

Daily Progress Report

Aliceville, AL Derailment Response Alabama & Gulf Coast November 20, 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 continued and remained on standby for response in the vicinity of the transfer operations.

Section 1.2: Transfer Operations

Transfer operations continued and crude oil from tankcars S1, S5, S6, X, and SHPX208858 was removed to secure frac tanks staged at the Aliceville Railyard. A total of 19,320 gallons were transferred in the last 24 hours. Daily and cumulative totals of crude oil transferred are provided in Attachment A.

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. Skimming operations resulted in the recovery of 200 gallons of crude oil removed from the slough. 715 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 from the slough and oil related waste is included in Attachment A.

Section 1.4: Wrecking Operations

During the last 24 hours a total of 5 railcars were transported to the east side of the track bed for a total of 13 cars in preparation of staging for Federal Railroad Administration inspection.

Section 1.5: Scrapping

During the last 24 hours, 2 tankcars were cut in half for a total of 7 halves ready for scrapping, and half of one tankcar was completely scrapped as part of demolition operations for transport and recycling.

Section 1.6: Construction and Site Prep

During the last 24 hours 1 pad was lined on the south side of the derailment site for contaminated soil staging to support response actions.

Section 1.7: Tankcar Decontamination

During the last 24 hours half of one railcar was 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)

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

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.

Section 2.4: Surface Water Sampling

Surface water sampling has been conducted daily from 1 upstream and 3 downstream locations since November 10, 2013. The samples collected are 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.

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 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 assessment continues 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. 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

No contaminated soil excavation occurred in the last 24 hours.

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®
Environmental Scientist Project Manager
(501) 960-5531
[**jdavis@cteh.com**](mailto: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 20, 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	-	179140	179140
Total	26	257460	479460

*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
Total	139	5069	10084

*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
Total		4265	179140

*All figures are considered preliminary and are subject to change

Table 4: Fish and Wildlife Impact

Fish		Wildlife	
Species	Count	Species	Count
Spotted Gar	90	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	Total	8
Banded Pygmy Sunfish	1		
Redfin Pike	2		
Bowfish	12		
Total	453		

*All figures are considered preliminary and are subject to change



CENTER FOR TOXICOLOGY
AND ENVIRONMENTAL HEALTH, LLC

Attachment B

Real-Time Air Monitoring Summary

Crude Oil Derailment Aliceville, AL Summary of Air Monitoring Results November 20, 2013

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

This data report discusses air monitoring data recorded on 11/20/13 00:00 to 11/20/13 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 20, 2013 00:00 to November 20, 2013 23:59

Location Category	Analyte	Number of Readings	Number of Detections	Average of Detects	Maximum Concentration
Community	VOC	126	1	0.5 ppm	0.5 ppm
	Benzene	20	1	0.1 ppm	0.1 ppm
Work Area	LEL	21	0	N/A	< 1 %
	VOC	67	13	1.2 ppm	4 ppm

Table 2: AreaRAE Data
November 20, 2013 00:00 to November 20, 2013 23:59

Unit	Serial Number	Analyte	Number of Readings	Number of Detections	Minimum Concentration	Maximum Concentration
Unit 1	292-504109	LEL	3,548	0	< 1 %	< 1 %
		VOC	3,548	15	0.1 ppm	0.6 ppm
Unit 2	292-504137	LEL	4,805	0	< 1 %	< 1 %
		VOC	4,805	0	< 0.1 ppm	< 0.1 ppm
Unit 3	292-504108	LEL	4,816	0	< 1 %	< 1 %
		VOC	4,816	0	< 0.1 ppm	< 0.1 ppm
Unit 4	292-504132	LEL	4,871	0	< 1 %	< 1 %
		VOC	4,871	0	< 0.1 ppm	< 0.1 ppm
Unit 5 (Mobile)	292-504128	LEL	1,651	0	< 1 %	< 1 %
		VOC	1,651	12	0.1 ppm	1.6 ppm
Unit 6	292-504120	LEL	4,848	0	< 1 %	< 1 %
		VOC	4,848	97	0.1 ppm	12.7 ppm
Unit 7	292-504133	LEL	4,641	0	< 1 %	< 1 %
		VOC	4,641	11	0.1 ppm	1.1. ppm
Unit 8	292-504118	LEL	4,786	0	< 1 %	< 1 %
		VOC	4,786	14	0.1 ppm	3.7 ppm
Unit 9	292-504130	LEL	2,715	0	< 1 %	< 1 %
		VOC	2,715	180	0.1 ppm	3.6 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



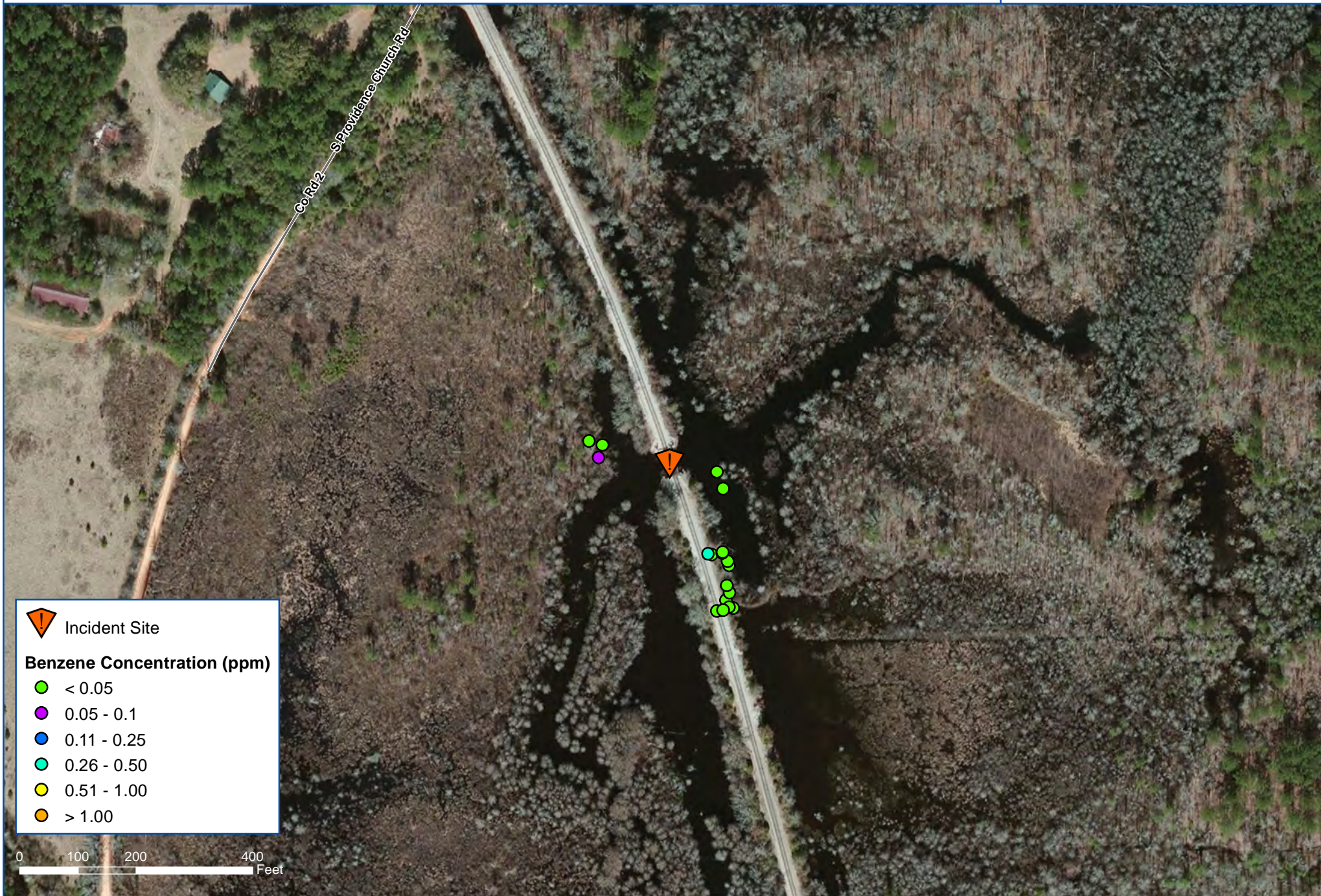
Real-Time Reading Location

0 0.25 0.5 1 Miles

Manually-Logged Real-Time Benzene Concentrations



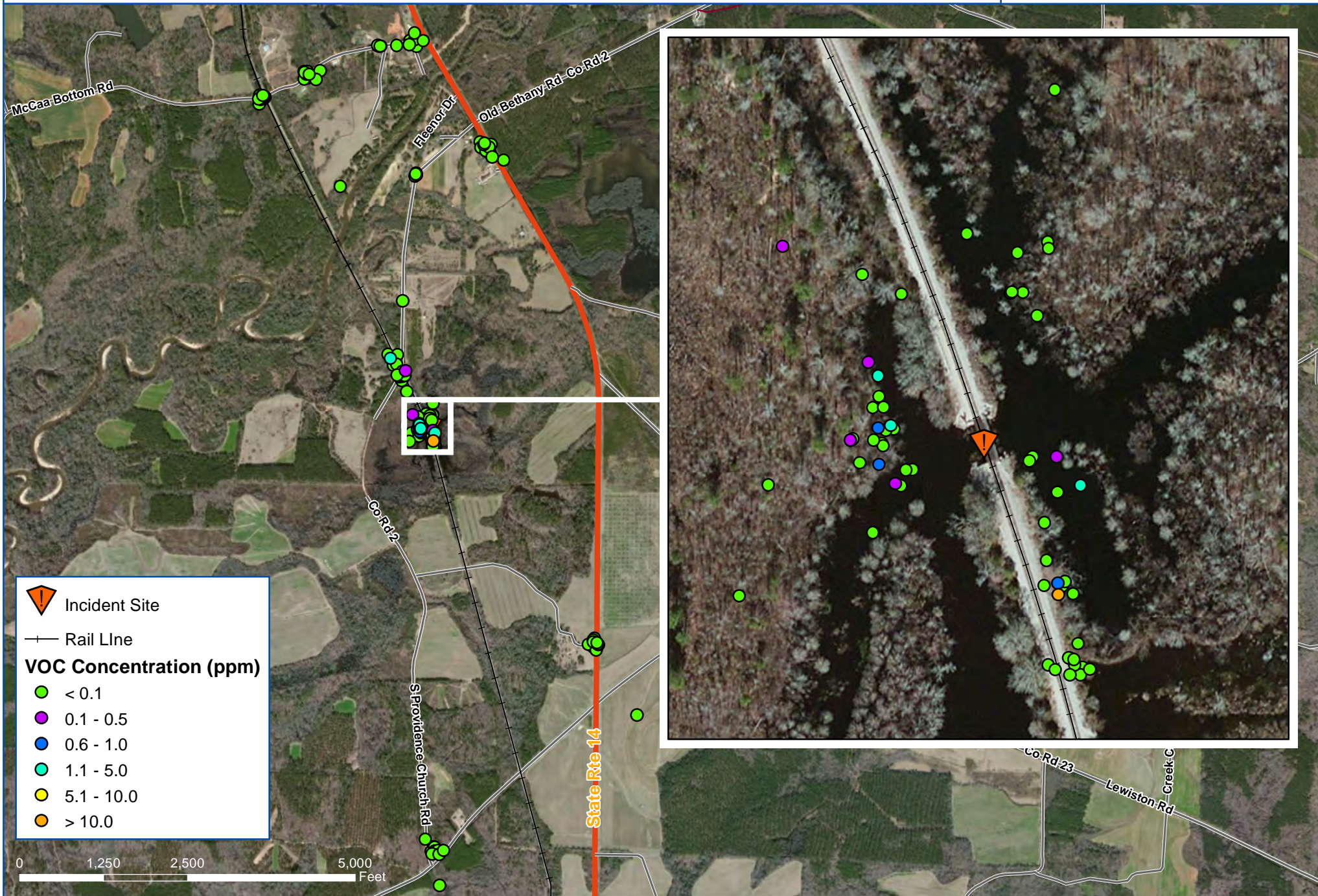
Project: 105723
Client: Alabama Gulf Coast Railway
City: Aliceville, AL
County: Pickens



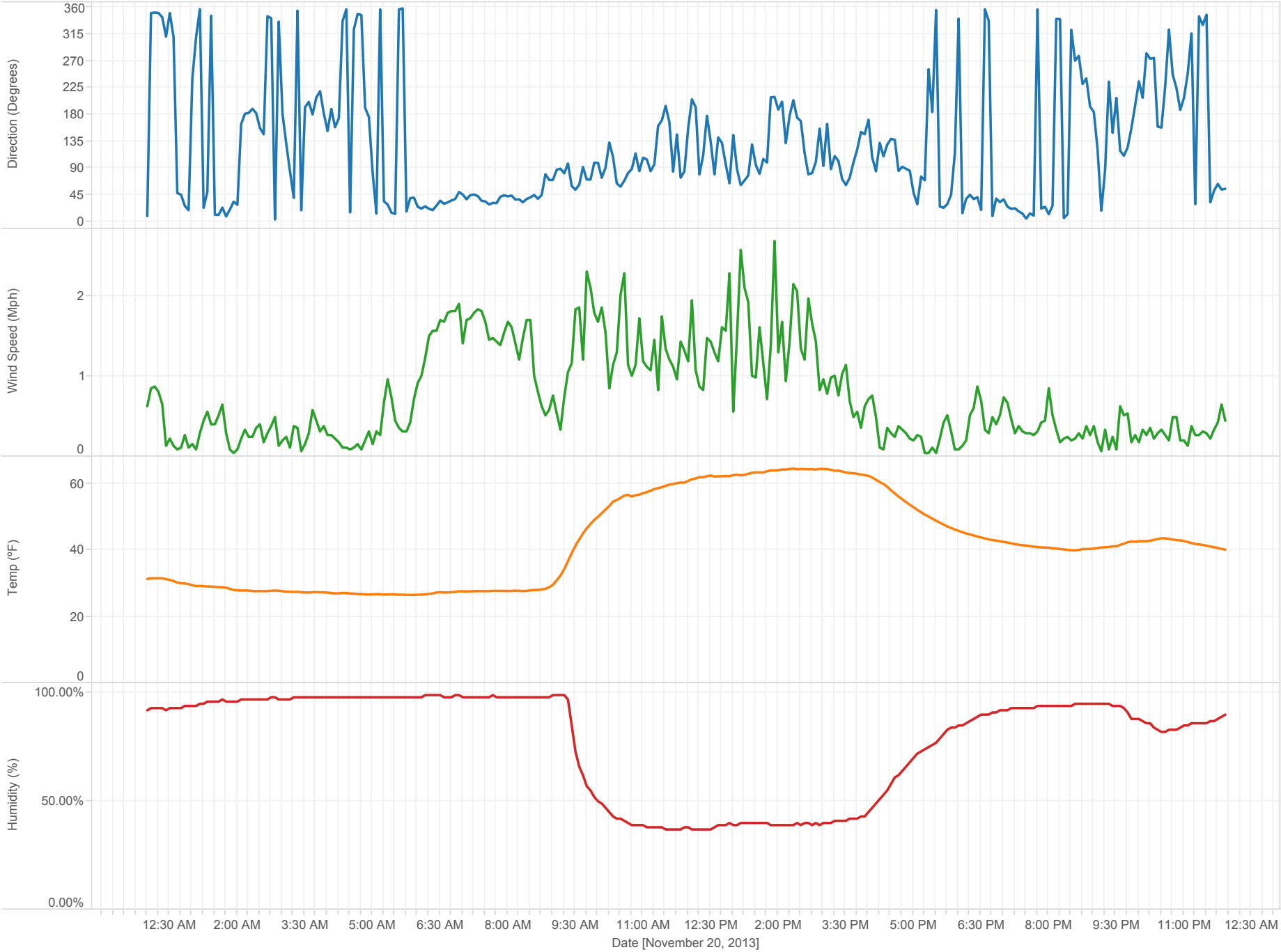
Manually-Logged Real-Time VOC Concentrations



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



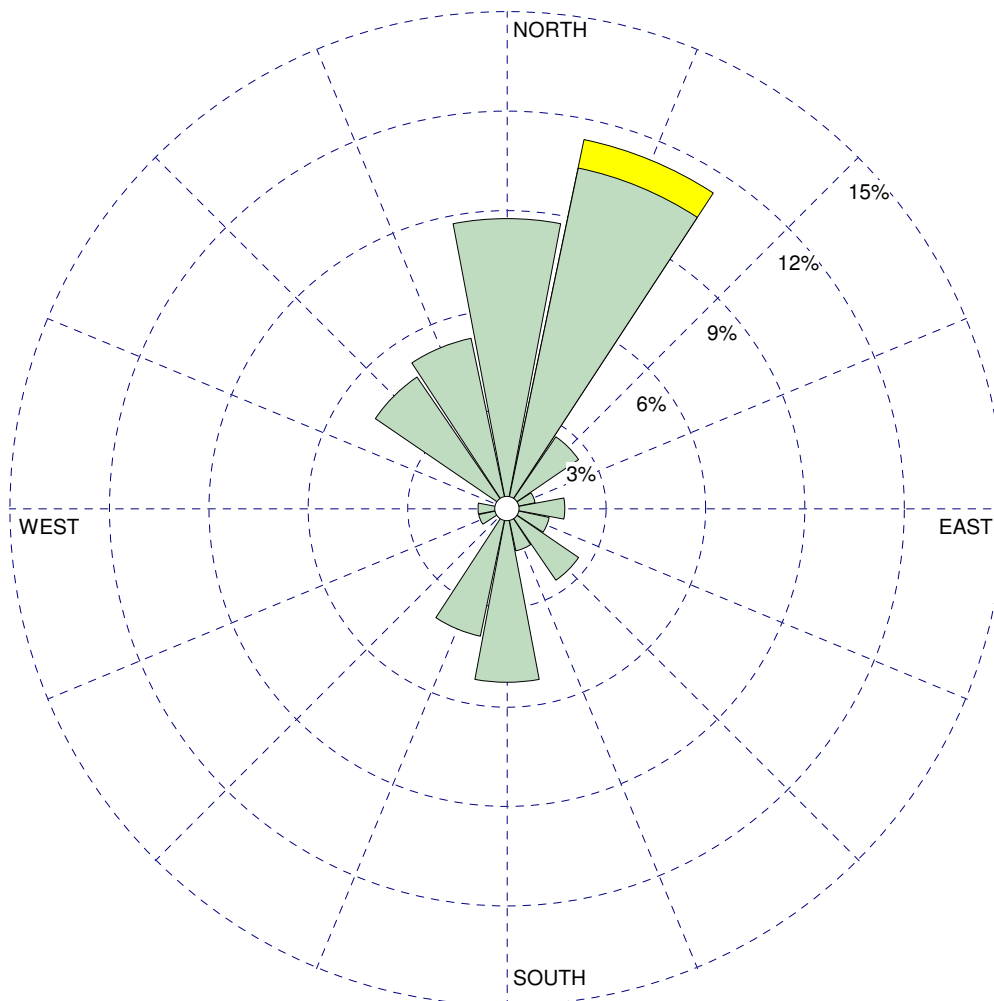
Weather Conditions - 11/20/2013



WIND ROSE PLOT:

105723***Not NWS Values**

DISPLAY:

Wind Speed**Direction (blowing from)**

COMMENTS:

Aliceville, AL

DATA PERIOD:

Start Date: 11/10/2013 - 08:00
End Date: 11/21/2013 - 07:00

COMPANY NAME:

CTEH

MODELER:

CALM WINDS:

48.47%

TOTAL COUNT:

229 hrs.

AVG. WIND SPEED:

0.79 Knots

DATE:

11/21/2013

PROJECT NO.:

105629



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

