676SERBSF10,638

676SERBSF10,638

Site Name (Subject):	SPRAGUE ELECTRIC COMPANY
Site ID (Document ID):	NCD003167780
Document Name (DocType):	Contractor Report (CONTR)
Report Segment:	
Description:	Report of Phase II Sampling
Date of Document:	2/1/1994
Date Received:	5/22/1995
Box: *Enter SF and # with no spaces*	SF10,638
Access Level:	PUBLIC
Division:	WASTE MANAGEMENT
Section:	SUPERFUND
Program (Document Group):	SERB (SERB)
Document Category:	FACILITY

Print Report for Record | **Go to New Blank Record** | **Go to New Record - (default to last record values)** | **Delete Record**

RECEIVED
MAY 22 1995
SUPERFUND SECTION

REPORT OF PHASE II SAMPLING

UNITED CHEMI-CON MANUFACTURING, INC.

LANSING, NORTH CAROLINA

DELTA PROJECT NO. 50-92-105.22

Sprague Electric

REPORT OF PHASE II SAMPLING

UNITED CHEMI-CON MANUFACTURING, INC.

LANSING, NORTH CAROLINA

DELTA PROJECT NO. 50-92-105.22

This report was prepared by:

Delta Environmental Consultants, Inc.
6701 Carmel Road, Suite 200
Charlotte, North Carolina 28226

February 1994

TABLE OF CONTENTS

1.0	BACKGROUND		1
2.0	FIELD INVESTIGATION		1
	2.1	Background Samples	1
	2.2	Suspected Buried Debris Area	2
		2.2.1 Soil/Sludge	2
		2.2.2 Ground Water	2
		2.2.3 Conclusions and Recommendations	3
	2.3	Surface Sludge Area	4
		2.3.1 Soil/Sludge	4
		2.3.2 Ground Water	6
		2.3.3 Conclusions and Recommendations	6
	2.4	Boiler House USTs	7
		2.4.1 Soil	7
		2.4.2 Ground Water	7
		2.4.3 Conclusions and Recommendations	8
	2.5	Ground Water Monitoring Wells MW-5 and MW-6	8
		2.5.1 Analytical Results	8
		2.5.2 Conclusion and Recommendations	9
	2.6	Containment Dike Area	9
		2.6.1 Soil	9
		2.6.2 Ground Water	10
		2.6.3 Conclusions and Recommendations	11
	2.7	Truck Loading Dock	11
		2.7.1 Sediment	11
		2.7.2 Conclusions and Recommendations	12
	2.8	Trash Burning Area	12
		2.8.1 Soil	12
		2.8.2 Conclusions and Recommendations	13
	2.9	Coal Bin Area	13
		2.9.1 Coal	13
		2.9.2 Conclusions and Recommendations	13
	2.10	Former Etchant Area	13
		2.10.1 Ground Water	13
		2.10.2 Conclusions and Recommendations	14
	2.11	Ground Water Flow	14
	3.0	REMARKS	15

TABLES OF CONTENTS (CONTINUED)

TABLES

Table 1A:	Phase II Water Sampling Summary
Table 1B:	Phase II Soil Sampling Summary
Table 2A:	Background Soil Analytical Results
Table 2B:	Background Ground Water Analytical Results
Table 3A:	Soil Analytical Results - Buried Debris Area
Table 3B:	Ground Water Analytical Results - Buried Debris Area
Table 4A:	Soil/Sludge Analytical Results - Surface Sludge Area
Table 4B:	Ground Water Analytical Results - Surface Sludge Area
Table 5A:	Soil Analytical Results - Boiler House USTs
Table 5B:	Ground Water Analytical Results - Boiler House USTs
Table 6:	Ground Water Analytical Results - Monitoring Wells MW-5 and MW-6
Table 7A:	Soil Analytical Results - Containment Dike Area
Table 7B:	Ground Water Analytical Results - Containment Dike Area
Table 8:	Soil Analytical Results - Trash Burning Area
Table 9:	Soil Analytical Results - Truck Loading Dock
Table 10:	Coal TCLP Analytical Results - Coal Bin Area
Table 11:	Ground Water Analytical Results - Former Etchant Area
Table 12:	Monitoring Well Construction

FIGURES

Figure 1:	Phase II Sample Location Map
Figure 2:	Surface Sludge Area Sample Locations
Figure 3:	Containment Dike Drain Sample Locations
Figure 4:	Trash Burning Area Sample Locations
Figure 5:	Water Table Contour Map (9/29/93)

APPENDICES

Appendix A:	Laboratory Reports
Appendix B:	Soil Boring Logs
Appendix C:	Risk Based Concentrations
Appendix D:	Monitoring Well Construction Characteristics

2.2 Suspected Buried Debris Area

2.2.1 Soil/Sludge

One soil boring (BSL-3) was advanced to a depth of 21 feet below ground surface (adjacent to previous soil boring BSL-2). Two discrete soil samples were obtained from the soil boring and submitted for laboratory analysis. The soil samples were obtained from brass tubes that had been inserted into the split barrel soil sampler. Upon removal from the split spoon sampler, the brass liners were immediately capped to minimize volatilization of organic compounds. The shallow sample was obtained from 10.5 to 11.0 feet below ground surface. The sample was comprised of a white sludge/ash material. The second sample was obtained from 20.5 to 21.0 feet below ground surface. This sample also consisted of sludge/ash material. The soil boring log is presented in Appendix B.

Each sample was submitted to OLI for the analyses summarized in Table 1B. The soil analytical results from the buried debris area, as summarized in Table 3A, indicate concentrations of aluminum, chromium and lead greater than the average background concentrations. Volatile organic compounds (VOCs) were not reported above the respective method detection limits.

2.2.2 Ground Water

A ground water sample was obtained from monitoring well MW-2 and analyzed for the constituents summarized in Table 1A. A filtered and unfiltered ground water sample was also submitted for metal analysis from each monitoring well. Filtration was performed in the field prior to sample preservation using a peristaltic pump and in-line QED sediment filter.

The analytical results, as summarized in Table 3B, indicate detectable levels of aluminum, barium, chromium and lead in the unfiltered sample. The unfiltered results indicate a consistent decrease of these metals since the initial sample was obtained by AWARE in August 1992. A field and equipment blank were obtained prior to sampling monitoring well MW-2. The analytical results indicated that all VOCs were reported below the method detection limit.

2.2.3 Conclusions and Recommendations

Based on the analytical results of the discrete sample, the sludge/ash material does not contain detectable levels of VOCs. The reported aluminum values in the sludge/ash material are consistent with the aluminum values previously reported. The aluminum sample obtained from 20.5 to 21 feet at BSL-3 did display the highest aluminum value (140,000 milligrams per kilogram - mg/kg) of any samples obtained from this area. For comparative purposes, the United States Environmental Protection Agency (EPA) has developed risk-based concentrations (RBCs) for approximately 600 chemicals. These RBC's are used by the EPA as a risk-based screen for Superfund sites and provide useful benchmarks for evaluating preliminary site data. The concentrations have no official status as either regulation or guidance and should be used only as a predictor of generic single contaminant health risk estimate. The RBC for aluminum in soil at a residential area is 226,821 mg/kg. The calculations and assumptions utilized to obtain this value are presented as Appendix C (EPA, Region III, Risk Based Concentration Tables, 1993). This RBC is considered to be conservative as the calculations are based on childhood exposure at residential areas. The calculation of RBC's at industrial locations will yield a larger number than the value reported above due to an increase in average body weight and a decrease in exposure frequency and soil ingestion rate.

Lead was reported in both sludge/ash samples (9.2 and 510 mg/kg) concentrations greater than the average background value of 4.77 mg/kg. Risk-based concentrations for elemental lead have not been calculated by EPA.

Chromium was reported above the average background concentration (60 mg/kg) in the sample obtained from 20.5 - 21 feet at a concentration of 68 mg/kg. This value is also less than the RBC of chromium VI (391 mg/kg).

The unfiltered ground water samples at monitoring well MW-2 continue to display decreasing values of aluminum (41,000 micrograms per liter (ug/L)), barium (390 ug/L), chromium (50 ug/L) and lead (6.9 ug/L). This decrease is attributed to the continued development of the monitoring well resulting in subsequent removal of silt and clay size particles thus resulting in lower amounts of metals adsorbed on particulate matter.

The filtered ground water sample did not contain dissolved metal concentrations at levels above method detection limit. VOCs were not reported in the ground water at monitoring well MW-2 above the method detection limits. Additional sampling of monitoring well MW-2 is not recommended.

The buried sludge/ash material at BSL-2 does not contain detectable VOC's. Although aluminum and lead are present in the material at 1 to 2 orders of magnitude greater than the background values, additional investigative or remedial activities are not recommended since the reported values are less than the RBC's and the ground water data continues to show decreasing values of metals and non-detectable values for VOC's. Additional investigative or remedial activities of this material is not recommended.

2.3 Surface Sludge Area

2.3.1 Soil/Sludge

Eleven hand auger borings (SSL-4 through SSL-14) were advanced in the surface sludge area to better delineate the lateral and vertical extent of sludge. The location of each hand auger boring is illustrated in Figure 2.

Each hand auger boring was advanced to a depth between 2 and 4 feet. Hand auger borings SSL-4 through SSL-10 and SSL-13 were advanced within the drainage swale to better delineate the extent of sludge. Hand auger borings SSL-11, SSL-12 and SSL-14 were advanced adjacent to the sand filter bed to determine the type of material present adjacent to the beds and soil chemistry. Sludge was visually identified at boring locations SSL-4, SSL-5, and SSL-13. A soil sample was obtained from the bottom of each remaining hand auger boring. The sample location, depth and associated OVA readings are summarized below:

Sample Location	Sample Depth (feet)	Sample Type	OVA Reading (ppm)
SSL-4	1	Sludge	200
SSL-5	1.0	Fresh Sludge	Not Obtained
SSL-6	2	Soil	1.7
SSL-7	2	Soil	1.7
SSL-8	1.5	Soil	1.6
SSL-9	2.5	Soil	3.0
SSL-10	2	Soil	0.8
SSL-11	0.5	Filter Sand/Sludge	1.0
SSL-12	0.5	Filter Sand/Sludge	0.8
SSL-13	4	Sludge	300
SSL-14	0.5	Filter Sand/Sludge	1.8

The approximate extent of sludge in the swale is shown in Figure 2. Fresh sludge was observed at the location of SSL-5 (apparently, UCCM continues to remove sludge from the Imhoff tank and dispose of it in the drainage swale). Soil samples from SSL-4, SSL-5 and SSL-14 were submitted for VOC analysis. The analytical results, as summarized in Table 4A, indicated the presence of tetrachloroethene (1 mg/kg) and toluene (6.2 mg/kg) at SSL-4. Acetone (19.6 mg/kg) and methyl ethyl ketone (2.3 mg/kg) were identified in the sludge sample obtained from SSL-5. Based on the tetrachloroethene value obtained from SSL-4, this sample was analyzed for the TCLP volatiles and was reported below the method detection limit and the North Carolina landfill maximum level.

The analytical results from SSL-14, as summarized in Table 4A, indicate that all VOCs are below the method detection limit.

Two composite samples were also obtained from the surface sludge area for disposal profiling as summarized in Table 1B. Composite sample A was obtained from five discrete sludge samples located in the immediate area of hand auger borings SSL-4, SSL-5 and SSL-13. Composite Sample B was also

obtained from five soil samples located along the east side of the sand filters adjacent to SSL-11, SSL-12 and SSL-14. The analytical results of the composite samples, as summarized in Table 4A, did not reveal levels above the TC regulatory level and the North Carolina maximum landfill level.

2.3.2 Ground Water

Ground water samples were obtained from monitoring wells MW-3 and MW-4 and analyzed for constituents identified in Table 1A. The analytical results, as summarized in Table 4B, indicate all targeted VOC's are below method detection limit in the ground water at both monitoring wells. A duplicate sample was also obtained from monitoring well MW-3. VOCs were also below the method detection limit in the duplicate sample.

The analytical results on the unfiltered samples for both wells indicate decreasing concentrations of aluminum, barium, chromium and lead (with the exception of the total barium concentration at monitoring well MW-4). The analytical results of the filtered ground water samples indicate a dissolved barium concentration of 290 ug/L in the ground water at monitoring well MW-4. The remaining metals were below the method detection limit in the filtered samples.

The results from the combined nitrate/nitrite analyses revealed concentrations of 6,530 ug/L and 25,900 ug/L at monitoring wells MW-3 and MW-4, respectively.

2.3.3 Conclusions and Recommendations

Based on information obtained from the hand auger borings, we estimate that approximately 200 cubic yards of sludge are present and should be removed from the drainage swale and adjacent to the perimeter of the sand filter bed.

Application should be made to the State of North Carolina Solid Waste Management Division to determine if the sludge is suitable for disposal at a North Carolina approved solid waste management facility (landfill). Upon removal of the sludge, confirmatory samples will be obtained from beneath the excavated material to determine soil quality.

Ground water analytical results indicate filtered metal concentrations below the 2L standards and non-detectable concentrations of VOCs. Additional sampling and analysis for VOC's and filtered metals is not recommended.

Nitrate and nitrite have 2L water quality standards of 10,000 ug/L and 1,000 ug/L respectively. Additional nitrate and nitrite analyses should be performed to determine the amount of each compound with respect to the 2L standards.

2.4 Boiler House USTs

2.4.1 Soil

Two hollow stem auger borings (UB-3 and UB-4) were advanced to a depth of 21 feet below ground surface at the approximate locations shown in Figure 1. Soil boring UB-3 was advanced immediately adjacent to AWARE's previous soil boring identified as UB-2. Soil boring UB-4 was advanced immediately east of the UST basin. Discrete soil samples were obtained by Delta from 10 to 10.5 feet below ground surface and submitted for laboratory analysis. Split samples were obtained by AWARE from 9 to 11 feet. The soil samples were analyzed for the parameters identified in Table 1B and the soil boring logs summarizing the soil description and OVA readings are presented in Appendix B. Analytical results are summarized in Table 5A.

The samples obtained by Delta and analyzed by OLI did not display detectable concentrations of diesel or oil and grease in either sample. Total petroleum hydrocarbons as gasoline were reported with a concentration of 0.14 mg/kg in the sample obtained from UB-4. The samples obtained by AWARE and analyzed by IEA displayed oil and grease concentrations at soil boring UB-3 and UB-4 of 420 and 700 mg/kg, respectively. Total petroleum hydrocarbons (No. 2 fuel oil or diesel) were reported at 6.7 mg/kg in AWARE's sample obtained from soil boring UB-3.

2.4.2 Ground Water

A representative ground water sample was obtained from monitoring well MW-1 and analyzed for the constituents summarized in Table 1A. A split sample was also obtained by AWARE. The analytical results, as summarized in Table 5B, indicate that the sample obtained by Delta does not display detectable

concentrations of VOCs. The unfiltered sample reveals decreasing concentrations of total aluminum (150,000 ug/L), barium (3,900 ug/L), cadmium (<5 ug/L), chromium (400 ug/L) and lead (<5 ug/L). Comparison of the unfiltered samples obtained by Delta and AWARE indicate that the metal results are within the same order of magnitude.

Filtered samples were also obtained by Delta and AWARE. Delta's filtering procedures are consistent with those described in Section 2.2.2. Sample filtration was performed by AWARE in accordance with the policy on treatment of ground water samples for metal determinations as provided by Mr. Arthur Mouberry (Chief, Groundwater Section, North Carolina Division of Environmental Management, January 26, 1993). Review of the filtered samples indicates that all of the metals are reported below the method detection limit in the sample obtained by Delta. Dissolved aluminum (27,000 ug/L), barium (250 ug/L) and chromium (80 ug/L) were reported in the filtered sample obtained by AWARE.

2.4.3 Conclusions and Recommendations

Based on the analytical results of the four soil samples obtained by Delta (two samples were obtained in January 1993 and two in September 1993), additional soil sampling and analysis is not recommended. No further investigation or remediation is warranted other than the removal of the visually stained material identified by AWARE sample location UST 1 obtained in August 1992.

The ground water analytical results obtained by Delta do not indicate the presence of VOCs or filtered metals above the method detection limit. Additional ground water sampling of monitoring well MW-1 is not recommended.

2.5 Ground Water Monitoring Wells MW-5 and MW-6

2.5.1 Analytical Results

Ground water samples were obtained from monitoring wells MW-5 and MW-6 and analyzed for the constituents identified in Table 1A. AWARE obtained a duplicate sample from monitoring well MW-6. The analytical results, as summarized in Table 6, do not indicate the presence of VOCs in the ground water at either monitoring well.

The unfiltered ground water samples indicate decreasing concentrations of dissolved aluminum, barium, chromium and lead. The filtered samples obtained by Delta indicate a dissolved aluminum concentration of 1,700 ug/L in the ground water at monitoring well MW-5. Final pH obtained from monitoring well MW-5 during the sampling procedure was 5.3. This level is lower than the pH value of 6.2 reported in January 1993. The results of the filtered analyses obtained by AWARE at monitoring well MW-6 did not reveal any metal constituents above the method detection limit.

2.5.2 Conclusions and Recommendations

Ground water samples have been obtained from monitoring wells MW-5 and MW-6 on three occasions since August 1992. Targeted VOCs have not been reported above the method detection limit in any of the samples obtained from monitoring well MW-5; therefore, additional VOC analysis at MW-5 is not recommended. Quarterly monitoring is proposed for the next six months. Additional sampling and analysis at monitoring well MW-5 should include pH and dissolved aluminum.

Trichloroethene (9 ug/L) was originally reported by AWARE at monitoring well MW-6 in the sample obtained in August 1992. Two subsequent ground water samples have not revealed filtered metals or detectable concentrations of trichloroethene or any other targeted VOCs as analyzed by EPA Methods 8010 and 8240. Subsequent sampling and analysis of ground water at monitoring well MW-6 is not recommended.

2.6 Containment Dike Area

2.6.1 Soil

Eight soil samples were obtained from the containment dike area in September 1993. The sample locations are illustrated in Figure 3 and the sample depths and analytical results are summarized in Table 7A. Soil samples CD-5 through CD-10 were obtained from 1 to 1.5 feet below ground surface. Soil samples from (4'-6' and 15'-15.5') were obtained from the soil boring advanced to install monitoring well MW-10. AWARE obtained a split sample from 4 to 6 feet at MW-10.

Four soil samples had previously been obtained from the containment dike area (CD-1 through CD-4). The results of these previous samples indicated the presence of tetrachloroethene, trichloroethene, acetone and total 1,2-dichloroethene.

The results of the eight samples obtained in September 1993 indicate the presence of acetone in five samples ranging from 28.8 mg/kg at sample CD-10 to 0.04 mg/kg in soil sample MW-10 (obtained from 15 to 15.5 feet below ground surface). For QA/QC purposes, an equipment blank was obtained from the hand auger prior to obtaining sample CD-5. The analytical results indicate that all VOC's were reported below the method detection limit.

The analytical results as reported by AWARE from MW-10 indicated total 1,2-dichloroethene concentration of 0.006 mg/kg. The sample obtained by Delta over the same interval did not indicate a presence of trans,1,2-dichloroethene.

2.6.2 Ground Water

Ground water monitoring well MW-10 was installed by Delta in September 1993 at the location shown in Figures 1 and 3. The soil boring log summarizing soil characteristics and OVA readings is presented in Appendix B and the monitoring well construction characteristics are presented in Appendix D.

A ground water sample was obtained by Delta and split with AWARE. The analytical results, as summarized in Table 7B, indicate detectable levels of toluene, ethylbenzene and xylenes. The value reported by Delta and AWARE for each of these VOC's was below their respective 2L standard. AWARE reported a benzene concentration (6 ug/L) in excess of the 2L standard of 1 ug/L. Delta reported benzene below the method detection limit of 5 ug/L. All filtered metal results were below the 2L standard. The filtered sample obtained by Delta revealed a dissolved barium concentration of 280 ug/L. The remaining dissolved metals reported by Delta and AWARE were below the method detection limits.

2.6.3 Conclusions and Recommendations

Analytical results continue to indicate the presence of VOCs in the soil samples. A clean-up level of 2.61 mg/kg was proposed for acetone in the Preliminary Site Assessment Report. Based on this clean-up level, the lateral and vertical extent of acetone in the soils has been delineated and is restricted to the area south of CD-6 and west of CD-3. Acetone levels greater than 2.61 mg/kg do not extend greater than 5 feet below ground surface. Based on this information, approximately 35 cubic yards of soil should be remediated. Subsequent sampling should include disposal profiling and additional soil sampling in the vicinity of CD-2 and CD-4 to better define current VOCs levels adjacent to the existing building. Based on the limited volume and low VOC levels, excavation and disposal at a North Carolina approved landfill is suggested assuming that excavation activities will not affect the structural integrity of the adjacent building.

Ground water analytical results indicate detectable levels of five VOCs. The benzene concentration reported by AWARE is the only analyte concentration reported above the 2L standard. Quarterly ground water monitoring for benzene and dissolved aluminum and barium should be performed at this monitoring well for one year.

UCCM indicated that they periodically discharge the water within the dike directly to the ground adjacent to soil sample CD-2.

2.7 Truck Loading Dock

2.7.1 Sediment

One surficial sediment sample was collected from material within the storm water catch basin located beneath the truck loading dock at the location illustrated in Figure 1. The sample obtained by Delta was analyzed for VOCs. A split sample was also obtained by AWARE and analyzed for VOCs, aluminum, barium, chromium and lead.

2.8.2 Conclusions and Recommendations

Based on the analytical results, residual trash material should be removed and properly disposed of. Preliminary calculations indicate approximately 120 cubic yards of material should be removed from the area. A follow-up composite sample should also be obtained from the material and analyzed for oil and grease and motor oil for disposal profiling.

2.9 Coal Bin Area

2.9.1 Coal

A coal sample was obtained and analyzed for the TCLP metals to assist evaluating disposal options. The analytical results, as summarized in Table 10, indicate all of the TCLP metals are below the method detection limit.

2.9.2 Conclusions and Recommendations

Residual coal and debris within the old coal bin area should be removed and properly disposed. Previous discussions with the Ashe County Sanitary Landfill indicate that they should accept the coal and associated debris.

Upon removal of the coal and debris, a surficial soil sample will be obtained to determine the arsenic and lead concentrations. Soil that displays arsenic and lead two orders of magnitude greater than the background values or greater then the RBC will be excavated and disposed of properly.

2.10 Former Etchant Area

2.10.1 Ground Water

Two additional water table monitoring wells (MW-8 and MW-9) were installed at the locations shown on Figure 1. Monitoring wells ET-2 and ET-3 were installed by Delta in January 1993 in order to obtain preliminary ground water chemistry data in the former etchant area. Monitoring well ET-2 was abandoned since it was located within the building. The location of ET-3 is also illustrated on Figure 1.

The analytical results, as summarized in Table 11, do not indicate the presence of VOCs above the method detection limits. The analytical results of the filtered samples obtained by Delta indicate dissolved

aluminum concentrations at ET-3 (56,000 ug/L) and MW-8 (5,600 ug/L). Dissolved aluminum was also reported in the ground water at monitoring well ET-2 (230 ug/L) in January 1993. The pH values obtained from ground water monitoring wells ET-2, ET-3 and MW-8 range from 3.7 to 5.9.

2.10.2 Conclusions and Recommendations

Additional ground water samples should be obtained downgradient of monitoring wells MW-8 and ET-3 to better determine the extent of the dissolved aluminum and low pH plume. The additional samples will be obtained using temporary sampling devices such as the Geoprobe or the Hydrocone. Subsequent monitor well locations will be based on the data obtained from the temporary sample locations.

At the completion of plume delineation, remedial alternatives will be evaluated including natural remediation, requesting a restricted designation or active ground water remediation.

Acid storage tanks were formerly located immediately south of monitoring well MW-9. Based on the absence of detectable levels of dissolved aluminum and the higher pH levels (relative to the values obtained from ET-2, ET-3 and MW-8), the former acid storage tanks do not appear to be a source for the dissolved aluminum plume.

2.11 Ground Water Flow

A water table contour map was prepared based on the depth to water measurements obtained from the monitoring wells on September 29, 1993. Table 12 summarizes the depth to water and water table elevations. Figure 5 illustrates the approximate configuration of the water table on September 29, 1993. Based on this data, ground water is inferred to flow radially towards the New River which borders the site in all directions except to the south.

3.0 REMARKS

The recommendations contained in this report represent our professional opinions. These opinions are arrived at in accordance with currently accepted hydrogeologic and engineering practices at this time and location. Other than this, no warranty is implied or intended.

The report was prepared by:

DELTA ENVIRONMENTAL CONSULTANTS, INC.

NORTH CAROLINA LICENSED SEAL 1090 GEOLOGIST STEPHEN A. ZBUR

2/14/94

Stephen A. Zbur, L.G. Date
Project Manager
North Carolina Licensed Geologist No. 1090

Reviewed by:

2/14/94

Michael S. Crouch, P.G. Date
Senior Consultant

/slhg

TABLES

TABLE 1A

PHASE II WATER SAMPLING SUMMARY
SPELCO, INC.
50-92-105

Sample ID	Sample Location	Date Collected	8240	Metals Aluminum, Barium, Cadmium, Chromium and Lead		
				Total	Dissolved	Nitrate/ Nitrite
MW-1	Ground Water Monitoring Wells	10-1-93	X	X	X	
MW-2	Ground Water Monitoring Wells	10-1-93	X	X	X	
MW-3	Ground Water Monitoring Wells	10-1-93	X	X	X	X
MW-4	Ground Water Monitoring Wells	10-1-93	X	X	X	X
MW-5	Ground Water Monitoring Wells	10-1-93	X	X	X	
MW-6	Ground Water Monitoring Wells	10-1-93	X	X	X	
MW-7	Ground Water Monitoring Wells	10-1-93	X	X	X	X
MW-8	Ground Water Monitoring Wells	10-1-93	X	X	X	
MW-9	Ground Water Monitoring Wells	10-1-93	X	X	X	
MW-10	Ground Water Monitoring Wells	10-1-93	X	X	X	
CD-Water	Containment Dike Drain Water	10-1-93	X			
ET-3	Etchant Area	10-1-93	X	X	X	
Duplicate	MW-3	10-1-93	X		X	
Travel Blank	NA	10-1-93	X			
Field Blank	NA	10-1-93	X			
Equipment Blank	NA	10-1-93	X			

TABLE 1B

PHASE II SOIL SAMPLING SUMMARY
SPELCO, INC.
50-92-105

Sample ID	Sample Location	Date Collected	Sample Depth	8240	Arsenic Lead	Aluminum Cadmium Chromium Lead	TCLP			Corros. Ignit. React.	TPH 3550	TPH 5030	Oil & Grease (9071)	Paint Filler
							VOL	Semi-Vol	Metals					
CD-5	Containment Dike Drain	9-29-93	1-1.5'	X										
CD-6 - CD-10	Containment Dike Drain	9-29-93	0.5-1'	X										
MW-10	Containment Dike Drain/Ground Water Monitoring Well	9-28-93	4.5-5' 15-15.5'	X X										
SSL-4	Surface Sludge	9-29-93	Surface	X			X							
SSL-5	Surface Sludge	9-29-93	Surface	X										
SSL-14	Surface Sludge	9-29-93	Surface	X										
Composite A&B	Surface Sludge								X	X				X
Coal	Coal	9-30-93	Surface						X					
BSL-3	Buried Debirs	9-28-93	10.5-11' 20.5-21'	X		X								
UB-3, UB-4	Boiler House UST	9-28-93	10-10.5'								X	X	X	
TLD-3	Truck Loading Dock Storm Drain	9-28-93	Surface	X										
TB-1 - TB-4	Trash Burning Area	9-29-93	0.5-1'		X									
TB-5	Trash Burning Area	9-29-93	2-2.5'		X									
TB-6	Trash Burning Area	9-29-93	0.5-1'		X		X		X	X	X	X	X	X

TABLE 2A
BACKGROUND SOIL ANALYTICAL RESULTS
SPELCO
DELTA PROJECT NO. 50-92-105

ANALYTE	SOIL SAMPLES MILLIGRAMS PER KILOGRAM (mg/kg)			
METALS	Bkgnd -1 1/93	Bkgnd -2 1/93	Bkgnd -3 1/93	Average Bkgnd 1/93
Aluminum	13000	23000	13000	16333
Arsenic	<1.2	<1.3	<1.3	<1.3
Barium	300	440	170	303
Cadmium	<1.2	2.2	<1.3	1.5
Chromium	70	80	30	60
Lead	2.3	7.5	4.5	4.77
Mercury	<0.058	<0.065	<0.063	<0.062
Selenium	<1.2	<1.3	<1.3	<1.3
Silver	<2.3	<2.6	<2.5	<2.5
TPH				
Diesel	< 9.7	< 10.4	< 10.2	<10.1
Gas	< 2.9	< 3.1	< 3.1	<3.1
Oil & Grease	121	< 40	< 40	66

TPH - Gas = EPA Method, SW-846, 5030
TPH - Diesel = EPA Method, SW-846, 3550
Oil & Grease = EPA Method 9071

TABLE 2B
BACKGROUND GROUND WATER ANALYTICAL RESULTS
SPELCO
DELTA PROJECT NO. 50-92-105

ANALYTE	WATER SAMPLES MICROGRAMS PER LITER (ug/L)				2L STANDARD ug/L
	DELTA BKGND (MW-7)	DELTA BKGND (MW-7)	DELTA BKGND (MW-7)	DELTA BKGND (MW-7)	
METALS	UNFILTERED 1/93	FILTERED 1/93	UNFILTERED 9/93	FILTERED 9/93	
Aluminum	56000	< 100	750	<100	NS
Arsenic	< 5.0	< 5.0	NA	NA	50
Barium	1900	120	210	180	1000/2000**
Cadmium	< 5.0	< 5.0	<5.0	<5.0	5
Chromium	160 *	< 10	<10	<10	50
Lead	8.5	< 5.0	<5.0	<5.0	50
Mercury	< 0.10	< 0.10	NA	NA	1.1
Selenium	<5.0	<5.0	NA	NA	10/50**
Silver	< 10	< 10	NA	NA	50
VOLATILES					
Trichloroethene	<1.0	NA	<5.0	NA	2.8
Acetone	NA	NA	<10	NA	NS/700**
Tetrachloroethene	<1.0	NA	<5.0	NA	0.7
NITRATE/NITRITE (Combined)					
Nitrate/Nitrite	NA	NA	820	NA	10000/1000
FIELD INDICATOR PARAMETERS					
pH	7.8	NA	6.5	NA	6.5 - 8.5
Conductivity (umho/cm)	160	NA	NA	NA	NS
Temperature (C)	12	NA	11	NA	NS

NA = Not analyzed.
NS = North Carolina 2L standard not established.
* = Concentration exceeds the 2L standard.
** = 2L standard increased as a result of the recent amendment.
umho/cm= Micromhos per centimeter
C = Degrees Centigrade
-- = Not averaged

TABLE 3A
SOIL ANALYTICAL RESULTS-BURIED DEBRIS AREA
SPELCO
DELTA PROJECT NO. 50-92-105

ANALYTE	SOIL SAMPLES MILLIGRAMS PER KILOGRAM (mg/kg)						
	DELTA AVG. BKGND	AWARE MW2-46 (4-6')	AWARE MW2-911 (9-11')	DELTA BSL-1 (COMPOSITE)	DELTA BSL-2 (COMPOSITE)	DELTA BSL-3 (10.5-11')	DELTA BSL-3 (20.5-21')
METALS	1/93	8/92	8/92	1/93	1/93	9/93	9/93
Aluminum	16333	33000 *	24000 *	32000 *	96000 *	35000 *	140000 *
Arsenic	<1.3	<1.0	<1.0	<12	<13	NA	NA
Barium	303	99	210	420 *	180	NA	NA
Cadmium	1.5	<1.0	<1.0	<1.2	2.8 *	<1.2	<6.4
Chromium	60	23	32	47	33	58	68 *
Lead	4.77	50 *	450 *	83 *	<0.063	9.2 *	510 *
Mercury	<0.062	<0.25	<0.25	<0.061	<0.063	NA	NA
Selenium	<1.3	<1.0	<1.0	<12	<13	NA	NA
Silver	<2.5	<2.0	<2.0	<2.5	<2.5	NA	NA
VOLATILES							
Trichloroethene	NA	NA	NA	<0.006	<0.007	<0.006	<0.006
Acetone	NA	NA	NA	<0.012	0.037	<0.01	<0.01
TCLP							
Volatiles	NA	NA	NA	ND	ND	NA	NA
Semi-volatiles	NA	NA	NA	ND	ND	NA	NA
Metals	NA	NA	NA	ND	ND	NA	NA

NA = Not analyzed.
* = Concentration exceeds the average background concentration.
ND = No leachable constituents detected. Flashpoint, reactivity, and corrosivity values are within regulatory limits.

TABLE 3B
GROUND WATER ANALYTICAL RESULTS-BURIED DEBRIS AREA
SPELCO
DELTA PROJECT NO. 50-92-105

ANALYTE	WATER SAMPLES MICROGRAMS PER LITER (ug/L)						2L STANDARD ug/L
	AWARE MW-2 UNFILTERED 8/92	DELTA BSL-2 UNFILTERED 1/93	DELTA MW-2 UNFILTERED 1/93	DELTA MW-2 FILTERED 1/93	DELTA MW-2 UNFILTERED 9/93	DELTA MW-2 FILTERED 9/93	
METALS							
Aluminum	170000	NA	99000	<100	41000	<100	NS
Arsenic	<0.5	NA	<5.0	<5.0	NA	NA	50
Barium	1800	NA	830	<100	390	<100	1000/2000 **
Cadmium	<5.0	NA	<5.0	<5.0	<5.0	<5.0	5
Chromium	240 *	NA	120 *	<10	50	<10	50
Lead	24	NA	21	<5.0	6.9	<5.0	50
Mercury	<0.5	NA	<0.10	<0.10	NA	NA	1.1
Selenium	<5.0	NA	<5.0	<5.0	NA	NA	10/50 **
Silver	<10	NA	<10	<10	NA	NA	50
VOLATILES							
Trichloroethene	10 *	<5.0	12 *	NA	<5.0	NA	2.8
Acetone	NA	<10	NA	NA	<10	NA	NS/700**
FIELD INDICATOR PARAMETERS							
pH	NA	7.7	6.9	NA	5.9	NA	6.5 - 8.5
Conductivity (umho/cm)	NA	360	700	NA	NA	NA	NS
Temperature (C)	NA	12	15	NA	13.7	NA	NS

NA = Not analyzed.
NS = North Carolina 2L standard not established.
* = Concentration exceeds the 2L standard.
** = 2L standard increased as a result of the recent amendment.

TABLE 4A
SOIL/SLUDGE ANALYTICAL RESULTS-SURFACE SLUDGE AREA
SPELCO
DELTA PROJECT NO. 50-92-105

ANALYTE	SOIL/SLUDGE SAMPLES MILLIGRAMS PER KILOGRAM (mg/kg)														REGULATORY LIMIT mg/l
	DELTA AVG. BKGND 1/93	AWARE WB-1 8/92	AWARE WB-2 8/92	AWARE WB-4 8/92	AWARE WB-5 8/92	AWARE SW-1 8/92	DELTA SSL-1 1/93	DELTA SSL-2 1/93	DELTA SSL-3 1/93	DELTA SSL-4 9/93	DELTA SSL-5 9/93	DELTA SSL-14 9/93	DELTA** COMPOSITE A 9/93	DELTA** COMPOSITE B 9/93	
ETALS															
luminum	16333.3	NA	NA	NA	NA	NA	9200	13000	21000 *	NA	NA	NA	NA	NA	NS
rsenic	<1.3	NA	NA	NA	NA	NA	<1.2	<1.2	<1.4	NA	NA	NA	NA	NA	NS
arium	303	NA	NA	NA	NA	NA	80	170	190	NA	NA	NA	NA	NA	NS
admium	1.5	NA	NA	NA	NA	NA	<1.2	<1.2	<1.4	NA	NA	NA	NA	NA	NS
hromium	60	NA	NA	NA	NA	NA	18	20	41	NA	NA	NA	NA	NA	NS
ead	4.77	NA	NA	NA	NA	NA	13 *	20 *	200 *	NA	NA	NA	NA	NA	NS
ercury	<0.062	NA	NA	NA	NA	NA	0.087 *	0.082 *	0.096 *	NA	NA	NA	NA	NA	NS
elenium	<1.3	NA	NA	NA	NA	NA	<1.2	<1.2	<1.4	NA	NA	NA	NA	NA	NS
ilver	<2.5	NA	NA	NA	NA	NA	<2.5	<2.3	<2.7	NA	NA	NA	NA	NA	NS
OLATILES															
richloroethene	NA	NA	NA	NA	NA	<0.005	<0.006	<0.006	<0.006	<0.3	<0.3	<0.006	NA	NA	NS
cetone	NA	NA	NA	NA	NA	<0.010	<0.013	<0.012	<0.012	<0.6	19.6	<0.01	NA	NA	NS
EK	NA	NA	NA	NA	NA	<0.010	<0.013	<0.012	<0.012	<0.6	2.3	<0.01	NA	NA	NS
etrachloroethene	NA	NA	NA	NA	NA	1.3	<0.006	<0.006	<0.006	1	<0.3	<0.006	NA	NA	NS
oluene	NA	NA	NA	NA	NA	16	<0.006	<0.006	<0.006	6.2	<0.3	<0.006	NA	NA	NS
CLP (mg/L)															
arium	NA	1.69	1.87	1.89	0.436	0.659	NA	NA	NA	NA	NA	NA	1.4	1.1	100
EK	NA	<0.01	<0.01	<0.01	<0.01	0.19	NA	NA	NA	<0.1	NA	NA	NA	NA	200
etrachloroethylene	NA	<0.0052	<0.0052	<0.0052	<0.0052	0.035	NA	NA	NA	<0.05	NA	NA	NA	NA	0.7
richloroethylene	NA	<0.0056	<0.0056	<0.0056	<0.0056	0.073	NA	NA	NA	<0.05	NA	NA	NA	NA	0.5
otal Cresols	NA	<0.036	<0.036	<0.037	<0.036	1.5	NA	NA	NA	NA	NA	NA	NA	NA	200

A = Not analyzed.
S = No regulatory limit.
= Concentration exceeds the average background concentration.
* = Corrosivity, reactivity, and flashpoint are within acceptable TC regulatory level.

TABLE 4B
GROUND WATER ANALYTICAL RESULTS-SURFACE SLUDGE AREA
SPELCO
DELTA PROJECT NO. 50-92-105

ANALYTE	WATER SAMPLES - MICROGRAMS PER LITER (ug/l)															2L STANDARD ug/L
METALS	DELTA SSL-1 UNFILTERED 1/93	DELTA SSL-2 UNFILTERED 1/93	DELTA SSL-3 UNFILTERED 1/93	AWARE MW-3 UNFILTERED 8/92	DELTA MW-3 UNFILTERED 1/93	DELTA MW-3 FILTERED 1/93	DELTA MW-3 UNFILTERED 9/93	DELTA MW-3 UNFILTERED 9/93 DUPLICATE	DELTA MW-3 FILTERED 9/93	DELTA MW-3 FILTERED 9/93 DUPLICATE	AWARE MW-4 UNFILTERED 8/92	DELTA MW-4 UNFILTERED 1/93	DELTA MW-4 FILTERED 1/93	DELTA MW-4 UNFILTERED 9/93	DELTA MW-4 FILTERED 9/93	
Aluminum	NA	NA	NA	100000	54000	<100	42000	NA	<100	<100	240000	71000	<100	35000	<100	NS
Arsenic	NA	NA	NA	<0.5	<5.0	<5.0	NA	NA	NA	NA	<0.5	<5.0	<5.0	NA	NA	50
Barium	NA	NA	NA	1800	980	<100	570	NA	<100	<100	6600 *	1300	260	730	290	1000/2000**
Cadmium	NA	NA	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5
Chromium	NA	NA	NA	190 *	92 *	<10	67 *	NA	<10	<10	450 *	130 *	<10	50	<10	50
Lead	NA	NA	NA	40	20	<5.0	9	NA	<5.0	<5.0	67 *	19	<5.0	7.6	<5.0	50
Mercury	NA	NA	NA	<0.5	<0.10	<0.10	NA	NA	NA	NA	0.6	<0.10	<0.10	NA	NA	1.1
Selenium	NA	NA	NA	<5.0	<5.0	<5.0	NA	NA	NA	NA	<5.0	<5.0	<5.0	NA	NA	10/50**
Silver	NA	NA	NA	<10	<10	<10	NA	NA	NA	NA	<10	<10	<10	NA	NA	50
VOLATILES																
Trichloroethene	<5	<5	<5	12 *	8 *	NA	<5.0	<5	NA	NA	<1.0	<1.0	NA	<5.0	NA	2.8
Acetone	<10	<10	<10	NA	NA	NA	<10	<10	NA	NA	NA	NA	NA	<10	NA	NS/700**
Tetrachloroethene	<6	<6	<6	<1.0	3 *	NA	<5.0	<5	NA	NA	<1.0	<1.0	NA	<5.0	NA	0.7
FIELD INDICATOR PARAMETERS																
pH	7.5	NA	8.9 *	NA	7.3	NA	6.4 *	NA	NA	NA	NA	6.4 *	NA	6.2 *	NA	6.5 - 8.5
Conductivity (umho/cm)	400	NA	100	NA	245	NA	NA	NA	NA	NA	NA	360	NA	NA	NA	NS
Temperature (C)	NA	NA	NA	NA	10	NA	15.5	NA	NA	NA	NA	11.5	NA	16	NA	NS
Nitrate/Nitrite	NA	NA	NA	8000	NA	NA	6530	NA	NA	NA	15000	NA	NA	25900	NA	10000/1000

NA = Not analyzed.
NS = North Carolina 2L standard not established.
* = Concentration exceeds the 2L standard.
** = 2l standard increased as a result of the recent amendment.

TABLE 5A
SOIL ANALYTICAL RESULTS-BOILER HOUSE USTs
SPELCO
DELTA PROJECT NO. 50-92-105

ANALYTE	SOIL SAMPLES - MILLIGRAMS PER KILOGRAM (mg/kg)														REGULATORY LIMITS (MG/KG)
METALS	DELTA AVERAGE BKGND 1/93	AWARE STB1-46 8/92	AWARE STB2-46 8/92	AWARE STB2-1620 8/92	AWARE UST-1 8/92	AWARE UB-2-1012 8/92	AWARE MW-1-810 8/92	AWARE MW-1-2834 8/92	DELTA SSE-1 (11-11.5') 1/93	DELTA SSE-1 (16-16.5') 1/93	DELTA UB-3 (10-10.5') 9/93	AWARE UB-3 (9-11) 9/93	DELTA UB-4 (10-10.5') 9/93	AWARE UB-4 (9-11) 9/93	
Aluminum	16333	17000	26000 *	8900	NA	NA	1500	14000	NA	NA	NA	NA	NA	NA	NS
Arsenic	<1.3	1.1	1.6 *	<1.0	NA	NA	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NS
Barium	303	180	330 *	60	NA	NA	<20	430 *	NA	NA	NA	NA	NA	NA	NS
Cadmium	1.5	<1.0	<1.0	<1.0	NA	NA	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NS
Chromium	60	45	58	37	NA	NA	3.5	47	NA	NA	NA	NA	NA	NA	NS
Lead	4.77	7.1 *	7.6 *	1.3	NA	NA	1.5	1.8	NA	NA	NA	NA	NA	NA	NS
Mercury	<0.062	<0.25	<0.25	<0.25	NA	NA	<0.25	<0.25	NA	NA	NA	NA	NA	NA	NS
Selenium	<1.3	<1.0	<1.0	<1.0	NA	NA	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NS
Silver	<2.5	<2.0	<2.0	<2.0	NA	NA	<2.0	<2.0	NA	NA	NA	NA	NA	NA	NS
TPH															
Diesel	<10.1	NA	66 *	<2.0	NA	280 *	NA	NA	<10	<12.0	<11.2	6.7	<10.8	<2.0	40
Gas	<3.1	NA	<2.0	<2.0	NA	<2.0	NA	NA	<3.0	<3.6	<0.14	NA	0.14	NA	10
Oil and Grease	66	NA	NA	NA	150000 *	NA	NA	NA	NA	NA	<40	420	<40	700	250

NA = Not analyzed.
* = Exceeds the average background concentration.

TABLE 5B
GROUND WATER ANALYTICAL RESULTS-BOILER HOUSE USTs
SPELCO
DELTA PROJECT NO. 50-92-105

ANALYTE	WATER SAMPLES MICROGRAMS PER LITER (ug/l)									2L STANDARD ug/L
	DELTA SSE-1 UNFILTERED 1/93	AWARE MW-1 UNFILTERED 8/92	DELTA MW-1 UNFILTERED 1/93	DELTA MW-1 FILTERED 1/93	DELTA SSE-1 UNFILTERED 1/93	DELTA MW-1 UNFILTERED 9/93	AWARE MW-1 UNFILTERED 9/93	DELTA MW-1 FILTERED 9/93	AWARE MW-1 FILTERED 9/93	
METALS										
Aluminum	NA	400000	210000	<100	NA	150000	100000	<100	27000	NS
Arsenic	NA	<0.5	<5.0	<5.0	NA	NA	NA	NA	NA	50
Barium	NA	16000 *	660	<100	NA	3900 *	2900 *	<100	250	1000/2000**
Cadmium	NA	<5.0	10 *	<5.0	NA	<5.0	NA	<5.0	NA	5
Chromium	NA	1100 *	610 *	<10	NA	400 *	320 *	<10	80 *	50
Lead	NA	24	<5.0	<5.0	NA	<5.0	10	<5.0	<3	50
Mercury	NA	<0.5	<0.10	<0.10	NA	NA	NA	NA	NA	1.1
Selenium	NA	<25	<25	<5.0	NA	NA	NA	NA	NA	10/50**
Silver	NA	<10	<10	<10	NA	NA	NA	NA	NA	50
VOLATILES										
Trichloroethene	<5	<1.0	<1.0	NA	<5	<5.0	NA	NA	NA	2.8
Acetone	<10	NA	NA	NA	<10	<10	NA	NA	NA	NS/700**
FIELD INDICATOR PARAMETERS										
pH	8.2	NA	6.8	NA	8.2	6.8	NA	NA	NA	6.5 - 8.5
Conductivity (umho/cm)	500	NA	600	NA	500	NA	NA	NA	NA	NS
Temperature (C)	NA	NA	23	NA	NA	21.7	NA	NA	NA	NS

NA = Not analyzed.
NS = North Carolina 2L standard not established.
* = Concentration exceeds the 2L standard.
** = 2L standard increased as a result of the recent amendment.
umho/cm = micromhos per centimeter.
C = degrees Centigrade.
-- = Not averaged.

TABLE 6
GROUND WATER ANALYTICAL RESULTS
MONITORING WELLS MW-5 AND MW-6
SPELCO
DELTA PROJECT NO. 50-92-105

ANALYTE	WATER SAMPLES - MICROGRAMS PER LITER (ug/l)												2L STANDARD ug/L
	AWARE MW-5 UNFILTERED 8/92	DELTA MW-5 UNFILTERED 1/93	DELTA MW-5 FILTERED 1/93	DELTA MW-5 UNFILTERED 9/93	DELTA MW-5 FILTERED 9/93	AWARE MW-6 UNFILTERED 8/92	DELTA MW-6 UNFILTERED 1/93	DELTA MW-6 FILTERED 1/93	DELTA MW-6 UNFILTERED 9/93	AWARE MW-6 UNFILTERED 9/93	DELTA MW-6 FILTERED 9/93	AWARE MW-6 FILTERED 9/93	
METALS													
Aluminum	220000	78000	<100	65000	1700	390000	97000	<100	2400	50000	<100	<200	NS
Arsenic	<0.5	<5.0	<5.0	NA	NA	<0.5	<5.0	<5.0	NA	NA	NA	NA	50
Barium	2800 *	970	<100	620	<100	5800 *	1100	<100	<100	580	<100	<200	1000/2000 **
Cadmium	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	NA	<5.0	NA	5
Chromium	590 *	190 *	<10	190 *	<10	21000 *	470 *	<10	16	280 *	<10	<10	50
Lead	52 *	19	<5.0	9.2	<5.0	84 *	18	<5.0	<5.0	18	<5.0	<3	50
Mercury	<0.5	<0.10	<0.10	NA	NA	<0.5	<0.10	<0.10	NA	NA	NA	NA	1.1
Selenium	<5.0	<5.0	<5.0	NA	NA	25	<5.0	<5.0	NA	NA	NA	NA	10/50 **
Silver	<10	<10	<10	NA	NA	<10	<10	<10	NA	NA	NA	NA	50
VOLATILES													
Trichloroethene	<1.0	<1.0	NA	<5.0	NA	9 *	<1.0	NA	<5.0	NA	NA	NA	2.8
FIELD INDICATOR PARAMETERS													
pH	NA	6.2 *	NA	5.3 *	NA	NA	6.3 *	NA	6.0 *	NA	NA	NA	6.5-8.5
Conductivity (umho/cm)	NA	218	NA	NA	NA	NA	140	NA	NA	NA	NA	NA	NS
Temperature (C)	NA	14	NA	14.3	NA	NA	14	NA	16.7	NA	NA	NA	NS

NA = Not analyzed.
NS = North Carolina 2L Standard not established.
* = Concentration exceeds the 2L Standard.
** = 2l standard increased as a result of the recent amendment.
ug/l = micrograms per liter or parts per billion
umho/cm= micromhos per centimeter.
C = degrees Centigrade.

TABLE 7A
SOIL ANALYTICAL RESULTS-CONTAINMENT DIKE AREA
SPELCO
DELTA PROJECT NO. 50-92-105

ANALYTE	SOIL SAMPLES - MILLIGRAMS PER KILOGRAM (mg/kg)												
METALS	AWARE CD-1 (1') 8/92	DELTA CD-2 (1') 1/93	DELTA CD-3 (1') 1/93	DELTA CD-4 (1') 1/93	DELTA CD-5 (1-1.5') 9/93	DELTA CD-6 (0.5-1') 9/93	DELTA CD-7 (0.5-1') 9/93	DELTA CD-8 (0.5-1') 9/93	DELTA CD-9 (0.5-1') 9/93	DELTA CD-10 (0.5-1') 9/93	DELTA MW-10 (4.5-5') 9/93	AWARE MW-10 (4-6') 9/93	DELTA MW-10 (15-15.5') 9/93
Aluminum	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
VOLATILES													
1,2-Dicholorethene *	0.68 *	<0.29	<0.006	<0.006	<0.005	<0.006	<0.006	<0.006	<0.005	<1.4	<0.006	0.006	<0.006
Tetrachloroethene	10	3.40	0.033	0.020	<0.005	<0.006	<0.006	<0.006	<0.005	<1.4	<0.006	<0.005	<0.006
Trichloroethene	1	<0.29	<0.006	<0.006	<0.005	<0.006	<0.006	<0.006	<0.005	<1.4	<0.006	<0.005	<0.006
Acetone	<1.25	<0.57	0.029	<0.012	0.09	0.1	<0.01	<0.01	<0.01	28.8	0.03	<0.010	0.04
MEK	<1.25	<0.57	0.024	<0.012	<0.01	<0.01	<0.01	<0.01	<0.01	<2.8	<0.03	<0.010	<0.01
Toluene	<0.625	<0.290	<0.006	<0.006	<0.005	<0.006	<0.006	<0.006	<0.005	<1.4	<0.006	<0.005	<0.006
Ethylbenzene	<0.625	<0.290	<0.006	<0.006	<0.005	<0.006	<0.006	<0.006	<0.005	<1.4	<0.006	<0.005	<0.006
Xylenes	<0.625	<0.290	<0.006	<0.006	<0.005	<0.006	<0.006	<0.006	<0.005	<1.4	<0.006	<0.005	<0.006
Benzene	<0.625	<0.290	<0.006	<0.006	<0.005	<0.006	<0.006	<0.006	<0.005	<1.4	<0.006	<0.005	<0.006

NA = Not analyzed
* = Total 1,2 dichloroethene reported by AWARE, Trans 1,2-dichloroethene reported by Delta.

TABLE 7B
GROUND WATER ANALYTICAL RESULTS-CONTAINMENT DIKE AREA
SPELCO
DELTA PROJECT NO. 50-92-105

ANALYTE	WATER SAMPLES MICROGRAMS PER LITER (ug/L)				2L STANDARD ug/L
	DELTA MW-10 UNFILTERED 9/93	AWARE MW-10 UNFILTERED 9/93	DELTA MW-10 FILTERED 9/93	AWARE MW-10 FILTERED 9/93	
METALS					
Aluminum	4400	2700	<100	<200	NS
Arsenic	NA	NA	NA	NA	50
Barium	370	300	280	<200	1000/2000 **
Cadmium	<5.0	NA	<5.0	NA	5
Chromium	13	<10	<10	<10	50
Lead	<5.0	4	<5.0	<3	50
Mercury	NA	NA	NA	NA	1.1
Selenium	NA	NA	NA	NA	10/50 **
Silver	NA	NA	NA	NA	50
VOLATILES					
1,2-Dicholorethene	<5	<5	NA	NA	70
Tetrachloroethene	<5	<5	NA	NA	0.7
Trichloroethene	<5	<5	NA	NA	2.8
Acetone	<10	<10	NA	NA	NS/700**
MEK	<10	<10	NA	NA	170
Toluene	14	24	NA	NA	1000
Ethylbenzene	16	22	NA	NA	29
Xylenes	54	57	NA	NA	400
Benzene	<5	6	NA	NA	1
FIELD INDICATOR PARAMETERS					
pH	6.5	NA	NA	NA	
Conductivity (umhos/cm)	NA	NA	NA	NA	
Temperature (C)	15.1	NA	NA	NA	

NA = Not analyzed
NS = North Caroina 2L standard not established
** = 2L standard increased as a result of the recent amendment.
umhos/cm = Micromhos per centimeter.
C = Degrees Centigrade

TABLE 8
SOIL ANALYTICAL RESULTS-TRUCK LOADING DOCK
SPELCO
DELTA PROJECT NO. 50-92-105

ANALYTE	SOIL SAMPLES — MILLIGRAMS PER KILOGRAM (mg/kg)				
	DELTA AVG. BKGND 1/93	AWARE TLD-1 8/92	DELTA TLD-2 1/93	DELTA TLD-3 9/93	AWARE TLD-3 9/93
METALS					
Aluminum	16333.3	4400	NA	NA	4600
Arsenic	<1.3	<1.0	NA	NA	NA
Barium	303	100	NA	NA	76
Cadmium	1.5	2.7 *	NA	NA	NA
Chromium	60	50	NA	NA	30
Lead	4.77	120 *	NA	NA	48 *
Mercury	<0.062	<0.25	NA	NA	NA
Selenium	<1.3	<1.0	NA	NA	NA
Silver	<2.5	<2.0	NA	NA	NA
VOLATILES					
Tetrachloroethene	NA	11	<0.006	<0.006	<0.005

NA =Not analyzed.
* =Concentration exceeds average background concentration.

TABLE 9
SOIL ANALYTICAL RESULTS-TRASH BURNING AREA
SPELCO
DELTA PROJECT NO. 50-92-105

ANALYTE	SOIL SAMPLES MILLIGRAMS PER KILOGRAM (mg/kg)								REGULATORY LIMIT MG/KG
	DELTA AVERAGE BKGND 1/93	AWARE BA-1 8/92	DELTA TB-1 (0.5-1') 9/93	DELTA TB-2 (0.5-1') 9/93	DELTA TB-3 (0.5-1') 9/93	DELTA TB-4 (0.5-1') 9/93	DELTA TB-5 (2-2.5') 9/93	DELTA TB-6 (0.5-1') 9/93	
METALS									
Aluminum	16333	10000	NA	NA	NA	NA	NA	NA	NS
Arsenic	<1.3	12 *	<1.1	<1.3	3.7 *	<1.3	12 *	6.7 *	NS
Barium	303	200	NA	NA	NA	NA	NA	NA	NS
Cadmium	1.5	1.9*	NA	NA	NA	NA	NA	NA	NS
Chromium	60	26	NA	NA	NA	NA	NA	NA	NS
Lead	4.77	27 *	5.5 *	19 *	16 *	4.9 *	38 *	18 *	NS
Mercury	<0.062	<0.25	NA	NA	NA	NA	NA	NA	NS
Selenium	<1.3	<1.0	NA	NA	NA	NA	NA	NA	NS
Silver	<2.5	<2.0	NA	NA	NA	NA	NA	NA	NS
TCLP									
Metals	NA	NA	NA	NA	NA	NA	NA	ND **	
Volatiles	NA	NA	NA	NA	NA	NA	NA	ND	
TPH									
Diesel	<10.1	NA	NA	NA	NA	NA	NA	<9.9	40
Gasoline	<3.1	NA	NA	NA	NA	NA	NA	<1.5	10
Oil & Grease	66	NA	NA	NA	NA	NA	NA	393 *	250
Motor Oil	<200	NA	NA	NA	NA	NA	NA	1,320	250

NA = Not analyzed.
ND = Not detected over regulatory limit.
* = Concentration higher than average background.
** = Corrosivity, reactivity, and ignitability are within the acceptable TC regulatory level.

TABLE 10
COAL TCLP ANALYTICAL RESULTS-COAL BIN AREA
SPELCO
DELTA PROJECT NO. 50-92-105

ANALYTE	COAL SAMPLE MILLIGRAMS PER LITER (mg/L)	REGULATORY LIMIT MILLIGRAMS PER LITER (mg/L)
TCLP METALS	DELTA COAL 9/93	
Arsenic	<0.5	5
Barium	<1.0	100
Cadmium	<0.10	1
Chromium	<0.50	5
Lead	<0.50	5
Mercury	<0.10	0.2
Selenium	<0.10	1
Silver	<0.50	5

TABLE 12
MONITORING WELL CONSTRUCTION
SPELCO, INC.
50-92-105

MONITORING WELL NO.	TOTAL DEPTH (fbg)	SCREENED INTERVAL (fbg)	DEPTH TO WATER TABLE (fbg)	TOP OF CASING ELEVATION (msl)	WATER TABLE ELEVATION 9/29/93 (msl)
MW-1	28	18 - 28	21.82	2668.79	2646.97
MW-2	38	28 - 38	29.31	2669.61	2640.30
MW-3	13	3 - 13	5.15	2645.27	2640.12
MW-4	13	3 - 13	7.03	2647.49	2640.46
MW-5	18	7 - 17	13.50	2655.85	2642.35
MW-6	25	15 - 25	18.16	2663.43	2645.27
MW-7	28	18 - 28	27.05	2673.93	2646.88
MW-8	37	22 - 37	30.28	2671.91	2641.63
MW-9	35	20 - 35	32.59	2677.59	2645.00
MW-10	25	10 - 25	18.67	2661.73	2643.06
ET-3	35	20 - 35	29.60	2672.27	2642.67

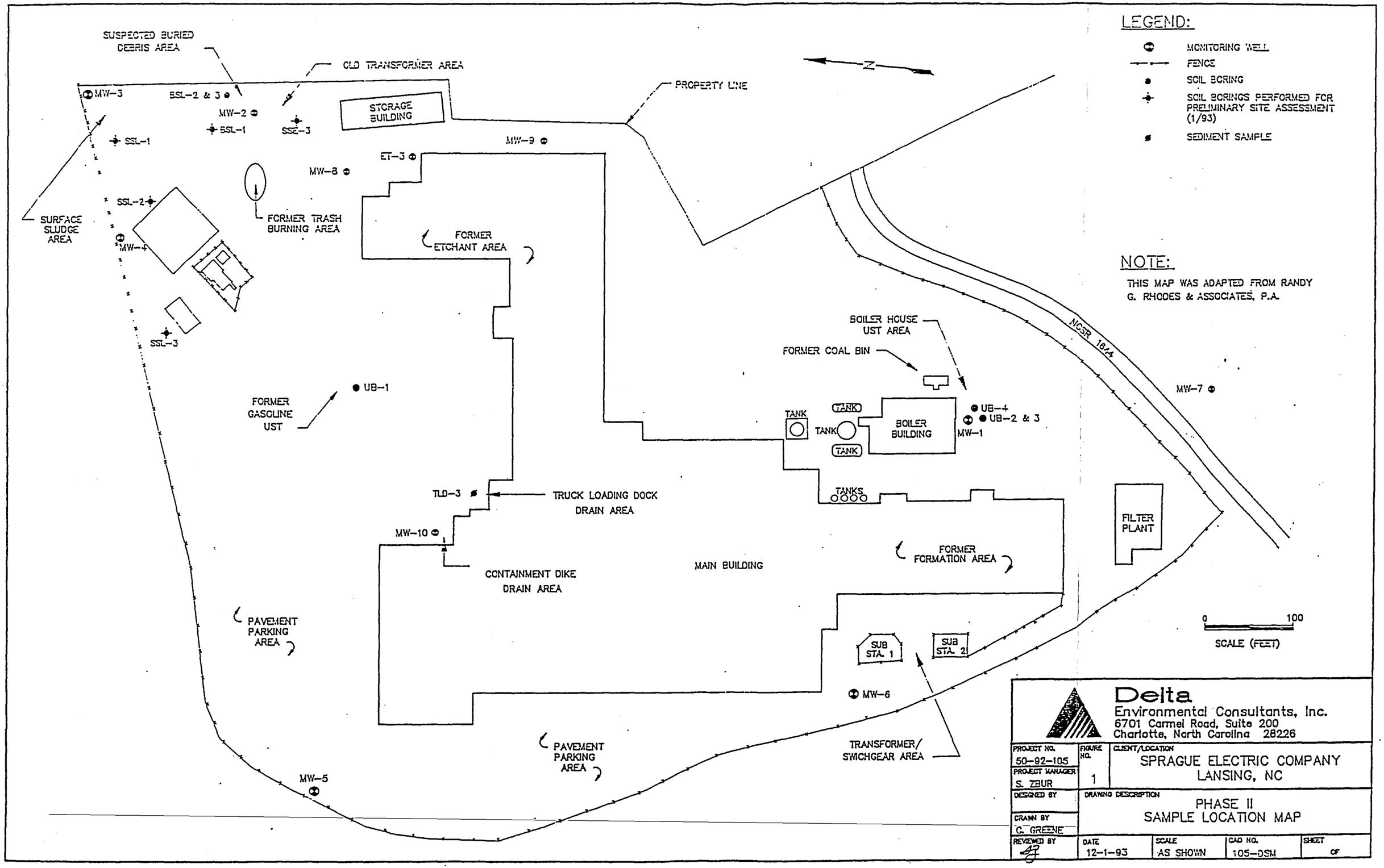
All measurements are in feet
fbg = feet below top of casing
msl = feet above mean sea level

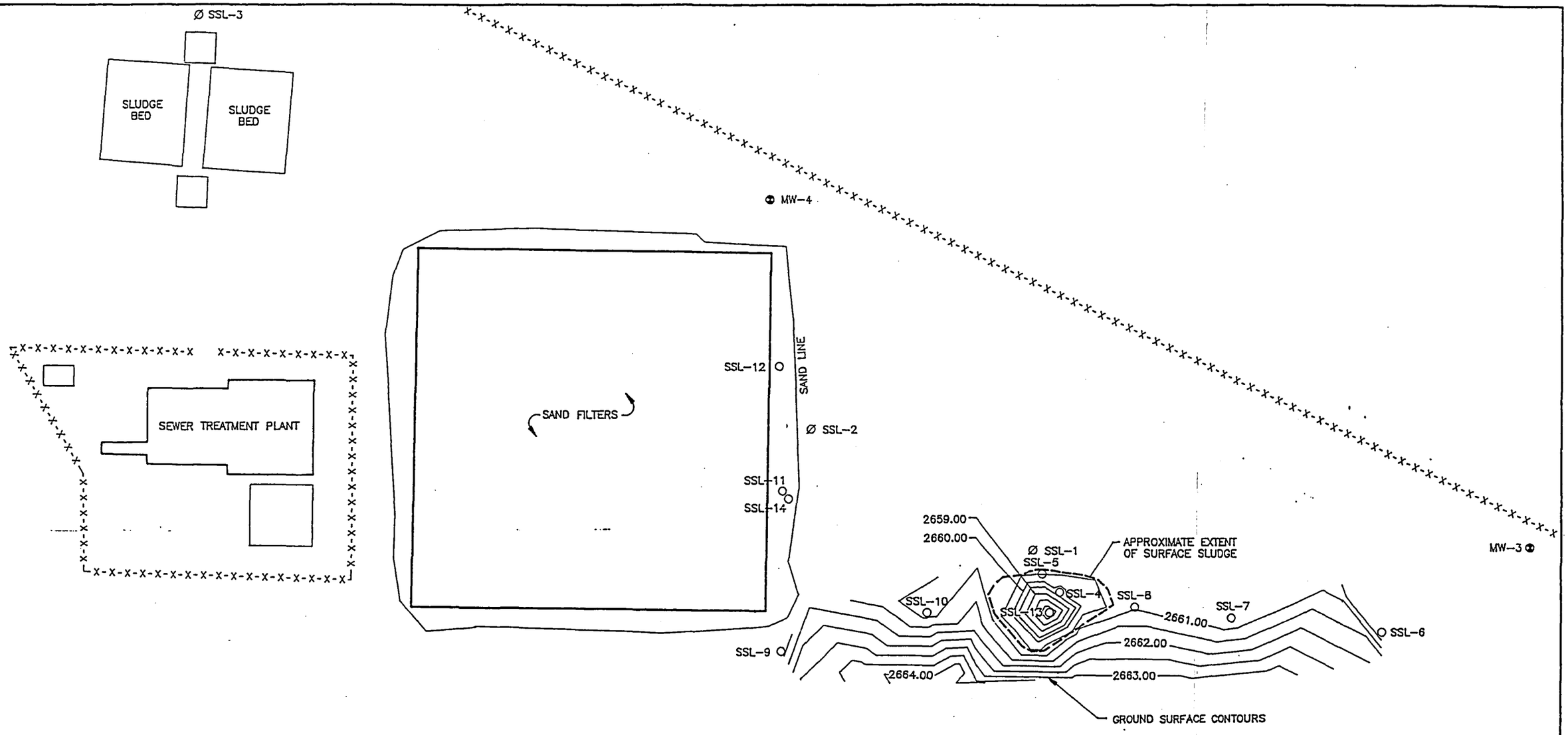
TABLE 11
GROUND WATER ANALYTICAL RESULTS - FORMER ETCHANT AREA
SPELCO
DELTA PROJECT NO. 50-92-105

ANALYTE	WATER SAMPLES - MICROGRAMS PER LITER (ug/L)														2L STANDARD ug/L
METALS	DELTA ET-2 UNFILTERED 1/93	DELTA ET-2 FILTERED 1/93	DELTA ET-3 UNFILTERED 1/93	DELTA ET-3 UNFILTERED 9/93	DELTA ET-3 FILTERED 1/93	DELTA ET-3 FILTERED 9/93	DELTA MW-8 UNFILTERED 9/93	AWARE MW-8 UNFILTERED 9/93	DELTA MW-8 FILTERED 9/93	AWARE MW-8 FILTERED 9/93	DELTA MW-9 UNFILTERED 9/93	AWARE MW-9 UNFILTERED 9/93	DELTA MW-9 FILTERED 9/93	AWARE MW-9 FILTERED 9/93	
Aluminum	64000	230	74000	56000	39000	56000	81000	59000	5600	5000	7000	2600	<100	<200	NS
Arsenic	< 5.0	< 5.0	< 25	NA	< 10	NA	NA	NA	NA	NA	NA	NA	NA	NA	50
Barium	1500 *	< 100	940	<100	< 100	<100	990	620	<100	<200	130	<200	<100	<200	1000/2000 **
Cadmium	< 5.0	< 5.0	< 5.0	<5.0	< 5.0	<5.0	5.8	NA	<5.0	NA	<5.0	NA	<5.0	NA	5
Chromium	280 *	< 10	43	12	< 10	12	140 *	90	<10	<10	<10	20	<10	<10	50
Lead	< 5.0	< 5.0	< 5.0	<5.0	< 5.0	<5.0	14	15	<5.0	12	<5.0	5	<5.0	6	50
Mercury	< 0.10	< 0.10	< 0.10	NA	< 0.10	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1
Selenium	< 5.0	< 5.0	< 10	NA	< 5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	10/50 **
Silver	< 10	< 10	< 10	NA	< 10	NA	NA	NA	NA	NA	NA	NA	NA	NA	50
VOLATILES															
Tetrachloroethene	<5.0	NA	<5.0	<5.0	NA	NA	<5.0	NA	NA	NA	<5.0	NA	NA	NA	2.8
Acetone	< 10	NA	< 10	<10	NA	NA	<10	NA	NA	NA	<10	NA	NA	NA	NS/700**
Trichloroethene	<5.0	NA	<5.0	<5.0	NA	NA	<5.0	NA	NA	NA	<5.0	NA	NA	NA	0.7
LIBRARY SEARCH															
Number TICs Found	0	NA	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS
Unknown - RT =24.12															
FIELD INDICATOR PARAMETERS															
pH	5.9 *	NA	4.77 *	3.7 *	NA	NA	4.7 *	NA	NA	NA	6.3	NA	NA	NA	6.5 - 8.5
Conductivity (umho/cm)	460	NA	1150	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS
Temperature (C)	17	NA	10.5	13.9	NA	NA	13.8	NA	NA	NA	15.6	NA	NA	NA	NS

NA = Not analyzed
NS = North Carolina 2L standard not established
TICs = Tentatively identified compounds
RT = Retention Time
umho/cm = Micromhos per centimeter
C = Degrees Centigrade
** = 2L standard increased as a result of the recent amendment.

FIGURES


SUSPECTED BURIED DEBRIS AREA
OLD TRANSFORMER AREA
PROPERTY LINE
N
MW-3
SSL-2 & 3
MW-2
SSL-1
SSL-3
STORAGE BUILDING
SSL-1
MW-9
ET-3
MW-8
SSL-2
SURFACE SLUDGE AREA
FORMER TRASH BURNING AREA
MW-4
FORMER ETCHANT AREA
SSL-3
BOILER HOUSE UST AREA
FORMER COAL BIN
NCSR 1644
MW-7
UB-1
FORMER GASOLINE UST
TANK
TANK
TANK
TANK
BOILER BUILDING
UB-4
UB-2 & 3
MW-1
TLD-3
TRUCK LOADING DOCK DRAIN AREA
TANKS
FILTER PLANT
MW-10
CONTAINMENT DIKE DRAIN AREA
MAIN BUILDING
FORMER FORMATION AREA
PAVEMENT PARKING AREA
SUB STA. 1
SUB STA. 2
0
100
SCALE (FEET)
MW-6
PAVEMENT PARKING AREA
TRANSFORMER/ SWICHGEAR AREA
MW-5
LEGEND:
MONITORING WELL
FENCE
SOIL BORING
SOIL BORINGS PERFORMED FOR PRELIMINARY SITE ASSESSMENT (1/93)
SEDIMENT SAMPLE
NOTE:
THIS MAP WAS ADAPTED FROM RANDY G. RHODES & ASSOCIATES, P.A.
Delta
Environmental Consultants, Inc.
6701 Carmel Road, Suite 200
Charlotte, North Carolina 28226
PROJECT NO. 50-92-105
FIGURE NO. 1
CLIENT/LOCATION SPRAGUE ELECTRIC COMPANY LANSING, NC
PROJECT MANAGER S. ZBUR
DESIGNED BY
DRAWING DESCRIPTION PHASE II SAMPLE LOCATION MAP
DRAWN BY C. GREENE
REVIEWED BY
DATE 12-1-93
SCALE AS SHOWN
CAD NO. 105-DSM
SHEET OF



LEGEND:

- ⊕ MONITORING WELL
- O SOIL/SLUDGE SAMPLE
- Ø FORMER SOIL BORING/TEMPORARY WELL

CONTOUR INTERVAL = 0.5 FT

NOTES:

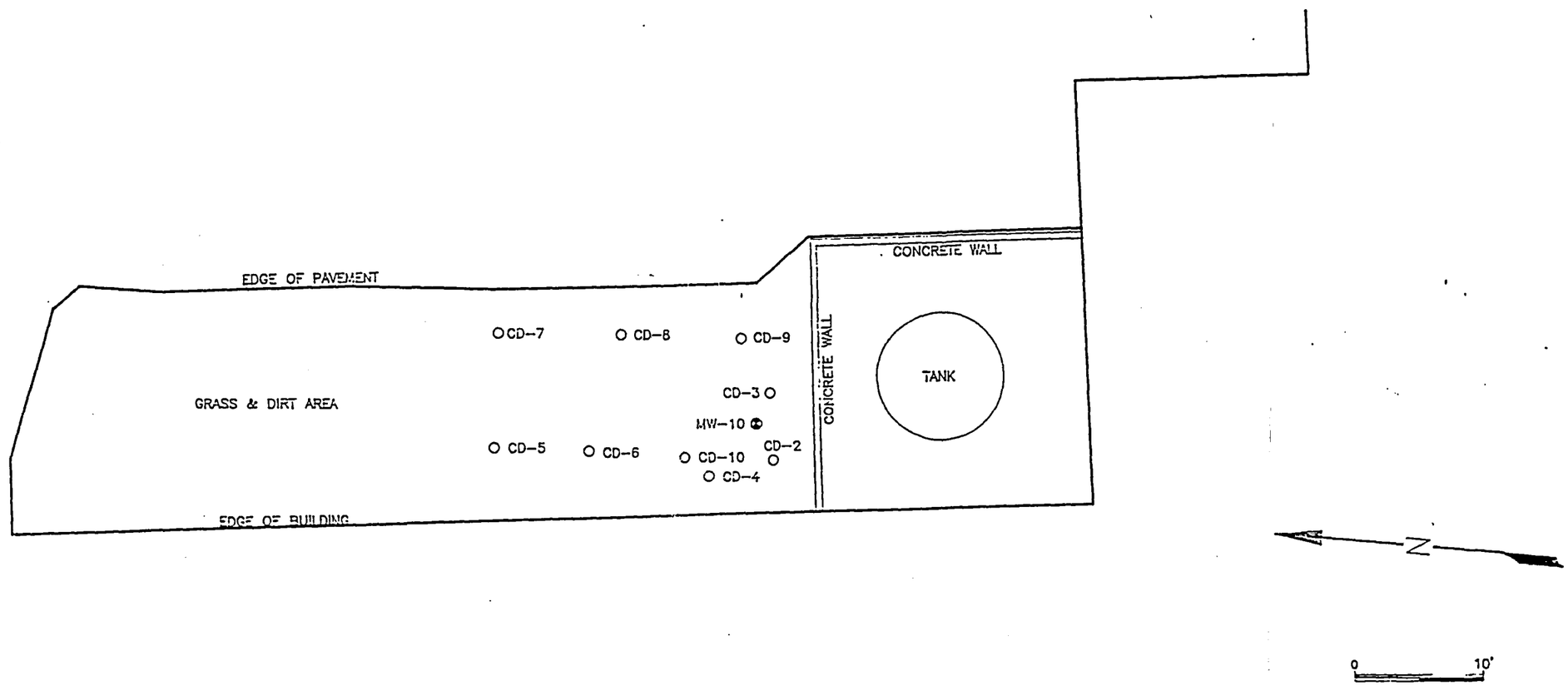
MAP ADAPTED FROM RANDY RHODES & ASSOCIATES, P.A.

N

0 20'

Delta
Environmental Consultants, Inc.
6701 Carmel Road, Suite 200
Charlotte, North Carolina 28226

PROJECT NO. 50-92-105	FIGURE NO. 2	CLIENT/LOCATION SPRAGUE ELECTRIC COMPANY LANSING, NC
PROJECT MANAGER S. ZBUR		
DESIGNED BY	DRAWING DESCRIPTION SURFACE SLUDGE AREA SAMPLE LOCATIONS	
DRAWN BY C. HAITHCOX		
REVIEWED BY	DATE 1-28-94	SCALE 1" = 20' / CAD NO. 105-SSA

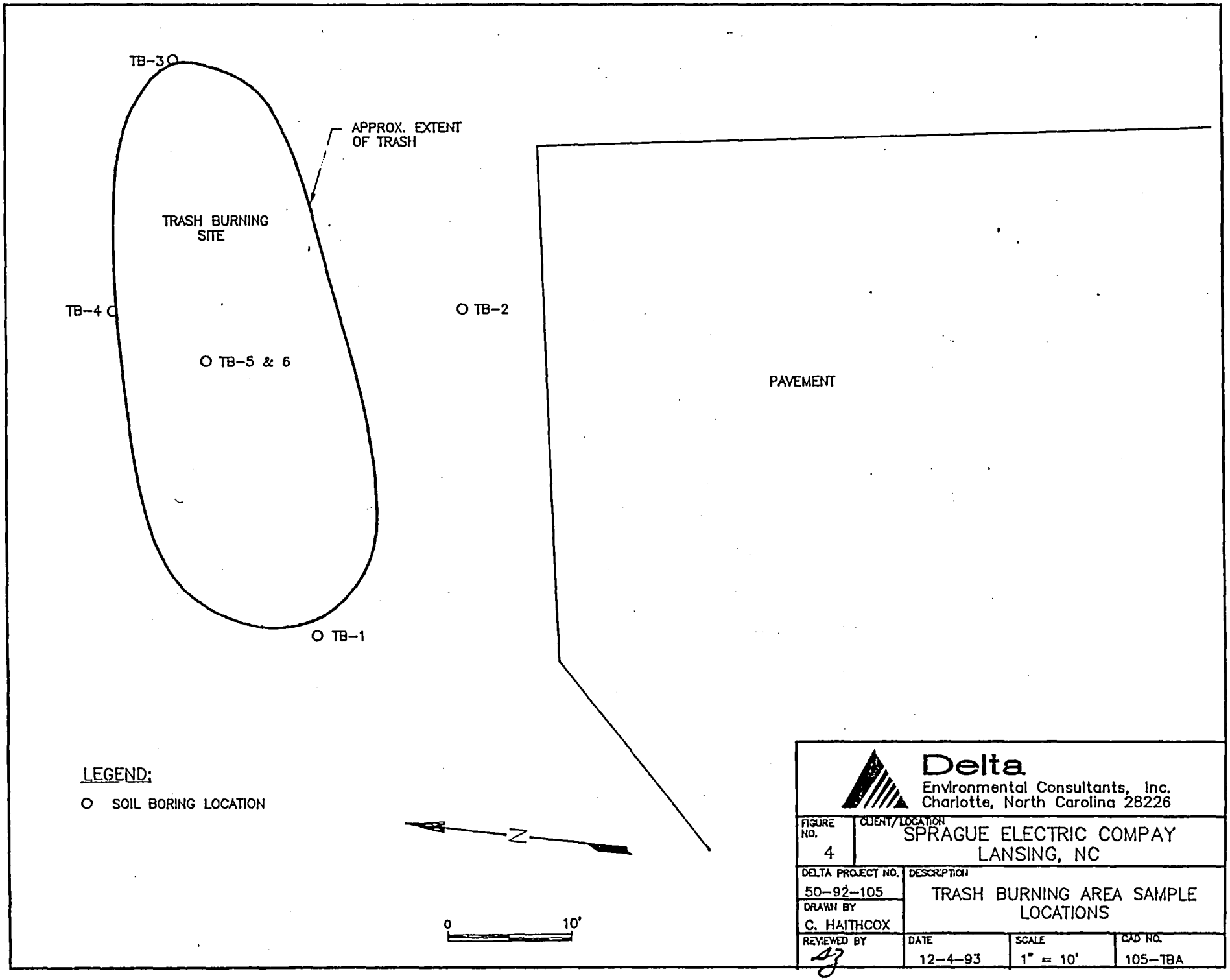


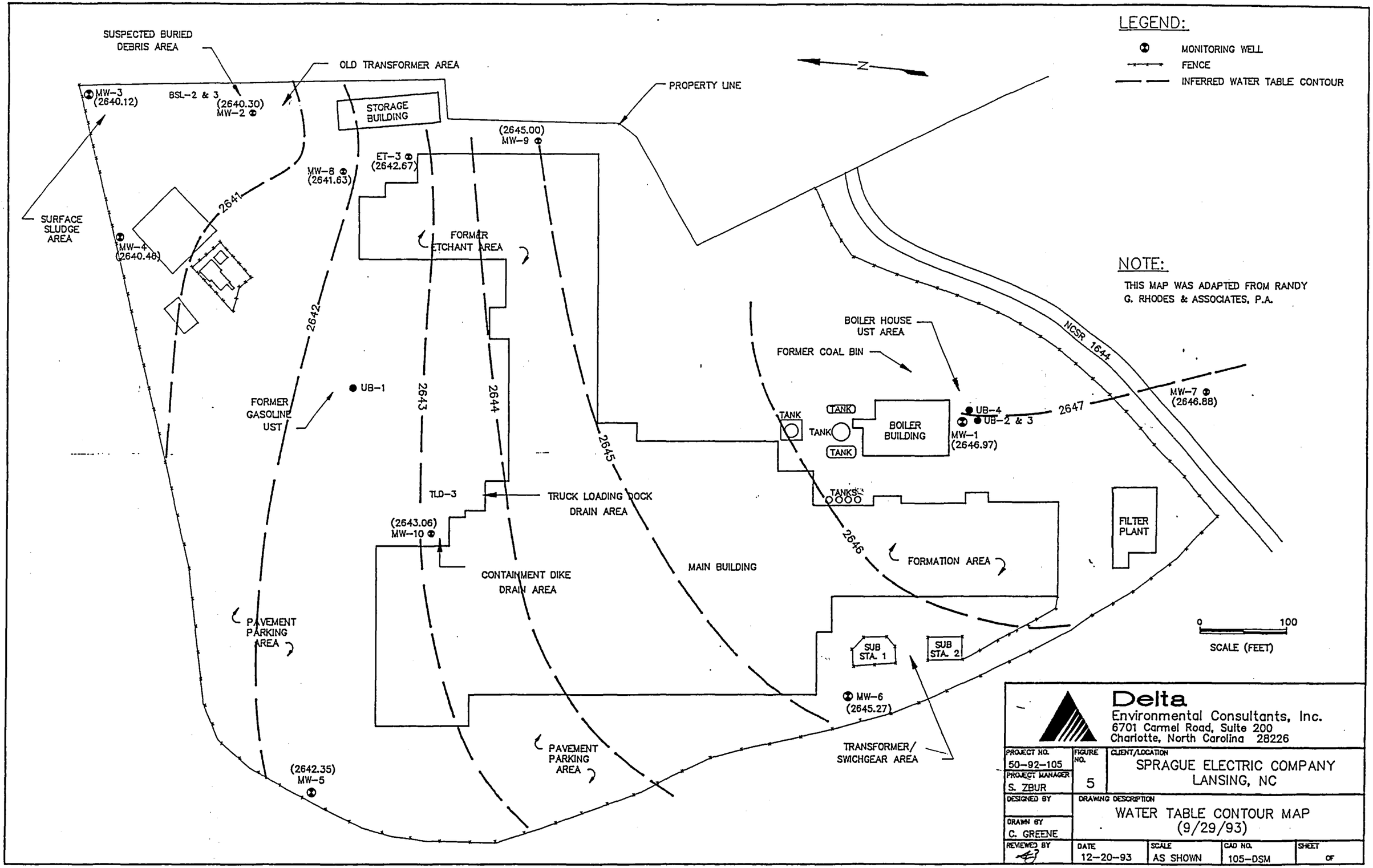
LEGEND:

- ⊕ MONITORING WELL LOCATION
- O SOIL BORING LOCATION

Delta
Environmental Consultants, inc.
6701 Carmel Road, Suite 200
Charlotte, North Carolina 28226

PROJECT NO. 50-92-105	FIGURE NO.	CLIENT/LOCATION SPRAGUE ELECTRIC COMPANY LANSING, NC
PROJECT MANAGER S. ZBUR	3	
DESIGNED BY	DRAWING DESCRIPTION CONTAINMENT DIKE DRAIN SAMPLE LOCATION	
DRAWN BY C. HAITHCOX		
REVIEWED BY	DATE 12-1-93	SCALE 1" = 10' / CAD NO. 105-CDD


TB-3
APPROX. EXTENT OF TRASH
TRASH BURNING SITE
TB-4
TB-2
TB-5 & 6
PAVEMENT
TB-1
LEGEND:
SOIL BORING LOCATION
N
0
10'
Delta
Environmental Consultants, Inc.
Charlotte, North Carolina 28226
FIGURE NO.
4
CLIENT/LOCATION
SPRAGUE ELECTRIC COMPAY
LANSING, NC
DELTA PROJECT NO.
50-92-105
DESCRIPTION
TRASH BURNING AREA SAMPLE LOCATIONS
DRAWN BY
C. HAITHCOX
REVIEWED BY
DATE
12-4-93
SCALE
1" = 10'
CAD NO.
105-TBA


LEGEND:
MONITORING WELL
FENCE
INFERRED WATER TABLE CONTOUR
NOTE:
THIS MAP WAS ADAPTED FROM RANDY G. RHODES & ASSOCIATES, P.A.
SUSPECTED BURIED DEBRIS AREA
OLD TRANSFORMER AREA
PROPERTY LINE
N
MW-3 (2640.12)
BSL-2 & 3 (2640.30) MW-2
STORAGE BUILDING
(2645.00) MW-9
ET-3 (2642.67)
MW-8 (2641.63)
SURFACE SLUDGE AREA
MW-4 (2640.46)
FORMER ETCHANT AREA
2641
2642
2643
2644
2645
2646
2647
UB-1
FORMER GASOLINE UST
BOILER HOUSE UST AREA
FORMER COAL BIN
TANK
BOILER BUILDING
UB-4
UB-2 & 3
MW-1 (2646.97)
MW-7 (2646.88)
NCSR 1644
TLD-3
TRUCK LOADING DOCK DRAIN AREA
(2643.06) MW-10
CONTAINMENT DIKE DRAIN AREA
MAIN BUILDING
FORMATION AREA
FILTER PLANT
PAVEMENT PARKING AREA
SUB STA. 1
SUB STA. 2
MW-6 (2645.27)
TRANSFORMER/ SWICHGEAR AREA
(2642.35) MW-5
0
100
SCALE (FEET)
Delta
Environmental Consultants, Inc.
6701 Carmel Road, Suite 200
Charlotte, North Carolina 28226
PROJECT NO. 50-92-105
FIGURE NO. 5
CLIENT/LOCATION SPRAGUE ELECTRIC COMPANY LANSING, NC
PROJECT MANAGER S. ZBUR
DESIGNED BY
DRAWN BY C. GREENE
REVIEWED BY
DRAWING DESCRIPTION WATER TABLE CONTOUR MAP (9/29/93)
DATE 12-20-93
SCALE AS SHOWN
CAD NO. 105-DSM
SHEET OF

APPENDICES

APPENDIX A

LABORATORY REPORTS

ORLANDO LABORATORIES INC.
P.O. BOX 149127 • ORLANDO, FLORIDA 32814
(407) 896-6645 • FAX: (407) 898-6588

OCT 18 1993

REPORT OF ANALYSIS

Delta Environmental
Consultants, Inc.
6701 Carmel Road, Suite 200
Charlotte, NC 28226-3901
Attn: Steven Zbur

Work Order # : 93-09-459
Date Received: 09/30/93
Date Reported: 10/14/93
OLI Contact: S_CHAI

Work ID: 50-92-105.22 SPELCO
Samples collected by: Client
Total Samples: 14

Sample Identification	Description of Analysis	Description of Analysis
01A BSL-3 10.5-11.0'	GC/MS Volatiles Cadmium Lead	Aluminum Chromium Soil Prep Fee
02A BSL-3 20.5-21.0'	GC/MS Volatiles Cadmium Lead	Aluminum Chromium Soil Prep Fee
03A MW-10 4.5-5.0'	GC/MS Volatiles	Soil Prep Fee
04A MW-10 15-15.5'	GC/MS Volatiles	Soil Prep Fee
05A UB-3 10-10.5'	Oil & Grease, Soxhlet Petroleum ID Semivolatile	Soil Prep Fee Petroleum ID Volatile
06A UB-4 10-10.5'	Oil & Grease, Soxhlet Petroleum ID Semivolatile	Soil Prep Fee Petroleum ID Volatile
07A TLD-3	GC/MS Volatiles	Soil Prep Fee
08A TB-1 0.5-1.0'	Arsenic Soil Prep Fee	Lead
09A TB-2 0.5-1.0'	Arsenic Soil Prep Fee	Lead
10A TB-3 0.5-1.0'	Arsenic Soil Prep Fee	Lead
11A TB-4 0.5-1.0'	Arsenic Soil Prep Fee	Lead
12A TB-5 2-2.5'	Arsenic	Lead

Delta Environmental
Work ID: 50-92-105.22 SPELCO

Work Order # : 93-09-459
C o n t i n u e d

Sample Identification	Description of Analysis	Description of Analysis
12A TB-5 2-2.5'	Soil Prep Fee	
13A TB-6 0.5-1.0'	Arsenic Freight Charges Paint Filter Liquids Test Laboratory pH Soil Prep Fee Petroleum ID Volatile	Flash Point Oil & Grease, Soxhlet Lead Reactivity Petroleum ID Semivolatile
14A Method Blank	GC/MS Volatiles QC for Wet Chemistry Petroleum ID Volatile	QC for Metals Petroleum ID Semivolatile

Respectfully Submitted,
ORLANDO LABORATORIES, INC.

John Bowers
TECHNICAL LABORATORY DIRECTOR

Eric Malarek
QUALITY CONTROL

Results of Analysis

Work ID: 50-92-105.22 SPELCO Work Order: 93-09-459

Client Number:	BSL-3 10.5-11.0'	BSL-3 20.5-21.0'	MW-10 4.5-5.0'	MW-10 15-15.5'
OLI Number:	01A	02A	03A	04A
Dilution:	1	1	1	1
% Moisture:	19.9	21.7	22.1	19.3

GC/MS Volatiles: Soil

EPA 8240	Units	Result/Flag	Result/Flag	Result/Flag	Result/Flag	MDL
Chloromethane	ug/kg	10 U	10 U	10 U	10 U	10
Bromomethane	ug/kg	10 U	10 U	10 U	10 U	10
Vinyl Chloride	ug/kg	10 U	10 U	10 U	10 U	10
Chloroethane	ug/kg	10 U	10 U	10 U	10 U	10
Methylene Chloride	ug/kg	6 U	6 U	6 U	6 U	5
Acetone	ug/kg	10 U	10 U	30	40	10
Carbon Disulfide	ug/kg	6 U	6 U	6 U	6 U	5
1,1-Dichloroethene	ug/kg	6 U	6 U	6 U	6 U	5
1,1-Dichloroethane	ug/kg	6 U	6 U	6 U	6 U	5
trans-1,2-Dichloroethene	ug/kg	6 U	6 U	6 U	6 U	5
Chloroform	ug/kg	6 U	6 U	6 U	6 U	5
1,2-Dichloroethane	ug/kg	6 U	6 U	6 U	6 U	5
MEK 2-Butanone	ug/kg	10 U	10 U	10 U	10 U	10
1,1,1-Trichloroethane	ug/kg	6 U	6 U	6 U	6 U	5
Carbon Tetrachloride	ug/kg	6 U	6 U	6 U	6 U	5
Vinyl Acetate	ug/kg	6 U	6 U	6 U	6 U	5
Bromodichloromethane	ug/kg	6 U	6 U	6 U	6 U	5
1,2-Dichloropropane	ug/kg	6 U	6 U	6 U	6 U	5
t-1,3-Dichloropropene	ug/kg	6 U	6 U	6 U	6 U	5
Trichloroethene	ug/kg	6 U	6 U	6 U	6 U	5
Dibromochloromethane	ug/kg	6 U	6 U	6 U	6 U	5
1,1.2-Trichloroethane	ug/kg	6 U	6 U	6 U	6 U	5
Benzene	ug/kg	6 U	6 U	6 U	6 U	5
c-1,3-Dichloropropene	ug/kg	6 U	6 U	6 U	6 U	5
2-Chloroethylvinylether	ug/kg	10 U	10 U	10 U	10 U	10
Bromoform	ug/kg	6 U	6 U	6 U	6 U	5
4-Methyl-2-pentanone	ug/kg	10 U	10 U	10 U	10 U	10
2-Hexanone	ug/kg	10 U	10 U	10 U	10 U	10
1,1,2,2-Tetrachloroethane	ug/kg	6 U	6 U	6 U	6 U	5
Tetrachloroethene	ug/kg	6 U	6 U	6 U	6 U	5
Toluene	ug/kg	6 U	6 U	6 U	6 U	5
Chlorobenzene	ug/kg	6 U	6 U	6 U	6 U	5
Ethylbenzene	ug/kg	6 U	6 U	6 U	6 U	5
Styrene	ug/kg	6 U	6 U	6 U	6 U	5
Total Xylenes	ug/kg	6 U	6 U	6 U	6 U	5
1,2-Dichlorobenzene	ug/kg	6 U	6 U	6 U	6 U	5
1,3-Dichlorobenzene	ug/kg	6 U	6 U	6 U	6 U	5
1,4-Dichlorobenzene	ug/kg	6 U	6 U	6 U	6 U	5
Trichlorofluoromethane	ug/kg	6 U	6 U	6 U	6 U	5

Results of Analysis

Work ID: 50-92-105.22 SPELCO Work Order: 93-09-459

Client Number:	BSL-3 10.5-11.0'	BSL-3 20.5-21.0'	MW-10 4.5-5.0'	MW-10 15-15.5'
OLI Number:	01A	02A	03A	04A

Continued from preceding page

EPA 8240	% Recovery	% Recovery	% Recovery	% Recovery
Surrogates/Internal Standard				
1,2-Dichloroethane (SS1)	92 %	91 %	92 %	98 %
Toluene-d8 (SS2)	98 %	99 %	97 %	86 %
Bromofluorobenzene (SS3)	92 %	92 %	95 %	84 %

Results of Analysis

Work ID: 50-92-105.22 SPELCO Work Order: 93-09-459

Client Number:	TLD-3	Method Blank
OLI Number:	07A	14A
Dilution:	1	1
% Moisture:	20.4	0.0

GC/MS Volatiles: Soil

EPA 8240	Units	Result/Flag	Result/Flag	MDL
Chloromethane	ug/kg	10 U	10 U	10
Bromomethane	ug/kg	10 U	10 U	10
Vinyl Chloride	ug/kg	10 U	10 U	10
Chloroethane	ug/kg	10 U	10 U	10
Methylene Chloride	ug/kg	6 U	5 U	5
Acetone	ug/kg	10 U	10 U	10
Carbon Disulfide	ug/kg	6 U	5 U	5
1,1-Dichloroethene	ug/kg	6 U	5 U	5
1,1-Dichloroethane	ug/kg	6 U	5 U	5
trans-1,2-Dichloroethene	ug/kg	6 U	5 U	5
Chloroform	ug/kg	6 U	5 U	5
1,2-Dichloroethane	ug/kg	6 U	5 U	5
MEK 2-Butanone	ug/kg	10 U	10 U	10
1,1,1-Trichloroethane	ug/kg	6 U	5 U	5
Carbon Tetrachloride	ug/kg	6 U	5 U	5
Vinyl Acetate	ug/kg	6 U	5 U	5
Bromodichloromethane	ug/kg	6 U	5 U	5
1,2-Dichloropropane	ug/kg	6 U	5 U	5
t-1,3-Dichloropropene	ug/kg	6 U	5 U	5
Trichloroethene	ug/kg	6 U	5 U	5
Dibromochloromethane	ug/kg	6 U	5 U	5
1,1.2-Trichloroethane	ug/kg	6 U	5 U	5
Benzene	ug/kg	6 U	5 U	5
c-1,3-Dichloropropene	ug/kg	6 U	5 U	5
2-Chloroethylvinylether	ug/kg	10 U	10 U	10
Bromoform	ug/kg	6 U	5 U	5
4-Methyl-2-pentanone	ug/kg	10 U	10 U	10
2-Hexanone	ug/kg	10 U	10 U	10
1,1,2,2-Tetrachloroethane	ug/kg	6 U	5 U	5
Tetrachloroethene	ug/kg	6 U	5 U	5
Toluene	ug/kg	6 U	5 U	5
Chlorobenzene	ug/kg	6 U	5 U	5
Ethylbenzene	ug/kg	6 U	5 U	5
Styrene	ug/kg	6 U	5 U	5
Total Xylenes	ug/kg	6 U	5 U	5
1,2-Dichlorobenzene	ug/kg	6 U	5 U	5
1,3-Dichlorobenzene	ug/kg	6 U	5 U	5
1,4-Dichlorobenzene	ug/kg	6 U	5 U	5
Trichlorofluoromethane	ug/kg	6 U	5 U	5

Results of Analysis

Work ID: 50-92-105.22 SPELCO Work Order: 93-09-459

Client Number:	TLD-3	Method Blank
OLI Number:	07A	14A

Continued from preceding page

EPA 8240	% Recovery	% Recovery
Surrogates/Internal Standard		
1,2-Dichloroethane (SS1)	120 %	100 %
Toluene-d8 (SS2)	85 %	93 %
Bromofluorobenzene (SS3)	80 %	100 %

Client Number:	UB-3 10-10.5'	UB-4 10-10.5'	TB-6 0.5-1.0'	Method Blank
OLI Number:	05A	06A	13A	14A
Dilution:	1	1	1	1
% Moisture:	25.8	23.2	16.5	0.0

Petroleum ID Semivolatile: Soil*

3550 FID	Units	Result/Flag	Result/Flag	Result/Flag	Result/Flag	MDL
Kerosene range	ug/kg	5500 U	5300 U	4900 U	4100 U	4100
Mineral spirits range	ug/kg	5500 U	5300 U	4900 U	4100 U	4100
Diesel fuel range	ug/kg	11200 U	10800 U	9900 U	8300 U	8300
Motor oil range	ug/kg	200000 U	200000 U	1320000	150000 U	150000

Client Number:	UB-3 10-10.5'	UB-4 10-10.5'	TB-6 0.5-1.0'	Method Blank
OLI Number:	05A	06A	13A	14A
Dilution:	1	1	25	1
% Moisture:	26	23	16	0.0

Petroleum ID Volatile: Soil*

5030 PIDFID	Units	Result/Flag	Result/Flag	Result/Flag	Result/Flag	MDL
Gasoline range	ug/kg	140 U	140	1500 U	100 U	100

*The sample was analyzed by the above method for petroleum organics contamination. The result of the identification indicated organics similar in distillation temperature range to those listed.

Re: EPA 5030 PIDFID - Sample 13:
Elevated detection limits caused by dilution of sample. Dilution was necessary because of matrix interference.

Results of Analysis

Work ID: 50-92-105.22 SPELCO Work Order: 93-09-459

Client Number:	TB-6 0.5-1.0'
OLI Number:	13A

Reactivity: Soil

SW846 CH7	Units	Result/Flag	MDL
Cyanide: SW846 CH7	mg/kg	0.025 U	0.025
Hydrogen Sulfide: SW846 CH7	mg/kg	0.50 U	0.50

Results of Analysis

Work ID: 50-92-105.22 SPELCO Work Order: 93-09-459

Client Number:		BSL-3	BSL-3	TB-1	TB-2	
		10.5-11.0'	20.5-21.0'	0.5-1.0'	0.5-1.0'	
OLI Number:		01A	02A	08A	09A	
Analyte	Units	Result/Flag	Result/Flag	Result/Flag	Result/Flag	MDL
Aluminum	mg/kg	35000	140000			20
Arsenic	mg/kg			1.1 U	1.3 U	1.0
Cadmium	mg/kg	1.2 U	6.4 U			1.0
Chromium	mg/kg	58	68			2.0
Lead	mg/kg	9.2	510	5.5	19	1.0

Client Number:		UB-3	UB-4	TB-6	
		10-10.5'	10-10.5'	0.5-1.0'	
OLI Number:		05A	06A	13A	
Analyte	Units	Result/Flag	Result/Flag	Result/Flag	MDL
Arsenic	mg/kg			6.7	1.0
Flash Point	Deg. Fahr			>149	NA
Lead	mg/kg			18	1.0
Laboratory pH	units			8.45	NA
Oil & Grease, Soxhlet	mg/kg	40 U	40 U	393	40
Paint Filter Liquids Test	free liq.			NONE	NA

Client Number:		TB-3	TB-4	TB-5	
		0.5-1.0'	0.5-1.0'	2-2.5'	
OLI Number:		10A	11A	12A	
Analyte	Units	Result/Flag	Result/Flag	Result/Flag	MDL
Arsenic	mg/kg	3.7	1.3 U	12	1.0
Lead	mg/kg	16	4.9	38	1.0

QA for Analysis

Work ID: 50-92-105.22 SPELCO

Work Order: 93-09-459

Client No: BSL-3 10.5-11.0'
OLI No: 01A
Matrix: Soil
Collected: 09/28/93 08:50:00

Test Description	Method	Prep	Run	Analyst
GC/MS Volatiles	EPA_8240	NA	10/01/93	EP
Aluminum	EPA_6010	10/04/93	10/06/93	BB
Cadmium	EPA_6010	10/04/93	10/06/93	BB
Chromium	EPA_6010	10/04/93	10/06/93	BB
Lead	EPA_7421	10/04/93	10/04/93	THH

Client No: BSL-3 20.5-21.0'
OLI No: 02A
Matrix: Soil
Collected: 09/28/93 09:00:00

Test Description	Method	Prep	Run	Analyst
GC/MS Volatiles	EPA_8240	NA	10/01/93	EP
Aluminum	EPA_6010	10/04/93	10/06/93	BB
Cadmium	EPA_6010	10/04/93	10/07/93	BB
Chromium	EPA_6010	10/04/93	10/06/93	BB
Lead	EPA_7421	10/04/93	10/04/93	THH

Client No: MW-10 4.5-5.0'
OLI No: 03A
Matrix: Soil
Collected: 09/28/93 10:00:00

Test Description	Method	Prep	Run	Analyst
GC/MS Volatiles	EPA_8240	NA	10/01/93	EP

Client No: MW-10 15-15.5'
OLI No: 04A
Matrix: Soil
Collected: 09/28/93 10:10:00

Test Description	Method	Prep	Run	Analyst
GC/MS Volatiles	EPA_8240	NA	10/01/93	EP

Client No: UB-3 10-10.5'
OLI No: 05A
Matrix: Soil
Collected: 09/28/93 13:50:00

Test Description	Method	Prep	Run	Analyst
Petroleum ID Semivolatile	3550_FID	NA	10/05/93	RJW
Petroleum ID Volatile	5030_PIDFID	NA	10/01/93	TWB
Oil & Grease, Soxhlet	EPA_9071	10/05/93	10/07/93	RAW

Client No: UB-4 10-10.5'
OLI No: 06A
Matrix: Soil
Collected: 09/28/93 14:25:00

Test Description	Method	Prep	Run	Analyst
Petroleum ID Semivolatile	3550_FID	NA	10/05/93	RJW
Petroleum ID Volatile	5030_PIDFID	NA	10/04/93	TWB
Oil & Grease, Soxhlet	EPA_9071	10/05/93	10/07/93	RAW

QA for Analysis

Work ID: 50-92-105.22 SPELCO

Work Order: 93-09-459

Client No: TLD-3
OLI No: 07A
Matrix: Soil
Collected: 09/28/93 11:00:00

Test Description	Method	Prep	Run	Analyst
GC/MS Volatiles	EPA_8240	NA	10/01/93	EP

Client No: TB-1 0.5-1.0'
OLI No: 08A
Matrix: Soil
Collected: 09/29/93 11:30:00

Test Description	Method	Prep	Run	Analyst
Arsenic	EPA_7060	10/04/93	10/06/93	THH
Lead	EPA_7421	10/04/93	10/04/93	THH

Client No: TB-2 0.5-1.0'
OLI No: 09A
Matrix: Soil
Collected: 09/29/93 11:40:00

Test Description	Method	Prep	Run	Analyst
Arsenic	EPA_7060	10/04/93	10/06/93	THH
Lead	EPA_7421	10/04/93	10/04/93	THH

Client No: TB-3 0.5-1.0'
OLI No: 10A
Matrix: Soil
Collected: 09/29/93 11:45:00

Test Description	Method	Prep	Run	Analyst
Arsenic	EPA_7060	10/04/93	10/06/93	THH
Lead	EPA_7421	10/04/93	10/04/93	THH

Client No: TB-4 0.5-1.0'
OLI No: 11A
Matrix: Soil
Collected: 09/29/93 11:50:00

Test Description	Method	Prep	Run	Analyst
Arsenic	EPA_7060	10/04/93	10/06/93	THH
Lead	EPA_7421	10/04/93	10/04/93	THH

Client No: TB-5 2-2.5'
OLI No: 12A
Matrix: Soil
Collected: 09/29/93 12:20:00

Test Description	Method	Prep	Run	Analyst
Arsenic	EPA_7060	10/04/93	10/06/93	THH
Lead	EPA_7421	10/04/93	10/04/93	THH

QA for Analysis

Work ID: 50-92-105.22 SPELCO

Work Order: 93-09-459

Client No: TB-6 0.5-1.0'
OLI No: 13A
Matrix: Soil
Collected: 09/29/93 12:10:00

Test Description	Method	Prep	Run	Analyst
Petroleum ID Semivolatile	3550_FID	NA	10/05/93	RJW
Petroleum ID Volatile	5030_PIDFID	NA	10/07/93	RMC
Arsenic	EPA_7060	10/04/93	10/06/93	THH
Flash Point	EPA_1010	10/08/93	10/08/93	DM
Lead	EPA_7421	10/04/93	10/04/93	THH
Laboratory pH	EPA_150_1	NA	10/01/93	BES
Oil & Grease, Soxhlet	EPA_9071	10/05/93	10/07/93	RMT
Paint Filter Liquids Test	EPA_9095	NA	10/06/93	KS
Reactivity				
Cyanide	SW846 CH7	10/11/93	10/08/93	RAW
Hydrogen Sulfide	SW846 CH7	10/11/93	10/08/93	RAW

Client No: Method Blank
OLI No: 14A
Matrix: Method Blank
Collected: Not specified

Test Description	Method	Prep	Run	Analyst
GC/MS Volatiles	EPA_8240	NA	10/01/93	EP
Petroleum ID Semivolatile	3550_FID	NA	10/05/93	RJW
Petroleum ID Volatile	5030_PIDFID	NA	10/07/93	1

Delta Environmental
Attn: Steven Zbur

Report Number: 93-09-459

Quality Control Data Sheets

Parameter	OLI Sample #	Matrix Spike % Recovery	Matrix Spike Dup % Recovery	Relative Percent Difference	Analysis Date	Analyst
Lead	9309459-08	60	63	2	10/04/93	THH
Aluminum	9309459-01	-	-	40	10/06/93	BB
Cadmium	9309459-01	102	102	0	10/06/93	BB
Chromium	9309459-01	92	66	13	10/06/93	BB
Aluminum*	9309459-01	NA	NA	NA	10/06/93	BB
Chromium*	9309459-01	NA	NA	NA	10/06/93	BB
Flash Point*	9309459-13	NA	NA	0	10/08/93	DM
Arsenic	9309459-13	51	-	48	10/06/93	THH
Arsenic*	9309459-13	NA	NA	NA	10/06/93	THH
Cadmium*	9309459-01	NA	NA	NA	10/06/93	BB
Paint*	9309459-13	NA	NA	0	10/06/93	KS
pH*	9309455-01	NA	NA	8	10/01/93	BES
Oil & Grease	9952	89	NA	NA	10/07/93	RMT
Oil & Grease*	9309459-05	NA	NA	0	10/07/93	RMT
Oil & Grease*	9309459-05	NA	NA	0	10/07/93	RMT
Total Sulfide	DI SPIKE	100	103	2	10/11/93	BES

Parameter	Sample #	Case Narrative for 93-09-459
Aluminum	QC	High relative percent difference of duplicate spikes due to inhomogeneity of sample.
Chromium	QC	High relative percent difference of duplicate spikes due to inhomogeneity of sample.
Aluminum	QC	Digestion spike recovery out of QC limits due to inhomogeneity of sample.
Chromium	QC	Digestion spike recovery out of QC limits due to inhomogeneity of sample.
Cadmium	2	Elevated detection limit due to dilution of sample. Dilution was necessary due to spectral interference.

Relative Percent Difference (RPD) was calculated from results of sample and sample duplicate.

Delta Environmental
Attn: Steven Zbur

Report Number: 93-09-459

Quality Control Data Sheets

Parameter	Sample #	Case Narrative for 93-09-459
Arsenic	QC	Digestion spike recovery out of QC limits due to inhomogeneity of sample.
Arsenic	QC	High relative percent difference of duplicate spikes due to inhomogeneity of sample.
Cadmium	2	Spectral interference due to high concentrations of Iron and Aluminum.

ORLANDO LABORATORIES, INC.

GC ORGANICS

MATRIX SPIKE RESULTS

MATRIX : Soil
REPORT DATE: 10-13-1993
EPA METHOD : 8020

LAB SAMPLE #: 9309459-06
ANALYSIS DATE: 10/04/93

COMPOUND	AMOUNT SPIKED	SAMPLE RESULT	MS RESULT	MS % RECOVERY	MSD RESULT	MSD % RECOVERY	RPD
Toluene	100	0	110	110	120	120	9
Chlorobenzene	100	0	110	110	116	116	5
Ethylbenzene	100	0	114	114	120	120	5

MATRIX SPIKE QUALITY CONTROL LIMITS

COMPOUND	WATER LOWER	WATER UPPER	WATER RPD	SOIL LOWER	SOIL UPPER	SOIL RPD	OIL LOWER	OIL UPPER	OIL RPD
Toluene	NA	NA	NA	76	124	13	NA	NA	NA
Chlorobenzene	NA	NA	NA	74	128	15	NA	NA	NA
Ethylbenzene	NA	NA	NA	76	127	14	NA	NA	NA

ORLANDO LABORATORIES, INC.

GC ORGANICS

MATRIX SPIKE RESULTS

MATRIX : Soil
REPORT DATE: 10-6-1993
EPA METHOD : 8100

LAB SAMPLE #: 9309459-05
ANALYSIS DATE: 10-05-93

COMPOUND	AMOUNT SPIKED	SAMPLE RESULT	MS RESULT	MS % RECOVERY	MSD RESULT	MSD % RECOVERY	RPD
Naphthalene	80	0	70.0	88	54.0	68	26
Fluorene	80	0	84.0	105	73.0	91	14
Fluoranthene	80	0	93.0	116	73.0	91	24

MATRIX SPIKE QUALITY CONTROL LIMITS

COMPOUND	WATER LOWER	WATER UPPER	WATER RPD	SOIL LOWER	SOIL UPPER	SOIL RPD
Naphthalene	NA	NA	NA	25	113	32
Fluorene	NA	NA	NA	39	130	26
Fluoranthene	NA	NA	NA	38	123	29

ORLANDO LABORATORIES, INC.

GC/MS ORGANICS

MATRIX SPIKE RESULTS

MATRIX : Soil
REPORT DATE: 10-5-1993
EPA METHOD : 8240

LAB SAMPLE #: 93-10-008-6
ANALYSIS DATE: 10-1-93

COMPOUND	AMOUNT SPIKED	SAMPLE RESULT	MS RESULT	MS % RECOVERY	MSD RESULT	MSD % RECOVERY	% RPD
1,1-Dichloroethene	50	0	45.0	90	46.0	92	2
Trichloroethene	50	0	46.0	92	43.0	86	7
Benzene	50	0	53.0	106	51.0	102	4
Toluene	50	0	51.0	102	49.0	98	4
Chlorobenzene	50	0	50.0	100	49.0	98	2

MATRIX SPIKE QUALITY CONTROL LIMITS

COMPOUND	WATER LOWER	WATER UPPER	WATER RPD	SOIL LOWER	SOIL UPPER	SOIL RPD
1,1-Dichloroethene	NA	NA	NA	55	141	30
Trichloroethene	NA	NA	NA	68	134	23
Benzene	NA	NA	NA	49	155	25
Toluene	NA	NA	NA	62	136	22
Chlorobenzene	NA	NA	NA	71	129	23

ORLANDO LABORATORIES, INC.
REPORT ANALYSIS CODES

Qual	Definition
<	Less Than
>	Greater Than
B	Results were based upon colony counts outside the acceptable range.
CFU	Colony Forming Units
D.O.	Diluted Out
G	More Than 200 Non-Coliform Background Bacteria
H	Value based on field kit determination and may not be accurate.
I	Internal Standard
J	Indicates an Estimated Value; value not accurate
L	Less Than 50 Non-Coliform Background Bacteria
M	Less Than 200 Non-Coliform Background Bacteria
MCL	Maximum Contaminant Level
MDL	The Method Detection Limit at a 1 dilution factor (and 0% moisture if soil/sediment) for each compound/analyte
N	Presumptive evidence of presence of material. (library search, evidence of possible interference, evidence of analyte but QC requirements for confirmation not met)
NA	Not Applicable
N/C	No Combustion
ND	Not Detected
NR	Not Requested
Q	Sample analyzed beyond the accepted holding time per client's approval
TNTC	Too Numerous To Count
U	Indicates the compound was analyzed, but not detected. The numerical value preceding the 'U' is the limit of detection for that compound, based upon the dilution (and moisture content if soil/sediment)
V	Analyte was detected in both the sample and the associated Method Blank
Y	The lab sample was received incompletely, improperly or not preserved and preserved at the laboratory for analysis
Z	Too many colonies were present (TNTC). The numeric value represents the filtration volume (mL)

ORLANDO LABORATORIES, INC. CERTIFICATIONS

State	Drinking Water Certification	Environmental Certification
Florida	HRS 83141	HRS E83033
Alabama	40020	Not Required*
Georgia	-----	Not Required*
Michigan	Certified	Not Required*
North Carolina	12700	101
South Carolina	96016	Not Required*
Tennessee	02928	UST - listed
Virginia	00248	Not Required*

DER Comprehensive QA Approval #860106G

* Indicates no Florida state certification program is in place and/or state will accept Florida certification.

ORLANDO LABORATORIES, INC.
P.O. Box 149127, Orlando, FL 32814
(407) 896-6645 FAX (407) 898-6588

CHAIN-OF-CUSTODY RECORD

(INSTRUCTIONS ON BACK)

(1) INVOICE TO: (Company and Individual) ADDRESS (City, State, Zip)

(2) CONTACT PERSON/PHONE # INVOICE: Steve Zbur

(3) RB NUMBER: A2159

(4) OLI WORK ORDER #:

(5) ORIGINAL REPORT TO: (Company and Individual) ADDRESS (City, State, Zip)

(6) CONTACT PERSON/PHONE # REPORT: (704) 541-9890

9309459

(7) (OPTIONAL) ADDITIONAL REPORTS SENT TO: ADDRESS (City, State, Zip)

(8) CLIENT PROJECT NAME: SPELCO Lansing, NC

(9) CLIENT PROJECT #: 50-92-105.22

(18) REQUESTED ANALYSIS

	(10) SAMPLE IDENTIFICATION	(11) DATE/TIME	(12) COMP	GRAB	WATER	SOIL	OTHER	(13) SAMPLE DESCRIPTION	(17) NUMBER OF CONTAINERS	8240	Alcl/Cr/Pb	TPH 3550/3630	CNG 9071	PCBs	TPH 3550/3630	Chlorobenzene	DW Reactant	Total Pb	(19) REMARKS
1	BSL-3 10.5-11.0'	9-28-93 0850		X		X			1	X	X								
2	BSL-3 20.5-21.0	9-28-93 0900		X		X			1	X	X								
3	MW-10 4.5-5.0'	9-28-93 1000		X		X			1	X									
4	MW-10 15-15.5'	9-28-93 1010		X		X			1	X									
5	LIB-3 10-10.5	9-28-93 1350		X		X			1			X	X						
6	LIB-4 10-10.5	9-28-93 1425		X		X			1			X	X						
7	TLD-3	9-28-93 1100		X		X			1	X									
8	TB-1 0.5-1.0'	9-29-93 1130		X		X			2					X					
9	TB-2 0.5-1.0	9-29-93 1140		X		X			2					X					
10	TB-3 0.5-1.0'	9-29-93 1145		X		X			2					X					
11	TB-4 0.5-1.0'	9-29-93 1150		X		X			2					X					
12	TB-5 2-2.5'	9-29-93 1220		X		X			2					X					
13	TB-6 0.5-1.0	9-29-93 1210		X		X			9				X	X	X		X	X	

TRANSFER NUMBER	(14) RELINQUISHED BY	(15) DATE/TIME	(16) ACCEPTED BY
1st	[illegible]	9/23/93 1334	
2nd	R C Powell	9/29/93 1420	
3rd	Federal Express	9/30/93 9:30	Alene Watkins

(20) ADDITIONAL REMARKS: FED X STD

(21) COOLER #s: 196, X TRA; 263, 137

(22) SAMPLER'S SIGNATURE: R C Powell

LAB

OL-001 (11/91)

ORLANDO LABORATORIES INC.
P.O. BOX 149127 • ORLANDO, FLORIDA 32814
(407) 896-6646 • FAX: (407) 898-6588

REPORT OF ANALYSIS

Delta Environmental
Consultants, Inc.
6701 Carmel Road, Suite 200
Charlotte, NC 28226-3901
Attn: Steven Zbur

OCT 18 1993

Work Order # : 93-10-008
Date Received: 10/01/93
Date Reported: 10/15/93
OLI Contact: S_CHAI

Work ID: 50-92-105.22 SPELCO
Samples collected by: Client
Total Samples: 19

Sample Identification	Description of Analysis	Description of Analysis
01A MW-7	Nitrate/Nitrite Combined	
02A MW-3	Nitrate/Nitrite Combined	
03A MW-4	Nitrate/Nitrite Combined	
04A Equipment Blank H.A.	GC/MS Volatiles	
05A CD5-1-1.5'	GC/MS Volatiles	Soil Prep Fee
06A CD6 0.5-1.0'	GC/MS Volatiles	Soil Prep Fee
07A CD7 0.5-1.0'	GC/MS Volatiles	Soil Prep Fee
08A CD8 0.5-1.0'	GC/MS Volatiles	Soil Prep Fee
09A CD9 0.5-1.0'	GC/MS Volatiles	Soil Prep Fee
10A SSL5	GC/MS Volatiles	Soil Prep Fee
11A SSL4	GC/MS Volatiles	Soil Prep Fee
12A SSL14	GC/MS Volatiles	Soil Prep Fee
13A Coal	TCLP Non-Vol. Extraction	TCLP Metals
14A CD10 0.5-1.0'	GC/MS Volatiles	Soil Prep Fee
15A Trip Blank	No Test Required	
16A Composite B	Composite Data For Samples Miscellaneous Services Laboratory pH	Flash Point Paint Filter Liquids Test Reactivity

Delta Environmental
Work ID: 50-92-105.22 SPELCO

Work Order # : 93-10-008
C o n t i n u e d

Sample Identification	Description of Analysis	Description of Analysis
16A Composite B	Soil Prep Fee	
16B Composite B	TCLP Non-Vol. Extraction	TCLP Metals
17A Composite A	Composite Data For Samples Miscellaneous Services Laboratory pH Soil Prep Fee	Flash Point Paint Filter Liquids Test Reactivity
17B Composite A	TCLP Non-Vol. Extraction	TCLP Metals
18A Method Blank Soil	GC/MS Volatiles	TCLP Metals
19A Method Blank Water	GC/MS Volatiles QC for Wet Chemistry	QC for Metals

Respectfully Submitted,
ORLANDO LABORATORIES, INC.

John Bowers
TECHNICAL LABORATORY DIRECTOR

Eric Malarek
QUALITY CONTROL

Results of Analysis

Work ID: 50-92-105.22 SPELCO Work Order: 93-10-008

Client Number:	CD5-1-1.5'	CD6 0.5-1.0'	CD7 0.5-1.0'	CD8 0.5-1.0'
OLI Number:	05A	06A	07A	08A
Dilution:	1	1	1	1
% Moisture:	7.5	16.5	15.7	20.4

GC/MS Volatiles: Soil

EPA 8240	Units	Result/Flag	Result/Flag	Result/Flag	Result/Flag	MDL
Chloromethane	ug/kg	10 U	10 U	10 U	10 U	10
Bromomethane	ug/kg	10 U	10 U	10 U	10 U	10
Vinyl Chloride	ug/kg	10 U	10 U	10 U	10 U	10
Chloroethane	ug/kg	10 U	10 U	10 U	10 U	10
Methylene Chloride	ug/kg	5 U	6 U	6 U	6 U	5
Acetone	ug/kg	90	100	10 U	10 U	10
Carbon Disulfide	ug/kg	5 U	6 U	6 U	6 U	5
1,1-Dichloroethene	ug/kg	5 U	6 U	6 U	6 U	5
1,1-Dichloroethane	ug/kg	5 U	6 U	6 U	6 U	5
trans-1,2-Dichloroethene	ug/kg	5 U	6 U	6 U	6 U	5
Chloroform	ug/kg	5 U	6 U	6 U	6 U	5
1,2-Dichloroethane	ug/kg	5 U	6 U	6 U	6 U	5
MEK 2-Butanone	ug/kg	10 U	10 U	10 U	10 U	10
1,1,1-Trichloroethane	ug/kg	5 U	6 U	6 U	6 U	5
Carbon Tetrachloride	ug/kg	5 U	6 U	6 U	6 U	5
Vinyl Acetate	ug/kg	5 U	6 U	6 U	6 U	5
Bromodichloromethane	ug/kg	5 U	6 U	6 U	6 U	5
1,2-Dichloropropane	ug/kg	5 U	6 U	6 U	6 U	5
t-1,3-Dichloropropene	ug/kg	5 U	6 U	6 U	6 U	5
Trichloroethene	ug/kg	5 U	6 U	6 U	6 U	5
Dibromochloromethane	ug/kg	5 U	6 U	6 U	6 U	5
1,1.2-Trichloroethane	ug/kg	5 U	6 U	6 U	6 U	5
Benzene	ug/kg	5 U	6 U	6 U	6 U	5
c-1,3-Dichloropropene	ug/kg	5 U	6 U	6 U	6 U	5
2-Chloroethylvinylether	ug/kg	10 U	10 U	10 U	10 U	10
Bromoform	ug/kg	5 U	6 U	6 U	6 U	5
4-Methyl-2-pentanone	ug/kg	10 U	10 U	10 U	10 U	10
2-Hexanone	ug/kg	10 U	10 U	10 U	10 U	10
1,1,2,2-Tetrachloroethane	ug/kg	5 U	6 U	6 U	6 U	5
Tetrachloroethene	ug/kg	5 U	6 U	6 U	6 U	5
Toluene	ug/kg	5 U	6 U	6 U	6 U	5
Chlorobenzene	ug/kg	5 U	6 U	6 U	6 U	5
Ethylbenzene	ug/kg	5 U	6 U	6 U	6 U	5
Styrene	ug/kg	5 U	6 U	6 U	6 U	5
Total Xylenes	ug/kg	5 U	6 U	6 U	6 U	5
1,2-Dichlorobenzene	ug/kg	5 U	6 U	6 U	6 U	5
1,3-Dichlorobenzene	ug/kg	5 U	6 U	6 U	6 U	5
1,4-Dichlorobenzene	ug/kg	5 U	6 U	6 U	6 U	5
Trichlorofluoromethane	ug/kg	5 U	6 U	6 U	6 U	5

Results of Analysis

Work ID: 50-92-105.22 SPELCO Work Order: 93-10-008

Client Number:	CD5-1-1.5'	CD6 0.5-1.0'	CD7 0.5-1.0'	CD8 0.5-1.0'
OLI Number:	05A	06A	07A	08A

Continued from preceding page

EPA 8240	% Recovery	% Recovery	% Recovery	% Recovery
Surrogates/Internal Standard				
1,2-Dichloroethane (SS1)	110 %	113 %	103 %	92 %
Toluene-d8 (SS2)	94 %	100 %	102 %	97 %
Bromofluorobenzene (SS3)	83 %	104 %	99 %	97 %

Results of Analysis

Work ID: 50-92-105.22 SPELCO Work Order: 93-10-008

Client Number:	CD9 0.5-1.0'	SSL5	SSL4	SSL14
OLI Number:	09A	10A	11A	12A
Dilution:	1	20	25	1
% Moisture:	5.6	61.7	61.1	11.2

GC/MS Volatiles: Soil

EPA 8240	Units	Result/Flag	Result/Flag	Result/Flag	Result/Flag	MDL
Chloromethane	ug/kg	10 U	500 U	600 U	10 U	10
Bromomethane	ug/kg	10 U	500 U	600 U	10 U	10
Vinyl Chloride	ug/kg	10 U	500 U	600 U	10 U	10
Chloroethane	ug/kg	10 U	500 U	600 U	10 U	10
Methylene Chloride	ug/kg	5 U	300 U	300 U	6 U	5
Acetone	ug/kg	10 U	19600	600 U	10 U	10
Carbon Disulfide	ug/kg	5 U	300 U	300 U	6 U	5
1,1-Dichloroethene	ug/kg	5 U	300 U	300 U	6 U	5
1,1-Dichloroethane	ug/kg	5 U	300 U	300 U	6 U	5
trans-1,2-Dichloroethene	ug/kg	5 U	300 U	300 U	6 U	5
Chloroform	ug/kg	5 U	300 U	300 U	6 U	5
1,2-Dichloroethane	ug/kg	5 U	300 U	300 U	6 U	5
MEK 2-Butanone	ug/kg	10 U	2300	600 U	10 U	10
1,1,1-Trichloroethane	ug/kg	5 U	300 U	300 U	6 U	5
Carbon Tetrachloride	ug/kg	5 U	300 U	300 U	6 U	5
Vinyl Acetate	ug/kg	5 U	300 U	300 U	6 U	5
Bromodichloromethane	ug/kg	5 U	300 U	300 U	6 U	5
1,2-Dichloropropane	ug/kg	5 U	300 U	300 U	6 U	5
t-1,3-Dichloropropene	ug/kg	5 U	300 U	300 U	6 U	5
Trichloroethene	ug/kg	5 U	300 U	300 U	6 U	5
Dibromochloromethane	ug/kg	5 U	300 U	300 U	6 U	5
1,1.2-Trichloroethane	ug/kg	5 U	300 U	300 U	6 U	5
Benzene	ug/kg	5 U	300 U	300 U	6 U	5
c-1,3-Dichloropropene	ug/kg	5 U	300 U	300 U	6 U	5
2-Chloroethylvinylether	ug/kg	10 U	500 U	600 U	10 U	10
Bromoform	ug/kg	5 U	300 U	300 U	6 U	5
4-Methyl-2-pentanone	ug/kg	10 U	500 U	600 U	10 U	10
2-Hexanone	ug/kg	10 U	500 U	600 U	10 U	10
1,1,2,2-Tetrachloroethane	ug/kg	5 U	300 U	300 U	6 U	5
Tetrachloroethene	ug/kg	5 U	300 U	1000	6 U	5
Toluene	ug/kg	5 U	300 U	6200	6 U	5
Chlorobenzene	ug/kg	5 U	300 U	300 U	6 U	5
Ethylbenzene	ug/kg	5 U	300 U	300 U	6 U	5
Styrene	ug/kg	5 U	300 U	300 U	6 U	5
Total Xylenes	ug/kg	5 U	300 U	300 U	6 U	5
1,2-Dichlorobenzene	ug/kg	5 U	300 U	300 U	6 U	5
1,3-Dichlorobenzene	ug/kg	5 U	300 U	300 U	6 U	5
1,4-Dichlorobenzene	ug/kg	5 U	300 U	300 U	6 U	5
Trichlorofluoromethane	ug/kg	5 U	300 U	300 U	6 U	5

Results of Analysis

Work ID: 50-92-105.22 SPELCO Work Order: 93-10-008

Client Number:	CD9 0.5-1.0'	SSL5	SSL4	SSL14
OLI Number:	09A	10A	11A	12A

Continued from preceding page

EPA 8240	% Recovery	% Recovery	% Recovery	% Recovery
Surrogates/Internal Standard				
1,2-Dichloroethane (SS1)	111 %	106 %	119 %	117 %
Toluene-d8 (SS2)	84 %	90 %	93 %	83 %
Bromofluorobenzene (SS3)	76 %	80 %	79 %	88 %

Re: EPA 8240 - Sample 10 and 11:
Elevated detection limits caused by dilution of sample. Dilution was necessary because compound concentrations were outside of calibration range.

Results of Analysis

Work ID: 50-92-105.22 SPELCO Work Order: 93-10-008

Client Number:	CD10 0.5-1.0'	Method Blank Soil
OLI Number:	14A	18A
Dilution:	250	1
% Moisture:	11.4	0.0

GC/MS Volatiles: Soil

EPA 8240	Units	Result/Flag	Result/Flag	MDL
Chloromethane	ug/kg	2800 U	10 U	10
Bromomethane	ug/kg	2800 U	10 U	10
Vinyl Chloride	ug/kg	2800 U	10 U	10
Chloroethane	ug/kg	2800 U	10 U	10
Methylene Chloride	ug/kg	1400 U	5 U	5
Acetone	ug/kg	28800	10 U	10
Carbon Disulfide	ug/kg	1400 U	5 U	5
1,1-Dichloroethene	ug/kg	1400 U	5 U	5
1,1-Dichloroethane	ug/kg	1400 U	5 U	5
trans-1,2-Dichloroethene	ug/kg	1400 U	5 U	5
Chloroform	ug/kg	1400 U	5 U	5
1,2-Dichloroethane	ug/kg	1400 U	5 U	5
MEK 2-Butanone	ug/kg	2800 U	10 U	10
1,1,1-Trichloroethane	ug/kg	1400 U	5 U	5
Carbon Tetrachloride	ug/kg	1400 U	5 U	5
Vinyl Acetate	ug/kg	1400 U	5 U	5
Bromodichloromethane	ug/kg	1400 U	5 U	5
1,2-Dichloropropane	ug/kg	1400 U	5 U	5
t-1,3-Dichloropropene	ug/kg	1400 U	5 U	5
Trichloroethene	ug/kg	1400 U	5 U	5
Dibromochloromethane	ug/kg	1400 U	5 U	5
1,1.2-Trichloroethane	ug/kg	1400 U	5 U	5
Benzene	ug/kg	1400 U	5 U	5
c-1,3-Dichloropropene	ug/kg	1400 U	5 U	5
2-Chloroethylvinylether	ug/kg	2800 U	10 U	10
Bromoform	ug/kg	1400 U	5 U	5
4-Methyl-2-pentanone	ug/kg	2800 U	10 U	10
2-Hexanone	ug/kg	2800 U	10 U	10
1,1,2,2-Tetrachloroethane	ug/kg	1400 U	5 U	5
Tetrachloroethene	ug/kg	1400 U	5 U	5
Toluene	ug/kg	1400 U	5 U	5
Chlorobenzene	ug/kg	1400 U	5 U	5
Ethylbenzene	ug/kg	1400 U	5 U	5
Styrene	ug/kg	1400 U	5 U	5
Total Xylenes	ug/kg	1400 U	5 U	5
1,2-Dichlorobenzene	ug/kg	1400 U	5 U	5
1,3-Dichlorobenzene	ug/kg	1400 U	5 U	5
1,4-Dichlorobenzene	ug/kg	1400 U	5 U	5
Trichlorofluoromethane	ug/kg	1400 U	5 U	5

Results of Analysis

Work ID: 50-92-105.22 SPELCO Work Order: 93-10-008

Client Number:	CD10 0.5-1.0'	Method Blank Soil
OLI Number:	14A	18A

Continued from preceding page

EPA 8240	% Recovery	% Recovery
Surrogates/Internal Standard		
1,2-Dichloroethane (SS1)	108 %	100 %
Toluene-d8 (SS2)	103 %	93 %
Bromofluorobenzene (SS3)	99 %	100 %

Re: EPA 8240 - Sample 14:
Elevated detection limits caused by dilution of sample. Dilution was necessary because compound concentrations were outside of calibration range.

Results of Analysis

Work ID: 50-92-105.22 SPELCO Work Order: 93-10-008

Client Number:	Equipment Blank H.A.	Method Blank Water
OLI Number:	04A	19A
Dilution:	1	1

GC/MS Volatiles: Water

EPA 8240	Units	Result/Flag	Result/Flag	MDL
Chloromethane	ug/l	10 U	10 U	10
Bromomethane	ug/l	10 U	10 U	10
Vinyl Chloride	ug/l	10 U	10 U	10
Chloroethane	ug/l	10 U	10 U	10
Methylene Chloride	ug/l	5 U	5 U	5
Acetone	ug/l	10 U	10 U	10
Carbon Disulfide	ug/l	5 U	5 U	5
1,1-Dichloroethene	ug/l	5 U	5 U	5
1,1-Dichloroethane	ug/l	5 U	5 U	5
trans-1,2-Dichloroethene	ug/l	5 U	5 U	5
Chloroform	ug/l	5 U	5 U	5
1,2-Dichloroethane	ug/l	5 U	5 U	5
MEK 2-Butanone	ug/l	10 U	10 U	10
1,1,1-Trichloroethane	ug/l	5 U	5 U	5
Carbon Tetrachloride	ug/l	5 U	5 U	5
Vinyl Acetate	ug/l	5 U	5 U	5
Bromodichloromethane	ug/l	5 U	5 U	5
1,2-Dichloropropane	ug/l	5 U	5 U	5
trans-1,3-Dichloropropene	ug/l	5 U	5 U	5
Trichloroethene	ug/l	5 U	5 U	5
Dibromochloromethane	ug/l	5 U	5 U	5
1,1,2-Trichloroethane	ug/l	5 U	5 U	5
Benzene	ug/l	5 U	5 U	5
c-1,3-Dichloropropene	ug/l	5 U	5 U	5
2-Chloroethylvinylether	ug/l	10 U	10 U	10
Bromoform	ug/l	5 U	5 U	5
4-Methyl-2-Pentanone	ug/l	10 U	10 U	10
2-Hexanone	ug/l	10 U	10 U	10
1,1,2,2-Tetrachloroethane	ug/l	5 U	5 U	5
Tetrachloroethene	ug/l	5 U	5 U	5
Toluene	ug/l	5 U	5 U	5
Chlorobenzene	ug/l	5 U	5 U	5
Ethylbenzene	ug/l	5 U	5 U	5
Styrene	ug/l	5 U	5 U	5
Total Xylenes	ug/l	5 U	5 U	5
1,2-Dichlorobenzene	ug/l	5 U	5 U	5
1,3-Dichlorobenzene	ug/l	5 U	5 U	5
1,4-Dichlorobenzene	ug/l	5 U	5 U	5
Trichlorofluoromethane	ug/l	5 U	5 U	5

Results of Analysis

Work ID: 50-92-105.22 SPELCO Work Order: 93-10-008

Client Number:	Equipment Blank H.A.	Method Blank Water
OLI Number:	04A	19A

Continued from preceding page

EPA 8240	% Recovery	% Recovery
Surrogates/Internal Standard		
1,2-Dichloroethane-d4(SS1)	103 %	100 %
Toluene (SS2)	100 %	102 %
Bromofluorobenzene (SS3)	101 %	97 %

Client Number:	Coal	Composite B	Composite A	Method Blank Soil
OLI Number:	13A	16B	17B	18A

TCLP Metals: Solid

Analyte	Units	Result/Flag	Result/Flag	Result/Flag	Result/Flag	MDL
Barium: 1311/6010	mg/l	1.0 U	1.1	1.4	1.0 U	1.0
Cadmium: 1311/6010	mg/l	0.10 U	0.10 U	0.10 U	0.10 U	0.10
Chromium: 1311/6010	mg/l	0.50 U	0.50 U	0.50 U	0.50 U	0.50
Silver: 1311/6010	mg/l	0.50 U	0.50 U	0.50 U	0.50 U	0.50
Arsenic: 1311/6010	mg/l	0.50 U	0.50 U	0.50 U	0.50 U	0.50
Lead: 1311/6010	mg/l	0.50 U	0.50 U	0.50 U	0.50 U	0.50
Selenium: 1311/6010	mg/l	0.10 U	0.10 U	0.10 U	0.10 U	0.10
Mercury: 1311/7470	mg/l	0.10 U	0.10 U	0.10 U	0.10 U	0.10
TCLP % Recoveries						
Barium		101 %	101 %	101 %	101 %	
Cadmium		104 %	104 %	104 %	104 %	
Chromium		95 %	95 %	95 %	95 %	
Silver		96 %	96 %	96 %	96 %	
Arsenic		109 %	109 %	109 %	109 %	
Lead		102 %	102 %	102 %	102 %	
Selenium		121 %	121 %	121 %	121 %	
Mercury		91 %	91 %	91 %	91 %	

Results of Analysis

Work ID: 50-92-105.22 SPELCO Work Order: 93-10-008

Client Number:		Composite B	Composite A	
OLI Number:		16A	17A	
Reactivity: Soil				
SW846 CH7	Units	Result/Flag	Result/Flag	MDL
Cyanide: SW846 CH7	mg/kg	0.025 U	0.025 U	0.025
Hydrogen Sulfide: SW846 CH7	mg/kg	0.50 U	0.50 U	0.50

Results of Analysis

Work ID: 50-92-105.22 SPELCO Work Order: 93-10-008

Client Number:		MW-7	MW-3	MW-4	
OLI Number:		01A	02A	03A	
Analyte	Units	Result/Flag	Result/Flag	Result/Flag	MDL
Nitrate/Nitrite Combined	mg/l	0.82	6.53	25.9	0.03

Client Number:		Coal	Composite B	Composite A	
OLI Number:		13A	16B	17B	
Analyte	Units	Result/Flag	Result/Flag	Result/Flag	MDL
TCLP Non-Vol. Extraction	Extracted	TCLP	TCLP	TCLP	NA

Client Number:		Composite B	Composite A	
OLI Number:		16A	17A	
Analyte	Units	Result/Flag	Result/Flag	MDL
Flash Point	Deg. Fahr	>149	>149	NA
Laboratory pH	units	4.87	5.55	NA
Paint Filter Liquids Test	free liq.	NONE	NONE	NA

Results of Analysis

Work ID: 50-92-105.22 SPELCO Work Order: 93-10-008

Client Number: Composite B
OLI Number: 16A

Composite Data For Samples

NUMBER OF SAMPLES COMPOSITED: 5

	Sample Identification	Date and time
#1	Composite B - Sample #16	09/30/93 13:05
#2	Composite B - Sample #17	09/30/93 13:05
#3	Composite B - Sample #18	09/30/93 13:05
#4	Composite B - Sample #19	09/30/93 13:05
#5	Composite B - Sample #20	09/30/93 13:05
#6		
#7		
#8		
#9		
#10		
#11		
#12		

Results of Analysis

Work ID: 50-92-105.22 SPELCO Work Order: 93-10-008

Client Number: Composite A
OLI Number: 17A

Composite Data For Samples

NUMBER OF SAMPLES COMPOSITED: 5

	Sample Identification	Date and time
#1	Composite A - Sample #21	09/30/93 13:30
#2	Composite A - Sample #22	09/30/93 13:30
#3	Composite A - Sample #23	09/30/93 13:30
#4	Composite A - Sample #24	09/30/93 13:30
#5	Composite A - Sample #25	09/30/93 13:30
#6		
#7		
#8		
#9		
#10		
#11		
#12		

QA for Analysis

Work ID: 50-92-105.22 SPELCO Work Order: 93-10-008

	Test Description	Method	Prep	Run	Analyst
Client No: MW-7 OLI No: 01A Matrix: Water Collected: 09/30/93 09:15:00	Nitrate/Nitrite Combined	EPA_353_2	NA	10/06/93	RMT
Client No: MW-3 OLI No: 02A Matrix: Water Collected: 09/30/93 11:15:00	Nitrate/Nitrite Combined	EPA_353_2	NA	10/06/93	RMT
Client No: MW-4 OLI No: 03A Matrix: Water Collected: 09/30/93 11:35:00	Nitrate/Nitrite Combined	EPA_353_2	NA	10/06/93	RMT
Client No: Equipment Blank H.A. OLI No: 04A Matrix: Water Collected: 09/29/93 14:25:00	GC/MS Volatiles	EPA_8240	NA	10/01/93	EP
Client No: CD5-1-1.5' OLI No: 05A Matrix: Soil Collected: 09/29/93 14:45:00	GC/MS Volatiles	EPA_8240	NA	10/01/93	EP
Client No: CD6 0.5-1.0' OLI No: 06A Matrix: Soil Collected: 09/29/93 15:05:00	GC/MS Volatiles	EPA_8240	NA	10/01/93	EP

QA for Analysis

Work ID: 50-92-105.22 SPELCO Work Order: 93-10-008

	Test Description	Method	Prep	Run	Analyst
Client No: CD7 0.5-1.0' OLI No: 07A Matrix: Soil Collected: 09/29/93 15:25:00	GC/MS Volatiles	EPA_8240	NA	10/01/93	EP
Client No: CD8 0.5-1.0' OLI No: 08A Matrix: Soil Collected: 09/29/93 15:45:00	GC/MS Volatiles	EPA_8240	NA	10/01/93	EP
Client No: CD9 0.5-1.0' OLI No: 09A Matrix: Soil Collected: 09/29/93 16:00:00	GC/MS Volatiles	EPA_8240	NA	10/01/93	EP
Client No: SSL5 OLI No: 10A Matrix: Soil Collected: 09/29/93 17:10:00	GC/MS Volatiles	EPA_8240	NA	10/01/93	EP
Client No: SSL4 OLI No: 11A Matrix: Soil Collected: 09/29/93 16:45:00	GC/MS Volatiles	EPA_8240	NA	10/01/93	EP
Client No: SSL14 OLI No: 12A Matrix: Soil Collected: 09/30/93 13:10:00	GC/MS Volatiles	EPA_8240	NA	10/01/93	EP

QA for Analysis

Work ID: 50-92-105.22 SPELCO

Work Order: 93-10-008

Client No: Coal
OLI No: 13A
Matrix: Solid
Collected: 09/30/93 14:00:00

Test Description	Method	Prep	Run	Analyst
TCLP Metals				
Barium	1311/6010	10/06/93	10/06/93	BB
Cadmium	1311/6010	10/06/93	10/06/93	BB
Chromium	1311/6010	10/06/93	10/06/93	BB
Silver	1311/6010	10/06/93	10/06/93	BB
Arsenic	1311/6010	10/06/93	10/06/93	BB
Lead	1311/6010	10/06/93	10/06/93	BB
Selenium	1311/6010	10/06/93	10/06/93	BB
Mercury	1311/7470	10/06/93	10/06/93	DM
TCLP Non-Vol. Extraction	EPA_1311	10/06/93		BB

Client No: CD10 0.5-1.0'
OLI No: 14A
Matrix: Soil
Collected: 09/30/93 14:00:00

Test Description	Method	Prep	Run	Analyst
GC/MS Volatiles	EPA_8240	NA	10/01/93	EP

Client No: Composite B
OLI No: 16A
Matrix: Soil
Collected: Not specified

Test Description	Method	Prep	Run	Analyst
Flash Point	EPA_1010	10/08/93	10/08/93	DM
Laboratory pH	EPA_150_1	NA	10/07/93	CP
Paint Filter Liquids Test	EPA_9095	NA	10/06/93	KS
Reactivity				
Cyanide	SW846 CH7	10/06/93	10/04/93	RAW
Hydrogen Sulfide	SW846 CH7	10/11/93	10/04/93	RAW

Client No: Composite B
OLI No: 16B
Matrix: Soil
Collected: Not specified

Test Description	Method	Prep	Run	Analyst
TCLP Metals				
Barium	1311/6010	10/06/93	10/06/93	BB
Cadmium	1311/6010	10/06/93	10/06/93	BB
Chromium	1311/6010	10/06/93	10/06/93	BB
Silver	1311/6010	10/06/93	10/06/93	BB
Arsenic	1311/6010	10/06/93	10/06/93	BB
Lead	1311/6010	10/06/93	10/06/93	BB
Selenium	1311/6010	10/06/93	10/06/93	BB
Mercury	1311/7470	10/06/93	10/06/93	DM
TCLP Non-Vol. Extraction	EPA_1311	10/06/93		BB

QA for Analysis

Work ID: 50-92-105.22 SPELCO Work Order: 93-10-008

	Test Description	Method	Prep	Run	Analyst
Client No: Composite A	Flash Point	EPA_1010	10/08/93	10/08/93	DM
OLI No: 17A	Laboratory pH	EPA_150_1	NA	10/07/93	CP
Matrix: Soil	Paint Filter Liquids Test	EPA_9095	NA	10/06/93	KS
Collected: Not specified	Reactivity				
	Cyanide	SW846 CH7	10/06/93	10/04/93	RAW
	Hydrogen Sulfide	SW846 CH7	10/11/93	10/04/93	RAW

	Test Description	Method	Prep	Run	Analyst
Client No: Composite A	TCLP Metals				
OLI No: 17B	Barium	1311/6010	10/06/93	10/06/93	BB
Matrix: Soil	Cadmium	1311/6010	10/06/93	10/06/93	BB
Collected: Not specified	Chromium	1311/6010	10/06/93	10/06/93	BB
	Silver	1311/6010	10/06/93	10/06/93	BB
	Arsenic	1311/6010	10/06/93	10/06/93	BB
	Lead	1311/6010	10/06/93	10/06/93	BB
	Selenium	1311/6010	10/06/93	10/06/93	BB
	Mercury	1311/7470	10/06/93	10/06/93	DM
	TCLP Non-Vol. Extraction	EPA_1311	10/06/93		BB

	Test Description	Method	Prep	Run	Analyst
Client No: Method Blank Soil	GC/MS Volatiles	EPA_8240	NA	10/01/93	EP
OLI No: 18A	TCLP Metals				
Matrix: Method Blank	Barium	1311/6010	10/06/93	10/06/93	BB
Collected: Not specified	Cadmium	1311/6010	10/06/93	10/06/93	BB
	Chromium	1311/6010	10/06/93	10/06/93	BB
	Silver	1311/6010	10/06/93	10/06/93	BB
	Arsenic	1311/6010	10/06/93	10/06/93	BB
	Lead	1311/6010	10/06/93	10/06/93	BB
	Selenium	1311/6010	10/06/93	10/06/93	BB
	Mercury	1311/7470	10/06/93	10/06/93	DM

	Test Description	Method	Prep	Run	Analyst
Client No: Method Blank Water	GC/MS Volatiles	EPA_8240	NA	10/01/93	EP
OLI No: 19A					
Matrix: Method Blank					
Collected: Not specified					

Delta Environmental
Attn: Steven Zbur

Report Number: 93-10-008

Quality Control Data Sheets

Parameter	OLI Sample #	Matrix Spike % Recovery	Matrix Spike Dup % Recovery	Relative Percent Difference	Analysis Date	Analyst
Flash Point*	9309459-13	NA	NA	0	10/08/93	DM
Cyanide*	9310008-16	NA	NA	0	10/06/93	BES
Cyanide	9309429-01	104	NA	NA	10/06/93	BES
Paint*	9309459-13	NA	NA	0	10/06/93	KS
Nitrate/Nitrite Combined	9310008-01	85	85	0	10/06/93	RMT
Total Sulfide*	9310008-16	NA	NA	0	10/06/93	RMT
pH*	9310008-16	NA	NA	0	10/07/93	CP

* Relative Percent Difference (RPD) was calculated from results of sample and sample duplicate.

ORLANDO LABORATORIES, INC.

GC/MS ORGANICS

MATRIX SPIKE RESULTS

MATRIX : Soil
REPORT DATE: 10-5-1993
EPA METHOD : 8240

LAB SAMPLE #: 93-10-008-6
ANALYSIS DATE: 10-1-93

COMPOUND	AMOUNT SPIKED	SAMPLE RESULT	MS RESULT	MS % RECOVERY	MSD RESULT	MSD % RECOVERY	% RPD
1,1-Dichloroethene	50	0	45.0	90	46.0	92	2
Trichloroethene	50	0	46.0	92	43.0	86	7
Benzene	50	0	53.0	106	51.0	102	4
Toluene	50	0	51.0	102	49.0	98	4
Chlorobenzene	50	0	50.0	100	49.0	98	2

MATRIX SPIKE QUALITY CONTROL LIMITS

COMPOUND	WATER LOWER	WATER UPPER	WATER RPD	SOIL LOWER	SOIL UPPER	SOIL RPD
1,1-Dichloroethene	NA	NA	NA	55	141	30
Trichloroethene	NA	NA	NA	68	134	23
Benzene	NA	NA	NA	49	155	25
Toluene	NA	NA	NA	62	136	22
Chlorobenzene	NA	NA	NA	71	129	23

ORLANDO LABORATORIES, INC.

GC/MS ORGANICS

MATRIX SPIKE RESULTS

MATRIX : Water
REPORT DATE: 10-5-1993
EPA METHOD : 8240

LAB SAMPLE #: 93-10-008-15
ANALYSIS DATE: 10-1-93

COMPOUND	AMOUNT SPIKED	SAMPLE RESULT	MS RESULT	MS % RECOVERY	MSD RESULT	MSD % RECOVERY	RPD
1,1-Dichloroethene	10	0	10.4	104	10.3	103	1
Trichloroethene	10	0	9.9	99	9.7	97	2
Benzene	10	0	10.3	103	10.3	103	0
Toluene	10	0	9.8	98	11.0	110	12
Chlorobenzene	10	0	9.6	96	10.3	103	7

MATRIX SPIKE QUALITY CONTROL LIMITS

COMPOUND	WATER LOWER	WATER UPPER	WATER RPD	SOIL LOWER	SOIL UPPER	SOIL RPD
1,1-Dichloroethene	52	139	25	NA	NA	NA
Trichloroethene	70	129	18	NA	NA	NA
Benzene	63	128	22	NA	NA	NA
Toluene	66	124	23	NA	NA	NA
Chlorobenzene	67	128	21	NA	NA	NA

ORLANDO LABORATORIES, INC.
REPORT ANALYSIS CODES

Qual	Definition
<	Less Than
>	Greater Than
B	Results were based upon colony counts outside the acceptable range.
CFU	Colony Forming Units
D.O.	Diluted Out
G	More Than 200 Non-Coliform Background Bacteria
H	Value based on field kit determination and may not be accurate.
I	Internal Standard
J	Indicates an Estimated Value; value not accurate
L	Less Than 50 Non-Coliform Background Bacteria
M	Less Than 200 Non-Coliform Background Bacteria
MCL	Maximum Contaminant Level
MDL	The Method Detection Limit at a 1 dilution factor (and 0% moisture if soil/sediment) for each compound/analyte
N	Presumptive evidence of presence of material. (library search, evidence of possible interference, evidence of analyte but QC requirements for confirmation not met)
NA	Not Applicable
N/C	No Combustion
ND	Not Detected
NR	Not Requested
Q	Sample analyzed beyond the accepted holding time per client's approval
TNTC	Too Numerous To Count
U	Indicates the compound was analyzed, but not detected. The numerical value preceding the 'U' is the limit of detection for that compound, based upon the dilution (and moisture content if soil/sediment)
V	Analyte was detected in both the sample and the associated Method Blank
Y	The lab sample was received incompletely, improperly or not preserved and preserved at the laboratory for analysis
Z	Too many colonies were present (TNTC). The numeric value represents the filtration volume (mL)

ORLANDO LABORATORIES, INC. CERTIFICATIONS

State	Drinking Water Certification	Environmental Certification
Florida	HRS 83141	HRS E83033
Alabama	40020	Not Required*
Georgia	-----	Not Required*
Michigan	Certified	Not Required*
North Carolina	12700	101
South Carolina	96016	Not Required*
Tennessee	02928	UST - listed
Virginia	00248	Not Required*

DER Comprehensive QA Approval #860106G

* Indicates no Florida state certification program is in place and/or state will accept Florida certification.

ORLANDO LABORATORIES, INC.
P.O. Box 149127, Orlando, FL 32814
(407) 896-6645 FAX (407) 898-6588

CHAIN-OF-CUSTODY RECORD

(INSTRUCTIONS ON BACK)

(1) INVOICE TO: (Company and Individual): Delta
ADDRESS (City, State, Zip):

(2) CONTACT PERSON/PHONE # INVOICE: Steve Zbur

(3) RB NUMBER: A2159

(4) OLI WORK ORDER #: 9310008

(5) ORIGINAL REPORT TO: (Company and Individual)
ADDRESS (City, State, Zip):

(6) CONTACT PERSON/PHONE # REPORT: Rick Powell

(7) (OPTIONAL) ADDITIONAL REPORTS SENT TO:
ADDRESS (City, State, Zip):

(8) CLIENT PROJECT NAME: SPELCO / Lansing NC

(9) CLIENT PROJECT #: 50-92-105.22

	(10) SAMPLE IDENTIFICATION	(11) DATE/TIME	(12) COMP	GRAB	WATER	SOIL	OTHER	(13) SAMPLE DESCRIPTION	(17) NUMBER OF CONTAINERS	(18) NO3-NO2	8240	TCLP Metals	pH	Ign. Reactivity	Reactivity	Paint filter	(19) REMARKS
1	MW1	9/30/93/915		X	X				1	X							
2	MW 3	9/30/93/1115		X	X				1	X							
3	MW 4	9/30/93/1135		X	X				1	X							
4	Equipment Blank H.A.	9/29/93/1425		X	X			Hand Auger Equipment	2		X						
5	CD5 - 1-1.5'	9/29/93/1445		X		X			1		X						
6	CD6 0.5-1.0'	9/29/93/1505		X		X			1		X						
7	CD7 0.5-1.0'	9/29/93/1525		X		X			1		X						
8	CD8 0.5-1.0'	9/29/93/1545		X		X			1		X						
9	CD9 0.5-1.0'	9/29/93/1600		X		X			1		X						
10	SSL5	9/29/93/1710		X		X			1		X*						*
11	SSL4	9/29/93/1645		X		X			1		X*						*
16 12	Composite B	9/30/93/1305		X		X			5			X	X	X	X	X	Composit 5 samples for profile
12	SSL 14	9/30/93/1310		X		X			1		X						

TRANSFER NUMBER	(14) RELINQUISHED BY	(15) DATE/TIME	(16) ACCEPTED BY
1st	[signature]	9/23/93 1334	
2nd	[signature]	9/30/93/1405	
3rd	Fed Ex	10/1/93 10:4	[signature]

(20) ADDITIONAL REMARKS
* - Please call Steve Zbur w/results of 8240, may want to run TCLP volatiles

(21) COOLER #'s

(22) SAMPLER'S SIGNATURE: [signature]

LAB

OL-001 (11/91)

ORLANDO LABORATORIES, INC.
P.O. Box 149127, Orlando, FL 32814
(407) 896-6645 FAX (407) 898-6588

CHAIN-OF-CUSTODY RECORD

(INSTRUCTIONS ON BACK)

(1) INVOICE TO: (Company and Individual): Delta
ADDRESS (City, State, Zip):
(2) CONTACT PERSON/PHONE # INVOICE: Steve Zbur
(3) RB NUMBER: A2159
(4) OU WORK ORDER #:

(5) ORIGINAL REPORT TO: (Company and Individual):
ADDRESS (City, State, Zip):
(6) CONTACT PERSON/PHONE # REPORT: Rick Powell
9310008

(7) (OPTIONAL) ADDITIONAL REPORTS SENT TO:
ADDRESS (City, State, Zip):

(8) CLIENT PROJECT NAME: SPELCO
(9) CLIENT PROJECT #: 50-92-105.22

(17) NUMBER OF CONTAINERS; (18) REQUESTED ANALYSIS: TCLP Metals, PH, Ignite, Volat., Flash Filter, 8240

	(10) SAMPLE IDENTIFICATION	(11) DATE/TIME	(12) COMP	GRAB	WATER	SOIL	OTHER	(13) SAMPLE DESCRIPTION	(17) NUMBER OF CONTAINERS	TCLP Metals	PH	Ignite	Volat.	Flash Filter	8240			(19) REMARKS
17	Composite A	9/30/93/1330		X		X			5	X	X	X	X	X				Composite the 5 samples for profile
13	Coal	9/30/93/1400		X		X	X		1	X								
14	ED ID 0.5'-1.0'	9/30/93/1400		X		X			1						X			
15	Trip																	

TRANSFER NUMBER	(14) RELINQUISHED BY	(15) DATE/TIME	(16) ACCEPTED BY
1st	[illegible]	9/30/93 1334	
2nd	R Freeland	9/30/93 1405	
3rd	Fed Exp	10/1/93 10:00	D C [illegible]

(20) ADDITIONAL REMARKS:

(21) COOLER #:

(22) SAMPLER'S SIGNATURE: Rick Freeland

LAB

OL-001 (11/91)

OCT 21 1993

ORLANDO LABORATORIES INC.
P.O. BOX 149127 • ORLANDO, FLORIDA 32814
(407) 896-6646 • FAX: (407) 898-6588

REPORT OF ANALYSIS

Delta Environmental
Consultants, Inc.
6701 Carmel Road, Suite 200
Charlotte, NC 28226-3901
Attn: Steven Zbur

Work Order # : 93-10-033
Date Received: 10/02/93
Date Reported: 10/15/93
OLI Contact: S_CHAI

Work ID: 50-92-105.22 SPELCO
Samples collected by: Client
Total Samples: 17

Sample Identification	Description of Analysis	Description of Analysis
01A MW-1	GC/MS Volatiles Aluminum Barium Cadmium Chromium Lead	Aluminum, Field Filtered Barium, Field Filtered Cadmium, Field Filtered Chromium, Field Filtered Lead, Field Filtered
02A MW-6	GC/MS Volatiles Aluminum Barium Cadmium Chromium Lead	Aluminum, Field Filtered Barium, Field Filtered Cadmium, Field Filtered Chromium, Field Filtered Lead, Field Filtered
03A MW-8	GC/MS Volatiles Aluminum Barium Cadmium Chromium Lead	Aluminum, Field Filtered Barium, Field Filtered Cadmium, Field Filtered Chromium, Field Filtered Lead, Field Filtered
04A MW-9	GC/MS Volatiles Aluminum Barium Cadmium Chromium Lead	Aluminum, Field Filtered Barium, Field Filtered Cadmium, Field Filtered Chromium, Field Filtered Lead, Field Filtered
05A MW-10	GC/MS Volatiles Aluminum Barium Cadmium Chromium	Aluminum, Field Filtered Barium, Field Filtered Cadmium, Field Filtered Chromium, Field Filtered Lead, Field Filtered

Delta Environmental
Work ID: 50-92-105.22 SPELCO

Work Order # : 93-10-033
C o n t i n u e d

Sample Identification	Description of Analysis	Description of Analysis
05A MW-10	Lead	
06A CD-Water	GC/MS Volatiles	
07A ET-3	GC/MS Volatiles Aluminum Barium Cadmium Chromium Lead	Aluminum, Field Filtered Barium, Field Filtered Cadmium, Field Filtered Chromium, Field Filtered Lead, Field Filtered
08A Field Blank	GC/MS Volatiles	
09A Equipment Blank	GC/MS Volatiles	
10A MW-2	GC/MS Volatiles Aluminum Barium Cadmium Chromium Lead	Aluminum, Field Filtered Barium, Field Filtered Cadmium, Field Filtered Chromium, Field Filtered Lead, Field Filtered
11A MW-3	GC/MS Volatiles Aluminum Barium Cadmium Chromium Lead	Aluminum, Field Filtered Barium, Field Filtered Cadmium, Field Filtered Chromium, Field Filtered Lead, Field Filtered
12A MW-4	GC/MS Volatiles Aluminum Barium Cadmium Chromium Lead	Aluminum, Field Filtered Barium, Field Filtered Cadmium, Field Filtered Chromium, Field Filtered Lead, Field Filtered
13A MW-5	GC/MS Volatiles Aluminum Barium Cadmium Chromium Lead	Aluminum, Field Filtered Barium, Field Filtered Cadmium, Field Filtered Chromium, Field Filtered Lead, Field Filtered
14A MW-7	GC/MS Volatiles	Aluminum, Field Filtered

Delta Environmental
Work ID: 50-92-105.22 SPELCO

Work Order # : 93-10-033
Continued

Sample Identification	Description of Analysis	Description of Analysis
14A MW-7	Aluminum Barium Cadmium Chromium Lead	Barium, Field Filtered Cadmium, Field Filtered Chromium, Field Filtered Lead, Field Filtered
15A Duplicate	GC/MS Volatiles Barium, Field Filtered Chromium, Field Filtered	Aluminum, Field Filtered Cadmium, Field Filtered Lead, Field Filtered
16A Trip Blank	Lab Filtering of sample No Test Required	Freight Charges
17A Method Blank	GC/MS Volatiles	QC for Metals

Respectfully Submitted,
ORLANDO LABORATORIES, INC.

John Bowers
TECHNICAL LABORATORY DIRECTOR

Eric Malarek
QUALITY CONTROL

Results of Analysis

Work ID: 50-92-105.22 SPELCO Work Order: 93-10-033

Client Number:	MW-1	MW-6	MW-8	MW-9
OLI Number:	01A	02A	03A	04A
Dilution:	1	1	1	1

GC/MS Volatiles: Water

EPA 8240	Units	Result/Flag	Result/Flag	Result/Flag	Result/Flag	MDL
Chloromethane	ug/l	10 U	10 U	10 U	10 U	10
Bromomethane	ug/l	10 U	10 U	10 U	10 U	10
Vinyl Chloride	ug/l	10 U	10 U	10 U	10 U	10
Chloroethane	ug/l	10 U	10 U	10 U	10 U	10
Methylene Chloride	ug/l	5 U	5 U	5 U	5 U	5
Acetone	ug/l	10 U	10 U	10 U	10 U	10
Carbon Disulfide	ug/l	5 U	5 U	5 U	5 U	5
1,1-Dichloroethene	ug/l	5 U	5 U	5 U	5 U	5
1,1-Dichloroethane	ug/l	5 U	5 U	5 U	5 U	5
trans-1,2-Dichloroethene	ug/l	5 U	5 U	5 U	5 U	5
Chloroform	ug/l	5 U	5 U	5 U	5 U	5
1,2-Dichloroethane	ug/l	5 U	5 U	5 U	5 U	5
MEK 2-Butanone	ug/l	10 U	10 U	10 U	10 U	10
1,1,1-Trichloroethane	ug/l	5 U	5 U	5 U	5 U	5
Carbon Tetrachloride	ug/l	5 U	5 U	5 U	5 U	5
Vinyl Acetate	ug/l	5 U	5 U	5 U	5 U	5
Bromodichloromethane	ug/l	5 U	5 U	5 U	5 U	5
1,2-Dichloropropane	ug/l	5 U	5 U	5 U	5 U	5
trans-1,3-Dichloropropene	ug/l	5 U	5 U	5 U	5 U	5
Trichloroethene	ug/l	5 U	5 U	5 U	5 U	5
Dibromochloromethane	ug/l	5 U	5 U	5 U	5 U	5
1,1,2-Trichloroethane	ug/l	5 U	5 U	5 U	5 U	5
Benzene	ug/l	5 U	5 U	5 U	5 U	5
c-1,3-Dichloropropene	ug/l	5 U	5 U	5 U	5 U	5
2-Chloroethylvinylether	ug/l	10 U	10 U	10 U	10 U	10
Bromoform	ug/l	5 U	5 U	5 U	5 U	5
4-Methyl-2-Pentanone	ug/l	10 U	10 U	10 U	10 U	10
2-Hexanone	ug/l	10 U	10 U	10 U	10 U	10
1,1,2,2-Tetrachloroethane	ug/l	5 U	5 U	5 U	5 U	5
Tetrachloroethene	ug/l	5 U	5 U	5 U	5 U	5
Toluene	ug/l	5 U	5 U	5 U	5 U	5
Chlorobenzene	ug/l	5 U	5 U	5 U	5 U	5
Ethylbenzene	ug/l	5 U	5 U	5 U	5 U	5
Styrene	ug/l	5 U	5 U	5 U	5 U	5
Total Xylenes	ug/l	5 U	5 U	5 U	5 U	5
1,2-Dichlorobenzene	ug/l	5 U	5 U	5 U	5 U	5
1,3-Dichlorobenzene	ug/l	5 U	5 U	5 U	5 U	5
1,4-Dichlorobenzene	ug/l	5 U	5 U	5 U	5 U	5
Trichlorofluoromethane	ug/l	5 U	5 U	5 U	5 U	5

Results of Analysis

Work ID: 50-92-105.22 SPELCO Work Order: 93-10-033

Client Number:	MW-1	MW-6	MW-8	MW-9
OLI Number:	01A	02A	03A	04A

Continued from preceding page

EPA 8240	% Recovery	% Recovery	% Recovery	% Recovery
Surrogates/Internal Standard				
1,2-Dichloroethane-d4(SS1)	112 %	107 %	108 %	111 %
Toluene (SS2)	102 %	96 %	101 %	102 %
Bromofluorobenzene (SS3)	106 %	104 %	106 %	102 %

Results of Analysis

Work ID: 50-92-105.22 SPELCO Work Order: 93-10-033

Client Number:		MW-10	CD-Water	ET-3	Field Blank	
OLI Number:		05A	06A	07A	08A	
Dilution:		1	1	1	1	
GC/MS Volatiles: Water						
EPA 8240	Units	Result/Flag	Result/Flag	Result/Flag	Result/Flag	MDL
Chloromethane	ug/l	10 U	10 U	10 U	10 U	10
Bromomethane	ug/l	10 U	10 U	10 U	10 U	10
Vinyl Chloride	ug/l	10 U	10 U	10 U	10 U	10
Chloroethane	ug/l	10 U	10 U	10 U	10 U	10
Methylene Chloride	ug/l	5 U	5 U	5 U	5 U	5
Acetone	ug/l	10 U	10 U	10 U	10 U	10
Carbon Disulfide	ug/l	5 U	5 U	5 U	5 U	5
1,1-Dichloroethene	ug/l	5 U	5 U	5 U	5 U	5
1,1-Dichloroethane	ug/l	5 U	5 U	5 U	5 U	5
trans-1,2-Dichloroethene	ug/l	5 U	5 U	5 U	5 U	5
Chloroform	ug/l	5 U	5 U	5 U	5 U	5
1,2-Dichloroethane	ug/l	5 U	5 U	5 U	5 U	5
MEK 2-Butanone	ug/l	10 U	10 U	10 U	10 U	10
1,1,1-Trichloroethane	ug/l	5 U	5 U	5 U	5 U	5
Carbon Tetrachloride	ug/l	5 U	5 U	5 U	5 U	5
Vinyl Acetate	ug/l	5 U	5 U	5 U	5 U	5
Bromodichloromethane	ug/l	5 U	5 U	5 U	5 U	5
1,2-Dichloropropane	ug/l	5 U	5 U	5 U	5 U	5
trans-1,3-Dichloropropene	ug/l	5 U	5 U	5 U	5 U	5
Trichloroethene	ug/l	5 U	5 U	5 U	5 U	5
Dibromochloromethane	ug/l	5 U	5 U	5 U	5 U	5
1,1,2-Trichloroethane	ug/l	5 U	5 U	5 U	5 U	5
Benzene	ug/l	5 U	5 U	5 U	5 U	5
c-1,3-Dichloropropene	ug/l	5 U	5 U	5 U	5 U	5
2-Chloroethylvinylether	ug/l	10 U	10 U	10 U	10 U	10
Bromoform	ug/l	5 U	5 U	5 U	5 U	5
4-Methyl-2-Pentanone	ug/l	10 U	10 U	10 U	10 U	10
2-Hexanone	ug/l	10 U	10 U	10 U	10 U	10
1,1,2,2-Tetrachloroethane	ug/l	5 U	5 U	5 U	5 U	5
Tetrachloroethene	ug/l	5 U	5 U	5 U	5 U	5
Toluene	ug/l	14	5 U	5 U	5 U	5
Chlorobenzene	ug/l	5 U	5 U	5 U	5 U	5
Ethylbenzene	ug/l	16	5 U	5 U	5 U	5
Styrene	ug/l	5 U	5 U	5 U	5 U	5
Total Xylenes	ug/l	54	5 U	5 U	5 U	5
1,2-Dichlorobenzene	ug/l	5 U	5 U	5 U	5 U	5
1,3-Dichlorobenzene	ug/l	5 U	5 U	5 U	5 U	5
1,4-Dichlorobenzene	ug/l	5 U	5 U	5 U	5 U	5
Trichlorofluoromethane	ug/l	5 U	5 U	5 U	5 U	5

Results of Analysis

Work ID: 50-92-105.22 SPELCO Work Order: 93-10-033

Client Number:	MW-10	CD-Water	ET-3	Field Blank
OLI Number:	05A	06A	07A	08A

Continued from preceding page

EPA 8240	% Recovery	% Recovery	% Recovery	% Recovery
Surrogates/Internal Standard				
1,2-Dichloroethane-d4(SS1)	112 %	113 %	96 %	108 %
Toluene (SS2)	101 %	97 %	97 %	105 %
Bromofluorobenzene (SS3)	108 %	111 %	96 %	100 %

Results of Analysis

Work ID: 50-92-105.22 SPELCO Work Order: 93-10-033

Client Number:		Equipment Blank	MW-2	MW-3	MW-4	
OLI Number:		09A	10A	11A	12A	
Dilution:		1	1	1	1	
GC/MS Volatiles: Water						
EPA 8240	Units	Result/Flag	Result/Flag	Result/Flag	Result/Flag	MDL
Chloromethane	ug/l	10 U	10 U	10 U	10 U	10
Bromomethane	ug/l	10 U	10 U	10 U	10 U	10
Vinyl Chloride	ug/l	10 U	10 U	10 U	10 U	10
Chloroethane	ug/l	10 U	10 U	10 U	10 U	10
Methylene Chloride	ug/l	5 U	5 U	5 U	5 U	5
Acetone	ug/l	10 U	10 U	10 U	10 U	10
Carbon Disulfide	ug/l	5 U	5 U	5 U	5 U	5
1,1-Dichloroethene	ug/l	5 U	5 U	5 U	5 U	5
1,1-Dichloroethane	ug/l	5 U	5 U	5 U	5 U	5
trans-1,2-Dichloroethene	ug/l	5 U	5 U	5 U	5 U	5
Chloroform	ug/l	5 U	5 U	5 U	5 U	5
1,2-Dichloroethane	ug/l	5 U	5 U	5 U	5 U	5
MEK 2-Butanone	ug/l	10 U	10 U	10 U	10 U	10
1,1,1-Trichloroethane	ug/l	5 U	5 U	5 U	5 U	5
Carbon Tetrachloride	ug/l	5 U	5 U	5 U	5 U	5
Vinyl Acetate	ug/l	5 U	5 U	5 U	5 U	5
Bromodichloromethane	ug/l	5 U	5 U	5 U	5 U	5
1,2-Dichloropropane	ug/l	5 U	5 U	5 U	5 U	5
trans-1,3-Dichloropropene	ug/l	5 U	5 U	5 U	5 U	5
Trichloroethene	ug/l	5 U	5 U	5 U	5 U	5
Dibromochloromethane	ug/l	5 U	5 U	5 U	5 U	5
1,1,2-Trichloroethane	ug/l	5 U	5 U	5 U	5 U	5
Benzene	ug/l	5 U	5 U	5 U	5 U	5
c-1,3-Dichloropropene	ug/l	5 U	5 U	5 U	5 U	5
2-Chloroethylvinylether	ug/l	10 U	10 U	10 U	10 U	10
Bromoform	ug/l	5 U	5 U	5 U	5 U	5
4-Methyl-2-Pentanone	ug/l	10 U	10 U	10 U	10 U	10
2-Hexanone	ug/l	10 U	10 U	10 U	10 U	10
1,1,2,2-Tetrachloroethane	ug/l	5 U	5 U	5 U	5 U	5
Tetrachloroethene	ug/l	5 U	5 U	5 U	5 U	5
Toluene	ug/l	5 U	5 U	5 U	5 U	5
Chlorobenzene	ug/l	5 U	5 U	5 U	5 U	5
Ethylbenzene	ug/l	5 U	5 U	5 U	5 U	5
Styrene	ug/l	5 U	5 U	5 U	5 U	5
Total Xylenes	ug/l	5 U	5 U	5 U	5 U	5
1,2-Dichlorobenzene	ug/l	5 U	5 U	5 U	5 U	5
1,3-Dichlorobenzene	ug/l	5 U	5 U	5 U	5 U	5
1,4-Dichlorobenzene	ug/l	5 U	5 U	5 U	5 U	5
Trichlorofluoromethane	ug/l	5 U	5 U	5 U	5 U	5

Results of Analysis

Work ID: 50-92-105.22 SPELCO Work Order: 93-10-033

Client Number:	Equipment Blank	MW-2	MW-3	MW-4
OLI Number:	09A	10A	11A	12A

Continued from preceding page

EPA 8240	% Recovery	% Recovery	% Recovery	% Recovery
Surrogates/Internal Standard				
1,2-Dichloroethane-d4(SS1)	111 %	108 %	114 %	109 %
Toluene (SS2)	95 %	98 %	102 %	101 %
Bromofluorobenzene (SS3)	98 %	97 %	101 %	96 %

Results of Analysis

Work ID: 50-92-105.22 SPELCO Work Order: 93-10-033

Client Number:		MW-5	MW-7	Duplicate	Trip Blank	
OLI Number:		13A	14A	15A	16A	
Dilution:		1	1	1	1	
GC/MS Volatiles: Water						
EPA 8240	Units	Result/Flag	Result/Flag	Result/Flag	Result/Flag	MDL
Chloromethane	ug/l	10 U	10 U	10 U	10 U	10
Bromomethane	ug/l	10 U	10 U	10 U	10 U	10
Vinyl Chloride	ug/l	10 U	10 U	10 U	10 U	10
Chloroethane	ug/l	10 U	10 U	10 U	10 U	10
Methylene Chloride	ug/l	5 U	5 U	5 U	5 U	5
Acetone	ug/l	10 U	10 U	10 U	10 U	10
Carbon Disulfide	ug/l	5 U	5 U	5 U	5 U	5
1,1-Dichloroethene	ug/l	5 U	5 U	5 U	5 U	5
1,1-Dichloroethane	ug/l	5 U	5 U	5 U	5 U	5
trans-1,2-Dichloroethene	ug/l	5 U	5 U	5 U	5 U	5
Chloroform	ug/l	5 U	5 U	5 U	5 U	5
1,2-Dichloroethane	ug/l	5 U	5 U	5 U	5 U	5
MEK 2-Butanone	ug/l	10 U	10 U	10 U	10 U	10
1,1,1-Trichloroethane	ug/l	5 U	5 U	5 U	5 U	5
Carbon Tetrachloride	ug/l	5 U	5 U	5 U	5 U	5
Vinyl Acetate	ug/l	5 U	5 U	5 U	5 U	5
Bromodichloromethane	ug/l	5 U	5 U	5 U	5 U	5
1,2-Dichloropropane	ug/l	5 U	5 U	5 U	5 U	5
trans-1,3-Dichloropropene	ug/l	5 U	5 U	5 U	5 U	5
Trichloroethene	ug/l	5 U	5 U	5 U	5 U	5
Dibromochloromethane	ug/l	5 U	5 U	5 U	5 U	5
1,1,2-Trichloroethane	ug/l	5 U	5 U	5 U	5 U	5
Benzene	ug/l	5 U	5 U	5 U	5 U	5
c-1,3-Dichloropropene	ug/l	5 U	5 U	5 U	5 U	5
2-Chloroethylvinylether	ug/l	10 U	10 U	10 U	10 U	10
Bromoform	ug/l	5 U	5 U	5 U	5 U	5
4-Methyl-2-Pentanone	ug/l	10 U	10 U	10 U	10 U	10
2-Hexanone	ug/l	10 U	10 U	10 U	10 U	10
1,1,2,2-Tetrachloroethane	ug/l	5 U	5 U	5 U	5 U	5
Tetrachloroethene	ug/l	5 U	5 U	5 U	5 U	5
Toluene	ug/l	5 U	5 U	5 U	5 U	5
Chlorobenzene	ug/l	5 U	5 U	5 U	5 U	5
Ethylbenzene	ug/l	5 U	5 U	5 U	5 U	5
Styrene	ug/l	5 U	5 U	5 U	5 U	5
Total Xylenes	ug/l	5 U	5 U	5 U	5 U	5
1,2-Dichlorobenzene	ug/l	5 U	5 U	5 U	5 U	5
1,3-Dichlorobenzene	ug/l	5 U	5 U	5 U	5 U	5
1,4-Dichlorobenzene	ug/l	5 U	5 U	5 U	5 U	5
Trichlorofluoromethane	ug/l	5 U	5 U	5 U	5 U	5

Results of Analysis

Work ID: 50-92-105.22 SPELCO Work Order: 93-10-033

Client Number:	MW-5	MW-7	Duplicate	Trip Blank
OLI Number:	13A	14A	15A	16A

Continued from preceding page

EPA 8240	% Recovery	% Recovery	% Recovery	% Recovery
Surrogates/Internal Standard				
1,2-Dichloroethane-d4(SS1)	110 %	113 %	108 %	110 %
Toluene (SS2)	95 %	100 %	98 %	99 %
Bromofluorobenzene (SS3)	91 %	100 %	100 %	100 %

Results of Analysis

Work ID: 50-92-105.22 SPELCO Work Order: 93-10-033

Client Number: Method Blank
OLI Number: 17A
Dilution: 1

GC/MS Volatiles: Method Blank

EPA 8240	Units	Result/Flag	MDL
Chloromethane	ug/l	10 U	10
Bromomethane	ug/l	10 U	10
Vinyl Chloride	ug/l	10 U	10
Chloroethane	ug/l	10 U	10
Methylene Chloride	ug/l	5 U	5
Acetone	ug/l	10 U	10
Carbon Disulfide	ug/l	5 U	5
1,1-Dichloroethene	ug/l	5 U	5
1,1-Dichloroethane	ug/l	5 U	5
trans-1,2-Dichloroethene	ug/l	5 U	5
Chloroform	ug/l	5 U	5
1,2-Dichloroethane	ug/l	5 U	5
MEK 2-Butanone	ug/l	10 U	10
1,1,1-Trichloroethane	ug/l	5 U	5
Carbon Tetrachloride	ug/l	5 U	5
Vinyl Acetate	ug/l	5 U	5
Bromodichloromethane	ug/l	5 U	5
1,2-Dichloropropane	ug/l	5 U	5
trans-1,3-Dichloropropene	ug/l	5 U	5
Trichloroethene	ug/l	5 U	5
Dibromochloromethane	ug/l	5 U	5
1,1,2-Trichloroethane	ug/l	5 U	5
Benzene	ug/l	5 U	5
c-1,3-Dichloropropene	ug/l	5 U	5
2-Chloroethylvinylether	ug/l	10 U	10
Bromoform	ug/l	5 U	5
4-Methyl-2-Pentanone	ug/l	10 U	10
2-Hexanone	ug/l	10 U	10
1,1,2,2-Tetrachloroethane	ug/l	5 U	5
Tetrachloroethene	ug/l	5 U	5
Toluene	ug/l	5 U	5
Chlorobenzene	ug/l	5 U	5
Ethylbenzene	ug/l	5 U	5
Styrene	ug/l	5 U	5
Total Xylenes	ug/l	5 U	5
1,2-Dichlorobenzene	ug/l	5 U	5
1,3-Dichlorobenzene	ug/l	5 U	5
1,4-Dichlorobenzene	ug/l	5 U	5
Trichlorofluoromethane	ug/l	5 U	5

Results of Analysis

Work ID: 50-92-105.22 SPELCO Work Order: 93-10-033

Client Number:	Method Blank
OLI Number:	17A

Continued from preceding page

EPA 8240	% Recovery
Surrogates/Internal Standard	
1,2-Dichloroethane-d4(SS1)	104 %
Toluene (SS2)	98 %
Bromofluorobenzene (SS3)	102 %

Results of Analysis

Work ID: 50-92-105.22 SPELCO Work Order: 93-10-033

Client Number:		MW-1	MW-6	MW-8	MW-9	
OLI Number:		01A	02A	03A	04A	
Analyte	Units	Result/Flag	Result/Flag	Result/Flag	Result/Flag	MDL
Aluminum	ug/l	150000	2400	81000	7000	100
Aluminum, Field Filtered	ug/l	100 U	100 U	5600	100 U	100
Barium	ug/l	3900	100 U	990	130	100
Barium, Field Filtered	ug/l	100 U	100 U	100 U	100 U	100
Cadmium	ug/l	5.0 U	5.0 U	5.8	5.0 U	5.0
Cadmium, Field Filtered	ug/l	5.0 U	5.0 U	5.0 U	5.0 U	5.0
Chromium	ug/l	400	16	140	17	10
Chromium, Field Filtered	ug/l	10 U	10 U	10 U	10 U	10
Lead	ug/l	5.0 U	5.0 U	14	5.0 U	5.0
Lead, Field Filtered	ug/l	5.0 U	5.0 U	5.0 U	5.0 U	5.0

Client Number:		MW-10	ET-3	MW-2	MW-3	
OLI Number:		05A	07A	10A	11A	
Analyte	Units	Result/Flag	Result/Flag	Result/Flag	Result/Flag	MDL
Aluminum	ug/l	4400	56000	41000	42000	100
Aluminum, Field Filtered	ug/l	100 UY	56000	100 U	100 UY	100
Barium	ug/l	370	100 U	390	570	100
Barium, Field Filtered	ug/l	280 Y	100 U	100 U	100 UY	100
Cadmium	ug/l	5.0 U	5.0 U	5.0 U	5.0 U	5.0
Cadmium, Field Filtered	ug/l	5.0 UY	5.0 U	5.0 U	5.0 UY	5.0
Chromium	ug/l	13	12	50	67	10
Chromium, Field Filtered	ug/l	10 UY	12	10 U	10 UY	10
Lead	ug/l	5.0 U	5.0 U	6.9	9.0	5.0
Lead, Field Filtered	ug/l	5.0 UY	5.0 U	5.0 U	5.0 UY	5.0

Client Number:		MW-4	MW-5	MW-7	Duplicate	
OLI Number:		12A	13A	14A	15A	
Analyte	Units	Result/Flag	Result/Flag	Result/Flag	Result/Flag	MDL
Aluminum	ug/l	35000	65000	750		100
Aluminum, Field Filtered	ug/l	100 U	1700	100 U	100 U	100
Barium	ug/l	730	620	210		100
Barium, Field Filtered	ug/l	290	100 U	180	100 U	100
Cadmium	ug/l	5.0 U	5.0 U	5.0 U		5.0
Cadmium, Field Filtered	ug/l	5.0 U	5.0 U	5.0 U	5.0 U	5.0
Chromium	ug/l	50	190	10 U		10
Chromium, Field Filtered	ug/l	10 U	10 U	10 U	10 U	10

Results of Analysis

Work ID: 50-92-105.22 SPELCO Work Order: 93-10-033

Client Number:		MW-4	MW-5	MW-7	Duplicate	
OLI Number:		12A	13A	14A	15A	
Analyte	Units	Result/Flag	Result/Flag	Result/Flag	Result/Flag	MDL
Lead	ug/l	7.6	9.2	5.0 U		5.0
Lead, Field Filtered	ug/l	5.0 U	5.0 U	5.0 U	5.0 U	5.0

QA for Analysis

Work ID: 50-92-105.22 SPELCO

Work Order: 93-10-033

Client No: MW-1
OLI No: 01A
Matrix: Water
Collected: 10/01/93 11:20:00

Test Description	Method	Prep	Run	Analyst
GC/MS Volatiles	EPA_8240	NA	10/04/93	EP
Aluminum	EPA_200_7	10/05/93	10/06/93	BB
Aluminum, Field Filtered	EPA_200_7	10/05/93	10/06/93	BB
Barium	EPA_200_7	10/05/93	10/06/93	BB
Barium, Field Filtered	EPA_200_7	10/05/93	10/06/93	BB
Cadmium	EPA_200_7	10/05/93	10/06/93	BB
Cadmium, Field Filtered	EPA_200_7	10/05/93	10/06/93	BB
Chromium	EPA_200_7	10/05/93	10/06/93	BB
Chromium, Field Filtered	EPA_200_7	10/05/93	10/06/93	BB
Lead	EPA_239_2	10/05/93	10/12/93	THH
Lead, Field Filtered	EPA_239_2	10/05/93	10/12/93	THH

Client No: MW-6
OLI No: 02A
Matrix: Water
Collected: 10/01/93 11:30:00

Test Description	Method	Prep	Run	Analyst
GC/MS Volatiles	EPA_8240	NA	10/04/93	EP
Aluminum	EPA_200_7	10/05/93	10/06/93	BB
Aluminum, Field Filtered	EPA_200_7	10/05/93	10/06/93	BB
Barium	EPA_200_7	10/05/93	10/06/93	BB
Barium, Field Filtered	EPA_200_7	10/05/93	10/06/93	BB
Cadmium	EPA_200_7	10/05/93	10/06/93	BB
Cadmium, Field Filtered	EPA_200_7	10/05/93	10/06/93	BB
Chromium	EPA_200_7	10/05/93	10/06/93	BB
Chromium, Field Filtered	EPA_200_7	10/05/93	10/06/93	BB
Lead	EPA_239_2	10/05/93	10/12/93	THH
Lead, Field Filtered	EPA_239_2	10/05/93	10/12/93	THH

Client No: MW-8
OLI No: 03A
Matrix: Water
Collected: 10/01/93 11:50:00

Test Description	Method	Prep	Run	Analyst
GC/MS Volatiles	EPA_8240	NA	10/04/93	EP
Aluminum	EPA_200_7	10/05/93	10/06/93	BB
Aluminum, Field Filtered	EPA_200_7	10/05/93	10/06/93	BB
Barium	EPA_200_7	10/05/93	10/06/93	BB
Barium, Field Filtered	EPA_200_7	10/05/93	10/06/93	BB
Cadmium	EPA_200_7	10/05/93	10/06/93	BB
Cadmium, Field Filtered	EPA_200_7	10/05/93	10/06/93	BB
Chromium	EPA_200_7	10/05/93	10/06/93	BB
Chromium, Field Filtered	EPA_200_7	10/05/93	10/06/93	BB
Lead	EPA_239_2	10/05/93	10/12/93	THH
Lead, Field Filtered	EPA_239_2	10/05/93	10/12/93	THH

QA for Analysis

Work ID: 50-92-105.22 SPELCO

Work Order: 93-10-033

Client No: MW-9
OLI No: 04A
Matrix: Water
Collected: 10/01/93 12:10:00

Test Description	Method	Prep	Run	Analyst
GC/MS Volatiles	EPA_8240	NA	10/04/93	EP
Aluminum	EPA_200_7	10/05/93	10/06/93	BB
Aluminum, Field Filtered	EPA_200_7	10/05/93	10/06/93	BB
Barium	EPA_200_7	10/05/93	10/06/93	BB
Barium, Field Filtered	EPA_200_7	10/05/93	10/06/93	BB
Cadmium	EPA_200_7	10/05/93	10/06/93	BB
Cadmium, Field Filtered	EPA_200_7	10/05/93	10/06/93	BB
Chromium	EPA_200_7	10/05/93	10/06/93	BB
Chromium, Field Filtered	EPA_200_7	10/05/93	10/06/93	BB
Lead	EPA_239_2	10/05/93	10/12/93	THH
Lead, Field Filtered	EPA_239_2	10/05/93	10/12/93	THH

Client No: MW-10
OLI No: 05A
Matrix: Water
Collected: 10/01/93 12:35:00

Test Description	Method	Prep	Run	Analyst
GC/MS Volatiles	EPA_8240	NA	10/04/93	EP
Aluminum	EPA_200_7	10/05/93	10/06/93	BB
Aluminum, Field Filtered	EPA_200_7	10/05/93	10/06/93	BB
Barium	EPA_200_7	10/05/93	10/06/93	BB
Barium, Field Filtered	EPA_200_7	10/05/93	10/06/93	BB
Cadmium	EPA_200_7	10/05/93	10/06/93	BB
Cadmium, Field Filtered	EPA_200_7	10/05/93	10/06/93	BB
Chromium	EPA_200_7	10/05/93	10/06/93	BB
Chromium, Field Filtered	EPA_200_7	10/05/93	10/06/93	BB
Lead	EPA_239_2	10/05/93	10/12/93	THH
Lead, Field Filtered	EPA_239_2	10/05/93	10/12/93	THH

Client No: CD-Water
OLI No: 06A
Matrix: Water
Collected: 10/01/93 12:40:00

Test Description	Method	Prep	Run	Analyst
GC/MS Volatiles	EPA_8240	NA	10/04/93	EP

Client No: ET-3
OLI No: 07A
Matrix: Water
Collected: 10/01/93 12:55:00

Test Description	Method	Prep	Run	Analyst
GC/MS Volatiles	EPA_8240	NA	10/04/93	EP
Aluminum	EPA_200_7	10/05/93	10/06/93	BB
Aluminum, Field Filtered	EPA_200_7	10/05/93	10/06/93	BB
Barium	EPA_200_7	10/05/93	10/06/93	BB
Barium, Field Filtered	EPA_200_7	10/05/93	10/06/93	BB
Cadmium	EPA_200_7	10/05/93	10/06/93	BB
Cadmium, Field Filtered	EPA_200_7	10/05/93	10/06/93	BB
Chromium	EPA_200_7	10/05/93	10/08/93	BB
Chromium, Field Filtered	EPA_200_7	10/05/93	10/06/93	BB
Lead	EPA_239_2	10/05/93	10/12/93	THH
Lead, Field Filtered	EPA_239_2	10/05/93	10/12/93	THH

QA for Analysis

Work ID: 50-92-105.22 SPELCO

Work Order: 93-10-033

Client No: Field Blank
OLI No: 08A
Matrix: Water
Collected: 10/01/93 13:00:00

Test Description	Method	Prep	Run	Analyst
GC/MS Volatiles	EPA_8240	NA	10/04/93	EP

Client No: Equipment Blank
OLI No: 09A
Matrix: Water
Collected: 10/01/93 13:00:00

Test Description	Method	Prep	Run	Analyst
GC/MS Volatiles	EPA_8240	NA	10/04/93	EP

Client No: MW-2
OLI No: 10A
Matrix: Water
Collected: 10/01/93 13:15:00

Test Description	Method	Prep	Run	Analyst
GC/MS Volatiles	EPA_8240	NA	10/04/93	EP
Aluminum	EPA_200_7	10/05/93	10/06/93	BB
Aluminum, Field Filtered	EPA_200_7	10/05/93	10/06/93	BB
Barium	EPA_200_7	10/05/93	10/06/93	BB
Barium, Field Filtered	EPA_200_7	10/05/93	10/06/93	BB
Cadmium	EPA_200_7	10/05/93	10/06/93	BB
Cadmium, Field Filtered	EPA_200_7	10/05/93	10/06/93	BB
Chromium	EPA_200_7	10/05/93	10/06/93	BB
Chromium, Field Filtered	EPA_200_7	10/05/93	10/06/93	BB
Lead	EPA_239_2	10/05/93	10/12/93	THH
Lead, Field Filtered	EPA_239_2	10/05/93	10/12/93	THH

Client No: MW-3
OLI No: 11A
Matrix: Water
Collected: 10/01/93 13:30:00

Test Description	Method	Prep	Run	Analyst
GC/MS Volatiles	EPA_8240	NA	10/04/93	EP
Aluminum	EPA_200_7	10/05/93	10/06/93	BB
Aluminum, Field Filtered	EPA_200_7	10/05/93	10/06/93	BB
Barium	EPA_200_7	10/05/93	10/06/93	BB
Barium, Field Filtered	EPA_200_7	10/05/93	10/06/93	BB
Cadmium	EPA_200_7	10/05/93	10/06/93	BB
Cadmium, Field Filtered	EPA_200_7	10/05/93	10/06/93	BB
Chromium	EPA_200_7	10/05/93	10/06/93	BB
Chromium, Field Filtered	EPA_200_7	10/05/93	10/06/93	BB
Lead	EPA_239_2	10/05/93	10/12/93	THH
Lead, Field Filtered	EPA_239_2	10/05/93	10/12/93	THH

QA for Analysis

Work ID: 50-92-105.22 SPELCO Work Order: 93-10-033

Client No: MW-4
OLI No: 12A
Matrix: Water
Collected: 10/01/93 13:45:00

Test Description	Method	Prep	Run	Analyst
GC/MS Volatiles	EPA_8240	NA	10/04/93	EP
Aluminum	EPA_200_7	10/05/93	10/06/93	BB
Aluminum, Field Filtered	EPA_200_7	10/05/93	10/06/93	BB
Barium	EPA_200_7	10/05/93	10/06/93	BB
Barium, Field Filtered	EPA_200_7	10/05/93	10/06/93	BB
Cadmium	EPA_200_7	10/05/93	10/06/93	BB
Cadmium, Field Filtered	EPA_200_7	10/05/93	10/06/93	BB
Chromium	EPA_200_7	10/05/93	10/06/93	BB
Chromium, Field Filtered	EPA_200_7	10/05/93	10/06/93	BB
Lead	EPA_239_2	10/05/93	10/12/93	THH
Lead, Field Filtered	EPA_239_2	10/05/93	10/12/93	THH

Client No: MW-5
OLI No: 13A
Matrix: Water
Collected: 10/01/93 13:55:00

Test Description	Method	Prep	Run	Analyst
GC/MS Volatiles	EPA_8240	NA	10/04/93	EP
Aluminum	EPA_200_7	10/05/93	10/06/93	BB
Aluminum, Field Filtered	EPA_200_7	10/05/93	10/06/93	BB
Barium	EPA_200_7	10/05/93	10/06/93	BB
Barium, Field Filtered	EPA_200_7	10/05/93	10/06/93	BB
Cadmium	EPA_200_7	10/05/93	10/06/93	BB
Cadmium, Field Filtered	EPA_200_7	10/05/93	10/06/93	BB
Chromium	EPA_200_7	10/05/93	10/06/93	BB
Chromium, Field Filtered	EPA_200_7	10/05/93	10/06/93	BB
Lead	EPA_239_2	10/05/93	10/12/93	THH
Lead, Field Filtered	EPA_239_2	10/05/93	10/12/93	THH

Client No: MW-7
OLI No: 14A
Matrix: Water
Collected: 10/01/93 14:05:00

Test Description	Method	Prep	Run	Analyst
GC/MS Volatiles	EPA_8240	NA	10/04/93	EP
Aluminum	EPA_200_7	10/05/93	10/06/93	BB
Aluminum, Field Filtered	EPA_200_7	10/05/93	10/06/93	BB
Barium	EPA_200_7	10/05/93	10/06/93	BB
Barium, Field Filtered	EPA_200_7	10/05/93	10/06/93	BB
Cadmium	EPA_200_7	10/05/93	10/06/93	BB
Cadmium, Field Filtered	EPA_200_7	10/05/93	10/06/93	BB
Chromium	EPA_200_7	10/05/93	10/06/93	BB
Chromium, Field Filtered	EPA_200_7	10/05/93	10/06/93	BB
Lead	EPA_239_2	10/05/93	10/12/93	THH
Lead, Field Filtered	EPA_239_2	10/05/93	10/12/93	THH

QA for Analysis

Work ID: 50-92-105.22 SPELCO

Work Order: 93-10-033

Client No: Duplicate
OLI No: 15A
Matrix: Water
Collected: 10/01/93 13:30:00

Test Description	Method	Prep	Run	Analyst
GC/MS Volatiles	EPA_8240	NA	10/04/93	EP
Aluminum, Field Filtered	EPA_200_7	10/05/93	10/06/93	BB
Barium, Field Filtered	EPA_200_7	10/05/93	10/06/93	BB
Cadmium, Field Filtered	EPA_200_7	10/05/93	10/06/93	BB
Chromium, Field Filtered	EPA_200_7	10/05/93	10/06/93	BB
Lead, Field Filtered	EPA_239_2	10/05/93	10/12/93	THH

Client No: Trip Blank
OLI No: 16A
Matrix: Water
Collected: Not specified

Test Description	Method	Prep	Run	Analyst
GC/MS Volatiles	EPA_8240	NA	10/05/93	EP

Client No: Method Blank
OLI No: 17A
Matrix: Method Blank
Collected: Not specified

Test Description	Method	Prep	Run	Analyst
GC/MS Volatiles	EPA_8240	NA	10/04/93	EP

Delta Environmental
Attn: Steven Zbur

Report Number: 93-10-033

Quality Control Data Sheets

Parameter	OLI Sample #	Matrix Spike % Recovery	Matrix Spike Dup % Recovery	Relative Percent Difference	Analysis Date	Analyst
Aluminum	9310026-01	101	100	0	10/06/93	BB
Barium	9310026-01	102	103	1	10/06/93	BB
Cadmium	9310026-01	99	99	0	10/06/93	BB
Chromium	9310026-01	100	101	1	10/06/93	BB
Aluminum	9310027-01	102	102	0	10/06/93	BB
Barium	9310027-01	102	102	1	10/06/93	BB
Cadmium	9310027-01	94	100	6	10/06/93	BB
Chromium	9310027-01	96	98	1	10/06/93	BB
Aluminum	9310033-02	140	144	2	10/06/93	BB
Barium	9310033-02	100	100	0	10/06/93	BB
Cadmium	9310033-02	99	101	2	10/06/93	BB
Chromium	9310033-02	99	99	0	10/06/93	BB
Lead	9310033-04	62	47	28	10/12/93	THH
Lead*	9310033-04	NA	NA	NA	10/12/93	THH
Lead	9310033-05	88	90	3	10/12/93	THH
Lead	9310033-07	41	45	9	10/12/93	THH

Parameter	Sample #	Case Narrative for 93-10-033
Lead	QC	Relative Percent Difference of duplicate matrix spikes out of QC limits due to matrix inconsistencies. RPD of procedure duplicate blank spikes was 1%.
Lead	QC	Digestion spike recovery out of QC limits due to matrix effects. Interference was confirmed by using the method of standard additions (GFAA and FLAA only).

* Relative Percent Difference (RPD) was calculated from results of sample and sample duplicate.

ORLANDO LABORATORIES, INC.

GC/MS ORGANICS

MATRIX SPIKE RESULTS

MATRIX : Water
REPORT DATE: 10-6-1993
EPA METHOD : 8240

LAB SAMPLE #: 9310033-16
ANALYSIS DATE: 10/5/93

COMPOUND	AMOUNT SPIKED	SAMPLE RESULT	MS RESULT	MS % RECOVERY	MSD RESULT	MSD % RECOVERY	RPD
1,1-Dichloroethene	50	0	54.0	108	54.0	108	0
Trichloroethene	50	0	49.0	98	47.0	94	4
Benzene	50	0	49.0	98	50.0	100	2
Toluene	50	0	50.0	100	51.0	102	2
Chlorobenzene	50	0	50.0	100	50.0	100	0

MATRIX SPIKE QUALITY CONTROL LIMITS

COMPOUND	WATER LOWER	WATER UPPER	WATER RPD	SOIL LOWER	SOIL UPPER	SOIL RPD
1,1-Dichloroethene	52	139	25	NA	NA	NA
Trichloroethene	70	129	18	NA	NA	NA
Benzene	63	128	22	NA	NA	NA
Toluene	66	124	23	NA	NA	NA
Chlorobenzene	67	128	21	NA	NA	NA

ORLANDO LABORATORIES, INC.
REPORT ANALYSIS CODES

Qual	Definition
<	Less Than
>	Greater Than
B	Results were based upon colony counts outside the acceptable range.
CFU	Colony Forming Units
D.O.	Diluted Out
G	More Than 200 Non-Coliform Background Bacteria
H	Value based on field kit determination and may not be accurate.
I	Internal Standard
J	Indicates an Estimated Value; value not accurate
L	Less Than 50 Non-Coliform Background Bacteria
M	Less Than 200 Non-Coliform Background Bacteria
MCL	Maximum Contaminant Level
MDL	The Method Detection Limit at a 1 dilution factor (and 0% moisture if soil/sediment) for each compound/analyte
N	Presumptive evidence of presence of material. (library search, evidence of possible interference, evidence of analyte but QC requirements for confirmation not met)
NA	Not Applicable
N/C	No Combustion
ND	Not Detected
NR	Not Requested
Q	Sample analyzed beyond the accepted holding time per client's approval
TNTC	Too Numerous To Count
U	Indicates the compound was analyzed, but not detected. The numerical value preceding the 'U' is the limit of detection for that compound, based upon the dilution (and moisture content if soil/sediment)
V	Analyte was detected in both the sample and the associated Method Blank
Y	The lab sample was received incompletely, improperly or not preserved and preserved at the laboratory for analysis
Z	Too many colonies were present (TNTC). The numeric value represents the filtration volume (mL)

ORLANDO LABORATORIES, INC. CERTIFICATIONS

State	Drinking Water Certification	Environmental Certification
Florida	HRS 83141	HRS E83033
Alabama	40020	Not Required*
Georgia	-----	Not Required*
Michigan	Certified	Not Required*
North Carolina	12700	101
South Carolina	96016	Not Required*
Tennessee	02928	UST - listed
Virginia	00248	Not Required*

DER Comprehensive QA Approval #860106G

* Indicates no Florida state certification program is in place and/or state will accept Florida certification.

ORLANDO LABORATORIES, INC.
P.O. Box 149127, Orlando, FL 32814
(407) 896-6645 FAX (407) 898-6588

CHAIN-OF-CUSTODY RECORD

(INSTRUCTIONS ON BACK)

(1) INVOICE TO: (Company and Individual) ADDRESS (City, State, Zip)

(2) CONTACT PERSON/PHONE # INVOICE: Steve Zbur

(3) RB NUMBER: A2159

(4) OU WORK ORDER #:

(5) ORIGINAL REPORT TO: (Company and Individual) ADDRESS (City, State, Zip)

(6) CONTACT PERSON/PHONE # REPORT: (704) 541-9890

9310.033

(7) (OPTIONAL) ADDITIONAL REPORTS SENT TO: ADDRESS (City, State, Zip)

(8) CLIENT PROJECT NAME: SPELCO Lansing, NC

(9) CLIENT PROJECT #: 50-92-105,22

	(10) SAMPLE IDENTIFICATION	(11) DATE/TIME	(12) COMP	GRAB	WATER	SOIL	OTHER	(13) SAMPLE DESCRIPTION	(17) NUMBER OF CONTAINERS	(18) REQUESTED ANALYSIS: 8240	Metals/A(Total)	Filtered Metals/A(Diss)					(19) REMARKS
1	MW-1	10-1-93 1120		X	X				4	X	X	X					
2	MW-6	" 1130							4	X	X	X					
3	MW-8	" 1150							4	X	X	X					
4	MW-9	" 1210							4	X	X	X					
5	MW-10	" 1235							4	X	X	X					
6	CD-Water	" 1240							2	X							
7	ET-3	" 1255							4	X	X	X					
8	Field Blank	" 1300							2	X							
9	Equip Blank	" 1300							2	X							
10	MW-2	" 1315							4	X	X	X					
11	MW-3	" 1330							4	X	X	X					
12	MW-4	" 1345							4	X	X	X					
13	MW-5	" 1355							4	X	X	X					

TRANSFER NUMBER	(14) RELINQUISHED BY	(15) DATE/TIME	(16) ACCEPTED BY
1st	[illegible]	9/23/93 1334	
2nd	R.G. Powell	10-1-93 1500	Fed Exp
3rd	Cooler A	10/2	[illegible] 10/4

(20) ADDITIONAL REMARKS

(21) COOLER #:

(22) R.G. Powell
SAMPLER'S SIGNATURE

LAB

OL-001 (11/91)

ORLANDO LABORATORIES, INC.
P.O. Box 149127, Orlando, FL 32814
(407) 896-6645 FAX (407) 898-6588

CHAIN-OF-CUSTODY RECORD

(INSTRUCTIONS ON BACK)

(1) INVOICE TO: (Company and Individual) ADDRESS (City, State, Zip)

(2) CONTACT PERSON/PHONE # INVOICE: Steve Zbur

(3) RB NUMBER: A2159

(4) OU WORK ORDER #:

(5) ORIGINAL REPORT TO: (Company and Individual) ADDRESS (City, State, Zip)

(6) CONTACT PERSON/PHONE # REPORT: (704) 541-9840

9310033

(7) (OPTIONAL) ADDITIONAL REPORTS SENT TO: ADDRESS (City, State, Zip)

(8) CLIENT PROJECT NAME: SPELCO Lansing, NC

(9) CLIENT PROJECT #: 50-92-105.22

	(10) SAMPLE IDENTIFICATION	(11) DATE/TIME	(12) COMP	GRAB	WATER	SOIL	OTHER	(13) SAMPLE DESCRIPTION	(17) NUMBER OF CONTAINERS	8240	Total Metals/AI	Filtered Metals/AI					(19) REMARKS
1'1	MW-7	10-1-93 1405		X	X				4	X	X	X					
10	Trip Blank			X	X				2	X							
15	Duplicate	10-1 13.30		X	X					X		X					

TRANSFER NUMBER	(14) RELINQUISHED BY	(15) DATE/TIME	(16) ACCEPTED BY
1st	[signature]	9/09/93 1334	
2nd	R E Powell	10-1-93 1500	Fed Exp
3rd	Cooler A	10/2	[signature] 10/4

(20) ADDITIONAL REMARKS

(21) COOLER #'s

(22) R E Powell
SAMPLER'S SIGNATURE

LAB

OL-001 (11/91)

ORLANDO LABORATORIES INC.
P.O. BOX 149127 • ORLANDO, FLORIDA 32814
(407) 896-6646 • FAX: (407) 898-6588

February 10, 1994

Steve Zbur
Delta Environmental
Consultants, Inc.
6701 Carmel Road
Suite 200
Charlotte, NC 28226-3901

Re: pH of filtered samples

Dear Steve,

Upon further investigation of pH values for report # 93-10-033 for SPELCO, I came up with 2 possible reasons for the low pH values: a) There was not enough preservative in the containers to bring the pH value to less than 2. b) There may have not been any preservative in the container for the samples of concern. I apologize for any inconvenience this may have caused you. In the future, the analysts will notify the project managers of any discrepancies. Please call me with any questions. Thank you.

Sincerely yours,

Sook F. Chai
Account Representative

cc. File

ORLANDO LABORATORIES INC.
P.O. BOX 149127 • ORLANDO, FLORIDA 32814
(407) 896-6646 • FAX: (407) 898-6588

REPORT OF ANALYSIS

Delta Environmental
Consultants, Inc.
6701 Carmel Road, Suite 200
Charlotte, NC 28226-3901
Attn: Steven Zbur

Work Order # : 93-10-070
Date Received: 09/30/93
Date Reported: 10/19/93
OLI Contact: S_CHAI

Work ID: 50-92-105.22 SPELCO Lansing
Samples collected by: Client
Total Samples: 2

Sample Identification	Description of Analysis	Description of Analysis
01A TB-6 0.5-1.0'	TCLP Volatile Extraction TCLP Metals	TCLP Non-Vol. Extraction TCLP Volatile Organics
02A Method Blank	TCLP Metals	TCLP Volatile Organics

Respectfully Submitted,
ORLANDO LABORATORIES, INC.

John Bowers
TECHNICAL LABORATORY DIRECTOR

Eric Malarek
QUALITY CONTROL

Results of Analysis

Work ID: 50-92-105.22 SPELCO Lansing Work Order: 93-10-070

Client Number:		TB-6 0.5-1.0'	Method Blank
OLI Number:		01A	02A
Dilution:		10	10
TCLP Volatile Organics: Soil			
1311 8240	Units	Result/Flag	Result/Flag	MDL
Benzene	ug/l	50 U	50 U	5
Carbon Tetrachloride	ug/l	50 U	50 U	5
Chlorobenzene	ug/l	50 U	50 U	5
MEK (2-Butanone)	ug/l	100 U	100 U	10
Vinyl Chloride	ug/l	100 U	100 U	10
1,2-Dichloroethane	ug/l	50 U	50 U	5
1,1-Dichloroethene	ug/l	50 U	50 U	5
Tetrachloroethene	ug/l	50 U	50 U	5
Trichloroethene	ug/l	50 U	50 U	5
Chloroform	ug/l	50 U	50 U	5
TCLP % Recoveries				
Benzene		106 %	106 %	
Carbon Tetrachloride		120 %	120 %	
Chlorobenzene		102 %	102 %	
MEK (2-Butanone)		140 %	140 %	
Vinyl Chloride		116 %	116 %	
1,2-Dichloroethane		96 %	96 %	
1,1-Dichloroethene		112 %	112 %	
Tetrachloroethene		118 %	118 %	
Trichloroethene		110 %	110 %	
Chloroform		96 %	96 %	

Results of Analysis

Work ID: 50-92-105.22 SPELCO Lansing Work Order: 93-10-070

Client Number:		TB-6 0.5-1.0'	Method Blank
OLI Number:		01A	02A

TCLP Metals: Soil

Analyte	Units	Result/Flag	Result/Flag	MDL
Barium: 1311/6010	mg/l	1.2	1.0 U	1.0
Cadmium: 1311/6010	mg/l	0.10 U	0.10 U	0.10
Chromium: 1311/6010	mg/l	0.50 U	0.50 U	0.50
Silver: 1311/6010	mg/l	0.50 U	0.50 U	0.50
Arsenic: 1311/6010	mg/l	0.50 U	0.50 U	0.50
Lead: 1311/6010	mg/l	0.50 U	0.50 U	0.50
Selenium: 1311/6010	mg/l	0.10 U	0.10 U	0.10
Mercury: 1311/7470	mg/l	0.10 U	0.10 U	0.10

TCLP % Recoveries

Barium	103 %	103 %
Cadmium	96 %	96 %
Chromium	88 %	88 %
Silver	97 %	97 %
Arsenic	102 %	102 %
Lead	95 %	95 %
Selenium	111 %	111 %
Mercury	95 %	95 %

Results of Analysis

Work ID: 50-92-105.22 SPELCO Lansing Work Order: 93-10-070

Client Number: TB-6 0.5-1.0'
OLI Number: 01A

Analyte	Units	Result/Flag	MDL
TCLP Non-Vol. Extraction	Extracted	TCLP	NA
TCLP Volatile Extraction	Extracted	TCLP	NA

QA for Analysis

Work ID: 50-92-105.22 SPELCO Lansing Work Order: 93-10-070

	Test Description	Method	Prep	Run	Analyst
Client No: TB-6 0.5-1.0'	TCLP Volatile Organics	1311_8240	10/12/93	10/12/93	EP
OLI No: 01A	TCLP Metals				
Matrix: Soil	Barium	1311/6010	10/12/93	10/13/93	BB
Collected: 09/29/93 12:10:00	Cadmium	1311/6010	10/12/93	10/13/93	BB
	Chromium	1311/6010	10/12/93	10/13/93	BB
	Silver	1311/6010	10/12/93	10/13/93	BB
	Arsenic	1311/6010	10/12/93	10/13/93	BB
	Lead	1311/6010	10/12/93	10/13/93	BB
	Selenium	1311/6010	10/12/93	10/13/93	BB
	Mercury	1311/7470	10/14/93	10/14/93	DM
	TCLP Non-Vol. Extraction	EPA_1311	10/12/93	10/13/93	BB
	TCLP Volatile Extraction	EPA_1311	10/12/93	10/12/93	EP

	Test Description	Method	Prep	Run	Analyst
Client No: Method Blank	TCLP Volatile Organics	1311_8240	10/12/93	10/12/93	EP
OLI No: 02A	TCLP Metals				
Matrix: Method Blank	Barium	1311/6010	10/12/93	10/13/93	BB
Collected: Not specified	Cadmium	1311/6010	10/12/93	10/13/93	BB
	Chromium	1311/6010	10/12/93	10/13/93	BB
	Silver	1311/6010	10/12/93	10/13/93	BB
	Arsenic	1311/6010	10/12/93	10/13/93	BB
	Lead	1311/6010	10/12/93	10/13/93	BB
	Selenium	1311/6010	10/12/93	10/13/93	BB
	Mercury	1311/7470	10/14/93	10/14/93	DM

ORLANDO LABORATORIES, INC.
REPORT ANALYSIS CODES

Qual	Definition
<	Less Than
>	Greater Than
B	Results were based upon colony counts outside the acceptable range.
CFU	Colony Forming Units
D.O.	Diluted Out
G	More Than 200 Non-Coliform Background Bacteria
H	Value based on field kit determination and may not be accurate.
I	Internal Standard
J	Indicates an Estimated Value; value not accurate
L	Less Than 50 Non-Coliform Background Bacteria
M	Less Than 200 Non-Coliform Background Bacteria
MCL	Maximum Contaminant Level
MDL	The Method Detection Limit at a 1 dilution factor (and 0% moisture if soil/sediment) for each compound/analyte
N	Presumptive evidence of presence of material. (library search, evidence of possible interference, evidence of analyte but QC requirements for confirmation not met)
NA	Not Applicable
N/C	No Combustion
ND	Not Detected
NR	Not Requested
Q	Sample analyzed beyond the accepted holding time per client's approval
TNTC	Too Numerous To Count
U	Indicates the compound was analyzed, but not detected. The numerical value preceding the 'U' is the limit of detection for that compound, based upon the dilution (and moisture content if soil/sediment)
V	Analyte was detected in both the sample and the associated Method Blank
Y	The lab sample was received incompletely, improperly or not preserved and preserved at the laboratory for analysis
Z	Too many colonies were present (TNTC). The numeric value represents the filtration volume (mL)

ORLANDO LABORATORIES, INC. CERTIFICATIONS

State	Drinking Water Certification	Environmental Certification
Florida	HRS 83141	HRS E83033
Alabama	40020	Not Required*
Georgia	----	Not Required*
Michigan	Certified	Not Required*
North Carolina	12700	101
South Carolina	96016	Not Required*
Tennessee	02928	UST - listed
Virginia	00248	Not Required*

DER Comprehensive QA Approval #860106G

* Indicates no Florida state certification program is in place and/or state will accept Florida certification.

[illegible] LA[illegible]ATO[illegible], IN[illegible]
P.O. Box 149127, Orlando, FL 32814
(407) 896-6645 FAX (407) 898-6588

CHAIN-OF-CUSTODY RECORD

(INSTRUCTIONS ON BACK)

(1) INVOICE TO: (Company and Individual) ADDRESS (City, State, Zip)

(2) CONTACT PERSON/PHONE # INVOICE: Steve Zlur

(3) RB NUMBER: N 2159

(4) OLI WORK ORDER #:

(5) ORIGINAL REPORT TO: (Company and Individual) ADDRESS (City, State, Zip)

(6) CONTACT PERSON/PHONE # REPORT: (704) 511-9890

(7) (OPTIONAL) ADDITIONAL REPORTS SENT TO: ADDRESS (City, State, Zip)

(8) CLIENT PROJECT NAME: SPECO Lansing, NC

(9) CLIENT PROJECT #: 50-92-105.02

(10) SAMPLE IDENTIFICATION	(11) DATE/TIME	(12) COMP	GRAB	WATER	SOIL	OTHER	(13) SAMPLE DESCRIPTION	(17) NUMBER OF CONTAINERS	(18) REQUESTED ANALYSIS: 624	624	ALCL VID	624/8260	8260	624/8260	8260	624/8260	8260	TCLP Metals	(19) REMARKS
BSL-3 10.5-11.0'	9-28-93 0850		X		X			1	X	X									
BSL-3 20.5-21.0	9-28-93 0900		X		X			1	X	X									
MW-10 4.5-5.0'	9-28-93 1000		X		X			1	X										
MW-10 15-15.5'	9-28-93 1010		X		X			1	X										
LIB-3 10-10.5	9-28-93 1350		X		X			1			X	X							
LIB-4 10-10.5	9-28-93 1425		X		X			1			X	X							
TLD-3	9-28-93 1100		X		X			1	X				X						
TP-1 [illegible]	9-29-93 [illegible]		X		X			2					X						
TP-2 [illegible]	9-29-93 [illegible]		X		X			2					X						
TP-3 [illegible]	9-29-93 [illegible]		X		X			2					X						
TP-4	9-29-93 [illegible]		X		X			2					X						
TP-5	9-29-93 [illegible]		X		X			2					X						
TP-6	9-29-93 [illegible]		X		X			9				X	X	X		X	X	TCLP Metals Vol	

TRANSFER NUMBER	(14) RELINQUISHED BY	(15) DATE/TIME	(16) ACCEPTED BY
1st	[illegible]	9/29/93 1334	
2nd	RC Russell		
3rd			

(20) ADDITIONAL REMARKS

(21) COOLER #s: 196, X Tref; 263, 137

(22) SAMPLER'S SIGNATURE: RC Russell

CLIENT

OL-001 (11/91)

ORLANDO LABORATORIES INC.
P.O. BOX 149127 • ORLANDO, FLORIDA 32814
(407) 896-6645 • FAX: (407) 898-6588

REPORT OF ANALYSIS

Delta Environmental
Consultants, Inc.
6701 Carmel Road, Suite 200
Charlotte, NC 28226-3901
Attn: Steven Zbur

Work Order # : 93-10-133
Date Received: 10/01/93
Date Reported: 10/22/93
OLI Contact: S_CHAI

Work ID: 50-92-105.22 Spelco
Samples collected by: Client
Total Samples: 2

Sample Identification	Description of Analysis	Description of Analysis
01A SSL4	TCLP Volatile Extraction	TCLP Volatile Organics
02A Method Blank	TCLP Volatile Extraction	TCLP Volatile Organics

Respectfully Submitted,
ORLANDO LABORATORIES, INC.

Mike Neuman (for)
John Bowers
TECHNICAL LABORATORY DIRECTOR

Eric Malarek
QUALITY CONTROL

Results of Analysis

Work ID: 50-92-105.22 Spelco Work Order: 93-10-133

Client Number:		SSL4	Method Blank
OLI Number:		01A	02A
Dilution:		10	10
TCLP Volatile Organics: Soil			
1311 8240	Units	Result/Flag	Result/Flag	MDL
Benzene	ug/l	50 U	50 U	5
Carbon Tetrachloride	ug/l	50 U	50 U	5
Chlorobenzene	ug/l	50 U	50 U	5
MEK (2-Butanone)	ug/l	100 U	100 U	10
Vinyl Chloride	ug/l	100 U	100 U	10
1,2-Dichloroethane	ug/l	50 U	50 U	5
1,1-Dichloroethene	ug/l	50 U	50 U	5
Tetrachloroethene	ug/l	50 U	50 U	5
Trichloroethene	ug/l	50 U	50 U	5
Chloroform	ug/l	50 U	50 U	5
TCLP % Recoveries				
Benzene		106 %	106 %	
Carbon Tetrachloride		120 %	120 %	
Chlorobenzene		102 %	102 %	
MEK (2-Butanone)		140 %	140 %	
Vinyl Chloride		116 %	116 %	
1,2-Dichloroethane		96 %	96 %	
1,1-Dichloroethene		112 %	112 %	
Tetrachloroethene		118 %	118 %	
Trichloroethene		110 %	110 %	
Chloroform		96 %	96 %	

Results of Analysis

Work ID: 50-92-105.22 Spelco

Work Order: 93-10-133

Client Number:		SSL4	Method Blank	
OLI Number:		01A	02A	
Analyte	Units	Result/Flag	Result/Flag	MDL
TCLP Volatile Extraction	Extracted	TCLP	TCLP	NA

QA for Analysis

Work ID: 50-92-105.22 Spelco

Work Order: 93-10-133

Client No: SSL4
OLI No: 01A
Matrix: Soil
Collected: 09/29/93 16:45:00

Test Description	Method	Prep	Run	Analyst
TCLP Volatile Organics	1311_8240	10/12/93	10/12/93	EP
TCLP Volatile Extraction	EPA_1311	10/12/93	10/12/93	EP

Client No: Method Blank
OLI No: 02A
Matrix: Method Blank
Collected: Not specified

Test Description	Method	Prep	Run	Analyst
TCLP Volatile Organics	1311_8240	10/12/93	10/12/93	EP
TCLP Volatile Extraction	EPA_1311	10/12/93	10/12/93	EP

ORLANDO LABORATORIES, INC.
REPORT ANALYSIS CODES

Qual	Definition
<	Less Than
>	Greater Than
B	Results were based upon colony counts outside the acceptable range.
CFU	Colony Forming Units
D.O.	Diluted Out
G	More Than 200 Non-Coliform Background Bacteria
H	Value based on field kit determination and may not be accurate.
I	Internal Standard
J	Indicates an Estimated Value; value not accurate
L	Less Than 50 Non-Coliform Background Bacteria
M	Less Than 200 Non-Coliform Background Bacteria
MCL	Maximum Contaminant Level
MDL	The Method Detection Limit at a 1 dilution factor (and 0% moisture if soil/sediment) for each compound/analyte
N	Presumptive evidence of presence of material. (library search, evidence of possible interference, evidence of analyte but QC requirements for confirmation not met)
NA	Not Applicable
N/C	No Combustion
ND	Not Detected
NR	Not Requested
Q	Sample analyzed beyond the accepted holding time per client's approval
TNTC	Too Numerous To Count
U	Indicates the compound was analyzed, but not detected. The numerical value preceding the 'U' is the limit of detection for that compound, based upon the dilution (and moisture content if soil/sediment)
V	Analyte was detected in both the sample and the associated Method Blank
Y	The lab sample was received incompletely, improperly or not preserved and preserved at the laboratory for analysis
Z	Too many colonies were present (TNTC). The numeric value represents the filtration volume (mL)

ORLANDO LABORATORIES, INC. CERTIFICATIONS

State	Drinking Water Certification	Environmental Certification
Florida	HRS 83141	HRS E83033
Alabama	40020	Not Required*
Georgia	-----	Not Required*
Michigan	Certified	Not Required*
North Carolina	12700	101
South Carolina	96016	Not Required*
Tennessee	02928	UST - listed
Virginia	00248	Not Required*

DER Comprehensive QA Approval #860106G

* Indicates no Florida state certification program is in place and/or state will accept Florida certification.

[redacted] LA[redacted]ATO[redacted], INC[redacted]
P.O. Box 149127, Orlando, FL 32814
(407) 896-6645 FAX (407) 898-6588

CHAIN-OF-CUSTODY RECORD

(INSTRUCTIONS ON BACK)

① INVOICE TO (Company and Individual): Delta
ADDRESS (City, State, Zip):

② CONTACT PERSON/PHONE # INVOICE: Steve Zbur

③ RB NUMBER: 72:15

④ OLI WORK ORDER #: [redacted]

⑤ ORIGINAL REPORT TO (Company and Individual):
ADDRESS (City, State, Zip):

⑥ CONTACT PERSON/PHONE # REPORT: Rick Powell

⑦ (OPTIONAL) ADDITIONAL REPORTS SENT TO:
ADDRESS (City, State, Zip):

⑧ CLIENT PROJECT NAME: SPELCO / Lansing NC

⑨ CLIENT PROJECT #: 50-92-105.02

	⑩ SAMPLE IDENTIFICATION	⑪ DATE/TIME	⑫ COMP	GRAB	WATER	SOIL	OTHER	⑬ SAMPLE DESCRIPTION	⑰ NUMBER OF CONTAINERS	⑱ REQUESTED ANALYSIS: NO3-NO2	8240	TCLP Metals	pH	Ignitability	Reactivity	Paint Filter	⑲ REMARKS
1	MW1	9/30/93/915		X	X				1	X							
2	MW 3	9/30/93/1115		X	X				1	X							
3	MW 4	9/30/93/1135		X	X				1	X							
4	Equipment Blank H.A.	9/29/93/1425		X	X			Hand Auger Equipment	2		X						
5	CD5 - 1-1.5'	9/29/93/1445		X		X			1		X						
6	CD6 0.5-1.0'	9/29/93/1505		X		X			1		X						
7	CD7 0.5-1.0'	9/29/93/1525		X		X			1		X						
8	CD8 0.5-1.0'	9/29/93/1545		X		X			1		X						
9	CD9 0.5-1.0'	9/29/93/1600		X		X			1		X						
10	SSL5	9/29/93/1710		X		X			1		X*						*
11	SSL4	9/29/93/1645		X		X			1		X*						*
16 (12)	Composite B	9/30/93/1305		X		X			5			X	X	X	X	X	Composit 5 samples for profile
12	SSL 14	9/30/93/1310		X		X			1		X						

TRANSFER NUMBER	⑭ RELINQUISHED BY	⑮ DATE/TIME	⑯ ACCEPTED BY
1st	[signature]	9/30/93 [illegible]	
2nd	[signature]	9/30/93/1405	
3rd	Fed Ex	10/1/93 10:[illegible]	[signature]

⑳ ADDITIONAL REMARKS
* - Please call Steve Zbur w/results of 8240, may want to run TCLP volatiles

㉑ COOLER #'s

㉒ SAMPLER'S SIGNATURE: [signature]

OL-001 (11 91)

APPENDIX B

SOIL BORING LOGS

PROJECT NAME/LOCATION	PROJECT NUMBER	BORING NUMBER	SHEET
Spec/Lansing, NC	1	BCL-3	1 OF 1
	CONTRACTOR Geo Exploration	DRILLING METHOD HSA	
	DRILLER Mark	DRILLING RIG Mobile B-57	
	START 9-28-93	COMPLETED 9-29-93	
LAND OWNER United Chemi-Con	SURFACE ELEVATION	LOGGED BY DEP	REVIEWED BY

SAMPLE TYPE	SAMPLE NUMBER	BLOW COUNTS	SAMPLE INTERVAL (IN)	SAMPLE RECOVERY (IN)	DEPTH SCALE 1" =	DESCRIPTION OF MATERIALS AND CONDITIONS	CONTAMINANT OBSERVATIONS INSTRUMENT: UNITS: 0	NOTES
					5			
	1				10	Sludge/ash present in end grain. Submitted brass insert from 10.5-11.0' to OLI for 8240 and Pb, Al, Cr, Cd analysis	NR	
					15			
	2				20	Sludge present in end grain submitted brass insert from 20.5-21.0' to OLI for 8240 and Pb, Al, Cr, and Cd analysis	NR	

BOREHOLE WATER LEVEL DATA					
DATE					
TIME					
GWL					
CASING DEPTH					

Delta Environmental Consultants, Inc.

Bottom of borehole @ 21.0'

50-42-103

PROJECT NAME/LOCATION	PROJECT NUMBER 1	BORING NUMBER UB-3	SHEET 1 OF 1
SPELCO/Lonsdale	CONTRACTOR Geologic Exploration	DRILLING METHOD HSA	
	DRILLER Mark	DRILLING RIG Mobile B-57	
	START 9-28-93	COMPLETED 9-28-93	
LAND OWNER United Chemicon	SURFACE ELEVATION	LOGGED BY R.EP	REVIEWED BY

SAMPLE TYPE	SAMPLE NUMBER	BLOW COUNTS	SAMPLE INTERVAL (IN)	SAMPLE RECOVERY (IN)	DEPTH SCALE 1" =	DESCRIPTION OF MATERIALS AND CONDITIONS	CONTAMINANT OBSERVATIONS INSTRUMENT: OVA UNITS: ppm	NOTES
		1						
	1	1			5	Little to no recovery.	45	
		1						
						to OLI		
	2	NR			10	Fine to coarse quartzite sand in end of si. Possible tank backfill submitted brass insert from 10-10.5 for TPH 3550/5030 and BS AWARE took 9.5-10 and 10.5-11 interval brass inserts.	NR	
		2						
	3	4			15	SM, tan to reddish brown micaceous silty fine SAND. Moist	6	
		7						
							9	
		2			20	SM, as above with coarse quartzite sand in end of si. Possible tank backfill		
		2						
		2						

BOREHOLE WATER LEVEL DATA					
DATE					
TIME					
SWL					
CASING DEPTH					

Delta Environmental Consultants, Inc.

Bottom of borehole at 21.0'

50-92-105

PROJECT NAME/LOCATION	PROJECT NUMBER	BORING NUMBER	SHEET / OF
SPELCO/Lorraine, NC	1	LID-4	1 / 1
	CONTRACTOR: Geologic Exploration	DRILLING METHOD: HSA	
	DRILLER: Mark	DRILLING RIG: Mobile B-57	
	START: 9-28-93	COMPLETED: 9-28-93	
LAND OWNER: United Chemi-Con	SURFACE ELEVATION	LOGGED BY: REP	REVIEWED BY

SAMPLE TYPE	SAMPLE NUMBER	BLOW COUNTS	SAMPLE INTERVAL (IN)	SAMPLE RECOVERY (IN)	DEPTH SCALE 1" =	DESCRIPTION OF MATERIALS AND CONDITIONS	CONTAMINANT OBSERVATIONS INSTRUMENT: OVA UNITS: ppm	NOTES
		2 2 2			5	SM-SP, reddish brown micaceous silty fine SAND.	2	
SS	1							
		2 2 2			10	submitted brass insert from 10-10.5' to OLI for TPH 3550/5030 analysis. AVARE took 9.5-10' and 10.5-11' interval brass inserts.	NR	
SS	2							
		3 3 4			15	SM-SC, reddish brown micaceous slightly clayey silty fine SAND. moist	2	
SS	3							
					20	SM-SP, black and brown silty fine to med SAND.	2	
SS	4	NR						

BOREHOLE WATER LEVEL DATA

DATE					
TIME					
GWL					
CASING DEPTH					

Delta Environmental Consultants, Inc.

Bottom of borehole at 21'

PROJECT NAME/LOCATION	PROJECT NUMBER 50-92-105	BORING NUMBER MW-10	SHEET 1 OF 2
SPECO/Lansing, NC.	CONTRACTOR Spencer Exploration	DRILLING METHOD HSA	
	DRILLER Mark	DRILLING RIG Mobile B-57	
	START 9-28-93	COMPLETED 9-28-93	
LAND OWNER United Chemi-Con	SURFACE ELEVATION	LOGGED BY KEP	REVIEWED BY

SAMPLE NUMBER	BLOW COUNTS	SAMPLE INTERVAL (IN)	SAMPLE RECOVERY (IN)	DEPTH SCALE 1" =	DESCRIPTION OF MATERIALS AND CONDITIONS	CONTAMINANT OBSERVATIONS INSTRUMENT: OVA UNITS: PPM	NOTES
1	NR			5	submitted brass insert from 4.5-5.0 to OLI for 8240 analysis	160	
2	1 2 2			10	SM-SP, black-brown micaceous silty fine to med SAND. Moist to wet.	>1000	
3	1 1 1			15	SM-SP, as above. Submitted brass insert from 15-15.5' to OLI for 8240 analysis.	>1000	
	1 1 3			20	SM-SP, as above. Saturated	>1000	

BOREHOLE WATER LEVEL DATA					
DATE					
TIME					
SWL					
CASING DEPTH					

Delta Environmental Consultants, Inc.

ROJECT NAME/LOCATION	PROJECT NUMBER	BORING NUMBER MW-10	SHEET 2 OF 2
	CONTRACTOR	DRILLING METHOD	
	DRILLER	DRILLING RIG	
	START	COMPLETED	
AND OWNER	SURFACE ELEVATION	LOGGED BY	REVIEWED BY

TYPE	SAMPLE NUMBER	BLOW COUNTS	SAMPLE INTERVAL (IN)	SAMPLE RECOVERY (IN)	DEPTH SCALE 1" =	DESCRIPTION OF MATERIALS AND CONDITIONS	CONTAMINANT OBSERVATIONS INSTRUMENT: UNITS:	NOTES
					25	Encountered auger refusal @ 25.0		

BOREHOLE WATER LEVEL DATA					
DATE					
TIME					
GWL					
CASING DEPTH					

Delta Environmental Consultants, Inc.

PROJECT NAME/LOCATION	PROJECT NUMBER SC-92-105	BORING NUMBER MW-8	SHEET 1 OF 2
SPELCO Hansing, NC	CONTRACTOR Geologic Exploration	DRILLING METHOD HSA	
	DRILLER Mark	DRILLING RIG Mobile B-57	
	START 9-27-93	COMPLETED 9-27-93	
LAND OWNER United Chemi-Con	SURFACE ELEVATION	LOGGED BY REP	REVIEWED BY

TIME	SAMPLE NUMBER	BLOW COUNTS	SAMPLE INTERVAL (IN)	SAMPLE RECOVERY (IN)	DEPTH SCALE 1" =	DESCRIPTION OF MATERIALS AND CONDITIONS	CONTAMINANT OBSERVATIONS INSTRUMENT: OVA UNITS: PPM	NOTES
	1	3 2 3			5	micaceous SM-SP, Tan and grayish brown silty fine to med. SAND	0	
	2	4 4 5			10	SM-SP, with relict foliation.	0	
	3	4 5 3			15	SM-SP, as above.	0	
	4	5 7 8			20	SM-SP, as above	0	

BOREHOLE WATER LEVEL DATA					
DATE					
TIME					
WL					
CASING DEPTH					

Delta Environmental Consultants, Inc.

PROJECT NAME/LOCATION	PROJECT NUMBER	BORING NUMBER MW-8	SHEET 2 OF 2
	CONTRACTOR	DRILLING METHOD	
	DRILLER	DRILLING RIG	
	START	COMPLETED	
AND OWNER	SURFACE ELEVATION	LOGGED BY	REVIEWED BY

SAMPLE NUMBER	BLOW COUNTS	SAMPLE INTERVAL (IN)	SAMPLE RECOVERY (IN)	DEPTH SCALE 1" =	DESCRIPTION OF MATERIALS AND CONDITIONS	CONTAMINANT OBSERVATIONS INSTRUMENT: OVA UNITS: ppm	NOTES
5	4 5 7			25	SM-SP, as above	0	
6	4 10 25			30	SM-SP, as above.		
7	5 12 50/4"			35	SM-SP, as above with quartz fragments.		
					Bottom of borehole @ 35.0'		

BOREHOLE WATER LEVEL DATA					
DATE					
TIME					
GWL					
CASING DEPTH					

Delta Environmental Consultants, Inc.

50-42-

PROJECT NAME/LOCATION	PROJECT NUMBER 105	BORING NUMBER MW-9	SHEET	OF 2
SPELCO Lansing, NC	CONTRACTOR Geocon Exploration	DRILLING METHOD HSA		
	DRILLER Mark	DRILLING RIG Mobile B-57		
	START 9-27-93	COMPLETED 9-27-93		
LAND OWNER United Chemi-Con	SURFACE ELEVATION	LOGGED BY REP	REVIEWED BY	

SAMPLE TYPE	SAMPLE NUMBER	BLOW COUNTS	SAMPLE INTERVAL (IN)	SAMPLE RECOVERY (IN)	DEPTH SCALE 1" =	DESCRIPTION OF MATERIALS AND CONDITIONS	CONTAMINANT OBSERVATIONS INSTRUMENT: OVA UNITS: PPM	NOTES
					5			
	1	7 11 2			10	SM-SP, black and brown silty fine SAND with rock fragment Possible fill	0	
					15			
	2	NR			20	ML, reddish brown fine sandy SILT with relict mineral foliation. Moist to wet	0	

BOREHOLE WATER LEVEL DATA

DATE					
TIME					
GWL					
CASING DEPTH					

Delta Environmental Consultants, Inc.

ROJECT NAME/LOCATION	PROJECT NUMBER	BORING NUMBER MW-9	SHEET 2 OF 2
	CONTRACTOR	DRILLING METHOD	
	DRILLER	DRILLING RIG	
	START	COMPLETED	
AND OWNER	SURFACE ELEVATION	LOGGED BY	REVIEWED BY

TYPE	SAMPLE NUMBER	BLOW COUNTS	SAMPLE INTERVAL (IN)	SAMPLE RECOVERY (IN)	DEPTH SCALE 1" =	DESCRIPTION OF MATERIALS AND CONDITIONS	CONTAMINANT OBSERVATIONS INSTRUMENT: UNITS:	NOTES
					25			
S	3	5 3 4			30	ML, as above. saturated	0	
					35	Bottom of borehole @ 30'		
					40			

BOREHOLE WATER LEVEL DATA					
ATE					
ME					
WL					
SING PTH					

Delta Environmental Consultants, Inc.

APPENDIX C

RISK BASED CONCENTRATIONS

RISK BASED CONCNETRATIONS
SOIL
SPELCO, LANSING, N.C.
DELTA PROJECT NO. 50-92-105.22

SOIL, RESIDENTIAL, NON-CARCINOGEN (based on childhood exposure only)

$$RBC = \frac{THQ * RfDo * BWC * ATn}{EFr * EDc * \frac{IRSc}{1E\,06}}$$

RBC	= Risk Based Concentration			
THQ	= Target Hazard Quotient	1	(corresponds to fixed risk level of 10^-6)	
BWC	= Body Weight, Age 1 - 6	15	KG	
ATn	= Averaging Time, Non-carcinogens	2190	DAYS	
EFr	= Exposure Frequency	350	DAYS	
EDc	= Exposure Duration, Age 1 - 6	6	YEARS	
IRSc	= Soil Ingestion, Age 1 - 6	200	MG/D	
RfDo	= Reference Dose, Oral	2.90	MG/KG/D	Aluminum
		0.0003	MG/KG/D	Arsenic
		0.07	MG/KG/D	Barium
		0.0005	MG/KG/D	Cadmium
		0.005	MG/KG/D	Chromium, VI

RESULTS:

Aluminum	=	226821	MG/KG
Arsenic	=	23	MG/KG
Barium	=	5475	MG/KG
Cadmium	=	39	MG/KG
Chromium, VI	=	391	MG/KG

REFERENCE: EPA REGION III RISK-BASED CONCENTRATION TABLES, MAY 10, 1993

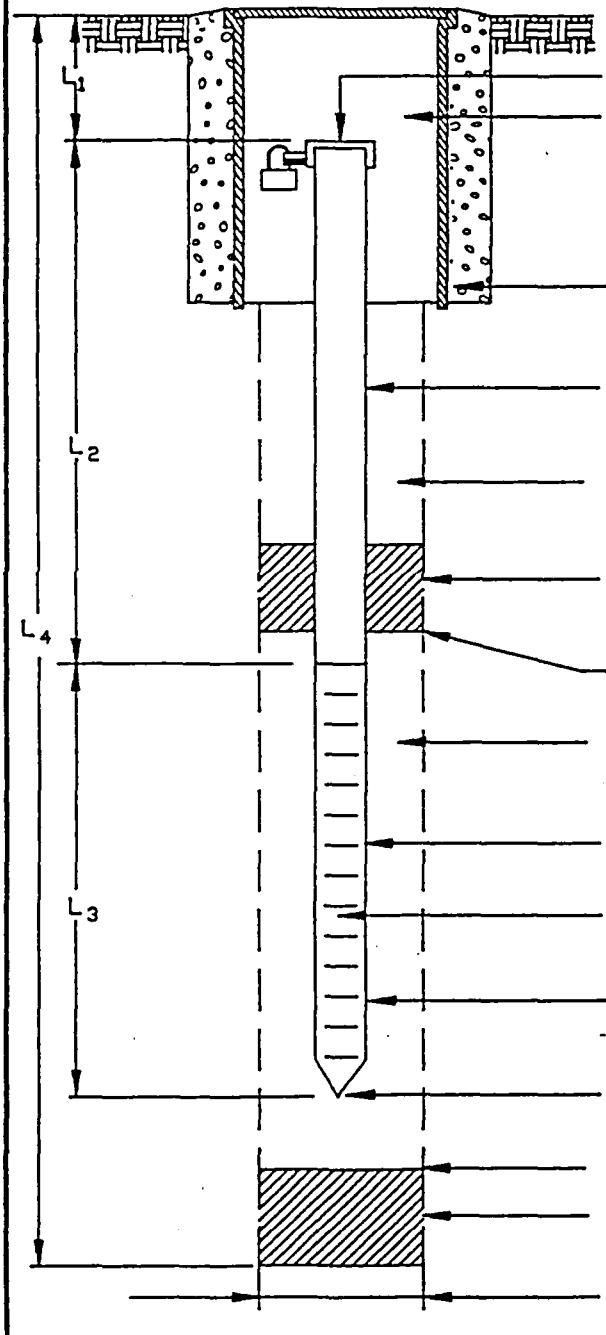
INSTALLATION OF FLUSH GRADE MONITORING WELL

PROJECT: Spelco/Lansing, NC

MONITORING WELL NO. MW-8

JOB NO. 50-92-105.22

TOP OF RISER ELEVATION: _____



WATER-TIGHT CAP	
FLUSH GRADE WELL CONSTRUCTION	
DIAMETER & MATERIAL	8" Steel
TOTAL LENGTH	8"
LENGTH ABOVE GROUND	Flush
THICKNESS & TYPE OF SEAL	8" Concrete
DIAMETER, MATERIAL & JOINT TYPE OF RISER PIPE	2"PVC Flush Threaded
TYPE OF BACKFILL AROUND RISER	Neat Cement Grout
THICKNESS & TYPE OF SEAL	2' Bentonite
DISTANCE OF FILTER SAND ABOVE TOP OF SCREEN	2'
TYPE OF FILTER AROUND SCREEN	Fine Sand
MONITORING WELL MATERIAL	PVC
SCREEN GAUGE OR SIZE OF OPENING (SLOT SIZE)	0.010"
DIAMETER & LENGTH OF SCREEN	2" x 15'
DEPTH TO THE BOTTOM OF MONITORING WELL	37'
DEPTH TO BOTTOM OF FILTER SAND	38'
THICKNESS & TYPE OF SEAL	N/A
DIAMETER OF BOREHOLE	8"

L_1 = _____ FT
L_2 = 22.0 FT
L_3 = 15.0 FT
L_4 = 37.0 FT

MONITORING WELL WATER LEVEL MEASUREMENTS		
DATE	TIME	WATER LEVEL *

(*) DEPTH BELOW TOP OF RISER BOX _____

INSTALLATION COMPLETED:
DATE: 9-27-93
TIME: 1200

Delta Environmental Consultants, Inc.