



**40435 – ExxonMobil Mayflower Pipeline Incident  
Summary of Air Monitoring Conducted by CTEH  
March 31, 2013 - 24 hour period**

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

**Table 1  
Community Summary of Manual Real-Time Air Monitoring**

Analyte	Count of Readings	Count of Detections	Average Concentration of Detections	Highest Concentration
Benzene	13	0	N/A	< 0.05 ppm
H <sub>2</sub> S	28	0	N/A	< 1 ppm
LEL	26	0	N/A	< 1 %
Toluene	2	0	N/A	< 0.5 ppm
VOC	134	2	1.5	3 ppm
Xylene	3	0	N/A	< 1 ppm

**Table 2  
Work Area Summary of Manual Real-Time Air Monitoring**

Analyte	Count of Readings	Count of Detections	Average Concentration of Detections	Highest Concentration
Benzene	67	10	0.27 ppm	0.8 ppm*
Hydrogen Sulfide	58	0	N/A	< 1 ppm
Hexane	5	0	N/A	< 1 ppm
LEL	63	0	N/A	< 1 %
Toluene	5	0	N/A	< 1 ppm
VOC	104	43	3.6 ppm	25.5 ppm*
Xylene	5	0	N/A	< 1 ppm

**Table 3  
Summary of AreaRAE Real-Time Air Monitoring**

Unit	Analyte	Count of Readings	Count of Detections	Average Concentration of Detections	Highest Concentration
RTU_1 mobile	Hydrogen Sulfide	4335	0	NA	< 0.1 ppm
	LEL	4335	0	NA	< 1 %
	VOC	4335	171	1.84 ppm	16.2 ppm*
RTU_5 fixed	Hydrogen Sulfide	4919	171	0.1 ppm	0.3 ppm
	LEL	4919	0	NA	< 1 %
	VOC	4919	509	0.9 ppm	10.9 ppm*
RTU_6 fixed	Hydrogen Sulfide	1357	22	0.1 ppm	0.1 ppm
	LEL	1357	0	NA	< 1 %
	VOC	1357	826	1.1 ppm	20.9 ppm*

\*Details of elevated chemical detections are provided at the end of this document.



**Legend**

✖ Source

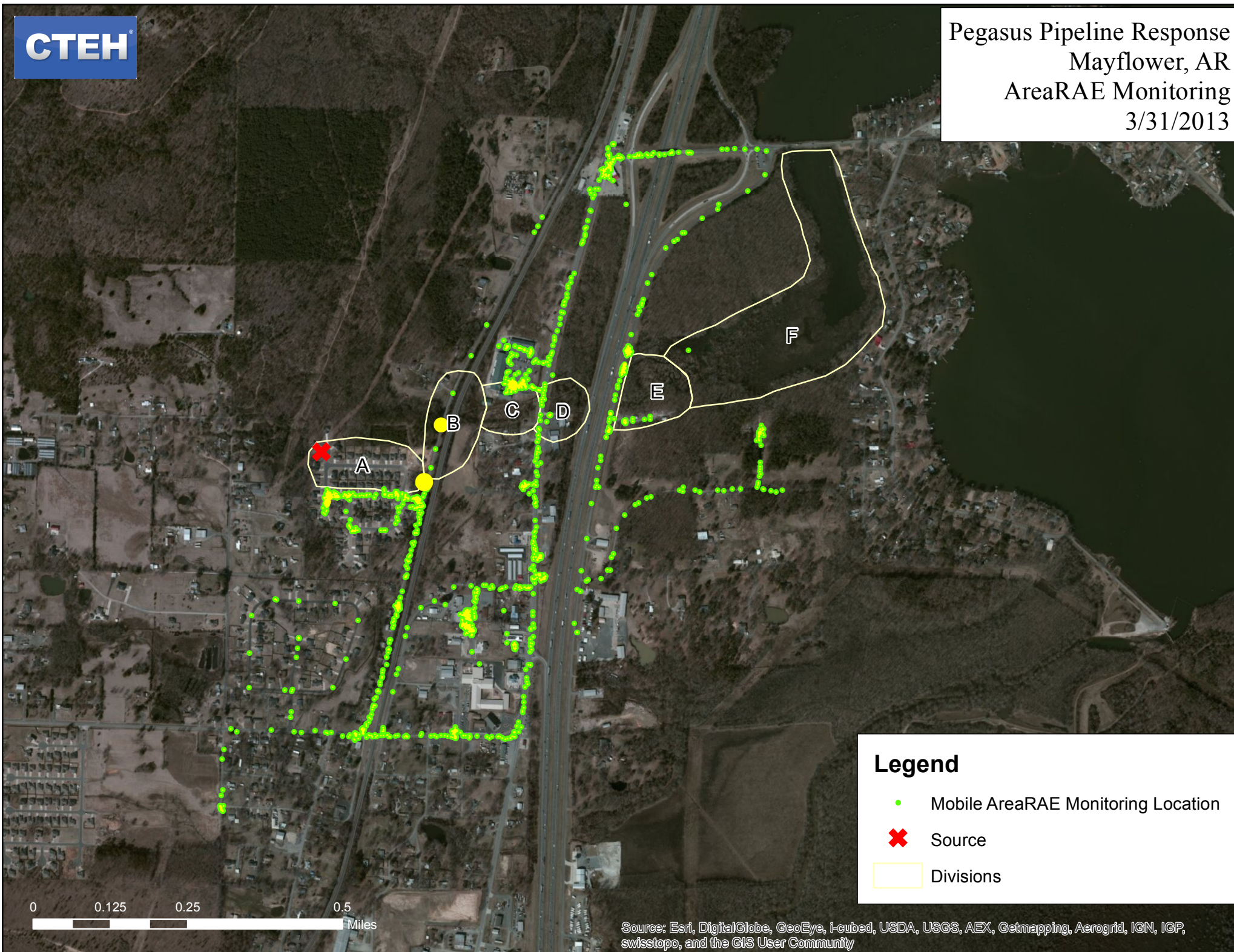
▭ Divisions

**Monitoring Type**

● Community

● Work Area







**0.8 ppm Benzene detected at 15:50 on 03/31/2013 in work area. Workers are in respiratory protection.**

Project number:	40435
Reading date:	2013/03/31 15:50
Latitude:	34.964472
Longitude:	-92.421136
Distance From Site:	0.10
Location description:	150 yds downstream from culvert. At creek.
Indoor/Outdoor:	Outdoor
Instrument:	UltraRAE
Instrument barcode:	13071
Matrix:	Air
Analyte:	Benzene
Concentration:	0.8
Units:	ppm
Comments:	Visible Oil; boom present; Workers in respiratory protection; Moderate Odor;
Initials:	Kyle Bennett
Additional comments:	Vac hose operator.
Detection limit:	0.05
Gps method:	Automatic
Guid:	C04CD544-C662-4C19-A635-3A3E9A0550A1
Created:	2013/03/31 15:50



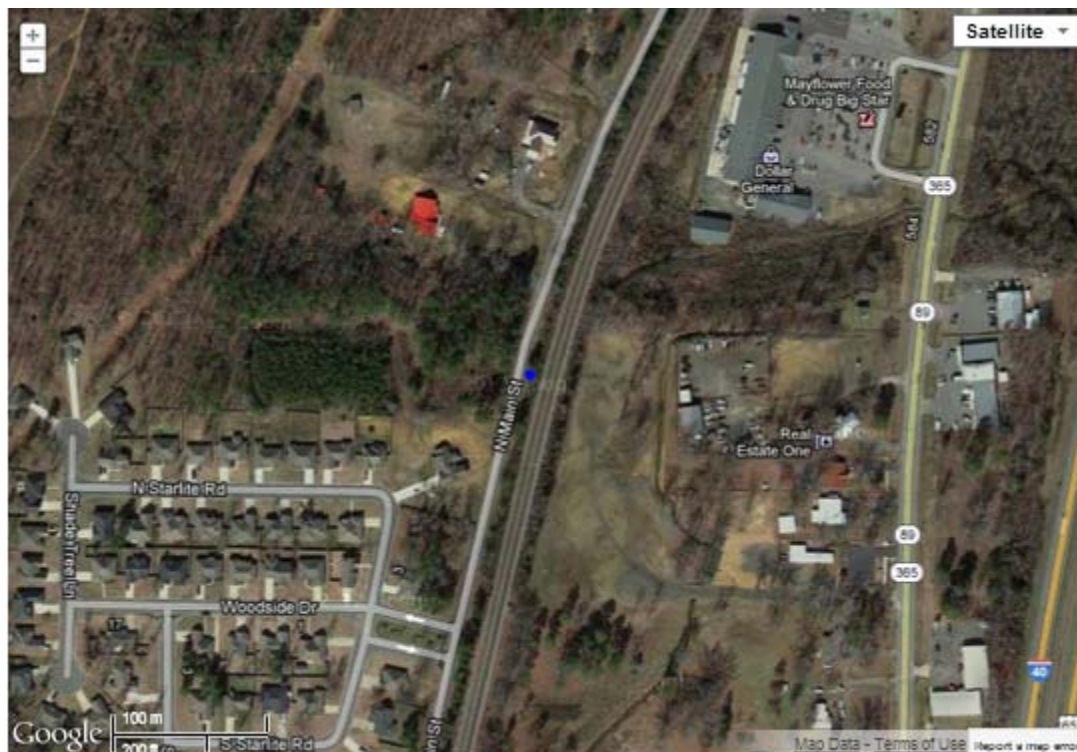
**0.55 ppm Benzene detected at 17:04 on 03/31/2013 in work area. Workers escorted from area.**

Project number:	40435
Reading date:	2013/03/31 17:04
Latitude:	34.9645
Longitude:	-92.42014
Distance From Site:	0.15
Location description:	At creek by hose from vac truck at stones and stone works.
Indoor/Outdoor:	Outdoor
Instrument:	UltraRAE
Instrument barcode:	13071
Matrix:	Air
Analyte:	Benzene
Concentration:	0.55
Units:	ppm
Comments:	Vac Trucks Present; Visible Oil; boom present; Workers present; Moderate Odor;
Initials:	Kyle Bennett
Additional comments:	Workers moved away from area. Benzene levels for the past couple hours in the areas of concern at the I40 culvert area have ranged from 0.15 to 0.4.
Detection limit:	0.05
Gps method:	Automatic
Guid:	A296A15C-2CED-47FD-8AB5-A7467C681C10
Created:	2013/03/31 17:04



**12.6 ppm VOC detected at 00:17 on 03/31/2013 in work area. Benzene < 0.5 ppm.**

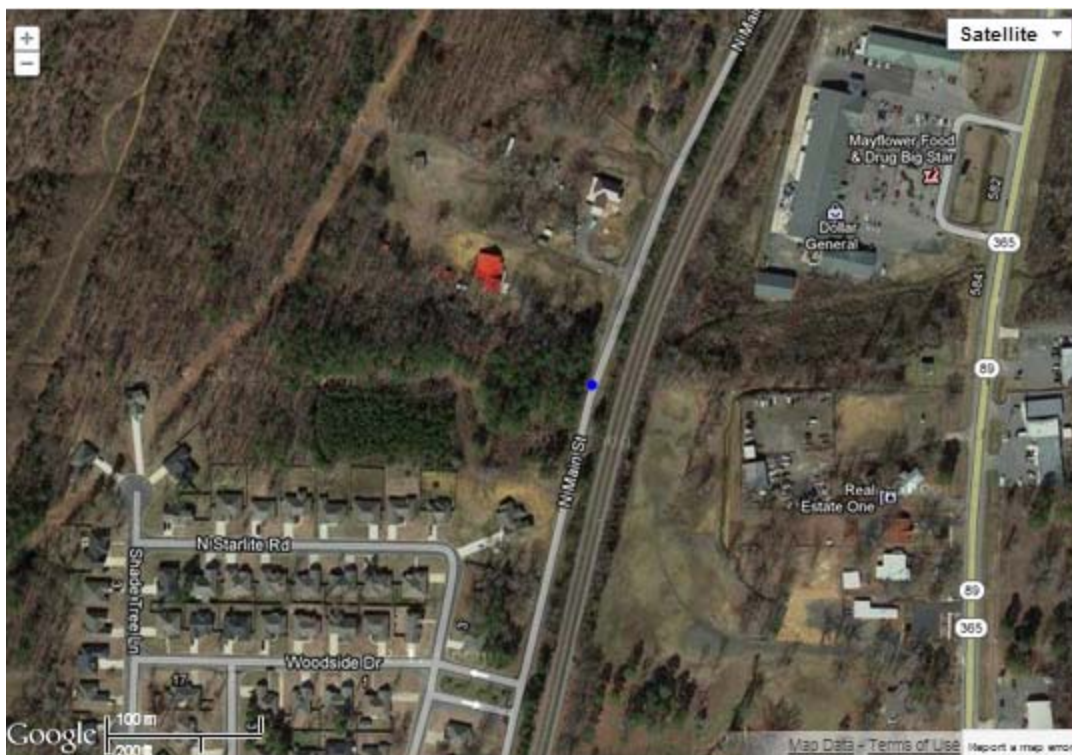
Project number:	40435
Reading date:	2013/03/31 00:17
Latitude:	34.963918
Longitude:	-92.425475
Distance From Site:	0.17
Location description:	North main street next to railroad tracks
Indoor/Outdoor:	Outdoor
Instrument:	MultiRAE
Instrument barcode:	10615
Matrix:	Air
Analyte:	VOC
Concentration:	12.6
Units:	ppm
Comments:	Crude oil odor; Workers present; Moderate Odor;
Initials:	Ram Pandey
Additional comments:	Vac trucks running
Detection limit:	0.1
Gps method:	Automatic
Guid:	ADA8C7E3-4DFA-42C7-AB54-4B0BA498DF8F
Created:	2013/03/31 00:17





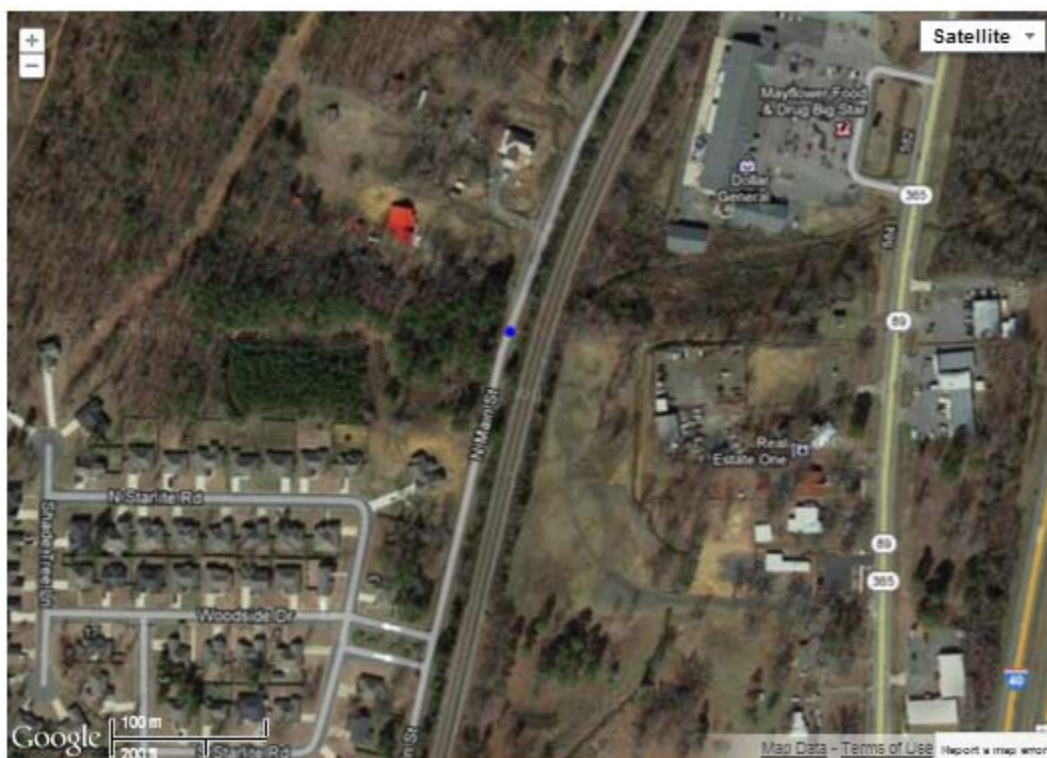
**25.5 ppm VOC detected at 04:35 on 03/31/2013 in work area. Benzene < 0.5 ppm.**

Project number:	40435
Reading date:	2013/03/31 04:35
Latitude:	34.964196
Longitude:	-92.425511
Distance From Site:	0.17
Location description:	On the berm near north main street
Indoor/Outdoor:	Outdoor
Instrument:	MultiRAE
Instrument barcode:	10615
Matrix:	Air
Analyte:	VOC
Concentration:	25.5
Units:	ppm
Comments:	Vac Trucks Present; boom present; Workers present; Moderate Odor;
Initials:	Ram Pandey
Additional comments:	
	Product from the containment is being removed via vac trucks. Moderate odor but no corresponding benzene detections
Detection limit:	0.1
Gps method:	Automatic
Guid:	D0056127-E6B6-45C0-8830-3D57A56AD753
Created:	2013/03/31 04:35



## 14.1 ppm VOC detected at 06:33 on 03/31/2013 in work area

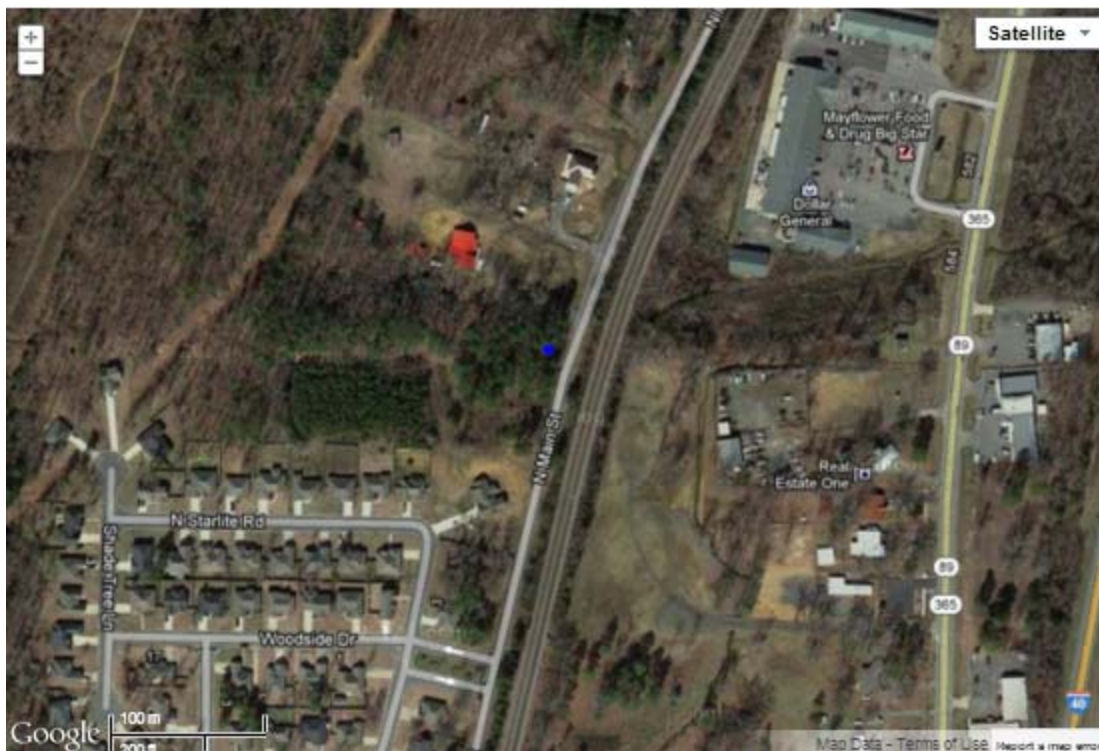
Project number:	40435
Reading date:	2013/03/31 06:33
Latitude:	34.964218
Longitude:	-92.425462
Distance From Site:	0.16
Location description:	North main street near ditch
Indoor/Outdoor:	Outdoor
Instrument:	MultiRAE
Instrument barcode:	10615
Matrix:	Air
Analyte:	VOC
Concentration:	14.1
Units:	ppm
Comments:	Vac Trucks Present; Visible Oil; Workers present; Slight Odor;
Initials:	Ram Pandey
Detection limit:	0.1
Gps method:	Automatic
Guid:	583EEBA1-7F7A-4BE4-99A6-10989A073C71
Created:	2013/03/31 06:33





**15.0 ppm VOC detected at 21:25 on 03/31/2013 in work area. Workers instructed to exit area.**

Project number:	40435
Reading date:	2013/03/31 21:26
Latitude:	34.964245
Longitude:	-92.425639
Distance From Site:	0.17
Location description:	Vac truck on N main
Indoor/Outdoor:	Outdoor
Instrument:	MultiRAE
Instrument barcode:	527924
Matrix:	Air
Analyte:	VOC
Concentration:	15.0
Units:	ppm
Comments:	Exhaust fumes odor; Vac Trucks Present; Exhaust fumes present; Crude oil odor; Visible Oil; Residence; Workers present; Moderate Odor;
Initials:	Ashley Richie
Additional comments:	workers advise not stand behind truck or next to ditch with oil in it generator and 2 trucks also located in the vicinity
Detection limit:	0.1
Gps method:	Automatic
Guid:	60767038-B4C4-4024-96F0-A35AD0BCFA92
Created:	2013/03/31 21:26



11.2 ppm VOC detected at 22:28 on 03/31/2013 in work area. Benzene < 0.5 ppm.

Project number:	40435
Reading date:	2013/03/31 22:28
Latitude:	34.965289
Longitude:	-92.418964
Distance From Site:	0.21
Location description:	Vac ops down in the woods by the creek
Indoor/Outdoor:	Outdoor
Instrument:	MultiRAE
Instrument barcode:	12415
Matrix:	Air
Analyte:	VOC
Concentration:	11.2
Units:	ppm
Comments:	Crude oil odor; Visible Oil; boom present; Workers present; Slight Odor;
Initials:	Austin Sharp
Detection limit:	0.1
Gps method:	Automatic
Guid:	22075C32-21ED-4939-B11F-168699CBCF40
Created:	2013/03/31 22:28





The Mobile AreaRAE station detected VOC above 10ppm on 3/31/2013

