



Daily Progress Report

**Aliceville, AL Derailment Response
Alabama & Gulf Coast
November 30, 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. 380 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 continued in the last 24 hours. 13 tank cars remain to be scrapped.

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 1.5 tank cars were decontaminated for scrapping.

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 estimates 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

Soil staging operations were suspended for the last 24 hours. 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. 123 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.



CENTER FOR TOXICOLOGY
AND ENVIRONMENTAL HEALTH, LLC

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[®]
Environmental Scientist Project Manager
(501) 960-5531
jdavis@cteh.com



CENTER FOR TOXICOLOGY
AND ENVIRONMENTAL HEALTH,LLC

Attachment A

Recovery Estimates



Recovery Estimate and Wildlife Impact

Aliceville, AL Derailment Response Alabama & Gulf Coast November 30, 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
Total	26	233520	455520

*All figures are considered preliminary and are subject to change

Table 2: Recovery from Environment

Reported	Oiled solids recovered (yd ³)	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
11/25/2013	10	890	0
11/26/2013	20	480	0
11/27/2013	7	660	0
11/28/2013	4	398	0



11/29/2013	6	330	0
11/30/2013	4	380	0
Total	237	10196	10734

*All figures are considered preliminary and are subject to change

Table 3: Recovery from Tankcar Transfer

Reported	Tankcar Identifier	Transferred (bbl)	Transferred (gal)
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
	Total	4835	203080

*All figures are considered preliminary and are subject to change

Transfer operations concluded on 11/21/2013.

**Table 4: Fish and Wildlife Impact**

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

*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.



CENTER FOR TOXICOLOGY
AND ENVIRONMENTAL HEALTH,LLC

Attachment B

Real-Time Air Monitoring Summary

**Aliceville, AL Derailment Response
Alabama & Gulf Coast
November 30, 2013**

Note: The information provided below has not been processed by the QAQC department.

This data report discusses air monitoring data recorded on 11/29/13 00:00 to 11/29/13 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 30, 2013 00:00 to November 30, 2013 23:59**

Location Category	Analyte	Number of Readings	Number of Detections	Average of Detects	Maximum Concentration
Work Area	Benzene	7	0	NA	< 0.05 ppm
	VOC	17	3	2.1 ppm	3.4 ppm

**Table 2: AreaRAE Data
November 30, 2013 00:00 to November 30, 2013 23:59**

Unit	Serial Number	Analyte	Number of Readings	Number of Detections	Minimum Concentration	Maximum Concentration
Unit 4	292-504132	LEL	1981	0	NA	< 1%
		VOC	1981	12	0.1 ppm	0.3 ppm
Unit 6	292-504120	LEL	2071	0	NA	< 1%
		VOC	2071	3	0.1 ppm	0.4 ppm
Unit 7	292-504133	LEL	2158	0	NA	< 1%
		VOC	2158	0	NA	< 0.1 ppm
Unit 8	292-504118	LEL	1884	0	NA	< 1%
		VOC	1884	0	NA	< 0.1 ppm
Unit 9	292-504130	LEL	1930	0	NA	< 1%
		VOC	1930	0	NA	< 0.1 ppm
Unit 10	292-504128	LEL	1838	0	NA	< 1%
		VOC	1838	0	NA	< 0.1 ppm

Aliceville Derailment

AreaRAE Locations



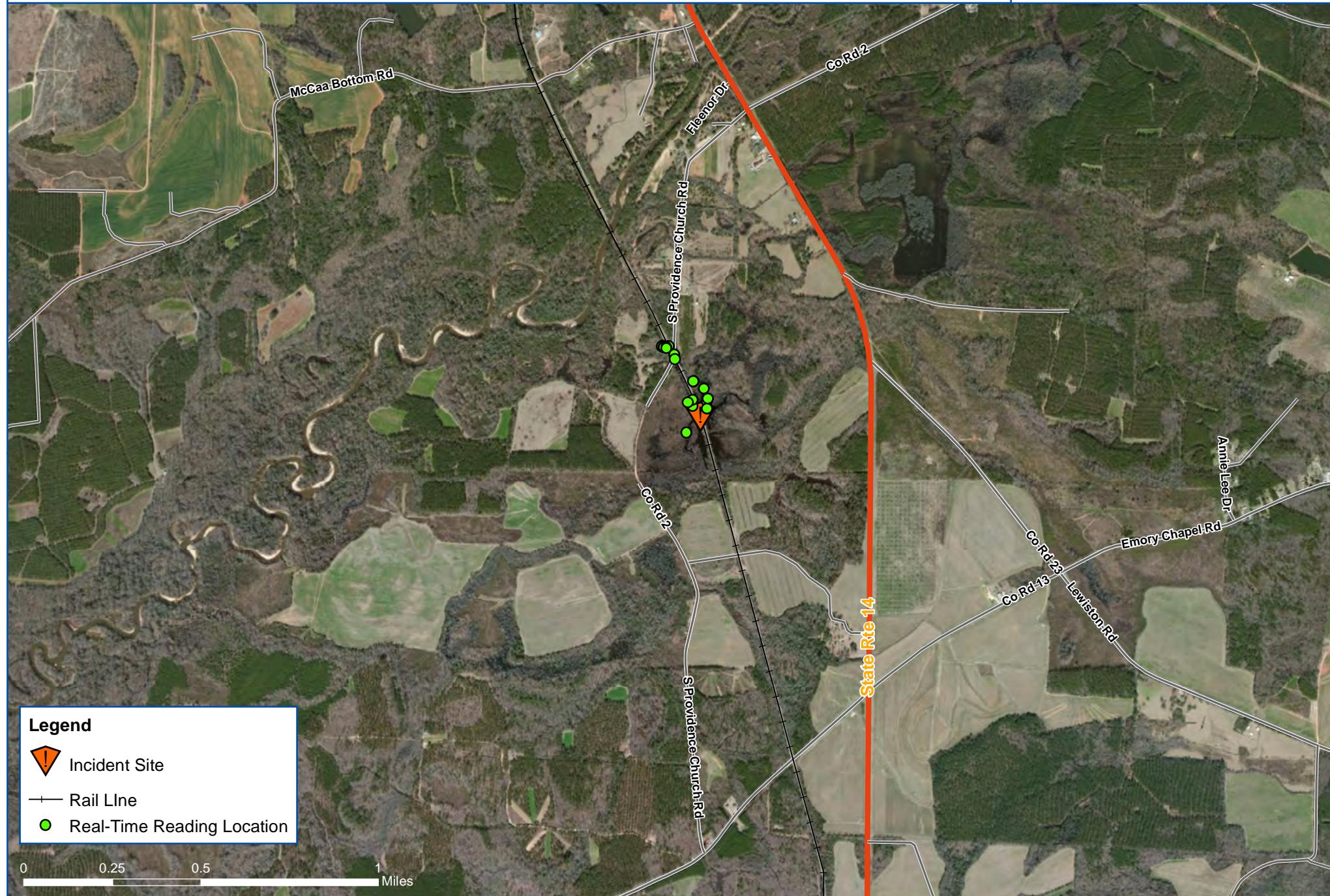
Project: 105723
Client: Alabama Gulf Coast Railway
City: Aliceville, AL
County: Pickens



Manually-Logged Real-Time Reading Locations



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

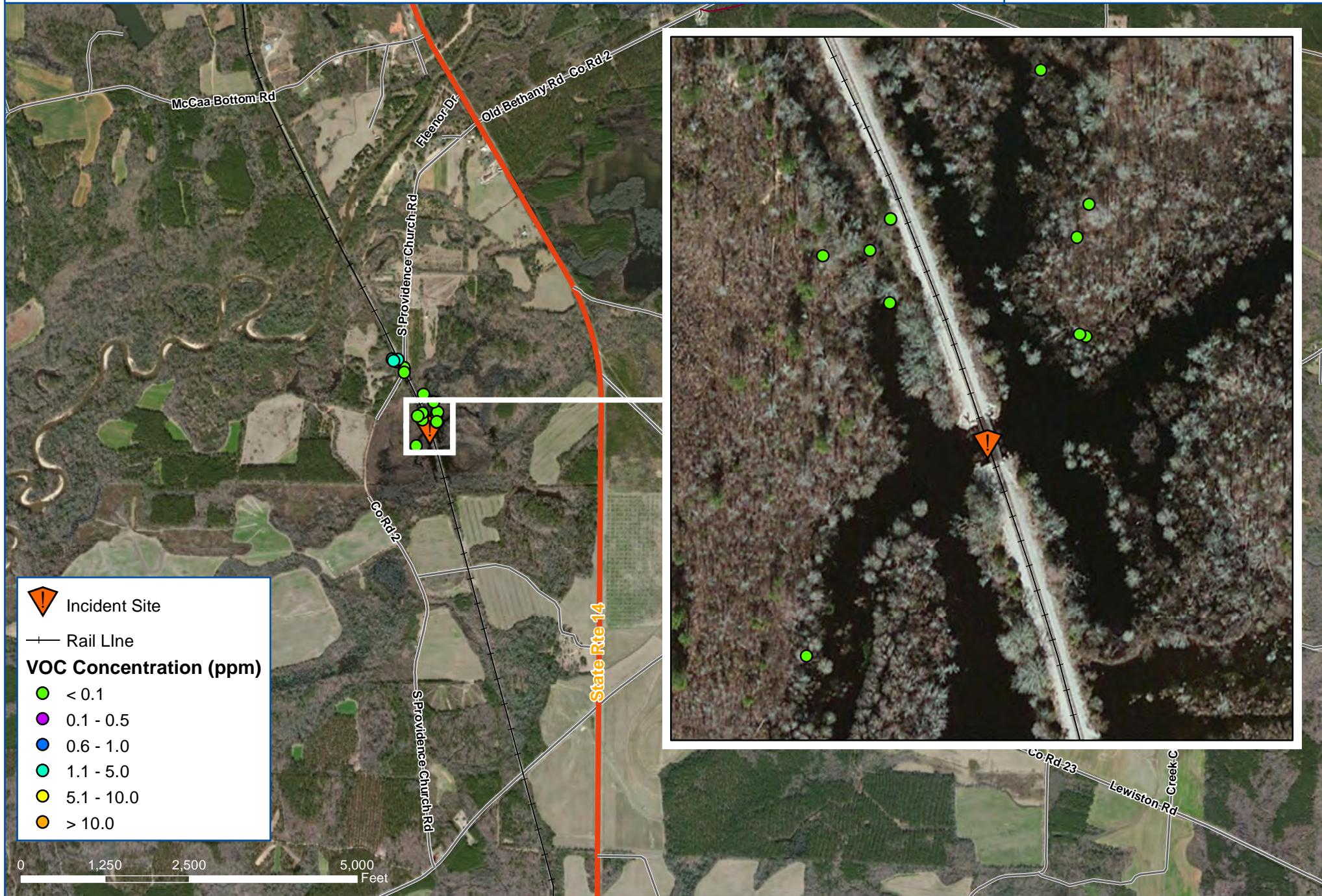


Legend

- ⚠ Incident Site
- Rail Line
- Real-Time Reading Location

0 0.25 0.5 1 Miles

Manually-Logged Real-Time VOC Concentrations



Manually-Logged Real-Time
Benzene Concentrations

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



Maximum Minican Concentration (Results Received as of 11/27/2013)

Analyte (ppbv)	Location					
	FA01	FA02	FA03	FA04	FA05	GB01
1,1-DICHLOROETHANE	< 5	< 5	< 5	< 5	< 5	< 25
1,1-DICHLOROETHENE	< 5	< 5	< 5	< 5	< 5	< 25
1,1,1-TRICHLOROETHANE	< 5	< 5	< 5	< 5	< 5	< 25
1,1,2-TRICHLOROETHANE	< 5	< 5	< 5	< 5	< 5	< 25
1,1,2,2-TETRACHLOROETHA...	< 5	< 5	< 5	< 5	< 5	< 25
1,2-DIBROMOETHANE	< 5	< 5	< 5	< 5	< 5	< 25
1,2-DICHLOROBENZENE	< 5	< 5	< 5	< 5	< 5	< 25
1,2-DICHLOROETHANE	< 5	< 5	< 5	< 5	< 5	< 25
1,2-DICHLOROPROPANE	< 5	< 5	< 5	< 5	< 5	< 25
1,2,4-TRIMETHYLBENZENE	< 5	< 5	< 5	< 5	< 5	< 25
1,3-BUTADIENE	< 5	< 5	< 5	< 5	< 5	< 25
1,3-DICHLOROBENZENE	< 5	< 5	< 5	< 5	< 5	< 25
1,3,5-TRIMETHYLBENZENE	< 5	< 5	< 5	< 5	< 5	< 25
1,4-DICHLOROBENZENE	< 5	< 5	< 5	< 5	< 5	< 25
1,4-DIOXANE	< 20	< 20	< 20	< 20	< 20	< 100
2,2,4-TRIMETHYLPENTANE	< 5	< 5	< 5	< 5	< 5	< 25
4-ETHYLTOLEUENE	< 5	< 5	< 5	< 5	< 5	< 25
ACETONE	< 25	< 25	39	26	< 25	< 130
ALLYL CHLORIDE	< 5	< 5	< 5	< 5	< 5	< 25
BENZENE	< 5	< 5	< 5	5	< 5	180
BENZYL CHLORIDE	< 5	< 5	< 5	< 5	< 5	< 25
BROMODICHLOROMETHANE	< 5	< 5	< 5	< 5	< 5	< 25
BROMOFORM	< 5	< 5	< 5	< 5	< 5	< 25
BROMOMETHANE	< 5	< 5	< 5	< 5	< 5	< 25
CARBON DISULFIDE	81	10	10	10	10	< 50
CARBON TETRACHLORIDE	< 5	< 5	< 5	< 5	< 5	< 25
CHLOROBENZENE	< 5	< 5	< 5	< 5	< 5	< 25
CHLOROETHANE	< 5	< 5	< 5	< 5	< 5	< 25
CHLOROFORM	< 5	< 5	< 5	< 5	< 5	< 25
CHLOROMETHANE	< 5	< 5	< 5	< 5	< 5	< 25
CIS-1,2-DICHLOROETHYLENE	< 5	< 5	< 5	< 5	< 5	< 25
CIS-1,3-DICHLOROPROPENE	< 5	< 5	< 5	< 5	< 5	< 25
CYCLOHEXANE	< 5	< 5	< 5	5.3	< 5	350
DIBROMOCHLOROMETHANE	< 5	< 5	< 5	< 5	< 5	< 25
ETHYL ACETATE	5	< 5	< 5	< 5	< 5	< 25
ETHYLBENZENE	< 5	< 5	< 5	< 5	< 5	14
FREON 11	< 5	< 5	< 5	< 5	< 5	< 25
FREON 12	< 5	< 5	< 5	< 5	< 5	< 25
FREON 113	< 5	< 5	< 5	< 5	< 5	< 25
FREON 114	< 5	< 5	< 5	< 5	< 5	< 25
HEPTANE	5.3	< 5	< 5	9.6	< 5	490
HEXANE	7.9	< 5	< 5	16	< 5	1900
ISOPROPYL ALCOHOL	< 25	< 25	< 25	< 25	< 25	< 130
M,P-XYLENES	< 10	< 10	< 10	< 10	< 10	44

Maximum Minican Concentration (Results Received as of 11/27/2013)



CENTER FOR TOXICOLOGY
AND ENVIRONMENTAL HEALTH,LLC

Attachment C

Worker Exposure Assessment

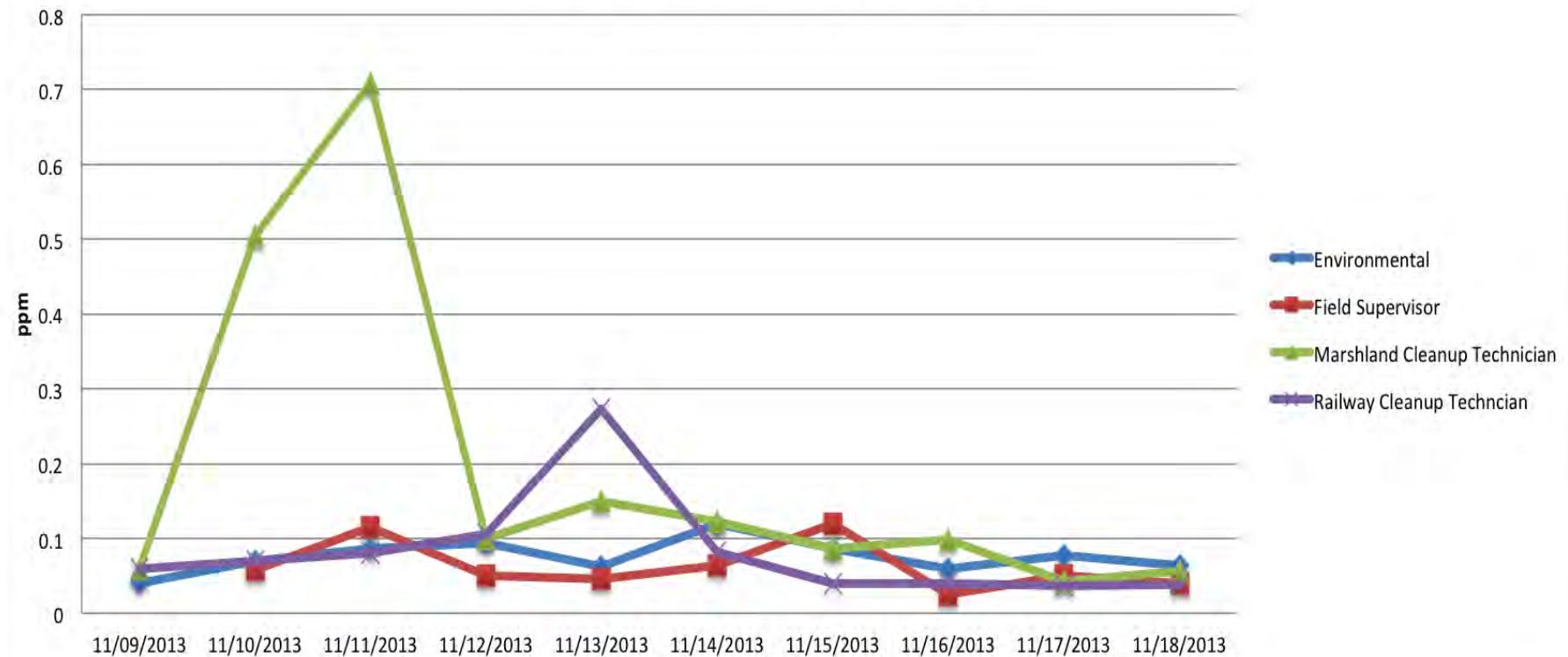


Worker Exposure Summary for Samples Collected 11/9 through 11/18

Similar Exposure Groups/Tasks	Samples Collected	8-hour TWA			
		Minimum (ppm)	Maximum (ppm)	Average (ppm)	Between Worker Variability
Environmental	39	0.03	0.3	0.08	0.40%
CTEH-Air	31	0.03	0.3	0.09	0.45%
CTEH-Water	8	0.03	0.1	0.04	0.06%
Field Supervisor	19	0.02	0.2	0.06	0.22%
Field Supervision	19	0.02	0.2	0.06	0.22%
Marshland Cleanup Technician	67	0.03	2.1	0.15	8.42%
Materials Handling	67	0.03	2.1	0.15	8.42%
Railway Cleanup Technician	55	0.02	0.89	0.09	2.00%
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%
Grand Total	180	0.02	2.1	0.11	3.93%

* 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





CENTER FOR TOXICOLOGY
AND ENVIRONMENTAL HEALTH,LLC

Attachment D

Surface Water Monitoring and Sampling Results

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

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

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

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

Aliceville Derailment

Well Sampling Locations

