

MAY STATUS REPORT

COLISEUM BOULEVARD PLUME INVESTIGATION



DEPARTMENT OF TRANSPORTATION

June 11,

2001

Submitted to:
The Alabama Department of Environmental Management
Montgomery, Alabama

Prepared by:
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May Status Report

Coliseum Boulevard Plume Investigation

May Status Report

- May 1-May 3, 2001 - installed 6 monitoring wells (MW101S, MW102S, MW103S, MW101D, MW102D, and MW103D) along west and main branches of Kilby Ditch.
- May 3, 2001 - performed soil conductivity tests at ALDOT monitoring well MW1 and immediately north of North Boulevard at former probehole PH 51 to attempt to tag the top of the Gordo Formation in preparation for the Rotosonic Drilling Demonstration.
- May 4, 2001 - measured water levels in monitoring wells and piezometers along main and west branches of Kilby ditch.
- May 10-11, 2001 - monitoring wells MW101S, MW101D, MW102S, MW102D, MW103S and MW103D were developed. Note: monitoring well MW103S contained only a few feet of water and was purged dry during development.
- May 14, 2001 - drilling demonstration performed by of Prosonic Corporation. Borehole drilled to 96 feet below land surface near ALDOT monitoring well MW1. Top of the Gordo Formation was tagged at about 87 feet below land surface.
- May 15, 2001 - deep monitoring well (identified as MW104) constructed near ALDOT monitoring well MW5. Well terminated on top of the Gordo Formation at 87 feet below land surface.
- May 16, 2001 - measured water levels in all monitoring wells and piezometers associated with the Coliseum Boulevard Plume Investigation.
- May 23-24, 2001 - collected shallow and deep ground-water samples from monitoring wells MW101S, MW101D, MW102S, MW102D, and MW103D. The ground-water samples were analyzed for volatile organic compounds (VOCs). Note: There was an insufficient volume of groundwater in MW103S for collection of a sample.
- May 25, 2001 - surface water samples collected along the main and west branches of Kilby ditch and tributaries of Three Mile Branch (see Figures 1 and 2). The samples were analyzed for VOCs (see Table 1).

Table 1. Results of analyses¹ of surface-water samples; Coliseum Boulevard Plume Investigation, Montgomery Alabama. [Locations of surface-water sample sites are shown on Figures 1 and 2.]

	SAMPLE SITE												
	SW-1*	SW-2*	SW-3**	SW-4*	SW-5*	SW-6**	SW-7**	SW-8**	SW-9**	SW-10**	SW-11**	SW-12	SW-13
Concentrations are expressed in micrograms/liter													
July 24, 2000 (No storm events several days prior to sampling)													
Trichloroethylene	NS	15	10.2	NS	---	---	---	---	---	---	---	---	---
cis, 1,2-Dichloroethene	NS	2.5	2.8	NS	---	---	---	---	---	---	---	---	---
Toluene	NS	13.4	<1.0	NS	---	---	---	---	---	---	---	---	---
Chloroform	NS	3.2	<1.0	NS	---	---	---	---	---	---	---	---	---
August 2, 2000 (Storm event during sampling)													
Trichloroethylene	<1.0	<1.0	<1.0	NS	---	---	---	---	---	---	---	---	---
August 11, 2000 (Storm event prior evening - August 10, 2000)													
Trichloroethylene	<1.0	<1.0	2.1	<1.0	NS	NS	NS	NS	NS	NS	NS	NS	NS
Toluene	<1.0	1.1	<1.0	<1.0	NS	NS	NS	NS	NS	NS	NS	NS	NS
September 18, 2000													
Trichloroethylene	NS	<1.0	2.1	NS	---	---	---	---	---	---	---	---	---
Bromodichloromethane	NS	6.2	1.8	NS	---	---	---	---	---	---	---	---	---
Dibromochloromethane	NS	1.5	<1.0	NS	---	---	---	---	---	---	---	---	---
Chloroform	NS	41.6	10.3	NS	---	---	---	---	---	---	---	---	---
November 9, 2000 (Storm event during sampling)													
Trichloroethylene	<1.0	<1.0	<1.0	<1.0	---	---	---	---	---	---	---	---	---
December 15, 2000													
Trichloroethylene	<1.0	<1.0	8.1	<1.0	---	---	---	---	---	---	---	---	---
Toluene	<1.0	2.5	<1.0	<1.0	---	---	---	---	---	---	---	---	---
January 31, 2001													
Trichloroethylene	<1.0	34.5	17.4	<1.0	---	---	---	---	---	---	---	---	---
Chloroform	<1.0	1.3	<1.0	<1.0	---	---	---	---	---	---	---	---	---
February 27, 2001													
Trichloroethylene	<1.0	100	21.1	<1.0	---	---	---	---	---	---	---	---	---
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	---	---	---	---	---	---	---	---	---
March 30, 2001													
Trichloroethylene	<1.0	156	68.0	<1.0	157	<1.0	<1.0	51.9	33.8	19.7	18.3	<1.0	3.4
1,1 - Dichloroethene	<1.0	2.0	<1.0	<1.0	1.1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis, 1,2-Dichloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.0	<1.0	<1.0	<1.0	<1.0	<1.0
April 26, 2001													
Trichloroethylene	<1.0	156	66.6	NS	88.8	NS	NS	46.4	21.9	16.7	15.7	1.8	<1.0
1,1 - Dichloroethene	<1.0	2.0	<1.0	NS	1.0	NS	NS	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis, 1,2-Dichloroethene	<1.0	<1.0	<1.0	NS	<1.0	NS	NS	1.5	<1.0	<1.0	<1.0	<1.0	<1.0
May 25, 2001													
Trichloroethylene	<1.0	140	24.3	<1.0	95.5	<1.0	<1.0	23.8	31.6	21.7	21.3	1.4	<1.0
1,1 - Dichloroethene	<1.0	1.6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis, 1,2-Dichloroethene	<1.0	<1.0	<1.0	<1.0	1.1	<1.0	<1.0	<1.0	1.0	<1.0	<1.0	<1.0	<1.0

¹ Testing of the samples was in accordance with Method 8260 outlined in Test Methods for Evaluating Solid Waste Physical/Chemical Methods, EPA, SW-846, Third Edition, November, 1986.

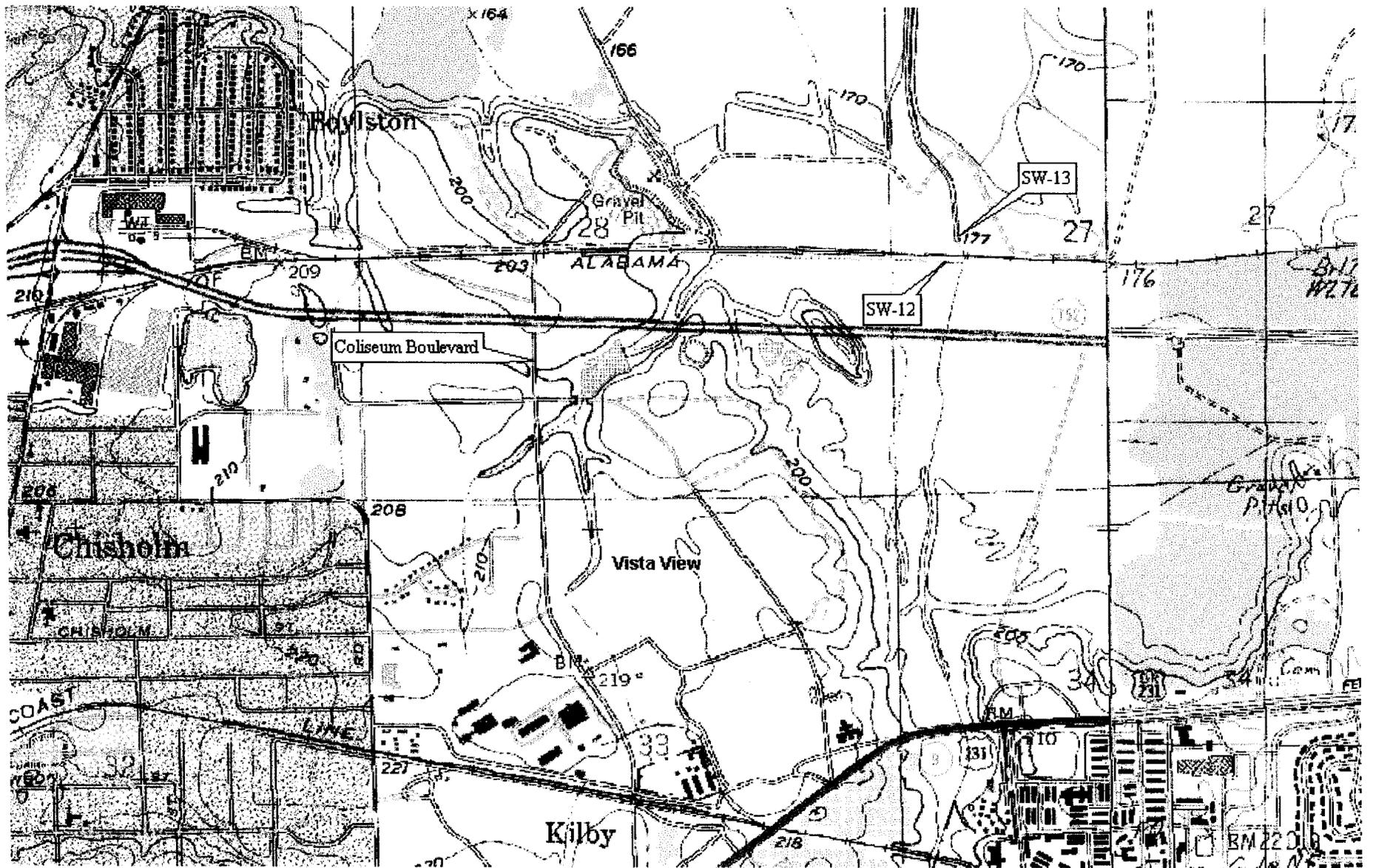
* West Kilby ditch

** Main Kilby ditch

NS = Not sampled (sample site was "dry").

Table 2--Continued

	Site 1*	Site 2*	Site 3**	Site 4*	Site 5*	Site 6**	Site 7**	Site 8**	Site 9**	Site 10**	Site 11**	Site 12	Site 13
Concentrations are expressed in micrograms/liter													
March 30, 2001													
Trichloroethylene	<1.0	156	68.0	<1.0	157	<1.0	<1.0	51.9	33.8	19.7	18.3	<1.0	3.4
1,1 - Dichloroethene	<1.0	2.0	<1.0	<1.0	1.1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis, 1,2-Dichloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	SW-1	SW-2	SW-3		SW-5			SW-8	SW-9	SW-10	SW-11	SW-12	SW-13
April 26, 2001													
Trichloroethylene	<1.0	156	66.6		88.8			46.4	21.9	16.7	15.7	1.8	<1.0
1,1 - Dichloroethene	<1.0	2.0	<1.0		<1.0			<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis, 1,2-Dichloroethene	<1.0	<1.0	<1.0		<1.0			1.5	<1.0	<1.0	<1.0	<1.0	<1.0
* West Kilby ditch													
** Main Kilby ditch													



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Figure 2. Locations of Surface Water Samples 12 and 13.
Coliseum Boulevard Plume Investigation; Montgomery, Alabama.

Scale 1:24,000

