

October 18, 2016, Rev. 1

Faller, Davis & Associates, Inc.  
5525 W. Cypress Street, Suite 300  
Tampa, FL 33607

Attn: Mr. Ken Muzyk, Jr., P.E.  
Project Manager

**RE: DRAFT Contamination Screening Evaluation Letter Report  
SR 60 Grade Separation over CSX Railroad  
Polk County, Florida  
FPN: 436559-1-32-01  
Tierra Project No.: 6511-15-022E**

Mr. Muzyk:

Tierra, Inc. (Tierra) has provided this DRAFT Contamination Screening Evaluation Letter Report adding two (2) new sites based on emails from the client dated September 28 and 29, 2016. Discussions with the property owner resulted in considering a third alternative, Pond 1-3, that would be located in the southeast corner of the parcel abutting the Duke Energy property to the east and the proposed SR 60 right of way to the south. Improvements to the existing outfall ditch located from the SR 60 proposed right of way to the FDOT outfall right of way adjacent to the Pond 3 alternatives are required to allow FDOT maintenance access and to improve conveyance. The limits of the outfall ditch and pond alternative were provided by the client via e-mail on September 29, 2016.

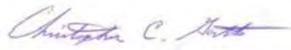
The contamination screening evaluation presented herein is based on site reconnaissance, historic aerial photograph and topographic map reviews and government database reviews. Additionally, Tierra reviewed the Final Contamination Screening Technical Memorandum for the PD&E Study for SR 60 Grade Separation over CSX Railroad, dated March 2015, FDEP databases and the Florida Department of Transportation (FDOT) Efficient Transportation Decision Making (ETDM) database for this project corridor to identify potential environmental contamination concerns. *Field screening of the two (2) new sites (Pond 1-3 and Outfall Ditch) was conducted on October 13, 2016, and the results are included in this Letter Report.* Previous contamination services submittals by Tierra for this project include:

- DRAFT Contamination Screening Evaluation Letter Report dated 10/5/2016
- FINAL Level 2 Field Screening Report dated 1/19/2016
- DRAFT Level 2 Field Screening Report dated 12/10/2015
- FINAL Level 1 CSER Tech Memo dated 10/1/2015
- DRAFT Level 1 CSER Tech Memo dated 7/1/2015

This Contamination Screening Evaluation Letter Report is intended to provide final risk rankings for the pond alternative (Pond 1-3) and Outfall Ditch. It is important to note, while Pond 3 is identified on the figures, it was not part of this study. It was part of a previous study and was retained in these figures only because it is embedded with the Pond 1 file. Should you have any questions, please contact us at (813) 989-1354.

Respectfully Submitted,

**TIERRA, INC.**



Christopher C. Garth  
Senior Scientist



Mike Bair  
Chief Scientist

- Appendix A Project Location Map
- Pond Alternative Location Map
- Boring Location Plan
- Appendix B Topographic Map
- Appendix C Historic Aerial Photographs
- Appendix D Environmental Data Report
- Appendix E Laboratory Analytical Report
- Appendix F Soil Boring Logs

### Introduction

Tierra has prepared this **revised** DRAFT Contamination Screening Evaluation Letter Report for the outfall ditch and Pond 1-3 for the SR 60 Grade Separation over CSX Railroad project located in Polk County, Florida. This revision includes the results of the Level 2 field screening activities which were approved by Mr. Jeffrey James, District Contamination Impact Coordinator via email dated October 12, 2016. The information presented is intended to provide the final risk ranking of the Outfall Ditch and Pond 1-3, based on the results of Level 2 field screening activities, to support the Pond Siting Report design documents.

Based on information provided by the client, discussions with the property owner resulted in considering a third alternative, Pond 1-3, that would be located in the southeast corner of the parcel abutting the Duke Energy property to the east and the proposed SR 60 right of way to the south. Improvements to the existing outfall ditch located from the SR 60 proposed right of way to the FDOT outfall right of way adjacent to the Pond 3 alternatives are required to allow FDOT maintenance access and to improve conveyance. The limits of the outfall ditch and pond alternative were provided by the client via e-mail on September 29, 2016.

The contamination screening evaluation presented herein is based on site reconnaissance, historic aerial photograph and topographic map reviews and government database reviews. Additionally, Tierra reviewed the Final Contamination Screening Technical Memorandum for the PD&E Study for SR 60 Grade Separation over CSX Railroad, dated March 2015, FDEP databases and the Florida Department of Transportation (FDOT) Efficient Transportation Decision Making (ETDM) database for this project corridor to identify potential environmental contamination concerns.

### Project Location and Boundaries

The outfall ditch and Pond 1-3 are located north of SR 60, approximately ½ mile west of Old Lake Wales Road in Polk County, Florida. The Project Location Map and the 2014 aerial photograph are included in **Appendix A**.

### Site Reconnaissance

The site reconnaissance was conducted on September 30, 2016. Based on plans provided by the client, the limits of the proposed outfall ditch are approximately 35 feet wide and 250 feet long. During the site reconnaissance, the outfall ditch was observed as an existing ditch (dry during reconnaissance), woods, grassy yard area, a 4-inch diameter potable water well, a wooden shed or “shack”, and overgrowth. The shed was secured and not accessed during the site visit. One (1) possible piezometer was observed in the central area onsite, approximately 20 feet north of the shed. One (1) empty 5-gallon bucket was observed near the shed. No obvious petroleum products or hazardous materials were observed during the site reconnaissance.

**DRAFT Contamination Screening Evaluation Letter Report  
SR 60 Grade Separation over CSX Railroad  
Polk County, Florida  
FPN: 436559-1-32-01  
Tierra Project No.: 6511-15-022E**



Shed, central area looking south



Possible piezometer, central area looking south



Near south end of existing ditch looking north

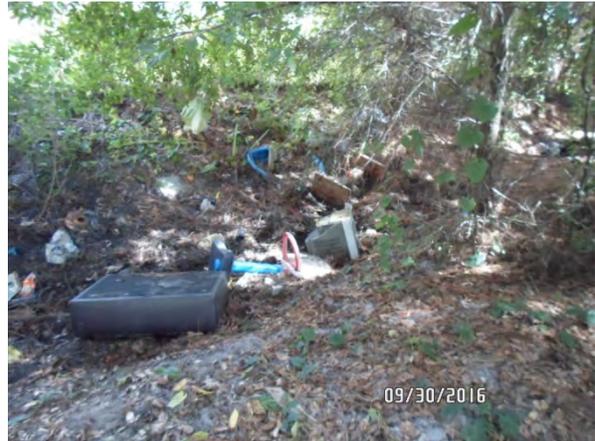


Near north end of existing ditch looking south

Offsite surrounding areas include woods and existing ditch to the north; woods, grassy yard and existing ditch to the south; a residence (4336 SR 60) approximately 50 feet east; woods, overgrowth, a concrete pad approximately 80 feet long and 40 feet wide located abutting west and CSX railroad tracks approximately 100 feet west. The adjacent east residence was built in 1948 according to information obtained from the Polk County Property Appraiser database. Approximately 2 cubic yards of household debris, including clothes, a cushion, plastic, wood, a television were located abutting south within the existing ditch.



Concrete slab, abutting west looking south



Near south boundary looking south

Pond 1-3

During the site reconnaissance, this pond alternative was observed primarily as woods with several low, wet areas and a manmade ditch along the north boundary. Offsite surrounding areas were SR 60 to the south, woods to the north and west, and grassy powerline easement and Peace Creek Canal to the east.



Southeast area looking north



Northeast area looking west



Northwest area looking east



Southwest area looking east

### Regulatory Review

Based on Tierra's review of Environmental Data Management's (EDM's) regulatory database report, FDEP databases and the FDOT Efficient Transportation Decision Making (ETDM) database, no listings/facilities were identified onsite for Pond 1-3 or the outfall ditch.

Offsite facilities/listings identified in nearby surrounding areas are depicted in **Appendix A**, and include:

#### Former C&J Transport, Inc. (Solid Waste ID: 00096071), 4421 SR 60

This facility is located approximately 300 feet south of the outfall ditch. During the site reconnaissance, this facility appeared abandoned with "For Lease" signage noted. EDM's report indicated this was a registered waste tire collector. Based on the significant distance and the lack of reported contamination concerns, this facility is not considered a significant potential contamination concern.

#### Former Vassallo, Inc. (Fac. ID 8628496), 4441 SR 60

This facility is located approximately 450 feet southwest of the outfall ditch. During the site reconnaissance, this facility appeared abandoned and the former UST location (newer concrete area) was observed on the north side of the facility. The Cortera Business Directory website indicates this was a former plumbing and heating supply company established in 1975. Based on the FINAL Level 2 Field Screening Report – Pond Alternatives and Mainline for the SR 60 Separation Grade over CSX Railroad project, dated February 17, 2015, this facility was given an initial risk ranking of "Medium" and a final risk ranking of "Low" for potential contamination to the SR 60 project corridor and/or pond alternative. Based on the significant distance, this facility is not considered a significant potential contamination source at this time.

#### Duke Energy Substation (aka Progress Energy West Lake Wales Substation), 3630 SR 60 West

This facility is located approximately 300 feet south of Pond 1-3 and was identified on two (2) FDEP MapDirect databases: Institutional Control Registry (ICR) #810, and Waste Cleanup COM\_314971. This facility was not identified on EDM's report. The Declaration of Restrictive Covenant dated November 12, 2014, found on the OCULUS database, indicated Mineral Oil Dielectric Fluid (MODEF) has contaminated both soil and groundwater at the substation; groundwater contamination does not extend beyond the substation parcel boundary; and that groundwater contamination is not migrating. Based on the significant distance, this facility is not considered a significant potential contamination concern.

#### Petersen Industries, Inc., 4000 SR 60 West

The western portion of this facility is located approximately 500 feet east of the outfall ditch. This facility is identified on the NONTSD database (Fac. ID FLR000127043). According to EDM's regulatory database report, this facility is a Small Quantity Generator of Hazardous Wastes (generates less than 1,000 kg/month). Based on FDEP Oculus database, violations for administrative deficiencies and uncovered containers were identified in both 2009 and 2013 inspections. Compliance Inspection Evaluations for both occurrences indicated this facility achieved compliance for the violations noted in 2009 and 2013. No discharges to soil or groundwater were noted in the inspection reports. During the site reconnaissance, this facility was observed as a maintenance building, grassy yard area with new trucks stored in the south and central areas, and metal supplies stored in the northern area. Based on the FINAL Level 2 Field Screening Report – Pond Alternatives and Mainline for the SR 60 Separation Grade over CSX Railroad project, dated February 17, 2015, this facility was given an initial risk ranking of

“Medium” and a final risk ranking of “Low” for potential contamination to the SR 60 project corridor and/or pond alternative. Based on the significant distance, this facility is not considered a significant potential contamination source at this time.

Other facilities/listings identified were over 500 feet from the outfall ditch and Pond 1-3 and were not considered significant potential contamination sources to the outfall ditch and Pond 1-3 at this time. See EDM’s regulatory database report in **Appendix D**.

#### Historic Aerial Photographs and USGS Topographic Map Review

Significant features in the area: SR 60 was added between 1941 and 1952. Railroad tracks and Peace Creek Canal were present since at least 1941.

#### **Outfall Ditch**

Based on Tierra’s review of historic aerial photographs this ditch was historically a ditch (since at least 1952), grassy area, woods and overgrowth. The “Eloise, Florida” topographic map dated 1955 and photorevised in 1987 depicted this outfall ditch as white shading indicating grassy areas, and green shading indicating woods.

Offsite west, railroad tracks were present since at least 1941, and a large concrete slab has been present since at least 1968.

#### **Pond 1-3**

Based on Tierra’s review of historic aerial photographs this pond alternative was historically woods and pasture with manmade ditches. The “Eloise, Florida” topographic map dated 1955 and photorevised in 1987 depicted this pond alternative as primarily woods with an intermittent stream, and grassy area.

Offsite, Peace Creek Canal was re-worked to the east, and SR 60 was added to the south between 1941 and 1950. A powerline easement was added by 1968.

The USGS topographic map is included in **Appendix B**, historic aerial photographs dated 1950, 1968, 1971, 1980, 1993, 2008 and 2011 are included in **Appendix C**, and the 2014 aerial photograph is included in **Appendix A**.

#### 2015 PD&E Study Review

The Final Contamination Screening Technical Memorandum for the PD&E Study for SR 60 Grade Separation over CSX Railroad, dated March 2015 included approximately 1.1 miles of SR 60, and three (3) off-site pond alternatives identified as Stormwater Management Facility (SMF)-1, SMF-2 and SMF-3. The report indicated Site 4, CSX Railroad was given a final risk ranking of “High” for arsenic and PAH concentrations above Soil Cleanup Target Levels (SCTLs), and SMF 2 was given a final risk ranking of “Medium” since no Level 2 field screening was recommended or performed (petroleum and paint products were observed at the shed). The CSX Railroad is located approximately 100 feet west of the outfall ditch. SMF 2 is located approximately 220 feet west of the outfall ditch and approximately 250 feet east of Pond 1-3. Other facilities identified in the report received final risk rankings of “Low” and “No.”

#### Initial Risk Ranking

Based on the current and historic use as woods and pasture with manmade ditches, Pond 1-3 was given an initial potential contamination risk ranking of “No.”

Based on the current and historic use as a ditch (since at least 1952), grassy area, woods, a shed and one (1) possible piezometer, the proposed Outfall Ditch was given an initial potential contamination risk ranking of "Low."

#### Recommendations

All preferred pond/ditch alternatives selected for final design regardless of risk rankings will require limited field screening, which will include at a minimum, soil screening for arsenic concentrations in shallow soils, and potential buried debris to the pond bottom design depth.

Additionally, other sample analyses may be required based on historic land use of the proposed pond/ditch alternatives and/or surrounding properties. The District Contamination Impact Coordinator (DCIC) should be consulted regarding the field screening scope of work for the proposed pond/ditch alternatives.

Water wells (potable, irrigation, monitor, etc.) located onsite should be properly abandoned within regulatory guidelines.

#### Level 2 Field Screening

The Level 2 Scope of Services dated October 10, 2016 was reviewed and approved by Mr. Jeffrey James, District Contamination Impact Coordinator via email dated October 11, 2016. The approved Level 2 Scope of Services is provided below:

##### Outfall Ditch:

Perform two (2) borings to a depth of approximately 3 feet below existing grade or two feet below the shallow groundwater table, whichever is encountered first. Soil aliquots will be collected from each boring (two samples in total) from land surface to two feet below grade, composited in the field and sent to the laboratory for analysis of Arsenic by EPA Method 6010. Observations and notations will be made of any non-native material including household trash and C&D material.

##### Pond 1-3:

Perform two (2) borings to a depth of approximately 9 feet below existing grade or two feet below the shallow groundwater table, whichever is encountered first. Soil aliquots will be collected from each boring (two samples in total) from land surface to two feet below grade, composited in the field and sent to the laboratory for analysis of Arsenic by EPA Method 6010. Observations and notations will be made of any non-native material including household trash and C&D material.

#### Level 2 Findings

Field screening was conducted on October 13, 2016 by Tierra. The soil boring locations are presented on the Boring Location Plan in **Appendix A**. Soil samples were collected in general accordance with FDEP Standard Operating Procedures (SOPs). Laboratory analytical tests were conducted by a NELAC certified laboratory. Laboratory analytical results indicated no SCTL exceedences were detected. See laboratory analytical report in **Appendix E**. No buried debris was noted in any of the soil borings. See soil boring logs in **Appendix F**. No groundwater testing was conducted or recommended. GPS coordinates collected in the field for the four (4) soil borings are included in the following table.

Soil Boring ID	Latitude	Longitude
SB-1	27.9053255	-81.6648814
SB-2	27.9050722	-81.6639757
SB-3	27.9039113	-81.6592353
SB-4	27.9036166	-81.6590383

Geographic Coordinate System: GCS\_WGS\_84  
Geodetic Datum: D\_WGS\_84

#### Level 2 Conclusions

Based on the field screening activities conducted for this contamination screening evaluation, no SCTL exceedences or buried debris was identified at Pond 1-3 or the Outfall Ditch.

Based on the field screening activities conducted for this contamination screening evaluation, Pond 1-3 is given a final potential contamination risk ranking of "No."

Based on the field screening activities conducted for this contamination screening evaluation, the Outfall Ditch is given a final potential contamination risk ranking of "Low."

#### Level 2 Recommendations

Based on the findings and conclusions of this contamination screening evaluation, Tierra recommends no further contamination screening for Pond 1-3 or the Outfall Ditch.

If contamination concerns are identified during future activities at Pond 1-3 or the Outfall Ditch, Tierra recommends they be addressed in accordance with PD&E Manual, Part 2, Chapter 22, paragraph 22.2.4.3 and Section 120-1.2 of the Standard Specifications for Road and Bridge Construction.

If it is determined that water wells (including monitor wells, potable wells, irrigation wells, etc.) are located within FDOT ROW, or possibly abutting, they should be properly abandoned in accordance with state and other applicable guidelines.

Surficial debris identified within/abutting the Outfall Ditch should be removed and properly disposed of offsite.

# **Appendix A**

Project Location Map and  
Pond Alternative Location Map  
Boring Location Plan



PROJECT LOCATION MAP

SOURCE: FDOT SURVEY AND MAPPING DATED 2014

REVISIONS				STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SR 60 GRADE SEPARATION OVER CSX	SHEET NO.  A-1
DATE	DESCRIPTION	DATE	DESCRIPTION	ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
			TIERRA PROJECT NO.: 6511-15-022E	SR 60	POLK	436559-1-32-01		
				TIERRA, INC. 7351 TEMPLE TERRACE HIGHWAY TAMPA, FLORIDA 33637 CERTIFICATE OF AUTHORIZATION 6486				



POND ALTERNATIVES LOCATION MAP

SOURCE: FDOT SURVEY AND MAPPING DATED 2014

REVISIONS				STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SR 60 GRADE SEPARATION OVER CSX	SHEET NO.  A-2
DATE	DESCRIPTION	DATE	DESCRIPTION	ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
			TIERRA PROJECT NO.: 6511-15-022E	SR 60	POLK	436559-1-32-01		

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CERTIFICATE OF AUTHORIZATION 6486



**BORING LOCATION PLAN**

SOURCE: FDOT SURVEY AND MAPPING DATED 2014

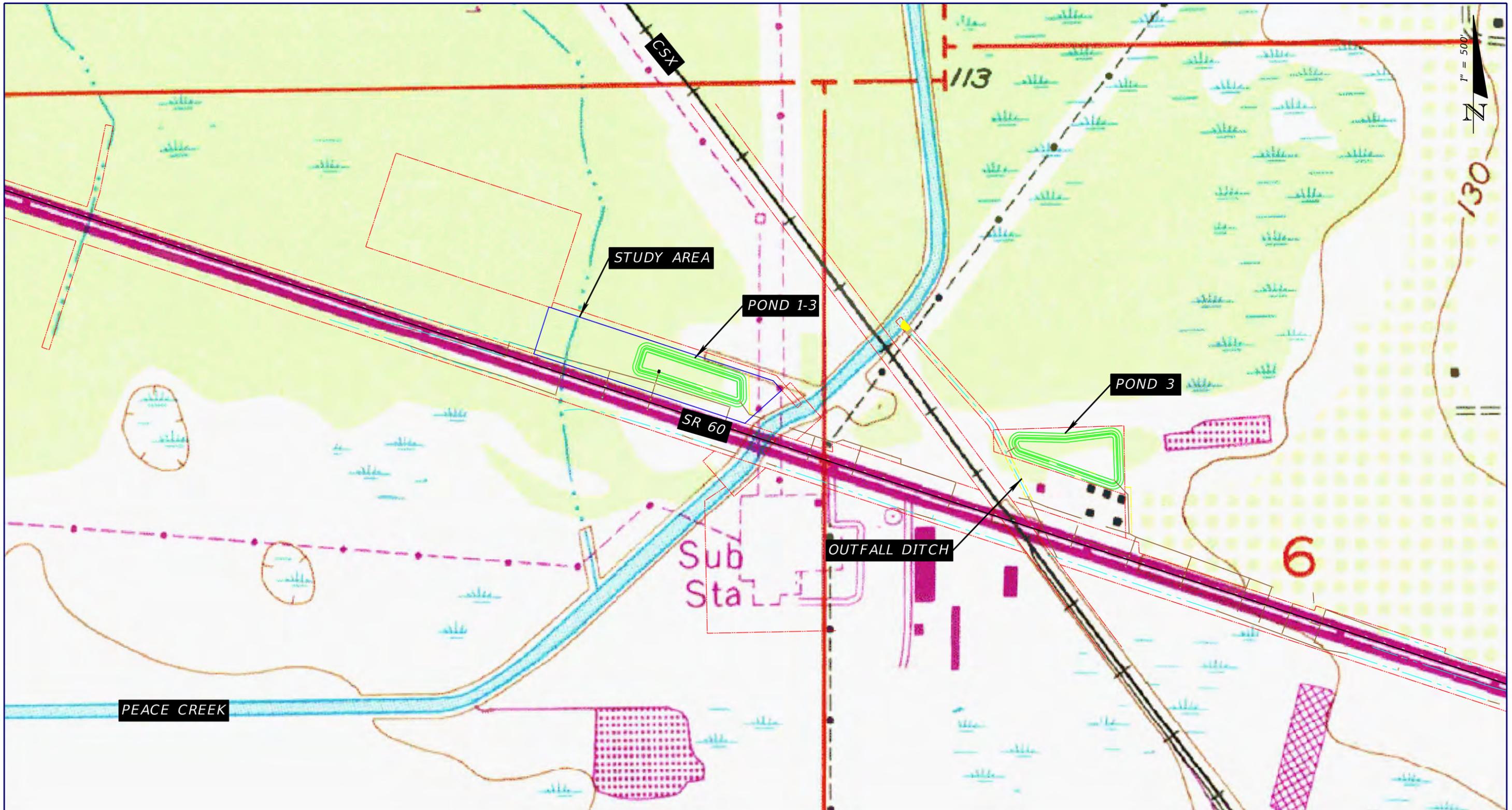
● SOIL BORING LOCATION

REVISIONS				STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SR 60 GRADE SEPARATION OVER CSX	SHEET NO. A-3
DATE	DESCRIPTION	DATE	DESCRIPTION	ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
			TIERRA PROJECT NO.: 6511-15-022E	SR 60	POLK	436559-1-32-01		

TIERRA, INC.  
7351 TEMPLE TERRACE HIGHWAY  
TAMPA, FLORIDA 33637  
CERTIFICATE OF AUTHORIZATION 6486

## **Appendix B**

USGS Topographic Map



USGS TOPOGRAPHIC MAP

"ELOISE, FLORIDA" DATED 1955, (PHOTOREVISED 1987)

REVISIONS		REVISIONS		TIERRA, INC. 7351 TEMPLE TERRACE HIGHWAY TAMPA, FLORIDA 33637 CERTIFICATE OF AUTHORIZATION 6486	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SR 60 GRADE SEPARATION OVER CSX	SHEET NO.  B
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
			TIERRA PROJECT NO.: 6511-15-022E	SR 60	POLK	436559-1-32-01			

## **Appendix C**

Historic Aerial Photographs



1950 HISTORICAL AERIAL PHOTOGRAPH

SOURCE: EARTH RESOURCE OBSERVATION AND SCIENCE (EROS) CENTER

REVISIONS				STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SR 60 GRADE SEPARATION OVER CSX	SHEET NO.  C-1
DATE	DESCRIPTION	DATE	DESCRIPTION	ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
			TIERRA PROJECT NO.: 6511-15-022E	SR 60	POLK	436559-1-32-01		

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1968 HISTORICAL AERIAL PHOTOGRAPH

SOURCE: UNIVERSITY OF FLORIDA

REVISIONS				STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SR 60 GRADE SEPARATION OVER CSX	SHEET NO. C-2
DATE	DESCRIPTION	DATE	DESCRIPTION	ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
			TIERRA PROJECT NO.: 6511-15-022E	SR 60	POLK	436559-1-32-01		

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1971 HISTORICAL AERIAL PHOTOGRAPH

SOURCE: FDOT SURVEY AND MAPPING

REVISIONS				STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SR 60 GRADE SEPARATION OVER CSX	SHEET NO.  C-3
DATE	DESCRIPTION	DATE	DESCRIPTION	ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
			TIERRA PROJECT NO.: 6511-15-022E	SR 60	POLK	436559-1-32-01		

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1980 HISTORICAL AERIAL PHOTOGRAPH

SOURCE: FDOT SURVEY AND MAPPING

REVISIONS				STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SR 60 GRADE SEPARATION OVER CSX	SHEET NO.  C-4
DATE	DESCRIPTION	DATE	DESCRIPTION	ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
			TIERRA PROJECT NO.: 6511-15-022E	SR 60	POLK	436559-1-32-01		



1993 HISTORICAL AERIAL PHOTOGRAPH

SOURCE: FDOT SURVEY AND MAPPING

REVISIONS				STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SR 60 GRADE SEPARATION OVER CSX	SHEET NO.  C-5
DATE	DESCRIPTION	DATE	DESCRIPTION	ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
			TIERRA PROJECT NO.: 6511-15-022E	SR 60	POLK	436559-1-32-01		

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2008 HISTORICAL AERIAL PHOTOGRAPH

SOURCE: FDOT SURVEY AND MAPPING

REVISIONS				STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SR 60 GRADE SEPARATION OVER CSX	SHEET NO.  C-6
DATE	DESCRIPTION	DATE	DESCRIPTION	ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
			TIERRA PROJECT NO.: 6511-15-022E	SR 60	POLK	436559-1-32-01		

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CERTIFICATE OF AUTHORIZATION 6486



2011 HISTORICAL AERIAL PHOTOGRAPH

SOURCE: FDOT SURVEY AND MAPPING

REVISIONS				STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SR 60 GRADE SEPARATION OVER CSX	SHEET NO.  C-7
DATE	DESCRIPTION	DATE	DESCRIPTION	ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
			TIERRA PROJECT NO.: 6511-15-022E	SR 60	POLK	436559-1-32-01		

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CERTIFICATE OF AUTHORIZATION 6486

# Appendix D

## Environmental Data Report

# Environmental Data Report

## Basic 1/4 Mile Research

SR 60 Grade Separation

Polk County, Florida

### Prepared For:

Tierra Inc  
7351 Temple Terrace Hwy  
Tampa, FL 33637

### Prepared By:



Environmental Data Management, Inc.  
2840 West Bay Drive, Suite 208  
Largo, Florida 33770

June 19, 2015



June 19, 2015

Chris Garth  
Tierra Inc  
7351 Temple Terrace Hwy  
Tampa, FL 33637

Subject: **Basic 1/4 Mile Research - EDM Project #22874**

Dear Mr. Garth

Thank you for choosing Environmental Data Management, Inc. The following report provides the results of our environmental data research that you requested for the following location:

**SR 60 Grade Separation**

**Polk County, Florida**

The following is a summary of the components contained within this report:

- **Executive Summary** –lists the databases that were searched for this report, the search distance criteria and the number of sites identified for each database.
- **Map of Study Area**– street map showing the location of the Subject Property and any regulatory listed sites identified within the search criteria.
- **Site Summary Table** –displays the Map ID number, Permit or Registration number, Name/Address and the Government Database(s) for the identified regulatory listed sites.
- **Detail Reports** – data detail for each database record identified.
- **Proximal Records Table** – a listing of potentially relevant sites identified just beyond the search criteria.
- **Non-Mapped Records Table** - lists those government records that do not contain sufficient address information to plot within our GIS system, but may still exist within your study area.
- **Addl Maps (where applicable)** – includes Recent Aerial Photo, USGS Topographic maps, FEMA Floodplain & NWI Wetland Map, map of statewide American Indian Lands and our Environmental Impact Areas map, showing the location of suspect sites such as NPL/STNPL, Brownfields, FUDS, etc.... Our Florida well data report is also include with the Standard and Comprehensive formats.
- **Agency List Descriptions** – defines the regulatory databases included in this report along with the dates that each database was last updated by the respective agency and EDM.

At EDM we take great pride in our work, and continually strive to provide you with the most accurate and thorough research service available. This report is only intended as a means to assist in identifying locations that may pose an environmental concern relative to the property under evaluation. Its use is not intended to replace the need for a complete environmental assessment or regulatory file review, but rather as a supplement to the overall evaluation.

Thank you again for selecting EDM as your data research provider. Should you have any questions regarding this report or our service, please feel free to contact us. We appreciate the opportunity to be of service to you and look forward to working with you in the future.

**ENVIRONMENTAL DATA MANAGEMENT, INC.**

# Executive Summary

Report Date: 6/19/2015

Client Information	Project Information
Tierra Inc 7351 Temple Terrace Hwy Tampa FL 33637 Client Job No: 6511-15-022E Client P.O. No:	Basic 1/4 Mile Research SR 60 Grade Separation  Polk County, Florida EDM Job No# 22874

The following table displays the databases that were included in the research provided, the respective search distance for each database and the number of records identified for each database. The distance values indicated are measured from the centroid of the Subject Property. The absence of records in this table and the Site Summary Tables indicates that our research found no data for other sites located within the specified search distances.

	Search Radius (Miles)	From 0 - .13 mi	From .13 - .25 mi	From .26 - .5 mi	From .51 - 1.0 mi	Greater than 1 Mile	Totals
<b>EPA DATABASES</b>							
<b>National Priorities List(NPL)</b>	1.00	0	0	0	0	N/A	0
<b>Comprehensive Env Response, Compensation &amp; Liability Information System List(CERCLIS)</b>	0.50	0	0	0	N/A	N/A	0
<b>Archived Cerclis Sites(NFRAP)</b>	0.50	0	0	0	N/A	N/A	0
<b>Emergency Response Notification System List(ERNS)</b>	0.25	0	0	N/A	N/A	N/A	0
<b>RCRIS Handlers with Corrective Action(CORRACTS)</b>	1.00	0	0	0	0	N/A	0
<b>RCRA-Treatment, Storage and/or Disposal Sites(TSD)</b>	1.00	0	0	0	0	N/A	0
<b>RCRA-LQG,SQG,CESQG and Transporters(NONTSD)</b>	0.25	0	0	N/A	1	N/A	1
<b>Tribal Tanks List(TRIBLTANKS)</b>	0.25	0	0	N/A	N/A	N/A	0
<b>Tribal Lust List(TRIBLLUST)</b>	0.50	0	0	0	N/A	N/A	0
<b>Brownfields Management System(USBRWNFLDS)</b>	0.50	0	0	0	N/A	N/A	0
<b>Institutional and/or Engineering Controls(USINSTENG)</b>	0.25	0	0	N/A	N/A	N/A	0
<b>FDEP DATABASES</b>							
<b>State NPL Equivalent(STNPL)</b>	1.00	0	0	0	0	N/A	0
<b>State CERCLIS Equivalent(STCERC)</b>	0.50	0	0	0	N/A	N/A	0
<b>Solid Waste Facilities List(SLDWST)</b>	0.50	0	0	0	1	N/A	1
<b>Leaking Underground Storage Tanks List(LUST)</b>	0.50	0	0	0	N/A	N/A	0
<b>Underground/Aboveground Storage Tanks(TANKS)</b>	0.25	0	0	N/A	1	N/A	1
<b>State Designated Brownfields(BRWNFLDS)</b>	0.50	0	0	0	N/A	N/A	0
<b>Voluntary Cleanup List(VOLCLNUP)</b>	0.50	0	0	0	N/A	N/A	0
<b>Institutional and/or Engineering Controls(INSTENG)</b>	0.25	0	0	N/A	N/A	N/A	0
<b>Dry Cleaners List(DRY)</b>	0.50	0	0	0	N/A	N/A	0

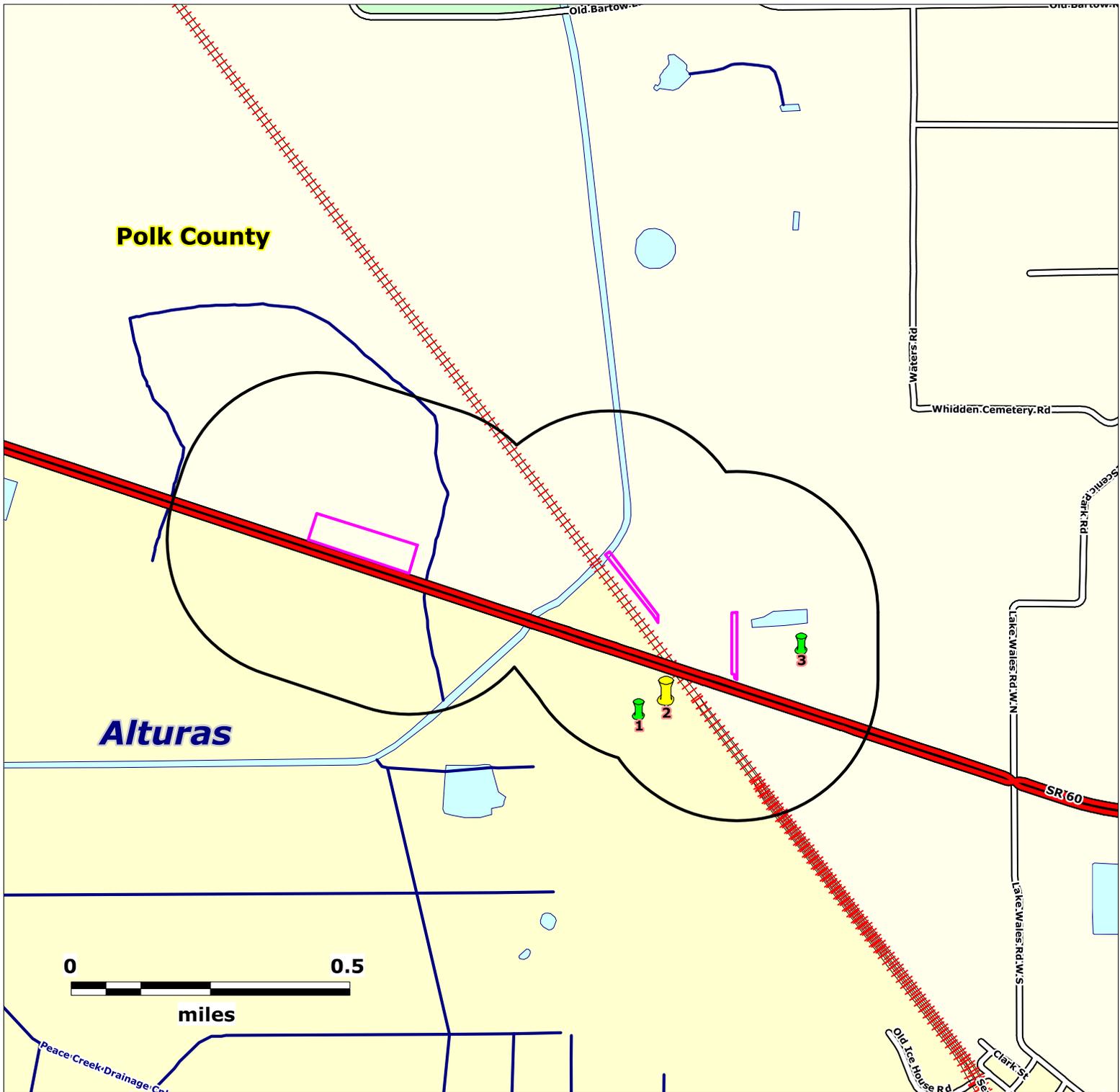
**\*\*\* Disclaimer \*\*\***

Please understand that the regulatory databases we utilize were not originally intended for our use, but rather for the source agency's internal tracking of sites for which they have jurisdiction or other interest. As a result of this difference in intended use, their data is frequently found to be incomplete or inaccurate, and is less than ideal for our use. Additionally, limitations exist in mapping data detail and accuracy. Our report is not to be relied upon for any purpose other than to "point" at approximate locations where further evaluation may be warranted. No conclusion can be based solely upon our report. Rather, our report should be used in conjunction with other relevant information to direct your attention at potential problem areas; which should be followed up by site inspections, interviews with relevant personnel and regulatory file review. Readers proceed at their own risk in relying upon this data, in whole or in part, for use within any evaluation. The EDM Service Request Form contains more detailed language with regard to such limitations, the terms of which the reader must accept in their entirety before utilizing this report. If the signed contract is not available to the reader, EDM will gladly furnish a copy upon request. Requests via email authorization are construed to be in accordance with these terms.



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Source: US Census Bureau TIGER Files

Map Scale and Property Boundaries are Approximate

### Subject Property

SR 60 Grade Separation  
Polk County, Florida

EDM Job No: 22874  
June 19, 2015

### Approximate Site Boundary



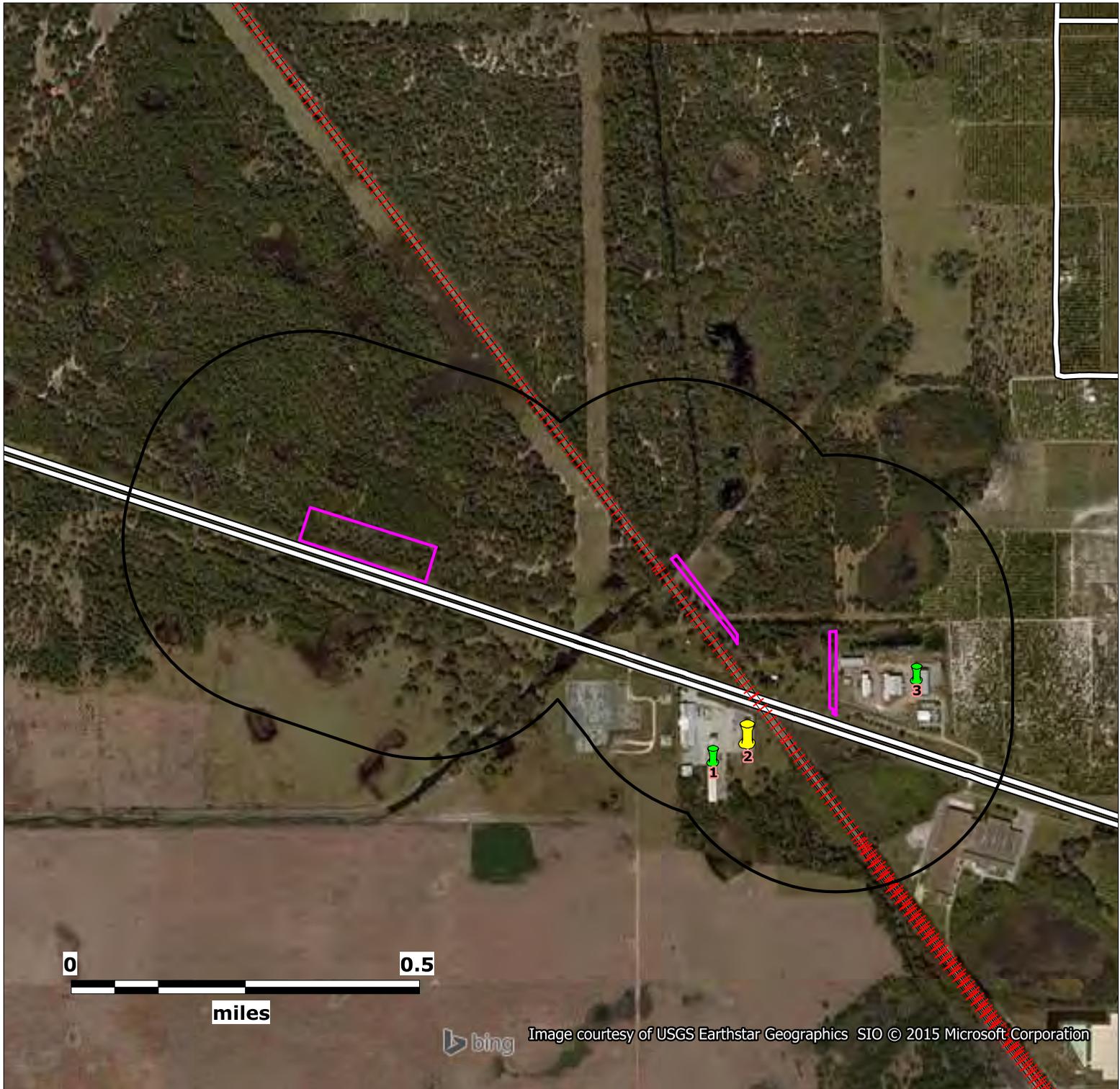
NPL, STNPL, CORRACTS  
& TSD sites



CERCLIS, NFRAP, STCERC, SLDWST,  
LUST, BRWNFLDS, VOLCLNUP  
& DRY sites



ERNS, NONTSD, TANKS  
& INSTENG sites



Map Scale and Property Boundaries are Approximate

### Subject Property

SR 60 Grade Separation  
Polk County, Florida

EDM Job No: 22874  
June 19, 2015

### Approximate Site Boundary



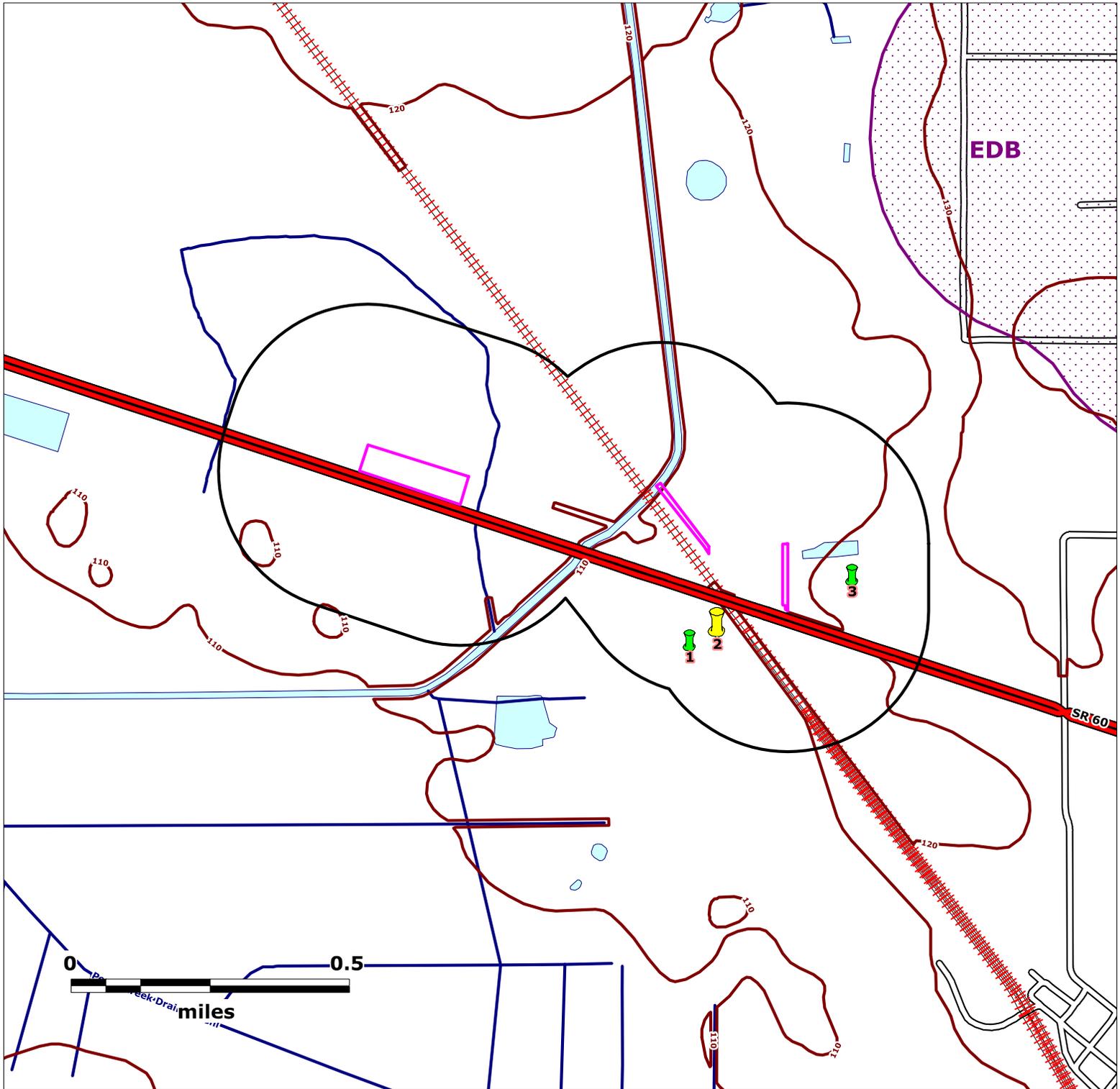
NPL, STNPL, CORRACTS  
& TSD sites



CERCLIS, NFRAP, STCERC, SLDWST,  
LUST, BRWNFLDS, VOLCLNUP  
& DRY sites



ERNS, NONTSD, TANKS  
& INSTENG sites



Source: FDEP and USEPA Geodata

Map Scale and Property Boundaries are Approximate

### Subject Property

SR 60 Grade Separation  
Polk County, Florida

EDM Job No: 22874  
June 19, 2015

FDEP Brownfield Areas	Formerly Used Defense Sites FUDS	<b>Approximate Site Boundary</b>
FDEP Brownfield Sites	FUDS Munitions Response Areas	NPL, STNPL, CORRACTS & TSD sites
USEPA NPL & FDEP STNPL Sites	FDEP Cattle Dipping Vat	CERCLIS, NFRAP, STCERC, SLDWST, LUST, BRWNFLDS, VOLCLNUP & DRY sites
FDEP Delineated GW Contamination	FDEP Solid Waste Sites	ERNS, NONTSD, TANKS & INSTENG sites

# ENVIRONMENTAL DATA MANAGEMENT

## Basic ASTM Research

### SUMMARY TABLE

Report Date: 6/19/2015

Page 1 of 1

#### REGULATORY LISTS

	N P L	C E R C L I S	N E F R A P	E R N S	C O R R A C T S	T S D	N O N T S D	T R I B L L U N K S	T R I B L L U N F L D S	U S B R S T E N G	U S I N S T E N G	S T N P L	S T C E W R C	S L D W S T	L U S T	T A N K S	B R W N F L D U P	V O L C L N G	I N S T E N G	D R Y
<b>MAPID# FAC ID, NAME AND LOCATION</b> 8628496 <span style="color: red;">Dist/Dir:</span> 0.6 SE <b>1)</b> VASSALLO INC SR 60 W LAKE WALES, FL. 33853																X				
00096071 <span style="color: red;">Dist/Dir:</span> 0.6 SE <b>2)</b> C & J TRANSPORT INC. 4421 STATE ROAD 60 WEST LAKE WALES, FL. 33859														X						
FLR000127043 <span style="color: red;">Dist/Dir:</span> 0.8 E <b>3)</b> PETERSEN INDUSTRIES INC 4000 SR 60 W LAKE WALES, FL. 33859						X														



# FDEP STORAGE TANKS REPORT

## (TANKS)

Report Date: 6/19/2015

TANKS Page 1 of 1

### FACILITY ID NUMBER, NAME AND LOCATION:

8628496  
VASSALLO INC  
SR 60 W  
LAKE WALES, FL 33853

### OWNERSHIP INFORMATION:

VASSALLO, INC.  
SR 60 W  
LAKE WALES, FL 33853  
**CONTACT TEL #:** (000) 000-0000  
**CONTACT:** MIGUEL A. VASSALLO  
**FACILITY TEL #:** (813) 676-7975

### MAP ID NUMBER:

**Dist (Miles):** 0.59  
**Direction:** SE

1

T  
A  
N  
K  
S

**COUNTY ID:** 53 **FAC TYPE:** Fuel user/Non-retail **FAC STATUS:** CLOSED

<u>TANK #:</u>	<u>TANK VOL(GALS):</u>	<u>INST.DATE:</u>	<u>TANK CONTENTS:</u>	<u>TANK POSITION:</u>	<u>TANK STATUS (as of...):</u>
1	10000	01-Jun-1978	Vehicular Diesel	UNDERGROUND	REMOVED 31-Aug-1993

\*\* CONSTR TYPE: C PIPING TYPE: LEAK MONIT TYPE: Y

See "Agency List Descriptions" Section for Code Definitions



# FDEP SOLID WASTE FACILITIES LIST

## (SLDWST)

Report Date: 6/19/2015

SLDWST Page 1 of 1

### FACILITY ID, NAME AND LOCATION:

00096071  
C & J TRANSPORT INC.  
4421 STATE ROAD 60 WEST  
LAKE WALES, FL 33859

### RESPONSIBLE AUTHORITY:

### LAND OWNER:

### MAP ID NUMBER:

Dist (Miles): 0.62  
Direction: SE

2

S  
L  
D  
W  
S  
T

SEC/TWN/RNG: //

FACILITY CLASS: 754 WASTE TIRE COLLECTOR

CLASS STATUS: REGISTERED (R)



# USEPA RESOURCE CONSERVATION AND RECOVERY ACT INFORMATION (RCRAInfo)

## (NONTSD)

Report Date: 6/19/2015

NONTSD Page 1 of 2

### FACILITY ID NUMBER, NAME AND LOCATION:

FLR000127043  
PETERSEN INDUSTRIES INC  
4000 SR 60 W  
LAKE WALES, FL 33859

### CONTACT INFORMATION:

4000 SR 60 W  
LAKE WALES FL 33855  
Contact: JIMMY TILLMAN  
Contact Telephone: 8636761493  
Contact Email:

### MAP ID NUMBER:

Dist (Miles): 0.81  
Direction: E

3

N  
O  
N  
T  
S  
D

### RCRIS INFORMATION

NOTIFICATION DATE: 8/19/2013 SOURCE: INSPECTION

TSD?: NOT A TSD, VERIFIED  
GEN STATUS(Fed): SMALL QUANTITY GENERATOR(<1000 KG PER MONTH)  
GEN STATUS(State): SMALL QUANTITY GENERATOR(<1000 KG PER MONTH)  
MIXED WSTE GEN?: N  
IMPORTER?: N  
OFFSITE RECPT?: N  
TRANSPORTER?: NOT A TRANSPORTER, VERIFIED  
XFER FAC?: N  
SHRT TRM GEN?: N  
RECYCLER?: N  
NON-NOTIFIER?:

UNIV WST DEST?: N  
ON SITE BURNER?: N  
FURNACE?: N  
UNDGRND INJ?: NO UNDERGROUND INJECTI  
UO BURNER?: N  
UO PROC?: N  
UO RECY?: N  
UO TRANS?: N  
UO XFER?: N  
UO MRKT BRN?: N  
UO SPEC MRKT?: N

NOTIFICATION DATE: 3/16/2009 SOURCE: INSPECTION

TSD?: NOT A TSD, VERIFIED  
GEN STATUS(Fed): SMALL QUANTITY GENERATOR(<1000 KG PER MONTH)  
GEN STATUS(State): SMALL QUANTITY GENERATOR(<1000 KG PER MONTH)  
MIXED WSTE GEN?: N  
IMPORTER?: N  
OFFSITE RECPT?: N  
TRANSPORTER?: NOT A TRANSPORTER, VERIFIED  
XFER FAC?: N  
SHRT TRM GEN?: N  
RECYCLER?: N  
NON-NOTIFIER?:

UNIV WST DEST?: N  
ON SITE BURNER?: N  
FURNACE?: N  
UNDGRND INJ?: NO UNDERGROUND INJECTI  
UO BURNER?: N  
UO PROC?: N  
UO RECY?: N  
UO TRANS?: N  
UO XFER?: N  
UO MRKT BRN?: N  
UO SPEC MRKT?: N

NOTIFICATION DATE: 3/16/2009 SOURCE: INSPECTION

TSD?: NOT A TSD, VERIFIED  
GEN STATUS(Fed): SMALL QUANTITY GENERATOR(<1000 KG PER MONTH)  
GEN STATUS(State): SMALL QUANTITY GENERATOR(<1000 KG PER MONTH)  
MIXED WSTE GEN?: N  
IMPORTER?: N  
OFFSITE RECPT?: N  
TRANSPORTER?: NOT A TRANSPORTER, VERIFIED  
XFER FAC?: N  
SHRT TRM GEN?: N  
RECYCLER?: N  
NON-NOTIFIER?:

UNIV WST DEST?: N  
ON SITE BURNER?: N  
FURNACE?: N  
UNDGRND INJ?: NO UNDERGROUND INJECTI  
UO BURNER?: N  
UO PROC?: N  
UO RECY?: N  
UO TRANS?: N  
UO XFER?: N  
UO MRKT BRN?: N  
UO SPEC MRKT?: N

NOTIFICATION DATE: 3/6/2006 SOURCE: NOTIFICATION

TSD?: NOT A TSD, VERIFIED  
GEN STATUS(Fed): SMALL QUANTITY GENERATOR(<1000 KG PER MONTH)  
GEN STATUS(State): SMALL QUANTITY GENERATOR(<1000 KG PER MONTH)  
MIXED WSTE GEN?: N  
IMPORTER?: N  
OFFSITE RECPT?: N  
TRANSPORTER?: NOT A TRANSPORTER, VERIFIED  
XFER FAC?: N  
SHRT TRM GEN?: N  
RECYCLER?: N  
NON-NOTIFIER?:

UNIV WST DEST?: N  
ON SITE BURNER?: N  
FURNACE?: N  
UNDGRND INJ?: NO UNDERGROUND INJECTI  
UO BURNER?: N  
UO PROC?: N  
UO RECY?: N  
UO TRANS?: N  
UO XFER?: N  
UO MRKT BRN?: N  
UO SPEC MRKT?: N



# USEPA RESOURCE CONSERVATION AND RECOVERY ACT INFORMATION (RCRAInfo)

## (NONTSD)

Report Date: 6/19/2015

NONTSD Page 2 of 2

**NOTIFICATION DATE:** 3/6/2006      **SOURCE:** NOTIFICATION

**TSD?:** NOT A TSD, VERIFIED  
**GEN STATUS(Fed):** SMALL QUANTITY GENERATOR(<1000 KG PER MONTH)  
**GEN STATUS(State):** SMALL QUANTITY GENERATOR(<1000 KG PER MONTH)  
**MIXED WSTE GEN?:** N  
**IMPORTER?:** N  
**OFFSITE RECPT?:** N  
**TRANSPORTER?:** NOT A TRANSPORTER, VERIFIED  
**XFER FAC?:** N  
**SHRT TRM GEN?:** N  
**RECYCLER?:** N  
**NON-NOTIFIER?:**

**UNIV WST DEST?:** N  
**ON SITE BURNER?:** N  
**FURNACE?:** N  
**UNDGRND INJ?:** NO UNDERGROUND INJECTI  
**UO BURNER?:** N  
**UO PROC?:** N  
**UO RECY?:** N  
**UO TRANS?:** N  
**UO XFER?:** N  
**UO MRKT BRN?:** N  
**UO SPEC MRKT?:** N

### VIOLATION INFO

<b>Eval Date:</b> 08/08/2013	<b>Eval Agcy:</b> STATE	<b>Eval Type Descr:</b> COMPLIANCE EVALUATION INSPECTION ON-SITE
<b>Viol Date:</b> 08/08/2013	<b>Viol Agcy:</b> S	<b>Enf Type Descr:</b>
<b>Enf Date:</b> 09/04/2013	<b>Enf Agcy:</b> STATE	<b>Lead Agcy:</b>

<b>Viol Type:</b> 265.I	TSD IS-Container Use and Management	<b>Citation:</b>	<b>Compl Date:</b> 08/09/2013
<b>Viol Type:</b> 262.C	Generators - Pre-transport	<b>Citation:</b>	<b>Compl Date:</b> 08/09/2013
<b>Viol Type:</b> 262.A	Generators - General	<b>Citation:</b>	<b>Compl Date:</b> 08/09/2013

<b>Eval Date:</b> 03/04/2009	<b>Eval Agcy:</b> STATE	<b>Eval Type Descr:</b> COMPLIANCE EVALUATION INSPECTION ON-SITE
<b>Viol Date:</b> 03/04/2009	<b>Viol Agcy:</b> S	<b>Enf Type Descr:</b>
<b>Enf Date:</b>	<b>Enf Agcy:</b>	<b>Lead Agcy:</b>

<b>Viol Type:</b> 262.C	Generators - Pre-transport	<b>Citation:</b>	<b>Compl Date:</b> 04/23/2009
<b>Viol Type:</b> XXS	State Statute or Regulation	<b>Citation:</b>	<b>Compl Date:</b> 07/01/2009
<b>Viol Type:</b> 265.I	TSD IS-Container Use and Management	<b>Citation:</b>	<b>Compl Date:</b> 04/23/2009
<b>Viol Type:</b> XXS	State Statute or Regulation	<b>Citation:</b>	<b>Compl Date:</b> 07/01/2009
<b>Viol Type:</b> 262.C	Generators - Pre-transport	<b>Citation:</b>	<b>Compl Date:</b> 04/23/2009



## PROXIMAL RECORDS TABLE

Report Date: 6/19/2015

The Proximal Records Table includes mapped facilities that appear outside of the study area, but in the proximity of the research boundary. They are provided in a summary fashion to allow one to determine potential interest.

Generally, these sites may be of potential interest for three reasons:

- 1.) The location occurs so close to the research boundary that it merits inclusion in the evaluation.
- 2.) The site may be expansive with regard to the property boundary. The physical address of a landfill for example may occur outside of the research boundary, but the landfill boundary may extend into the research area. Large industrial complexes may also fall into this category.
- 3.) The U.S. Census Bureau data, from which our maps are created, is not always precise with regard to address information. A facility may therefore appear on the map outside of the research area, but actually fall within the research area. These inaccuracies are typically less than 500 feet. If you observe any such inaccuracies, we ask that you please notify us of the more precise location and we will use this information to improve our product.

If more specific information relative to one or more locations included in the Proximal Records Table is desired, please feel free to contact us and we will send you this information as an addendum to this report.

# ENVIRONMENTAL DATA MANAGEMENT

## Basic ASTM Research

### PROXIMAL RECORDS TABLE

Report Date: 6/19/2015

Page 1 of 1

#### REGULATORY LISTS

MAPID# FAC ID, NAME AND LOCATION	N P L	C E R C L I S	N F R A P	E R N S	C O R R A C T S	T O R D	N O N T S D	T R I B U T A N K S	T R I B U T E S	U S B R W F L D S	U S I N S T E N G	S T N P L	S T C E W R C	S L D W T	L U S T	T A N K S	B R O W N F L D S	V O L T A G E	I N C E N D R Y	
<b>1A)</b> 8624313 ST JOE CONTAINER CO 4025 HWY 60 W LAKE WALES, FL. 33853 Dist/Dir: 1 SE															X	X				
<b>1A)</b> FLD043048008 ST JOE CONTAINER CO 4025 SR 60 W LAKE WALES, FL. 33853 Dist/Dir: 1 SE							X													



## NONMAPPED RECORDS TABLE

Report Date: 6/19/2015

The Non-Mapped Records Table is a listing of database records that lack sufficient address information to be placed within our mapping system, but may exist within your study area. These records have been manually screened to determine whether they could likely fall within the study area or can be conclusively identified as existing outside of the study area. Those records that could be located within the study area, but cannot be plotted within our GIS, are displayed in the Non-Mapped Records Table within this report.

If more specific information relative to one or more locations included in the Non-Mapped Records Table is desired, please feel free to contact us and we will send you this information as an addendum to this report.

NONMAPPED RECORDS



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# ENVIRONMENTAL DATA MANAGEMENT

## Basic ASTM Research

### NON-MAPPED RECORDS TABLE

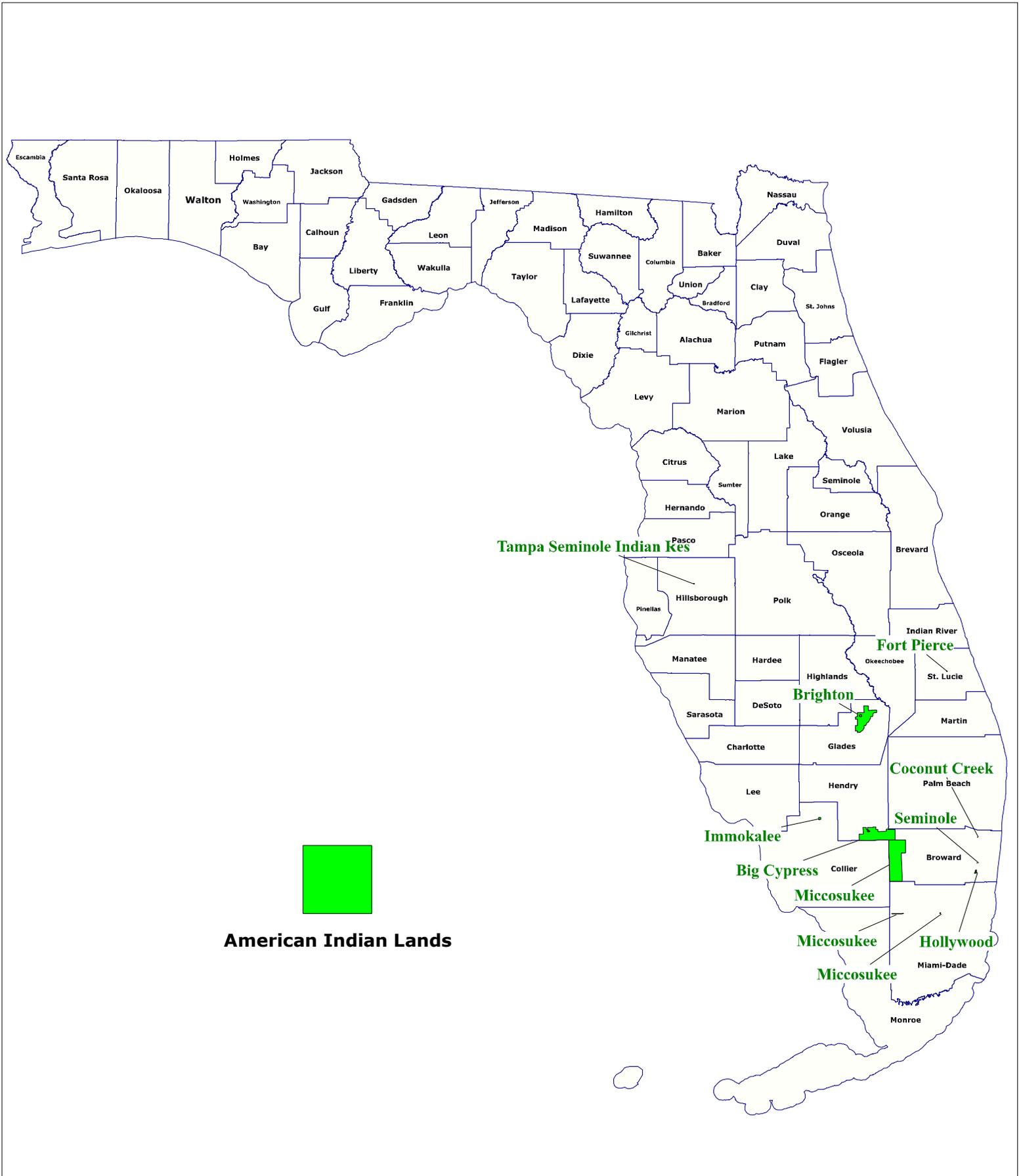
Report Date: 6/19/2015

Page 1 of 1

#### REGULATORY LISTS

	N P L	C E R C L I S	N F R A P	E R R A S	C O R R A C T S	T S D	N O N T S D	T R I B L L T A N K S	T R I B L L U N S T	U S B R W N F L D S	U S I N S T E N G	S T N P L	S T C E W R C	S L D W T	L U S T	T A N K S	B R O S T R O L N G F L D U P	V O L C A N O	I N T E N S I T Y	D R Y
<b>MAPID# FAC ID, NAME AND LOCATION</b>  1060822 HWY 60 BETWEEN FT. WELLS AND BARTOW,  , FL.				X																





## American Indian Lands in Florida

Name	Entity	County	General Location Information	Approx. Area (Acres)
Tampa Reservation	Seminole Tribe of Florida	Hillsborough	I-4 & Hillsborough Avenue	42
Fort Pierce Reservation	Seminole Tribe of Florida	Saint Lucie	Okeechobee Rd & Eleven Mile Rd	54
Brighton Reservation	Seminole Tribe of Florida	Glades	N of CR 721 & SR 78	36,630
Immokalee Reservation	Seminole Tribe of Florida	Collier	N of CR 846 & Stockade Rd	660
Big Cypress Reservation	Seminole Tribe of Florida	Hendry/Broward	CR 833 & BIA Hwy 182	52,750
Miccosukee Reservation	Miccosukee Tribe of Florida	Broward	I-75 & Government Rd	81,440
Miccosukee Reservation	Miccosukee Tribe of Florida	Dade	SW 8 <sup>th</sup> St & Loop Rd	750
Miccosukee Reservation	Miccosukee Tribe of Florida	Dade	SW 177 <sup>th</sup> Ave & SW 8 <sup>th</sup> St	56
Holly (Dania) Reservation	Seminole Tribe of Florida	Broward	Stirling Rd & Florida's turnpike	560
Coconut Creek Reservation	Seminole Tribe of Florida	Broward	US 441 & NW 40 <sup>th</sup> St	6
Seminole Trust Land	Seminole Tribe of Florida	Broward	US 441 & Davie Blvd	1

## Florida Tribal Contacts

Entity	Contact	Tel/Fac	Source
Miccosukee Tribe of Florida	<b>Billy Cypress</b> Tribal Chairman Miccosukee Tribe of Indians of Florida iPost Office Box 440021 Miami, Florida 33144 County: Dade	Phone: (305) 223-8380 Facsimile: (305) 223-1011	EPA Reg IV Tribal Contacts
Miccosukee Tribe of Florida	<b>Steve Terry</b> Land Resources Manager Miccosukee Tribe of Indians of Florida Post Office Box 440021 Miami, Florida 33144 E-Mail: <a href="mailto:esoterry@shadow.net">esoterry@shadow.net</a>	Phone:(305) 223-8380 Facsimile: (305) 223-1011	EPA Reg IV Tribal Contacts
Miccosukee Tribe of Florida	<b>Billy Cypress</b> Chairman Miccosukee Indian Tribe Tamiami Station PO Box 440021 Miami, Florida 33144	Phone: (305) 223-8380 Facsimile: (305) 223-1011	US DOI - BIA Tribal Leaders Directory
Seminole Tribe of Florida	<b>Mitchell Cypress</b> Tribal Chairman Seminole Tribe of Florida 6300 Stirling Road Hollywood, Florida 33024 County: Broward	Phone: (954) 967-3900 Facsimile: (954) 967-3486	EPA Reg IV Tribal Contacts
Seminole Tribe of Florida	<b>Craig T. Tepper</b> , Director Water Resource Management Department Seminole Tribe of Florida 6300 Stirling Road Hollywood, Florida 33024 County: Broward E-Mail: <a href="mailto:water@gate.net">water@gate.net</a>	Phone: (954) 966-6300, extension 1120 Facsimile: (954) 967-3489	EPA Reg IV Tribal Contacts
Seminole Tribe of Florida	<b>Susie Kippenberger</b> , Director Utilities Department Seminole Tribe of Florida 6300 Stirling Road Hollywood, Florida 33024 County: Broward E- Mail: <a href="mailto:susiek@semtribe.com">susiek@semtribe.com</a>	Phone: (954) 966-3475 Facsimile: (954) 967-3475	EPA Reg IV Tribal Contacts
Seminole Tribe of Florida	<b>Mitchell Cypress</b> Chairman Seminole Indian Tribe 6300 Stirling Road Hollywood, Florida 33024 <a href="http://www.seminoletribe.com/">http://www.seminoletribe.com/</a>	Phone: (954) 966-6300 Facsimile: (954) 967-3463	US DOI - BIA Tribal Leaders Directory
Seminole Tribe of Florida	<b>Joe Frank, Acting Superintendent</b> Seminole Agency Bureau of Indian Affairs 6100 Hollywood Blvd, Suite 206 Hollywood, FL 33024	Phone: (954) 983-1537 Facsimile: (954) 983-5018	US DOI - BIA Tribal Leaders Directory

# Agency List Descriptions

USEPA and State Databases are updated on a quarterly basis. Supplemental Databases are updated on an annual basis.

## United States Environmental Protection Agency (EPA)

### Comprehensive Env Response, Compensation & Liability Information System List(CERCLIS)

The US EPA Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) database tracks potential and confirmed hazardous waste sites at which the EPA Superfund program has some involvement. It contains sites that are either proposed to be or are on the National Priorities List (NPL) as well as sites that are in the screening and assessment phase for possible inclusion on the NPL.

**Agency File Date:** 11/12/2013      **Received by EDM:** 6/4/2015      **EDM Database Updated:** 6/4/2015

### RCRIS Handlers with Corrective Action(CORRACTS)

The US EPA Corrective Action Sites (CORRACTS) database is a listing of hazardous waste handlers that have undergone RCRA corrective action activity.

**Agency File Date:** 3/10/2015      **Received by EDM:** 3/20/2015      **EDM Database Updated:** 4/3/2015

### Emergency Response Notification System List(ERNS)

The Emergency Response Notification System (ERNS) database stores information on oil discharges and hazardous substance releases. The ERNS program is a cooperative data sharing effort among the EPA, DOT and the National Response Center (NRC), which currently provides access to this data.

**Agency File Date:** 5/17/2015      **Received by EDM:** 5/19/2015      **EDM Database Updated:** 5/19/2015

### Archived Cerclis Sites(NFRAP)

The US EPA NFRAP list contains archived data of CERCLIS records where the EPA has completed assessment activities and determined that no further steps to list the site on the NPL will be taken. NFRAP sites may be reviewed in the future to determine if they should be returned to CERCLIS based upon newly identified contamination problems at the site.

**Agency File Date:** 10/25/2013      **Received by EDM:** 6/4/2015      **EDM Database Updated:** 6/4/2015

### RCRA-LQG,SQG,CESQG and Transporters(NONTSD)

The EDM NONTSD list is a subset of the US EPA RCRAInfo System and identifies facilities that generate and transport hazardous wastes. These facilities may be Large Quantity Generators (LQG), Small Quantity Generators (SQG), Conditionally Exempt SQG's (CESQG) as well as "Non-Notifiers" and "Non-Handlers".

**Agency File Date:** 5/12/2015      **Received by EDM:** 5/22/2015      **EDM Database Updated:** 5/22/2015

### National Priorities List(NPL)

The US EPA National Priorities List (NPL) contains facilities and/or locations where environmental contamination has been confirmed and prioritized for cleanup activities. In addition to sites that are currently on the EPA NPL, the EDM database contains sites that have been Proposed, Withdrawn and Deleted from the list.

**Agency File Date:** 3/4/2015      **Received by EDM:** 3/4/2015      **EDM Database Updated:** 3/4/2015

### Tribal LUST List(TRIBLLUST)

EDM's Tribal LUST list is derived from the USEPA Region IV Tribal Tanks database by extracting those sites with indicators of past and/or current releases.

**Agency File Date:** 2/24/2010      **Received by EDM:** 3/9/2010      **EDM Database Updated:** 3/9/2010

### Tribal Tanks List(TRIBLTANKS)

The USEPA Region IV Tribal Tanks database lists Active and Closed storage tank facilities on Native American lands.

**Agency File Date:** 2/24/2010      **Received by EDM:** 3/9/2010      **EDM Database Updated:** 3/9/2010

### RCRA-Treatment, Storage and/or Disposal Sites(TSD)

The EDM TSD list is a subset of the US EPA RCRAInfo system and identifies facilities that Treat, Store and/or Dispose of hazardous waste.

**Agency File Date:** 5/12/2015      **Received by EDM:** 5/22/2015      **EDM Database Updated:** 5/22/2015

### Brownfields Management System(USBRWNFLDS)

The US EPA Brownfields program provides information on environmentally distressed properties that have received Grants or Targeted funding for cleanup and redevelopment. Tribal Brownfield sites are included in the USBRWNFLDS database.

**Agency File Date:** 5/18/2015      **Received by EDM:** 5/18/2015      **EDM Database Updated:** 5/18/2015

### Institutional and/or Engineering Controls(USINSTENG)

The USINSTENG list is compiled from data elements contained in the NPL, CORRACTS and USBRWNFLDS lists.

**Agency File Date:** 3/10/2015      **Received by EDM:** 4/3/2015      **EDM Database Updated:** 4/3/2015

# Florida Department of Environmental Protection (FDEP)

## State Designated Brownfields(BRWNFLDS)

The FDEP Brownfields database contains a listing of State Designated Brownfield Areas and Brownfield Sites with signed rehabilitation agreements. Brownfields are typically defined as abandoned, idled or underused industrial and commercial sites where expansion or redevelopment is complicated by real or perceived environmental contamination.

**Agency File Date:** 3/16/2015

**Received by EDM:** 3/20/2015

**EDM Database Updated:** 3/20/2015

## Dry Cleaners List(DRY)

The FDEP Dry Cleaning Facilities List is comprised of data from the FDEP Storage Tank and Contamination Monitoring (STCM) database and the Drycleaning Solvent Cleanup Program- Priority Ranking List. It contains a listing of those Dry Cleaning sites (and suspected historical Dry Cleaning sites) who have registered with the FDEP and/or have applied for the Dry Cleaning Solvent Cleanup Program.

**Agency File Date:** 5/7/2015

**Received by EDM:** 5/28/2015

**EDM Database Updated:** 6/1/2015

## Institutional and/or Engineering Controls(INSTENG)

The FDEP Institutional Controls Registry Database (INSTENG) contains sites that have had Institutional and/or Engineering Controls implemented to regulate exposure to environmental hazards

**Agency File Date:** 3/17/2015

**Received by EDM:** 4/14/2015

**EDM Database Updated:** 4/14/2015

## Leaking Underground Storage Tanks List(LUST)

The FDEP LUST list identifies facilities and/or locations that have notified the FDEP of a possible release of contaminants from petroleum storage systems. This Report is generated from the FDEP Storage Tank and Contamination Monitoring Database (STCM).

**Agency File Date:** 5/8/2015

**Received by EDM:** 5/19/2015

**EDM Database Updated:** 5/19/2015

## Solid Waste Facilities List(SLDWST)

The FDEP SLDWST list identifies locations that have been permitted to conduct solid waste handling activities including Landfills, Transfer Stations and sites handling Bio-Hazardous wastes. Sites listed with "##" after the Facility ID Number are historical locations, obtained from documents on record at local agencies.

**Agency File Date:** 5/21/2015

**Received by EDM:** 5/21/2015

**EDM Database Updated:** 5/22/2015

## State CERCLIS Equivalent(STCERC)

The STCERC list is compiled from the FDEP Site Investigation Section list and the Florida SITES list. The SITES list is a historical database that the FDEP once used to track suspected contamination from accidental or uncontrolled releases of hazardous substances.

**Agency File Date:** 3/16/2015

**Received by EDM:** 3/20/2015

**EDM Database Updated:** 3/20/2015

## State NPL Equivalent(STNPL)

The FDEP SFAS list contains facilities and/or locations that have been identified by the FDEP as having known environmental contamination and are currently being addressed through State funded cleanup action.

**Agency File Date:** 1/23/2015

**Received by EDM:** 2/18/2015

**EDM Database Updated:** 2/18/2015

## Underground/Aboveground Storage Tanks(TANKS)

The FDEP TANKS list contains sites with registered aboveground and/or underground storage tanks containing regulated petroleum products. Please refer to the "Explanation of Florida Tank Codes" insert to interpret tank construction, monitoring and piping codes.

**Agency File Date:** 5/8/2015

**Received by EDM:** 6/4/2015

**EDM Database Updated:** 6/5/2015

## Voluntary Cleanup List(VOLCLNUP)

The VOLCLNUP List is derived from the FDEP Brownfields Site Rehabilitation Agreement (BSRA) database and the FDEP Office of Waste Cleanup Responsible Party Sites database. This list identifies those sites that have signed an agreement to Voluntarily cleanup a site and/or sites where legal responsibility for site rehabilitation exists pursuant to Florida Statutes and is being conducted either voluntarily or pursuant to enforcement activity.

**Agency File Date:** 3/9/2015

**Received by EDM:** 3/9/2015

**EDM Database Updated:** 3/9/2015

## EXPLANATION OF FLORIDA TANK CODES

### CONSTRUCTION TYPE CODES

**A** = BALL CHECK VALVE  
**B** = INTERNAL LINING  
**C** = STEEL  
**D** = UNKNOWN  
**E** = FIBERGLASS  
**F** = FIBERGLASS-CLAD STEEL  
**G** = CATHODIC PROTECTION-SACRIFICIAL ANODE  
**H** = CATHODIC PROTECTION -IMPRESSED CURRENT  
**I** = DBL WALL/SINGLE MATERIAL  
**J** = SYNTHETIC LINER IN TANK EXCAVATION  
**K** = AST CONTAINMENT: CONCRETE /SYNTHETIC MATERIAL AREA  
**L** = COMPARTMENTED  
**M** = SPILL CONTAINMENT BUCKET  
**N** = FLOW SHUT OFF  
**O** = TIGHT FILL  
**P** = LEVEL GAUGES, HI LEVEL ALARMS  
**Q** = OTHER DER APPROVED PROTECTION METHOD  
**R** = DBL WALL/DUAL MATERIAL/ (TANK "JACKET")  
**S** = OTHER DEP APPROVED SECONDARY CONTAINMENT SYSTEM  
**T** = SMALL USE TANK  
**U** = FIELD ERECTED TANK  
**V** = PIPELESS UST W/SECONDARY CONTAINMENT  
**W** = BUILT ON SUPPORTS  
**X** = CONCRETE  
**Y** = POLYETHYLENE  
**Z** = OTHER DEP APPROVED TANK MATERIAL

### PIPING TYPE CODES

**A** = ABOVE GROUND-NO CONTACT W/SOIL  
**B** = STEEL OR GALVANIZED METAL  
**C** = FIBERGLASS  
**D** = EXTERNAL PROTECTIVE COATING  
**E** = CATHODIC PROTECTION (SACRIFICIAL ANODE/IMPRESSED CURRENT)  
**F** = DBLWALL/SINGLE MATERIAL  
**G** = SYNTHETIC OR BOX/TRENCH LINER  
**H** = AIRPORT/SEAPORT HYDRANT SYSTEM  
**I** = SUCTION PIPING SYSTEM  
**J** = PRESSURIZED PIPING SYSTEM  
**K** = DISPENSER LINERS  
**L** = BULK PRODUCT SYSTEM  
**M** = DOUBLE WALL / DUAL MATERIAL (PIPE "JACKET")  
**N** = APPROVED SYNTHETIC MATERIAL  
**O** = SEVERE VIOLATION  
**P** = INTERNAL PIPING WITHIN INTERNAL SUMP RISER  
**V** = VIOLATION  
**X** = NO PIPING ASSOCIATED WITH TANK  
**Y** = UNKNOWN  
**Z** = OTHER DEP APPROVED PIPING MATERIAL

### LEAK MONITORING CODES

**1** = CONTINUOUS ELECTRONIC SENSING EQUIPMENT  
**2** = VISUAL INSPECTIONS OF PIPING SUMPS  
**3** = ELECTRONIC MONITORING OF PIPING SUMPS  
**4** = VISUAL INSPECTIONS OF DISPENSING LINERS  
**5** = ELECTRONIC MONITORING OF DISPENSER LINERS  
**6** = EXTERNAL PIPING MONITORING  
**7** = AUTOMATICALLY SAMPLED WELLS  
**8** = MANUALLY SAMPLED WELLS  
**A** = SITE SUITABILITY PLAN  
**B** = SITE SUITABILITY PLAN EXEMPTION  
**C** = GROUNDWATER MONITOR PLAN  
**D** = SPCC PLAN  
**E** = INTERSTITIAL MONITORING UST LINERS  
**F** = INTERSTITIAL SPACE-DOUBLE WALL TANK  
**G** = ELECTRONIC LINE LEAK DETECTOR W/FLOW SHUTOFF  
**H** = MECHANICAL LINE LEAK DETECTOR  
**I** = NOT REQUIRED-SEE RULE FOR EXEMPTIONS  
**J** = INTERSTITIAL MONITORING-PIPING LINER  
**K** = INTERSTITIAL MONITORING- DOUBLE WALL PIPING  
**L** = AUTOMATIC TANK GAUGING SYSTEM (USTS)  
**M** = MANUAL TANK GAUGING SYSTEM (USTS)  
**N** = GROUNDWATER MONITORING SYSTEM  
**O** = VAPOR MONITORING SYSTEM  
**P** = VAPOR MONITORING W/DILUTION PROCEDURES  
**Q** = VISUAL INSPECTION OF AST SYSTEMS  
**R** = INTERSTITIAL MONITORING OF TANK BOTTOM  
**S** = STATISTICAL INVENTORY RECONCILIATION (SIR/USTS)  
**T** = ANNUAL TIGHTNESS TEST WITH INVENTORY (UST)  
**U** = BULK PIPING PRESSURE TEST  
**V** = SUCTION PUMP CHECK VALVE  
**W** = FIBER-OPTIC TECHNOLOGIES  
**X** = NONE  
**Y** = UNKNOWN  
**Z** = OTHER DEP APPROVED MONITORING METHOD

# **Appendix E**

Laboratory Analytical Report

October 18, 2016

Chris Garth  
Tierra, Inc.  
7351 Temple Terrace Hwy  
Tampa, FL 33637

RE: Project: SR 60 Grade Separation\*  
Pace Project No.: 35270444

Dear Chris Garth:

Enclosed are the analytical results for sample(s) received by the laboratory on October 13, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Lori Palmer  
lori.palmer@pacelabs.com  
Project Manager

Enclosures



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: SR 60 Grade Separation\*

Pace Project No.: 35270444

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### Ormond Beach Certification IDs

8 East Tower Circle, Ormond Beach, FL 32174  
Alabama Certification #: 41320  
Connecticut Certification #: PH-0216  
Delaware Certification: FL NELAC Reciprocity  
Florida Certification #: E83079  
Georgia Certification #: 955  
Guam Certification: FL NELAC Reciprocity  
Hawaii Certification: FL NELAC Reciprocity  
Illinois Certification #: 200068  
Indiana Certification: FL NELAC Reciprocity  
Kansas Certification #: E-10383  
Louisiana Certification #: FL NELAC Reciprocity  
Louisiana Environmental Certificate #: 05007  
Maryland Certification: #346  
Michigan Certification #: 9911  
Mississippi Certification: FL NELAC Reciprocity  
Missouri Certification #: 236  
Montana Certification #: Cert 0074

Nebraska Certification: NE-OS-28-14  
Nevada Certification: FL NELAC Reciprocity  
New York Certification #: 11608  
North Carolina Environmental Certificate #: 667  
North Carolina Certification #: 12710  
Oklahoma Certification #: D9947  
Pennsylvania Certification #: 68-00547  
Puerto Rico Certification #: FL01264  
South Carolina Certification: #96042001  
Tennessee Certification #: TN02974  
Texas Certification: FL NELAC Reciprocity  
US Virgin Islands Certification: FL NELAC Reciprocity  
Virginia Environmental Certification #: 460165  
Wyoming Certification: FL NELAC Reciprocity  
West Virginia Certification #: 9962C  
Wisconsin Certification #: 399079670  
Wyoming (EPA Region 8): FL NELAC Reciprocity

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## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: SR 60 Grade Separation\*  
Pace Project No.: 35270444

Lab ID	Sample ID	Matrix	Date Collected	Date Received
35270444001	SB-1	Solid	10/13/16 10:50	10/13/16 13:15
35270444002	SB-2	Solid	10/13/16 11:00	10/13/16 13:15
35270444003	SB-3	Solid	10/13/16 10:30	10/13/16 13:15
35270444004	SB-4	Solid	10/13/16 10:10	10/13/16 13:15

## REPORT OF LABORATORY ANALYSIS

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### SAMPLE ANALYTE COUNT

Project: SR 60 Grade Separation\*

Pace Project No.: 35270444

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
35270444001	SB-1	EPA 6010	CKJ	1	PASI-O
		ASTM D2974-87	MLO	1	PASI-O
35270444002	SB-2	EPA 6010	CKJ	1	PASI-O
		ASTM D2974-87	MLO	1	PASI-O
35270444003	SB-3	EPA 6010	CKJ	1	PASI-O
		ASTM D2974-87	MLO	1	PASI-O
35270444004	SB-4	EPA 6010	CKJ	1	PASI-O
		ASTM D2974-87	MLO	1	PASI-O

### REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: SR 60 Grade Separation\*

Pace Project No.: 35270444

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**Sample: SB-1**      **Lab ID: 35270444001**      Collected: 10/13/16 10:50      Received: 10/13/16 13:15      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Arsenic	<b>0.32 U</b>	mg/kg	0.65	0.32	1	10/17/16 13:46	10/18/16 07:48	7440-38-2	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	<b>25.3</b>	%	0.10	0.10	1		10/17/16 10:14		

## REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: SR 60 Grade Separation\*

Pace Project No.: 35270444

**Sample: SB-2**      **Lab ID: 35270444002**      Collected: 10/13/16 11:00      Received: 10/13/16 13:15      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>	Analytical Method: EPA 6010    Preparation Method: EPA 3050								
Arsenic	<b>0.28 U</b>	mg/kg	0.56	0.28	1	10/17/16 13:46	10/18/16 08:12	7440-38-2	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	<b>16.2</b>	%	0.10	0.10	1		10/17/16 10:14		

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: SR 60 Grade Separation\*

Pace Project No.: 35270444

**Sample: SB-3**      **Lab ID: 35270444003**      Collected: 10/13/16 10:30      Received: 10/13/16 13:15      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>	Analytical Method: EPA 6010    Preparation Method: EPA 3050								
Arsenic	<b>0.57 I</b>	mg/kg	0.67	0.33	1	10/17/16 13:46	10/18/16 08:16	7440-38-2	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	<b>15.3</b>	%	0.10	0.10	1		10/17/16 10:14		

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: SR 60 Grade Separation\*

Pace Project No.: 35270444

**Sample: SB-4**      **Lab ID: 35270444004**      Collected: 10/13/16 10:10      Received: 10/13/16 13:15      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Arsenic	<b>0.33 U</b>	mg/kg	0.66	0.33	1	10/17/16 13:46	10/18/16 08:20	7440-38-2	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	<b>4.2</b>	%	0.10	0.10	1		10/17/16 10:15		

### REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA

Project: SR 60 Grade Separation\*

Pace Project No.: 35270444

QC Batch: 326430

Analysis Method: EPA 6010

QC Batch Method: EPA 3050

Analysis Description: 6010 MET Solid

Associated Lab Samples: 35270444001, 35270444002, 35270444003, 35270444004

METHOD BLANK: 1742045

Matrix: Solid

Associated Lab Samples: 35270444001, 35270444002, 35270444003, 35270444004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Arsenic	mg/kg	0.27 U	0.54	0.27	10/18/16 07:39	

LABORATORY CONTROL SAMPLE: 1742046

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/kg	14	13.5	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1742047 1742048

Parameter	Units	35270444001		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	Spike Conc.	MS Result	MSD Result	% Rec	% Rec					
Arsenic	mg/kg	0.32 U	18.4	16.2	17.1	15.0	93	93	75-125	13	20		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA

Project: SR 60 Grade Separation\*

Pace Project No.: 35270444

QC Batch: 326321

Analysis Method: ASTM D2974-87

QC Batch Method: ASTM D2974-87

Analysis Description: Dry Weight/Percent Moisture

Associated Lab Samples: 35270444001, 35270444002, 35270444003, 35270444004

SAMPLE DUPLICATE: 1741674

Parameter	Units	35270444001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	25.3	26.8	6	10	

SAMPLE DUPLICATE: 1741675

Parameter	Units	35270460009 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	20.9	21.1	1	10	

SAMPLE DUPLICATE: 1741676

Parameter	Units	35270617003 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	4.3	4.4	2	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

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## QUALIFIERS

Project: SR 60 Grade Separation\*  
Pace Project No.: 35270444

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### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.  
ND - Not Detected at or above adjusted reporting limit.  
MDL - Adjusted Method Detection Limit.  
PQL - Practical Quantitation Limit.  
RL - Reporting Limit.  
S - Surrogate  
1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.  
Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.  
LCS(D) - Laboratory Control Sample (Duplicate)  
MS(D) - Matrix Spike (Duplicate)  
DUP - Sample Duplicate  
RPD - Relative Percent Difference  
NC - Not Calculable.  
SG - Silica Gel - Clean-Up  
U - Indicates the compound was analyzed for, but not detected.  
N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.  
Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.  
TNI - The NELAC Institute.

### LABORATORIES

PASI-O Pace Analytical Services - Ormond Beach

### ANALYTE QUALIFIERS

I The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.  
U Compound was analyzed for but not detected.

## REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: SR 60 Grade Separation\*

Pace Project No.: 35270444

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
35270444001	SB-1	EPA 3050	326430	EPA 6010	326459
35270444002	SB-2	EPA 3050	326430	EPA 6010	326459
35270444003	SB-3	EPA 3050	326430	EPA 6010	326459
35270444004	SB-4	EPA 3050	326430	EPA 6010	326459
35270444001	SB-1	ASTM D2974-87	326321		
35270444002	SB-2	ASTM D2974-87	326321		
35270444003	SB-3	ASTM D2974-87	326321		
35270444004	SB-4	ASTM D2974-87	326321		

### REPORT OF LABORATORY ANALYSIS

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WO#: 35270444



35270444

TODY / Analytical Request Document

LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A

Required Client Information:

Company: Tierra  
 Address: 7351 Temple Terrace Hwy  
 Email To: Cgarth@tierraeng.com  
 Phone: 813-989-1354 Fax:  
 Requested Due Date/TAT: 2 days

Required Project Information:

Report To: Chris Garth  
 Copy To:  
 Purchase Order No.:  
 Project Name: 5260 Grade Separation  
 Project Number: 6511-65-022E

Section C

Invoice Information:

Attention:  
 Company Name:  
 Address:  
 Pace Quote Reference:  
 Pace Project Manager:  
 Pace Profile #:

Page: 1 of 1  
 1702156

REGULATORY AGENCY  
 NPDES  GROUND WATER  DRINKING WATER  
 UST  RCRA  OTHER \_\_\_\_\_  
 Site Location  
 STATE: FL

ITEM #	Section D Required Client Information	Matrix Codes MATRIX / CODE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives										Analysis Test ↓	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.			
					COMPOSITE START		COMPOSITE END/GRAB				Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol	Other								
					DATE	TIME	DATE	TIME			Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N								
1	SB-1		SL	C			10/13/16	1050	1	1																
2	SB-2		SL	C			↓	1100	1	1																
3	SB-3		SL	C			↓	1030	1	1																
4	SB-4		SL	C			↓	1010	1	1																

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS						
	B. O'Connell Inc.	10/7/16	1500	Sammy Awad	10/7/16	1500							
	f. Samy Awad	10/13/16	1315	B. O'Connell Inc.	10/13/16	1315	R.O	H	N	Y			
	P. J. Delaney	10/14/16	2000	FLY	10/13/16	2000							
	FLX	10/13/16	2355	Michelle Pace	10/13/16	2355							

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Sammy Awad

SIGNATURE of SAMPLER: Sammy Awad

DATE Signed (MM/DD/YY): 10/13/16

Temp in °C  
 Received on Ice (Y/N)  
 Custody Sealed Cooler (Y/N)  
 Samples Intact (Y/N)

ORIGINAL

\*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.



Document Name: Sample Condition Upon Receipt Form  
 Document No.: F-FL-C-007 rev. 10  
 Document Revised: August 10, 2016  
 Issuing Authority: Pace Florida Quality Office

**Sample Condition Upon Receipt Form (SCUR)**

**Project #**

**WO#: 35270444**

**Project Manager:**

**PM: LAP Due Date: 10/17/16**

**Client:**

**CLIENT: 37-TIETPA**

**Date and initials of person:**

Examining contents: CLG  
 Label: 10/14/16  
 Deliver: N/A  
 pH: N/A

Thermometer Used: I-2269 Date: 10/13/16 Time: 1355 Initials: CLG

Samples shorted to lab (if Yes, complete) Shorted Date: \_\_\_\_\_ Shorted Time: \_\_\_\_\_ Qty: \_\_\_\_\_

Cooler #1 Temp. °C 0.9 (Visual) 0.2 (Correction Factor) 1.1 (Actual)  Samples on ice, cooling process has begun  
 Cooler #2 Temp. °C \_\_\_\_\_ (Visual) \_\_\_\_\_ (Correction Factor) \_\_\_\_\_ (Actual)  Samples on ice, cooling process has begun  
 Cooler #3 Temp. °C \_\_\_\_\_ (Visual) \_\_\_\_\_ (Correction Factor) \_\_\_\_\_ (Actual)  Samples on ice, cooling process has begun  
 Cooler #4 Temp. °C \_\_\_\_\_ (Visual) \_\_\_\_\_ (Correction Factor) \_\_\_\_\_ (Actual)  Samples on ice, cooling process has begun  
 Cooler #5 Temp. °C \_\_\_\_\_ (Visual) \_\_\_\_\_ (Correction Factor) \_\_\_\_\_ (Actual)  Samples on ice, cooling process has begun  
 Cooler #6 Temp. °C \_\_\_\_\_ (Visual) \_\_\_\_\_ (Correction Factor) \_\_\_\_\_ (Actual)  Samples on ice, cooling process has begun

Courier:  Fed Ex  UPS  USPS  Client  Commercial  Pace  Other  
 Shipping Method:  First Overnight  Priority Overnight  Standard Overnight  Ground  Other  
 Billing:  Recipient  Sender  Third Party  Unknown

Tracking # \_\_\_\_\_

Custody Seal on Cooler/Box Present:  Yes  No Seals intact:  Yes  No Ice: Wet  Blue  None  
 Packing Material:  Bubble Wrap  Bubble Bags  None  Other \_\_\_\_\_

	Yes	No	Seals intact:	Yes	No	Ice:	Wet	Blue	None
Chain of Custody Present	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Chain of Custody Filled Out	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Relinquished Signature & Sampler Name COC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Samples Arrived within Hold Time	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Rush TAT requested on COC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Sufficient Volume	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Correct Containers Used	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Containers Intact	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Sample Labels match COC (sample IDs & date/time of collection)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
All containers needing acid/base preservation have been checked.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
All Containers needing preservation are found to be in compliance with EPA recommendation:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Exceptions: VOA, Coliform, TOC, O&G, Carbamates									
Headspace in VOA Vials? (>6mm):	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Trip Blank Present:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				

**Client Notification/ Resolution:** \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Person Contacted: \_\_\_\_\_

**Comments/ Resolution (use back for additional comments):**  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Project Manager Review: \_\_\_\_\_ Date: \_\_\_\_\_

# **Appendix F**

Soil Boring Logs

# BORING LOG

Pond 1-3

Boring/Well Number: <b>SB-1</b>		Permit Number: <b>NA</b>		FDEP Facility Identification Number: <b>NA</b>	
Site Name: <b>SR 60 Grade Separation</b> <b>6511-15-022E</b>		Borehole Start Date: <b>10/13/16</b> End Date: <b>10/13/16</b>		Borehole Start Time: <b>1045</b> End Time: <b>1650</b> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	
Environmental Contractor: <b>TIERRA, INC.</b>		Geologist's Name: <b>NA</b>		Environmental Technician's Name: <b>Sammy Awad</b>	
Drilling Company: <b>TIERRA, INC.</b>		Pavement Thickness (inches): <b>NA</b>		Borehole Diameter (inches): <b>3.25</b>	
Drilling Method(s): <b>HA</b>		Apparent Borehole DTW (in feet from soil moisture content): <b>3</b>		Measured Well DTW (in feet after water recharges in well): <b>NA</b>	
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other (describe if other or multiple items are checked):		OVA (list model and check type): <b>NA</b> <input type="checkbox"/> FID <input type="checkbox"/> PID			
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	SB-1						1	R. F/S		D	SB-1 @ 0-2'
							2	Gr. F/S			
							3	Lgt Gr. F/S			
							3	Br Clayey sand			
							4				
							6	Br F/S			
							7	EOB			
					8	No debris encountered					
					9	Boring terminated due to collapse					
					10						
					11						
					12						

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

*Pond 1-3*

Boring/Well Number: <b>SB-2</b>		Permit Number: <b>NA</b>		FDEP Facility Identification Number: <b>NA</b>	
Site Name: <b>SE GO Grade Separation 6511-15-022E</b>		Borehole Start Date: <b>10/13/16</b> End Date: <b>10/13/16</b>		Borehole Start Time: <b>1055</b> End Time: <b>1100</b> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	
Environmental Contractor: <b>TIERRA, INC.</b>		Geologist's Name: <b>NA</b>		Environmental Technician's Name: <b>Sammy Awad</b>	
Drilling Company: <b>TIERRA, INC.</b>		Pavement Thickness (inches): <b>NA</b>		Borehole Diameter (inches): <b>3.25</b>	
Drilling Method(s): <b>HA</b>		Apparent Borehole DTW (in feet from soil moisture content): <b>4</b>		Measured Well DTW (in feet after water recharges in well): <b>NA</b>	
OVA (list model and check type): <b>NA</b> <input type="checkbox"/> FID <input type="checkbox"/> PID					
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other <i>(describe if other or multiple items are checked):</i>					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description <small>(include grain size based on USCS, odors, staining, and other remarks)</small>	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples <small>(list sample number and depth or temporary screen interval)</small>
<b>HA</b>	<b>SB-2</b>						1	<b>Br F/s</b>		<b>D</b>	<b>SB-2@0-2'</b>
							2	<b>Lgt Br F/s</b>			
							3	<b>Br. Clayey Sand</b>		<b>3</b>	
							4				
							5				
							6	<b>Br F/s</b>			
							7	<b>EOB</b>			
							8	<b>No debris encountered</b>			
							9	<b>Boring terminated due to collapse</b>			
							10				
							11				
							12				

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings  
 Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

# BORING LOG

**Outfall Ditch**

Boring/Well Number: <b>SB-3</b>		Permit Number: <b>NA</b>		FDEP Facility Identification Number: <b>NA</b>	
Site Name: <b>SR 60 Grade Separation 65115-022E</b>		Borehole Start Date: <b>10/13/10</b> End Date: <b>10/15/10</b>		Borehole Start Time: <b>1025</b> End Time: <b>1030</b> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	
Environmental Contractor: <b>TIERRA, INC.</b>		Geologist's Name: <b>NA</b>		Environmental Technician's Name: <b>Sammy Wood</b>	
Drilling Company: <b>TIERRA, INC.</b>		Pavement Thickness (inches): <b>NA</b>		Borehole Diameter (inches): <b>3.25</b>	
Drilling Method(s): <b>HA</b>		Apparent Borehole DTW (in feet from soil moisture content): <b>3</b>		Measured Well DTW (in feet after water recharges in well): <b>NA</b>	
				OVA (list model and check type): <b>NA</b> <input type="checkbox"/> FID <input type="checkbox"/> PID	
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other (describe if other or multiple items are checked):					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
<b>HA</b>	<b>SB-3</b>						1	<b>Lgt Br. Sandy Clay</b>		<b>D</b>	<b>SB-3@0-2'</b>
							2	<b>Br. Sandy Clay</b>			
							3	<b>EOB</b>		<b>3</b>	
							4				
							5	<b>No debris encountered</b>			
							6				
							7				
							8				
							9				
							10				
							11				
							12				

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings  
 Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

# BORING LOG

**Outfall Ditch**

Boring/Well Number: <b>SB-4</b>		Permit Number: <b>NA</b>		FDEP Facility Identification Number: <b>NA</b>	
Site Name: <b>SE 60 Grade Separation 6511-15-022E</b>		Borehole Start Date: <b>10/13/16</b> End Date: <b>10/13/16</b>	Borehole Start Time: <b>1005</b> End Time: <b>1010</b>	<input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	<input checked="" type="checkbox"/> AM <input type="checkbox"/> PM
Environmental Contractor: <b>TIERRA, INC.</b>		Geologist's Name: <b>NA</b>		Environmental Technician's Name: <b>Sammi Alwad</b>	
Drilling Company: <b>TIERRA, INC.</b>		Pavement Thickness (inches): <b>NA</b>	Borehole Diameter (inches): <b>3.25</b>	Borehole Depth (feet): <b>3</b>	
Drilling Method(s): <b>HA</b>	Apparent Borehole DTW (in feet from soil moisture content): <b>3</b>	Measured Well DTW (in feet after water recharges in well): <b>NA</b>	OVA (list model and check type): <b>NA</b> <input type="checkbox"/> FID <input type="checkbox"/> PID		
Disposition of Drill Cuttings [check method(s)]: (describe if other or multiple items are checked):					
<input type="checkbox"/> Drum <input type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other					
Borehole Completion (check one):					
<input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
<b>HA</b>	<b>SB-4</b>						1	<b>Gray F/S</b>		<b>D</b>	<b>SB-4@0-2'</b>
							2	<b>Br F/S</b>			
							3	<b>EUB</b>		<b>3</b>	
							4	<b>No debris encountered</b>			
							5				
							6				
							7				
							8				
							9				
							10				
							11				
							12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated