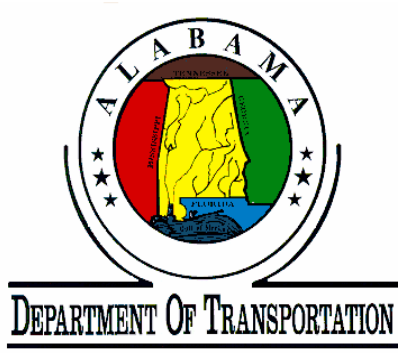
SUMMARY REPORT FOR QUARTERLY SAMPLING RESULTS FOR JANUARY 22, 2003

INVESTIGATION OF "LOW-LYING AREAS"

Coliseum Boulevard Plume Investigation



July 11, 2003

Submitted to:

The Alabama Department of Environmental Management
Montgomery, Alabama

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DEPARTMENT OF TRANSPORTATION

SUMMARY REPORT FOR QUARTERLY SAMPLING RESULTS FOR JANUARY 22, 2003

INVESTIGATION OF "LOW-LYING AREAS"

Introduction

The ALDOT (Alabama Department of Transportation) is investigating TCE (trichloroethylene) in soil and groundwater in the area known as the Coliseum Boulevard Plume in Montgomery, Alabama. The investigation is being conducted under the direction of the ADEM (Alabama Department of Environmental Management). The investigation comprises four general areas: 1) the Kilby Ditch, 2) the Probehole 12 area, 3) Low-Lying Areas, and 4) Site-Wide. This report contains results of samples of sediment and surface water collected from the Low-Lying Areas.

The Low-Lying Areas are located downstream from the Kilby Ditch (Figure 1). Sediment and surface-water samples have been collected at 16 sites in accordance with Addendum 04 of the Comprehensive Work Plan to investigate the CBP (Coliseum Boulevard Plume). The 16 sites where samples are collected are shown on Figure 2 and described in Table 1. Sediment and surface-water samples were collected in November 2001 and February 2002. Based on the November 2001 and February 2002, results, the ALDOT recommended quarterly sediment and surface-water sampling at eight locations (I, J, K, L, M, N, O, and P) for one year. The quarterly sampling was to determine if VOC (volatile organic compounds) concentrations fluctuate seasonally and to determine if an ecological risk assessment was needed. This report provides the results of the January 14, 2003, sampling event of the Low-Lying Areas. The January sampling event was the fourth quarter and final approved sampling event for the Low-Lying Areas.

Sample Collection

A hand auger was used to collect sediment samples at locations I, J, K, L, M, N, O, and P on January 14, 2003. Sediment samples were collected from the hand auger using an EnCore sampler. The sediment samples were collected immediately above the first stiff silt, clay, or organic layer. During the January 2003 sampling event the sediment samples were collected 8 to 11 inches BLS (below land surface).

Eight surface-water samples were collected during the January 2003 sampling event at locations I, J, K, L, M, N, O, and P. An equipment rinsate sample was collected during the event. Additionally, an aqueous trip blank was placed in the cooler with the samples that were shipped to the laboratory.

Surface-water samples were collected by slowly lowering an upright VOC glass vial, which contained a hydrochloric acid preservative, into the water. The cap of the VOC vial was used to add water to form a meniscus before sealing the vial with a Teflon-lined cap.

Sediment and surface-water samples were immediately placed on ice, in a cooler, and shipped to **TTL's** laboratory in Tuscaloosa, Alabama for VOC analyses under strict chain-of-custody. The samples were analyzed for VOC's using Method 5035/8260 (sediment) and 8260 (groundwater) as outlined in Test Methods for Evaluating Solid Waste Physical/Chemical Methods, EPA, SW-846.

Results

The analytical results for samples collected on November 15 and 16, 2001, February 13 and 14, 2002, May 22, 2002, September 17, 2002, October 31, 2002, and January 14, 2003 are presented in Tables 2a and 2b and in Figures 3 and 4.

In January 2003, the sediment sample from location P contained a concentration of TCE of 11 µg/kg (micrograms per kilogram). None of the other sediment samples collected at the other sample locations contained detectable concentrations of VOCs. Laboratory reports are included in the Attachment.

During the January 2003 event, TCE concentrations (some concentrations estimated) were reported in the surface water at sample locations I, J, K, L, N, O, and P. Detected concentrations of TCE ranged from 2.9 µg/l (micrograms per liter) to 43.2 µg/l. Cis-1,2-dichloroethene was reported in only one surface-water sample at a concentration of 14.4 µg/l (location O). Laboratory reports are included in the Attachment.

Preliminary Ecological Screening

A preliminary ecological screening was performed using the maximum sediment and surface water concentrations collected during the six (November 15 and 16, 2001, February 13 and 14, 2002, May 22, 2002, September 17, 2002, October 31, 2002, and January 14, 2003) sampling events. The ecological screening evaluation was performed to determine if an Ecological Risk Assessment should be performed in the Low-Lying Area. Table 3 compares ecological screening values for the constituents of concern in this investigation to the maximum VOC concentrations detected in the sediment and surface water of the Low-Lying Areas.

Trichloroethylene, trichorofluoromethane, benzene, toluene, M, P-Xylenes, cis-1,2-Dichloroethene, chloromethane, vinyl chloride, and methylene chloride are the volatile organic compounds identified in the analyses of the sediment samples. Trichorofluoromethane, benzene, toluene, M, P-Xylenes, and methylene chloride have not been identified as constituents of concern for this investigation; and therefore, were not considered for the screening. The screening values for soil were obtained from the U. S. EPA Bulletin, Region III BTAG Screening Levels, 1995 as no soil or sediment screening values were available from the ADEM (Alabama Department of Environmental Management) or from the EPA Region IV. No ecological screening values could be obtained for the chemicals chloromethane, and cis-1,2-Dichloroethene, from that document.

The screening value for TCE in sediment is 300 ppb (parts per billion) or µg/kg. The maximum concentration detected in the Low-Lying Areas is 50.5 µg/kg (location N on November 15, 2001). The screening value for vinyl chloride is 300 µg/kg. The maximum concentration detected is 35.1 µg/kg (location O on October 31, 2002). Therefore, the maximum concentrations of the constituents of concern detected in the Low-Lying Areas do not exceed the ecological screening values for soils from the Region III BTAG.

The screening values used for the surface water evaluation were calculated using equation nineteen and information in Table 1 from the ADEM, Water Division - Water Quality Program; July 14, 1999, Revision; Toxic Pollutant Criteria; 335-6-10-.07. This is also the source of the action level that the ADEM set for Trichloroethylene in the Kilby Ditch. Trichloroethylene, toluene, chloromethane, vinyl chloride, cis-1,2-Dichloroethene, and methylene chloride are compounds of VOC's identified in the surface-water samples. Toluene and methylene chloride were not compared to a screening value because neither compound has been identified as a constituent of concern for this investigation. Screening values are not available for chloromethane and cis-1,2-dichloroethene.

None of the maximum surface water concentrations for the constituents of concern exceeded the ecological screening values. The screening value for TCE in surface water is 175 µg/l. The maximum concentration detected in surface water of the Low-Lying Areas is 43.2 µg/l at location P on January 14, 2003. The maximum surface water concentration of vinyl chloride is estimated at 4.8µg/l collected at location O, on October 31, 2002 (the screening value is 1,167 µg/l).

Recommendations

The ALDOT recommends semi-annual monitoring events to determine the presence of constituents of concern in the Low-Lying Areas. The ALDOT further recommends that one of the monitoring events be scheduled for winter (January – February) to coincide with the period in which the highest concentrations of TCE were detected in sediment and surface water samples. Howerver, inasmuch as none of the maximum sediment and surface water concentrations for the constituents of concern exceeded the ecological risk screening values, the ALDOT does not believe an Ecological Risk Assessment is needed at this time. If future data collected from the surface water samples show that a constituent of concern exceeds the ecological screening values, an Ecological Risk Assessment will be performed.

TABLES

TABLE 1. Sediment and Surface-Water Sample Locations in Low-Lying Area; Coliseum Boulevard Plume Investigation Site, Montgomery, Montgomery County, Alabama.	
Sample Location Identifier	**Description**
A	Seep
B	Low point of a multi-branching channel. Water flows in from a single channel and pools until it overflows into other channels.
C	Low point of an interconnecting channel between two intermittent streams.
D	Low point of branching channels.
E	Low point of a channel (ground water seep).
F	Same as B (The pooled water empties into a single channel).
G	Confluence of intermittent stream with Three Mile Branch.
H	Depositional area (sand bar).
I	Depositional area (sand bar).
J	Depositional area (mud flat).
K	Low point (water pools).
L	Depositional area (sand bar).
M	A low point in the grassy field.
N	Culvert (water outflow).
O	Low point at bottom of hill.
P	Culvert (water inflow).

Table 2a. Concentrations of VOCs [1] (volatile organic compounds) in samples of sediment. Quarterly "Low-Lying Areas" Investigations; Coliseum Blvd. Plume Investigation; Montgomery, Alabama. [Distributions of VOCs in sediment and surface-water samples are shown on Figures 3 and 4.]

			Soil Lab Results							
Sample Location Identifier	Sample Date	Approximate Sample Depth (inches)	Trichloroethylene	Cis-1,2-Dichloroethene	Vinyl Chloride	Trichlorofluoromethane	M,P-Xylenes	Benzene	Toluene	Methylene Chloride[2]
			[Concentrations are in micrograms per kilogram (µg/kg)]							
			3.0 µg/kg[3]	3.0 µg/kg[3]	3.0 µg/kg[3]	3.0 µg/kg[3]	3.0 µg/kg[3]	3.0 µg/kg[3]	3.0 µg/kg[3]	3.0 µg/kg[3]
A	11/15/2001	6	ND[4]	ND	ND	ND	ND	ND	ND	4.3J[5]
A	2/13/2002	12	ND	ND	ND	6.3	ND	ND	ND	ND
A	5/22/2002	-	NC[6]	NC	NC	NC	NC	NC	NC	NC
B	11/15/2001	5	ND	ND	ND	ND	ND	ND	ND	3.6J
B	2/13/2002	10	ND	ND	ND	ND	ND	ND	ND	ND
B - duplicate[7]	2/13/2002	10	ND	ND	ND	ND	ND	ND	ND	ND
B	5/22/2002	-	NC	NC	NC	NC	NC	NC	NC	NC
C	11/15/2001	8	ND	ND	ND	ND	ND	ND	ND	5.7J
C	2/13/2002	8	NR[8]	NR	NR	NR	NR	NR	NR	NR
C	5/22/2002	-	NC	NC	NC	NC	NC	NC	NC	NC
D	11/15/2001	8	ND	ND	ND	ND	ND	ND	3.3J	ND
D-duplicate	11/15/2001	8	ND	ND	ND	ND	ND	ND	12.4J	ND
D	2/13/2002	8	ND	ND	ND	ND	ND	5.0	ND	ND
D	5/22/2002	-	NC	NC	NC	NC	NC	NC	NC	NC
E	11/15/2001	4	ND	ND	ND	ND	ND	ND	25.5J	3.9J
E	2/13/2002	7	ND	ND	ND	ND	ND	ND	9.5	ND
E	5/22/2002	-	NC	NC	NC	NC	NC	NC	NC	NC
F	11/15/2001	6	ND	ND	ND	ND	ND	ND	8.8J	10.6J
F	2/13/2002	11	ND	ND	ND	ND	ND	ND	ND	ND
F	5/22/2002	-	NC	NC	NC	NC	NC	NC	NC	NC
G	11/15/2001	10	ND	ND	ND	ND	ND	ND	ND	ND
G	2/13/2002	7	ND	ND	ND	14.4	ND	ND	ND	ND
G	5/22/2002	-	NC	NC	NC	NC	NC	NC	NC	NC
H	11/15/2001	6	ND	ND	ND	ND	ND	ND	ND	ND
H	2/13/2002	4	ND	ND	ND	ND	ND	ND	ND	ND
H	5/22/2002	-	NC	NC	NC	NC	NC	NC	NC	NC
I	11/16/2001	3	ND	ND	ND	ND	ND	ND	ND	ND
I	2/14/2002	5	12.1	ND	ND	ND	ND	ND	ND	ND
I	5/22/2002	5	6.8J	ND	ND	ND	1.9J	ND	4.7J	4.2J
I	9/17/2002	6	ND[9]	ND	ND	ND	ND	ND	ND	ND
I	10/31/2002	6	ND	ND	ND	ND	ND	ND	ND	ND
I	1/14/2003	8	ND[10]	ND	ND	ND	ND	ND	ND	ND

Table 2a. Concentrations of VOCs [1] (volatile organic compounds) in samples of sediment. Quarterly "Low-Lying Areas" Investigations; Coliseum Blvd. Plume Investigation; Montgomery, Alabama. [Distributions of VOCs in sediment and surface-water samples are shown on Figures 3 and 4.]

			Soil Lab Results							
Sample Location Identifier	Sample Date	Approximate Sample Depth (inches)	Trichloroethylene	Cis-1,2-Dichloroethene	Vinyl Chloride	Trichlorofluoromethane	M,P-Xylenes	Benzene	Toluene	Methylene Chloride[2]
			[Concentrations are in micrograms per kilogram (µg/kg)]							
			3.0 µg/kg[3]	3.0 µg/kg[3]	3.0 µg/kg[3]	3.0 µg/kg[3]	3.0 µg/kg[3]	3.0 µg/kg[3]	3.0 µg/kg[3]	3.0 µg/kg[3]
J	11/16/2001	8	ND	ND	ND	ND	ND	ND	ND	ND
J	2/14/2002	5	ND	ND	ND	ND	ND	ND	ND	ND
J	5/22/2002	8	ND	ND	ND	ND	ND	ND	4.1J	7.5J
J	9/17/2002	7	ND	ND	ND	ND	ND	ND	ND	ND
J	10/31/2002	8	ND	ND	ND	ND	ND	ND	ND	ND
J	1/14/2003	8	ND	ND	ND	ND	ND	ND	ND	ND
K	11/16/2001	8	ND	ND	ND	ND	ND	ND	ND	3.1J
K-duplicate	11/16/2001	8	ND	ND	ND	ND	ND	ND	ND	ND
K	2/14/2002	11	ND	ND	ND	ND	ND	ND	ND	ND
K-duplicate	2/14/2002	11	ND	ND	ND	ND	ND	ND	ND	ND
K	5/22/2002	12	ND	ND	ND	ND	ND	ND	6.0J	3.2J
K	9/17/2002	12	ND	ND	ND	ND	ND	ND	ND	ND
K	10/31/2002	12	ND	ND	ND	ND	ND	ND	ND	ND
K	1/14/2003	10	ND	ND	ND	ND	ND	ND	ND	ND
L	11/16/2001	10	3.9J	ND	ND	ND	ND	ND	ND	3.1J
L	2/14/2002	8	ND	ND	ND	ND	ND	ND	ND	ND
L	5/22/2002	10	ND	ND	ND	ND	ND	ND	ND	4.8J
L-duplicate	5/22/2002	10	ND	ND	ND	ND	ND	ND	ND	4.8J
L	9/17/2002	8	26.4J	6.3J	ND	ND	ND	ND	ND	ND
L	10/31/2002	12	ND	ND	ND	ND	ND	ND	ND	ND
L	1/14/2003	9	ND	ND	ND	ND	ND	ND	ND	ND
M	11/16/2001	10	ND	ND	ND	ND	ND	ND	ND	4.8J
M	2/14/2002	10	ND	ND	ND	ND	ND	ND	ND	ND
M	5/22/2002	8	ND	ND	ND	ND	ND	ND	3.0J	3.3J
M	9/17/2002	8	ND	ND	ND	ND	ND	ND	ND	ND
M	10/31/2002	6	ND	ND	ND	ND	ND	ND	ND	ND
M	1/14/2003	9	ND	ND	ND	ND	ND	ND	ND	ND
N	11/15/2001	3	50.6J	ND	ND	ND	ND	ND	16.4J	6.6J
N	2/13/2002	9	ND	ND	ND	ND	ND	ND	ND	ND
N	5/22/2002	10	ND	ND	ND	ND	ND	ND	ND	3.3J
N	9/17/2002	8	ND	ND	ND	ND	ND	ND	ND	ND
N-duplicate	9/17/2002	8	ND	ND	ND	ND	ND	ND	ND	ND
N	10/31/2002	12	ND	ND	ND	ND	ND	ND	3.2J	ND
N	1/14/2003	8	ND	ND	ND	ND	ND	ND	ND	ND

Table 2a. Concentrations of VOCs [1] (volatile organic compounds) in samples of sediment. Quarterly "Low-Lying Areas" Investigations; Coliseum Blvd. Plume Investigation; Montgomery, Alabama. [Distributions of VOCs in sediment and surface-water samples are shown on Figures 3 and 4.]

			Soil Lab Results							
Sample Location Identifier	Sample Date	Approximate Sample Depth (inches)	Trichloroethylene	Cis-1,2-Dichloroethene	Vinyl Chloride	Trichlorofluoromethane	M,P-Xylenes	Benzene	Toluene	Methylene Chloride[2]
			[Concentrations are in micrograms per kilogram (µg/kg)]							
			3.0 µg/kg[3]	3.0 µg/kg[3]	3.0 µg/kg[3]	3.0 µg/kg[3]	3.0 µg/kg[3]	3.0 µg/kg[3]	3.0 µg/kg[3]	3.0 µg/kg[3]
O	11/15/2001	3	ND	ND	ND	ND	ND	ND	3.3J	3.1J
O	2/13/2002	8	ND	ND	ND	ND	ND	ND	ND	ND
O	5/22/2002	8	ND	ND	ND	5.7J	ND	ND	4.0J	4.8J
O	9/17/2002	12	ND	ND	ND	ND	ND	ND	ND	ND
O	10/31/2002	12	ND	ND	35.1	ND	ND	ND	7.1J	ND
O	1/14/2003	11	ND	ND	ND	ND	ND	ND	ND	ND
P	11/15/2001	2	ND	ND	ND	7.1J	ND	ND	ND	ND
P	2/13/2002	9	10.6	ND	ND	ND	ND	ND	ND	ND
P	5/22/2002	11	7.0J	ND	ND	ND	ND	ND	ND	6.7J
P	9/17/2002	10	ND	ND	ND	ND	ND	ND	ND	ND
P	10/31/2002	8	ND	ND	ND	ND	ND	ND	ND	ND
P	1/14/2003	10	11	ND	ND	ND	ND	ND	ND	ND

Notes:

[1] The samples were analyzed in accordance with Method 8260 outlined in Test Methods for Evaluating Solid Waste Physical/Chemical Methods, EPA, SW-846.

[2] Methylene Chloride is considered to have been present in the laboratory during analysis of the samples.

[3] MDL = Method Detection Limit of 3.0 micrograms per kilogram for the soil laboratory analyses

[4] ND = Not Detected

[5] J = Concentration below the calibration curve, but above the detection limit

[6] NC = Not Collected, Quarterly sampling was initiated after the February 2002 sampling event, and the only sample locations to be sampled are I through P.

[7] Duplicate samples were collected for quality assurance/quality control purposes.

[8] NR = Not Reported, analytical results were not reported by STL laboratories because the soil sample appeared to have something in the matrix which caused the sample not to purge.

[9] Results are reported on "wet-weight" basis.

[10] The sediment samples collected on 1/14/03 were analyzed by STL Laboratories due to equipment malfunction at TTL. STL method detection limits were listed as <1.1, <1.2, <1.3, <1.6, and <2.4 for the different samples analyzed.

Table 2b. Concentrations of VOCs (volatile organic compounds)[1] in samples of surface water; Quarterly "Low-Lying Areas" Investigation; Coliseum Blvd. Plume Investigation; Montgomery, Alabama. [Distributions of VOCs in sediment and surface-water samples are shown on Figures 3 and 4.]

		Aqueous Lab Results					
		Trichloroethylene	Cis-1,2-Dichloroethene	Vinyl Chloride	Chloromethane	Toluene	Methylene Chloride[2]
Sample Location Identifier	Sample Date	[Concentrations are in micrograms per liter (µg/l)]					
		1.0 µg/l[3]	1.0 µg/l[3]	1.0 µg/l[3]	1.0 µg/l[3]	1.0 µg/l[3]	1.0 µg/l[3]
A	11/15/2001	ND[4]	ND	ND	ND	ND	ND
A	2/13/2002	ND	ND	ND	ND	ND	ND
A	5/22/2002	NC[5]	NC	NC	NC	NC	NC
B	11/15/2001	NC	NC	NC	NC	NC	NC
B	2/13/2002	ND	ND	ND	ND	ND	ND
B - duplicate[6]	2/13/2002	ND	ND	ND	ND	ND	ND
B	5/22/2002	NC	NC	NC	NC	NC	NC
C	11/15/2001	NC	NC	NC	NC	NC	NC
C	2/13/2002	ND	ND	ND	ND	ND	ND
C	5/22/2002	NC	NC	NC	NC	NC	NC
D	11/15/2001	NC	NC	NC	NC	NC	NC
D-duplicate	11/15/2001	NC	NC	NC	NC	NC	NC
D	2/13/2002	ND	ND	ND	ND	ND	ND
D	5/22/2002	NC	NC	NC	NC	NC	NC
E	11/15/2001	NC	NC	NC	NC	NC	NC
E	2/13/2002	ND	ND	ND	ND	ND	ND
E	5/22/2002	NC	NC	NC	NC	NC	NC
F	11/15/2001	NC	NC	NC	NC	NC	NC
F	2/13/2002	ND	ND	ND	ND	1.1J[7]	ND
F	5/22/2002	NC	NC	NC	NC	NC	NC
G	11/15/2001	NC	NC	NC	NC	NC	NC
G	2/13/2002	ND	ND	ND	ND	ND	ND
G	5/22/2002	NC	NC	NC	NC	NC	NC
H	11/15/2001	ND	ND	ND	ND	ND	ND
H	2/13/2002	ND	ND	ND	ND	ND	ND
H	5/22/2002	NC	NC	NC	NC	NC	NC
I	11/16/2001	4.6J	ND	ND	ND	ND	ND
I	2/14/2002	5.0J	ND	ND	ND	ND	ND
I	5/22/2002	2.3J	ND	ND	ND	ND	ND
I	9/17/2002	ND	ND	ND	ND	ND	ND
I	10/31/2002	4.2J	ND	ND	ND	ND	ND
I	1/14/2003	4.3J	ND	ND	ND	ND	ND
J	11/16/2001	2.8J	ND	ND	ND	ND	ND
J	2/14/2002	3.9J	ND	ND	ND	ND	ND
J	5/22/2002	1.9J	ND	ND	ND	ND	ND
J	9/17/2002	ND	ND	ND	ND	ND	ND
J	10/31/2002	3.9J	ND	ND	ND	ND	ND
J	1/14/2003	2.9J	ND	ND	ND	ND	ND
K	11/16/2001	4.9J	ND	ND	ND	ND	ND
K-duplicate	11/16/2001	4.9J	ND	ND	ND	ND	ND
K	2/14/2002	16.4J	ND	ND	ND	ND	ND
K-duplicate	2/14/2003	16.2J	ND	ND	ND	ND	ND
K	5/22/2002	5.5J	ND	ND	ND	ND	ND
K	9/17/2002	2.2J	ND	ND	ND	1.4J	ND
K	10/31/2002	5.5J	ND	ND	ND	ND	ND
K	1/14/2003	13.9J	ND	ND	ND	ND	ND
L	11/16/2001	2.9J	ND	ND	ND	ND	ND
L	2/14/2002	7.9J	ND	ND	ND	ND	ND
L	5/22/2002	2.7J	ND	ND	ND	ND	ND
L-duplicate	5/22/2002	2.6J	ND	ND	ND	ND	ND
L	9/17/2002	1.4J	ND	ND	ND	ND	ND
L	10/31/2002	3.4J	ND	ND	ND	ND	ND
L	1/14/2003	6.0J	ND	ND	ND	ND	ND

Table 3. Preliminary ecological screening evaluation of volatile organic compounds[1] (VOCs) in soils and surface water; "Low-Lying Areas" Investigation: Colisum Blvd. Plume Site: Montgomery, Alabama.

Soil	Maximum Concentration (µg/kg) [2]	Depth of Sample (inches)	Screening Level (ppb) [3]	Exceeds Screening Level
Trichloroethylene	50.6	3	300	No[4]
Toluene	25.5	4	100	No[4]
Benzene	5.0	8	5,300	No[4]
Trichlorofluoromethane	14.4	7	11,600	No[4]
Methylene Chloride	NA	NA	NA	NA
Aqueous	**(µg/L) [6]**			
Trichloroethylene	41.2	NA	21,900	No[4]
Toluene	1.1	NA	175	No[5]

[1] The sample was analyzed in accordance with Method 8260 outlined in Test Methods for Evaluating Solid Waste Physical/Chemical Methods. EPA, SW-846

[2] MDL = Method Detection Limit 3.0 micrograms per kilogram for the soil laboratory analyses

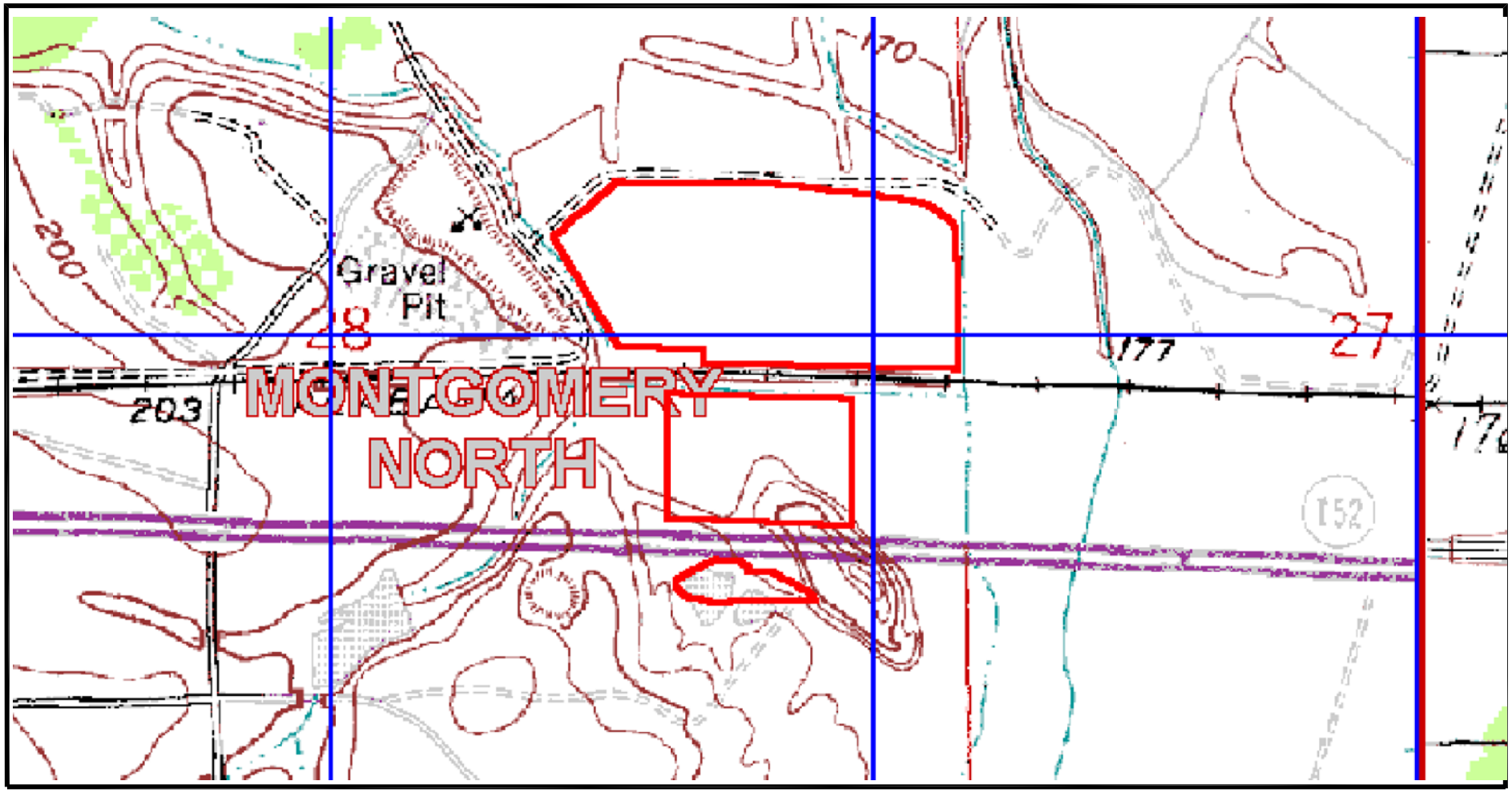
[3] The screening levels were reported in ppb (parts per billion)

[4] The soil screening values were obtained from the U. S. EPA Bulletin, Region IV Ecological Risk Assesment Bulletins-Supplement RAGS.

[5] The screening values were obtained from the U. S. EPA Document, Region III, BTAG Screening Levels, 1995.

[6] MDL = Method Detection Limit of of 1.0 micrograms per liter for the aqueous laboratory analyses

FIGURES



Source: USGS Tuscaloosa 7.5 Minute Quadrangle Maps

TTL
Technology and Tradition
4154 Lomac Street ■ Montgomery, Alabama 36106
334.244.0766 ■ Fax 334.244.6668

TTL PROJECT NO: 0700-024

Figure 1. Locations of Low Lying Areas. Summary Report for Quarterly Sampling Results; Investigation of "Low Lying Areas"; Coliseum Boulevard Plume; Montgomery, Alabama.

Low Lying Areas

N

1" = 16,000'

OLD ROAD BED

DIRT ROAD

SS MANHOLE

SS MANHOLE

WASTE MANAGEMENT

OT ROW

BLVD

DITCH

EXISTING BRIDGE

W.S. Newell

OPEN EARTH DITCH

Corona Drive

lina Place

Russell Corp.
Distribution Facility

Folmer Boulevard

Three Mile Branch

A*
B*
C*
D*
E*
F*
G*
H*
I
J
K
L
M
N
O
P

N

LEGEND:

Boundary of **Low Lying Area**

M • Sample location and Identifier

Approximate locations of **inter**mittent streams

* Not sampled – Location **was not scheduled** for sampling during this quarterly event

ALDOT Coliseum Boulevard Plume Investigation

TTL Technology and Tradition

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Sample locations and identifiers. January 14, 2003. Fourth Quarterly Event. "Low-Lying Areas." Coliseum Boulevard Plume. Montgomery, Alabama.

TTL PROJECT NUMBER:0700-024

Drawing No. 030509

SCALE: 1" = 300'

Figure 2

OLD ROAD BED

WASTE MANAGEMENT

DIRT ROAD

SS MANHOLE

SS MANHOLE

ROW

DITCH

BLVD

EXISTING BRIDGE

W.S. Newell

OPEN EARTH DITCH

Corona Drive

Russell Corp. Distribution Facility

Folmer Boulevard

Three Mile Branch

A	1/14/03: NC	
B	1/14/03: NC	
C	1/14/03: NC	
D	1/14/03: NC	
E	1/14/03: NC	
F	1/14/03: NC	
G	1/14/03: NC	
H	1/14/03: NC	
I	1/14/03 (8"): <2.6	
J	1/14/03 (8"): <2.4	
K	1/14/03 (10"): <1.6	
L	1/14/03 (9"): <1.2	
M	1/14/03 (9"): <1.3	
N	1/14/03 (10"): 11	
O	1/14/03 (11"): <1.6	
P	1/14/03 (8"): <1.2	

LEGEND:

1/14/03 (8"): <3.0 — Sample date (depth): TCE Concentrations (ug/kg)

NC — Not collected

Boundary of **Low Lying Area**

M • — Sample location and Identifier

Approximate locations of **inter**mittent streams

ALDOT Coliseum Boulevard Plume Investigation

Analytical results of sediment samples on January 14, 2003. Investigation of "Low-Lying Areas." Coliseum Boulevard Plume. Montgomery, Alabama.

TTL PROJECT NUMBER:0700-024

TTL Technology and Tradition
4154 Lomac Street ■ Montgomery, Alabama 36106
334.244.0766 ■ Fax 334.244.6668

Drawing No. 030206

SCALE: 1" = 300'

Figure 3

OLD ROAD BED

DIRT ROAD

SS MANHOLE

SS MANHOLE

WASTE MANAGEMENT

OT ROW

BLVD

DITCH

EXISTING BRIDGE

W.S. Newell

OPEN EARTH DITCH

Corona Drive

lina Place

Russell Corp.
Distribution Facility

Folmer Boulevard

Three Mile Branch

A*
B*
C*
D*
E*
F*
G*
H*
I
J
K
L
M
N
O
P

N

LEGEND:

Boundary of **Low Lying Area**

M • Sample location and Identifier

Approximate locations of **inter**mittent streams

* Not sampled – Location **was not scheduled** for sampling during this quarterly event

ALDOT Coliseum Boulevard Plume Investigation

TTL Technology and Tradition

4154 Lomac Street ■ Montgomery, Alabama 36106
334.244.0766 ■ Fax 334.244.6668

Sample locations and identifiers. January 14, 2003. Fourth Quarterly Event. "Low-Lying Areas." Coliseum Boulevard Plume. Montgomery, Alabama.

TTL PROJECT NUMBER:0700-024

Drawing No. 030509

SCALE: 1" = 300'

Figure 2

ATTACHMENT
(Refer to GIS Database)