



**TRILEAF**

environmental architecture engineering

# TRILEAF Environmental

- u National environmental consulting firm
  - u Commercial Markets
  - u Telecom Markets
  - u A&E Division
  - u Cultural Resources
- u 30 Years
- u 20 Offices E à W Coast
- u 250+ Employees



# Meet The Team



**Clint Carlson**

Account Manager  
Eastern Region  
Environmental Professional  
Schaumburg, IL Office  
9 Years at TRILEAF



**Sammy Hoskins**

Group Manager Commercial Division  
Quality Control Manager  
Environmental Professional  
St. Louis, MO Office  
10 Years at TRILEAF

# What is Environmental Due Diligence?

It is the pre-transaction (purchase, sale, lease, finance) investigation of the environmental conditions and history of the Subject Property.

## How did EDD come to be?

- Many situations such as Love Canal Tragedy (story time)
  - William T. Love - Dream community (turned nightmare)
  - Nicola Tesla - Hydropower canal, electricity and invention of alternating current.
  - Became a municipal and industrial dump site
  - 1953 Hooker Chemical Company sold to city for \$1
  - Late 50's = 100 homes and a school developed atop the land

## Massive Explosion in 1978 due to record rainfall

- NY Times wrote: 2 different compounds, 11 of them suspected carcinogens, have been percolating upward through the soil, their drum containers rotting and leaching their contents into the backyards and basements of 100 homes and a public school built on the banks of the canal.

HAZARDOUS  
CHEMICALS  
UNAUTHORIZED  
ENTRY  
PROHIBITED

DISASTER  
AREA  
CITY  
FAILED  
US  
TAXATION  
WITHOUT  
REPRESENTATION  
FED. GOVT, HELP





## Explosion led to leaching

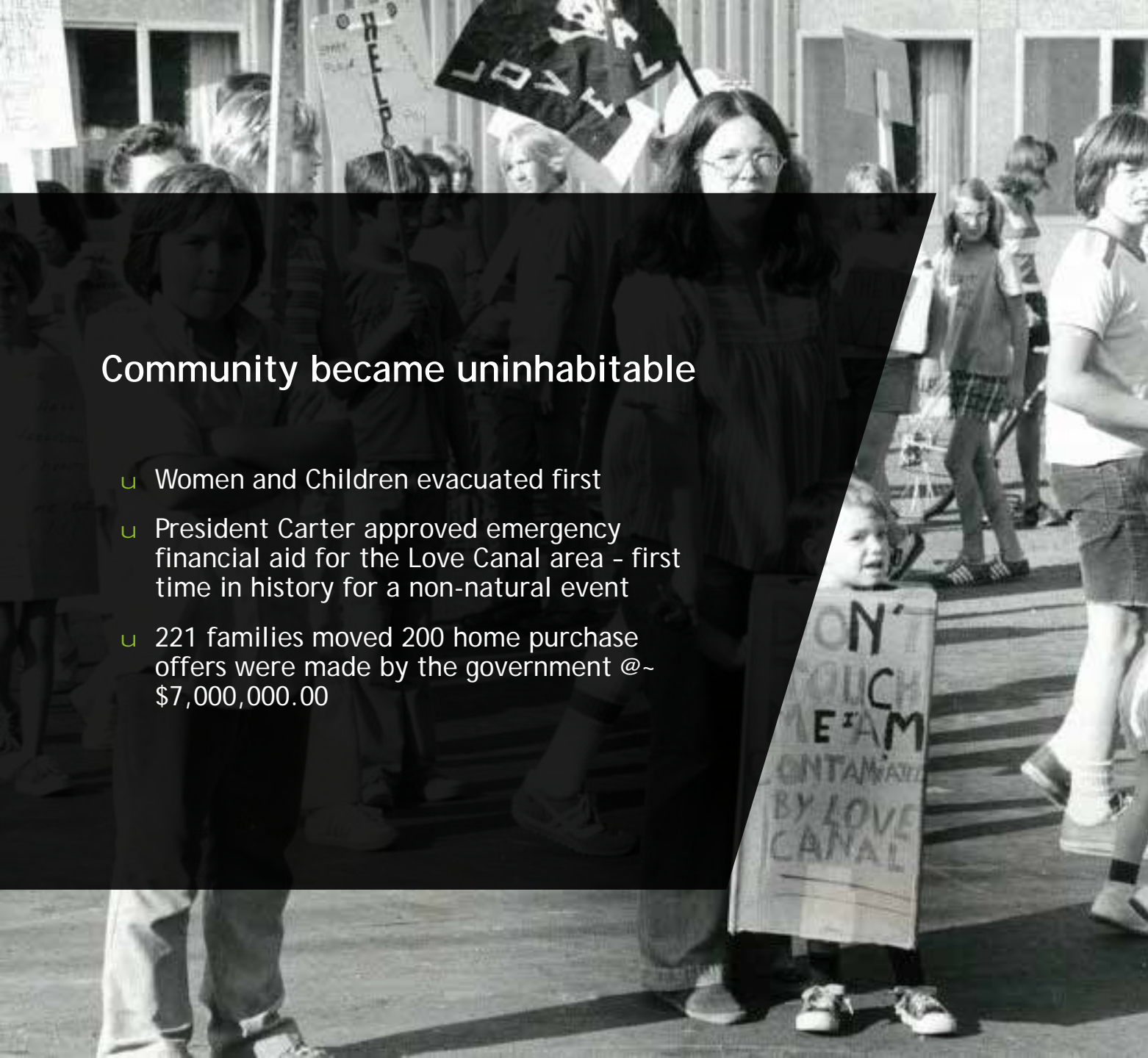
- u Pools of hazardous materials in peoples homes, playgrounds, backyards, basements, dying vegetation everywhere, putrid smell, and most harmful ... the massive amount of miscarriages and birth defects in the community.





## Community became uninhabitable

- u Women and Children evacuated first
- u President Carter approved emergency financial aid for the Love Canal area - first time in history for a non-natural event
- u 221 families moved 200 home purchase offers were made by the government @ ~\$7,000,000.00



# CERCLA Establishment

*Comprehensive Environmental Responsibility and Contamination Liability Act) established by EPA.*

## How to ensure this never happens again

Not an isolated event at Love Canal, NY suspect that there are thousands of sites like it.

1980 → CERCLA (Comprehensive Environmental Responsibility and Contamination Liability Act) established by EPA.

2002 → Brownfields Amendment: Further protects

- u Bonafied Prospective Purchasers (BFPPs)
- u Contiguous Property Owners (CPOs)
- u Innocent Landowners (ILOs)



# What exactly does CERCLA do?

- uProtects your lending “assets” and provides both the bank, your borrower, and potentially any CDCs future security with CERLCA guarantee (BFPPs, CLOs, and ILOs). This is only granted if due diligence is performed PRIOR to purchase.

---

# Why lenders should care?

- uCost of remediation could cause borrower to default on the loan ... now it's the bank's responsibility!
- uMarket value of the property can be greatly diminished
- uLender can be held liable for the clean up costs.
- uIf the government cleans up the site it can file a lien to recover the costs.

# How Can We Help?

- u RiskCheck Basic
- u RiskCheck Plus
- u Transaction Screen Assessment (TSA)
- u Phase I Environmental Site Assessment (ESA)
- u Phase II ESA
- u Property Condition Assessment (PCA)
- u Mold / Asbestos / Lead Assessment

## RiskCheck Basic:

- u Regulatory Records Review up to 1 mile of Property;
  - u 2-3 Business Days
- 

## RiskCheck Plus:



- u Regulatory Records Review up to 1 mile of Property;
- u Historical topographic maps, aerial photographs, city directories, fire insurance maps (when available) up to 1 mile of Property;
- u SBA Compliant
- u 2-3 Business days

# TSA – Transaction Screen Assessment

- u Regulatory records review up to 1 mile of the Property;
- u Historical topographic maps, aerial photographs, city directories, fire insurance maps (when available) up to 1 mile of Property;
- u On-site property inspection
- u Owner interview
- u SBA compliant, not ASTM compliant
  - u Does not meet AAI requirement for CERCLA Liability Protection
- u 10 business days





# Phase I ESA

- u Regulatory records review, historical topographic maps, aerial photographs, city directories, fire insurance maps (when available) up to 1 mile of Property
- u On-site reconnaissance walk through
- u Owner interview, site manager interview, occupant interview, local government inquiries, Freedom of Information Act (FOIA) requests
- u Within 15 Business Days
  - u Can Expedite for additional fee



# Phase II ESA



- u Groundwater and ground soil sampling based on Recognized Environmental Conditions (RECs) identified in Phase I ESA
- u Timeline dependent on laboratory and drill rig availability
  - u Standard turnaround time in the range of 20 business days for full scale Phase IIs



# PCA – Property Condition Assessment



- u Analysis of major building components to anticipate any large repairs or renovations that may have to occur within the first few years of operation
- u Within 15 Business Days



# Mold, Asbestos, Lead Assessments



- u Lead Risk Assessments for childcare facilities per SBA SOP





You're receive your  
report order...

Now what?

Reading TRILEAF's Reports has never been simpler.

# RiskCheck Basic & RSRA's

**RiskCheck Basic Report** 1/5/2021  
Trileaf Project # [REDACTED]

Page 1 of 3

Property: [REDACTED]

Prepared For: [REDACTED]

**TRILEAF**  
environmental architecture engineering  
1515 Des Peres Road, Suite 200  
St. Louis, Missouri 63131  
Phone: 314-997-6111  
Fax: 314-997-8066

**PROFESSIONAL OPINION SUMMARY**

This Professional Opinion is provided by Trileaf Corporation (Trileaf), and provides a ranking of environmental risk as determined by an environmental professional. Based on a search and review of current government records and available historical records, Trileaf assigns the Property a risk ranking of:

ELEVATED RISK      Based on the records found in this report and any additional review performed by Trileaf Corporation, Trileaf's opinion is that the environmental risk level for this property is elevated.

**LOW RISK**      Based on the records found in this report and any additional review performed by Trileaf Corporation, Trileaf's opinion is that the environmental risk level for this property is low.

**RiskCheck Basic Report** 1/12/2022  
Trileaf Project # [REDACTED]

Page 1 of 3

Property: [REDACTED]

Prepared For: [REDACTED]

**TRILEAF**  
environmental architecture engineering  
1515 Des Peres Road, Suite 200  
St. Louis, Missouri 63131  
Phone: 314-997-6111  
Fax: 314-997-8066

**PROFESSIONAL OPINION SUMMARY**

This Professional Opinion is provided by Trileaf Corporation (Trileaf) and provides a ranking of environmental risk as determined by an environmental professional. Based on a search and review of current government records and available historical records, Trileaf assigns the Property a risk ranking of:

**ELEVATED RISK**      Based on the records found in this report and any additional review performed by Trileaf Corporation, Trileaf's opinion is that the environmental risk level for this property is elevated.

LOW RISK      Based on the records found in this report and any additional review performed by Trileaf Corporation, Trileaf's opinion is that the environmental risk level for this property is low.

**RiskCheck Plus: Record Search w/ Risk Assessment (RSRA) - SBA Compliant** 01/14/2022  
Trileaf Project # [REDACTED]

Page 1 of 3

Property: [REDACTED]

Prepared For: [REDACTED]

**TRILEAF**  
environmental architecture engineering  
2121 West Chandler Boulevard, Suite 108  
Chandler, Arizona 85224  
Phone: 480-850-0575

**PROFESSIONAL OPINION SUMMARY**

This Professional Opinion is provided by Trileaf Corporation (Trileaf), in accordance with the Small Business Administration (SBA) Standard Operating Procedure (SOP) 50 10 6 and provides a ranking of environmental risk as determined by an environmental professional. Based on a search and review of current government records and available historical records, Trileaf assigns the Property a risk ranking of:

ELEVATED RISK      Based on the records found in this report and any additional review performed by Trileaf, Trileaf's opinion is that the environmental risk level is elevated.

**LOW RISK**      Based on the records found in this report and any additional review performed by Trileaf, Trileaf's opinion is that the environmental risk level is low.

**RiskCheck Plus: Record Search w/ Risk Assessment (RSRA) - SBA Compliant** 01/13/2022  
Trileaf Project # [REDACTED]

Page 1 of 4

Property: [REDACTED]

Prepared For: [REDACTED]

**TRILEAF**  
environmental architecture engineering  
2121 West Chandler Boulevard, Suite 108  
Chandler, Arizona 85224  
Phone: 480-850-0575  
Fax: 480-850-0578  
Web: www.trileaf.com

**PROFESSIONAL OPINION SUMMARY**

This Professional Opinion is provided by Trileaf Corporation (Trileaf), in accordance with the Small Business Administration (SBA) Standard Operating Procedure (SOP) 50 10 6 and provides a ranking of environmental risk as determined by an environmental professional. Based on a search and review of current government records and available historical records, Trileaf assigns the Property a risk ranking of:

**ELEVATED RISK**      Based on the records found in this report and any additional review performed by Trileaf, Trileaf's opinion is that the environmental risk level is elevated.

LOW RISK      Based on the records found in this report and any additional review performed by Trileaf, Trileaf's opinion is that the environmental risk level is low.

## Recommendation

Based on the information reviewed, Trileaf assigns this Property the risk ranking of Elevated Risk.

Trileaf recommends that a Phase I Environmental Site Assessment (ESA) be performed to investigate potential environmental conditions associated with the Property and surrounding area.

# TSA Report

## TABLE OF CONTENTS

SECTION	PAGE
<b>1. EXECUTIVE SUMMARY AND RECOMMENDATION</b> .....	<b>1</b>
<b>2. SITE AND SURROUNDING AREA</b> .....	<b>1</b>
<b>3. RECORDS REVIEW</b> .....	<b>2</b>
3.1 Regulatory Record Sources .....	2
3.1.1 Environmental Database Sites Summary .....	2
3.1.2 Previous Documentation .....	2
3.2 Historic Record Sources .....	2
<b>4. FINDINGS AND CONCLUSIONS</b> .....	<b>2</b>
<b>5. USER RELIANCE AND SIGNATURES</b> .....	<b>3</b>
<b>6. APPENDICES</b>	
6.1 Transaction Screen Questionnaire	
6.2 Site Plan and Other Maps	
6.3 Site Photographs	
6.4 Resumes of Personnel Working on the Project	
6.5 Regulatory Records Documentation	
6.6 Historical Records (as available)	

### 1.0 EXECUTIVE SUMMARY AND RECOMMENDATION

This report presents the results of a Transaction Screen Assessment (TSA) conducted by Trileaf Corporation (Trileaf) of the property located at [REDACTED] (Property). Specifically, the 'Property' hereinafter refers to the area referenced in the [Site Plan and Other Maps Appendix](#). This TSA was conducted in accordance with ASTM E1528-14.

Based on the information reviewed, Trileaf assigns this Property the risk ranking of Low Risk. Trileaf found no Potential Environmental Concerns (PECs) as defined in ASTM E1528-14.

Trileaf's opinion is that the risk of contamination at the property is low, therefore, no further investigation is warranted.

### 4.0 FINDINGS AND CONCLUSIONS

Trileaf has found no PECs in connection with the Property. No further investigation is recommended.

# Phase I ESA

## TABLE OF CONTENTS

SECTION	PAGE
1. SUMMARY .....	1
1.1 Findings .....	2
1.2 Opinion .....	3
1.3 Conclusions .....	4

### 1.0 SUMMARY

This report presents the results of a Phase I Environmental Site Assessment (ESA) conducted by Trileaf Corporation (Trileaf) of the property located at [REDACTED]. Specifically, the 'Property' hereinafter refers to the area referenced in the [Site Plan and Other Maps Appendix \(Appendix 9.2\)](#). The Property and immediate surrounding area were evaluated for this report.

Trileaf has performed a Phase I ESA in conformance with the scope and limitations of ASTM E1527-13 of the Property. Any exceptions to, or deletions from, this practice are described in [Section 8.4](#) of this report.

This study was initiated by [REDACTED], hereinafter referred to as 'User', to investigate potential environmental concerns at the Property.

### 1.0 SUMMARY

This report presents the results of a Phase I Environmental Site Assessment (ESA) conducted by Trileaf Corporation (Trileaf) of the property located at [REDACTED] (Property). Specifically, the 'Property' hereinafter refers to the area referenced in the [Site Plan and Other Maps Appendix \(Appendix 9.2\)](#). The Property and immediate surrounding area were evaluated for this report.

Trileaf has performed a Phase I ESA in conformance with the scope and limitations of ASTM E1527-13 of the Property. Any exceptions to, or deletions from, this practice are described in [Section 8.4](#) of this report.

This study was initiated by [REDACTED], hereinafter referred to as 'User', to investigate potential environmental concerns at the Property.

### 1.2 Opinion

Trileaf found evidence of RECs associated with the Property.

It is the opinion of Trileaf that the risk is sufficient to warrant additional investigation.

This opinion is based on site reconnaissance, an environmental database search report, and available historical research. Data gaps are described in the Data Gaps, Limiting Conditions, Deviations, Deletions, and Exceptions section ([Section 8.4](#)) of this report.

### 1.2 Opinion

Trileaf found no evidence of RECs associated with the Property.

It is the opinion of Trileaf that the risk of contamination at the property is so minimal that no further investigation is warranted.

This opinion is based on site reconnaissance, an environmental database search report, and available historical research. Data gaps are described in the Data Gaps, Limiting Conditions, Deviations, Deletions, and Exceptions section ([Section 8.4](#)) of this report.

### 1.3 Conclusions

Trileaf has performed a Phase I ESA in conformance with the scope and limitations of ASTM E1527-13 of the Property located at [REDACTED], the Property. Exceptions to, or deletions from, this practice are described in the Data Gaps, Limiting Conditions, Deviations, Deletions, and Exceptions section ([Section 8.4](#)) of this report.

This assessment has revealed no evidence of RECs in connection with the Property except for the following:

- The historical use of the Property as a filling station from the 1950s to 1970s, as well as the discovery of petroleum contamination at nearby sites (and in part on the Property itself) attributed to the Property parcel, is considered a Recognized Environmental Condition (REC) at this time.

It is the opinion of Trileaf that additional investigation is warranted, such as a limited subsurface investigation (Phase II ESA) or vapor intrusion study.

These conclusions are based on the review of available historical information, regulatory records, site reconnaissance, and interviews when possible. These conclusions are not subject to environmental concerns or contamination that is hidden, unpublished, or otherwise undiscoverable using standard ASTM E1527-13 Phase I ESA methodology.

This section is only a brief summary of the findings and does not represent a detailed summary of the information gathered in the preparation of this report. The report should be reviewed in its entirety to fully understand environmental conditions associated with the Property.



# Phase II ESA

SECTION	TABLE OF CONTENTS	PAGE
1. EXECUTIVE SUMMARY	.....	1
2. INTRODUCTION	.....	2
2.1 Purpose and Statement of Objectives	.....	2
2.2 Assumptions	.....	2
2.3 Limitations and Exceptions	.....	2
2.4 Special Terms and Conditions	.....	2
2.5 User Reliance	.....	3
3. BACKGROUND	.....	3
3.1 Site and Vicinity General Characteristics	.....	3
3.2 Summary of Environmental Concern(s)	.....	3
4. PHASE II ACTIVITIES	.....	3
4.1 Scope of Assessment	.....	3
4.1.1 Chemical Testing Plan	.....	4
4.1.2 Deviation from the Work Plan	.....	4
4.2 Field Exploration and Methods	.....	4
4.3 Sampling and Chemical Analyses and Methods	.....	5
4.3.1 Soil Sampling Methods	.....	5
4.3.2 Groundwater Sampling Methods	.....	5
5. PRESENTATION AND EVALUATION OF RESULTS	.....	5
5.1 Subsurface Conditions	.....	6
5.2 Analytical Data	.....	6
5.2.1 Soil Sampling Results	.....	6
5.2.2 Groundwater Sampling Results	.....	7
6. DISCUSSION OF FINDINGS AND CONCLUSIONS	.....	7
7. RECOMMENDATIONS AND PROFESSIONAL OPINION	.....	8
8. ADDITIONAL SERVICES	.....	8
9. REFERENCES	.....	8
10. SIGNATURES OF ENVIRONMENTAL PROFESSIONALS AND OTHERS	.....	9
11. APPENDICES		
11.1 Data Table(s)		
11.2 Topographic Map		
11.3 Site Plan		
11.4 Soil Boring Log(s)		
11.5 Laboratory Report(s)		

## 1.0 EXECUTIVE SUMMARY

This report presents the results of a Limited Phase II Environmental Site Assessment (Phase II ESA) conducted by Trileaf Corporation (Trileaf) on the Subject Property currently owned by [REDACTED] at [REDACTED]. Specifically, the Subject Property hereinafter refers to the area referenced in [Appendix 11.3](#). A site vicinity map showing the general location of the Site is included in [Appendix 11.2](#).

This study was initiated by [REDACTED], herein referred to as the 'User', to investigate environmental concerns at the Property. This study was conducted by Trileaf, 1515 Des Peres Road, Suite 200, St. Louis, Missouri [REDACTED] for the User, [REDACTED] as well as for [REDACTED].

Trileaf reviewed a Phase I Environmental Site Assessment (Phase I ESA) report for the above listed site dated November 30, 2021, prepared by [REDACTED]. [REDACTED] identified the following recognized environmental conditions (RECs):

- Per [REDACTED] independent review of the previous investigations, the subject property has been utilized as a gasoline service station since 1955, with the existing second-generation USTs installed in 1999. While a subsurface investigation was performed in 2007, it is [REDACTED] opinion that the Phase II is insufficient and failed to appropriately assess the first generation USTs or provide an adequate baseline assessment. The four borings were located to the northeast and north of the USTs and dispensers instead of at either end of the UST pit and adjacent to the dispensers. Furthermore, given the size of the USTs, the depth sampled (maximum depth of 12 feet bgs) was too shallow to reach the bottom of the UST and adequately assess whether a subsurface release had occurred. Based on the foregoing, the use of the subject property as a gasoline service station since 1955 represents a Recognized Environmental Condition (REC) for the subject property.

No assessments other than the February 25, 2019, Phase I ESA prepared by Trileaf were available for review.

Additional assessment of the Property was recommended by [REDACTED]. To investigate potential for contaminants of concern (COCs) associated with the uses of the Subject Property discussed above, Trileaf collected samples in accordance with the sampling plan described in Section 4.0.

Based on field observations and analytical results from samples collected from the Subject Property, no evidence of COCs above applicable standards was found to exist at the Property. Additionally, no visual indications of a release, such as soil staining or odor, or an oil sheen on groundwater, were observed on the soil and/or groundwater samples collected from the Property. As a result of this assessment, Trileaf recommends no further investigation at this time.

This Phase II ESA was conducted in general accordance with the guidelines of ASTM E1903-19.

## 7.0 RECOMMENDATIONS AND PROFESSIONAL OPINION

Trileaf has performed a Phase II ESA in conformance with the terms and conditions of the Agreement between Trileaf and [REDACTED], dated December 14, 2021, and the Work Plan approved by [REDACTED], with respect to the real property located at [REDACTED]. Any exceptions to, or deletions from, this practice are described in Section 2.3.

Based on field observations and analytical results from soil and groundwater samples collected from the Property, Trileaf did not identify any elevated concentrations of contaminants indicative of a release. Trileaf recommends no further investigation at this time.

# Final thoughts:

- u A Phase I ESA has a shelf-life of 365 days, BUT that requires a Phase I ESA Update report be completed at the 180 day or 6-month mark.
  - u Not sure what report may be best for you? Reach out and we can help guide you to the correct report type.
  - u Trileaf is always here to discuss any past, present, or future reports you may need assistance with.
    - u We are always happy to talk with your borrower, or immediate client. However, we will request written permission and your presence for any discussions.
- 

Let us know how we can help you with  
your next report!