

# Daily Progress Report

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## **Aliceville, AL Derailment Response Alabama & Gulf Coast November 24, 2013**

In accordance with the United States Environmental Protection Agency (USEPA) Removal Administrative Order (Order) issued to Alabama & Gulf Coast Railway, LLC., (AGR) on November 19, 2013, AGR provides the following information associated with the emergency response activities at the derailment site for the past 24 hours. This process is provided to ensure compliance with section 20 of the Removal Administrative Order prescribing daily progress reports. The following operational and environmental response actions have occurred in the last 24 hours.

### **Section 1: Operations**

#### **Section 1.1: Fire Operations**

*Fire operations support scaled down as of 11/22/2013 in conjunction with the completion of transfer operations. However, firefighting measures are still in place on standby in locations susceptible to fire.*

#### **Section 1.2: Transfer Operations**

*Transfer operations completed on November 21, 2013. Attachment A will no longer include transfer operations.*

#### **Section 1.3: Oil Recovery Operations**

Oil recovery operations continued in the last 24 hours in the slough on the east and west sides of track bed. No skimming operations were performed. 645 bags of oil recovery pads, sorbent boom and personal protection equipment were removed to secure rolloff boxes in the last 24 hours. Daily and cumulative totals of crude oil skimmed and bags counted and collected from the slough and oil-related waste is included in Attachment A.

#### **Section 1.4: Wrecking Operations**

*Primary wrecking operations were suspended on 11/21/2013.*

## **Section 1.5: Scrapping**

***Scrapping operations have been suspended as of 11/21/2013. Scrapping operations are projected to resume on Tuesday, November 26, as part of demolition operations for transport and recycling.***

## **Section 1.6: Construction and Site Prep**

During the last 24 hours no new construction activities were initiated.

## **Section 1.7: Tankcar Decontamination**

During the last 24 hours no railcars were decontaminated for scrapping. Scrapping operations are currently halted and projected to resume on November 26, 2013.

## **Section 2: Environmental**

### **Section 2.1: Air Monitoring (Work Area)**

During the last 24 hours real-time air monitoring occurred in and around the vicinity of the derailment. Attachment B provides a summary report of real-time work area air monitoring results.

### **Section 2.2: Air Monitoring (Community)**

***As of November 21, 2013, real-time air monitoring efforts in the community have concluded.***

### **Section 2.3: Air Monitoring (Worker Exposure)**

In the last 24 hours worker exposure has been assessed using personal sampling badges. These badges are deployed on a representative population of workers from the similar exposure groups (SEGs). The SEGs are defined by work task and their potential for exposure to crude oil vapor. A summary report for the worker exposure assessment is included in Attachment C. The results reported are likely retrospective based on the time delay in laboratory analysis. In the case that new lab results have not been received at the time of issuing this report, the most recent lab results will be included which may have been reported previously.

### **Section 2.4: Surface Water Sampling**

Surface water sampling has been conducted daily from 1 upstream and 3 downstream locations from November 10, 2013 to November 17, 2013. The samples collected were submitted daily for independent laboratory analyses of volatile organic compounds (VOC), semi-volatile organic compounds (SVOC), and total petroleum hydrocarbons (TPH) diesel range organics (DRO), gasoline range organics (GRO), oil range organics (ORO). The surface water sampling frequency was reduced to weekly sample collection events as approved by USEPA on November 18, 2013. Sample analysis parameters for the weekly sampling events include analysis for benzene, toluene, ethyl benzene and xylene (BTEX) and polycyclic aromatic hydrocarbons (PAH). Surface water samples will be collected and submitted for independent laboratory analyses for precipitation events greater than 0.5 inches in a 24 hour time period. The

weekly or precipitation event samples will be analyzed for BTEX and PAH. The results for surface water samples will be reported in a summary table as Attachment D. As analytical lab results are received, they will be included in the report.

### **Section 2.5: Water Quality Monitoring**

Water quality parameters (e.g., dissolved oxygen (DO), pH, temperature, and conductivity) are collected using an YSI Pro Plus meter concurrent with surface water sampling which are to occur weekly. Attachment D provides a summary report of water quality values obtained in any 24 hour period.

### **Section 2.6: Natural Resources and Wetlands Assessment**

A wetland and natural resources assessment was initiated on November 9, 2013. The natural resources assessment, including counting and documenting numbers and species of trees and animals impacted by the incident, was preliminarily completed on November 10, 2013. The wetland assessment and identification of a similar offsite wetland for comparative purposes was completed on November 13, 2013. Wetland and natural resource assessments continue daily to document additional impacts to the wetland. The natural resources and wetland assessment process will be summarized in the report in a narrative format daily and will result in overall restoration goals for the impacted area. There was no wildlife mortality observed in the last 24 hours. Wildlife mortality associated with this incident is reported in Attachment A.

### **Section 2.7: Boom Maintenance and Monitoring**

Boom deployed throughout the area of operations is being inspected several times daily to document the efficacy of boom deployment and evaluate additional placement/redeployment of booms, as necessary. The boom was inspected in the last 24 hours and was performing as intended.

### **Section 2.8: Contaminated Soil Removal and Sample Collection**

Contaminated soil excavation occurred in the last 24 hours. 51 loads of soil were staged on November 24, 2013. Excavation began on November 23, 2013 to remove impacted soil and fill material in the wetland. A total of 36 loads of soil were staged on the first day of removal. 87 total loads of soil have been staged to date.

As additional environmental tasks are performed (e.g. waste classification, soil confirmation sampling, etc.), they will be summarized and provided in the same format as the environmental tasks above. As operational tasks are concluded, they will be removed from the daily summary. All data provided in the daily summary reports is considered preliminary and is to be utilized for informational purposes only.



**All data collected during the response will be provided in the final report required by the Order due on March 3, 2014. All data provided in the final report will be reviewed by quality assurance, quality control personnel to ensure the validity of all data collected.**

Sincerely,

**Jason Davis, CTEH<sup>®</sup>**  
**Environmental Scientist Project Manager**  
**(501) 960-5531**  
**[jdavis@cteh.com](mailto:jdavis@cteh.com)**



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## **Attachment A**

### **Recovery Estimates**

## Recovery Estimate and Wildlife Impact

**Aliceville, AL Derailment Response  
Alabama & Gulf Coast  
November 24, 2013**

**Table 1: Discharged Volume Estimate**

	Compromised crude oil car count	Est. Volume Discharged (gal )	
		25% discharge rate	75% discharge rate
Empty	11	325600	325600
Load/Partial	15	111000	333000
Transferred	-	203080	203080
<b>Total</b>	<b>26</b>	<b>233520</b>	<b>455520</b>

\*All figures are considered preliminary and are subject to change

**Table 2: Recovery from Environment**

Reported	Oiled solids recovered (yd <sup>3</sup> )	Oiled solids loaded (bags)	Skimming ops recovered (gal)
11/10/2013	10	-	-
11/11/2013	10	-	-
11/12/2013	10	-	-
11/13/2013	22	-	-
11/14/2013	16	-	2184
11/15/2013	8	608	1400
11/16/2013	15	460	1400
11/17/2013	13	801	3000
11/18/2013	8	439	700
11/19/2013	18	2046	1200
11/20/2013	9	715	200
11/21/2013	6	298	400
11/22/2013	8	463	250
11/23/2013	20	583	0
11/24/2013	13	645	0
<b>Total</b>	<b>186</b>	<b>7058</b>	<b>10734</b>

\*All figures are considered preliminary and are subject to change



**Table 3: Recovery from Tankcar Transfer**

<b>Reported</b>	<b>Tankcar Identifier</b>	<b>Transferred (bbl)</b>	<b>Transferred (gal)</b>
11/14/2013	N-5	595	25000
11/15/2013	208516	600	25200
11/15/2013	208926	610	25620
11/16/2013	N-4	180	7560
11/16/2013	N-2	150	6300
11/17/2013	N-1	180	7560
11/17/2013	207353	220	9240
11/18/2013	SW1	45	1890
11/18/2013	209108	190	7980
11/18/2013	S3	85	3570
11/18/2013	S2	120	5040
11/19/2013	S2	220	9240
11/19/2013	S1	280	11760
11/19/2013	X	330	13860
11/20/2013	X	5	210
11/20/2013	S1	195	8190
11/20/2013	S5	90	3780
11/20/2013	S6	60	2520
11/20/2013	208858	110	4620
11/21/2013	208858	570	23940
<b>Total</b>		<b>4835</b>	<b>203080</b>

\*All figures are considered preliminary and are subject to change

**Transfer operations concluded on 11/21/2013.**



**Table 4: Fish and Wildlife Impact**

<b>Fish</b>		<b>Wildlife</b>	
<b>Species</b>	<b>Count</b>	<b>Species</b>	<b>Count</b>
Spotted Gar	92	Snapping Turtle	3
Sunfish SPP (2-3 species)	247	Mud Turtle	2
Largemouth Bass	8	Three Toed Amphiuma	1
Pretty Shier	83	Beaver	1
Lake Chubsucker	9	Muskrat	1
White Crappie	1	<b>Total</b>	<b>8</b>
Banded Pygmy Sunfish	1		
Redfin Pike	2		
Bowfish	12		
<b>Total</b>	<b>455</b>		

\*All figures are considered preliminary and are subject to change

Fish count comes from 44 bags from the east side of the rail and 25 bags from the west side of the rail.



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## **Attachment B**

### **Real-Time Air Monitoring Summary**

## Aliceville, AL Derailment Response Alabama & Gulf Coast November 24, 2013

*Note: The information provided below has not been processed by the QA/QC department.*

This data report discusses air monitoring data recorded on 11/24/13 00:00 to 11/25/13 23:59 in support of mitigation and remediation operations conducted for a crude oil train derailment near Aliceville, AL. Real-time air monitoring for Volatile Organic Compounds (VOCs), Benzene, and the Lower Explosive Limit (LEL) was conducted using hand-held instruments such as the RAESystems® MultiRAE, and Gastec® colorimetric detector tubes. Table 1 contains a summary of handheld data. Fixed station monitoring for VOCs, LEL was conducted using RAESystems® AreaRAEs. Table 2 contains a summary of AreaRAE data.

Table 1: Manually-Logged Real-Time Air Monitoring  
November 24, 2013 00:00 to November 25, 2013 23:59

Location Category	Analyte	Number of Readings	Number of Detections	Average of Detects	Maximum Concentration
<b>Work Area</b>	<b>Benzene</b>	13	0	N/A	< 0.05 ppm
	<b>CO</b>	2	1	2 ppm	2 ppm
	<b>LEL</b>	2	0	N/A	< 1%
	<b>VOC</b>	69	1	0.5 ppm	0.5 ppm

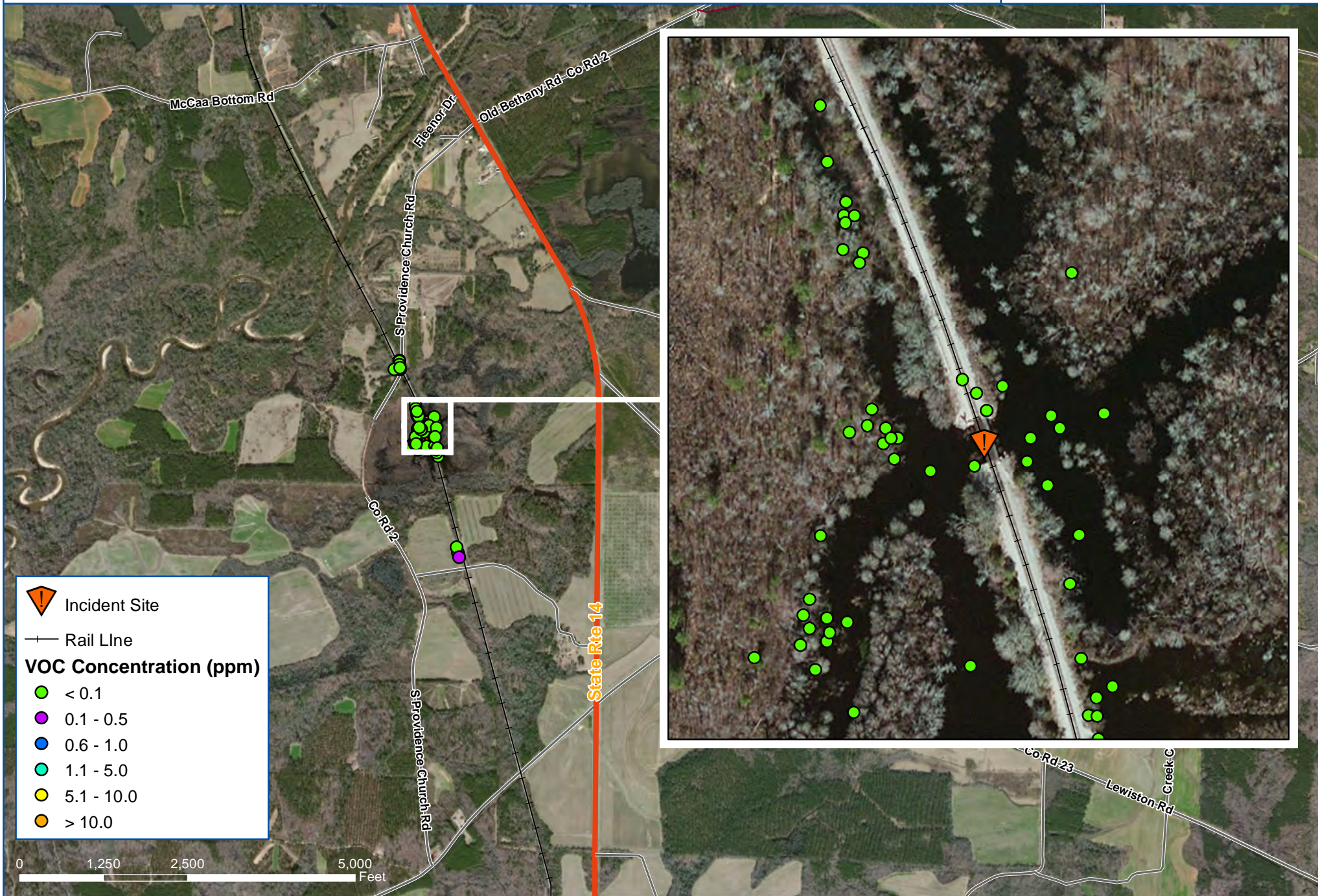
Table 2: AreaRAE Data  
November 24, 2013 00:00 to November 25, 2013 23:59

Unit	Serial Number	Analyte	Number of Readings	Number of Detections	Minimum Concentration	Maximum Concentration
Unit 4	292-504132	<b>LEL</b>	2015	0	NA	< 1 %
		<b>VOC</b>	2015	0	NA	< 0.1 ppm
Unit 6	292-504120	<b>LEL</b>	2093	0	NA	< 1 %
		<b>VOC</b>	2093	0	NA	< 0.1 ppm
Unit 7	292-504133	<b>LEL</b>	1733	0	NA	< 1 %
		<b>VOC</b>	1733	0	NA	< 0.1 ppm
Unit 8	292-504118	<b>LEL</b>	1894	0	NA	< 1 %
		<b>VOC</b>	1894	0	NA	< 0.1 ppm
Unit 9	292-504130	<b>LEL</b>	1832	0	NA	< 1 %
		<b>VOC</b>	1832	6	0.1 ppm	<b>0.3 ppm</b>
Unit 10	292-504128	<b>LEL</b>	1934	0	NA	< 1%
		<b>VOC</b>	1934	7	0.1 ppm	2 ppm

# Manually-Logged Real-Time VOC Concentrations



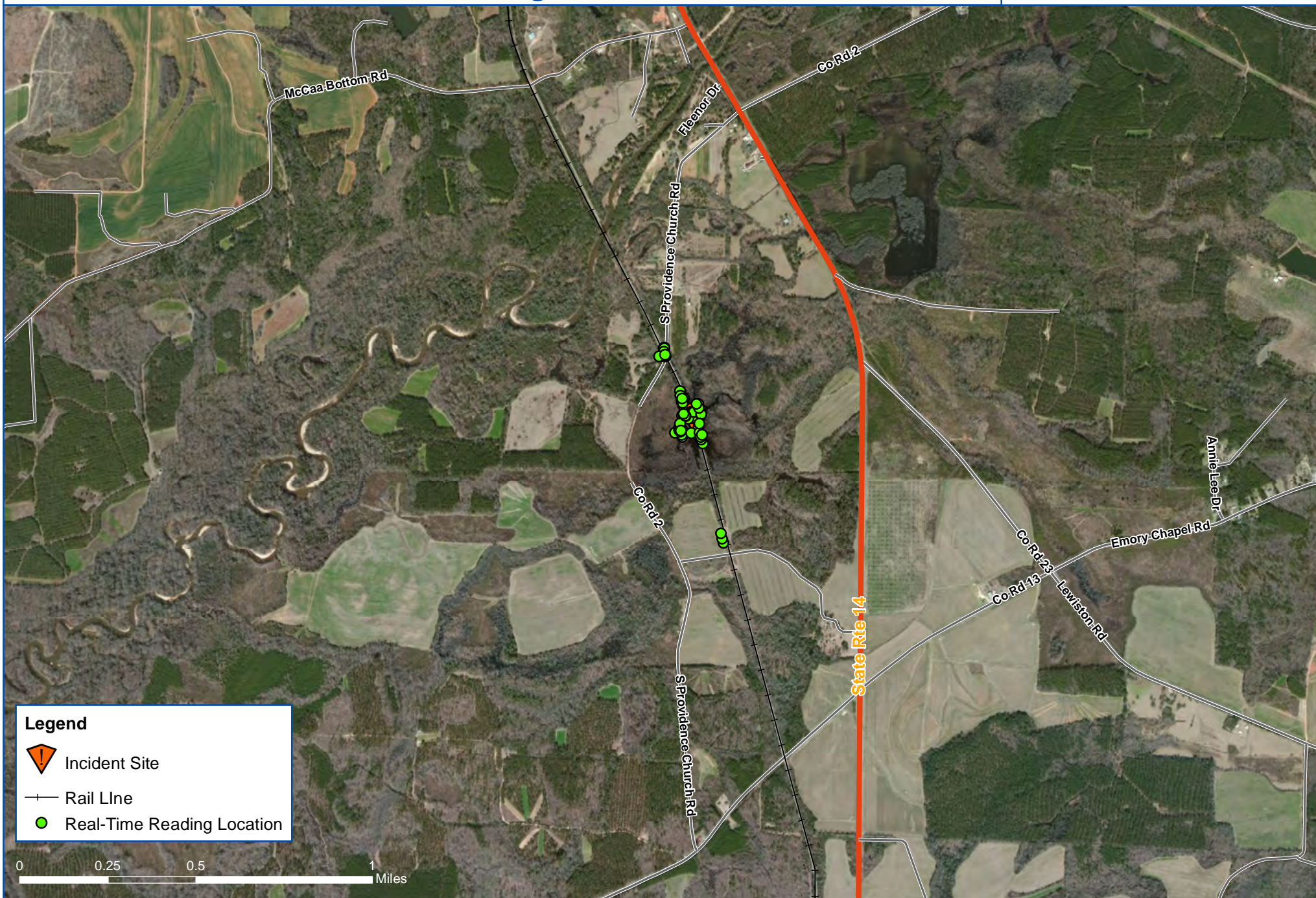
Project: 105723  
Client: Alabama Gulf Coast Railway  
City: Aliceville, AL  
County: Pickens



# Manually-Logged Real-Time Reading Locations



Project: 105723  
Client: Alabama Gulf Coast Railway  
City: Aliceville, AL  
County: Pickens



## Legend



Incident Site



Rail Line



Real-Time Reading Location

0 0.25 0.5 1 Miles

# Manually-Logged Real-Time Benzene Concentrations



Project: 105723  
Client: Alabama Gulf Coast Railway  
City: Aliceville, AL  
County: Pickens



# Aliceville Derailment AreaRAE Locations



Project: 105723  
Client: Alabama Gulf Coast Railway  
City: Aliceville, AL  
County: Pickens





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## **Attachment C**

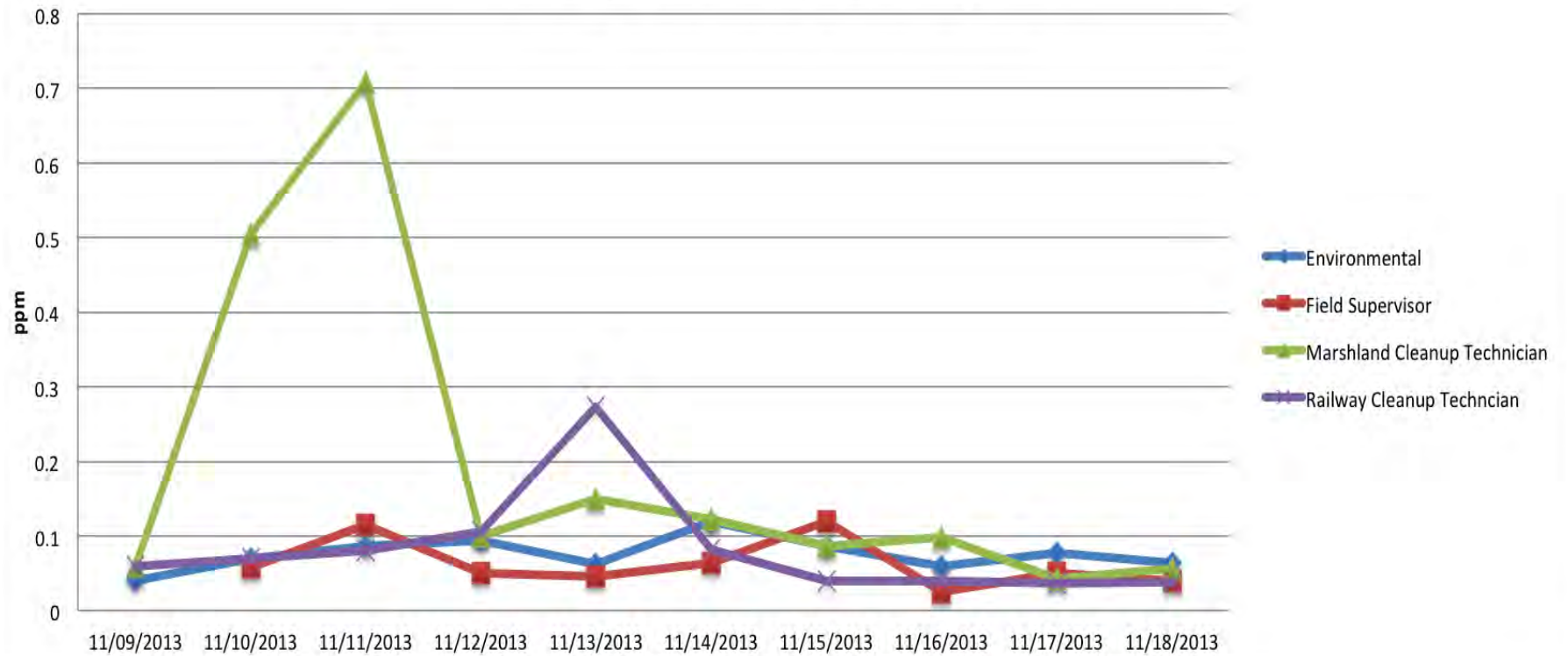
### **Worker Exposure Assessment**

### Worker Exposure Summary for Samples Collected 11/9 through 11/18

Similar Exposure Groups/Tasks	Samples Collected	8-hour TWA			
		Minimum (ppm)	Maximum (ppm)	Average (ppm)	Between Worker Variability
<b>Environmental</b>	<b>39</b>	<b>0.03</b>	<b>0.3</b>	<b>0.08</b>	<b>0.40%</b>
CTEH-Air	31	0.03	0.3	0.09	0.45%
CTEH-Water	8	0.03	0.1	0.04	0.06%
<b>Field Supervisor</b>	<b>19</b>	<b>0.02</b>	<b>0.2</b>	<b>0.06</b>	<b>0.22%</b>
Field Supervision	19	0.02	0.2	0.06	0.22%
<b>Marshland Cleanup Technician</b>	<b>67</b>	<b>0.03</b>	<b>2.1</b>	<b>0.15</b>	<b>8.42%</b>
Materials Handling	67	0.03	2.1	0.15	8.42%
<b>Railway Cleanup Technician</b>	<b>55</b>	<b>0.02</b>	<b>0.89</b>	<b>0.09</b>	<b>2.00%</b>
Machine Excavation Operation	22	0.02	0.1	0.06	0.09%
Machine Wrecking Operation	2	0.04	0.2	0.12	1.28%
Road & Infrastructure Building Operations	8	0.04	0.6	0.13	3.61%
Transfer Operations	23	0.02	0.89	0.10	3.42%
<b>Grand Total</b>	<b>180</b>	<b>0.02</b>	<b>2.1</b>	<b>0.11</b>	<b>3.93%</b>

\* All sample results are included. For samples where benzene was not detected, the LOD was included as a conservative approach of utilizing censored data.

**Average Benzene by Date Sampled**





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## **Attachment D**

# **Surface Water Monitoring and Sampling Results**

**Table1: BTEX Results Water Well (11/14 & 15/2013)**

[illegible]

**Table 2: PAH Results Water Well (11/14 & 15/2013)**

[illegible]

**Table 4: Method Target Analytes Water Well (11/14 & 15/2013)**

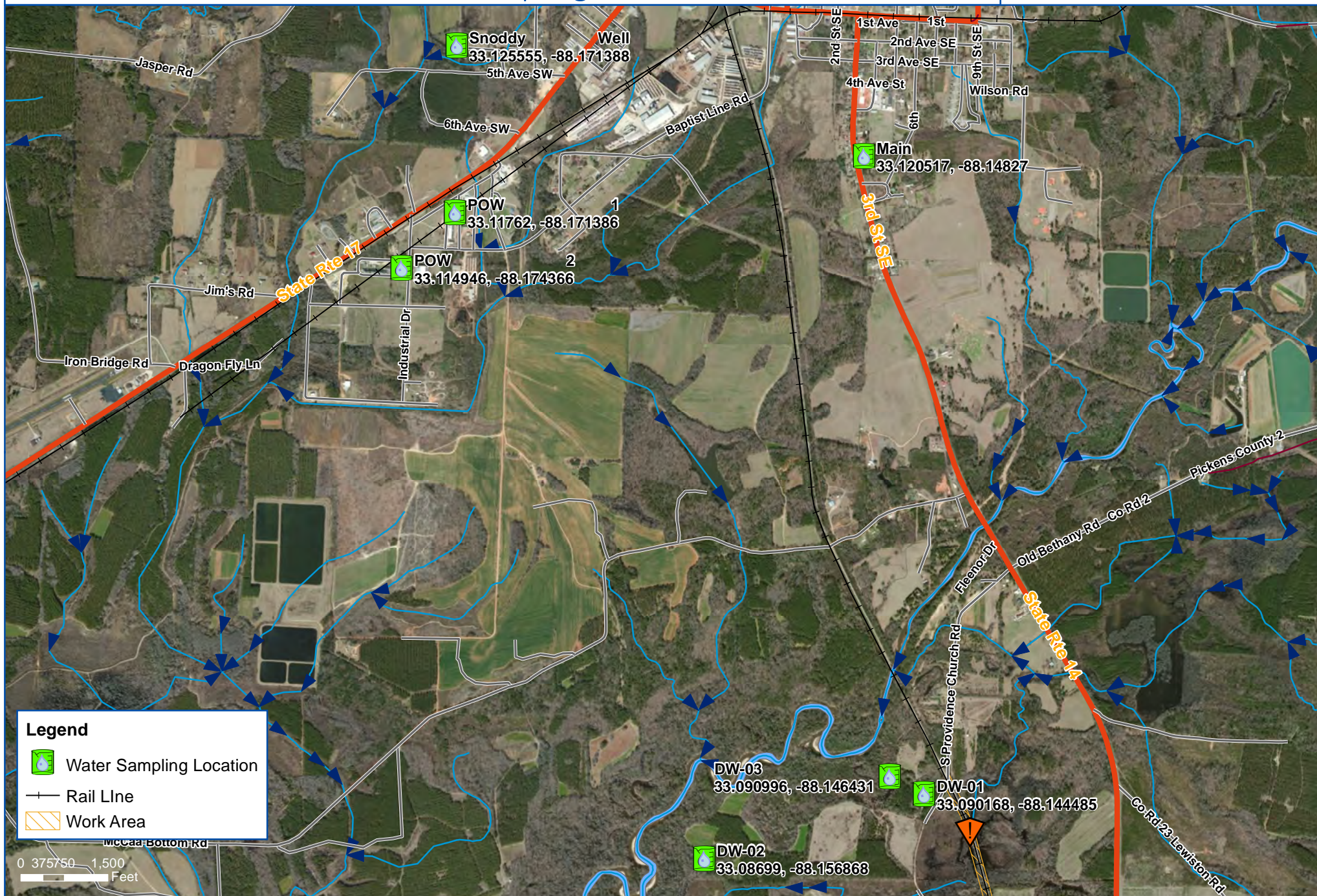
		DW-01	DW-02	DW-03	Main	POW 1	POW 2	Snoddy Well
Analyte	Analytical Method	AVAL1115GW005	AVAL1115GW006	AVAL1115GW007	AVAL1114GW004	AVAL1114GW002	AVAL1114GW001	AVAL1114GW003
trans-1,3-Dichloropropene	E524	(U) 0.00048	(U) 0.00048	(U) 0.00048	(U) 0.00048	(U) 0.00048	(U) 0.00048	(U) 0.00048
trans-1,2-Dichloroethene	E524	(U) 0.00024	(U) 0.00024	(U) 0.00024	(U) 0.00024	(U) 0.00024	(U) 0.00024	(U) 0.00024
o-Xylene	E524	(U) 0.00027	(U) 0.00027	(U) 0.00027	(U) 0.00027	(U) 0.00027	(U) 0.00027	(U) 0.00027
m-Xylene & p-Xylene	E524	(U) 0.00042	(U) 0.00042	(U) 0.00042	(U) 0.00042	(U) 0.00042	(U) 0.00042	(U) 0.00042
gamma-BHC (Lindane)	E525	(U) 0.000081	(U) 0.000081	(U) 0.000081	(U) 0.000081	(U) 0.000081	(U) 0.000081	(U) 0.000081
cis-1,3-Dichloropropene	E524	(U) 0.00032	(U) 0.00032	(U) 0.00032	(U) 0.00032	(U) 0.00032	(U) 0.00032	(U) 0.00032
cis-1,2-Dichloroethene	E524	(U) 0.00037	(U) 0.00037	(U) 0.00037	(U) 0.00037	(U) 0.00037	(U) 0.00037	(U) 0.00037
Xylenes, Total	E524	(U) 0.00027	(U) 0.00027	(U) 0.00027	(U) 0.00027	(U) 0.00027	(U) 0.00027	(U) 0.00027
Vinyl chloride	E524	(U) 0.00033	(U) 0.00033	(U) 0.00033	(U) 0.00033	(U) 0.00033	(U) 0.00033	(U) 0.00033
Trichloroethene	E524	(U) 0.00037	(U) 0.00037	(U) 0.00037	(U) 0.00037	(U) 0.00037	(U) 0.00037	(U) 0.00037
Toluene	E524	(U) 0.00023	(U) 0.00023	(U) 0.00023	(U) 0.00023	(U) 0.00023	(U) 0.00023	(U) 0.00023
Tetrachloroethene	E524	(U) 0.0003	(U) 0.0003	(U) 0.0003	(U) 0.0003	(U) 0.0003	(U) 0.0003	(U) 0.0003
Styrene	E524	(U) 0.00028	(U) 0.00028	(U) 0.00028	(U) 0.00028	(U) 0.00028	(U) 0.00028	(U) 0.00028
Simazine	E525	(U) 0.000035	(U) 0.000035	(U) 0.000035	(U) 0.000035	(U) 0.000035	(U) 0.000035	(U) 0.000035
Methylene Chloride	E524	(U) 0.00036	(U) 0.00036	(U) 0.00036	(U) 0.00036	(U) 0.00036	(U) 0.00036	(U) 0.00036
Methyl tert-butyl ether	E524	(U) 0.00026	(U) 0.00026	(U) 0.00026	(U) 0.00026	(U) 0.00026	(U) 0.00026	(U) 0.00026
Methoxychlor	E525	(U) 0.000043	(U) 0.000043	(U) 0.000043	(U) 0.000043	(U *) 0.000043	(U) 0.000043	(U) 0.000043
Hexachlorocyclopentadiene	E525	(U) 0.000042	(U) 0.000042	(U) 0.000042	(U) 0.000042	(U) 0.000042	(U) 0.000042	(U) 0.000042
Hexachlorobenzene	E525	(U) 0.000041	(U) 0.000041	(U) 0.000041	(U) 0.000041	(U) 0.000041	(U) 0.000041	(U) 0.000041
Heptachlor epoxide	E525	(U) 0.00018	(U) 0.00018	(U) 0.00018	(U) 0.00018	(U) 0.00018	(U) 0.00018	(U) 0.00018
Heptachlor	E525	(U) 0.000054	(U) 0.000054	(U) 0.000054	(U) 0.000054	(U) 0.000054	(U) 0.000054	(U) 0.000054
Ethylbenzene	E524	(U) 0.00012	(U) 0.00012	(U) 0.00012	(U) 0.00012	(U) 0.00012	(U) 0.00012	(U) 0.00012
Endrin	E525	(U) 0.000072	(U) 0.000072	(U) 0.000072	(U) 0.000072	(U) 0.000072	(U) 0.000072	(U) 0.000072
Dichlorobromomethane	E524	(U) 0.0001	(U) 0.0001	(U) 0.0001	(U) 0.0001	(U) 0.0001	(U) 0.0001	(U) 0.0001
Dibromomethane	E524	(U) 0.00038	(U) 0.00038	(U) 0.00038	(U) 0.00038	(U) 0.00038	(U) 0.00038	(U) 0.00038
Di(2-ethylhexyl)adipate	E525	(U) 0.0006	(U) 0.0006	(U) 0.0006	(U) 0.0006	(U) 0.0006	(U) 0.0006	(U) 0.0006
Chloromethane	E524	(U) 0.00032	(U) 0.00032	(U) 0.00032	(U) 0.00032	(U) 0.00032	(U) 0.00032	(U) 0.00032
Chloroform	E524	(U) 0.00029	(U) 0.00029	(U) 0.00029	(U) 0.00029	(U) 0.00029	(U) 0.00029	(U) 0.00029
Chloroethane	E524	(U) 0.00033	(U) 0.00033	(U) 0.00033	(U) 0.00033	(U) 0.00033	(U) 0.00033	(U) 0.00033
Chlorodibromomethane	E524	(U) 0.00043	(U) 0.00043	(U) 0.00043	(U) 0.00043	(U) 0.00043	(U) 0.00043	(U) 0.00043
Chlorobenzene	E524	(U) 0.00027	(U) 0.00027	(U) 0.00027	(U) 0.00027	(U) 0.00027	(U) 0.00027	(U) 0.00027
Carbon tetrachloride	E524	(U) 0.00022	(U) 0.00022	(U) 0.00022	(U) 0.00022	(U) 0.00022	(U) 0.00022	(U) 0.00022

[illegible]

# Aliceville Derailment Well Sampling Locations



Project: 105723  
Client: Alabama Gulf Coast Railway  
City: Aliceville, AL  
County: Pickens



**Legend**

- Water Sampling Location
- Rail Line
- Work Area

0 375 750 1,500  
Feet