



# January Status Report

Coliseum Boulevard Plume

February 20, 2001

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## Summary of Activities From January 1 through January 31, 2001

- Submitted Amended Response Plan on January 5, 2001. The Amended Plan included placement of a temporary fence around the East Coliseum Ditch, development of a Work Plan for Rapid Response, Interim Corrective Measures and Comprehensive Site Assessment, including a Community Relations Plan. The Amended Response Plan was approved by ADEM on January 12, 2001.
- An Access agreement between ALDOT and Alfa was executed on January 12, 2001. The agreement was also signed by ADEM to allow for access, by ADEM, onto Alfa's property for sampling. Licensing agreements were signed by **TTL**, Inc. and Southeast Cherokee Construction Company for sampling and construction of the temporary fence on behalf of ALDOT.
- Constructed an 8-foot-high, protective fence along the open ditch that is east of Coliseum Boulevard. Construction of this fence was expedited through planning meetings among ALDOT, **TTL**, Malcom Pirnie, and Southeast Cherokee Construction Company. Construction of the fence began on January 15, 2001.
- On January 15, 2001, **TTL** initiated field work as outlined in the December 13, 2000, work-plan to investigate the geology and horizontal extent of TCE in the soil/sediments and shallow ground water in the areas of the Eastern Meadows and Vista View Subdivisions, and within the area encompassed by Coliseum Boulevard, the open ditch that is east of Coliseum Boulevard, and Highway 231. The locations of the probeholes were included in the Proposed Work Plan which was approved by ADEM on January 8, 2001. At least two probeholes were driven at each location. One of the probeholes was driven so that the soils/sediments and occurrences of TCE could be investigated with a Membrane Interface Probe (MIP). The MIP provides real-time measurements of soil conductivity, temperature, probe depth, and soil screening data using an Electron Capture Detector and a Photoionization detector. Real-time measurements by these probes were reviewed to select zones for collecting soil/sediment and/or ground-water samples for laboratory analysis for TCE. A second probehole then was driven at each of the locations so that the soils/sediments could be retrieved and described by an on-site geologist. The geologist, based on review of the measurements from the MIP, collected soil/sediment and ground-water samples for the TCE analyses. The probeholes at each of the locations were plugged immediately upon collection of the samples by pressure grouting each probehole with a bentonite slurry. Through January 31, 2001, ten probeholes had been completed and grouted. Forty two samples of soil/sediment and twenty-one samples of ground water had been collected for analysis for TCE.
- Accompanied ADEM personnel on January 17 and 18, 2001 to collect split samples of surface water for laboratory analyses for VOCs (Volatile Organic Compounds). Results of samples collected by **TTL** are summarized in attached Table 1. General Locations of the samples are indicated on the attached topographic map. (Figure 1).



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- Accompanied ADEM personnel on January 24 through 26, 2001 to collect split samples of shallow ground water using the ADEM Geoprobe 66DT for laboratory analyses for VOC. Results of samples collected by TTL are shown on the attached Table 2. General Locations of the samples are shown on Figure 2.
- Collected samples of surface water from the ditch at locations SW1, SW2, SW3 and SW4 on January 31, 2001. It was not raining on January 31, but had rained the preceding day. Results are summarized in Table 3. Locations of the samples are shown on Figure 3.

## **TABLES**

**Table 1. Results of analyses of VOCs (Volatile Organic Compounds) in split samples <sup>1</sup> of surface water and sediment collected by ADEM and TTL on January 17 and 18, 2001; Coliseum Boulevard Plume, Montgomery, Alabama . (Approximate sample locations are shown on Figure 1.)**

Surface Water Samples	Trichloroethylene <sup>2</sup> , µg/L TTL Laboratory	Trichloroethylene <sup>3</sup> , µg/L ADEM Laboratory
SW/W1	<1.0	<0.5
SW/W2	<1.0 <sup>4</sup>	<0.5 <sup>4</sup>
SW/W3	5.6	4.83
SW/W4	17.6	11.3 <sup>5</sup>
SW/W5	33.2	27.9
SW/W6	<1.0	<0.5
SW/W7	<1.0	<0.5
SW/W8	2.0	1.63
SW/W9	<1.0	<0.5
SW/W10	25.7	20.7
SW/W11	<1.0	<0.5
SW/W12	<1.0	<0.5
SW/W13	<1.0	<0.5
SW/W14	<1.0	<0.5

Sediment Samples	Trichloroethylene <sup>6</sup> , µg/kg	Trichloroethylene <sup>7</sup> , µg/g
SD/S1	<3.0	<0.05
SD/S2	<3.0	<0.05

<sup>1</sup> Split samples collected at locations selected by ADEM.

<sup>2</sup> Trichloroethylene was the only VOC detected unless otherwise noted. Samples were analyzed by TTL's laboratory using SW 846 Method 8260.

<sup>3</sup> Trichloroethylene was the only VOC detected unless otherwise noted. Samples were analyzed by ADEM's laboratory using EPA Method 524.2

<sup>4</sup> Chloroform detected at 2.3 µg/L (TTL Lab) and 2.59 µg/L (ADEM Lab) .

<sup>5</sup> Chloroform detected at 0.596 µg/L (ADEM Lab) .

<sup>6</sup> Samples were analyzed using SW 846 Method 8260.

<sup>7</sup> Samples were analyzed using SW 846 Method 8260B.

**Table 2. Results of analyses of VOCs (Volatile Organic Compounds) in split samples<sup>1</sup> of subsurface soil and ground water collected by ADEM and TTL from January 24 through 26, 2001; Coliseum Boulevard Plume; Montgomery, Alabama. (Approximate sample locations are shown on Figure 2.)**

Soil Samples	Depth of Sample <sup>2</sup> (feet BLS)	Date Collected	Constituents Detected <sup>3</sup> TTL Laboratory	Constituents Detected ADEM Laboratory
B1/S1	0-2	1/24/01	ND (<3.0 µg/kg)	<MDL (<.05 µg/g)
B1/S2	25-26	1/24/01	ND (<3.0 µg/kg)	<MDL (<.05 µg/g)
B2/S1	1-2	1/25/01	TCE 9.5 µg/kg	<MDL (<.05 µg/g)
B2/S2	27-29	1/25/01	TCE 8.4 µg/kg	<MDL (<.05 µg/g)
B3/S1	1-2	1/25/01	ND (<3.0 µg/kg)	Methyl t-Butyl Ether 0.044 µg/g
B3/S2	26-28	1/25/01	ND (<3.0 µg/kg)	<MDL (<.05 µg/g)
B4/S1	0-4	1/26/01	ND (<3.0 µg/kg)	<MDL (<.05 µg/g)

Ground-Water Samples	Date Collected	Constituents Detected TTL Laboratory	Constituents Detected ADEM Laboratory
B1/W1	1/24/01	TCE 83.8 µg/L	TCE 72.7 µg/L
B2/W1	1/25/01	TCE 1790 µg/L cis-1,2 DCE 105 µg/L 1,1,1-TCA 5.7 µg/L 1,1,2-TCA 2.7 µg/L Chloroform 6.8 µg/L	TCE 1450.5 µg/L cis-1,2 DCE 107 µg/L 1,1,1-TCA 5.3 µg/L  Chloroform 5.9 µg/L
B3/W1	1/25/01	TCE 249 µg/L cis-1,2 DCE 2.3 µg/L Chloroform 1.2 µg/L	TCE 237.1 µg/L
B4/W1	1/26/01	ND (< 1.0 µg/L)	ND

<sup>1</sup> Split samples collected at locations selected by ADEM.

<sup>2</sup> Below land surface

<sup>3</sup> Only detected constituents identified in table. (TCE= trichloroethylene; cis-1,2 - DCE = cis -1,2 - dichloroethylene; 1,1,1-TCA = 1,1,1-trichloroethane; 1,1,2 -TCA =1,1,2 - trichloroethane.)

**Table 2. Results of analyses of surface water samples collected from ditch near Coliseum Boulevard, Montgomery Alabama. [ Locations of surface water sample sites are shown on Figure 1. ]**

	Site 1	Site 2	Site 3	Site 4
<b>Concentrations are expressed in micrograms/liter</b>				
<b>July 24, 2000</b>	(No storm events several days prior to sampling)			
Trichloroethylene	NS	15.0	10.2	NS
Toluene	NS	13.4	<1.0	NS
Chloroform	NS	3.2	<1.0	NS
cis, 1,2-Dichloroethene	NS	2.5	2.8	NS
<b>August 2, 2000</b>	(storm event during sampling)			
Trichloroethylene	<1.0	<1.0	<1.0	NS
<b>August 11, 2000</b>	(storm event prior evening - August 10, 2000)			
Trichloroethylene	<1.0	<1.0	2.1	<1.0
Toluene	<1.0	1.1	<1.0	<1.0
<b>September 18, 2000</b>				
Chloroform	NS	41.6	10.3	NS
Trichloroethylene	NS	<1.0	2.1	NS
Bromodichloromethane	NS	6.2	1.8	NS
Dibromochloromethane	NS	1.5	<1.0	NS
<b>November 9, 2000</b>	(storm event during sampling)			
Trichloroethylene	<1.0	<1.0	<1.0	<1.0
<b>December 15, 2000</b>				
Trichloroethylene	<1.0	<1.0	8.1	<1.0
Toluene	<1.0	2.5	<1.0	<1.0
<b>January 31, 2001</b>				
Chloroform	<1.0	1.3	<1.0	<1.0
Trichloroethylene	<1.0	34.5	17.4	<1.0
<b>February 27, 2001</b>				
1,1 - Dichloroethene	<1.0	1.1	<1.0	<1.0
cis, 1,2-Dichloroethene	<1.0	1.5	1.4	<1.0
Chloroform	<1.0	1.2	<1.0	<1.0
Trichloroethylene	<1.0	100	21.1	<1.0

## FIGURES

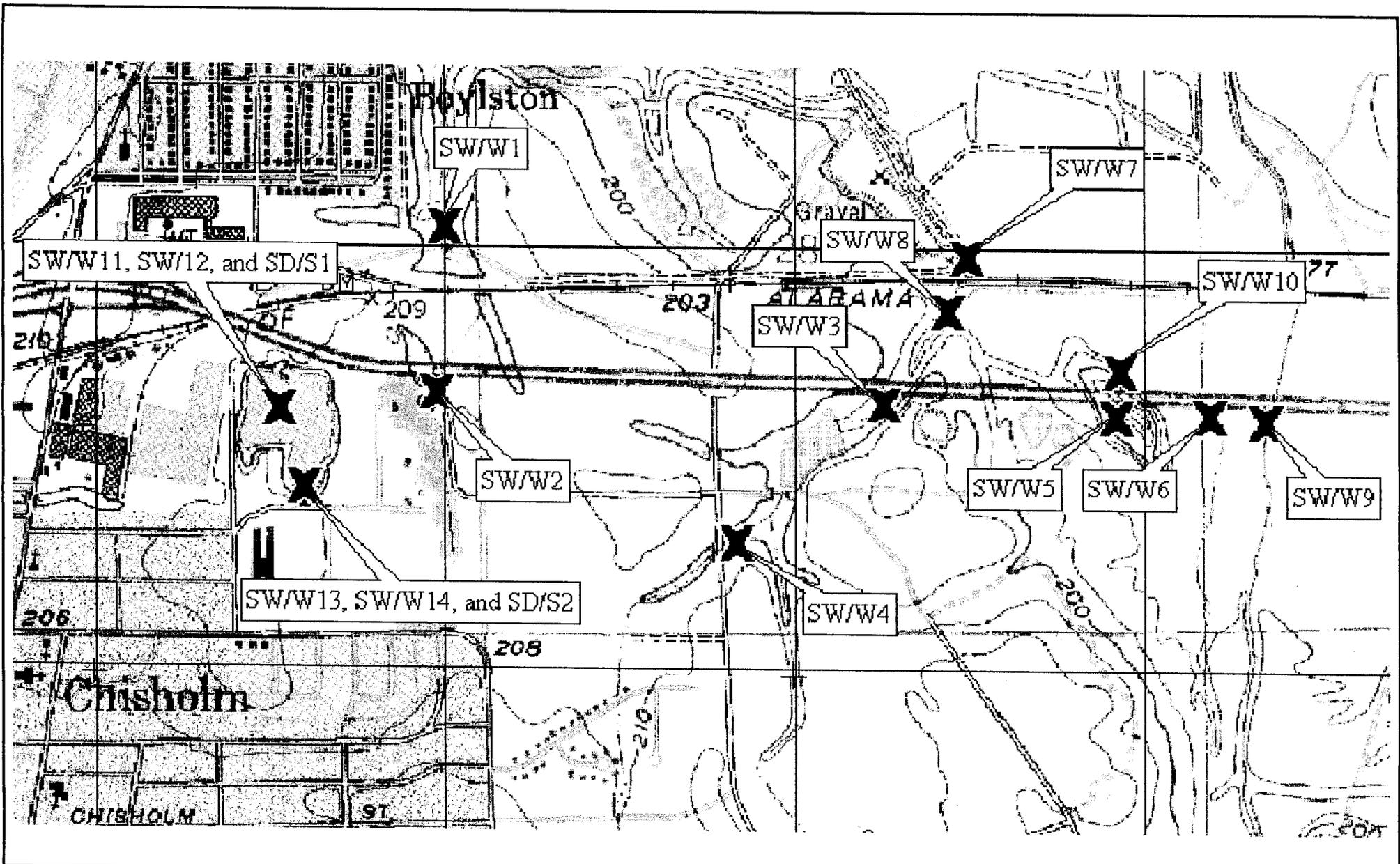


Figure 1. Approximate Locations of Surface Water Samples Collected by ADEM and TTL on January 17 and 18, 2001; Coliseum Boulevard Plume, Montgomery, Alabama.

TTL, Inc.

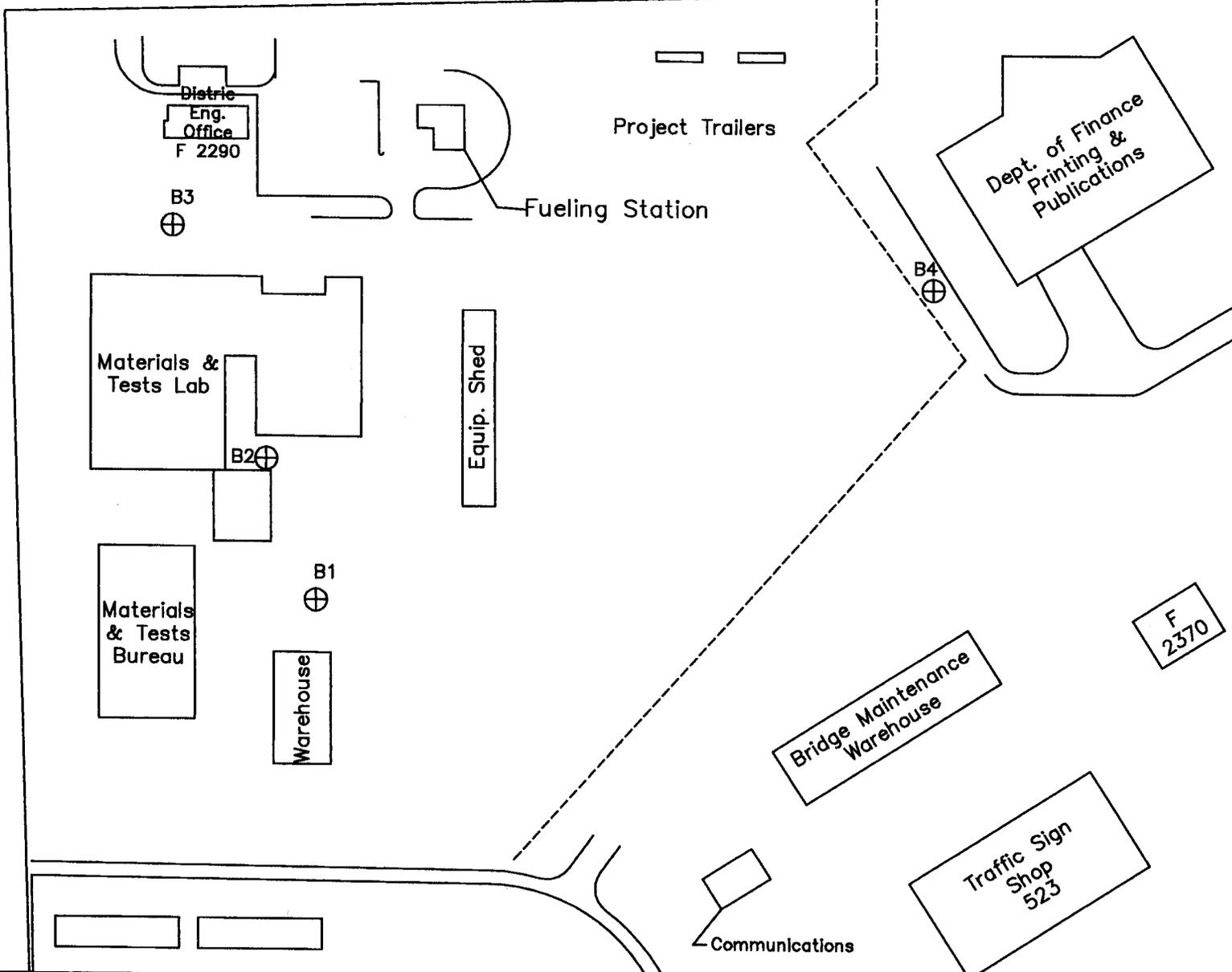
PRACTICING IN THE GEOSCIENCES

Scale 1" = 155'



CHISHOLM ST

FAIRGROUND RD



**LEGEND**

B1  
⊕ Geoprobe borehole location and identifier  
Note: Borehole locations have not been surveyed and are thus approximate.

SCALE: 1"=300'

DRAWING NUMBER 001107.01

ADEM

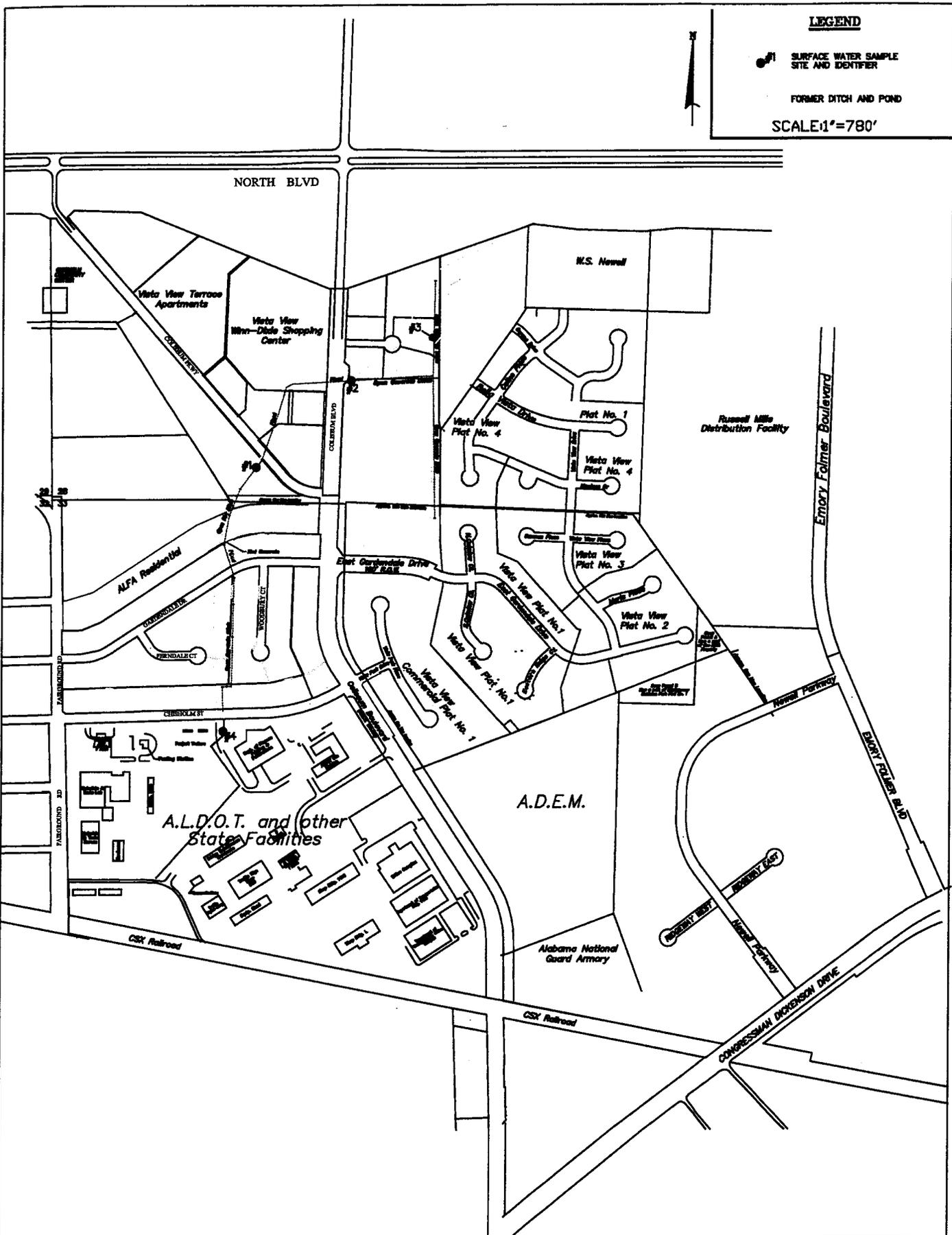
January 30, 2001

Note: Base map is a composite of an initial base map compiled by Goodwyn, Mills and Goodwood Environmental Consultants, Inc. and a June 16, 2000 map by Larry E. Speake & Associates. The June 16, 2000 map of Larry Speake & Associates was compiled from maps provided by TTL, Inc. and the Montgomery, Alabama Tax Assessor's Office. Data is from investigations performed by TTL, Inc.

**TTL, Inc.**  
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Figure 2. Approximate locations of geoprobe boreholes for collection of soil and groundwater samples by ADEM and TTL; January 24-26, 2001; Coliseum Boulevard Plume; Montgomery, Alabama.

F 2370



**LEGEND**

● #1 SURFACE WATER SAMPLE SITE AND IDENTIFIER

--- FORMER DITCH AND POND

SCALE: 1"=780'

TTL, Inc.

Practicing in the Geosciences

Drawing No. 001113.02

Figure 3. Locations of Surface Water Samples collected on January 31, 2001; Coliseum Boulevard Plume Investigation; Montgomery, Alabama.

Note: Base map is a composite of an initial base map compiled by Goodwyn, Mills & Cowood Environmental Consultants, Inc. and a June 16, 2000 map by Larry E. Speaks & Associates. The June 16, 2000 map of Larry Speaks & Associates was compiled from maps provided by TTL, Inc. and the Montgomery, Alabama Tax Assessor's Office.