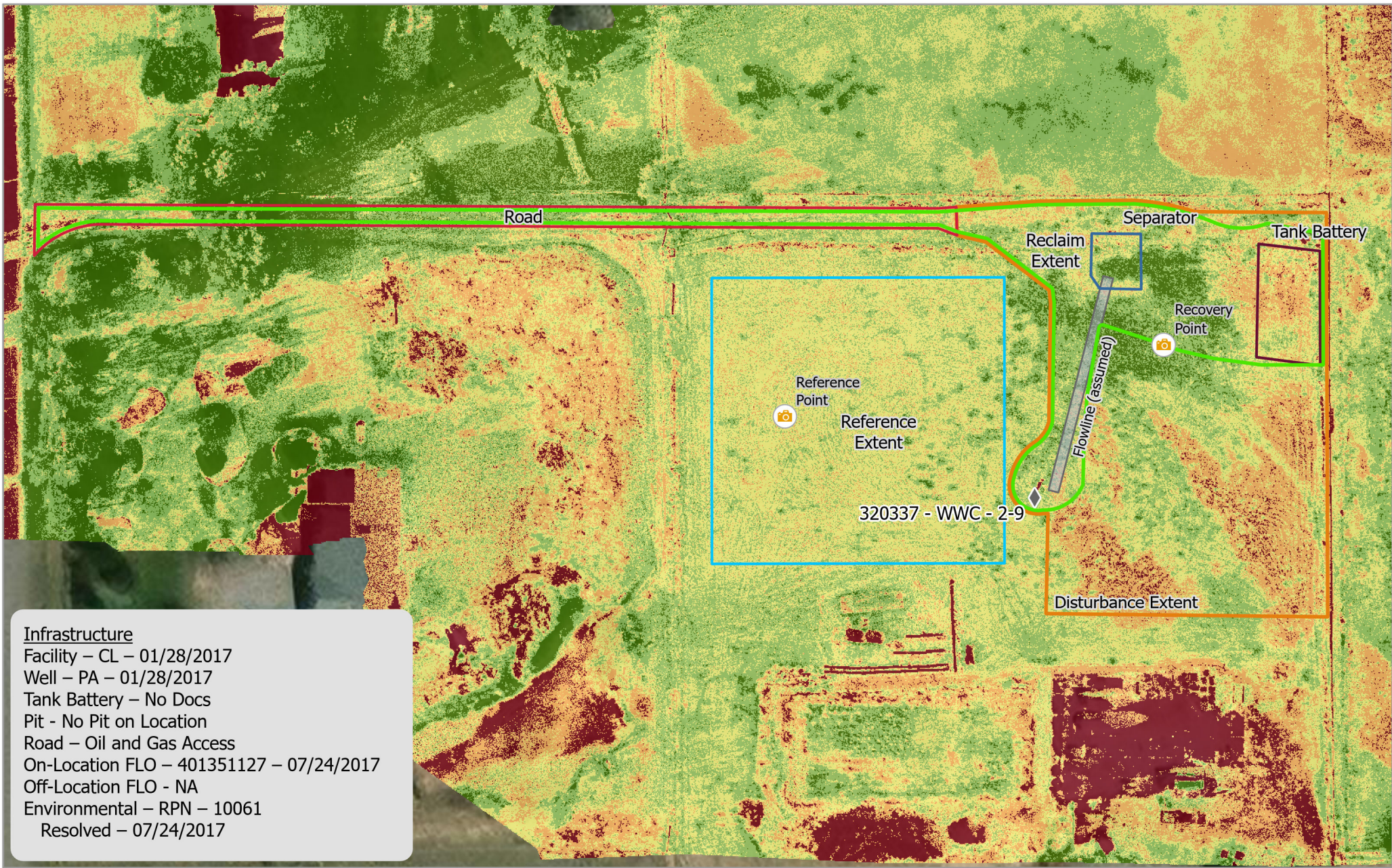
0 20 40 Meters

Total Disturbance: 0.74 Acres
 Reclaim Extent: 0.38 Acres
 Scale: 1:750

Pad Location:
 39.973600
 -105.000050



Service Credits - Maxar, Microsoft



Infrastructure
 Facility – CL – 01/28/2017
 Well – PA – 01/28/2017
 Tank Battery – No Docs
 Pit - No Pit on Location
 Road – Oil and Gas Access
 On-Location FLO – 401351127 – 07/24/2017
 Off-Location FLO - NA
 Environmental – RPN – 10061
 Resolved – 07/24/2017

CIV - 320337- WWC 2-9
Map Extent - NDRE

Imagery: RS Multispectral
 Imagery Date: 24 Sep 2022
 Map Date: 25 Mar 2023
 Datum: WGS 1984 UTM Zone 13N
 POC: Soil Sage

◆ Wells	□ Reference Extent	NDRE
📷 Reference & Recovery Points	□ Tank Battery	Classes
□ Disturbance Extent	□ Separator	1-Veg
□ Reclaim Extent	□ Flowline (assumed)	2-Veg
□ Road		3-Non Veg
		4-Non Veg
		5-Non Veg

0 20 40 Meters

Total Disturbance: 0.74 Acres
 Reclaim Extent: 0.38 Acres
 Scale: 1:750

Pad Location:
 39.973600
 -105.000050

N



Service Credits - Maxar, Microsoft