

SITE-SPECIFIC QUALITY ASSURANCE & QUALITY CONTROL AUDIT

Permit Closure Type – Final



PERMIT CLOSURE REPORT – DESIGNATION LAND USE CHANGE

Location ID - 327723

Location Name – HALEY-62N68W22NESE

Report Date

7 Nov 2022

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	11/3/2022

Audit Methodology

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

- ✓ Original List (spreadsheet) of proposed 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
- ✓ Natural Resources Conservation Service (NRCS) Map Unit Description
- ✓ Hydrology Map

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

Site Description

Name	HALEY-62N68W22NESE		
Location ID	327723		
Operator / #	CRESTONE PEAK RESOURCES OPERATING LLC / 10633		
Field	WATTENBERG 90750		
County / State	WELD / CO	Lat/Long	40.121254 / -104.983381
Facility Status	CL	Location	NESE 22 2N68W
Facility Status Date	02/26/2018	Access Road	Oil & Gas access road
Facility Entities	<input checked="" type="checkbox"/> Tank Battery	<input type="checkbox"/> Pits	
	<input checked="" type="checkbox"/> Wells	<input type="checkbox"/> Off-Location Flowlines	
	<input type="checkbox"/> Domestic Taps	<input checked="" type="checkbox"/> Flowlines	
Environment Incidents & Remediation	<input type="checkbox"/> None	<input type="checkbox"/> Spill or Release (Form 19)	
	<input checked="" type="checkbox"/> Remediation (Form 27)		
Sundry Notice (Form 4)	No Form 4s were detected during this QA & QC Audit.		
On-Location Flowlines (Form 42)	Form 42s exist for Site Related Facilities. See individual scout card data below 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 # – 13382</p> <ul style="list-style-type: none"> ● Form 27A - Supplemental Doc # & Date – 402128040 on 08/29/2019 <ul style="list-style-type: none"> ○ Approved – 08/28/2019 by Chris Canfield. ○ Final Resolution – Case closed on 08/28/2019 ● Form 27 Initial Doc# & Date – 402015331 on 04/22/2019 <ul style="list-style-type: none"> ○ Purpose – Pit/PW vessel closure. ○ Operator Comments – none ○ Type of Waste Requiring Remediation – E&P Waste, Produced Water ○ Impacted Media – Soil ○ Impacted Type – Undetermined ○ Completion of Site Investigation Date – 04/29/2019 		

Field Inspection (Form INSP)	<p>Form INSP Doc # & Date – 681902462 – 01/02/2018</p> <ul style="list-style-type: none"> ○ Inspection Status – SI – Shut In ○ Inspection Date & Inspector – 01/02/2018 by Gary Helgeland. No follow up inspection required. ○ Purpose – Follow up Inspection of well – HALEY 2-22 – Facility ID 247277. ○ Comments – Refer to inspection Form INSP – Doc # & Date - 600000947 – 03/19/2014 for information concerning shared battery and equipment. Operator - Encana Oil & Gas Inc.
COGIS Well Information (Scout Card)	<p>Well – HALEY #2-22 FACILITY ID 247277</p> <ul style="list-style-type: none"> ○ Well Status & Date – PA – 02/26/2018 ○ Form 6 Subsequent – Doc # & Date – 401567148 – Approved on 05/30/2019 by Nick McFarland. ○ Form 42 – Doc # & Date – 401624315 submitted on 04/30/2018 Purpose – Flowlines Abandoned. Completed on 02/23/2018. ○ Form 42 – Doc # & Date – 401533229 on 02/01/2018 Purpose – Start of Plugging Operations 48 Hours notice.

Audit Key Findings - Designation Land Use Change Observations

PREVIOUS LAND USE	CURRENT LAND USE
Reference Imagery for Infrastructure – DRCOG 2014	Remotely Sense Imagery – 09/15/2022
Designation – Well Pad	Designation – Parking, Storage

The following imagery sources were reviewed during this audit:

EarthExplorer, DRCOG 2010 - 2014, NAIP Imagery 2011, 2013, 2015, 2017, 2019, 2021, ESRI Maxar and Remotely Sensed Imagery Sep 2022

Closure Information

Tank battery no related documents were located within the COGCC databases.

Site Summary

Based on the key findings of our thorough data audit, the following information is provided:

Site Investigation Date

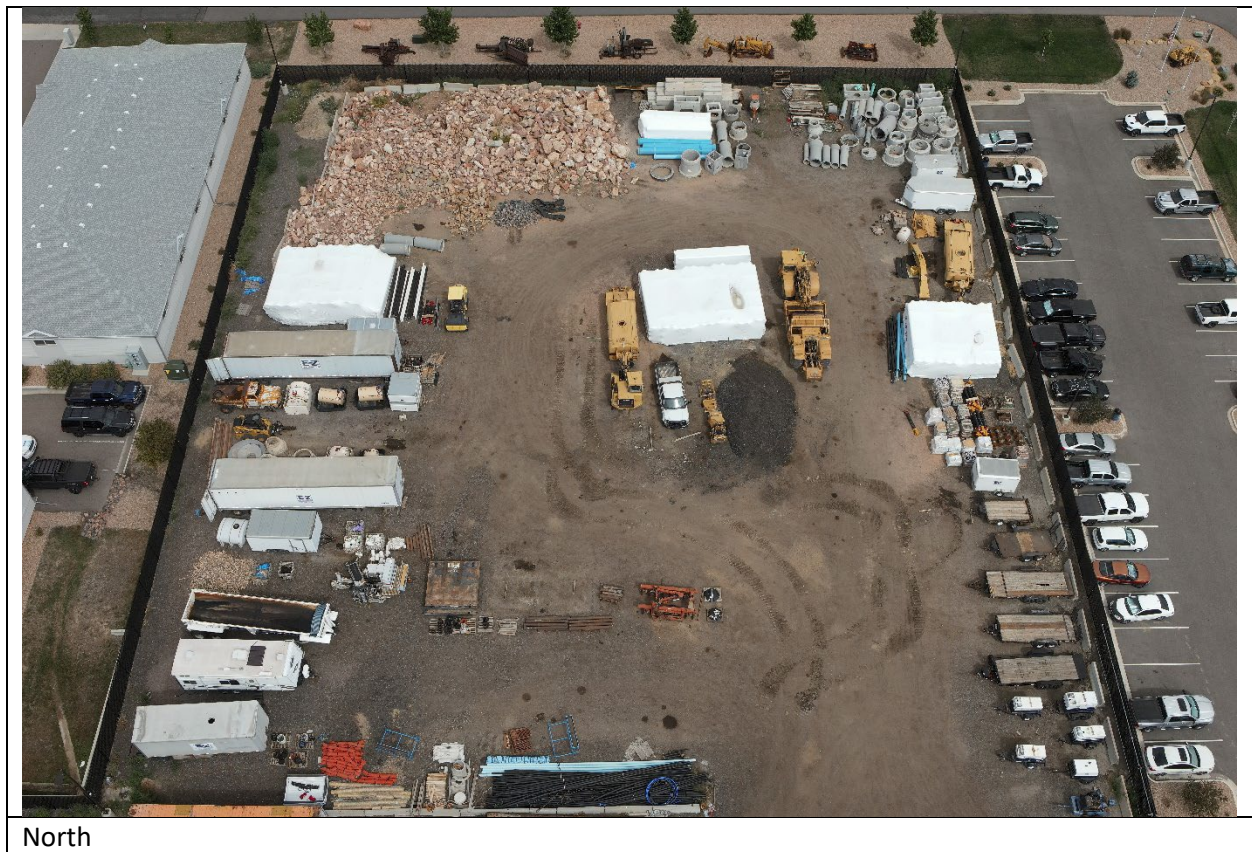
09/15/2022

Reference Area Photos

Site photos.

15 Sep 2022

Cardinal directional photos of the site





East



South



West

ATTACHMENTS

Maps and Figures

Area Maps

Previous Infrastructure Overview

Current Site Overview

Hydrology – (2 CCR 404-1 – 303.b.3.G pg.34)

Background Information

Natural Resources Conservation Service (NRCS) Map Unit Description

Reference Soil Document

Soil Properties

USDA Soil Description

Location ID /
Name

327723 - HALEY-
62N68W22NESE

Reference Soil Information

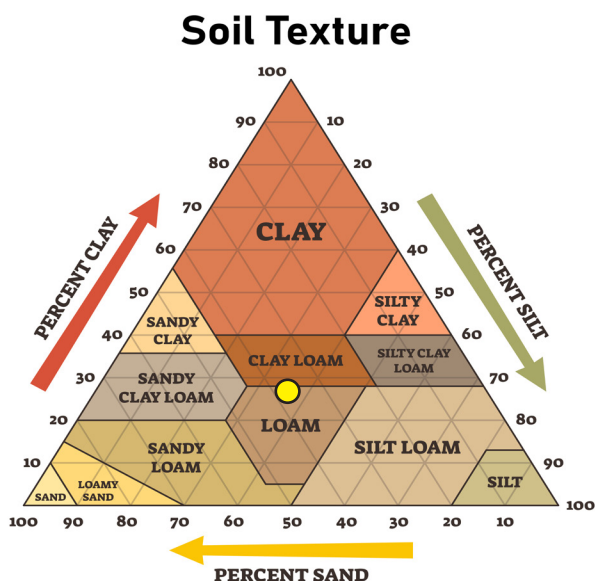
The location of the site is contained within one soil type, Nunn loam.

Map Unit 40 Reference Soil information - Nunn loam

This soil is formed from pleistocene aged alluvium and/or eolian deposits. Landform is terraces, with the Loamy Plains Ecological Site. Soils are well drained with a high water holding capacity, and slope 1-3 percent.

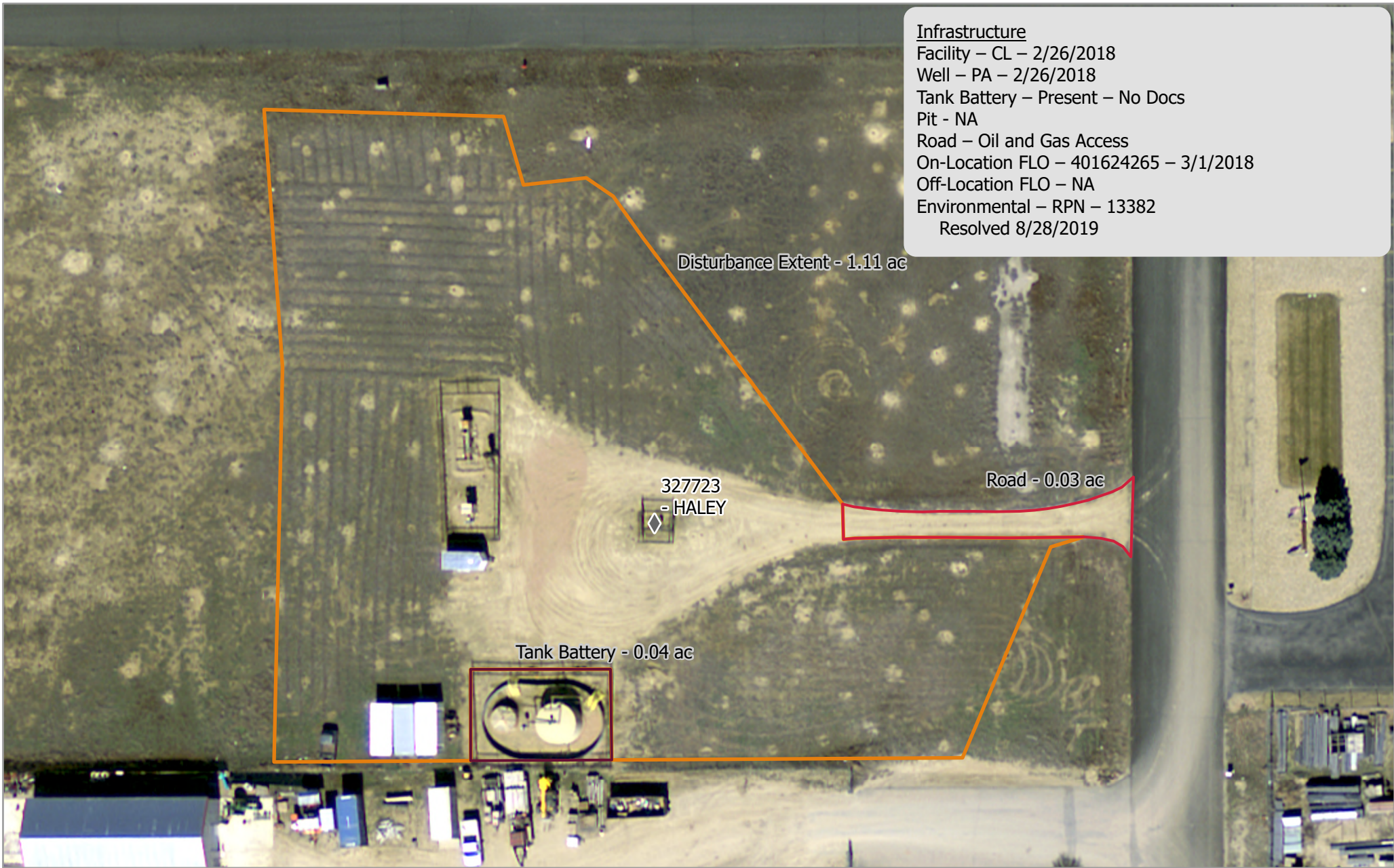
Depth (in)	Physical			Chemical			
	Texture	Bulk Density	Partical Size Percent sand, silt, clay	pH	EC	SAR	OM%
0-10	Loam	1.43	39-35-26	7.4	0.5	0.0	1.50
10-20	Clay Loam	1.38	32-30-38	7.6	0.5	0.0	1.50
20-30	Clay Loam	1.41	36-38-36	7.8	0.3	0.0	1.20
30-40	Clay Loam	1.51	46-31-22	8.4	0.5	0.1	0.31
40-50	Loam	1.53	47-31-22	8.4	0.5	0.1	0.25
50 +	Loam	1.54	48-28-24	8.5	0.5	0.1	0.25

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.



Infrastructure

Facility – CL – 2/26/2018
Well – PA – 2/26/2018
Tank Battery – Present – No Docs
Pit - NA
Road – Oil and Gas Access
On-Location FLO – 401624265 – 3/1/2018
Off-Location FLO – NA
Environmental – RPN – 13382
Resolved 8/28/2019

CIV - 327723- HALEY Map Extent - DRCOG 2014

Imagery: DRCOG
Imagery Date: 2014
Map Date: 10 Nov 2022
Datum: NAD_1983_UTM_Zone_13N
POC: Soil Sage

Legend

- ◆ Wells
- ▭ Road
- ▭ Disturbance Extent
- ▭ Tank Battery

0 0.01 0.01 0.02 Miles

Overall Disturbance:
1.19 Acres
Scale: 1:600

Pad Location:
40.121254
-104.983381





CIV - 327723- HALEY
Map Extent - Overview

Imagery: RS Orthomosaic & DSM
Imagery Date: 15 Sep 2022
Map Date: 10 Nov 2022
Datum: NAD_1983_UTM_Zone_13N
POC: Soil Sage

Legend

- | | |
|----------------------|----------------|
| ◆ Wells | □ Road |
| □ Disturbance Extent | □ Tank Battery |

0 0.01 0.01 0.02 Miles

Overall Disturbance:
1.19 Acres
Scale: 1:600

Pad Location:
40.121254
-104.983381



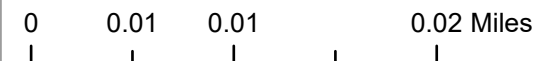
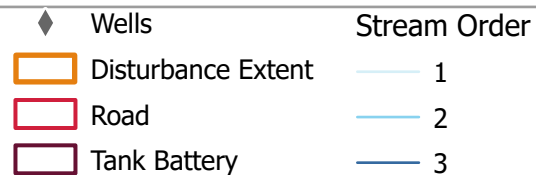


Infrastructure

Facility – CL – 2/26/2018
 Well – PA – 2/26/2018
 Tank Battery – Present – No Docs
 Pit - NA
 Road – Oil and Gas Access
 On-Location FLO – 401624265 – 3/1/2018
 Off-Location FLO – NA
 Environmental – RPN – 13382
 Resolved 8/28/2019

CIV - 327723- HALEY Map Extent - Hydrology

Imagery: RS Orthomosaic & DSM
 Imagery Date: 15 Sep 2022
 Map Date: 10 Nov 2022
 Datum: NAD_1983_UTM_Zone_13N
 POC: Soil Sage



Overall Disturbance:
 1.19 Acres
 Scale: 1:600

Pad Location:
 40.121254
 -104.983381



Service Credits - Maxar, Microsoft