



April 10, 2009

Mr. Randy Nattis  
On-Scene Coordinator  
U.S. Environmental Protection Agency, Region 4  
Atlanta Federal Center  
61 Forsyth Street SW  
Atlanta, GA 30303-3104

**Subject: Draft Emergency Response Letter Report  
Railroad Street Drum  
Haralson, Coweta County, Georgia  
EPA Contract No. EP-W-05-054  
TDD No. TTEMI-05-001-0092**

Dear Mr. Nattis:

The Tetra Tech EM Inc. (Tetra Tech) Superfund Technical Assessment and Response Team (START) is submitting this letter report summarizing emergency response activities that were conducted at the Railroad Street Drum site in Haralson, Coweta County, Georgia from March 13 through 17, 2009. Tetra Tech START was tasked to prepare a site-specific health and safety plan; conduct air monitoring and multimedia sampling, including laboratory procurement; provide written and photographic documentation of response activities; and prepare draft and final letter reports summarizing response activities. Appendix A provides figures illustrating the site location and layout. Appendix B contains tables that summarize the containers identified at the site during response activities as well as unvalidated analytical results for samples collected. Appendix C provides a photographic log of response activities. Appendix D contains a copy of the Tetra Tech START logbook notes. Appendix E is a table of witnesses for personnel involved in response activities. Attachment 1 provides a copy of the unvalidated laboratory analytical data package for samples collected during response activities.

## **BACKGROUND**

The Railroad Street Drum site is a former cotton mill facility situated to the northwest of the intersection of Main Street and Line Creek Road in Haralson, Georgia (see Figure 1 of Appendix A). According to the property owner, the cotton mill has been inactive for approximately 30 years. On February 6, 2009 representatives from the Georgia Environmental Protection Division (EPD) received an anonymous complaint concerning three large above-ground storage tanks (AST) located adjacent to a storage building at 17 Railroad Street in Haralson, Georgia. According to the complainant, the ASTs appeared to be leaking and killing vegetation. The complainant also indicated that numerous drums were located in the area to the east of and across the railroad tracks from 17 Railroad Street.

A subsequent inspection conducted by EPD documented numerous containers at the site and indicated the presence of various pesticides, insecticides, and herbicides as well as lead-acid batteries and drums reportedly containing used oil. Stressed vegetation was also documented in the vicinity of the ASTs. Based on the inspection and discussions with the property owner, EPD issued a notice of violation to the property owner, which required further characterization and disposal of materials at the site. However, further inspections by EPD representatives indicated no action was taken by the property owner and assistance from EPA Region 4 was requested.

## EMERGENCY RESPONSE ACTIVITIES

On March 13, 2009, EPA and Tetra Tech START mobilized to the site and met with EPD and the property owner to conduct further assessment of site conditions. According to the property owner, former cotton mill activities that occurred at the site included the mixing of liquid fertilizers with potash, nitrogen, and phosphorous for field application as well as the harvesting and processing of cotton and grain. EPA, Tetra Tech START, and EPD toured the facility which included two general areas (see Figure 2 of Appendix A):

- **17 Railroad Street:** This area, located west of the railroad tracks, included three ASTs, two of which were each approximately 5,000-gallons in size and one of which was approximately 3,000-gallons in size. In addition, the building at this area was reportedly leased by the property owner to a tenant for storage purposes.
- **Former Cotton Mill:** This area includes seven buildings and other ancillary structures used during former cotton mill activities.

During the tour, air monitoring was conducted by Tetra Tech START using a MultiRAE five-gas meter, including a photoionization detector, to measure concentrations of volatile organic compounds (VOC), oxygen, hydrogen sulfide, carbon monoxide, and lower explosive limit. A TVA 1000 with a flame ionization was also used to measure concentrations of VOCs. Air monitoring results indicated no readings above background levels for these parameters. The following buildings, which are illustrated on Figure 2 of Appendix A, were identified and inspected at the former cotton mill:

- **Building 1:** This building, which was in deteriorated condition, contained approximately 42 drums as well as other small containers. Most of the drums were determined to be empty, but label information indicated that they were used to store various pesticides, including toxaphene and methyl parathion.
- **Building 2:** This building, which was reportedly used as a fertilizer shed, contained approximately 23 drums as well as various bags of insecticide and other small containers. The drums were determined to be empty, but various bags containing insecticide were identified. Label information indicated that containers in this building were used to store various pesticides, insecticides, and fungicides, including toxaphene and methyl parathion. According to available information, the northeastern portion of Building 2 was also formerly used to wash drums containing pesticides.
- **Building 3:** This building, which reportedly housed the cotton gin and an office area, contained 20 to 30 lead-acid batteries and five drums as well as other small containers. Label information indicated that these containers were used to store various materials, including liquid steam cleaner liquid seed disinfectant. In addition, EPD observed that several drums of used oil, which were stored outside the northwest corner of Building 3 during a previous inspection, had been removed. The property owner stated that a friend had removed the oil and drums, but he had no documentation of their disposal.
- **Buildings 4, 5, and 6:** These buildings were not inspected by Tetra Tech START during response activities, but were reportedly void of containers.
- **Building 7:** This building, which was reportedly used in former bagging and seeding activities at the cotton mill, contained various items, including drums, bags, and other small containers. Label information indicated that these containers were used to store various pesticides, including sodium arsenite, captan, and dichlorodiphenyltrichloroethane (DDT). In addition, a bag of red powder was documented in this building and some of the powder was spread on the floor in

various locations of Building 7 as well as the storage building located at the 17 Railroad Street area.

- **Storage Building (17 Railroad Street):** This building contained various personal items stored by the tenant, including clothing. In addition, red powder similar to that observed in Building 7 was observed on the floor and near the entrance to the Storage Building.

Based on observations during the site tour, EPA and EPD informed the property owner that actions needed to be taken in order to conduct further characterization and assessment of site conditions and to arrange for the disposal of any hazardous materials from the site. However, the property owner claimed he was financially unable to do so during EPA's initial assessment activities, and as such, EPA mobilized Environmental Restoration LLC, the Emergency and Rapid Response Services (ERRS) contractor to the site on March 13, 2009. ERRS personnel began gathering drums and containers at the site, which were transferred to Building 7, where they were staged and inventoried. Building 7 was selected because it had a concrete floor and the structure was more secure and in relatively good condition. Table 1 of Appendix B provides an inventory of containers identified at the site and a brief summary is provided below:

- Approximately 82 drums and more than 100 small containers from Buildings 1, 2, and 3;
- Approximately 20 bags of insecticide (Sta-Green®) and one five-gallon fiber drum of fungicide (Chloroneb®) from Building 2, which were transferred to seven overpack drums; and,
- Approximately 20 lead-acid batteries from Building 3.

On March 17, 2009, ERRS procured a hydraulic man-lift to assess the content of the three ASTs identified at the 17 Railroad Street area. According to the property owner, the two 5,000-gallon ASTs were formerly used to mix liquid fertilizers while the 3,000-gallon AST was used as an "abort" tank to contain leftover fertilizer mixtures that were not used. The property owner also stated that a valve on one of the 5,000-gallon ASTs became stuck in the open position at one time and emptied the AST contents onto the ground. During response activities, the following observations were made regarding the ASTs:

- The two 5,000-gallon ASTs contained only residual material.
- The 3,000-gallon AST contained approximately 4 to 5 feet of a greenish-brown gel-like substance mixed with solid material.

Based on observations during response activities and available knowledge regarding chemicals formerly used at the site, EPA directed Tetra Tech START to collect the following samples, which are summarized in Table 2 of Appendix B:

- WS-01: Waste sample collected from a 30-gallon drum observed in Building 1.
- WS-02: Waste sample collected from the bag of red powder observed in Building 7.
- WS-03: Waste sample collected from a bag of Sta-Green® insecticide observed in Building 2.
- WS-04: Waste sample collected from the 3,000-gallon AST.
- WS-05: Waste sample collected from the fiber drum (labeled DDT) observed in Building 7.
- WS-06: Waste sample collected from the fiber drum (labeled Captan) observed in Building 7.
- S-01: Surface soil sample (5-point composite) collected from a small drainage path that runs from the northeast corner of Building 2 toward Building 1.
- S-02: Surface soil sample (5-point composite) collected from the floor inside Building 2 in the vicinity of drums labeled as containing toxaphene and methyl parathion. According to available information, the northeastern corner of Building 2 was formerly used to wash drums containing pesticides.

- S-03: Surface soil sample (5-point composite) collected from outside the northwest corner of Building 3, where drums reportedly containing used oil were previously stored.
- S-04: Surface soil sample (5-point composite) collected from the floor inside Building 1 at the southern end, where 55-gallon drums were stored.

Samples were submitted to Xenco Laboratories, Inc. in Norcross, Georgia for laboratory analyses, including VOCs; semivolatile organic compounds (SVOC); organochlorine pesticides; organophosphorus pesticides; triazine herbicides; chlorinated herbicides; N-methylcarbamates; Target Analyte List (TAL) metals, including mercury; total petroleum hydrocarbons gasoline range organics; polychlorinated biphenyls; and pH. Analytical results were compared to "EPA Removal Action Levels (RAL)" dated September 16, 2008. Table 3 of Appendix B provides a summary of analytes detected and highlights of the results area presented below:

- Waste samples WS-02 and WS-05 indicated the presence of pesticides at concentrations exceeding RALs, including 4,4-dichlorodiphenyldichlorethane (DDD), 4,4-dichlorodiphenyldichlorethylene (DDE), 4,4-DDT, aldrin, alpha-BHC, gamma-BHC (Lindane), and dieldrin.
- Soil sample S-01, which was collected from the small drainage path that runs from the northeastern corner of Building 2 towards Building 1 indicated the presence of arsenic at concentrations exceeding the RAL.
- Soil samples S-02, which was collected from inside Building 2, and S-04, which was collected from inside Building 1, indicated the presence of pesticides at concentrations exceeding RALs, including toxaphene, 4,4-DDT, and alpha-BHC.

Upon completion of sampling and stabilization activities, EPA, ERRS, and Tetra Tech START demobilized from site on March 17, 2009.

If you have any questions or need additional copies of this report, please contact me at (206) 300-0301.

Sincerely,



Brian Croft  
Tetra Tech START III Site Manager



Andrew F. Johnson  
Tetra Tech START III Program Manager

Enclosures (Six)

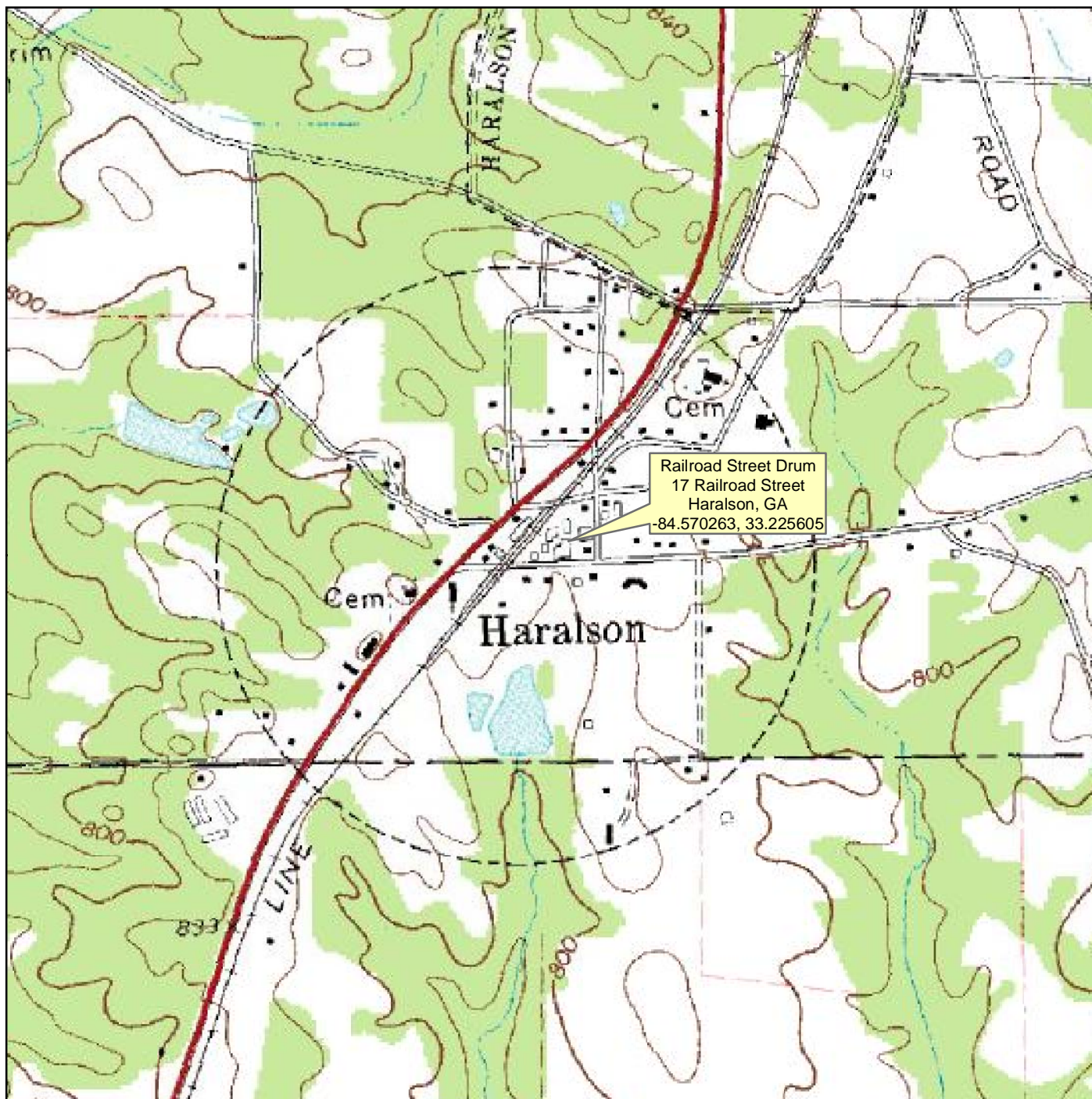
cc: Katrina Jones, EPA Project Officer  
Darryl Walker, EPA Alternate Project Officer  
Angel Reed, START III Document Control Coordinator



## **APPENDIX A**

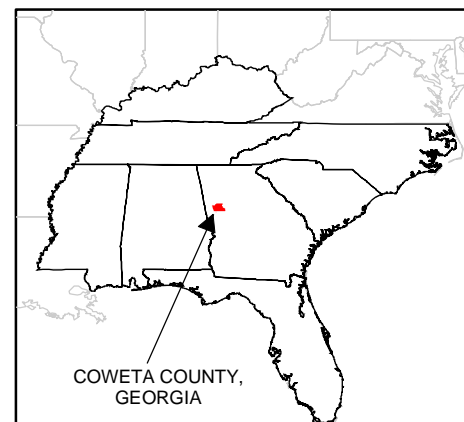
### **FIGURES**

(Two Pages)



0 500 1,000  
Feet  
1:12,000

MAP SOURCE:  
USGS, HARALSON, GA  
TOPOGRAPHIC QUADRANGLE, 1981



United States Environmental Protection Agency

RAILROAD STREET DRUM  
HARALSON,  
COWETA COUNTY,  
GEORGIA  
TDD No. TTEMI-05-001-0092

**FIGURE 1**  
**SITE LOCATION**







## LEGEND

- Soil Sampling Location (approximate)
- AST
- Silo
- Building (existing)
- Building (demolished)
- Road Edge
- Railroad Tracks

0 75 150  
1:1,800 Feet



Map Source:  
Aerial Photograph - GlobeXplorer 01/2007,  
0.3m Resolution.



United States Environmental Protection Agency

RAILROAD STREET DRUM  
HARALSON,  
COWETA COUNTY,  
GEORGIA  
TDD No. TTEMI-05-001-0092

**FIGURE 2**  
**SITE LAYOUT WITH**  
**SAMPLE LOCATIONS**



## **APPENDIX B**

### **TABLES**

(10 Pages)

**Table 1**  
**Railroad Street Drum**  
**Container Inventory**

Container ID	Type	Estimated Size	Estimated Percent Full	Container Description/Label Information	Photo ID
1-001	Steel	30	5	Kleen-O-Brite Globe Chemical Company - Washington & Olive Streets Decatur, GA Sampled as WS-01	IMG_1912
1-002	Steel	30	0	Kleen-O-Brite Globe Chemical Company - Washington & Olive Streets Decatur, GA	IMG_1913 IMG_1949
1-003	Steel	55	0	Momar, Inc. - Atlanta, GA	IMG_1914 IMG_1948 IMG_1959
1-004	Steel	30	0	Ceresan Industrial Seed Disinfectant Dupont - Wilmington, DE Methyl mercury 2,3 dihydroxypropyl mercantide, methyl mercury acetate	IMG_1915 IMG_1948
1-005	<b>THIS NUMBER WAS INADVERTENTLY SKIPPED</b>				
1-006	Steel	30	0	Lustre Wax - Heavy Duty Kem Manufacturing Corp - Tucker, GA	IMG_1916 IMG_1949
1-007	Steel	30	0	Lustre Wax - Heavy Duty Kem Manufacturing Corp - Tucker, GA	IMG_1917 IMG_1949
1-008	Steel	30	0	Lustre Wax - Heavy Duty Kem Manufacturing Corp - Tucker, GA	IMG_1918 IMG_1949
1-009	Steel	30	0	Lustre Wax - Heavy Duty Kem Manufacturing Corp - Tucker, GA	IMG_1919 IMG_1950
1-010	Steel	30	0	Lustre Wax - Heavy Duty Kem Manufacturing Corp - Tucker, GA	IMG_1920 IMG_1950
1-011	Steel	30	0	PolyFinish Globe Chemical Company	IMG_1921 IMG_1950
1-012	Steel	30	0	H-G Concentrate Kem Manufacturing Corp - Tucker, GA	IMG_1922 IMG_1950
1-013	Steel	30	0	Kleen-O-Brite Globe Chemical Company - Washington & Olive Streets Decatur, GA Sampled as WS-01	IMG_1923 IMG_1950 IMG_1953
1-014	Steel	55	0	Master Brand Insecticide -Tox M parathion Stevens Industries - Dawson, GA Toxaphene, methylparathion, xylene	IMG_1924 IMG_1951
1-015	Steel	55	0	Master Brand Insecticide -Tox M parathion Stevens Industries - Dawson, GA Toxaphene, methylparathion, xylene	IMG_1925 IMG_1951

**Table 1**  
**Railroad Street Drum**  
**Container Inventory**

Container ID	Type	Estimated Size	Estimated Percent Full	Container Description/Label Information	Photo ID
1-016	Steel	55	0	Triangle Chemicals - Macon, GA	IMG_1926 IMG_1951 IMG_1952
1-017	Steel	55	0	Woolfolk Chemical Works - Fort Valley, GA Toxaphene, methylparathion, aromatic petroleum derivative solvents	IMG_1927 IMG_1952
1-018	Steel	55	0	Master Brand Insecticide -Tox M parathion Stevens Industries - Dawson, GA Toxaphene, methylparathion, xylene	IMG_1928 IMG_1953
1-019	Steel	55	0	Master Brand Insecticide -Tox M parathion Stevens Industries - Dawson, GA Toxaphene, methylparathion, xylene	IMG_1929 IMG_1954
1-020	Steel	55	0	Master Brand Insecticide -Tox M parathion Stevens Industries - Dawson, GA Toxaphene, methylparathion, xylene	IMG_1930 IMG_1954
1-021	Steel	55	0	Super 3-Way Cotton Spray 4-2-1 Woolfolk Chemical Works - Fort Valley, GA Toxaphene, DDT, methylparathion, aromatic petroleum derivative solvent, xylene	IMG_1931 IMG_1954
1-022	Steel	55	0	Woolfolk Chemical Works - Fort Valley, GA <b>NO LABEL</b>	IMG_1932 IMG_1954
1-023	Steel	55	0	DDT-EC-3 Woolfolk Chemical Works - Fort Valley, GA DDT, xylene	IMG_1933 IMG_1955
1-024	Steel	55	0	DDT-EC-3 Woolfolk Chemical Works - Fort Valley, GA DDT, xylene	IMG_1934 IMG_1955
1-025	Steel	55	0	DDT-EC-3 Woolfolk Chemical Works - Fort Valley, GA DDT, xylene	IMG_1935 IMG_1955
1-026	Steel	55	0	Motox-63 Cotton Spray Woolfolk Chemical Works - Fort Valley, GA Toxaphene, methylparathion, aromatic petroleum derivative solvents	IMG_1936 IMG_1956
1-027	Steel	55	0	Super 3-Way Cotton Spray 4-2-1 Woolfolk Chemical Works - Fort Valley, GA Toxaphene, DDT, methylparathion, aromatic petroleum derivative solvent, xylene	IMG_1937 IMG_1956



**Table 1**  
**Railroad Street Drum**  
**Container Inventory**

Container ID	Type	Estimated Size	Estimated Percent Full	Container Description/Label Information	Photo ID
1-028	Steel	55	0	4-2 Toxaphene DDT Emulsifiable Concentrate Triangle Chemicals - Macon, GA Toxaphene, DDT, petroleum hydrocarbons	IMG_1938 IMG_1956
1-029	Steel	55	0	Master Brand Insecticide -Tox M parathion Stevens Industries - Dawson, GA Toxaphene, methylparathion, xylene	IMG_1939
1-030	Steel	55	0	Super 3-Way Cotton Spray 4-2-1 Woolfolk Chemical Works - Fort Valley, GA Toxaphene, DDT, methylparathion, aromatic petroleum derivative solvent, xylene	IMG_1940 IMG_1957
1-031	Steel	55	0	Super-Duper 6-2-1 Triangle Chemical Company - Macon, GA Toxaphene, methylparathion, xylene	IMG_1961
1-032	Steel	55	0	DDT Woolfolk Chemical Works - Fort Valley, GA	IMG_1962
1-033	Steel	55	0	Cotton Spray Woolfolk Chemical Works - Fort Valley, GA DDT, methylparathion, aromatic petroleum derivative, xylene	IMG_1963
1-034	Steel	55	0	Cotton Spray Woolfolk Chemical Works - Fort Valley, GA DDT, methylparathion, aromatic petroleum derivative, xylene	IMG_1964
1-035	Steel	30	0	Master Brand Cotton Spray - Emulsifiable Stevens Industries - Dawson, GA Toxaphene	IMG_1965
1-036	Steel	30	0	Master Brand Cotton Spray Stevens Industries - Dawson, GA DDT, methylparathion, toxaphene, xylene	IMG_1966
1-037	Steel	55	0	Emulsifiable DDT Concentrate Triangle Chemical Company - Macon, GA	IMG_1967
1-038	Steel	55	0	Super T-C Cotton Spray Triangle Chemical Company - Macon, GA Methylparathion, endrin, DDT, aromatic petroleum hydrocarbons	IMG_1968
1-039	Steel	55	0	Tox-M Parathion Stevens Industries - Dawson, GA	IMG_1969
1-040	Steel	55	0	Tox-M Parathion Stevens Industries - Dawson, GA	IMG_1970

**Table 1**  
**Railroad Street Drum**  
**Container Inventory**

Container ID	Type	Estimated Size	Estimated Percent Full	Container Description/Label Information	Photo ID
1-041	Steel	55	0	Tox-M Parathion Stevens Industries - Dawson, GA	IMG_1971
1-042	Steel	55	0	Motox-63 Cotton Spray Woolfolk Chemical Works - Fort Valley, GA Toxaphene, methylparathion, aromatic petroleum derivative solvents	IMG_2019
1-043	Steel	55	10	California Chemical Company - Richmond, CA <b>NO LABEL</b>	IMG_2020
2-001	Steel	55	0	Super Duper 6-2-1 Triangle Chemical Company - Macon, GA Toxaphene, methylparathion, xylene,	IMG_1972
2-002	Steel	55	0	Super Duper 6-2-1 Triangle Chemical Company - Macon, GA Toxaphene, methylparathion, xylene,	IMG_1973
2-003	Steel	55	0	Super Duper 6-2-1 Triangle Chemical Company - Macon, GA Toxaphene, methylparathion, xylene,	IMG_1974
2-004	Steel	55	0	Mr. 4x4 Triangle Chemical Company - Macon, GA Toxaphene, methylparathion, xylene	IMG_1975
2-005	Steel	55	0	Super Duper 6-2-1 Triangle Chemical Company - Macon, GA Toxaphene, methylparathion, xylene,	IMG_1976 IMG_1993
2-006	Steel	55	0	Master Brand Insecticide -Tox M parathion Stevens Industries - Dawson, GA Toxaphene, methylparathion, xylene	IMG_1977
2-007	Steel	55	0	Super Duper 6-2-1 Triangle Chemical Company - Macon, GA Toxaphene, methylparathion, xylene,	IMG_1978
2-008	Steel	55	0	Super Duper 6-2-1 Triangle Chemical Company - Macon, GA Toxaphene, methylparathion, xylene,	IMG_1979
2-009	Steel	55	0	Mr. 4x4 Triangle Chemical Company - Macon, GA Toxaphene, methylparathion, xylene	IMG_1980

**Table 1**  
**Railroad Street Drum**  
**Container Inventory**

Container ID	Type	Estimated Size	Estimated Percent Full	Container Description/Label Information	Photo ID
2-010	Steel	55	0	Super Duper 6-2-1 Triangle Chemical Company - Macon, GA Toxaphene, methylparathion, xylene,	IMG_1981
2-011	Steel	55	0	Super T-Spray Triangle Chemical Company - Macon, GA Methylparathion, endrin, DDT, aromatic petroleum hydrocarbons	IMG_1982
2-012	Steel	55	0	Master Brand Insecticide -Tox M parathion Stevens Industries - Dawson, GA Toxaphene, methylparathion, xylene	IMG_1983
2-013	Steel	55	0	Super T-Spray Triangle Chemical Company - Macon, GA Methylparathion, endrin, DDT, aromatic petroleum hydrocarbons	IMG_1984
2-014	Steel	55	0	Master Brand Insecticide -Tox M parathion Stevens Industries - Dawson, GA Toxaphene, methylparathion, xylene	IMG_1985
2-015	Steel	55	0	Master Brand Insecticide -Tox M parathion Stevens Industries - Dawson, GA Toxaphene, methylparathion, xylene	IMG_1986
2-016	Steel	55	0	Super Duper 6-2-1 Triangle Chemical Company - Macon, GA Toxaphene, methylparathion, xylene,	IMG_1987
2-017	Steel	55	0	Super Duper 6-2-1 Triangle Chemical Company - Macon, GA Toxaphene, methylparathion, xylene,	IMG_1988
2-018	Steel	55	0	Chem Nut 6-3 Cotton Spray Chem Nut Inc. - Albany, GA Toxophene, methylparathion, aromatic petroleum hydrocarbons	IMG_1989
2-019	Steel	55	0	Master Brand Insecticide -Tox M parathion Stevens Industries - Dawson, GA Toxaphene, methylparathion, xylene	IMG_1990
2-020	Steel	55	0	<b>NO LABEL</b> <b>SIMILAR IN APPEARANCE TO 2-018</b>	IMG_1991 IMG_2023
2-021	Steel	55	0	Insecticide Spray Methylparathion	IMG_1992 IMG_2023

**Table 1**  
**Railroad Street Drum**  
**Container Inventory**

Container ID	Type	Estimated Size	Estimated Percent Full	Container Description/Label Information	Photo ID
2-022	Overpack			Sta-Green®	IMG_2009
2-023	Overpack			Sta-Green®	IMG_2010
2-024	Fiber	5	75	Dupont Demosan 65N Chloroneb® fungicide	IMG_2011
2-025	Steel	30	0	<b><i>LABEL IS ILLEGIBLE</i></b>	IMG_2012
2-026	Overpack			Sta-Green®	IMG_2013
2-027	Overpack			Sta-Green®	IMG_2014 IMG_2022
2-028	Overpack			Sta-Green®	IMG_2015 IMG_2022
2-029	Overpack			Sta-Green®	IMG_2016 IMG_2023
3-001	Steel	55	0	Panogen Liquid Seed Disinfectant	IMG_2029
3-002	Steel	55	0	<b><i>NO LABEL</i></b>	IMG_2030
3-003	Steel	30	0	Liquid Steam Cleaner Southern Sanitary Company - Lafayette, AL	IMG_2031
3-004	Steel	20	0	Globe Chemical Company - Decatur, GA	IMG_2032
3-005	Steel	55	0	No label information available; similar in appearance to 3-002	IMG_2033
7-001	Steel	55	0	Sodium Arsenite - 40% Solution Woolfolk Chemical Works - Fort Valley, GA	IMG_1941 IMG_1957
7-002	Steel	30	0	Fail Safe Insecticide Madison	IMG_1945 IMG_1948 IMG_1959
7-003	Steel	55	0	Momar Inc.	IMG_1946 IMG_1960
7-004	Steel	30	0	Geresan Industrial Seed Disinfectant Dupont - Wilmington, DE Methyl mercury 2,3 dihydroxypropyl mercantide, methyl mercury acetate	IMG_1947 IMG_1958
7-005	Fiber	10	30	DDT 50% Sampled as WS-05	IMG_1801 IMG_2026 IMG_2027
7-006	Fiber	30	75	Captan, N-trichloromethylthio-4-cyclohexene-1,2 dicarboximide Sampled as WS-06	IMG_2024 IMG_2025

**Table 1**  
**Railroad Street Drum**  
**Container Inventory**

<b>Container ID</b>	<b>Type</b>	<b>Estimated Size</b>	<b>Estimated Percent Full</b>	<b>Container Description/Label Information</b>	<b>Photo ID</b>
7-007	Fiber	10	Unknown	Captan-Dieldrin Stauffer Chemical Company	IMG_1801 IMG_1802 IMG 2028
7-008	Fiber	10	Unknown	Captan-Dieldrin Stauffer Chemical Company	IMG_1801 IMG_1802 IMG 2028
7-009	Fiber	10	Unknown	Captan-Dieldrin Stauffer Chemical Company	IMG_1801 IMG_1802 IMG 2028

**Table 2**  
**Railroad Street Drum**  
**Sampling Locations**

Sample Identification	Location Description	Laboratory Analyses
<b>Waste Samples</b>		
WS-01	30-gallon drum formerly located inside Building 1; drum was labeled "Kleen-O-Brite"	VOCs, SVOC, Chlorinated Pesticides, OP Pesticides, Triazine Herbicides, N-Methylcarbamates, TAL Metals, pH
WS-02	Bag of red powder located in Building 7	VOCs, SVOC, Chlorinated Pesticides, OP Pesticides, Triazine Herbicides, N-Methylcarbamates, TAL Metals, pH
WS-03	Bag of Sta-Green® insecticide formerly stored in Building 2	VOCs, SVOC, Chlorinated Pesticides, OP Pesticides, Triazine Herbicides, N-Methylcarbamates, TAL Metals, pH
WS-04	3,000-gallon aboveground storage tank located at 17 Railroad Street	SVOCs, Chlorinated Pesticides, OP Pesticides, Triazine Herbicides, N-Methylcarbamates, TAL Metals, pH
WS-05	Fiber drum labeled "50% DDT" located in Building 7	SVOCs, Chlorinated Pesticides, OP Pesticides, Triazine Herbicides, N-Methylcarbamates, TAL Metals, pH
WS-06	Fiber drum labeled "Captan" located in Building 7	SVOCs, Chlorinated Pesticides, OP Pesticides, Triazine Herbicides, N-Methylcarbamates, TAL Metals, pH
<b>Surface Soil Samples (5-point composite)</b>		
S-01	Drainage path outside the northeast corner of Building 2 (Fertilizer Shed) leading toward Building 1	VOCs, SVOC, Chlorinated Pesticides, OP Pesticides, Triazine Herbicides, N-Methylcarbamates, TAL Metals, pH
S-02	Floor inside Building 2 in the vicinity drums that formerly contained toxaphene and methyl parathion drums were stored	VOCs, SVOC, Chlorinated Pesticides, OP Pesticides, Triazine Herbicides, N-Methylcarbamates, TAL Metals, pH
S-03	Outside the northwest portion of Building 3, where drums reportedly containing used oil were formerly stored	SVOCs, Chlorinated Pesticides, OP Pesticides, Triazine Herbicides, N-Methylcarbamates, TAL Metals, pH, GRO
S-04	Floor inside Building 1 where drums that formerly contained toxaphene and methyl parathion were stored	SVOCs, Chlorinated Pesticides, OP Pesticides, Triazine Herbicides, N-Methylcarbamates, TAL Metals, pH

Notes

GRO Gasoline-range organics  
OP Organophosphate  
S Soil sample  
SVOC Semivolatile organic compound  
TAL Target analyte list  
VOC Volatile organic compound  
WS Waste sample



**Table 3**  
**Railroad Street Drum Response**  
**Summary of Analytes Detected**

	Waste Samples						Soil Samples				
	WS-01	WS-02	WS-03	WS-04	WS-05	WS-06	S-01	S-02	S-03	S-04	EPA Region 4 Removal Action Level
<b>Pesticides</b>	<i>mg/L</i>	<i>mg/kg</i>	<i>mg/kg</i>	<i>mg/kg</i>	<i>mg/kg</i>	<i>mg/kg</i>	<i>mg/kg</i>	<i>mg/kg</i>	<i>mg/kg</i>	<i>mg/kg</i>	<i>mg/kg</i>
Aldrin	ND	ND	ND	ND	5.84	ND	ND	ND	ND	ND	2.86
Dieldrin	ND	2.88	ND	ND	ND	ND	ND	ND	ND	ND	2.03
4,4-DDD	ND	ND	ND	ND	16,700	ND	ND	20	ND	ND	202
4,4-DDE	ND	0.154	ND	ND	15,300	ND	0.046	27	0.278	ND	143
4,4-DDT	ND	0.341	ND	548	46,000	149	1.27	3,390	3.11	ND	172
Heptachlor	ND	ND	8.05	ND	ND	ND	ND	ND	ND	ND	10.8
Gamma-chlordane	ND	ND	6.72	ND	ND	ND	ND	ND	ND	ND	162
Alpha-BHC	ND	ND	0.169	ND	8.99	ND	ND	0.093	ND	37.2	7.71
Beta-BHC	ND	ND	ND	ND	ND	ND	ND	0.228	ND	ND	27
Delta-BHC	ND	ND	ND	ND	ND	ND	ND	0.413	ND	ND	NE
Endrin	ND	ND	ND	ND	ND	ND	ND	67.6	ND	ND	187
Gamma-BHC (Lindane)	ND	ND	0.487	ND	2.62	ND	ND	0.219	ND	ND	51.6
Methoxychlor	ND	ND	ND	ND	ND	40.9	ND	ND	ND	ND	3,120
Toxaphene	ND	ND	ND	ND	ND	ND	ND	462	13.6	67,100	44.1
<b>Organophosphorous Pesticides</b>	<i>mg/L</i>	<i>mg/kg</i>	<i>mg/kg</i>	<i>mg/kg</i>	<i>mg/kg</i>	<i>mg/kg</i>	<i>mg/kg</i>	<i>mg/kg</i>	<i>mg/kg</i>	<i>mg/kg</i>	<i>mg/kg</i>
Atrazine	ND	ND	ND	21.4	ND	ND	ND	ND	ND	ND	211
Azinphos-ethyl	ND	ND	ND	ND	ND	ND	ND	5.08	ND	ND	NE
Parathion, ethyl	ND	ND	ND	ND	ND	ND	ND	0.797	ND	126	NE
Parathion, methyl	ND	ND	ND	ND	ND	ND	ND	ND	ND	74.1	156
<b>Carbamates</b>	<i>mg/L</i>	<i>mg/kg</i>	<i>mg/kg</i>	<i>mg/kg</i>	<i>mg/kg</i>	<i>mg/kg</i>	<i>mg/kg</i>	<i>mg/kg</i>	<i>mg/kg</i>	<i>mg/kg</i>	<i>mg/kg</i>
3-Hydroxycarbofuran	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.01	3,120
Carbaryl	ND	ND	ND	0.184	ND	0.777	ND	0.576	ND	0.001	62,400
Methiocarb	ND	ND	ND	0.003	ND	ND	ND	ND	ND	0.003	NE
<b>TAL Metals</b>	<i>mg/L</i>	<i>mg/kg</i>	<i>mg/kg</i>	<i>mg/kg</i>	<i>mg/kg</i>	<i>mg/kg</i>	<i>mg/kg</i>	<i>mg/kg</i>	<i>mg/kg</i>	<i>mg/kg</i>	<i>mg/kg</i>
Aluminum	ND	ND	4,080	4,000	2,200	951	2,420	10,000	13,900	ND	791,000
Arsenic	0.011	ND	ND	ND	ND	ND	48.6	15.3	ND	18.6	39
Barium	ND	ND	63.4	ND	ND	ND	43.5	127	75.7	21.8	164,000
Beryllium	ND	ND	0.608	3.34	ND	ND	ND	0.339	ND	ND	1,610
Cadmium	ND	0.944	2.35	14.2	ND	ND	3.65	3.19	3.12	11.8	729
Calcium	ND	ND	142,000	ND	826	8,660	ND	21,800	1,830	1,240	NE
Chromium	ND	ND	21	230	ND	6.24	10	15.8	17.7	25.9	27,600
Cobalt	ND	ND	2.53	2.49	ND	ND	3.87	7.27	5.03	8.87	244
Copper	ND	ND	367	ND	ND	ND	14.6	79.8	12.8	36.5	NE

**Table 3**  
**Railroad Street Drum Response**  
**Summary of Analytes Detected**

	Waste Samples						Soil Samples				
	WS-01	WS-02	WS-03	WS-04	WS-05	WS-06	S-01	S-02	S-03	S-04	EPA Region 4 Removal Action Level
Iron	2.73	9,960	5,500	19,000	ND	623	22,600	22,200	19,700	119,000	575,000
Lead	ND	5.55	18.6	ND	17.5	ND	141	154	51.3	50.3	NE
Magnesium	ND	ND	13,800	1,440	ND	3,370	ND	3,760	2,270	1,690	NE
Manganese	0.394	31.9	460	94.1	ND	12.3	252	372	383	397	18,000
Nickel	ND	ND	6.74	ND	ND	7.48	ND	11.4	ND	19.2	16,400
Potassium	8.42	18,000	48,100	27,100	ND	ND	ND	10,800	2,260	10,800	NE
Sodium	403	116,000	4,920	899	8,340	2,260	ND	3,000	ND	ND	NE
Thallium	0.003	ND	ND	ND	ND	ND	ND	ND	ND	ND	53.2
Vanadium	ND	ND	21.2	38.3	11.3	4.64	8.47	21.4	37.8	3.11	4,140
Zinc	1.51	ND	453	331	ND	ND	1,390	377	336	232	246,000
Mercury	ND	0.427	ND	0.0827	0.0946	0.1853	0.2471	0.2328	0.1297	3.458	20
<b>VOCs</b>	<i>mg/L</i>	<i>mg/kg</i>	<i>mg/kg</i>	<i>mg/kg</i>	<i>mg/kg</i>	<i>mg/kg</i>	<i>mg/kg</i>	<i>mg/kg</i>	<i>mg/kg</i>	<i>mg/kg</i>	<i>mg/kg</i>
Acetone	ND	ND	ND	ND	ND	ND	0.06	0.28	0.18	ND	474,000
Naphthalene	1.41	ND	ND	ND	ND	ND	ND	ND	ND	ND	389
p-Isopropyltoluene	0.179	ND	ND	ND	ND	ND	ND	ND	ND	ND	NE
<b>SVOCs</b>	<i>mg/L</i>	<i>mg/kg</i>	<i>mg/kg</i>	<i>mg/kg</i>	<i>mg/kg</i>	<i>mg/kg</i>	<i>mg/kg</i>	<i>mg/kg</i>	<i>mg/kg</i>	<i>mg/kg</i>	<i>mg/kg</i>
1,2-Diphenylhydrazine	ND	120	ND	ND	ND	ND	ND	ND	ND	ND	6.07
4-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	88	ND	ND	NE
bis(2-Ethylhexyl)phthalate	ND	<b>39,000</b>	ND	ND	ND	ND	ND	ND	ND	ND	3,470
Diethyl phthalate	ND	160	ND	ND	ND	ND	ND	ND	ND	ND	499,000
di-n-Butyl phthalate	ND	55	ND	ND	ND	ND	ND	ND	ND	ND	NE
di-n-Octyl phthalate	ND	120	ND	ND	ND	ND	ND	ND	ND	ND	NE
<b>pH</b>											
pH	8.13	7.22	9.5	NA	NA	NA	5.48	5.03	NA	NA	NE

Notes

- bold** Indicates concentration exceeding EPA Region 4 Removal Action Level for Residential Soil, as identified in the "Removal Action Level Master Table" dated 9/16/2008
- mg/L Milligram per liter
- mg/kg Milligram per kilogram
- NA Not analyzed
- ND Not detected above laboratory reporting limit
- NE None established

**APPENDIX C**  
**PHOTOGRAPHIC LOG**  
(20 Pages)



**OFFICIAL PHOTOGRAPH NO. 1**  
**U.S. ENVIRONMENTAL PROTECTION AGENCY**

**TDD Number:** TTEMI-05-001-0092

**Location:** Railroad Street Drum

**Orientation:** North

**Date:** March 13, 2009

**Photographer:** Brian Croft, Tetra Tech

**Witness:** Brandon Foskey, Tetra Tech

**Subject:** Building and three aboveground storage tanks (AST) located at 17 Railroad Street. According to the property owner, the building was leased to a tenant for storage. The two taller ASTs (right and center) were determined to be empty while the smallest AST (left) contained a mixture of solids and gel-like material and was filled to just below the rust line visible in the photograph. Waste sample WS-04 was collected from the shorter AST.





**OFFICIAL PHOTOGRAPH NO. 2**  
**U.S. ENVIRONMENTAL PROTECTION AGENCY**

**TDD Number:** TTEMI-05-001-0092

**Location:** Railroad Street Drum

**Orientation:** Northeast

**Date:** March 13, 2009

**Photographer:** Brian Croft, Tetra Tech

**Witness:** Brandon Foskey, Tetra Tech

**Subject:** Former cotton mill facility located east of the railroad tracks. Buildings 6 and 7 as well as storage silos are visible in the photograph.







**OFFICIAL PHOTOGRAPH NO. 3**  
**U.S. ENVIRONMENTAL PROTECTION AGENCY**

**TDD Number:** TTEMI-05-001-0092

**Location:** Railroad Street Drum

**Orientation:** Southeast

**Date:** March 13, 2009

**Photographer:** Brian Croft, Tetra Tech

**Witness:** Brandon Foskey, Tetra Tech

**Subject:** Building 1 in the background with the northeastern portion of the Fertilizer Shed (Building 2) visible in the right side of the photograph. Surface soil sample S-01 was collected from a small drainage pathway leading from the northeastern corner of Building 2 and sloping toward Building 1.







**OFFICIAL PHOTOGRAPH NO. 4**  
**U.S. ENVIRONMENTAL PROTECTION AGENCY**

**TDD Number:** TTEMI-05-001-0092

**Location:** Railroad Street Drum

**Orientation:** East

**Date:** March 13, 2009

**Photographer:** Brian Croft, Tetra Tech

**Witness:** Brandon Foskey, Tetra Tech

**Subject:** Building 1 in the background with the northeastern portion of the Fertilizer Shed (Building 2) visible in the right side of the photograph. Waste sample WS-01 was collected from a drum formerly stored inside Building 1. Surface soil sample S-01 was collected from a small drainage pathway (visible in photograph) leading from the northeastern corner of Building 2 and sloping toward Building 1. According to the tenant at the 17 Railroad Street location, the northeastern portion of Building 2 was formerly used to wash and drain drums.





**OFFICIAL PHOTOGRAPH NO. 5**  
**U.S. ENVIRONMENTAL PROTECTION AGENCY**

<b>TDD Number:</b>	TTEMI-05-001-0092	<b>Location:</b>	Railroad Street Drum
<b>Orientation:</b>	Southeast	<b>Date:</b>	March 13, 2009
<b>Photographer:</b>	Brian Croft, Tetra Tech	<b>Witness:</b>	Brandon Foskey, Tetra Tech
<b>Subject:</b>	Drums located in the southeastern corner of Building 1. Drums were stored haphazardly (i.e. double-stacked) and the structure was in poor condition.		







**OFFICIAL PHOTOGRAPH NO. 6**  
**U.S. ENVIRONMENTAL PROTECTION AGENCY**

**TDD Number:** TTEMI-05-001-0092      **Location:** Railroad Street Drum Response  
**Orientation:** South      **Date:** March 13, 2009  
**Photographer:** Brandon Foskey, Tetra Tech      **Witness:** Brian Croft, Tetra Tech  
**Subject:** Tetra Tech START collecting waste sample WS-01 from a drum located in Building 1.





**OFFICIAL PHOTOGRAPH NO. 7**  
**U.S. ENVIRONMENTAL PROTECTION AGENCY**

**TDD Number:** TTEMI-05-001-0092

**Location:** Railroad Street Drum

**Orientation:** East

**Date:** March 13, 2008

**Photographer:** Brian Croft, Tetra Tech

**Witness:** Brandon Foskey, Tetra Tech

**Subject:** Entrance from Main Street to Building 2 (Fertilizer Shed).





**OFFICIAL PHOTOGRAPH NO. 8**  
**U.S. ENVIRONMENTAL PROTECTION AGENCY**

**TDD Number:** TTEMI-05-001-0092

**Location:** Railroad Street Drum

**Orientation:** North

**Date:** March 13, 2009

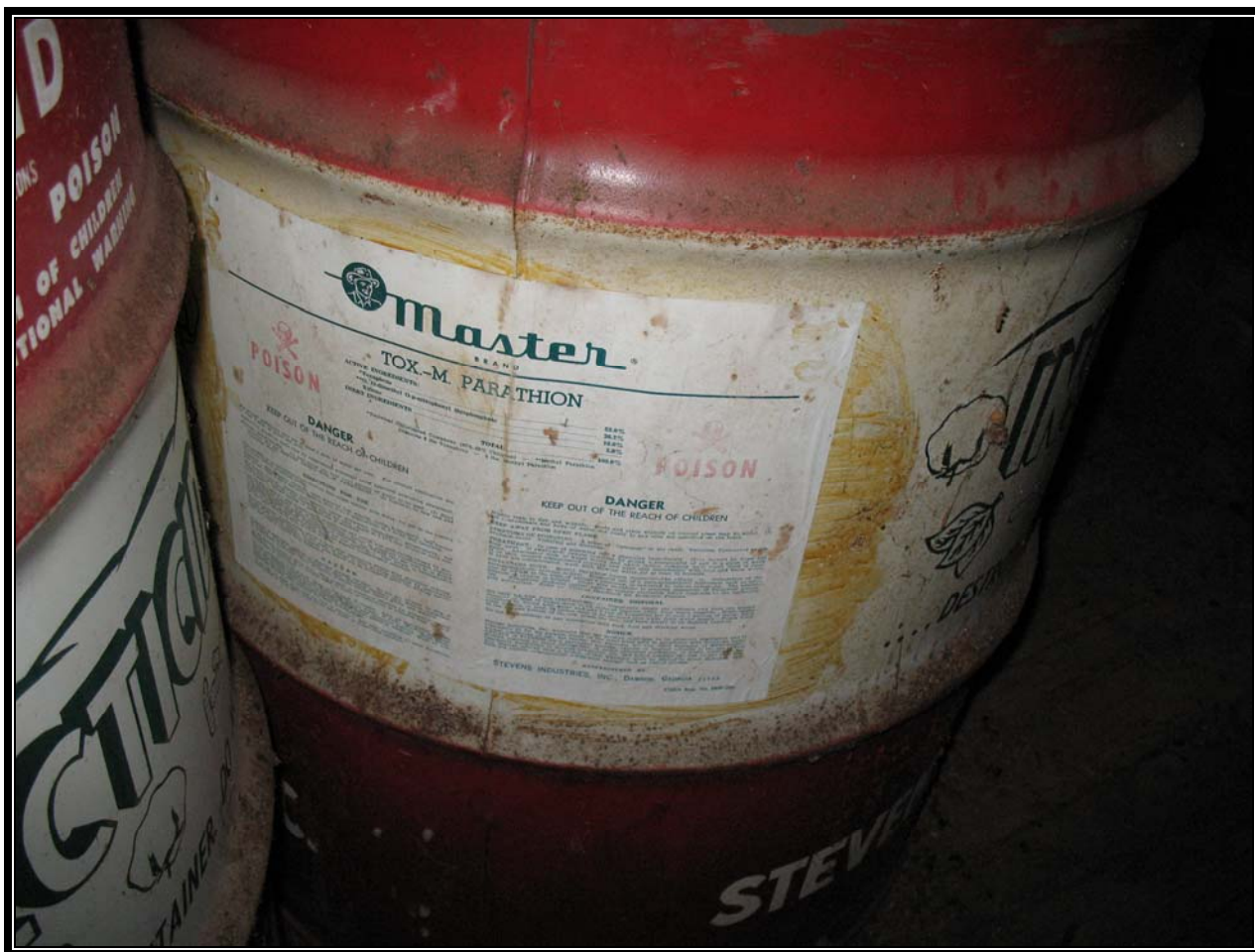
**Photographer:** Brian Croft, Tetra Tech

**Witness:** Brandon Foskey, Tetra Tech

**Subject:** Various drums located in the northeastern portion of Building 2 (Fertilizer Shed). Drums found in this building were empty but labels indicated that many formerly contained a mixture of toxaphene and methyl parathion.







**OFFICIAL PHOTOGRAPH NO. 9**  
**U.S. ENVIRONMENTAL PROTECTION AGENCY**

<b>TDD Number:</b>	TTEMI-05-001-0092	<b>Location:</b>	Railroad Street Drum
<b>Orientation:</b>	Not applicable	<b>Date:</b>	March 13, 2008
<b>Photographer:</b>	Brian Croft, Tetra Tech	<b>Witness:</b>	Brandon Foskey, Tetra Tech
<b>Subject:</b>	Label on a 55-gallon drum inside Building 2 (Fertilizer Shed); label information indicates that the drum was used to store a mixture of toxaphene and methyl parathion.		







**OFFICIAL PHOTOGRAPH NO. 10**  
**U.S. ENVIRONMENTAL PROTECTION AGENCY**

<b>TDD Number:</b>	TTEMI-05-001-0092	<b>Location:</b>	Railroad Street Drum
<b>Orientation:</b>	Not applicable	<b>Date:</b>	March 13, 2008
<b>Photographer:</b>	Brian Croft, Tetra Tech	<b>Witness:</b>	Brandon Foskey, Tetra Tech
<b>Subject:</b>	Bag of Sta-Green <sup>®</sup> insecticide formerly stored inside Building 2 (Fertilizer Shed).		





**OFFICIAL PHOTOGRAPH NO. 11**  
**U.S. ENVIRONMENTAL PROTECTION AGENCY**

**TDD Number:** TTEMI-05-001-0092

**Location:** Railroad Street Drum

**Orientation:** Southwest

**Date:** March 13, 2008

**Photographer:** Brian Croft, Tetra Tech

**Witness:** Brandon Foskey, Tetra Tech

**Subject:** Building 3 (Cotton Gin), which is shown in the right portion of the photograph, housed the cotton gin and office. Approximately 20 lead-acid batteries and five drums were found in this building. Building 4 is also visible in the left portion of the photograph.





**OFFICIAL PHOTOGRAPH NO. 12**  
**U.S. ENVIRONMENTAL PROTECTION AGENCY**

**TDD Number:** TTEMI-05-001-0092

**Location:** Railroad Street Drum

**Orientation:** East

**Date:** March 13, 2009

**Photographer:** Brian Croft, Tetra Tech

**Witness:** Brandon Foskey, Tetra Tech

**Subject:** Various 5-gallon buckets located in Building 3 (Cotton Gin) with the several lead-acid batteries visible in the background on the tilted shelf.







**OFFICIAL PHOTOGRAPH NO. 13**  
**U.S. ENVIRONMENTAL PROTECTION AGENCY**

**TDD Number:** TTEMI-05-001-0092

**Location:** Railroad Street Drum

**Orientation:** South

**Date:** March 13, 2009

**Photographer:** Brian Croft, Tetra Tech

**Witness:** Brandon Foskey, Tetra Tech

**Subject:** Lead-acid batteries located in Building 3 (Cotton Gin).





**OFFICIAL PHOTOGRAPH NO. 14**  
**U.S. ENVIRONMENTAL PROTECTION AGENCY**

**TDD Number:** TTEMI-05-001-0092

**Location:** Railroad Street Drum

**Orientation:** North

**Date:** March 13, 2009

**Photographer:** Brian Croft, Tetra Tech

**Witness:** Brandon Foskey, Tetra Tech

**Subject:** Lead-acid batteries located in Building 3 (Cotton Gin).





**OFFICIAL PHOTOGRAPH NO. 15**  
**U.S. ENVIRONMENTAL PROTECTION AGENCY**

**TDD Number:** TTEMI-05-001-0092

**Location:** Railroad Street Drum

**Orientation:** South

**Date:** March 16, 2009

**Photographer:** Brian Croft, Tetra Tech

**Witness:** Brandon Foskey, Tetra Tech

**Subject:** Interior of Building 7 (Bag/Seed Area), which was used during response activities to stage drums and containers removed from other buildings at the site.







**OFFICIAL PHOTOGRAPH NO. 16**  
**U.S. ENVIRONMENTAL PROTECTION AGENCY**

**TDD Number:** TTEMI-05-001-0092

**Location:** Railroad Street Drum

**Orientation:** East

**Date:** March 13, 2009

**Photographer:** Brian Croft, Tetra Tech

**Witness:** Brandon Foskey, Tetra Tech

**Subject:** Fiber drum located in Building 7 (Bag/Seed Area). Waste sample WS-05 was collected from this drum; analytical results indicated the presence of Aldrin, 4,4-DDD, 4,4-DDE, and 4,4-DDT. In addition, waste sample WS-02 was collected from a bag containing red powder, which is also visible on the floor in this photograph.





**OFFICIAL PHOTOGRAPH NO. 17**  
**U.S. ENVIRONMENTAL PROTECTION AGENCY**

<b>TDD Number:</b>	TTEMI-05-001-0092	<b>Location:</b>	Railroad Street Drum
<b>Orientation:</b>	East	<b>Date:</b>	March 13, 2009
<b>Photographer:</b>	Brian Croft, Tetra Tech	<b>Witness:</b>	Brandon Foskey, Tetra Tech
<b>Subject:</b>	Fiber drum located in Building 7 (Bag/Seed Area). Waste sample WS-06 was collected from this drum; analytical results indicated the presence of 4,4-DDT and methoxychlor.		







**OFFICIAL PHOTOGRAPH NO. 18**  
**U.S. ENVIRONMENTAL PROTECTION AGENCY**

**TDD Number:** TTEMI-05-001-0092      **Location:** Railroad Street Drum  
**Orientation:** North      **Date:** March 16, 2009  
**Photographer:** Brian Croft, Tetra Tech      **Witness:** Brandon Foskey, Tetra Tech  
**Subject:** Miscellaneous small containers removed from Building 2 (Fertilizer Shed).





**OFFICIAL PHOTOGRAPH NO. 19**  
**U.S. ENVIRONMENTAL PROTECTION AGENCY**

**TDD Number:** TTEMI-05-001-0092

**Location:** Railroad Street Drum

**Orientation:** North

**Date:** March 16, 2009

**Photographer:** Brian Croft, Tetra Tech

**Witness:** Brandon Foskey, Tetra Tech

**Subject:** Miscellaneous small containers removed from Building 2 (Fertilizer Shed).







**OFFICIAL PHOTOGRAPH NO. 17**  
**U.S. ENVIRONMENTAL PROTECTION AGENCY**

**TDD Number:** TTEMI-05-001-0092      **Location:** Railroad Street Drum  
**Orientation:** North      **Date:** March 16, 2009  
**Photographer:** Brian Croft, Tetra Tech      **Witness:** Brandon Foskey, Tetra Tech  
**Subject:** Miscellaneous small containers removed from Building 2 (Fertilizer Shed).



**APPENDIX D**  
**LOGBOOK NOTES**  
(Six Sheets)

"Outdoor writing products...  
...for outdoor writing people."



RECYCLABLE

"Rite in the Rain" - A unique All-Weather Writing paper created to shed water and enhance the written image. It is widely used throughout the world for recording critical field data in all kinds of weather.

Available in a variety of standard and custom printed case-bound field books, loose leaf, spiral and stapled notebooks, multi-copy sets and copier paper.

For best results, use a pencil or an all-weather pen.

a product of

J. L. DARLING CORPORATION  
Tacoma, WA 98424-1017 USA  
[www.RiteintheRain.com](http://www.RiteintheRain.com)

Item No. 391

ISBN: 978-1-932149-22-7

Made in the USA  
US PAT NO: 6,863,940



6 32281 39111 1



"Rite in the Rain"®

ALL-WEATHER  
JOURNAL

No. 391

TTEmI-05-001-00A2  
Railroad St. ER

Figure 1 shows a vertical strip of six horizontal bars, each labeled with a number from 1 to 6 on the right side. The bars represent different levels of a hierarchical structure, with the top bar (1) being the longest and the bottom bar (6) being the shortest. The bars are connected by a vertical line on the left side.

Address \_\_\_\_\_

Phone \_\_\_\_\_

Project \_\_\_\_\_

**Clear Vinyl Protective Slipcovers (Item No. 30)** are available for this style of notebook. Helps protect your notebook from wear & tear. Contact your dealer or the J. L. Darling Corporation.

[illegible]

PAGE

## REFERENCE

DATE \_\_\_\_\_



2  
3-13-09 Railroad St. ER B. Croft  
B. Foote

0930 onsite w/ OSC Nattis & GA EPD

K. Collins

touring 17<sup>th</sup> Rd location

- 3 ASTs (each ~ 5,000 gals.)

AST west - rusted - appears to be solid <sup>liquid</sup> in AST

AST middle - reportedly used to hold fertilizers that were not used on fields (i.e. leftovers)

AST east - reportedly used to mix fertilizers

meet w/ owner, Mr. Wilkenburg  
touring

- six "oil" drums have been noted
- silos - currently still used to store grain
- Ms. Vold onsite (tenant at 17<sup>th</sup> St.) - says owner changed lock on 17<sup>th</sup> St. bldg.
- Mr. Wilkenburg says a friend pumped out/removed oil from the drums that were outside cotton gin previously - no documentation

### Fertilizer Shed

~ 18 drums - apparently empty - bags on floor

"Tox M. Parathion" (Master Brand)

"Insecticide Spray"

- PID/PID = background @ ambient air (breathing zone)
- misc small containers (paint, stains, hydraulic oil, etc)
- MT 30-gal drums & 1-gal containers (ESOL??)
- bags of "Sod-GRASS"

BSC 3-13-09

3-13-09 Railroad St. ER B. Croft  
B. Foote 3

wooden shed behind Fertilizer Shed

~ 20 drums (double stacked)

~ 4 30-gal drums

(1 - with liquid)

ASTs @ 17<sup>th</sup> Rd.

- short one was "A-bomb" tank - leftover material from fertilizer mixing/spreading ops was stored there
- taller ones (2) were used to mix liquid fertilizers - potash, nitrogen, & phosphorus ("acid")
- no secondary containment
- no restricted access

### Gin Bldg

- Gin Office

- Numerous  $H_2SO_4$  acid batteries

- 2 30-gal drums

~ 10 5-gal buckets

- 1-pt. calcium carbide

### Deep Well

- evidence of trespassing - small poly tank knocked over

BSC 3-13-09

3-13-09

Railroad St. ER

B. Craft  
B. FosterBag & Seed Area / Grist Mill

- ~ 4 MT drums
- red powder on floor - unknown
- bagged materials - unknown

IT Rd Bldg

red sticks on cement floor

1155 OSC discussing options for clean up w/ Mr. Wilkinson (owner)

- he does not have the money
- he would rather EPA / CA address
- he offered to assist any way possible
- stated he has medical conditions that would cause him too much stress

1315 collect WS-01 (waste)

- 30 gal drum inside wood shed behind fertilizer shed

1330 collect WS-02 (waste)

- bagged red powder in bag/seed area

1340 collect S-01 (soil)

- composite from drainage channel @ NE corner of fertilizer shed

1440 collect S-02 (soil). Soil on floor beneath & around paraffin drums in Fertilizer Shed

1445 collect WS-03 (waste) - STA Green Insecticide

BSC 3-13-09

3-13-09

Railroad St. ER

B. Craft<sup>5</sup>  
B. FosterFertilizer Shed

1505 collect S-03 (soil) - from area of former oil drums @ NW corner of cotton gin

1515 packing samples

1545 offsite to deliver samples to lab

1720 Samples delivered - return to Tt office to unload / change equipment

BSC 3-13-09

3-16-09 Railroad St. ER

B. Craft  
B. Foster

0900 START onsite w/ OSC Natter &amp; ER (Ems)

- to begin stabilization activities

note: owner now says he wants to assist with cleanup efforts

0930 ER setting up to begin clearing space in bag/seed area to stage drums/containers

note: building designations

- 1 - collapsed wood building behind Fertilizer Shed
- 2 - Fertilizer Shed
- 3 - cotton gin bldg
- 4 - south of cotton gin bldg
- 5 -
- 6 -
- 7 - bag/seed area & grist mill

1005 ER begins transferring drums from Bldg 1 to Bldg 7

1100 ER continues to transfer drums/containers  
- START begins inventorying/documenting drums & containers @ Bldg 7

1300 ER transferring drums/containers from Bldg 2

note: START attempted to sample 2 drums found in Bldg 1 - one had only ~ 1/2-inches of slt in bottom - other drum could not remove bung (contents felt solid)

BSC 3-16-09

B. Foster

3-16-09 Railroad St. ER

note: START continues container inventorying of

Bldg 7

1405 LUNCH

1430 ER moving manlift to 17 Railroad St location for storage

START prepping to collect soil sample from Bldg 1 (floor area where drums were stored)

1445 collect S-04 - soil/debris from floor in Bldg 1 where 55-gal drums were stored

1500 ER continues transferring bagged materials from Bldg 2 into drums, then moving to Bldg 7 along w/ drums/containers  
- primarily STA-GREEN (insecticide)  
- 2 bags of cattle feed

1555 ER begins removing containers/batteries from Bldg 3

1620 2 local residents stopped by to inquire about EPA activities  
- live on Line Creek Rd  
- served by well water (city main installed approx 3-4 yrs ago but not hooked up)  
- concerned regarding potential contamination

1715 START offsite

BSC 3-16-09

3-17-09 Railroad St. ER

B. Craft  
B. Foskey

0855 onsite

0930 setting up to access 3 ASTs @

17 Railroad St. location

1005 2 large ASTs contain less than 2 inches  
of liquid - may be rain water (open rain)

1030 START accessing materials in 3rd (small) AST

1045 collect WS-04 from small AST

- mixture of yellow/white solids; milky white gel-like material

1110 setting up to collect waste samples from

2 containers stored in building 2<sup>nd</sup> 7

1130 collect WS-05

- 5-gal fiber drum labeled 'DDT 50B'
- approx  $\frac{1}{3}$  full w/ white powder

1140 collect WS-06

- 20-gal fiber drum labeled Capstan (and others)
- approx  $\frac{1}{2}$  full

1205 START packing up samples and locking buildings

1235 START offsite to deliver samples to lab

BSC 3-17-09

BSC 3-17-09

**APPENDIX E**  
**TABLE OF WITNESSES**  
(One Page)

**TABLE OF WITNESSES**  
**RAILROAD STREET DRUM**  
**HARALSON, COWETA COUNTY, GEORGIA**

Randy Nattis  
On-Scene Coordinator (OSC), Region 4  
U.S. Environmental Protection Agency  
Sam Nunn Atlanta Federal Center  
61 Forsyth Street SW  
Atlanta, GA 30303  
Telephone No.: (404) 562-8757

Frank Wilkerson (Property Owner)  
1 Main Street  
P.O. Box 116  
Haralson, Georgia 30229  
Telephone No.: (770) 599-3108

Brian Croft, Site Manager  
Brandon Foskey, Team Member  
Tetra Tech Region 4 Superfund Technical  
Assessment and Response Team (START)  
1955 Evergreen Boulevard, Suite 300  
Duluth, Georgia 30096  
Telephone No.: (678) 775-3080

Jake Jones  
Environmental Restoration LLC  
6940 Commercial Drive  
Morrow, Georgia 35673  
Telephone No.: (770) 961-9272

Kevin Collins, Geologist III  
Georgia Department of Natural Resources  
Environmental Protection Division  
2 Martin Luther King, Jr. Dr., SE,  
Suite 1462 East  
Atlanta, Georgia 30334  
Telephone No.: (404) 657-8600

Sharon Vold  
17 Railroad Street (tenant)  
Haralson, Georgia 30229  
Telephone No.: (678) 633-0566



**ATTACHMENT 1**

**XENCO, INC. ANALYTICAL DATA PACKAGE**

(260 Pages)

(Electronic copy on compact disc)

# **Analytical Report 327527**

**for**

**Tetra Tech EM, Atlanta**

**Project Manager: Jessica Vickers**

**Railroad Drum Site**

**TTEMI-05-001-0091**

**06-APR-09**



**6017 Financial Dr., Norcross, GA 30071**

**Ph:(770) 449-8800 Fax:(770) 449-5477**

Texas certification numbers:

Houston, TX T104704215-08B-TX - Odessa/Midland, TX T104704400-08-TX

Florida certification numbers:

Houston, TX E871002 - Miami, FL E86678 - Tampa, FL E86675

Miramar, FL E86349

Norcross(Atlanta), GA E87429

South Carolina certification numbers:

Norcross(Atlanta), GA 98015

North Carolina certification numbers:

Norcross(Atlanta), GA 483

Houston - Dallas - San Antonio - Tampa - Miami - Latin America

Midland - Corpus Christi - Atlanta



06-APR-09

Project Manager: **Jessica Vickers**  
**Tetra Tech EM, Atlanta**  
10955 Evergreen Blvd. Bld. 200 Suite 300  
Duluth, GA 300967

Reference: XENCO Report No: **327527**  
**Railroad Drum Site**  
Project Address: Haralson, GA

**Jessica Vickers:**

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 327527. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 327527 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

---

**Eben Buchanan**  
Project Manager

***Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.***

*Certified and approved by numerous States and Agencies.*

*A Small Business and Minority Status Company that delivers SERVICE and QUALITY*

Houston - Dallas - San Antonio - Austin - Tampa - Miami - Atlanta - Corpus Christi - Latin America

## Sample Cross Reference 327527

**Tetra Tech EM, Atlanta, Duluth, GA**

Railroad Drum Site

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
WS-01	L	Mar-13-09 13:15		327527-001
WS-02	S	Mar-13-09 13:30		327527-002
WS-03	S	Mar-13-09 14:45		327527-003
S-01	S	Mar-13-09 13:40		327527-004
S-02	S	Mar-13-09 14:40		327527-005
S-03	S	Mar-13-09 15:05		327527-006





## CASE NARRATIVE

*Client Name: Tetra Tech EM, Atlanta*

*Project Name: Railroad Drum Site*

*Project ID: TTEMI-05-001-0091*

*Work Order Number: 327527*

*Report Date: 06-APR-09*

*Date Received: 13-MAR-09*

### **Sample receipt non conformances and Comments:**

*The Captan by 8270-GC/MS and Carbamates by Method 8322 were subcontracted to Data/Analysis Technologies, Inc., 7715 Corporate Boulevard, Plain City, OH 43064.*

*The Lab Contact at DAT, Inc. is Contact: Ronald K. Mitchum, Ph.D. at (614) 873-0710.*

*The subcontractor's data report has been appended to the end of this report.*

### **Sample receipt Non Conformances and Comments per Sample:**

*None*

### **Analytical Non Conformances and Comments:**

Batch:	LBA-752766	VOCs by SW-846 8260B
--------	------------	----------------------

*The responses of one or more internal standards were outside the method specified limit (low) for the following samples due to possible matrix interferences and/or sample heterogeneity. The samples were reanalyzed and results were confirmed. 327527-005 and 006.*

*The surrogate, 4-Bromofluorobenzene, was outside the laboratory control limits (high) for the following sample due to possible matrix interferences and/or sample heterogeneity. The sample was reanalyzed and results were confirmed. 327527-005.*

Batch:	LBA-752847	Soil pH by SW-846 9045C
--------	------------	-------------------------

*None*

Batch:	LBA-752849	pH by SW-846 9040
--------	------------	-------------------

*None*

Batch:	LBA-752897	Mercury by SW-846 7470A
--------	------------	-------------------------

*None*

Batch:	LBA-752897	Mercury by SW-846 7470A
--------	------------	-------------------------

*None*

Batch:	LBA-752917	Metals, Total by SW846 6010B
--------	------------	------------------------------

*Copper detected in the blank below the MQL but above the SQL; possible laboratory contamination.*

*Samples affected are: 327653-002, -001, -007, -003.*



## CASE NARRATIVE

**Client Name:** Tetra Tech EM, Atlanta

**Project Name:** Railroad Drum Site

**Project ID:** TTEMI-05-001-0091

**Work Order Number:** 327527

**Report Date:** 06-APR-09

**Date Received:** 13-MAR-09

**Batch:** LBA-752946 **Pesticides by SW-846 8081A**

The spiking compound endosulfan II and endrin aldehyde failed high out of the laboratory control limit for the BKS, which indicated a high response bias. However, there was no hit detected in the sample.

The compound methoxychlor failed high in the CCV, but no hit was detected in the sample.

**Batch:** LBA-752969 **Percent Moisture**

None

**Batch:** LBA-753039 **VOAs by SW-846 8260B**

The responses of all internal standards were outside the method specified limit (low) for the following sample due to matrix interferences and/or foaming. The sample was initially analyzed at 1000x dilution, with no reportable concentrations, however the internal standard responses were within the acceptable limits. The results for this sample should be considered estimated.  
327527-001

The following surrogate recoveries were outside the laboratory control limits for 327527-001 due to matrix interferences. 1,2-Dichloroethane-d4 (high) and Toluene-d8 (low)

**Batch:** LBA-753039 **VOAs by SW-846 8260B**

The responses of all internal standards were outside the method specified limit (low) for the following sample due to matrix interferences and/or foaming. The sample was initially analyzed at 1000x dilution, with no reportable concentrations, however the internal standard responses were within the acceptable limits. The results for this sample should be considered estimated.  
327527-001

The following surrogate recoveries were outside the laboratory control limits for 327527-001 due to matrix interferences. 1,2-Dichloroethane-d4 (high) and Toluene-d8 (low)

**Batch:** LBA-753053 **TPH (Gasoline Range Organics) by SW8015B**

None



## CASE NARRATIVE

**Client Name:** Tetra Tech EM, Atlanta

**Project Name:** Railroad Drum Site

**Project ID:** TTEMI-05-001-0091

**Work Order Number:** 327527

**Report Date:** 06-APR-09

**Date Received:** 13-MAR-09

Batch: LBA-753056 Mercury by SW-846 7471A

None

Batch: LBA-753079 Metals, Total by SW846 6010B

None

Batch: LBA-753224 Chlorinated Herbicides by SW-846 8151A

None

Batch: LBA-753260 Chlorinated Herbicides by SW-846 8151A

The recoveries of the surrogate DCAA were high out of the laboratory control limit on both columns for samples 327527-003, -005 due to co-elution with severe matrix interference.

Batch: LBA-753263 PCBs by 8082

The recoveries of the spiking compound 1260 were out of the laboratory control limit for both MS and MSD due to co-elution with severe matrix interference.

Batch: LBA-753394 VOCs by SW-846 8260B

None

Batch: LBA-753416 SVOCs by SW846 8270C

The CCC di-n-octylphthalate failed (high) outside laboratory control limits for % Deviation in the CCV. No hits for this compound were detected in the sample.

Batch: LBA-753650 SVOCs by SW846 8270C

The spiking compound pentachlorophenol failed (low) outside laboratory control limits for % recovery in MS. The recovery of this compound passed in the MSD resulting in a %RPD failure. Recoveries for this compound were in control in the BKS. The spiking compound pyrene failed (high) outside laboratory control limits for % Recovery in the SD. Recovery for this compound passed in the S and the BKS.



## CASE NARRATIVE

**Client Name:** Tetra Tech EM, Atlanta

**Project Name:** Railroad Drum Site

**Project ID:** TTEMI-05-001-0091

**Work Order Number:** 327527

**Report Date:** 06-APR-09

**Date Received:** 13-MAR-09

Due to severe sample matrix, the surrogate 2,4,6-Tribromophenol failed (high) outside laboratory control limits in samples 327527-005, 005DL, 006, and 006SD. These samples were run at a 10X dilution as received from the extraction lab. All surrogates failed (low) outside laboratory control limits in the 1000X dilution of sample 327527-002.

The CCC di-n-octylphthalate failed (high) outside laboratory control limits in the CCV for % Deviation. There was a hit for this analyte detected in sample 327527-002. Due to the high analyte concentration of the samples and the viscosity of the samples, it was determined that the samples could not be rerun with a new CCV. The laboratory realizes that a new column should be installed and a curve run, but does not want to risk the condition of a new capillary column.

**Batch:** LBA-753926 | Pesticides by SW-846 8081A

The spiking compound 4,4-DDD, 4,4-DDE and Endosulfan II failed for MS and MSD due to co-elution with severe matrix interference.

The spiking compound Endosulfan Sulfate failed high for BKS, but it was not detected in any of the samples.

The surrogate TCMX failed for the samples 327527-003 on column I, 327689-001 -003 and -004 on both columns; the surrogate DCB failed for the samples 327527-005 on column I, 327689-001 -002, -003, and -004 on both columns due to severe matrix interference.

**Batch:** LBA-754021 | Organophosphorus Pesticides by SW846 8141A

Sample 327527-001 had a very heavy emulsion upon extraction.

**Batch:** LBA-754487 | Organophosphorus Pesticides by SW846 8141A

None

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: <b>WS-01</b>	Matrix: <b>LIQUID</b>	% Moisture:
Lab Sample Id: <b>327527-001</b>	Date Collected: <b>Mar-13-09 13:15</b>	Date Received: <b>Mar-13-09 17:05</b>

<b>Analytical Method: Chlorinated Herbicides by SW-846 8151A</b>	Prep Method: SW8151A_EXT
Date Analyzed: Mar-19-09 17:14    Analyst: VCH	Date Prep: Mar-17-09 14:00    Tech: 4118
Seq Number: 753224	

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
2,4,5-T	93-76-5	U	25	12	ug/L	U	1
2,4,5-Tp	93-72-1	U	25	7.3	ug/L	U	1
2,4-D	94-75-7	U	25	12	ug/L	U	1
2,4-Db	94-82-6	U	25	7.0	ug/L	U	1
Dalapon	75-99-0	U	25	8.1	ug/L	U	1
Dicamba	1918-00-9	U	25	11	ug/L	U	1
Dichloroprop	120-36-5	U	25	13	ug/L	U	1
Dinoseb	88-85-7	U	25	9.4	ug/L	U	1
MCPA	94-74-6	U	2500	1700	ug/L	U	1
MCPD	93-65-2	U	2500	1500	ug/L	U	1

<b>Analytical Method: Mercury by SW-846 7470A</b>	Prep Method: SW7470P
Date Analyzed: Mar-17-09 13:36    Analyst: 4150	Date Prep: Mar-17-09 10:56    Tech: ABA
Seq Number: 752897	

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Mercury	7439-97-6	U	0.0020	0.0001	mg/L	U	1



## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: <b>WS-01</b>	Matrix: <b>LIQUID</b>	% Moisture:
Lab Sample Id: <b>327527-001</b>	Date Collected: <b>Mar-13-09 13:15</b>	Date Received: <b>Mar-13-09 17:05</b>

Analytical Method: Organophosphorus Pesticides by SW846 8141A				Prep Method: SW3510C			
Date Analyzed: Mar-25-09 17:15		Analyst: JAN		Date Prep: Mar-19-09 07:04		Tech: MAZ	
Seq Number: 754021				SUB: E86678 - Xenco Miami			
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
o,o,o,o-Tetra-n-Propyl Dithiopyrophosphate	3244-90-4	U	0.480	0.200	ug/L	U	1
Atrazine		U	2.00	1.00	ug/L	U	1
Azinphos-ethyl	2642-71-9	U	8.00	0.720	ug/L	U	1
azinphos-methyl	86-50-0	U	8.00	1.64	ug/L	U	1
Bolstar	35400-43-2	U	2.00	0.480	ug/L	U	1
Chlorfenyinphos		U	2.00	0.276	ug/L	U	1
Chlorpyrifos	2921-88-2	U	2.00	0.252	ug/L	U	1
Chlorpyrifos mathyl	5598-13-0	U	2.00	0.236	ug/L	U	1
Coumaphos	56-72-4	U	6.00	0.840	ug/L	U	1
Crotoxyphos	7700-17-6	U	2.00	0.312	ug/L	U	1
Demeton-O	298-03-3	U	2.00	0.164	ug/L	U	1
Demeton-S	126-75-0	U	2.00	0.248	ug/L	U	1
Diazinon	333-41-5	U	2.00	0.244	ug/L	U	1
Dichlorofenthion	97-17-6	U	2.00	0.284	ug/L	U	1
Dichlorvos	62-73-7	U	2.00	0.300	ug/L	U	1
Dimethoate	60-51-5	U	2.00	1.00	ug/L	U	1
Dioxathion	78-34-2	U	2.00	0.560	ug/L	U	1
Disulfoton	298-04-4	U	2.00	0.840	ug/L	U	1
EPN (Ent)	2104-64-5	U	2.00	0.320	ug/L	U	1
Ethion	563-12-2	U	2.00	0.880	ug/L	U	1
Ethoprop	13194-48-4	U	2.00	1.00	ug/L	U	1
Famphur	52-85-7	U	2.00	0.720	ug/L	U	1
Fenithrothion		U	2.00	0.252	ug/L	U	1
Fenthion	55-38-9	U	2.00	0.296	ug/L	U	1
Fonophos		U	2.00	0.760	ug/L	U	1
Leptophos	21609-90-5	U	2.00	0.184	ug/L	U	1
Malathion	121-75-5	U	2.00	0.264	ug/L	U	1
Merphos	150-50-5	U	2.00	0.360	ug/L	U	1
Mevinphos	7786-34-7	U	2.00	0.760	ug/L	U	1
Monocrotophos		U	2.00	1.08	ug/L	U	1
Naled	300-76-5	U	2.00	1.12	ug/L	U	1
Parathion, Ethyl	56-38-2	U	2.00	0.180	ug/L	U	1
Parathion, Methyl	298-00-0	U	2.00	0.600	ug/L	U	1
Phorate	298-02-2	U	2.00	1.20	ug/L	U	1
Phosmet	732-11-6	U	0.480	0.200	ug/L	U	1
Phosphamidon	13171-21-6	U	2.00	0.840	ug/L	U	1
Simazine	SW8141A	U	8.00	1.64	ug/L	U	1
stirophos	22248-79-9	U	2.00	0.840	ug/L	U	1
Sulfotep	3689-24-5	U	2.00	0.640	ug/L	U	1

Project: Xenco-Atlanta Master Project

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: <b>WS-01</b>	Matrix: <b>LIQUID</b>	% Moisture:
Lab Sample Id: <b>327527-001</b>	Date Collected: <b>Mar-13-09 13:15</b>	Date Received: <b>Mar-13-09 17:05</b>

<b>Analytical Method: Organophosphorus Pesticides by SW846 8141A</b>	Prep Method: SW3510C
Date Analyzed: Mar-25-09 17:15    Analyst: JAN	Date Prep: Mar-19-09 07:04    Tech: MAZ
Seq Number: 754021	SUB: E86678 - Xenco Miami

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
TEPP	21646-99-1	U	2.00	1.20	ug/L	U	1
Thionazin		U	2.00	0.560	ug/L	U	1
Tokuthion	34643-46-4	U	2.00	0.216	ug/L	U	1
Trichlorfon	52-68-9	U	7.20	7.20	ug/L	U	1
Trichloronate	327-98-0	U	2.00	0.220	ug/L	U	1

<b>Analytical Method: Pesticides by SW-846 8081A</b>	Prep Method: SW3510C
Date Analyzed: Mar-17-09 22:04    Analyst: VCH	Date Prep: Mar-17-09 13:00    Tech: 5458
Seq Number: 752946	

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
4,4-DDD	72-54-8	U	5.00	0.185	ug/L	U	1
4,4-DDE	72-55-9	U	5.00	0.175	ug/L	U	1
4,4-DDT	50-29-3	U	5.00	0.245	ug/L	U	1
Aldrin	309-00-2	U	2.50	0.130	ug/L	U	1
Alpha-BHC	319-84-6	U	2.50	0.505	ug/L	U	1
Alpha-Chlordane	5103-71-9	U	2.50	0.110	ug/L	U	1
Beta-BHC	319-85-7	U	2.50	0.115	ug/L	U	1
Chlordane	57-74-9	U	25.0	4.82	ug/L	U	1
Delta-BHC	319-86-8	U	2.50	0.100	ug/L	U	1
Dieldrin	60-57-1	U	5.00	0.215	ug/L	U	1
Endosulfan I	959-98-8	U	2.50	0.120	ug/L	U	1
Endosulfan II	33213-65-9	U	5.00	0.225	ug/L	U	1
Endosulfan Sulfate	1031-07-8	U	5.00	0.350	ug/L	U	1
Endrin	72-20-8	U	5.00	0.230	ug/L	U	1
Endrin Aldehyde	7421-93-4	U	5.00	0.430	ug/L	U	1
Endrin Ketone	53494-70-5	U	5.00	0.225	ug/L	U	1
Gamma-BHC (Lindane)	58-89-9	U	2.50	0.080	ug/L	U	1
Gamma-Chlordane	5103-74-2	U	2.50	0.090	ug/L	U	1
Heptachlor	76-44-8	U	2.50	0.145	ug/L	U	1
Heptachlor Epoxide	1024-57-3	U	2.50	0.140	ug/L	U	1
Methoxychlor	72-43-5	U	25.0	1.44	ug/L	U	1
Toxaphene	8001-35-2	U	100	21.2	ug/L	U	1

Project: Xenco-Atlanta Master Project

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: <b>WS-01</b>	Matrix: <b>LIQUID</b>	% Moisture:
Lab Sample Id: <b>327527-001</b>	Date Collected: <b>Mar-13-09 13:15</b>	Date Received: <b>Mar-13-09 17:05</b>

Analytical Method: SVOCs by SW-846 8270C				Prep Method: SW3520C			
Date Analyzed: Mar-23-09 11:32		Analyst: RYE		Date Prep: Mar-17-09 13:00		Tech: 5458	
Seq Number: 753416							
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Biphenyl (Diphenyl)	92-52-4	U	5000	535	ug/L	U	10
1,2,4-Trichlorobenzene	120-82-1	U	5000	715	ug/L	U	10
1,2-Dichlorobenzene	95-50-1	U	5000	915	ug/L	U	10
1,3-Dichlorobenzene	541-73-1	U	5000	1060	ug/L	U	10
1,4-Dichlorobenzene	106-46-7	U	5000	805	ug/L	U	10
1-Methylnaphthalene	90-12-0	U	5000	655	ug/L	U	10
2,3,4,6-Tetrachlorophenol	58-90-2	U	5000	1090	ug/L	U	10
2,4,5-Trichlorophenol	95-95-4	U	5000	1310	ug/L	U	10
2,4,6-Trichlorophenol	88-06-2	U	5000	820	ug/L	U	10
2,4-Dichlorophenol	120-83-2	U	5000	890	ug/L	U	10
2,4-Dimethylphenol	105-67-9	U	5000	815	ug/L	U	10
2,4-Dinitrophenol	51-28-5	U	10000	3560	ug/L	U	10
2,4-Dinitrotoluene	121-14-2	U	5000	1070	ug/L	U	10
2,6-Dichlorophenol	87-65-0	U	5000	820	ug/L	U	10
2,6-Dinitrotoluene	606-20-2	U	5000	1360	ug/L	U	10
2-Chloronaphthalene	91-58-7	U	5000	645	ug/L	U	10
2-Chlorophenol	95-57-8	U	5000	915	ug/L	U	10
2-Methylnaphthalene	91-57-6	U	5000	595	ug/L	U	10
2-methylphenol	95-48-7	U	5000	1000	ug/L	U	10
2-Nitroaniline	88-74-4	U	10000	1180	ug/L	U	10
2-Nitrophenol	88-75-5	U	5000	975	ug/L	U	10
3&4-Methylphenol	3/4-CRESOL	U	10000	1280	ug/L	U	10
3,3-Dichlorobenzidine	91-94-1	U	10000	1940	ug/L	U	10
3-Nitroaniline	99-09-2	U	10000	1380	ug/L	U	10
4,6-dinitro-2-methyl phenol	534-52-1	U	10000	700	ug/L	U	10
4-Bromophenyl-phenylether	101-55-3	U	5000	1060	ug/L	U	10
4-chloro-3-methylphenol	59-50-7	U	5000	1090	ug/L	U	10
4-Chloroaniline	106-47-8	U	5000	1550	ug/L	U	10
4-Chlorophenyl Phenyl Ether	7005-72-3	U	5000	675	ug/L	U	10
4-Nitroaniline	100-01-6	U	10000	1600	ug/L	U	10
4-Nitrophenol	100-02-7	U	10000	1210	ug/L	U	10
Acenaphthene	83-32-9	U	5000	715	ug/L	U	10
Acenaphthylene	208-96-8	U	5000	740	ug/L	U	10
Acetophenone	98-86-2	U	5000	620	ug/L	U	10
Anthracene	120-12-7	U	5000	1010	ug/L	U	10
Azobenzene	103-33-3	U	5000	955	ug/L	U	10
Benzo(a)anthracene	56-55-3	U	5000	950	ug/L	U	10
Benzo(a)pyrene	50-32-8	U	5000	900	ug/L	U	10
Benzo(b)fluoranthene	205-99-2	U	5000	985	ug/L	U	10

Project: Xenco-Atlanta Master Project

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: <b>WS-01</b>	Matrix: <b>LIQUID</b>	% Moisture:
Lab Sample Id: <b>327527-001</b>	Date Collected: <b>Mar-13-09 13:15</b>	Date Received: <b>Mar-13-09 17:05</b>

Analytical Method: SVOCs by SW-846 8270C				Prep Method: SW3520C			
Date Analyzed: Mar-23-09 11:32		Analyst: RYE	Date Prep: Mar-17-09 13:00		Tech: 5458		
Seq Number: 753416							
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Benzo(g,h,i)perylene	191-24-2	U	5000	985	ug/L	U	10
Benzo(k)fluoranthene	207-08-9	U	5000	1360	ug/L	U	10
Benzoic Acid	65-85-0	U	10000	1110	ug/L	U	10
Benzyl Alcohol	100-51-6	U	5000	615	ug/L	U	10
bis(2-chloroethoxy) methane	111-91-1	U	5000	625	ug/L	U	10
bis(2-chloroethyl) ether	111-44-4	U	5000	890	ug/L	U	10
bis(2-chloroisopropyl) ether	108-60-1	U	5000	620	ug/L	U	10
bis(2-ethylhexyl) phthalate	117-81-7	U	5000	600	ug/L	U	10
Benzyl Butyl Phthalate	85-68-7	U	5000	910	ug/L	U	10
Caprolactam	105-60-2	U	5000	1510	ug/L	U	10
Carbazole	86-74-8	U	5000	910	ug/L	U	10
Chrysene	218-01-9	U	5000	1050	ug/L	U	10
Dibenz(a,h)anthracene	53-70-3	U	5000	915	ug/L	U	10
Dibenzofuran	132-64-9	U	5000	820	ug/L	U	10
Diethyl Phthalate	84-66-2	U	5000	950	ug/L	U	10
Dimethyl Phthalate	131-11-3	U	5000	985	ug/L	U	10
di-n-Butyl Phthalate	84-74-2	U	5000	1040	ug/L	U	10
di-n-Octyl Phthalate	117-84-0	U	5000	690	ug/L	U	10
Ethyl Methanesulfonate	62-50-0	U	5000	825	ug/L	U	10
Fluoranthene	206-44-0	U	5000	905	ug/L	U	10
Fluorene	86-73-7	U	5000	780	ug/L	U	10
Hexachlorobenzene	118-74-1	U	5000	1110	ug/L	U	10
Hexachlorobutadiene	87-68-3	U	5000	890	ug/L	U	10
Hexachlorocyclopentadiene	77-47-4	U	5000	935	ug/L	U	10
Hexachloroethane	67-72-1	U	5000	1190	ug/L	U	10
Indeno(1,2,3-c,d)Pyrene	193-39-5	U	5000	935	ug/L	U	10
Isophorone	78-59-1	U	5000	705	ug/L	U	10
Methyl Methanesulfonate	66-27-3	U	5000	860	ug/L	U	10
Naphthalene	91-20-3	U	5000	760	ug/L	U	10
Nitrobenzene	98-95-3	U	5000	745	ug/L	U	10
N-Nitrosodimethylamine	62-75-9	U	5000	3120	ug/L	U	10
N-Nitrosodi-n-Propylamine	621-64-7	U	5000	680	ug/L	U	10
N-Nitrosodiphenylamine	86-30-6	U	5000	1250	ug/L	U	10
Pentachlorophenol	87-86-5	U	10000	1130	ug/L	U	10
Phenanthrene	85-01-8	U	5000	1020	ug/L	U	10
Phenol	108-95-2	U	5000	880	ug/L	U	10
Pyrene	129-00-0	U	5000	1200	ug/L	U	10
Pyridine	110-86-1	U	5000	1330	ug/L	U	10

Project: Xenco-Atlanta Master Project

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: <b>WS-01</b>	Matrix: <b>LIQUID</b>	% Moisture:
Lab Sample Id: <b>327527-001</b>	Date Collected: <b>Mar-13-09 13:15</b>	Date Received: <b>Mar-13-09 17:05</b>

<b>Analytical Method: TAL Metals by SW846 6010B</b>	<b>Prep Method: SW3010A</b>
Date Analyzed: Mar-18-09 11:41    Analyst: 4150	Date Prep: Mar-17-09 12:26    Tech: ABA
Seq Number: 752917	

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Aluminum	7429-90-5	U	0.050	0.012	mg/L	U	1
Antimony	7440-36-0	U	0.006	0.005	mg/L	U	1
Arsenic	7440-38-2	0.011	0.010	0.007	mg/L		1
Barium	7440-39-3	U	0.050	0.002	mg/L	U	1
Beryllium	7440-41-7	U	0.003	0.001	mg/L	U	1
Cadmium	7440-43-9	U	0.005	0.001	mg/L	U	1
Calcium	7440-70-2	U	5.00	0.012	mg/L	U	1
Chromium	7440-47-3	U	0.050	0.001	mg/L	U	1
Cobalt	7440-48-4	U	0.010	0.001	mg/L	U	1
Copper	7440-50-8	U	0.050	0.001	mg/L	U	1
Iron	7439-89-6	2.73	0.100	0.021	mg/L		1
Lead	7439-92-1	U	0.010	0.002	mg/L	U	1
Magnesium	7439-95-4	U	5.00	0.004	mg/L	U	1
Manganese	7439-96-5	0.394	0.050	0.001	mg/L		1
Nickel	7440-02-0	U	0.010	0.001	mg/L	U	1
Potassium	2133-26-8	8.42	5.00	0.002	mg/L		1
Selenium	7782-49-2	U	0.010	0.008	mg/L	U	1
Silver	7440-22-4	U	0.050	0.001	mg/L	U	1
Sodium	7440-23-5	403	50.0	1.25	mg/L	D	10
Thallium	7440-28-0	0.003	0.002	0.004	mg/L		1
Vanadium	7440-62-2	U	0.010	0.001	mg/L	U	1
Zinc	7440-66-6	1.51	0.100	0.002	mg/L		1

Project: Xenco-Atlanta Master Project

Version: 1.055



## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: <b>WS-01</b>	Matrix: <b>LIQUID</b>	% Moisture:
Lab Sample Id: <b>327527-001</b>	Date Collected: <b>Mar-13-09 13:15</b>	Date Received: <b>Mar-13-09 17:05</b>

Analytical Method: VOCs by SW-846 8260B				Prep Method: SW5030B			
Date Analyzed: Mar-18-09 13:07		Analyst: 4124		Date Prep: Mar-18-09 07:25		Tech: 5459	
Seq Number: 753039							
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
1,1,1,2-Tetrachloroethane	630-20-6	U	10.0	2.40	ug/L	U	10
1,1,1-Trichloroethane	71-55-6	U	10.0	1.60	ug/L	U	10
1,1,2,2-Tetrachloroethane	79-34-5	U	10.0	1.80	ug/L	U	10
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	U	10.0	1.10	ug/L	U	10
1,1,2-Trichloroethane	79-00-5	U	10.0	2.50	ug/L	U	10
1,1-Dichloroethane	75-34-3	U	10.0	1.10	ug/L	U	10
1,1-Dichloroethene	75-35-4	U	10.0	2.00	ug/L	U	10
1,1-Dichloropropene	563-58-6	U	10.0	1.00	ug/L	U	10
1,2,3-Trichlorobenzene	87-61-6	U	10.0	2.50	ug/L	U	10
1,2,3-Trichloropropane	96-18-4	U	10.0	2.10	ug/L	U	10
1,2,4-Trichlorobenzene	120-82-1	U	10.0	1.70	ug/L	U	10
1,2,4-Trimethylbenzene	95-63-6	U	10.0	1.40	ug/L	U	10
1,3,5-Trimethylbenzene	108-67-8	U	10.0	1.70	ug/L	U	10
1,3-Dichlorobenzene	541-73-1	U	10.0	1.70	ug/L	U	10
1,3-Dichloropropane	142-28-9	U	10.0	1.90	ug/L	U	10
1,4-Dichlorobenzene	106-46-7	U	10.0	1.70	ug/L	U	10
2,2-Dichloropropane	594-20-7	U	10.0	2.10	ug/L	U	10
2-Chloroethyl Vinyl Ether	110-75-8	U	10.0	2.90	ug/L	U	10
2-Chlorotoluene	95-49-8	U	10.0	1.90	ug/L	U	10
2-Hexanone	591-78-6	U	20.0	3.20	ug/L	U	10
4-Chlorotoluene	106-43-4	U	10.0	1.30	ug/L	U	10
4-Methyl-2-Pentanone	108-10-1	U	20.0	2.60	ug/L	U	10
Acetone	67-64-1	U	20.0	3.50	ug/L	U	10
Acrolein	107-02-8	U	200	35.0	ug/L	U	10
Acrylonitrile	107-13-1	U	20.0	4.90	ug/L	U	10
Benzene	71-43-2	U	10.0	1.60	ug/L	U	10
Bromobenzene	108-86-1	U	10.0	2.10	ug/L	U	10
Bromochloromethane	74-97-5	U	10.0	2.00	ug/L	U	10
Bromodichloromethane	75-27-4	U	10.0	2.50	ug/L	U	10
Bromoform	75-25-2	U	10.0	1.70	ug/L	U	10
Methyl bromide	74-83-9	U	10.0	2.50	ug/L	U	10
Carbon Disulfide	75-15-0	U	10.0	2.60	ug/L	U	10
Carbon Tetrachloride	56-23-5	U	10.0	3.30	ug/L	U	10
Chlorobenzene	108-90-7	U	10.0	1.50	ug/L	U	10
Chloroethane	75-00-3	U	10.0	2.60	ug/L	U	10
Chloroform	67-66-3	U	10.0	1.60	ug/L	U	10
Methyl Chloride	74-87-3	U	10.0	2.50	ug/L	U	10
cis-1,2-Dichloroethylene	156-59-2	U	10.0	2.10	ug/L	U	10
cis-1,3-Dichloropropene	10061-01-5	U	10.0	1.00	ug/L	U	10

Project: Xenco-Atlanta Master Project

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: <b>WS-01</b>	Matrix: <b>LIQUID</b>	% Moisture:
Lab Sample Id: <b>327527-001</b>	Date Collected: <b>Mar-13-09 13:15</b>	Date Received: <b>Mar-13-09 17:05</b>

<b>Analytical Method: VOCs by SW-846 8260B</b>	<b>Prep Method: SW5030B</b>
Date Analyzed: Mar-18-09 13:07    Analyst: 4124	Date Prep: Mar-18-09 07:25    Tech: 5459
Seq Number: 753039	

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Dibromochloromethane	124-48-1	U	10.0	1.50	ug/L	U	10
Methylene bromide	74-95-3	U	10.0	2.40	ug/L	U	10
Dichlorodifluoromethane	75-71-8	U	10.0	2.20	ug/L	U	10
Ethyl Methacrylate	97-63-2	U	10.0	2.10	ug/L	U	10
Ethylbenzene	100-41-4	U	10.0	1.90	ug/L	U	10
Hexachlorobutadiene	87-68-3	U	10.0	1.30	ug/L	U	10
isopropylbenzene	98-82-8	U	10.0	1.50	ug/L	U	10
m,p-Xylene	179601-23-1	U	20.0	5.10	ug/L	U	10
MTBE	1634-04-4	U	20.0	1.80	ug/L	U	10
Methylene Chloride	75-09-2	U	10.0	4.20	ug/L	U	10
Naphthalene	91-20-3	1410	10.0	2.20	ug/L		10
n-Butylbenzene	104-51-8	U	10.0	1.70	ug/L	U	10
n-Propylbenzene	103-65-1	U	10.0	1.80	ug/L	U	10
o-Xylene	95-47-6	U	10.0	2.00	ug/L	U	10
p-Cymene (p-Isopropyltoluene)	99-87-6	179	10.0	1.30	ug/L		10
Sec-Butylbenzene	135-98-8	U	10.0	2.10	ug/L	U	10
Styrene	100-42-5	U	10.0	1.80	ug/L	U	10
tert-Butylbenzene	98-06-6	U	10.0	1.80	ug/L	U	10
Tetrachloroethylene	127-18-4	U	10.0	1.60	ug/L	U	10
Toluene	108-88-3	U	10.0	1.40	ug/L	U	10
trans-1,2-dichloroethylene	156-60-5	U	10.0	2.10	ug/L	U	10
trans-1,3-dichloropropene	10061-02-6	U	10.0	1.10	ug/L	U	10
Trichloroethylene	79-01-6	U	10.0	1.90	ug/L	U	10
Trichlorofluoromethane	75-69-4	U	10.0	5.30	ug/L	U	10
Vinyl Acetate	108-05-4	U	10.0	12.6	ug/L	U	10
Vinyl Chloride	75-01-4	U	10.0	1.90	ug/L	U	10

<b>Analytical Method: pH by SW-846 9040C</b>	<b>Prep Method:</b>
Date Analyzed: Mar-14-09 10:00    Analyst: 4099	Date Prep:    Tech: 4099
Seq Number: 752849	

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
pH	PH	8.13	N/A	N/A	SU		1

Project: Xenco-Atlanta Master Project

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: <b>WS-02</b>	Matrix: <b>SOLID WASTE</b>	% Moisture: <b>4.06</b>
Lab Sample Id: <b>327527-002</b>	Date Collected: <b>Mar-13-09 13:30</b>	Date Received: <b>Mar-13-09 17:05</b>

<b>Analytical Method: Chlorinated Herbicides by SW-846 8151A</b>	Prep Method: SW8151A_EXT
Date Analyzed: Mar-19-09 18:27    Analyst: VCH	Date Prep: Mar-17-09 15:00    Tech: 4118
Seq Number: 753260	

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
2,4-D	94-75-7	U	4.34	0.598	ug/kg	U	1
2,4-Db	94-82-6	U	21.7	1.32	ug/kg	U	1
2,4,5-T	93-76-5	U	2.17	0.744	ug/kg	U	1
2,4,5-Tp	93-72-1	U	2.17	0.421	ug/kg	U	1
Dalapon	75-99-0	U	2.17	0.947	ug/kg	U	1
Dicamba	1918-00-9	U	2.17	0.484	ug/kg	U	1
Dichloroprop	120-36-5	U	4.34	0.285	ug/kg	U	1
MCPA	94-74-6	U	869	164	ug/kg	U	1
MCPD	93-65-2	U	869	44.6	ug/kg	U	1

<b>Analytical Method: Mercury by SW-846 7471A</b>	Prep Method: SW7471P
Date Analyzed: Mar-18-09 11:13    Analyst: 4150	Date Prep: Mar-17-09 18:12    Tech: ABA
Seq Number: 753056	

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Mercury	7439-97-6	0.4270	0.0521	0.0031	mg/kg		1

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: <b>WS-02</b>	Matrix: <b>SOLID WASTE</b>	% Moisture: <b>4.06</b>
Lab Sample Id: <b>327527-002</b>	Date Collected: <b>Mar-13-09 13:30</b>	Date Received: <b>Mar-13-09 17:05</b>

**Analytical Method: Organophosphorus Pesticides by SW846 8141A**

Prep Method: SW3550

Date Analyzed: Mar-25-09 01:07

Analyst: JAN

Date Prep: Mar-19-09 08:14

Tech: MAZ

Seq Number: 754487

SUB: E86678 - Xenco Miami

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
o,o,o,o-Tetra-n-Propyl Dithiopyrophosphate	3244-90-4	U	125	52.1	ug/kg	U	1
Atrazine		U	521	261	ug/kg	U	1
Azinphos-ethyl	2642-71-9	U	2080	188	ug/kg	U	1
azinphos-methyl	86-50-0	U	2080	427	ug/kg	U	1
Bolstar	35400-43-2	U	521	125	ug/kg	U	1
Chlorfenyinphos		U	521	71.9	ug/kg	U	1
Chlorpyrifos	2921-88-2	U	521	65.7	ug/kg	U	1
Chlorpyrifos methyl	5598-13-0	U	521	61.5	ug/kg	U	1
Coumaphos	56-72-4	U	1560	219	ug/kg	U	1
Crotoxypfos	7700-17-6	U	521	81.3	ug/kg	U	1
Demeton-O	298-03-3	U	521	42.7	ug/kg	U	1
Demeton-S	126-75-0	U	521	64.6	ug/kg	U	1
Diazinon	333-41-5	U	521	63.6	ug/kg	U	1
Dichlorofenthion	97-17-6	U	521	74.0	ug/kg	U	1
Dichlorvos	62-73-7	U	521	78.2	ug/kg	U	1
Dimethoate	60-51-5	U	521	261	ug/kg	U	1
Dioxathion	78-34-2	U	521	146	ug/kg	U	1
Disulfoton	298-04-4	U	521	219	ug/kg	U	1
EPN (Ent)	2104-64-5	U	521	83.4	ug/kg	U	1
Ethion	563-12-2	U	521	229	ug/kg	U	1
Ethoprop	13194-48-4	U	521	261	ug/kg	U	1
Famphur	52-85-7	U	521	188	ug/kg	U	1
Fenithrothion		U	521	65.7	ug/kg	U	1
Fenthion	55-38-9	U	521	77.1	ug/kg	U	1
Fonophos		U	521	198	ug/kg	U	1
Leptophos	21609-90-5	U	521	47.9	ug/kg	U	1
Malathion	121-75-5	U	521	68.8	ug/kg	U	1
Merphos	150-50-5	U	521	93.8	ug/kg	U	1
Mevinphos	7786-34-7	U	521	198	ug/kg	U	1
Monocrotophos		U	521	281	ug/kg	U	1
Naled	300-76-5	U	521	292	ug/kg	U	1
Parathion, Ethyl	56-38-2	U	521	46.9	ug/kg	U	1
Parathion, Methyl	298-00-0	U	521	156	ug/kg	U	1
Phorate	298-02-2	U	521	313	ug/kg	U	1
Phosmet	732-11-6	U	125	52.1	ug/kg	U	1
Phosphamidon	13171-21-6	U	521	219	ug/kg	U	1
Simazine	SW8141A	U	2080	427	ug/kg	U	1
stirophos	22248-79-9	U	521	219	ug/kg	U	1
Sulfotep	3689-24-5	U	521	167	ug/kg	U	1

Project: Xenco-Atlanta Master Project

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: <b>WS-02</b>	Matrix: <b>SOLID WASTE</b>	% Moisture: <b>4.06</b>
Lab Sample Id: <b>327527-002</b>	Date Collected: <b>Mar-13-09 13:30</b>	Date Received: <b>Mar-13-09 17:05</b>

Analytical Method: Organophosphorus Pesticides by SW846 8141A				Prep Method: SW3550			
Date Analyzed: Mar-25-09 01:07		Analyst: JAN		Date Prep: Mar-19-09 08:14		Tech: MAZ	
Seq Number: 754487				SUB: E86678 - Xenco Miami			
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
TEPP	21646-99-1	U	521	313	ug/kg	U	1
Thionazin		U	521	146	ug/kg	U	1
Tokuthion	34643-46-4	U	521	56.3	ug/kg	U	1
Trichlorfon	52-68-9	U	1880	1880	ug/kg	U	1
Trichloronate	327-98-0	U	521	57.3	ug/kg	U	1
Analytical Method: Pesticides by SW-846 8081A				Prep Method: SW3545			
Date Analyzed: Mar-19-09 10:47		Analyst: VCH		Date Prep: Mar-17-09 15:00		Tech: 4118	
Seq Number: 753926							
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
4,4-DDD	72-54-8	U	51.1	2.81	ug/kg	U	1
Aldrin	309-00-2	U	25.5	1.61	ug/kg	U	1
Alpha-BHC	319-84-6	U	25.5	1.34	ug/kg	U	1
Alpha-Chlordane	5103-71-9	U	25.5	2.20	ug/kg	U	1
Beta-BHC	319-85-7	U	25.5	2.65	ug/kg	U	1
Chlordane	57-74-9	U	255	71.3	ug/kg	U	1
Delta-BHC	319-86-8	U	25.5	2.97	ug/kg	U	1
Dieldrin	60-57-1	2880	511	25.7	ug/kg	D	10
Endosulfan I	959-98-8	U	25.5	2.08	ug/kg	U	1
Endosulfan II	33213-65-9	U	51.1	2.60	ug/kg	U	1
Endosulfan Sulfate	1031-07-8	U	51.1	3.40	ug/kg	U	1
Endrin	72-20-8	U	51.1	2.58	ug/kg	U	1
Endrin Aldehyde	7421-93-4	U	51.1	3.56	ug/kg	U	1
Endrin Ketone	53494-70-5	U	51.1	2.88	ug/kg	U	1
Gamma-BHC (Lindane)	58-89-9	U	25.5	1.42	ug/kg	U	1
Heptachlor	76-44-8	U	25.5	2.94	ug/kg	U	1
Gamma-Chlordane	5103-74-2	U	25.5	4.31	ug/kg	U	1
Heptachlor Epoxide	1024-57-3	U	25.5	1.42	ug/kg	U	1
Methoxychlor	72-43-5	U	255	17.3	ug/kg	U	1
Toxaphene	8001-35-2	U	1020	216	ug/kg	U	1

Project: Xenco-Atlanta Master Project





## Certificate of Analytical Results 327527



### Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: <b>WS-02</b>	Matrix: <b>SOLID WASTE</b>	% Moisture: <b>4.06</b>
Lab Sample Id: <b>327527-002</b>	Date Collected: <b>Mar-13-09 13:30</b>	Date Received: <b>Mar-13-09 17:05</b>

Analytical Method: **Pesticides by SW-846 8081A**

Prep Method: SW3545

Date Analyzed: Mar-19-09 10:47

Analyst: VCH

Date Prep: Mar-17-09 15:00

Tech: 4118

Seq Number: 753926

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
4,4-DDE	72-55-9	154	51.1	2.78	ug/kg		1
4,4-DDT	50-29-3	341	51.1	4.54	ug/kg		1

Project: Xenco-Atlanta Master Project

Version: 1.055

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: <b>WS-02</b>	Matrix: <b>SOLID WASTE</b>	% Moisture: <b>4.06</b>
Lab Sample Id: <b>327527-002</b>	Date Collected: <b>Mar-13-09 13:30</b>	Date Received: <b>Mar-13-09 17:05</b>

Analytical Method: SVOCs by SW-846 8270C				Prep Method: SW3545			
Date Analyzed: Mar-23-09 15:47		Analyst: RYE		Date Prep: Mar-17-09 10:00		Tech: 4118	
Seq Number: 753650							
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
1,2,4-Trichlorobenzene	120-82-1	U	51000	9000	ug/kg	U	10
1,2-Dichlorobenzene	95-50-1	U	51000	8200	ug/kg	U	10
1,2-Diphenylhydrazine	122-66-7	120000	51000	5600	ug/kg		10
1,3-Dichlorobenzene	541-73-1	U	51000	8000	ug/kg	U	10
1,4-Dichlorobenzene	106-46-7	U	51000	7900	ug/kg	U	10
1-Methylnaphthalene	90-12-0	U	51000	9900	ug/kg	U	10
2,3,4,6-Tetrachlorophenol	58-90-2	U	51000	7600	ug/kg	U	10
2,4,5-Trichlorophenol	95-95-4	U	51000	9300	ug/kg	U	10
2,4,6-Trichlorophenol	88-06-2	U	51000	9800	ug/kg	U	10
2,4-Dichlorophenol	120-83-2	U	51000	6400	ug/kg	U	10
2,4-Dimethylphenol	105-67-9	U	51000	9200	ug/kg	U	10
2,4-Dinitrophenol	51-28-5	U	100000	8100	ug/kg	U	10
2,4-Dinitrotoluene	121-14-2	U	51000	8100	ug/kg	U	10
2,6-Dichlorophenol	87-65-0	U	51000	8100	ug/kg	U	10
2,6-Dinitrotoluene	606-20-2	U	51000	6600	ug/kg	U	10
2-Chloronaphthalene	91-58-7	U	51000	9200	ug/kg	U	10
2-Chlorophenol	95-57-8	U	51000	9100	ug/kg	U	10
2-Methylnaphthalene	91-57-6	U	51000	7700	ug/kg	U	10
2-methylphenol	95-48-7	U	51000	7100	ug/kg	U	10
2-Nitroaniline	88-74-4	U	100000	6800	ug/kg	U	10
2-Nitrophenol	88-75-5	U	51000	6400	ug/kg	U	10
3&4-Methylphenol	3/4-CRESOL	U	100000	15000	ug/kg	U	10
3,3-Dichlorobenzidine	91-94-1	U	100000	7400	ug/kg	U	10
3-Nitroaniline	99-09-2	U	100000	7000	ug/kg	U	10
4,6-dinitro-2-methyl phenol	534-52-1	U	100000	8800	ug/kg	U	10
4-Bromophenyl-phenylether	101-55-3	U	51000	8600	ug/kg	U	10
4-chloro-3-methylphenol	59-50-7	U	51000	7200	ug/kg	U	10
4-Chloroaniline	106-47-8	U	51000	8400	ug/kg	U	10
4-Chlorophenyl Phenyl Ether	7005-72-3	U	51000	9600	ug/kg	U	10
4-Nitroaniline	100-01-6	U	100000	7700	ug/kg	U	10
4-Nitrophenol	100-02-7	U	100000	6200	ug/kg	U	10
Acenaphthene	83-32-9	U	51000	7100	ug/kg	U	10
Acenaphthylene	208-96-8	U	51000	8600	ug/kg	U	10
Acetophenone	98-86-2	U	51000	9200	ug/kg	U	10
Anthracene	120-12-7	U	51000	7500	ug/kg	U	10
Benzo(a)anthracene	56-55-3	U	51000	8200	ug/kg	U	10
Benzo(a)pyrene	50-32-8	U	51000	7400	ug/kg	U	10
Benzo(b)fluoranthene	205-99-2	U	51000	8200	ug/kg	U	10
Benzo(g,h,i)perylene	191-24-2	U	51000	8300	ug/kg	U	10

Project: Xenco-Atlanta Master Project

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: <b>WS-02</b>	Matrix: <b>SOLID WASTE</b>	% Moisture: <b>4.06</b>
Lab Sample Id: <b>327527-002</b>	Date Collected: <b>Mar-13-09 13:30</b>	Date Received: <b>Mar-13-09 17:05</b>

Analytical Method: SVOCs by SW-846 8270C				Prep Method: SW3545			
Date Analyzed: Mar-23-09 15:47		Analyst: RYE		Date Prep: Mar-17-09 10:00		Tech: 4118	
Seq Number: 753650							
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Benzo(k)fluoranthene	207-08-9	U	51000	8700	ug/kg	U	10
Benzoic Acid	65-85-0	U	100000	8000	ug/kg	U	10
Benzyl Alcohol	100-51-6	U	51000	8100	ug/kg	U	10
Biphenyl (Diphenyl)	92-52-4	U	51000	6700	ug/kg	U	10
bis(2-chloroethoxy) methane	111-91-1	U	51000	6100	ug/kg	U	10
bis(2-chloroethyl) ether	111-44-4	U	51000	7200	ug/kg	U	10
bis(2-chloroisopropyl) ether	108-60-1	U	51000	6800	ug/kg	U	10
bis(2-ethylhexyl) phthalate	117-81-7	39000000	5100000	820000	ug/kg	D	1000
Benzyl Butyl Phthalate	85-68-7	U	51000	7600	ug/kg	U	10
Caprolactam	105-60-2	U	51000	2700	ug/kg	U	10
Carbazole	86-74-8	U	51000	8700	ug/kg	U	10
Chrysene	218-01-9	U	51000	6700	ug/kg	U	10
Dibenz(a,h)anthracene	53-70-3	U	51000	9800	ug/kg	U	10
Dibenzofuran	132-64-9	U	51000	6500	ug/kg	U	10
Diethyl Phthalate	84-66-2	160000	51000	8100	ug/kg		10
Dimethyl Phthalate	131-11-3	U	51000	7600	ug/kg	U	10
di-n-Butyl Phthalate	84-74-2	55000	51000	9300	ug/kg		10
di-n-Octyl Phthalate	117-84-0	120000	51000	8400	ug/kg		10
Ethyl Methanesulfonate	62-50-0	U	51000	5100	ug/kg	U	10
Fluoranthene	206-44-0	U	51000	6600	ug/kg	U	10
Fluorene	86-73-7	U	51000	6200	ug/kg	U	10
Hexachlorobenzene	118-74-1	U	51000	8400	ug/kg	U	10
Hexachlorobutadiene	87-68-3	U	51000	5600	ug/kg	U	10
Hexachlorocyclopentadiene	77-47-4	U	51000	8700	ug/kg	U	10
Hexachloroethane	67-72-1	U	51000	7800	ug/kg	U	10
Indeno(1,2,3-c,d)Pyrene	193-39-5	U	51000	9200	ug/kg	U	10
Isophorone	78-59-1	U	51000	5200	ug/kg	U	10
Methyl Methanesulfonate	66-27-3	U	51000	7200	ug/kg	U	10
Naphthalene	91-20-3	U	51000	8100	ug/kg	U	10
Nitrobenzene	98-95-3	U	51000	9000	ug/kg	U	10
N-Nitrosodimethylamine	62-75-9	U	51000	7700	ug/kg	U	10
N-Nitrosodi-n-Propylamine	621-64-7	U	51000	7200	ug/kg	U	10
N-Nitrosodiphenylamine	86-30-6	U	51000	11000	ug/kg	U	10
Pentachlorophenol	87-86-5	U	100000	9200	ug/kg	U	10
Phenanthrene	85-01-8	U	51000	8400	ug/kg	U	10
Phenol	108-95-2	U	51000	7100	ug/kg	U	10
Pyrene	129-00-0	U	51000	8600	ug/kg	U	10

Project: Xenco-Atlanta Master Project

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: <b>WS-02</b>	Matrix: <b>SOLID WASTE</b>	% Moisture: <b>4.06</b>
Lab Sample Id: <b>327527-002</b>	Date Collected: <b>Mar-13-09 13:30</b>	Date Received: <b>Mar-13-09 17:05</b>

<b>Analytical Method: TAL Metals by SW-846 6010B</b>	<b>Prep Method: SW3050B</b>
Date Analyzed: Mar-18-09 17:20    Analyst: 4150	Date Prep: Mar-17-09 18:15    Tech: ABA
Seq Number: 753079	

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Aluminum	7429-90-5	U	492	0.425	mg/kg	U	1
Antimony	7440-36-0	U	4.92	0.662	mg/kg	U	1
Arsenic	7440-38-2	U	4.92	0.607	mg/kg	U	1
Barium	7440-39-3	U	4.92	0.150	mg/kg	U	1
Beryllium	7440-41-7	U	0.295	0.007	mg/kg	U	1
Cadmium	7440-43-9	0.944	0.492	0.021	mg/kg		1
Calcium	7440-70-2	U	492	1.97	mg/kg	U	1
Chromium	7440-47-3	U	4.92	0.094	mg/kg	U	1
Cobalt	7440-48-4	U	0.983	0.091	mg/kg	U	1
Copper	7440-50-8	U	4.92	0.050	mg/kg	U	1
Iron	7439-89-6	9960	4920	5.41	mg/kg	D	10
Lead	7439-92-1	5.55	4.92	0.295	mg/kg		1
Magnesium	7439-95-4	U	492	0.089	mg/kg	U	1
Manganese	7439-96-5	31.9	4.92	0.080	mg/kg		1
Nickel	7440-02-0	U	4.92	0.154	mg/kg	U	1
Potassium	2133-26-8	18000	492	0.295	mg/kg		1
Selenium	7782-49-2	U	4.92	0.940	mg/kg	U	1
Silver	7440-22-4	U	4.92	0.047	mg/kg	U	1
Sodium	7440-23-5	116000	49200	6760	mg/kg	D	100
Thallium	7440-28-0	U	4.92	0.206	mg/kg	U	1
Vanadium	7440-62-2	U	0.983	0.027	mg/kg	U	1
Zinc	7440-66-6	U	98.3	0.252	mg/kg	U	1

Project: Xenco-Atlanta Master Project

Version: 1.055

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: <b>WS-02</b>	Matrix: <b>SOLID WASTE</b>	% Moisture: <b>4.06</b>
Lab Sample Id: <b>327527-002</b>	Date Collected: <b>Mar-13-09 13:30</b>	Date Received: <b>Mar-13-09 17:05</b>

Analytical Method: VOCs by SW-846 8260B				Prep Method: SW5030B			
Date Analyzed: Mar-18-09 11:10		Analyst: 4124		Date Prep: Mar-18-09 07:25		Tech: 5459	
Seq Number: 753394							
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
1,1,1-Trichloroethane	71-55-6	U	2400	370	ug/kg	U	50
1,1,2,2-Tetrachloroethane	79-34-5	U	2400	580	ug/kg	U	50
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	U	2400	540	ug/kg	U	50
1,1,2-Trichloroethane	79-00-5	U	2400	330	ug/kg	U	50
1,1-Dichloroethane	75-34-3	U	2400	390	ug/kg	U	50
1,1-Dichloroethene	75-35-4	U	2400	560	ug/kg	U	50
1,2,4-Trichlorobenzene	120-82-1	U	2400	420	ug/kg	U	50
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	U	2400	790	ug/kg	U	50
1,2-Dibromoethane (EDB)	106-93-4	U	2400	420	ug/kg	U	50
1,2-Dichlorobenzene	95-50-1	U	2400	630	ug/kg	U	50
1,2-Dichloroethane	107-06-2	U	2400	290	ug/kg	U	50
1,2-Dichloropropane	78-87-5	U	2400	450	ug/kg	U	50
1,3-Dichlorobenzene	541-73-1	U	2400	490	ug/kg	U	50
1,4-Dichlorobenzene	106-46-7	U	2400	330	ug/kg	U	50
2-Butanone (MEK)	78-93-3	U	24000	4400	ug/kg	U	50
2-Hexanone	591-78-6	U	24000	550	ug/kg	U	50
4-Methyl-2-pentanone (MIBK)	108-10-1	U	24000	1600	ug/kg	U	50
Acetone	67-64-1	U	24000	3300	ug/kg	U	50
Benzene	71-43-2	U	2400	250	ug/kg	U	50
Bromodichloromethane	75-27-4	U	2400	240	ug/kg	U	50
Bromoform	75-25-2	U	2400	470	ug/kg	U	50
Bromomethane	74-83-9	U	2400	1200	ug/kg	U	50
Carbon disulfide	75-15-0	U	2400	710	ug/kg	U	50
Carbon tetrachloride	56-23-5	U	2400	360	ug/kg	U	50
Chlorobenzene	108-90-7	U	4900	280	ug/kg	U	50
Chloroethane	75-00-3	U	2400	1200	ug/kg	U	50
Chloroform	67-66-3	U	2400	360	ug/kg	U	50
Chloromethane	74-87-3	U	2400	1100	ug/kg	U	50
cis-1,2-Dichloroethene	156-59-2	U	2400	320	ug/kg	U	50
cis-1,3-Dichloropropene	10061-01-5	U	2400	260	ug/kg	U	50
Cyclohexane	110-82-7	U	2400	460	ug/kg	U	50
Dibromochloromethane	124-48-1	U	2400	480	ug/kg	U	50
Dichlorodifluoromethane	75-71-8	U	2400	570	ug/kg	U	50
Ethylbenzene	100-41-4	U	2400	270	ug/kg	U	50
Isopropylbenzene	98-82-8	U	2400	370	ug/kg	U	50
m,p-Xylenes	179601-23-1	U	4900	590	ug/kg	U	50
Methyl acetate	79-20-9	U	2400	460	ug/kg	U	50
Methyl tert-butyl ether	1634-04-4	U	2400	340	ug/kg	U	50
Methylcyclohexane	108-87-2	U	2400	530	ug/kg	U	50

Project: Xenco-Atlanta Master Project





## Certificate of Analytical Results 327527



### Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: <b>WS-02</b>	Matrix: <b>SOLID WASTE</b>	% Moisture: <b>4.06</b>
Lab Sample Id: <b>327527-002</b>	Date Collected: <b>Mar-13-09 13:30</b>	Date Received: <b>Mar-13-09 17:05</b>

Analytical Method: **VOCs by SW-846 8260B**

Prep Method: SW5030B

Date Analyzed: Mar-18-09 11:10

Analyst: 4124

Date Prep: Mar-18-09 07:25

Tech: 5459

Seq Number: 753394

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Methylene chloride	75-09-2	U	2400	1100	ug/kg	U	50
o-Xylene	95-47-6	U	2400	350	ug/kg	U	50
Styrene	100-42-5	U	2400	360	ug/kg	U	50
Tetrachloroethene	127-18-4	U	2400	500	ug/kg	U	50
Toluene	108-88-3	U	2400	290	ug/kg	U	50
trans-1,2-Dichloroethene	156-60-5	U	2400	380	ug/kg	U	50
trans-1,3-Dichloropropene	10061-02-6	U	2400	330	ug/kg	U	50
Trichloroethene	79-01-6	U	2400	340	ug/kg	U	50
Trichlorofluoromethane	75-69-4	U	2400	1700	ug/kg	U	50
Vinyl chloride	75-01-4	U	2400	980	ug/kg	U	50
Xylenes, Total	1330-20-7	U	2400	350	ug/kg	U	50

Project: Xenco-Atlanta Master Project

Version: 1.055



# Certificate of Analytical Results 327527



## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: <b>WS-02</b>	Matrix: <b>SOLID WASTE</b>	% Moisture:
Lab Sample Id: <b>327527-002</b>	Date Collected: <b>Mar-13-09 13:30</b>	Date Received: <b>Mar-13-09 17:05</b>

Analytical Method: Percent Moisture				Prep Method:			
Date Analyzed: Mar-17-09 13:15		Analyst: 4099		Date Prep:		Tech: 4099	
Seq Number: 752969							
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Percent Moisture	TMOIST	4.06			%		1
Analytical Method: pH by SW-846 9045D				Prep Method:			
Date Analyzed: Mar-14-09 10:45		Analyst: 4099		Date Prep:		Tech: 4099	
Seq Number: 752847							
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
pH	PH	7.22	N/A	N/A	SU		1

Project: Xenco-Atlanta Master Project

Version: 1.055

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: <b>WS-03</b>	Matrix: <b>SOLID WASTE</b>	% Moisture: <b>8.51</b>
Lab Sample Id: <b>327527-003</b>	Date Collected: <b>Mar-13-09 14:45</b>	Date Received: <b>Mar-13-09 17:05</b>

<b>Analytical Method: Chlorinated Herbicides by SW-846 8151A</b>	<b>Prep Method: SW8151A_EXT</b>
Date Analyzed: Mar-19-09 18:52    Analyst: VCH	Date Prep: Mar-17-09 15:00    Tech: 4118
Seq Number: 753260	

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
2,4-D	94-75-7	U	4.37	0.602	ug/kg	U	1
2,4-Db	94-82-6	U	21.9	1.33	ug/kg	U	1
2,4,5-T	93-76-5	U	2.19	0.749	ug/kg	U	1
2,4,5-Tp	93-72-1	U	2.19	0.424	ug/kg	U	1
Dalapon	75-99-0	U	2.19	0.953	ug/kg	U	1
Dicamba	1918-00-9	U	2.19	0.487	ug/kg	U	1
Dichloroprop	120-36-5	U	4.37	0.287	ug/kg	U	1
MCPA	94-74-6	U	874	165	ug/kg	U	1
MCPD	93-65-2	U	874	44.9	ug/kg	U	1

<b>Analytical Method: Mercury by SW-846 7471A</b>	<b>Prep Method: SW7471P</b>
Date Analyzed: Mar-18-09 11:13    Analyst: 4150	Date Prep: Mar-17-09 18:12    Tech: ABA
Seq Number: 753056	

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Mercury	7439-97-6	U	0.0536	0.0032	mg/kg	U	1

Project: Xenco-Atlanta Master Project

Version: 1.055

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: <b>WS-03</b>	Matrix: <b>SOLID WASTE</b>	% Moisture: <b>8.51</b>
Lab Sample Id: <b>327527-003</b>	Date Collected: <b>Mar-13-09 14:45</b>	Date Received: <b>Mar-13-09 17:05</b>

Analytical Method: Organophosphorus Pesticides by SW846 8141A				Prep Method: SW3550			
Date Analyzed: Mar-31-09 06:09		Analyst: JAN		Date Prep: Mar-19-09 08:14		Tech: MAZ	
Seq Number: 754487				SUB: E86678 - Xenco Miami			
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
o,o,o,o-Tetra-n-Propyl Dithiopyrophosphate	3244-90-4	U	131	54.7	ug/kg	U	1
Atrazine		U	547	273	ug/kg	U	1
Azinphos-ethyl	2642-71-9	U	2190	197	ug/kg	U	1
azinphos-methyl	86-50-0	U	2190	448	ug/kg	U	1
Bolstar	35400-43-2	U	547	131	ug/kg	U	1
Chlorfenyinhos		U	547	75.4	ug/kg	U	1
Chlorpyrifos	2921-88-2	U	547	68.9	ug/kg	U	1
Chlorpyrifos mathyl	5598-13-0	U	547	64.5	ug/kg	U	1
Coumaphos	56-72-4	U	1640	230	ug/kg	U	1
Crotoxypfos	7700-17-6	U	547	85.3	ug/kg	U	1
Demeton-O	298-03-3	U	547	44.8	ug/kg	U	1
Demeton-S	126-75-0	U	547	67.8	ug/kg	U	1
Diazinon	333-41-5	U	547	66.7	ug/kg	U	1
Dichlorofenthion	97-17-6	U	547	77.6	ug/kg	U	1
Dichlorvos	62-73-7	U	547	82.0	ug/kg	U	1
Dimethoate	60-51-5	U	547	273	ug/kg	U	1
Dioxathion	78-34-2	U	547	153	ug/kg	U	1
Disulfoton	298-04-4	U	547	230	ug/kg	U	1
EPN (Ent)	2104-64-5	U	547	87.4	ug/kg	U	1
Ethion	563-12-2	U	547	240	ug/kg	U	1
Ethoprop	13194-48-4	U	547	273	ug/kg	U	1
Famphur	52-85-7	U	547	197	ug/kg	U	1
Fenithrothion		U	547	68.9	ug/kg	U	1
Fenthion	55-38-9	U	547	80.9	ug/kg	U	1
Fonophos		U	547	208	ug/kg	U	1
Leptophos	21609-90-5	U	547	50.3	ug/kg	U	1
Malathion	121-75-5	U	547	72.1	ug/kg	U	1
Merphos	150-50-5	U	547	98.4	ug/kg	U	1
Mevinphos	7786-34-7	U	547	208	ug/kg	U	1
Monocrotophos		U	547	295	ug/kg	U	1
Naled	300-76-5	U	547	306	ug/kg	U	1
Parathion, Ethyl	56-38-2	U	547	49.2	ug/kg	U	1
Parathion, Methyl	298-00-0	U	547	164	ug/kg	U	1
Phorate	298-02-2	U	547	328	ug/kg	U	1
Phosmet	732-11-6	U	131	54.7	ug/kg	U	1
Phosphamidon	13171-21-6	U	547	230	ug/kg	U	1
Simazine	SW8141A	U	2190	448	ug/kg	U	1
stirophos	22248-79-9	U	547	230	ug/kg	U	1
Sulfotep	3689-24-5	U	547	175	ug/kg	U	1

Project: Xenco-Atlanta Master Project

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: <b>WS-03</b>	Matrix: <b>SOLID WASTE</b>	% Moisture: <b>8.51</b>
Lab Sample Id: <b>327527-003</b>	Date Collected: <b>Mar-13-09 14:45</b>	Date Received: <b>Mar-13-09 17:05</b>

Analytical Method: Organophosphorus Pesticides by SW846 8141A				Prep Method: SW3550			
Date Analyzed: Mar-31-09 06:09		Analyst: JAN	Date Prep: Mar-19-09 08:14		Tech: MAZ		
Seq Number: 754487				SUB: E86678 - Xenco Miami			
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
TEPP	21646-99-1	U	547	328	ug/kg	U	1
Thionazin		U	547	153	ug/kg	U	1
Tokuthion	34643-46-4	U	547	59.0	ug/kg	U	1
Trichlorfon	52-68-9	U	1970	1970	ug/kg	U	1
Trichloronate	327-98-0	U	547	60.1	ug/kg	U	1
Analytical Method: Pesticides by SW-846 8081A				Prep Method: SW3545			
Date Analyzed: Mar-19-09 11:14		Analyst: VCH	Date Prep: Mar-17-09 15:00		Tech: 4118		
Seq Number: 753926							
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
4,4-DDD	72-54-8	U	52.0	2.86	ug/kg	U	1
4,4-DDE	72-55-9	U	52.0	2.83	ug/kg	U	1
4,4-DDT	50-29-3	U	52.0	4.63	ug/kg	U	1
Aldrin	309-00-2	U	26.0	1.64	ug/kg	U	1
Alpha-Chlordane	5103-71-9	U	26.0	2.24	ug/kg	U	1
Beta-BHC	319-85-7	U	26.0	2.70	ug/kg	U	1
Chlordane	57-74-9	U	260	72.6	ug/kg	U	1
Delta-BHC	319-86-8	U	26.0	3.02	ug/kg	U	1
Dieldrin	60-57-1	U	52.0	2.62	ug/kg	U	1
Endosulfan I	959-98-8	U	26.0	2.12	ug/kg	U	1
Endosulfan II	33213-65-9	U	52.0	2.65	ug/kg	U	1
Endosulfan Sulfate	1031-07-8	U	52.0	3.46	ug/kg	U	1
Endrin	72-20-8	U	52.0	2.62	ug/kg	U	1
Endrin Aldehyde	7421-93-4	U	52.0	3.62	ug/kg	U	1
Endrin Ketone	53494-70-5	U	52.0	2.94	ug/kg	U	1
Heptachlor	76-44-8	8050	2600	299	ug/kg	D	100
Gamma-Chlordane	5103-74-2	6720	2600	439	ug/kg	D	100
Heptachlor Epoxide	1024-57-3	U	26.0	1.45	ug/kg	U	1
Methoxychlor	72-43-5	U	260	17.6	ug/kg	U	1
Toxaphene	8001-35-2	U	1040	220	ug/kg	U	1

Project: Xenco-Atlanta Master Project





## Certificate of Analytical Results 327527



### Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: <b>WS-03</b>	Matrix: <b>SOLID WASTE</b>	% Moisture: <b>8.51</b>
Lab Sample Id: <b>327527-003</b>	Date Collected: <b>Mar-13-09 14:45</b>	Date Received: <b>Mar-13-09 17:05</b>

Analytical Method: **Pesticides by SW-846 8081A**

Prep Method: SW3545

Date Analyzed: Mar-19-09 11:14

Analyst: VCH

Date Prep: Mar-17-09 15:00

Tech: 4118

Seq Number: 753926

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Alpha-BHC	319-84-6	160	26.0	1.36	ug/kg		1
Gamma-BHC (Lindane)	58-89-9	487	26.0	1.45	ug/kg		1

Project: Xenco-Atlanta Master Project

Version: 1.055

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: <b>WS-03</b>	Matrix: <b>SOLID WASTE</b>	% Moisture: <b>8.51</b>
Lab Sample Id: <b>327527-003</b>	Date Collected: <b>Mar-13-09 14:45</b>	Date Received: <b>Mar-13-09 17:05</b>

**Analytical Method: SVOCs by SW-846 8270C**

**Prep Method: SW3545**

Date Analyzed: Mar-23-09 16:15

Analyst: RYE

Date Prep: Mar-17-09 10:00

Tech: 4118

Seq Number: 753650

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
1,2,4-Trichlorobenzene	120-82-1	U	53000	9400	ug/kg	U	10
1,2-Dichlorobenzene	95-50-1	U	53000	8600	ug/kg	U	10
1,2-Diphenylhydrazine	122-66-7	U	53000	5800	ug/kg	U	10
1,3-Dichlorobenzene	541-73-1	U	53000	8400	ug/kg	U	10
1,4-Dichlorobenzene	106-46-7	U	53000	8300	ug/kg	U	10
1-Methylnaphthalene	90-12-0	U	53000	10000	ug/kg	U	10
2,3,4,6-Tetrachlorophenol	58-90-2	U	53000	8000	ug/kg	U	10
2,4,5-Trichlorophenol	95-95-4	U	53000	9800	ug/kg	U	10
2,4,6-Trichlorophenol	88-06-2	U	53000	10000	ug/kg	U	10
2,4-Dichlorophenol	120-83-2	U	53000	6700	ug/kg	U	10
2,4-Dimethylphenol	105-67-9	U	53000	9700	ug/kg	U	10
2,4-Dinitrophenol	51-28-5	U	110000	8500	ug/kg	U	10
2,4-Dinitrotoluene	121-14-2	U	53000	8500	ug/kg	U	10
2,6-Dichlorophenol	87-65-0	U	53000	8500	ug/kg	U	10
2,6-Dinitrotoluene	606-20-2	U	53000	6900	ug/kg	U	10
2-Chloronaphthalene	91-58-7	U	53000	9700	ug/kg	U	10
2-Chlorophenol	95-57-8	U	53000	9500	ug/kg	U	10
2-Methylnaphthalene	91-57-6	U	53000	8100	ug/kg	U	10
2-methylphenol	95-48-7	U	53000	7400	ug/kg	U	10
2-Nitroaniline	88-74-4	U	110000	7100	ug/kg	U	10
2-Nitrophenol	88-75-5	U	53000	6700	ug/kg	U	10
3&4-Methylphenol	3/4-CRESOL	U	110000	16000	ug/kg	U	10
3,3-Dichlorobenzidine	91-94-1	U	110000	7700	ug/kg	U	10
3-Nitroaniline	99-09-2	U	110000	7300	ug/kg	U	10
4,6-dinitro-2-methyl phenol	534-52-1	U	110000	9200	ug/kg	U	10
4-Bromophenyl-phenylether	101-55-3	U	53000	9000	ug/kg	U	10
4-chloro-3-methylphenol	59-50-7	U	53000	7600	ug/kg	U	10
4-Chloroaniline	106-47-8	U	53000	8800	ug/kg	U	10
4-Chlorophenyl Phenyl Ether	7005-72-3	U	53000	10000	ug/kg	U	10
4-Nitroaniline	100-01-6	U	110000	8100	ug/kg	U	10
4-Nitrophenol	100-02-7	U	110000	6500	ug/kg	U	10
Acenaphthene	83-32-9	U	53000	7400	ug/kg	U	10
Acenaphthylene	208-96-8	U	53000	9000	ug/kg	U	10
Acetophenone	98-86-2	U	53000	9700	ug/kg	U	10
Anthracene	120-12-7	U	53000	7900	ug/kg	U	10
Benzo(a)anthracene	56-55-3	U	53000	8600	ug/kg	U	10
Benzo(a)pyrene	50-32-8	U	53000	7800	ug/kg	U	10
Benzo(b)fluoranthene	205-99-2	U	53000	8600	ug/kg	U	10
Benzo(g,h,i)perylene	191-24-2	U	53000	8800	ug/kg	U	10

Project: Xenco-Atlanta Master Project

Version: 1.055

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: <b>WS-03</b>	Matrix: <b>SOLID WASTE</b>	% Moisture: <b>8.51</b>
Lab Sample Id: <b>327527-003</b>	Date Collected: <b>Mar-13-09 14:45</b>	Date Received: <b>Mar-13-09 17:05</b>

Analytical Method: SVOCs by SW-846 8270C				Prep Method: SW3545			
Date Analyzed: Mar-23-09 16:15		Analyst: RYE		Date Prep: Mar-17-09 10:00		Tech: 4118	
Seq Number: 753650							
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Benzo(k)fluoranthene	207-08-9	U	53000	9100	ug/kg	U	10
Benzoic Acid	65-85-0	U	110000	8400	ug/kg	U	10
Benzyl Alcohol	100-51-6	U	53000	8500	ug/kg	U	10
Biphenyl (Diphenyl)	92-52-4	U	53000	7100	ug/kg	U	10
bis(2-chloroethoxy) methane	111-91-1	U	53000	6400	ug/kg	U	10
bis(2-chloroethyl) ether	111-44-4	U	53000	7500	ug/kg	U	10
bis(2-chloroisopropyl) ether	108-60-1	U	53000	7200	ug/kg	U	10
bis(2-ethylhexyl) phthalate	117-81-7	U	53000	8600	ug/kg	U	10
Benzyl Butyl Phthalate	85-68-7	U	53000	8000	ug/kg	U	10
Caprolactam	105-60-2	U	53000	2800	ug/kg	U	10
Carbazole	86-74-8	U	53000	9100	ug/kg	U	10
Chrysene	218-01-9	U	53000	7100	ug/kg	U	10
Dibenz(a,h)anthracene	53-70-3	U	53000	10000	ug/kg	U	10
Dibenzofuran	132-64-9	U	53000	6800	ug/kg	U	10
Diethyl Phthalate	84-66-2	U	53000	8500	ug/kg	U	10
Dimethyl Phthalate	131-11-3	U	53000	8000	ug/kg	U	10
di-n-Butyl Phthalate	84-74-2	U	53000	9800	ug/kg	U	10
di-n-Octyl Phthalate	117-84-0	U	53000	8800	ug/kg	U	10
Ethyl Methanesulfonate	62-50-0	U	53000	5300	ug/kg	U	10
Fluoranthene	206-44-0	U	53000	6900	ug/kg	U	10
Fluorene	86-73-7	U	53000	6500	ug/kg	U	10
Hexachlorobenzene	118-74-1	U	53000	8900	ug/kg	U	10
Hexachlorobutadiene	87-68-3	U	53000	5900	ug/kg	U	10
Hexachlorocyclopentadiene	77-47-4	U	53000	9100	ug/kg	U	10
Hexachloroethane	67-72-1	U	53000	8200	ug/kg	U	10
Indeno(1,2,3-c,d)Pyrene	193-39-5	U	53000	9700	ug/kg	U	10
Isophorone	78-59-1	U	53000	5500	ug/kg	U	10
Methyl Methanesulfonate	66-27-3	U	53000	7500	ug/kg	U	10
Naphthalene	91-20-3	U	53000	8500	ug/kg	U	10
Nitrobenzene	98-95-3	U	53000	9400	ug/kg	U	10
N-Nitrosodimethylamine	62-75-9	U	53000	8100	ug/kg	U	10
N-Nitrosodi-n-Propylamine	621-64-7	U	53000	7600	ug/kg	U	10
N-Nitrosodiphenylamine	86-30-6	U	53000	11000	ug/kg	U	10
Pentachlorophenol	87-86-5	U	110000	9600	ug/kg	U	10
Phenanthrene	85-01-8	U	53000	8800	ug/kg	U	10
Phenol	108-95-2	U	53000	7400	ug/kg	U	10
Pyrene	129-00-0	U	53000	9000	ug/kg	U	10

Project: Xenco-Atlanta Master Project

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: <b>WS-03</b>	Matrix: <b>SOLID WASTE</b>	% Moisture: <b>8.51</b>
Lab Sample Id: <b>327527-003</b>	Date Collected: <b>Mar-13-09 14:45</b>	Date Received: <b>Mar-13-09 17:05</b>

Analytical Method: TAL Metals by SW-846 6010B				Prep Method: SW3050B			
Date Analyzed: Mar-18-09 17:30		Analyst: 4150		Date Prep: Mar-17-09 18:15		Tech: ABA	
Seq Number: 753079							
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Aluminum	7429-90-5	4080	516	0.445	mg/kg		1
Antimony	7440-36-0	U	5.16	0.694	mg/kg	U	1
Arsenic	7440-38-2	U	5.16	0.636	mg/kg	U	1
Barium	7440-39-3	63.4	5.16	0.158	mg/kg		1
Beryllium	7440-41-7	0.608	0.309	0.007	mg/kg		1
Cadmium	7440-43-9	2.35	0.516	0.022	mg/kg		1
Calcium	7440-70-2	142000	5160	20.6	mg/kg	D	10
Chromium	7440-47-3	21.0	5.16	0.099	mg/kg		1
Cobalt	7440-48-4	2.53	1.03	0.095	mg/kg		1
Copper	7440-50-8	367	5.16	0.053	mg/kg		1
Iron	7439-89-6	5500	516	0.567	mg/kg		1
Lead	7439-92-1	18.6	5.16	0.309	mg/kg		1
Magnesium	7439-95-4	13800	5160	0.928	mg/kg	D	10
Manganese	7439-96-5	460	5.16	0.084	mg/kg		1
Nickel	7440-02-0	6.74	5.16	0.162	mg/kg		1
Potassium	2133-26-8	48100	5160	3.09	mg/kg	D	10
Selenium	7782-49-2	U	5.16	0.986	mg/kg	U	1
Silver	7440-22-4	U	5.16	0.049	mg/kg	U	1
Sodium	7440-23-5	4920	516	70.8	mg/kg		1
Thallium	7440-28-0	U	5.16	0.217	mg/kg	U	1
Vanadium	7440-62-2	21.2	1.03	0.028	mg/kg		1
Zinc	7440-66-6	453	103	0.264	mg/kg		1

Project: Xenco-Atlanta Master Project

Version: 1.055

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: <b>WS-03</b>	Matrix: <b>SOLID WASTE</b>	% Moisture: <b>8.51</b>
Lab Sample Id: <b>327527-003</b>	Date Collected: <b>Mar-13-09 14:45</b>	Date Received: <b>Mar-13-09 17:05</b>

**Analytical Method: VOCs by SW-846 8260B**

**Prep Method: SW5030B**

Date Analyzed: Mar-18-09 10:44

Analyst: 4124

Date Prep: Mar-18-09 07:25

Tech: 5459

Seq Number: 753394

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
1,1,1-Trichloroethane	71-55-6	U	510	77	ug/kg	U	50
1,1,2,2-Tetrachloroethane	79-34-5	U	510	120	ug/kg	U	50
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	U	510	110	ug/kg	U	50
1,1,2-Trichloroethane	79-00-5	U	510	68	ug/kg	U	50
1,1-Dichloroethane	75-34-3	U	510	82	ug/kg	U	50
1,1-Dichloroethene	75-35-4	U	510	120	ug/kg	U	50
1,2,4-Trichlorobenzene	120-82-1	U	510	89	ug/kg	U	50
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	U	510	170	ug/kg	U	50
1,2-Dibromoethane (EDB)	106-93-4	U	510	88	ug/kg	U	50
1,2-Dichlorobenzene	95-50-1	U	510	130	ug/kg	U	50
1,2-Dichloroethane	107-06-2	U	510	61	ug/kg	U	50
1,2-Dichloropropane	78-87-5	U	510	95	ug/kg	U	50
1,3-Dichlorobenzene	541-73-1	U	510	100	ug/kg	U	50
1,4-Dichlorobenzene	106-46-7	U	510	70	ug/kg	U	50
2-Butanone (MEK)	78-93-3	U	5100	930	ug/kg	U	50
2-Hexanone	591-78-6	U	5100	120	ug/kg	U	50
4-Methyl-2-pentanone (MIBK)	108-10-1	U	5100	330	ug/kg	U	50
Acetone	67-64-1	U	5100	700	ug/kg	U	50
Benzene	71-43-2	U	510	52	ug/kg	U	50
Bromodichloromethane	75-27-4	U	510	51	ug/kg	U	50
Bromoform	75-25-2	U	510	98	ug/kg	U	50
Bromomethane	74-83-9	U	510	250	ug/kg	U	50
Carbon disulfide	75-15-0	U	510	150	ug/kg	U	50
Carbon tetrachloride	56-23-5	U	510	76	ug/kg	U	50
Chlorobenzene	108-90-7	U	1000	59	ug/kg	U	50
Chloroethane	75-00-3	U	510	250	ug/kg	U	50
Chloroform	67-66-3	U	510	76	ug/kg	U	50
Chloromethane	74-87-3	U	510	240	ug/kg	U	50
cis-1,2-Dichloroethene	156-59-2	U	510	68	ug/kg	U	50
cis-1,3-Dichloropropene	10061-01-5	U	510	55	ug/kg	U	50
Cyclohexane	110-82-7	U	510	97	ug/kg	U	50
Dibromochloromethane	124-48-1	U	510	100	ug/kg	U	50
Dichlorodifluoromethane	75-71-8	U	510	120	ug/kg	U	50
Ethylbenzene	100-41-4	U	510	58	ug/kg	U	50
Isopropylbenzene	98-82-8	U	510	78	ug/kg	U	50
m,p-Xylenes	179601-23-1	U	1000	120	ug/kg	U	50
Methyl acetate	79-20-9	U	510	97	ug/kg	U	50
Methyl tert-butyl ether	1634-04-4	U	510	71	ug/kg	U	50
Methylcyclohexane	108-87-2	U	510	110	ug/kg	U	50

Project: Xenco-Atlanta Master Project

Version: 1.055



## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: <b>WS-03</b>	Matrix: <b>SOLID WASTE</b>	% Moisture: <b>8.51</b>
Lab Sample Id: <b>327527-003</b>	Date Collected: <b>Mar-13-09 14:45</b>	Date Received: <b>Mar-13-09 17:05</b>

**Analytical Method: VOCs by SW-846 8260B**

**Prep Method: SW5030B**

Date Analyzed: Mar-18-09 10:44

Analyst: 4124

Date Prep: Mar-18-09 07:25

Tech: 5459

Seq Number: 753394

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Methylene chloride	75-09-2	U	510	220	ug/kg	U	50
o-Xylene	95-47-6	U	510	73	ug/kg	U	50
Styrene	100-42-5	U	510	76	ug/kg	U	50
Tetrachloroethene	127-18-4	U	510	110	ug/kg	U	50
Toluene	108-88-3	U	510	60	ug/kg	U	50
trans-1,2-Dichloroethene	156-60-5	U	510	80	ug/kg	U	50
trans-1,3-Dichloropropene	10061-02-6	U	510	68	ug/kg	U	50
Trichloroethene	79-01-6	U	510	72	ug/kg	U	50
Trichlorofluoromethane	75-69-4	U	510	360	ug/kg	U	50
Vinyl chloride	75-01-4	U	510	210	ug/kg	U	50
Xylenes, Total	1330-20-7	U	510	73	ug/kg	U	50

Project: Xenco-Atlanta Master Project

Version: 1.055



## Certificate of Analytical Results 327527



### Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: <b>WS-03</b>	Matrix: <b>SOLID WASTE</b>	% Moisture:
Lab Sample Id: <b>327527-003</b>	Date Collected: <b>Mar-13-09 14:45</b>	Date Received: <b>Mar-13-09 17:05</b>

Analytical Method: Percent Moisture				Prep Method:			
Date Analyzed: Mar-17-09 13:15		Analyst: 4099		Date Prep:		Tech: 4099	
Seq Number: 752969							
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Percent Moisture	TMOIST	8.51			%		1
Analytical Method: pH by SW-846 9045D				Prep Method:			
Date Analyzed: Mar-14-09 10:45		Analyst: 4099		Date Prep:		Tech: 4099	
Seq Number: 752847							
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
pH	PH	9.50	N/A	N/A	SU		1

Project: Xenco-Atlanta Master Project

Version: 1.055

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: <b>S-01</b>	Matrix: <b>SOIL</b>	% Moisture: <b>10.13</b>
Lab Sample Id: <b>327527-004</b>	Date Collected: <b>Mar-13-09 13:40</b>	Date Received: <b>Mar-13-09 17:05</b>

<b>Analytical Method: Chlorinated Herbicides by SW-846 8151A</b>	Prep Method: SW8151A_EXT
Date Analyzed: Mar-19-09 19:16    Analyst: VCH	Date Prep: Mar-17-09 15:00    Tech: 4118
Seq Number: 753260	

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
2,4-D	94-75-7	U	0.368	0.051	ug/kg	U	1
2,4-Db	94-82-6	U	1.84	0.112	ug/kg	U	1
2,4,5-T	93-76-5	U	0.184	0.063	ug/kg	U	1
2,4,5-Tp	93-72-1	U	0.184	0.036	ug/kg	U	1
Dalapon	75-99-0	U	0.184	0.080	ug/kg	U	1
Dicamba	1918-00-9	U	0.184	0.041	ug/kg	U	1
Dichloroprop	120-36-5	U	0.368	0.024	ug/kg	U	1
MCPA	94-74-6	U	73.7	13.9	ug/kg	U	1
MCPD	93-65-2	U	73.7	3.78	ug/kg	U	1

<b>Analytical Method: Mercury by SW-846 7471A</b>	Prep Method: SW7471P
Date Analyzed: Mar-18-09 11:13    Analyst: 4150	Date Prep: Mar-17-09 18:12    Tech: ABA
Seq Number: 753056	

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Mercury	7439-97-6	0.2471	0.0556	0.0033	mg/kg		1

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: <b>S-01</b>	Matrix: <b>SOIL</b>	% Moisture: <b>10.13</b>
Lab Sample Id: <b>327527-004</b>	Date Collected: <b>Mar-13-09 13:40</b>	Date Received: <b>Mar-13-09 17:05</b>

Analytical Method: Organophosphorus Pesticides by SW846 8141A				Prep Method: SW3550			
Date Analyzed: Mar-25-09 11:28		Analyst: JAN		Date Prep: Mar-19-09 08:14		Tech: MAZ	
Seq Number: 754487				SUB: E86678 - Xenco Miami			
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
o,o,o,o-Tetra-n-Propyl Dithiopyrophosphate	3244-90-4	U	4.45	1.85	ug/kg	U	1
Atrazine		U	18.5	9.27	ug/kg	U	1
Azinphos-ethyl	2642-71-9	U	74.2	6.68	ug/kg	U	1
azinphos-methyl	86-50-0	U	74.2	15.2	ug/kg	U	1
Bolstar	35400-43-2	U	18.5	4.45	ug/kg	U	1
Chlorfenyinphos		U	18.5	2.56	ug/kg	U	1
Chlorpyrifos	2921-88-2	U	18.5	2.34	ug/kg	U	1
Chlorpyrifos mathyl	5598-13-0	U	18.5	2.19	ug/kg	U	1
Coumaphos	56-72-4	U	55.6	7.79	ug/kg	U	1
Crotoxyphos	7700-17-6	U	18.5	2.89	ug/kg	U	1
Demeton-O	298-03-3	U	18.5	1.52	ug/kg	U	1
Demeton-S	126-75-0	U	18.5	2.30	ug/kg	U	1
Diazinon	333-41-5	U	18.5	2.26	ug/kg	U	1
Dichlorofenthion	97-17-6	U	18.5	2.63	ug/kg	U	1
Dichlorvos	62-73-7	U	18.5	2.78	ug/kg	U	1
Dimethoate	60-51-5	U	18.5	9.27	ug/kg	U	1
Dioxathion	78-34-2	U	18.5	5.19	ug/kg	U	1
Disulfoton	298-04-4	U	18.5	7.79	ug/kg	U	1
EPN (Ent)	2104-64-5	U	18.5	2.97	ug/kg	U	1
Ethion	563-12-2	U	18.5	8.16	ug/kg	U	1
Ethoprop	13194-48-4	U	18.5	9.27	ug/kg	U	1
Famphur	52-85-7	U	18.5	6.68	ug/kg	U	1
Fenithrothion		U	18.5	2.34	ug/kg	U	1
Fenthion	55-38-9	U	18.5	2.74	ug/kg	U	1
Fonophos		U	18.5	7.05	ug/kg	U	1
Leptophos	21609-90-5	U	18.5	1.71	ug/kg	U	1
Malathion	121-75-5	U	18.5	2.45	ug/kg	U	1
Merphos	150-50-5	U	18.5	3.34	ug/kg	U	1
Mevinphos	7786-34-7	U	18.5	7.05	ug/kg	U	1
Monocrotophos		U	18.5	10.0	ug/kg	U	1
Naled	300-76-5	U	18.5	10.4	ug/kg	U	1
Parathion, Ethyl	56-38-2	U	18.5	1.67	ug/kg	U	1
Parathion, Methyl	298-00-0	U	18.5	5.56	ug/kg	U	1
Phorate	298-02-2	U	18.5	11.1	ug/kg	U	1
Phosmet	732-11-6	U	4.45	1.85	ug/kg	U	1
Phosphamidon	13171-21-6	U	18.5	7.79	ug/kg	U	1
Simazine	SW8141A	U	74.2	15.2	ug/kg	U	1
stirophos	22248-79-9	U	18.5	7.79	ug/kg	U	1
Sulfotep	3689-24-5	U	18.5	5.93	ug/kg	U	1

Project: Xenco-Atlanta Master Project

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: <b>S-01</b>	Matrix: <b>SOIL</b>	% Moisture: <b>10.13</b>
Lab Sample Id: <b>327527-004</b>	Date Collected: <b>Mar-13-09 13:40</b>	Date Received: <b>Mar-13-09 17:05</b>

Analytical Method: Organophosphorus Pesticides by SW846 8141A				Prep Method: SW3550			
Date Analyzed: Mar-25-09 11:28		Analyst: JAN	Date Prep: Mar-19-09 08:14		Tech: MAZ		
Seq Number: 754487				SUB: E86678 - Xenco Miami			
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
TEPP	21646-99-1	U	18.5	11.1	ug/kg	U	1
Thionazin		U	18.5	5.19	ug/kg	U	1
Tokuthion	34643-46-4	U	18.5	2.00	ug/kg	U	1
Trichlorfon	52-68-9	U	66.8	66.8	ug/kg	U	1
Trichloronate	327-98-0	U	18.5	2.04	ug/kg	U	1
Analytical Method: Pesticides by SW-846 8081A				Prep Method: SW3545			
Date Analyzed: Mar-19-09 11:42		Analyst: VCH	Date Prep: Mar-17-09 15:00		Tech: 4118		
Seq Number: 753926							
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
4,4-DDD	72-54-8	U	3.70	0.203	ug/kg	U	1
4,4-DDT	50-29-3	1270	74.0	6.58	ug/kg	D	20
Aldrin	309-00-2	U	1.85	0.116	ug/kg	U	1
Alpha-BHC	319-84-6	U	1.85	0.097	ug/kg	U	1
Alpha-Chlordane	5103-71-9	U	1.85	0.159	ug/kg	U	1
Beta-BHC	319-85-7	U	1.85	0.192	ug/kg	U	1
Chlordane	57-74-9	U	18.5	5.16	ug/kg	U	1
Delta-BHC	319-86-8	U	1.85	0.215	ug/kg	U	1
Dieldrin	60-57-1	U	3.70	0.186	ug/kg	U	1
Endosulfan I	959-98-8	U	1.85	0.151	ug/kg	U	1
Endosulfan II	33213-65-9	U	3.70	0.188	ug/kg	U	1
Endosulfan Sulfate	1031-07-8	U	3.70	0.246	ug/kg	U	1
Endrin	72-20-8	U	3.70	0.186	ug/kg	U	1
Endrin Aldehyde	7421-93-4	U	3.70	0.257	ug/kg	U	1
Endrin Ketone	53494-70-5	U	3.70	0.209	ug/kg	U	1
Gamma-BHC (Lindane)	58-89-9	U	1.85	0.103	ug/kg	U	1
Heptachlor	76-44-8	U	1.85	0.213	ug/kg	U	1
Gamma-Chlordane	5103-74-2	U	1.85	0.312	ug/kg	U	1
Heptachlor Epoxide	1024-57-3	U	1.85	0.103	ug/kg	U	1
Methoxychlor	72-43-5	U	18.5	1.25	ug/kg	U	1
Toxaphene	8001-35-2	U	74.0	15.7	ug/kg	U	1

Project: Xenco-Atlanta Master Project





## Certificate of Analytical Results 327527



### Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: <b>S-01</b>	Matrix: <b>SOIL</b>	% Moisture: <b>10.13</b>
Lab Sample Id: <b>327527-004</b>	Date Collected: <b>Mar-13-09 13:40</b>	Date Received: <b>Mar-13-09 17:05</b>

Analytical Method: Pesticides by SW-846 8081A					Prep Method: SW3545		
Date Analyzed: Mar-19-09 11:42		Analyst: VCH		Date Prep: Mar-17-09 15:00		Tech: 4118	
Seq Number: 753926							
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
4,4-DDE	72-55-9	45.5	3.70	0.201	ug/kg		1

Project: Xenco-Atlanta Master Project

Version: 1.055

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: <b>S-01</b>	Matrix: <b>SOIL</b>	% Moisture: <b>10.13</b>
Lab Sample Id: <b>327527-004</b>	Date Collected: <b>Mar-13-09 13:40</b>	Date Received: <b>Mar-13-09 17:05</b>

Analytical Method: SVOCs by SW-846 8270C				Prep Method: SW3545			
Date Analyzed: Mar-23-09 16:44		Analyst: RYE		Date Prep: Mar-17-09 10:00		Tech: 4118	
Seq Number: 753650							
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
1,2,4-Trichlorobenzene	120-82-1	U	3700	650	ug/kg	U	10
1,2-Dichlorobenzene	95-50-1	U	3700	600	ug/kg	U	10
1,2-Diphenylhydrazine	122-66-7	U	3700	410	ug/kg	U	10
1,3-Dichlorobenzene	541-73-1	U	3700	580	ug/kg	U	10
1,4-Dichlorobenzene	106-46-7	U	3700	580	ug/kg	U	10
1-Methylnaphthalene	90-12-0	U	3700	730	ug/kg	U	10
2,3,4,6-Tetrachlorophenol	58-90-2	U	3700	560	ug/kg	U	10
2,4,5-Trichlorophenol	95-95-4	U	3700	680	ug/kg	U	10
2,4,6-Trichlorophenol	88-06-2	U	3700	710	ug/kg	U	10
2,4-Dichlorophenol	120-83-2	U	3700	470	ug/kg	U	10
2,4-Dimethylphenol	105-67-9	U	3700	670	ug/kg	U	10
2,4-Dinitrophenol	51-28-5	U	7400	600	ug/kg	U	10
2,4-Dinitrotoluene	121-14-2	U	3700	600	ug/kg	U	10
2,6-Dichlorophenol	87-65-0	U	3700	590	ug/kg	U	10
2,6-Dinitrotoluene	606-20-2	U	3700	480	ug/kg	U	10
2-Chloronaphthalene	91-58-7	U	3700	670	ug/kg	U	10
2-Chlorophenol	95-57-8	U	3700	660	ug/kg	U	10
2-Methylnaphthalene	91-57-6	U	3700	570	ug/kg	U	10
2-methylphenol	95-48-7	U	3700	520	ug/kg	U	10
2-Nitroaniline	88-74-4	U	7400	500	ug/kg	U	10
2-Nitrophenol	88-75-5	U	3700	470	ug/kg	U	10
3&4-Methylphenol	3/4-CRESOL	U	7400	1100	ug/kg	U	10
3,3-Dichlorobenzidine	91-94-1	U	7400	540	ug/kg	U	10
3-Nitroaniline	99-09-2	U	7400	510	ug/kg	U	10
4,6-dinitro-2-methyl phenol	534-52-1	U	7400	640	ug/kg	U	10
4-Bromophenyl-phenylether	101-55-3	U	3700	630	ug/kg	U	10
4-chloro-3-methylphenol	59-50-7	U	3700	530	ug/kg	U	10
4-Chloroaniline	106-47-8	U	3700	610	ug/kg	U	10
4-Chlorophenyl Phenyl Ether	7005-72-3	U	3700	700	ug/kg	U	10
4-Nitroaniline	100-01-6	U	7400	560	ug/kg	U	10
4-Nitrophenol	100-02-7	U	7400	460	ug/kg	U	10
Acenaphthene	83-32-9	U	3700	520	ug/kg	U	10
Acenaphthylene	208-96-8	U	3700	630	ug/kg	U	10
Acetophenone	98-86-2	U	3700	670	ug/kg	U	10
Anthracene	120-12-7	U	3700	550	ug/kg	U	10
Benzo(a)anthracene	56-55-3	U	3700	600	ug/kg	U	10
Benzo(a)pyrene	50-32-8	U	3700	540	ug/kg	U	10
Benzo(b)fluoranthene	205-99-2	U	3700	600	ug/kg	U	10
Benzo(g,h,i)perylene	191-24-2	U	3700	610	ug/kg	U	10

Project: Xenco-Atlanta Master Project

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: <b>S-01</b>	Matrix: <b>SOIL</b>	% Moisture: <b>10.13</b>
Lab Sample Id: <b>327527-004</b>	Date Collected: <b>Mar-13-09 13:40</b>	Date Received: <b>Mar-13-09 17:05</b>

<b>Analytical Method: SVOCs by SW-846 8270C</b>			Prep Method: SW3545
Date Analyzed: Mar-23-09 16:44	Analyst: RYE	Date Prep: Mar-17-09 10:00	Tech: 4118
Seq Number: 753650			

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Benzo(k)fluoranthene	207-08-9	U	3700	640	ug/kg	U	10
Benzoic Acid	65-85-0	U	7400	580	ug/kg	U	10
Benzyl Alcohol	100-51-6	U	3700	590	ug/kg	U	10
Biphenyl (Diphenyl)	92-52-4	U	3700	490	ug/kg	U	10
bis(2-chloroethoxy) methane	111-91-1	U	3700	440	ug/kg	U	10
bis(2-chloroethyl) ether	111-44-4	U	3700	530	ug/kg	U	10
bis(2-chloroisopropyl) ether	108-60-1	U	3700	500	ug/kg	U	10
bis(2-ethylhexyl) phthalate	117-81-7	U	3700	600	ug/kg	U	10
Benzyl Butyl Phthalate	85-68-7	U	3700	560	ug/kg	U	10
Caprolactam	105-60-2	U	3700	200	ug/kg	U	10
Carbazole	86-74-8	U	3700	630	ug/kg	U	10
Chrysene	218-01-9	U	3700	490	ug/kg	U	10
Dibenz(a,h)anthracene	53-70-3	U	3700	720	ug/kg	U	10
Dibenzofuran	132-64-9	U	3700	470	ug/kg	U	10
Diethyl Phthalate	84-66-2	U	3700	600	ug/kg	U	10
Dimethyl Phthalate	131-11-3	U	3700	560	ug/kg	U	10
di-n-Butyl Phthalate	84-74-2	U	3700	680	ug/kg	U	10
di-n-Octyl Phthalate	117-84-0	U	3700	610	ug/kg	U	10
Ethyl Methanesulfonate	62-50-0	U	3700	370	ug/kg	U	10
Fluoranthene	206-44-0	U	3700	480	ug/kg	U	10
Fluorene	86-73-7	U	3700	450	ug/kg	U	10
Hexachlorobenzene	118-74-1	U	3700	620	ug/kg	U	10
Hexachlorobutadiene	87-68-3	U	3700	410	ug/kg	U	10
Hexachlorocyclopentadiene	77-47-4	U	3700	640	ug/kg	U	10
Hexachloroethane	67-72-1	U	3700	570	ug/kg	U	10
Indeno(1,2,3-c,d)Pyrene	193-39-5	U	3700	670	ug/kg	U	10
Isophorone	78-59-1	U	3700	380	ug/kg	U	10
Methyl Methanesulfonate	66-27-3	U	3700	530	ug/kg	U	10
Naphthalene	91-20-3	U	3700	590	ug/kg	U	10
Nitrobenzene	98-95-3	U	3700	660	ug/kg	U	10
N-Nitrosodimethylamine	62-75-9	U	3700	570	ug/kg	U	10
N-Nitrosodi-n-Propylamine	621-64-7	U	3700	530	ug/kg	U	10
N-Nitrosodiphenylamine	86-30-6	U	3700	780	ug/kg	U	10
Pentachlorophenol	87-86-5	U	7400	670	ug/kg	U	10
Phenanthrene	85-01-8	U	3700	610	ug/kg	U	10
Phenol	108-95-2	U	3700	520	ug/kg	U	10
Pyrene	129-00-0	U	3700	630	ug/kg	U	10

Project: Xenco-Atlanta Master Project

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: <b>S-01</b>	Matrix: <b>SOIL</b>	% Moisture: <b>10.13</b>
Lab Sample Id: <b>327527-004</b>	Date Collected: <b>Mar-13-09 13:40</b>	Date Received: <b>Mar-13-09 17:05</b>

Analytical Method: TAL Metals by SW-846 6010B				Prep Method: SW3050B			
Date Analyzed: Mar-18-09 17:32		Analyst: 4150		Date Prep: Mar-17-09 18:15		Tech: ABA	
Seq Number: 753079							
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Aluminum	7429-90-5	2420	506	0.437	mg/kg		1
Antimony	7440-36-0	U	5.06	0.681	mg/kg	U	1
Arsenic	7440-38-2	48.6	5.06	0.624	mg/kg		1
Barium	7440-39-3	43.5	5.06	0.155	mg/kg		1
Beryllium	7440-41-7	U	0.303	0.007	mg/kg	U	1
Cadmium	7440-43-9	3.65	0.506	0.021	mg/kg		1
Calcium	7440-70-2	U	506	2.02	mg/kg	U	1
Chromium	7440-47-3	10.0	5.06	0.097	mg/kg		1
Cobalt	7440-48-4	3.87	1.01	0.093	mg/kg		1
Copper	7440-50-8	14.6	5.06	0.052	mg/kg		1
Iron	7439-89-6	22600	5060	5.56	mg/kg	D	10
Lead	7439-92-1	141	5.06	0.303	mg/kg		1
Magnesium	7439-95-4	U	506	0.091	mg/kg	U	1
Manganese	7439-96-5	252	5.06	0.082	mg/kg		1
Nickel	7440-02-0	U	5.06	0.159	mg/kg	U	1
Potassium	2133-26-8	U	506	0.303	mg/kg	U	1
Selenium	7782-49-2	U	5.06	0.967	mg/kg	U	1
Silver	7440-22-4	U	5.06	0.048	mg/kg	U	1
Sodium	7440-23-5	U	506	69.5	mg/kg	U	1
Thallium	7440-28-0	U	5.06	0.212	mg/kg	U	1
Vanadium	7440-62-2	8.47	1.01	0.027	mg/kg		1
Zinc	7440-66-6	1390	101	0.259	mg/kg		1

Project: Xenco-Atlanta Master Project

Version: 1.055



## Certificate of Analytical Results 327527



**Tetra Tech EM, Atlanta, Duluth, GA**

Railroad Drum Site

Sample Id: <b>S-01</b>	Matrix: <b>SOIL</b>	% Moisture:
Lab Sample Id: <b>327527-004</b>	Date Collected: <b>Mar-13-09 13:40</b>	Date Received: <b>Mar-13-09 17:05</b>

Analytical Method: Percent Moisture					Prep Method:		
Date Analyzed: Mar-17-09 13:15		Analyst: 4099		Date Prep:		Tech: 4099	
Seq Number: 752969							
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Percent Moisture	TMOIST	10.1			%		1

Project: Xenco-Atlanta Master Project

Version: 1.055

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: <b>S-01</b>	Matrix: <b>SOIL</b>	% Moisture:
Lab Sample Id: <b>327527-004</b>	Date Collected: <b>Mar-13-09 13:40</b>	Date Received: <b>Mar-13-09 17:05</b>

Analytical Method: VOCs by SW-846 8260B				Prep Method: SW5035			
Date Analyzed: Mar-17-09 07:53		Analyst: 4124		Date Prep: Mar-17-09 05:39		Tech: 4148	
Seq Number: 752766							
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
1,1,1-Trichloroethane	71-55-6	U	4.4	0.66	ug/kg	U	1
1,1,2,2-Tetrachloroethane	79-34-5	U	4.4	1.0	ug/kg	U	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	U	4.4	0.97	ug/kg	U	1
1,1,2-Trichloroethane	79-00-5	U	4.4	0.59	ug/kg	U	1
1,1-Dichloroethane	75-34-3	U	4.4	0.70	ug/kg	U	1
1,1-Dichloroethene	75-35-4	U	4.4	1.0	ug/kg	U	1
1,2,4-Trichlorobenzene	120-82-1	U	4.4	0.76	ug/kg	U	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	U	4.4	1.4	ug/kg	U	1
1,2-Dibromoethane (EDB)	106-93-4	U	4.4	0.75	ug/kg	U	1
1,2-Dichlorobenzene	95-50-1	U	4.4	1.1	ug/kg	U	1
1,2-Dichloroethane	107-06-2	U	4.4	0.52	ug/kg	U	1
1,2-Dichloropropane	78-87-5	U	4.4	0.81	ug/kg	U	1
1,3-Dichlorobenzene	541-73-1	U	4.4	0.87	ug/kg	U	1
1,4-Dichlorobenzene	106-46-7	U	4.4	0.60	ug/kg	U	1
2-Butanone (MEK)	78-93-3	U	44	8.0	ug/kg	U	1
2-Hexanone	591-78-6	U	44	0.99	ug/kg	U	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	44	2.8	ug/kg	U	1
Acetone	67-64-1	60	44	6.0	ug/kg		1
Benzene	71-43-2	U	4.4	0.45	ug/kg	U	1
Bromodichloromethane	75-27-4	U	4.4	0.44	ug/kg	U	1
Bromoform	75-25-2	U	4.4	0.84	ug/kg	U	1
Bromomethane	74-83-9	U	4.4	2.1	ug/kg	U	1
Carbon disulfide	75-15-0	U	4.4	1.3	ug/kg	U	1
Carbon tetrachloride	56-23-5	U	4.4	0.65	ug/kg	U	1
Chlorobenzene	108-90-7	U	8.7	0.51	ug/kg	U	1
Chloroethane	75-00-3	U	4.4	2.1	ug/kg	U	1
Chloroform	67-66-3	U	4.4	0.65	ug/kg	U	1
Chloromethane	74-87-3	U	4.4	2.0	ug/kg	U	1
cis-1,2-Dichloroethene	156-59-2	U	4.4	0.58	ug/kg	U	1
cis-1,3-Dichloropropene	10061-01-5	U	4.4	0.47	ug/kg	U	1
Cyclohexane	110-82-7	U	4.4	0.83	ug/kg	U	1
Dibromochloromethane	124-48-1	U	4.4	0.87	ug/kg	U	1
Dichlorodifluoromethane	75-71-8	U	4.4	1.0	ug/kg	U	1
Ethylbenzene	100-41-4	U	4.4	0.49	ug/kg	U	1
Isopropylbenzene	98-82-8	U	4.4	0.66	ug/kg	U	1
m,p-Xylenes	179601-23-1	U	8.7	1.1	ug/kg	U	1
Methyl acetate	79-20-9	U	4.4	0.83	ug/kg	U	1
Methyl tert-butyl ether	1634-04-4	U	4.4	0.61	ug/kg	U	1
Methylcyclohexane	108-87-2	U	4.4	0.95	ug/kg	U	1

Project: Xenco-Atlanta Master Project



## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: <b>S-01</b>	Matrix: <b>SOIL</b>	% Moisture:
Lab Sample Id: <b>327527-004</b>	Date Collected: <b>Mar-13-09 13:40</b>	Date Received: <b>Mar-13-09 17:05</b>

Analytical Method: VOCs by SW-846 8260B				Prep Method: SW5035			
Date Analyzed: Mar-17-09 07:53		Analyst: 4124		Date Prep: Mar-17-09 05:39		Tech: 4148	
Seq Number: 752766							
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Methylene chloride	75-09-2	U	4.4	1.9	ug/kg	U	1
o-Xylene	95-47-6	U	4.4	0.63	ug/kg	U	1
Styrene	100-42-5	U	4.4	0.65	ug/kg	U	1
Tetrachloroethene	127-18-4	U	4.4	0.90	ug/kg	U	1
Toluene	108-88-3	U	4.4	0.51	ug/kg	U	1
trans-1,2-Dichloroethene	156-60-5	U	4.4	0.68	ug/kg	U	1
trans-1,3-Dichloropropene	10061-02-6	U	4.4	0.59	ug/kg	U	1
Trichloroethene	79-01-6	U	4.4	0.62	ug/kg	U	1
Trichlorofluoromethane	75-69-4	U	4.4	3.1	ug/kg	U	1
Vinyl chloride	75-01-4	U	4.4	1.8	ug/kg	U	1
Xylenes, Total	1330-20-7	U	4.4	0.63	ug/kg	U	1
Analytical Method: pH by SW-846 9045D				Prep Method:			
Date Analyzed: Mar-14-09 10:45		Analyst: 4099		Date Prep:		Tech: 4099	
Seq Number: 752847							
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
pH	PH	5.48	N/A	N/A	SU		1

Project: Xenco-Atlanta Master Project

Version: 1.055

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: <b>S-02</b>	Matrix: <b>SOIL</b>	% Moisture: <b>4.62</b>
Lab Sample Id: <b>327527-005</b>	Date Collected: <b>Mar-13-09 14:40</b>	Date Received: <b>Mar-13-09 17:05</b>

<b>Analytical Method: Chlorinated Herbicides by SW-846 8151A</b>	<b>Prep Method: SW8151A_EXT</b>
Date Analyzed: Mar-19-09 19:40    Analyst: VCH	Date Prep: Mar-17-09 15:00    Tech: 4118
Seq Number: 753260	

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
2,4-D	94-75-7	U	0.349	0.048	ug/kg	U	1
2,4-Db	94-82-6	U	1.74	0.106	ug/kg	U	1
2,4,5-T	93-76-5	U	0.174	0.060	ug/kg	U	1
2,4,5-Tp	93-72-1	U	0.174	0.034	ug/kg	U	1
Dalapon	75-99-0	U	0.174	0.076	ug/kg	U	1
Dicamba	1918-00-9	U	0.174	0.039	ug/kg	U	1
Dichloroprop	120-36-5	U	0.349	0.023	ug/kg	U	1
MCPA	94-74-6	U	69.8	13.2	ug/kg	U	1
MCPD	93-65-2	U	69.8	3.58	ug/kg	U	1

<b>Analytical Method: Mercury by SW-846 7471A</b>	<b>Prep Method: SW7471P</b>
Date Analyzed: Mar-18-09 11:13    Analyst: 4150	Date Prep: Mar-17-09 18:12    Tech: ABA
Seq Number: 753056	

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Mercury	7439-97-6	0.2328	0.0514	0.0031	mg/kg		1

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: <b>S-02</b>	Matrix: <b>SOIL</b>	% Moisture: <b>4.62</b>
Lab Sample Id: <b>327527-005</b>	Date Collected: <b>Mar-13-09 14:40</b>	Date Received: <b>Mar-13-09 17:05</b>

Analytical Method: Organophosphorus Pesticides by SW846 8141A				Prep Method: SW3550			
Date Analyzed: Mar-25-09 10:56		Analyst: JAN		Date Prep: Mar-19-09 08:14		Tech: MAZ	
Seq Number: 754487				SUB: E86678 - Xenco Miami			
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
o,o,o,o-Tetra-n-Propyl Dithiopyrophosphate	3244-90-4	U	120	49.9	ug/kg	U	1
Atrazine		U	499	250	ug/kg	U	1
Azinphos-ethyl	2642-71-9	5080	999	180	ug/kg		1
azinphos-methyl	86-50-0	U	2000	409	ug/kg	U	1
Bolstar	35400-43-2	U	499	120	ug/kg	U	1
Chlorfenyinhpos		U	499	68.9	ug/kg	U	1
Chlorpyrifos	2921-88-2	U	499	62.9	ug/kg	U	1
Chlorpyrifos mathyl	5598-13-0	U	499	58.9	ug/kg	U	1
Coumaphos	56-72-4	U	1500	210	ug/kg	U	1
Crotoxyphos	7700-17-6	U	499	77.9	ug/kg	U	1
Demeton-O	298-03-3	U	499	40.9	ug/kg	U	1
Demeton-S	126-75-0	U	499	61.9	ug/kg	U	1
Diazinon	333-41-5	U	499	60.9	ug/kg	U	1
Dichlorofenthion	97-17-6	U	499	70.9	ug/kg	U	1
Dichlorvos	62-73-7	U	499	74.9	ug/kg	U	1
Dimethoate	60-51-5	U	499	250	ug/kg	U	1
Dioxathion	78-34-2	U	499	140	ug/kg	U	1
Disulfoton	298-04-4	U	499	210	ug/kg	U	1
EPN (Ent)	2104-64-5	U	499	79.9	ug/kg	U	1
Ethion	563-12-2	U	499	220	ug/kg	U	1
Ethoprop	13194-48-4	U	499	250	ug/kg	U	1
Famphur	52-85-7	U	499	180	ug/kg	U	1
Fenithrothion		U	499	62.9	ug/kg	U	1
Fenthion	55-38-9	U	499	73.9	ug/kg	U	1
Fonophos		U	499	190	ug/kg	U	1
Leptophos	21609-90-5	U	499	45.9	ug/kg	U	1
Malathion	121-75-5	U	499	65.9	ug/kg	U	1
Merphos	150-50-5	U	499	89.9	ug/kg	U	1
Mevinphos	7786-34-7	U	499	190	ug/kg	U	1
Monocrotophos		U	499	270	ug/kg	U	1
Naled	300-76-5	U	499	280	ug/kg	U	1
Parathion, Ethyl	56-38-2	797	499	44.9	ug/kg		1
Parathion, Methyl	298-00-0	U	499	150	ug/kg	U	1
Phorate	298-02-2	U	499	300	ug/kg	U	1
Phosmet	732-11-6	U	120	49.9	ug/kg	U	1
Phosphamidon	13171-21-6	U	499	210	ug/kg	U	1
Simazine	SW8141A	U	2000	409	ug/kg	U	1
stirophos	22248-79-9	U	499	210	ug/kg	U	1
Sulfotep	3689-24-5	U	499	160	ug/kg	U	1

Project: Xenco-Atlanta Master Project

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: <b>S-02</b>	Matrix: <b>SOIL</b>	% Moisture: <b>4.62</b>
Lab Sample Id: <b>327527-005</b>	Date Collected: <b>Mar-13-09 14:40</b>	Date Received: <b>Mar-13-09 17:05</b>

<b>Analytical Method: Organophosphorus Pesticides by SW846 8141A</b>	Prep Method: SW3550
Date Analyzed: Mar-25-09 10:56    Analyst: JAN	Date Prep: Mar-19-09 08:14    Tech: MAZ
Seq Number: 754487	SUB: E86678 - Xenco Miami

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
TEPP	21646-99-1	U	499	300	ug/kg	U	1
Thionazin		U	499	140	ug/kg	U	1
Tokuthion	34643-46-4	U	499	53.9	ug/kg	U	1
Trichlorfon	52-68-9	U	1800	1800	ug/kg	U	1
Trichloronate	327-98-0	U	499	54.9	ug/kg	U	1

<b>Analytical Method: Pesticides by SW-846 8081A</b>	Prep Method: SW3545
Date Analyzed: Mar-19-09 12:09    Analyst: VCH	Date Prep: Mar-17-09 15:00    Tech: 4118
Seq Number: 753926	

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
4,4-DDD	72-54-8	20000	1740	95.7	ug/kg	D	500
4,4-DDE	72-55-9	27000	1740	94.7	ug/kg	D	500
4,4-DDT	50-29-3	3390000	174000	15500	ug/kg	D	50000
Aldrin	309-00-2	U	1.74	0.109	ug/kg	U	1
Alpha-BHC	319-84-6	93	34.8	1.82	ug/kg	D	20
Alpha-Chlordane	5103-71-9	U	1.74	0.150	ug/kg	U	1
Beta-BHC	319-85-7	228	34.8	3.61	ug/kg	D	20
Chlordane	57-74-9	U	17.4	4.85	ug/kg	U	1
Delta-BHC	319-86-8	413	34.8	4.04	ug/kg	D	20
Dieldrin	60-57-1	U	3.48	0.175	ug/kg	U	1
Endosulfan I	959-98-8	U	1.74	0.142	ug/kg	U	1
Endosulfan II	33213-65-9	U	3.48	0.177	ug/kg	U	1
Endosulfan Sulfate	1031-07-8	U	3.48	0.231	ug/kg	U	1
Endrin	72-20-8	67600	3480	175	ug/kg	D	1000
Endrin Aldehyde	7421-93-4	U	3.48	0.242	ug/kg	U	1
Endrin Ketone	53494-70-5	U	3.48	0.196	ug/kg	U	1
Gamma-BHC (Lindane)	58-89-9	219	34.8	1.94	ug/kg	D	20
Gamma-Chlordane	5103-74-2	U	1.74	0.294	ug/kg	U	1
Heptachlor	76-44-8	U	1.74	0.200	ug/kg	U	1
Heptachlor Epoxide	1024-57-3	U	1.74	0.097	ug/kg	U	1
Methoxychlor	72-43-5	U	17.4	1.18	ug/kg	U	1
Toxaphene	8001-35-2	462000	34800	7360	ug/kg	D	500

Project: Xenco-Atlanta Master Project

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: <b>S-02</b>	Matrix: <b>SOIL</b>	% Moisture: <b>4.62</b>
Lab Sample Id: <b>327527-005</b>	Date Collected: <b>Mar-13-09 14:40</b>	Date Received: <b>Mar-13-09 17:05</b>

Analytical Method: SVOCs by SW-846 8270C				Prep Method: SW3545			
Date Analyzed: Mar-23-09 17:12		Analyst: RYE		Date Prep: Mar-17-09 10:00		Tech: 4118	
Seq Number: 753650							
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
1,2,4-Trichlorobenzene	120-82-1	U	3500	620	ug/kg	U	10
1,2-Dichlorobenzene	95-50-1	U	3500	570	ug/kg	U	10
1,2-Diphenylhydrazine	122-66-7	U	3500	380	ug/kg	U	10
1,3-Dichlorobenzene	541-73-1	U	3500	550	ug/kg	U	10
1,4-Dichlorobenzene	106-46-7	U	3500	540	ug/kg	U	10
1-Methylnaphthalene	90-12-0	U	3500	680	ug/kg	U	10
2,3,4,6-Tetrachlorophenol	58-90-2	U	3500	520	ug/kg	U	10
2,4,5-Trichlorophenol	95-95-4	U	3500	640	ug/kg	U	10
2,4,6-Trichlorophenol	88-06-2	U	3500	670	ug/kg	U	10
2,4-Dichlorophenol	120-83-2	U	3500	440	ug/kg	U	10
2,4-Dimethylphenol	105-67-9	U	3500	640	ug/kg	U	10
2,4-Dinitrophenol	51-28-5	U	7000	560	ug/kg	U	10
2,4-Dinitrotoluene	121-14-2	U	3500	560	ug/kg	U	10
2,6-Dichlorophenol	87-65-0	U	3500	560	ug/kg	U	10
2,6-Dinitrotoluene	606-20-2	U	3500	450	ug/kg	U	10
2-Chloronaphthalene	91-58-7	U	3500	640	ug/kg	U	10
2-Chlorophenol	95-57-8	U	3500	620	ug/kg	U	10
2-Methylnaphthalene	91-57-6	U	3500	530	ug/kg	U	10
2-methylphenol	95-48-7	U	3500	490	ug/kg	U	10
2-Nitroaniline	88-74-4	U	7000	470	ug/kg	U	10
2-Nitrophenol	88-75-5	U	3500	440	ug/kg	U	10
3&4-Methylphenol	3/4-CRESOL	U	7000	1000	ug/kg	U	10
3,3-Dichlorobenzidine	91-94-1	U	7000	510	ug/kg	U	10
3-Nitroaniline	99-09-2	U	7000	480	ug/kg	U	10
4,6-dinitro-2-methyl phenol	534-52-1	U	7000	610	ug/kg	U	10
4-Bromophenyl-phenylether	101-55-3	U	3500	590	ug/kg	U	10
4-chloro-3-methylphenol	59-50-7	U	3500	500	ug/kg	U	10
4-Chloroaniline	106-47-8	U	3500	580	ug/kg	U	10
4-Chlorophenyl Phenyl Ether	7005-72-3	U	3500	660	ug/kg	U	10
4-Nitroaniline	100-01-6	U	7000	530	ug/kg	U	10
4-Nitrophenol	100-02-7	88000	35000	2100	ug/kg	D	50
Acenaphthene	83-32-9	U	3500	490	ug/kg	U	10
Acenaphthylene	208-96-8	U	3500	590	ug/kg	U	10
Acetophenone	98-86-2	U	3500	640	ug/kg	U	10
Anthracene	120-12-7	U	3500	520	ug/kg	U	10
Benzo(a)anthracene	56-55-3	U	3500	570	ug/kg	U	10
Benzo(a)pyrene	50-32-8	U	3500	510	ug/kg	U	10
Benzo(b)fluoranthene	205-99-2	U	3500	570	ug/kg	U	10
Benzo(g,h,i)perylene	191-24-2	U	3500	580	ug/kg	U	10

Project: Xenco-Atlanta Master Project

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: <b>S-02</b>	Matrix: <b>SOIL</b>	% Moisture: <b>4.62</b>
Lab Sample Id: <b>327527-005</b>	Date Collected: <b>Mar-13-09 14:40</b>	Date Received: <b>Mar-13-09 17:05</b>

<b>Analytical Method: SVOCs by SW-846 8270C</b>			Prep Method: SW3545
Date Analyzed: Mar-23-09 17:12	Analyst: RYE	Date Prep: Mar-17-09 10:00	Tech: 4118
Seq Number: 753650			

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Benzo(k)fluoranthene	207-08-9	U	3500	600	ug/kg	U	10
Benzoic Acid	65-85-0	U	7000	550	ug/kg	U	10
Benzyl Alcohol	100-51-6	U	3500	560	ug/kg	U	10
Biphenyl (Diphenyl)	92-52-4	U	3500	460	ug/kg	U	10
bis(2-chloroethoxy) methane	111-91-1	U	3500	420	ug/kg	U	10
bis(2-chloroethyl) ether	111-44-4	U	3500	500	ug/kg	U	10
bis(2-chloroisopropyl) ether	108-60-1	U	3500	470	ug/kg	U	10
bis(2-ethylhexyl) phthalate	117-81-7	U	3500	570	ug/kg	U	10
Benzyl Butyl Phthalate	85-68-7	U	3500	520	ug/kg	U	10
Caprolactam	105-60-2	U	3500	190	ug/kg	U	10
Carbazole	86-74-8	U	3500	600	ug/kg	U	10
Chrysene	218-01-9	U	3500	460	ug/kg	U	10
Dibenz(a,h)anthracene	53-70-3	U	3500	680	ug/kg	U	10
Dibenzofuran	132-64-9	U	3500	450	ug/kg	U	10
Diethyl Phthalate	84-66-2	U	3500	560	ug/kg	U	10
Dimethyl Phthalate	131-11-3	U	3500	530	ug/kg	U	10
di-n-Butyl Phthalate	84-74-2	U	3500	640	ug/kg	U	10
di-n-Octyl Phthalate	117-84-0	U	3500	580	ug/kg	U	10
Ethyl Methanesulfonate	62-50-0	U	3500	350	ug/kg	U	10
Fluoranthene	206-44-0	U	3500	450	ug/kg	U	10
Fluorene	86-73-7	U	3500	430	ug/kg	U	10
Hexachlorobenzene	118-74-1	U	3500	580	ug/kg	U	10
Hexachlorobutadiene	87-68-3	U	3500	390	ug/kg	U	10
Hexachlorocyclopentadiene	77-47-4	U	3500	600	ug/kg	U	10
Hexachloroethane	67-72-1	U	3500	540	ug/kg	U	10
Indeno(1,2,3-c,d)Pyrene	193-39-5	U	3500	640	ug/kg	U	10
Isophorone	78-59-1	U	3500	360	ug/kg	U	10
Methyl Methanesulfonate	66-27-3	U	3500	500	ug/kg	U	10
Naphthalene	91-20-3	U	3500	560	ug/kg	U	10
Nitrobenzene	98-95-3	U	3500	620	ug/kg	U	10
N-Nitrosodimethylamine	62-75-9	U	3500	530	ug/kg	U	10
N-Nitrosodi-n-Propylamine	621-64-7	U	3500	500	ug/kg	U	10
N-Nitrosodiphenylamine	86-30-6	U	3500	730	ug/kg	U	10
Pentachlorophenol	87-86-5	U	7000	630	ug/kg	U	10
Phenanthrene	85-01-8	U	3500	580	ug/kg	U	10
Phenol	108-95-2	U	3500	490	ug/kg	U	10
Pyrene	129-00-0	U	3500	590	ug/kg	U	10

Project: Xenco-Atlanta Master Project



## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: <b>S-02</b>	Matrix: <b>SOIL</b>	% Moisture: <b>4.62</b>
Lab Sample Id: <b>327527-005</b>	Date Collected: <b>Mar-13-09 14:40</b>	Date Received: <b>Mar-13-09 17:05</b>

Analytical Method: TAL Metals by SW-846 6010B				Prep Method: SW3050B			
Date Analyzed: Mar-18-09 17:34		Analyst: 4150		Date Prep: Mar-17-09 18:15		Tech: ABA	
Seq Number: 753079							
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Aluminum	7429-90-5	10000	499	0.431	mg/kg		1
Antimony	7440-36-0	U	4.99	0.672	mg/kg	U	1
Arsenic	7440-38-2	15.3	4.99	0.616	mg/kg		1
Barium	7440-39-3	127	4.99	0.153	mg/kg		1
Beryllium	7440-41-7	0.339	0.300	0.007	mg/kg		1
Cadmium	7440-43-9	3.19	0.499	0.021	mg/kg		1
Calcium	7440-70-2	21800	4990	20.0	mg/kg	D	10
Chromium	7440-47-3	15.8	4.99	0.096	mg/kg		1
Cobalt	7440-48-4	7.27	0.999	0.092	mg/kg		1
Copper	7440-50-8	79.8	4.99	0.051	mg/kg		1
Iron	7439-89-6	22200	4990	5.49	mg/kg	D	10
Lead	7439-92-1	154	4.99	0.300	mg/kg		1
Magnesium	7439-95-4	3760	499	0.090	mg/kg		1
Manganese	7439-96-5	372	4.99	0.081	mg/kg		1
Nickel	7440-02-0	11.4	4.99	0.157	mg/kg		1
Potassium	2133-26-8	10800	499	0.300	mg/kg		1
Selenium	7782-49-2	U	4.99	0.955	mg/kg	U	1
Silver	7440-22-4	U	4.99	0.047	mg/kg	U	1
Sodium	7440-23-5	3000	499	68.6	mg/kg		1
Thallium	7440-28-0	U	4.99	0.210	mg/kg	U	1
Vanadium	7440-62-2	21.4	0.999	0.027	mg/kg		1
Zinc	7440-66-6	377	99.9	0.256	mg/kg		1

Project: Xenco-Atlanta Master Project

Version: 1.055



## Certificate of Analytical Results 327527



**Tetra Tech EM, Atlanta, Duluth, GA**

Railroad Drum Site

Sample Id: <b>S-02</b>	Matrix: <b>SOIL</b>	% Moisture:
Lab Sample Id: <b>327527-005</b>	Date Collected: <b>Mar-13-09 14:40</b>	Date Received: <b>Mar-13-09 17:05</b>

Analytical Method: Percent Moisture					Prep Method:		
Date Analyzed: Mar-17-09 13:15		Analyst: 4099		Date Prep:		Tech: 4099	
Seq Number: 752969							
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Percent Moisture	TMOIST	4.62			%		1

Project: Xenco-Atlanta Master Project

Version: 1.055

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: <b>S-02</b>	Matrix: <b>SOIL</b>	% Moisture:
Lab Sample Id: <b>327527-005</b>	Date Collected: <b>Mar-13-09 14:40</b>	Date Received: <b>Mar-13-09 17:05</b>

<b>Analytical Method: VOCs by SW-846 8260B</b>	<b>Prep Method: SW5035</b>
Date Analyzed: Mar-17-09 09:18    Analyst: 4124	Date Prep: Mar-17-09 05:39    Tech: 4148
Seq Number: 752766	

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
1,1,1-Trichloroethane	71-55-6	U	6.3	0.96	ug/kg	U	1
1,1,2,2-Tetrachloroethane	79-34-5	U	6.3	1.5	ug/kg	U	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	U	6.3	1.4	ug/kg	U	1
1,1,2-Trichloroethane	79-00-5	U	6.3	0.85	ug/kg	U	1
1,1-Dichloroethane	75-34-3	U	6.3	1.0	ug/kg	U	1
1,1-Dichloroethene	75-35-4	U	6.3	1.5	ug/kg	U	1
1,2,4-Trichlorobenzene	120-82-1	U	6.3	1.1	ug/kg	U	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	U	6.3	2.1	ug/kg	U	1
1,2-Dibromoethane (EDB)	106-93-4	U	6.3	1.1	ug/kg	U	1
1,2-Dichlorobenzene	95-50-1	U	6.3	1.6	ug/kg	U	1
1,2-Dichloroethane	107-06-2	U	6.3	0.76	ug/kg	U	1
1,2-Dichloropropane	78-87-5	U	6.3	1.2	ug/kg	U	1
1,3-Dichlorobenzene	541-73-1	U	6.3	1.3	ug/kg	U	1
1,4-Dichlorobenzene	106-46-7	U	6.3	0.87	ug/kg	U	1
2-Butanone (MEK)	78-93-3	U	63	12	ug/kg	U	1
2-Hexanone	591-78-6	U	63	1.4	ug/kg	U	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	63	4.1	ug/kg	U	1
Acetone	67-64-1	280	63	8.7	ug/kg		1
Benzene	71-43-2	U	6.3	0.65	ug/kg	U	1
Bromodichloromethane	75-27-4	U	6.3	0.64	ug/kg	U	1
Bromoform	75-25-2	U	6.3	1.2	ug/kg	U	1
Bromomethane	74-83-9	U	6.3	3.1	ug/kg	U	1
Carbon disulfide	75-15-0	U	6.3	1.8	ug/kg	U	1
Carbon tetrachloride	56-23-5	U	6.3	0.94	ug/kg	U	1
Chlorobenzene	108-90-7	U	13	0.73	ug/kg	U	1
Chloroethane	75-00-3	U	6.3	3.1	ug/kg	U	1
Chloroform	67-66-3	U	6.3	0.94	ug/kg	U	1
Chloromethane	74-87-3	U	6.3	2.9	ug/kg	U	1
cis-1,2-Dichloroethene	156-59-2	U	6.3	0.84	ug/kg	U	1
cis-1,3-Dichloropropene	10061-01-5	U	6.3	0.68	ug/kg	U	1
Cyclohexane	110-82-7	U	6.3	1.2	ug/kg	U	1
Dibromochloromethane	124-48-1	U	6.3	1.3	ug/kg	U	1
Dichlorodifluoromethane	75-71-8	U	6.3	1.5	ug/kg	U	1
Ethylbenzene	100-41-4	U	6.3	0.72	ug/kg	U	1
Isopropylbenzene	98-82-8	U	6.3	0.96	ug/kg	U	1
m,p-Xylenes	179601-23-1	U	13	1.5	ug/kg	U	1
Methyl acetate	79-20-9	U	6.3	1.2	ug/kg	U	1
Methyl tert-butyl ether	1634-04-4	U	6.3	0.88	ug/kg	U	1
Methylcyclohexane	108-87-2	U	6.3	1.4	ug/kg	U	1

Project: Xenco-Atlanta Master Project

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: <b>S-02</b>	Matrix: <b>SOIL</b>	% Moisture:
Lab Sample Id: <b>327527-005</b>	Date Collected: <b>Mar-13-09 14:40</b>	Date Received: <b>Mar-13-09 17:05</b>

Analytical Method: VOCs by SW-846 8260B				Prep Method: SW5035			
Date Analyzed: Mar-17-09 09:18		Analyst: 4124		Date Prep: Mar-17-09 05:39		Tech: 4148	
Seq Number: 752766							
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Methylene chloride	75-09-2	U	6.3	2.7	ug/kg	U	1
o-Xylene	95-47-6	U	6.3	0.91	ug/kg	U	1
Styrene	100-42-5	U	6.3	0.94	ug/kg	U	1
Tetrachloroethene	127-18-4	U	6.3	1.3	ug/kg	U	1
Toluene	108-88-3	U	6.3	0.75	ug/kg	U	1
trans-1,2-Dichloroethene	156-60-5	U	6.3	0.99	ug/kg	U	1
trans-1,3-Dichloropropene	10061-02-6	U	6.3	0.85	ug/kg	U	1
Trichloroethene	79-01-6	U	6.3	0.90	ug/kg	U	1
Trichlorofluoromethane	75-69-4	U	6.3	4.5	ug/kg	U	1
Vinyl chloride	75-01-4	U	6.3	2.5	ug/kg	U	1
Xylenes, Total	1330-20-7	U	6.3	0.91	ug/kg	U	1
Analytical Method: pH by SW-846 9045D				Prep Method:			
Date Analyzed: Mar-14-09 10:45		Analyst: 4099		Date Prep:		Tech: 4099	
Seq Number: 752847							
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
pH	PH	5.03	N/A	N/A	SU		1

Project: Xenco-Atlanta Master Project

Version: 1.055

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: <b>S-03</b>	Matrix: <b>SOIL</b>	% Moisture: <b>25.68</b>
Lab Sample Id: <b>327527-006</b>	Date Collected: <b>Mar-13-09 15:05</b>	Date Received: <b>Mar-13-09 17:05</b>

<b>Analytical Method: Chlorinated Herbicides by SW-846 8151A</b>	<b>Prep Method: SW8151A_EXT</b>
Date Analyzed: Mar-19-09 20:52    Analyst: VCH	Date Prep: Mar-17-09 15:00    Tech: 4118
Seq Number: 753260	

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
2,4-D	94-75-7	U	0.446	0.062	ug/kg	U	1
2,4-Db	94-82-6	U	2.23	0.136	ug/kg	U	1
2,4,5-T	93-76-5	U	0.223	0.077	ug/kg	U	1
2,4,5-Tp	93-72-1	U	0.223	0.043	ug/kg	U	1
Dalapon	75-99-0	U	0.223	0.097	ug/kg	U	1
Dicamba	1918-00-9	U	0.223	0.050	ug/kg	U	1
Dichloroprop	120-36-5	U	0.446	0.029	ug/kg	U	1
MCPA	94-74-6	U	89.3	16.9	ug/kg	U	1
MCPD	93-65-2	U	89.3	4.58	ug/kg	U	1

<b>Analytical Method: Mercury by SW-846 7471A</b>	<b>Prep Method: SW7471P</b>
Date Analyzed: Mar-18-09 11:13    Analyst: 4150	Date Prep: Mar-17-09 18:12    Tech: ABA
Seq Number: 753056	

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Mercury	7439-97-6	0.1297	0.0673	0.0040	mg/kg		1

Project: Xenco-Atlanta Master Project

Version: 1.055

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: <b>S-03</b>	Matrix: <b>SOIL</b>	% Moisture: <b>25.68</b>
Lab Sample Id: <b>327527-006</b>	Date Collected: <b>Mar-13-09 15:05</b>	Date Received: <b>Mar-13-09 17:05</b>

Analytical Method: Organophosphorus Pesticides by SW846 8141A				Prep Method: SW3550			
Date Analyzed: Mar-25-09 16:44		Analyst: JAN		Date Prep: Mar-19-09 08:14		Tech: MAZ	
Seq Number: 754487				SUB: E86678 - Xenco Miami			
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
o,o,o,o-Tetra-n-Propyl Dithiopyrophosphate	3244-90-4	U	5.38	2.24	ug/kg	U	1
Atrazine		U	22.4	11.2	ug/kg	U	1
Azinphos-ethyl	2642-71-9	U	89.7	8.07	ug/kg	U	1
azinphos-methyl	86-50-0	U	89.7	18.4	ug/kg	U	1
Bolstar	35400-43-2	U	22.4	5.38	ug/kg	U	1
Chlorfenyinhos		U	22.4	3.09	ug/kg	U	1
Chlorpyrifos	2921-88-2	U	22.4	2.83	ug/kg	U	1
Chlorpyrifos mathyl	5598-13-0	U	22.4	2.65	ug/kg	U	1
Coumaphos	56-72-4	U	67.3	9.42	ug/kg	U	1
Crotoxyphos	7700-17-6	U	22.4	3.50	ug/kg	U	1
Demeton-O	298-03-3	U	22.4	1.84	ug/kg	U	1
Demeton-S	126-75-0	U	22.4	2.78	ug/kg	U	1
Diazinon	333-41-5	U	22.4	2.74	ug/kg	U	1
Dichlorofenthion	97-17-6	U	22.4	3.18	ug/kg	U	1
Dichlorvos	62-73-7	U	22.4	3.36	ug/kg	U	1
Dimethoate	60-51-5	U	22.4	11.2	ug/kg	U	1
Dioxathion	78-34-2	U	22.4	6.28	ug/kg	U	1
Disulfoton	298-04-4	U	22.4	9.42	ug/kg	U	1
EPN (Ent)	2104-64-5	U	22.4	3.59	ug/kg	U	1
Ethion	563-12-2	U	22.4	9.87	ug/kg	U	1
Ethoprop	13194-48-4	U	22.4	11.2	ug/kg	U	1
Famphur	52-85-7	U	22.4	8.07	ug/kg	U	1
Fenithrothion		U	22.4	2.83	ug/kg	U	1
Fenthion	55-38-9	U	22.4	3.32	ug/kg	U	1
Fonophos		U	22.4	8.52	ug/kg	U	1
Leptophos	21609-90-5	U	22.4	2.06	ug/kg	U	1
Malathion	121-75-5	U	22.4	2.96	ug/kg	U	1
Merphos	150-50-5	U	22.4	4.04	ug/kg	U	1
Mevinphos	7786-34-7	U	22.4	8.52	ug/kg	U	1
Monocrotophos		U	22.4	12.1	ug/kg	U	1
Naled	300-76-5	U	22.4	12.6	ug/kg	U	1
Parathion, Ethyl	56-38-2	U	22.4	2.02	ug/kg	U	1
Parathion, Methyl	298-00-0	U	22.4	6.73	ug/kg	U	1
Phorate	298-02-2	U	22.4	13.5	ug/kg	U	1
Phosmet	732-11-6	U	5.38	2.24	ug/kg	U	1
Phosphamidon	13171-21-6	U	22.4	9.42	ug/kg	U	1
Simazine	SW8141A	U	89.7	18.4	ug/kg	U	1
stirophos	22248-79-9	U	22.4	9.42	ug/kg	U	1
Sulfotep	3689-24-5	U	22.4	7.18	ug/kg	U	1

Project: Xenco-Atlanta Master Project



## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: <b>S-03</b>	Matrix: <b>SOIL</b>	% Moisture: <b>25.68</b>
Lab Sample Id: <b>327527-006</b>	Date Collected: <b>Mar-13-09 15:05</b>	Date Received: <b>Mar-13-09 17:05</b>

Analytical Method: Organophosphorus Pesticides by SW846 8141A				Prep Method: SW3550			
Date Analyzed: Mar-25-09 16:44		Analyst: JAN		Date Prep: Mar-19-09 08:14		Tech: MAZ	
Seq Number: 754487				SUB: E86678 - Xenco Miami			
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
TEPP	21646-99-1	U	22.4	13.5	ug/kg	U	1
Thionazin		U	22.4	6.28	ug/kg	U	1
Tokuthion	34643-46-4	U	22.4	2.42	ug/kg	U	1
Trichlorfon	52-68-9	U	80.7	80.7	ug/kg	U	1
Trichloronate	327-98-0	U	22.4	2.47	ug/kg	U	1
Analytical Method: PCBs by SW846 8082				Prep Method: SW3545			
Date Analyzed: Mar-20-09 03:57		Analyst: VCH		Date Prep: Mar-19-09 10:00		Tech: 4118	
Seq Number: 753263							
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
PCB-1016	12674-11-2	U	45	5.0	ug/kg	U	1
PCB-1221	11104-28-2	U	45	4.6	ug/kg	U	1
PCB-1232	11141-16-5	U	45	4.5	ug/kg	U	1
PCB-1242	53469-21-9	U	45	4.9	ug/kg	U	1
PCB-1248	12672-29-6	U	45	4.7	ug/kg	U	1
PCB-1254	11097-69-1	U	45	5.1	ug/kg	U	1
PCB-1260	11096-82-5	U	45	5.7	ug/kg	U	1

Project: Xenco-Atlanta Master Project

Version: 1.055

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: <b>S-03</b>	Matrix: <b>SOIL</b>	% Moisture: <b>25.68</b>
Lab Sample Id: <b>327527-006</b>	Date Collected: <b>Mar-13-09 15:05</b>	Date Received: <b>Mar-13-09 17:05</b>

<b>Analytical Method: Pesticides by SW-846 8081A</b>	<b>Prep Method: SW3545</b>
Date Analyzed: Mar-19-09 12:37	Analyst: VCH
Seq Number: 753926	Date Prep: Mar-17-09 15:00
	Tech: 4118

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
4,4-DDD	72-54-8	U	4.48	0.246	ug/kg	U	1
4,4-DDE	72-55-9	278	44.8	2.44	ug/kg	D	10
4,4-DDT	50-29-3	3110	448	39.8	ug/kg	D	100
Aldrin	309-00-2	U	2.24	0.141	ug/kg	U	1
Alpha-BHC	319-84-6	U	2.24	0.117	ug/kg	U	1
Alpha-Chlordane	5103-71-9	U	2.24	0.193	ug/kg	U	1
Beta-BHC	319-85-7	U	2.24	0.232	ug/kg	U	1
Chlordane	57-74-9	U	22.4	6.25	ug/kg	U	1
Delta-BHC	319-86-8	U	2.24	0.260	ug/kg	U	1
Dieldrin	60-57-1	U	4.48	0.225	ug/kg	U	1
Endosulfan I	959-98-8	U	2.24	0.183	ug/kg	U	1
Endosulfan II	33213-65-9	U	4.48	0.228	ug/kg	U	1
Endosulfan Sulfate	1031-07-8	U	4.48	0.298	ug/kg	U	1
Endrin	72-20-8	U	4.48	0.226	ug/kg	U	1
Endrin Aldehyde	7421-93-4	U	4.48	0.312	ug/kg	U	1
Endrin Ketone	53494-70-5	U	4.48	0.253	ug/kg	U	1
Gamma-BHC (Lindane)	58-89-9	U	2.24	0.125	ug/kg	U	1
Gamma-Chlordane	5103-74-2	U	2.24	0.378	ug/kg	U	1
Heptachlor	76-44-8	U	2.24	0.258	ug/kg	U	1
Heptachlor Epoxide	1024-57-3	U	2.24	0.125	ug/kg	U	1
Methoxychlor	72-43-5	U	22.4	1.52	ug/kg	U	1
Toxaphene	8001-35-2	13600	896	190	ug/kg	D	10

Project: Xenco-Atlanta Master Project

Version: 1.055

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: <b>S-03</b>	Matrix: <b>SOIL</b>	% Moisture: <b>25.68</b>
Lab Sample Id: <b>327527-006</b>	Date Collected: <b>Mar-13-09 15:05</b>	Date Received: <b>Mar-13-09 17:05</b>

Analytical Method: SVOCs by SW-846 8270C				Prep Method: SW3545			
Date Analyzed: Mar-23-09 18:09		Analyst: RYE	Date Prep: Mar-17-09 10:00		Tech: 4118		
Seq Number: 753650							
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
1,2,4-Trichlorobenzene	120-82-1	U	4500	790	ug/kg	U	10
1,2-Dichlorobenzene	95-50-1	U	4500	730	ug/kg	U	10
1,2-Diphenylhydrazine	122-66-7	U	4500	490	ug/kg	U	10
1,3-Dichlorobenzene	541-73-1	U	4500	710	ug/kg	U	10
1,4-Dichlorobenzene	106-46-7	U	4500	700	ug/kg	U	10
1-Methylnaphthalene	90-12-0	U	4500	880	ug/kg	U	10
2,3,4,6-Tetrachlorophenol	58-90-2	U	4500	670	ug/kg	U	10
2,4,5-Trichlorophenol	95-95-4	U	4500	820	ug/kg	U	10
2,4,6-Trichlorophenol	88-06-2	U	4500	860	ug/kg	U	10
2,4-Dichlorophenol	120-83-2	U	4500	570	ug/kg	U	10
2,4-Dimethylphenol	105-67-9	U	4500	810	ug/kg	U	10
2,4-Dinitrophenol	51-28-5	U	9000	720	ug/kg	U	10
2,4-Dinitrotoluene	121-14-2	U	4500	720	ug/kg	U	10
2,6-Dichlorophenol	87-65-0	U	4500	720	ug/kg	U	10
2,6-Dinitrotoluene	606-20-2	U	4500	580	ug/kg	U	10
2-Chloronaphthalene	91-58-7	U	4500	810	ug/kg	U	10
2-Chlorophenol	95-57-8	U	4500	800	ug/kg	U	10
2-Methylnaphthalene	91-57-6	U	4500	690	ug/kg	U	10
2-methylphenol	95-48-7	U	4500	630	ug/kg	U	10
2-Nitroaniline	88-74-4	U	9000	600	ug/kg	U	10
2-Nitrophenol	88-75-5	U	4500	560	ug/kg	U	10
3&4-Methylphenol	3/4-CRESOL	U	9000	1300	ug/kg	U	10
3,3-Dichlorobenzidine	91-94-1	U	9000	650	ug/kg	U	10
3-Nitroaniline	99-09-2	U	9000	620	ug/kg	U	10
4,6-dinitro-2-methyl phenol	534-52-1	U	9000	780	ug/kg	U	10
4-Bromophenyl-phenylether	101-55-3	U	4500	760	ug/kg	U	10
4-chloro-3-methylphenol	59-50-7	U	4500	640	ug/kg	U	10
4-Chloroaniline	106-47-8	U	4500	740	ug/kg	U	10
4-Chlorophenyl Phenyl Ether	7005-72-3	U	4500	850	ug/kg	U	10
4-Nitroaniline	100-01-6	U	9000	680	ug/kg	U	10
4-Nitrophenol	100-02-7	U	9000	550	ug/kg	U	10
Acenaphthene	83-32-9	U	4500	630	ug/kg	U	10
Acenaphthylene	208-96-8	U	4500	760	ug/kg	U	10
Acetophenone	98-86-2	U	4500	810	ug/kg	U	10
Anthracene	120-12-7	U	4500	660	ug/kg	U	10
Benzo(a)anthracene	56-55-3	U	4500	730	ug/kg	U	10
Benzo(a)pyrene	50-32-8	U	4500	660	ug/kg	U	10
Benzo(b)fluoranthene	205-99-2	U	4500	730	ug/kg	U	10
Benzo(g,h,i)perylene	191-24-2	U	4500	740	ug/kg	U	10

Project: Xenco-Atlanta Master Project

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: <b>S-03</b>	Matrix: <b>SOIL</b>	% Moisture: <b>25.68</b>
Lab Sample Id: <b>327527-006</b>	Date Collected: <b>Mar-13-09 15:05</b>	Date Received: <b>Mar-13-09 17:05</b>

Analytical Method: SVOCs by SW-846 8270C				Prep Method: SW3545			
Date Analyzed: Mar-23-09 18:09		Analyst: RYE		Date Prep: Mar-17-09 10:00		Tech: 4118	
Seq Number: 753650							
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Benzo(k)fluoranthene	207-08-9	U	4500	770	ug/kg	U	10
Benzoic Acid	65-85-0	U	9000	710	ug/kg	U	10
Benzyl Alcohol	100-51-6	U	4500	720	ug/kg	U	10
Biphenyl (Diphenyl)	92-52-4	U	4500	600	ug/kg	U	10
bis(2-chloroethoxy) methane	111-91-1	U	4500	540	ug/kg	U	10
bis(2-chloroethyl) ether	111-44-4	U	4500	640	ug/kg	U	10
bis(2-chloroisopropyl) ether	108-60-1	U	4500	600	ug/kg	U	10
bis(2-ethylhexyl) phthalate	117-81-7	U	4500	730	ug/kg	U	10
Benzyl Butyl Phthalate	85-68-7	U	4500	670	ug/kg	U	10
Caprolactam	105-60-2	U	4500	240	ug/kg	U	10
Carbazole	86-74-8	U	4500	770	ug/kg	U	10
Chrysene	218-01-9	U	4500	600	ug/kg	U	10
Dibenz(a,h)anthracene	53-70-3	U	4500	870	ug/kg	U	10
Dibenzofuran	132-64-9	U	4500	570	ug/kg	U	10
Diethyl Phthalate	84-66-2	U	4500	720	ug/kg	U	10
Dimethyl Phthalate	131-11-3	U	4500	680	ug/kg	U	10
di-n-Butyl Phthalate	84-74-2	U	4500	820	ug/kg	U	10
di-n-Octyl Phthalate	117-84-0	U	4500	740	ug/kg	U	10
Ethyl Methanesulfonate	62-50-0	U	4500	450	ug/kg	U	10
Fluoranthene	206-44-0	U	4500	580	ug/kg	U	10
Fluorene	86-73-7	U	4500	550	ug/kg	U	10
Hexachlorobenzene	118-74-1	U	4500	750	ug/kg	U	10
Hexachlorobutadiene	87-68-3	U	4500	500	ug/kg	U	10
Hexachlorocyclopentadiene	77-47-4	U	4500	770	ug/kg	U	10
Hexachloroethane	67-72-1	U	4500	690	ug/kg	U	10
Indeno(1,2,3-c,d)Pyrene	193-39-5	U	4500	810	ug/kg	U	10
Isophorone	78-59-1	U	4500	460	ug/kg	U	10
Methyl Methanesulfonate	66-27-3	U	4500	640	ug/kg	U	10
Naphthalene	91-20-3	U	4500	720	ug/kg	U	10
Nitrobenzene	98-95-3	U	4500	800	ug/kg	U	10
N-Nitrosodimethylamine	62-75-9	U	4500	690	ug/kg	U	10
N-Nitrosodi-n-Propylamine	621-64-7	U	4500	640	ug/kg	U	10
N-Nitrosodiphenylamine	86-30-6	U	4500	940	ug/kg	U	10
Pentachlorophenol	87-86-5	U	9000	810	ug/kg	U	10
Phenanthrene	85-01-8	U	4500	740	ug/kg	U	10
Phenol	108-95-2	U	4500	630	ug/kg	U	10
Pyrene	129-00-0	U	4500	760	ug/kg	U	10

Project: Xenco-Atlanta Master Project

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: <b>S-03</b>	Matrix: <b>SOIL</b>	% Moisture: <b>25.68</b>
Lab Sample Id: <b>327527-006</b>	Date Collected: <b>Mar-13-09 15:05</b>	Date Received: <b>Mar-13-09 17:05</b>

<b>Analytical Method: TAL Metals by SW-846 6010B</b>	<b>Prep Method: SW3050B</b>
Date Analyzed: Mar-18-09 17:08    Analyst: 4150	Date Prep: Mar-17-09 18:15    Tech: ABA
Seq Number: 753079	

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Aluminum	7429-90-5	13900	647	0.559	mg/kg		1
Antimony	7440-36-0	U	6.47	0.871	mg/kg	U	1
Arsenic	7440-38-2	U	6.47	0.798	mg/kg	U	1
Barium	7440-39-3	75.7	6.47	0.198	mg/kg		1
Beryllium	7440-41-7	U	0.388	0.009	mg/kg	U	1
Cadmium	7440-43-9	3.12	0.647	0.027	mg/kg		1
Calcium	7440-70-2	1830	647	2.59	mg/kg		1
Chromium	7440-47-3	17.7	6.47	0.124	mg/kg		1
Cobalt	7440-48-4	5.03	1.29	0.119	mg/kg		1
Copper	7440-50-8	12.8	6.47	0.066	mg/kg		1
Iron	7439-89-6	19700	6470	7.12	mg/kg	D	10
Lead	7439-92-1	51.3	6.47	0.388	mg/kg		1
Magnesium	7439-95-4	2270	647	0.116	mg/kg		1
Manganese	7439-96-5	383	6.47	0.105	mg/kg		1
Nickel	7440-02-0	U	6.47	0.203	mg/kg	U	1
Potassium	2133-26-8	2260	647	0.388	mg/kg		1
Selenium	7782-49-2	U	6.47	1.24	mg/kg	U	1
Silver	7440-22-4	U	6.47	0.061	mg/kg	U	1
Sodium	7440-23-5	U	647	88.9	mg/kg	U	1
Thallium	7440-28-0	U	6.47	0.272	mg/kg	U	1
Vanadium	7440-62-2	37.8	1.29	0.035	mg/kg		1
Zinc	7440-66-6	336	129	0.331	mg/kg		1

<b>Analytical Method: TPH (Gasoline Range Organics) by SW8015B</b>	<b>Prep Method: SW5030B</b>
Date Analyzed: Mar-18-09 13:27    Analyst: ANI	Date Prep: Mar-18-09 09:54    Tech: ANI
Seq Number: 753053	

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
TPH-GRO (Gasoline Range Organics)	8006-61-9	U	14	2.1	mg/kg	U	50

Project: Xenco-Atlanta Master Project



## Certificate of Analytical Results 327527



**Tetra Tech EM, Atlanta, Duluth, GA**

Railroad Drum Site

Sample Id: <b>S-03</b>	Matrix: <b>SOIL</b>	% Moisture:
Lab Sample Id: <b>327527-006</b>	Date Collected: <b>Mar-13-09 15:05</b>	Date Received: <b>Mar-13-09 17:05</b>

Analytical Method: Percent Moisture					Prep Method:		
Date Analyzed: Mar-17-09 13:15		Analyst: 4099		Date Prep:		Tech: 4099	
Seq Number: 752969							
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Percent Moisture	TMOIST	25.7			%		1

Project: Xenco-Atlanta Master Project

Version: 1.055



## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: <b>S-03</b>	Matrix: <b>SOIL</b>	% Moisture:
Lab Sample Id: <b>327527-006</b>	Date Collected: <b>Mar-13-09 15:05</b>	Date Received: <b>Mar-13-09 17:05</b>

Analytical Method: VOCs by SW-846 8260B				Prep Method: SW5035			
Date Analyzed: Mar-17-09 09:46		Analyst: 4124		Date Prep: Mar-17-09 05:39		Tech: 4148	
Seq Number: 752766							
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
1,1,1-Trichloroethane	71-55-6	U	5.1	0.76	ug/kg	U	1
1,1,2,2-Tetrachloroethane	79-34-5	U	5.1	1.2	ug/kg	U	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	U	5.1	1.1	ug/kg	U	1
1,1,2-Trichloroethane	79-00-5	U	5.1	0.68	ug/kg	U	1
1,1-Dichloroethane	75-34-3	U	5.1	0.81	ug/kg	U	1
1,1-Dichloroethene	75-35-4	U	5.1	1.2	ug/kg	U	1
1,2,4-Trichlorobenzene	120-82-1	U	5.1	0.89	ug/kg	U	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	U	5.1	1.6	ug/kg	U	1
1,2-Dibromoethane (EDB)	106-93-4	U	5.1	0.88	ug/kg	U	1
1,2-Dichlorobenzene	95-50-1	U	5.1	1.3	ug/kg	U	1
1,2-Dichloroethane	107-06-2	U	5.1	0.61	ug/kg	U	1
1,2-Dichloropropane	78-87-5	U	5.1	0.94	ug/kg	U	1
1,3-Dichlorobenzene	541-73-1	U	5.1	1.0	ug/kg	U	1
1,4-Dichlorobenzene	106-46-7	U	5.1	0.69	ug/kg	U	1
2-Butanone (MEK)	78-93-3	U	51	9.2	ug/kg	U	1
2-Hexanone	591-78-6	U	51	1.1	ug/kg	U	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	51	3.3	ug/kg	U	1
Acetone	67-64-1	180	51	7.0	ug/kg		1
Benzene	71-43-2	U	5.1	0.52	ug/kg	U	1
Bromodichloromethane	75-27-4	U	5.1	0.51	ug/kg	U	1
Bromoform	75-25-2	U	5.1	0.97	ug/kg	U	1
Bromomethane	74-83-9	U	5.1	2.5	ug/kg	U	1
Carbon disulfide	75-15-0	U	5.1	1.5	ug/kg	U	1
Carbon tetrachloride	56-23-5	U	5.1	0.75	ug/kg	U	1
Chlorobenzene	108-90-7	U	10	0.59	ug/kg	U	1
Chloroethane	75-00-3	U	5.1	2.5	ug/kg	U	1
Chloroform	67-66-3	U	5.1	0.75	ug/kg	U	1
Chloromethane	74-87-3	U	5.1	2.3	ug/kg	U	1
cis-1,2-Dichloroethene	156-59-2	U	5.1	0.67	ug/kg	U	1
cis-1,3-Dichloropropene	10061-01-5	U	5.1	0.55	ug/kg	U	1
Cyclohexane	110-82-7	U	5.1	0.96	ug/kg	U	1
Dibromochloromethane	124-48-1	U	5.1	1.0	ug/kg	U	1
Dichlorodifluoromethane	75-71-8	U	5.1	1.2	ug/kg	U	1
Ethylbenzene	100-41-4	U	5.1	0.57	ug/kg	U	1
Isopropylbenzene	98-82-8	U	5.1	0.77	ug/kg	U	1
m,p-Xylenes	179601-23-1	U	10	1.2	ug/kg	U	1
Methyl acetate	79-20-9	U	5.1	0.96	ug/kg	U	1
Methyl tert-butyl ether	1634-04-4	U	5.1	0.70	ug/kg	U	1
Methylcyclohexane	108-87-2	U	5.1	1.1	ug/kg	U	1

Project: Xenco-Atlanta Master Project

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: <b>S-03</b>	Matrix: <b>SOIL</b>	% Moisture:
Lab Sample Id: <b>327527-006</b>	Date Collected: <b>Mar-13-09 15:05</b>	Date Received: <b>Mar-13-09 17:05</b>

Analytical Method: VOCs by SW-846 8260B				Prep Method: SW5035			
Date Analyzed: Mar-17-09 09:46		Analyst: 4124		Date Prep: Mar-17-09 05:39		Tech: 4148	
Seq Number: 752766							
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Methylene chloride	75-09-2	U	5.1	2.2	ug/kg	U	1
o-Xylene	95-47-6	U	5.1	0.73	ug/kg	U	1
Styrene	100-42-5	U	5.1	0.75	ug/kg	U	1
Tetrachloroethene	127-18-4	U	5.1	1.1	ug/kg	U	1
Toluene	108-88-3	U	5.1	0.60	ug/kg	U	1
trans-1,2-Dichloroethene	156-60-5	U	5.1	0.79	ug/kg	U	1
trans-1,3-Dichloropropene	10061-02-6	U	5.1	0.68	ug/kg	U	1
Trichloroethene	79-01-6	U	5.1	0.72	ug/kg	U	1
Trichlorofluoromethane	75-69-4	U	5.1	3.6	ug/kg	U	1
Vinyl chloride	75-01-4	U	5.1	2.0	ug/kg	U	1
Xylenes, Total	1330-20-7	U	5.1	0.73	ug/kg	U	1
Analytical Method: pH by SW-846 9045D				Prep Method:			
Date Analyzed: Mar-14-09 10:45		Analyst: 4099		Date Prep:		Tech: 4099	
Seq Number: 752847							
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
pH	PH	5.56	N/A	N/A	SU		1

Project: Xenco-Atlanta Master Project

Version: 1.055

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.
  - B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
  - D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
  - E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
  - F** RPD exceeded lab control limits.
  - J** The target analyte was positively identified below the MQL and above the SQL.
  - U** Analyte was not detected.
  - L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
  - H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
  - K** Sample analyzed outside of recommended hold time.
  - JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.
- \* Outside XENCO's scope of NELAC Accreditation.

***Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.***

*Certified and approved by numerous States and Agencies.*

*A Small Business and Minority Status Company that delivers SERVICE and QUALITY*

Houston - Dallas - San Antonio - Corpus Christi - Midland/Odessa - Tampa - Miami - Latin America

4143 Greenbriar Dr, Stafford, Tx 77477  
 9701 Harry Hines Blvd , Dallas, TX 75220  
 5332 Blackberry Drive, San Antonio TX 78238  
 2505 North Falkenburg Rd, Tampa, FL 33619  
 5757 NW 158th St, Miami Lakes, FL 33014  
 12600 West I-20 East, Odessa, TX 79765  
 842 Cantwell Lane, Corpus Christi, TX 78408

Phone	Fax
(281) 240-4200	(281) 240-4280
(214) 902 0300	(214) 351-9139
(210) 509-3334	(210) 509-3335
(813) 620-2000	(813) 620-2033
(305) 823-8500	(305) 823-8555
(432) 563-1800	(432) 563-1713
(361) 884-0371	(361) 884-9116



## Form 2 - Surrogate Recoveries

Project Name: Railroad Drum Site

Work Orders : 327527,

Project ID: TTEMI-05-001-0091

Lab Batch #: 753224

Sample: 526665-1-BLK / BLK

Batch: 1 Matrix: Water

Units: ug/L

Date Analyzed: 03/19/09 16:01

### SURROGATE RECOVERY STUDY

Chlorinated Herbicides by SW-846 8151A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	20.99	25.00	84	6-127	

Lab Batch #: 753224

Sample: 526665-1-BLK / BLK

Batch: 1 Matrix: Water

Units: ug/L

Date Analyzed: 03/19/09 16:01

### SURROGATE RECOVERY STUDY

Chlorinated Herbicides by SW-846 8151A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	19.17	25.00	77	6-127	

Lab Batch #: 753224

Sample: 526665-1-BKS / BKS

Batch: 1 Matrix: Water

Units: ug/L

Date Analyzed: 03/19/09 16:25

### SURROGATE RECOVERY STUDY

Chlorinated Herbicides by SW-846 8151A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	24.28	25.00	97	6-127	

Lab Batch #: 753224

Sample: 526665-1-BKS / BKS

Batch: 1 Matrix: Water

Units: ug/L

Date Analyzed: 03/19/09 16:25

### SURROGATE RECOVERY STUDY

Chlorinated Herbicides by SW-846 8151A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	21.79	25.00	87	6-127	

Lab Batch #: 753224

Sample: 526665-1-BSD / BSD

Batch: 1 Matrix: Water

Units: ug/L

Date Analyzed: 03/19/09 16:50

### SURROGATE RECOVERY STUDY

Chlorinated Herbicides by SW-846 8151A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	23.95	25.00	96	6-127	

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] =  $100 * A / B$

All results are based on MDL and validated for QC purposes.



## Form 2 - Surrogate Recoveries

Project Name: Railroad Drum Site

Work Orders : 327527,

Project ID: TTEMI-05-001-0091

Lab Batch #: 753224

Sample: 526665-1-BSD / BSD

Batch: 1 Matrix: Water

Units: ug/L

Date Analyzed: 03/19/09 16:50

### SURROGATE RECOVERY STUDY

Chlorinated Herbicides by SW-846 8151A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	21.24	25.00	85	6-127	

Lab Batch #: 753224

Sample: 327527-001 / SMP

Batch: 1 Matrix: Liquid

Units: ug/L

Date Analyzed: 03/19/09 17:14

### SURROGATE RECOVERY STUDY

Chlorinated Herbicides by SW-846 8151A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	232.7	250.0	93	6-127	

Lab Batch #: 753224

Sample: 327527-001 / SMP

Batch: 1 Matrix: Liquid

Units: ug/L

Date Analyzed: 03/19/09 17:14

### SURROGATE RECOVERY STUDY

Chlorinated Herbicides by SW-846 8151A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	139.2	250.0	56	6-127	

Lab Batch #: 753260

Sample: 526662-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/19/09 17:38

### SURROGATE RECOVERY STUDY

Chlorinated Herbicides by SW-846 8151A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	134	167	80	45-139	

Lab Batch #: 753260

Sample: 526662-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/19/09 17:38

### SURROGATE RECOVERY STUDY

Chlorinated Herbicides by SW-846 8151A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	118	167	71	45-139	

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] =  $100 * A / B$

All results are based on MDL and validated for QC purposes.



## Form 2 - Surrogate Recoveries

Project Name: Railroad Drum Site

Work Orders : 327527,

Project ID: TTEMI-05-001-0091

Lab Batch #: 753260

Sample: 526662-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/19/09 18:03

### SURROGATE RECOVERY STUDY

Chlorinated Herbicides by SW-846 8151A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	176	167	105	45-139	

Lab Batch #: 753260

Sample: 526662-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/19/09 18:03

### SURROGATE RECOVERY STUDY

Chlorinated Herbicides by SW-846 8151A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	146	167	87	45-139	

Lab Batch #: 753260

Sample: 327527-002 / SMP

Batch: 1 Matrix: Solid Waste

Units: ug/kg

Date Analyzed: 03/19/09 18:27

### SURROGATE RECOVERY STUDY

Chlorinated Herbicides by SW-846 8151A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	2080	2080	100	45-139	

Lab Batch #: 753260

Sample: 327527-002 / SMP

Batch: 1 Matrix: Solid Waste

Units: ug/kg

Date Analyzed: 03/19/09 18:27

### SURROGATE RECOVERY STUDY

Chlorinated Herbicides by SW-846 8151A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	2030	2080	98	45-139	

Lab Batch #: 753260

Sample: 327527-003 / SMP

Batch: 1 Matrix: Solid Waste

Units: ug/kg

Date Analyzed: 03/19/09 18:52

### SURROGATE RECOVERY STUDY

Chlorinated Herbicides by SW-846 8151A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	9410	2000	471	45-139	**

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] =  $100 * A / B$

All results are based on MDL and validated for QC purposes.





## Form 2 - Surrogate Recoveries

Project Name: Railroad Drum Site

Work Orders : 327527,

Project ID: TTEMI-05-001-0091

Lab Batch #: 753260

Sample: 327527-003 / SMP

Batch: 1 Matrix: Solid Waste

Units: ug/kg

Date Analyzed: 03/19/09 18:52

### SURROGATE RECOVERY STUDY

Chlorinated Herbicides by SW-846 8151A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	8800	2000	440	45-139	**

Lab Batch #: 753260

Sample: 327527-004 / SMP

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/19/09 19:16

### SURROGATE RECOVERY STUDY

Chlorinated Herbicides by SW-846 8151A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	137	166	83	45-139	

Lab Batch #: 753260

Sample: 327527-004 / SMP

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/19/09 19:16

### SURROGATE RECOVERY STUDY

Chlorinated Herbicides by SW-846 8151A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	124	166	75	45-139	

Lab Batch #: 753260

Sample: 327527-005 / SMP

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/19/09 19:40

### SURROGATE RECOVERY STUDY

Chlorinated Herbicides by SW-846 8151A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	342	166	206	45-139	**

Lab Batch #: 753260

Sample: 327527-005 / SMP

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/19/09 19:40

### SURROGATE RECOVERY STUDY

Chlorinated Herbicides by SW-846 8151A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	312	166	188	45-139	**

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] =  $100 * A / B$

All results are based on MDL and validated for QC purposes.



## Form 2 - Surrogate Recoveries

Project Name: Railroad Drum Site

Work Orders : 327527,

Project ID: TTEMI-05-001-0091

Lab Batch #: 753260

Sample: 327527-006 / SMP

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/19/09 20:52

### SURROGATE RECOVERY STUDY

Chlorinated Herbicides by SW-846 8151A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	119	166	72	45-139	

Lab Batch #: 753260

Sample: 327527-006 / SMP

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/19/09 20:52

### SURROGATE RECOVERY STUDY

Chlorinated Herbicides by SW-846 8151A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	94.2	166	57	45-139	

Lab Batch #: 753260

Sample: 327527-006 S / MS

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/19/09 21:16

### SURROGATE RECOVERY STUDY

Chlorinated Herbicides by SW-846 8151A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	214	166	129	45-139	

Lab Batch #: 753260

Sample: 327527-006 S / MS

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/19/09 21:16

### SURROGATE RECOVERY STUDY

Chlorinated Herbicides by SW-846 8151A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	143	166	86	45-139	

Lab Batch #: 753260

Sample: 327527-006 SD / MSD

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/19/09 21:40

### SURROGATE RECOVERY STUDY

Chlorinated Herbicides by SW-846 8151A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	134	166	81	45-139	

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] =  $100 * A / B$

All results are based on MDL and validated for QC purposes.



## Form 2 - Surrogate Recoveries

Project Name: Railroad Drum Site

Work Orders : 327527,

Project ID: TTEMI-05-001-0091

Lab Batch #: 753260

Sample: 327527-006 SD / MSD

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/19/09 21:40

### SURROGATE RECOVERY STUDY

Chlorinated Herbicides by SW-846 8151A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	112	166	67	45-139	

Lab Batch #: 754021

Sample: 526633-1-BLK / BLK

Batch: 1 Matrix: Water

Units: ug/L

Date Analyzed: 03/25/09 07:15

### SURROGATE RECOVERY STUDY

Organophosphorus Pesticides by SW846 8141A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Bromo-2-nitrobenzene	15.6	20.0	78	50-150	

Lab Batch #: 754021

Sample: 526633-1-BKS / BKS

Batch: 1 Matrix: Water

Units: ug/L

Date Analyzed: 03/25/09 07:46

### SURROGATE RECOVERY STUDY

Organophosphorus Pesticides by SW846 8141A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Bromo-2-nitrobenzene	15.9	20.0	80	50-150	

Lab Batch #: 754021

Sample: 526633-1-BSD / BSD

Batch: 1 Matrix: Water

Units: ug/L

Date Analyzed: 03/25/09 08:18

### SURROGATE RECOVERY STUDY

Organophosphorus Pesticides by SW846 8141A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Bromo-2-nitrobenzene	14.3	20.0	72	50-150	

Lab Batch #: 754021

Sample: 327527-001 / SMP

Batch: 1 Matrix: Liquid

Units: ug/L

Date Analyzed: 03/25/09 17:15

### SURROGATE RECOVERY STUDY

Organophosphorus Pesticides by SW846 8141A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Bromo-2-nitrobenzene	48.4	80.0	61	50-150	

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] =  $100 * A / B$

All results are based on MDL and validated for QC purposes.



## Form 2 - Surrogate Recoveries

Project Name: Railroad Drum Site

Work Orders : 327527,

Project ID: TTEMI-05-001-0091

Lab Batch #: 754487

Sample: 526634-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/24/09 23:32

### SURROGATE RECOVERY STUDY

Organophosphorus Pesticides by SW846 8141A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Bromo-2-nitrobenzene	429	667	64	50-150	

Lab Batch #: 754487

Sample: 526634-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/25/09 00:04

### SURROGATE RECOVERY STUDY

Organophosphorus Pesticides by SW846 8141A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Bromo-2-nitrobenzene	490	667	73	50-150	

Lab Batch #: 754487

Sample: 526634-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/25/09 00:35

### SURROGATE RECOVERY STUDY

Organophosphorus Pesticides by SW846 8141A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Bromo-2-nitrobenzene	442	667	66	50-150	

Lab Batch #: 754487

Sample: 327527-002 / SMP

Batch: 1 Matrix: Solid Waste

Units: ug/kg

Date Analyzed: 03/25/09 01:07

### SURROGATE RECOVERY STUDY

Organophosphorus Pesticides by SW846 8141A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Bromo-2-nitrobenzene	13100	20000	66	50-150	

Lab Batch #: 754487

Sample: 327527-005 / SMP

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/25/09 10:56

### SURROGATE RECOVERY STUDY

Organophosphorus Pesticides by SW846 8141A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Bromo-2-nitrobenzene	21500	19000	113	50-150	

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] =  $100 * A / B$

All results are based on MDL and validated for QC purposes.



## Form 2 - Surrogate Recoveries

Project Name: Railroad Drum Site

Work Orders : 327527,

Project ID: TTEMI-05-001-0091

Lab Batch #: 754487

Sample: 327527-004 / SMP

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/25/09 11:28

### SURROGATE RECOVERY STUDY

Organophosphorus Pesticides by SW846 8141A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Bromo-2-nitrobenzene	375	667	56	50-150	

Lab Batch #: 754487

Sample: 327527-006 / SMP

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/25/09 16:44

### SURROGATE RECOVERY STUDY

Organophosphorus Pesticides by SW846 8141A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Bromo-2-nitrobenzene	488	667	73	50-150	

Lab Batch #: 754487

Sample: 327527-005 / DL

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/30/09 17:49

### SURROGATE RECOVERY STUDY

Organophosphorus Pesticides by SW846 8141A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Bromo-2-nitrobenzene	U	95200	0	50-150	***

Lab Batch #: 754487

Sample: 327527-003 / SMP

Batch: 1 Matrix: Solid Waste

Units: ug/kg

Date Analyzed: 03/31/09 06:09

### SURROGATE RECOVERY STUDY

Organophosphorus Pesticides by SW846 8141A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Bromo-2-nitrobenzene	7740	20000	39	50-150	**

Lab Batch #: 753263

Sample: 526701-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/20/09 03:10

### SURROGATE RECOVERY STUDY

PCBs by SW846 8082	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
Decachlorobiphenyl	11.9	16.7	71	19-203	
Tetrachloro-m-xylene	12.8	16.7	77	19-191	

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] =  $100 * A / B$

All results are based on MDL and validated for QC purposes.



## Form 2 - Surrogate Recoveries

Project Name: Railroad Drum Site

Work Orders : 327527,

Project ID: TTEMI-05-001-0091

Lab Batch #: 753263

Sample: 526701-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/20/09 03:10

### SURROGATE RECOVERY STUDY

PCBs by SW846 8082 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	11.0	16.7	66	19-203	
Tetrachloro-m-xylene	10.6	16.7	63	19-191	

Lab Batch #: 753263

Sample: 526701-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/20/09 03:33

### SURROGATE RECOVERY STUDY

PCBs by SW846 8082 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	13.5	16.7	81	19-203	
Tetrachloro-m-xylene	15.7	16.7	94	19-191	

Lab Batch #: 753263

Sample: 526701-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/20/09 03:33

### SURROGATE RECOVERY STUDY

PCBs by SW846 8082 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	12.6	16.7	75	19-203	
Tetrachloro-m-xylene	13.1	16.7	78	19-191	

Lab Batch #: 753263

Sample: 327527-006 / SMP

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/20/09 03:57

### SURROGATE RECOVERY STUDY

PCBs by SW846 8082 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	13.2	16.6	80	19-203	
Tetrachloro-m-xylene	13.7	16.6	83	19-191	

Lab Batch #: 753263

Sample: 327527-006 / SMP

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/20/09 03:57

### SURROGATE RECOVERY STUDY

PCBs by SW846 8082 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	13.1	16.6	80	19-203	
Tetrachloro-m-xylene	11.9	16.6	72	19-191	

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] =  $100 * A / B$

All results are based on MDL and validated for QC purposes.





## Form 2 - Surrogate Recoveries

Project Name: Railroad Drum Site

Work Orders : 327527,

Project ID: TTEMI-05-001-0091

Lab Batch #: 753263

Sample: 327527-006 S / MS

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/20/09 04:21

### SURROGATE RECOVERY STUDY

PCBs by SW846 8082 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	17.0	16.6	102	19-203	
Tetrachloro-m-xylene	16.3	16.6	98	19-191	

Lab Batch #: 753263

Sample: 327527-006 S / MS

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/20/09 04:21

### SURROGATE RECOVERY STUDY

PCBs by SW846 8082 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	17.8	16.6	107	19-203	
Tetrachloro-m-xylene	13.0	16.6	78	19-191	

Lab Batch #: 753263

Sample: 327527-006 SD / MSD

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/20/09 04:45

### SURROGATE RECOVERY STUDY

PCBs by SW846 8082 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	16.7	16.7	100	19-203	
Tetrachloro-m-xylene	14.8	16.7	89	19-191	

Lab Batch #: 753263

Sample: 327527-006 SD / MSD

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/20/09 04:45

### SURROGATE RECOVERY STUDY

PCBs by SW846 8082 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	17.2	16.7	103	19-203	
Tetrachloro-m-xylene	11.8	16.7	71	19-191	

Lab Batch #: 752946

Sample: 526548-1-BLK / BLK

Batch: 1 Matrix: Water

Units: ug/L

Date Analyzed: 03/17/09 20:14

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	5.379	5.000	108	26-154	
Tetrachloro-m-xylene	4.061	5.000	81	27-135	

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] =  $100 * A / B$

All results are based on MDL and validated for QC purposes.



## Form 2 - Surrogate Recoveries

Project Name: Railroad Drum Site

Work Orders : 327527,

Project ID: TTEMI-05-001-0091

Lab Batch #: 752946

Sample: 526548-1-BLK / BLK

Batch: 1 Matrix: Water

Units: ug/L

Date Analyzed: 03/17/09 20:14

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	5.108	5.000	102	26-154	
Tetrachloro-m-xylene	3.967	5.000	79	27-135	

Lab Batch #: 752946

Sample: 526548-1-BKS / BKS

Batch: 1 Matrix: Water

Units: ug/L

Date Analyzed: 03/17/09 20:41

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	5.381	5.000	108	26-154	
Tetrachloro-m-xylene	4.494	5.000	90	27-135	

Lab Batch #: 752946

Sample: 526548-1-BKS / BKS

Batch: 1 Matrix: Water

Units: ug/L

Date Analyzed: 03/17/09 20:41

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	5.272	5.000	105	26-154	
Tetrachloro-m-xylene	4.451	5.000	89	27-135	

Lab Batch #: 752946

Sample: 526548-1-BSD / BSD

Batch: 1 Matrix: Water

Units: ug/L

Date Analyzed: 03/17/09 21:09

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	4.925	5.000	99	26-154	
Tetrachloro-m-xylene	3.557	5.000	71	27-135	

Lab Batch #: 752946

Sample: 526548-1-BSD / BSD

Batch: 1 Matrix: Water

Units: ug/L

Date Analyzed: 03/17/09 21:09

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	4.615	5.000	92	26-154	
Tetrachloro-m-xylene	3.486	5.000	70	27-135	

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] =  $100 * A / B$

All results are based on MDL and validated for QC purposes.



## Form 2 - Surrogate Recoveries

Project Name: Railroad Drum Site

Work Orders : 327527,

Project ID: TTEMI-05-001-0091

Lab Batch #: 752946

Sample: 327527-001 / SMP

Batch: 1 Matrix: Liquid

Units: ug/L

Date Analyzed: 03/17/09 22:04

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	19.96	25.00	80	26-154	
Tetrachloro-m-xylene	18.09	25.00	72	27-135	

Lab Batch #: 752946

Sample: 327527-001 / SMP

Batch: 1 Matrix: Liquid

Units: ug/L

Date Analyzed: 03/17/09 22:04

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	21.04	25.00	84	26-154	
Tetrachloro-m-xylene	14.37	25.00	57	27-135	

Lab Batch #: 753926

Sample: 526588-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/18/09 15:06

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	16.78	16.67	101	32-145	
Tetrachloro-m-xylene	14.92	16.67	90	11-114	

Lab Batch #: 753926

Sample: 526588-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/18/09 15:06

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	16.23	16.67	97	32-145	
Tetrachloro-m-xylene	13.30	16.67	80	11-114	

Lab Batch #: 753926

Sample: 526588-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/18/09 15:34

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	17.55	16.67	105	32-145	
Tetrachloro-m-xylene	13.18	16.67	79	11-114	

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] =  $100 * A / B$

All results are based on MDL and validated for QC purposes.



## Form 2 - Surrogate Recoveries

Project Name: Railroad Drum Site

Work Orders : 327527,

Project ID: TTEMI-05-001-0091

Lab Batch #: 753926

Sample: 526588-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/18/09 15:34

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	16.63	16.67	100	32-145	
Tetrachloro-m-xylene	12.73	16.67	76	11-114	

Lab Batch #: 753926

Sample: 327527-002 / SMP

Batch: 1 Matrix: Solid Waste

Units: ug/kg

Date Analyzed: 03/19/09 10:47

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	239.3	245.1	98	32-145	
Tetrachloro-m-xylene	135.3	245.1	55	11-114	

Lab Batch #: 753926

Sample: 327527-002 / SMP

Batch: 1 Matrix: Solid Waste

Units: ug/kg

Date Analyzed: 03/19/09 10:47

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	262.6	245.1	107	32-145	
Tetrachloro-m-xylene	119.1	245.1	49	11-114	

Lab Batch #: 753926

Sample: 327527-003 / SMP

Batch: 1 Matrix: Solid Waste

Units: ug/kg

Date Analyzed: 03/19/09 11:14

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	335.3	238.1	141	32-145	
Tetrachloro-m-xylene	286.8	238.1	120	11-114	**

Lab Batch #: 753926

Sample: 327527-003 / SMP

Batch: 1 Matrix: Solid Waste

Units: ug/kg

Date Analyzed: 03/19/09 11:14

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	283.0	238.1	119	32-145	
Tetrachloro-m-xylene	181.2	238.1	76	11-114	

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] =  $100 * A / B$

All results are based on MDL and validated for QC purposes.



## Form 2 - Surrogate Recoveries

Project Name: Railroad Drum Site

Work Orders : 327527,

Project ID: TTEMI-05-001-0091

Lab Batch #: 753926

Sample: 327527-004 / SMP

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/19/09 11:42

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	15.33	16.62	92	32-145	
Tetrachloro-m-xylene	10.39	16.62	63	11-114	

Lab Batch #: 753926

Sample: 327527-004 / SMP

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/19/09 11:42

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	12.31	16.62	74	32-145	
Tetrachloro-m-xylene	11.68	16.62	70	11-114	

Lab Batch #: 753926

Sample: 327527-005 / SMP

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/19/09 12:09

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	262.0	16.59	1579	32-145	**
Tetrachloro-m-xylene	14.26	16.59	86	11-114	

Lab Batch #: 753926

Sample: 327527-005 / SMP

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/19/09 12:09

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	10.57	16.59	64	32-145	
Tetrachloro-m-xylene	11.84	16.59	71	11-114	

Lab Batch #: 753926

Sample: 327527-006 / SMP

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/19/09 12:37

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	13.74	16.64	83	32-145	
Tetrachloro-m-xylene	10.27	16.64	62	11-114	

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] =  $100 * A / B$

All results are based on MDL and validated for QC purposes.



## Form 2 - Surrogate Recoveries

Project Name: Railroad Drum Site

Work Orders : 327527,

Project ID: TTEMI-05-001-0091

Lab Batch #: 753926

Sample: 327527-006 / SMP

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/19/09 12:37

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	16.60	16.64	100	32-145	
Tetrachloro-m-xylene	9.441	16.64	57	11-114	

Lab Batch #: 753926

Sample: 327527-006 S / MS

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/19/09 13:05

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	11.61	16.62	70	32-145	
Tetrachloro-m-xylene	9.262	16.62	56	11-114	

Lab Batch #: 753926

Sample: 327527-006 S / MS

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/19/09 13:05

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	10.02	16.62	60	32-145	
Tetrachloro-m-xylene	10.73	16.62	65	11-114	

Lab Batch #: 753926

Sample: 327527-006 SD / MSD

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/19/09 13:32

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	16.43	16.61	99	32-145	
Tetrachloro-m-xylene	8.645	16.61	52	11-114	

Lab Batch #: 753926

Sample: 327527-006 SD / MSD

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/19/09 13:32

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	10.56	16.61	64	32-145	
Tetrachloro-m-xylene	9.582	16.61	58	11-114	

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] =  $100 * A / B$

All results are based on MDL and validated for QC purposes.





## Form 2 - Surrogate Recoveries

Project Name: Railroad Drum Site

Work Orders : 327527,

Project ID: TTEMI-05-001-0091

Lab Batch #: 753926

Sample: 327527-005 DL2 / DL

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/23/09 14:11

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	224.0	16.59	1350	32-145	***
Tetrachloro-m-xylene	<0.0000	16.59	0	11-114	***

Lab Batch #: 753926

Sample: 327527-005 DL2 / DL

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/23/09 14:11

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	526.1	16.59	3171	32-145	***
Tetrachloro-m-xylene	<0.0000	16.59	0	11-114	***

Lab Batch #: 753926

Sample: 327527-006 DL / DL

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/23/09 14:39

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	26.76	16.64	161	32-145	***
Tetrachloro-m-xylene	16.05	16.64	96	11-114	

Lab Batch #: 753926

Sample: 327527-006 DL / DL

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/23/09 14:39

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	2.663	16.64	16	32-145	***
Tetrachloro-m-xylene	13.45	16.64	81	11-114	

Lab Batch #: 753926

Sample: 327527-003 DL / DL

Batch: 1 Matrix: Solid Waste

Units: ug/kg

Date Analyzed: 03/24/09 20:27

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	371.4	238.1	156	32-145	***
Tetrachloro-m-xylene	252.4	238.1	106	11-114	

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] =  $100 * A / B$

All results are based on MDL and validated for QC purposes.



## Form 2 - Surrogate Recoveries

Project Name: Railroad Drum Site

Work Orders : 327527,

Project ID: TTEMI-05-001-0091

Lab Batch #: 753926

Sample: 327527-003 DL / DL

Batch: 1 Matrix: Solid Waste

Units: ug/kg

Date Analyzed: 03/24/09 20:27

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	347.6	238.1	146	32-145	***
Tetrachloro-m-xylene	238.1	238.1	100	11-114	

Lab Batch #: 753926

Sample: 327527-004 DL / DL

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/24/09 20:54

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	16.32	16.62	98	32-145	
Tetrachloro-m-xylene	13.19	16.62	79	11-114	

Lab Batch #: 753926

Sample: 327527-004 DL / DL

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/24/09 20:54

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	17.78	16.62	107	32-145	
Tetrachloro-m-xylene	14.22	16.62	86	11-114	

Lab Batch #: 753926

Sample: 327527-005 DL / DL

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/24/09 21:49

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	11.82	16.59	71	32-145	
Tetrachloro-m-xylene	11.88	16.59	72	11-114	

Lab Batch #: 753926

Sample: 327527-005 DL / DL

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/24/09 21:49

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	17.13	16.59	103	32-145	
Tetrachloro-m-xylene	13.01	16.59	78	11-114	

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] =  $100 * A / B$

All results are based on MDL and validated for QC purposes.



## Form 2 - Surrogate Recoveries

Project Name: Railroad Drum Site

Work Orders : 327527,

Project ID: TTEMI-05-001-0091

Lab Batch #: 753926

Sample: 327527-006 DL2 / DL

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/24/09 22:45

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	8.988	16.64	54	32-145	
Tetrachloro-m-xylene	19.64	16.64	118	11-114	***

Lab Batch #: 753926

Sample: 327527-006 DL2 / DL

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/24/09 22:45

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	17.31	16.64	104	32-145	
Tetrachloro-m-xylene	16.98	16.64	102	11-114	

Lab Batch #: 753926

Sample: 327527-005 DL3 / DL

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/25/09 19:47

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	<0.0000	16.59	0	32-145	***
Tetrachloro-m-xylene	<0.0000	16.59	0	11-114	***

Lab Batch #: 753926

Sample: 327527-005 DL3 / DL

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/25/09 19:47

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	<0.0000	16.59	0	32-145	***
Tetrachloro-m-xylene	<0.0000	16.59	0	11-114	***

Lab Batch #: 753926

Sample: 327527-005 DL4 / DL

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/25/09 20:15

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	<0.0000	16.59	0	32-145	***
Tetrachloro-m-xylene	<0.0000	16.59	0	11-114	***

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] =  $100 * A / B$

All results are based on MDL and validated for QC purposes.



## Form 2 - Surrogate Recoveries

Project Name: Railroad Drum Site

Work Orders : 327527,

Project ID: TTEMI-05-001-0091

Lab Batch #: 753926

Sample: 327527-005 DL4 / DL

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/25/09 20:15

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	<0.0000	16.59	0	32-145	***
Tetrachloro-m-xylene	<0.0000	16.59	0	11-114	***

Lab Batch #: 753926

Sample: 327527-002 DL / DL

Batch: 1 Matrix: Solid Waste

Units: ug/kg

Date Analyzed: 03/26/09 10:22

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	242.6	245.1	99	32-145	
Tetrachloro-m-xylene	298.0	245.1	122	11-114	***

Lab Batch #: 753926

Sample: 327527-002 DL / DL

Batch: 1 Matrix: Solid Waste

Units: ug/kg

Date Analyzed: 03/26/09 10:22

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	257.8	245.1	105	32-145	
Tetrachloro-m-xylene	37.75	245.1	15	11-114	

Lab Batch #: 753926

Sample: 327527-004 DL2 / DL

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/26/09 11:19

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	14.02	16.62	84	32-145	
Tetrachloro-m-xylene	7.511	16.62	45	11-114	

Lab Batch #: 753926

Sample: 327527-004 DL2 / DL

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/26/09 11:19

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	9.372	16.62	56	32-145	
Tetrachloro-m-xylene	<0.0000	16.62	0	11-114	***

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] =  $100 * A / B$

All results are based on MDL and validated for QC purposes.



## Form 2 - Surrogate Recoveries

Project Name: Railroad Drum Site

Work Orders : 327527,

Project ID: TTEMI-05-001-0091

Lab Batch #: 753416

Sample: 526547-1-BLK / BLK

Batch: 1 Matrix: Water

Units: ug/L

Date Analyzed: 03/23/09 10:09

### SURROGATE RECOVERY STUDY

SVOCs by SW-846 8270C	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2,4,6-Tribromophenol	887	1000	89	32-117	
2-Fluorobiphenyl	418	500	84	35-96	
2-Fluorophenol	761	1000	76	29-87	
Nitrobenzene-d5	413	500	83	22-108	
Phenol-d5	777	1000	78	28-88	
Terphenyl-D14	464	500	93	18-133	

Lab Batch #: 753416

Sample: 526547-1-BKS / BKS

Batch: 1 Matrix: Water

Units: ug/L

Date Analyzed: 03/23/09 10:36

### SURROGATE RECOVERY STUDY

SVOCs by SW-846 8270C	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2,4,6-Tribromophenol	942	1000	94	32-117	
2-Fluorobiphenyl	434	500	87	35-96	
2-Fluorophenol	738	1000	74	29-87	
Nitrobenzene-d5	440	500	88	22-108	
Phenol-d5	816	1000	82	28-88	
Terphenyl-D14	445	500	89	18-133	

Lab Batch #: 753416

Sample: 327527-001 / SMP

Batch: 1 Matrix: Liquid

Units: ug/L

Date Analyzed: 03/23/09 11:32

### SURROGATE RECOVERY STUDY

SVOCs by SW-846 8270C	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2,4,6-Tribromophenol	5600	5000	112	32-117	
2-Fluorobiphenyl	2010	2500	80	35-96	
2-Fluorophenol	2770	5000	55	29-87	
Nitrobenzene-d5	1950	2500	78	22-108	
Phenol-d5	2990	5000	60	28-88	
Terphenyl-D14	2120	2500	85	18-133	

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] =  $100 * A / B$

All results are based on MDL and validated for QC purposes.



## Form 2 - Surrogate Recoveries

Project Name: Railroad Drum Site

Work Orders : 327527,

Project ID: TTEMI-05-001-0091

Lab Batch #: 753416

Sample: 526547-1-BSD / BSD

Batch: 1 Matrix: Water

Units: ug/L

Date Analyzed: 03/23/09 14:21

### SURROGATE RECOVERY STUDY

SVOCs by SW-846 8270C	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2,4,6-Tribromophenol	1050	1000	105	32-117	
2-Fluorobiphenyl	476	500	95	35-96	
2-Fluorophenol	842	1000	84	29-87	
Nitrobenzene-d5	482	500	96	22-108	
Phenol-d5	866	1000	87	28-88	
Terphenyl-D14	541	500	108	18-133	

Lab Batch #: 753650

Sample: 526543-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/23/09 09:13

### SURROGATE RECOVERY STUDY

SVOCs by SW-846 8270C	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2-Fluorobiphenyl	1600	1700	94	30-115	
2-Fluorophenol	2800	3300	85	25-121	
Nitrobenzene-d5	1600	1700	94	23-120	
Phenol-d5	2900	3300	88	25-125	
Terphenyl-D14	1700	1700	100	18-137	
2,4,6-Tribromophenol	3300	3300	100	19-122	

Lab Batch #: 753650

Sample: 526543-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/23/09 09:41

### SURROGATE RECOVERY STUDY

SVOCs by SW-846 8270C	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2-Fluorobiphenyl	1700	1700	100	30-115	
2-Fluorophenol	2900	3300	88	25-121	
Nitrobenzene-d5	1600	1700	94	23-120	
Phenol-d5	2800	3300	85	25-125	
Terphenyl-D14	1800	1700	106	18-137	
2,4,6-Tribromophenol	3700	3300	112	19-122	

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] =  $100 * A / B$

All results are based on MDL and validated for QC purposes.





## Form 2 - Surrogate Recoveries

Project Name: Railroad Drum Site

Work Orders : 327527,

Project ID: TTEMI-05-001-0091

Lab Batch #: 753650

Sample: 327527-006 S / MS

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/23/09 14:50

### SURROGATE RECOVERY STUDY

SVOCs by SW-846 8270C Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	1500	1700	88	30-115	
2-Fluorophenol	2000	3300	61	25-121	
Nitrobenzene-d5	1300	1700	76	23-120	
Phenol-d5	2600	3300	79	25-125	
Terphenyl-D14	1700	1700	100	18-137	
2,4,6-Tribromophenol	3900	3300	118	19-122	

Lab Batch #: 753650

Sample: 327527-006 SD / MSD

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/23/09 15:18

### SURROGATE RECOVERY STUDY

SVOCs by SW-846 8270C Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	1800	1700	106	30-115	
2-Fluorophenol	2600	3300	79	25-121	
Nitrobenzene-d5	1400	1700	82	23-120	
Phenol-d5	3200	3300	97	25-125	
Terphenyl-D14	2200	1700	129	18-137	
2,4,6-Tribromophenol	4800	3300	145	19-122	**

Lab Batch #: 753650

Sample: 327527-002 / SMP

Batch: 1 Matrix: Solid Waste

Units: ug/kg

Date Analyzed: 03/23/09 15:47

### SURROGATE RECOVERY STUDY

SVOCs by SW-846 8270C Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	23000	24000	96	30-115	
2-Fluorophenol	34000	49000	69	25-121	
Nitrobenzene-d5	18000	24000	75	23-120	
Phenol-d5	37000	49000	76	25-125	
Terphenyl-D14	23000	24000	96	18-137	
2,4,6-Tribromophenol	60000	49000	122	19-122	

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] =  $100 * A / B$

All results are based on MDL and validated for QC purposes.



## Form 2 - Surrogate Recoveries

Project Name: Railroad Drum Site

Work Orders : 327527,

Project ID: TTEMI-05-001-0091

Lab Batch #: 753650

Sample: 327527-003 / SMP

Batch: 1 Matrix: Solid Waste

Units: ug/kg

Date Analyzed: 03/23/09 16:15

### SURROGATE RECOVERY STUDY

SVOCs by SW-846 8270C Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	18000	24000	75	30-115	
2-Fluorophenol	22000	49000	45	25-121	
Nitrobenzene-d5	15000	24000	63	23-120	
Phenol-d5	25000	49000	51	25-125	
Terphenyl-D14	20000	24000	83	18-137	
2,4,6-Tribromophenol	46000	49000	94	19-122	

Lab Batch #: 753650

Sample: 327527-004 / SMP

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/23/09 16:44

### SURROGATE RECOVERY STUDY

SVOCs by SW-846 8270C Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	1200	1700	71	30-115	
2-Fluorophenol	1800	3300	55	25-121	
Nitrobenzene-d5	1100	1700	65	23-120	
Phenol-d5	1900	3300	58	25-125	
Terphenyl-D14	1400	1700	82	18-137	
2,4,6-Tribromophenol	3400	3300	103	19-122	

Lab Batch #: 753650

Sample: 327527-005 / SMP

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/23/09 17:12

### SURROGATE RECOVERY STUDY

SVOCs by SW-846 8270C Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	1500	1700	88	30-115	
2-Fluorophenol	2000	3300	61	25-121	
Nitrobenzene-d5	1000	1700	59	23-120	
Phenol-d5	2400	3300	73	25-125	
Terphenyl-D14	1200	1700	71	18-137	
2,4,6-Tribromophenol	4500	3300	136	19-122	**

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] =  $100 * A / B$

All results are based on MDL and validated for QC purposes.



## Form 2 - Surrogate Recoveries

Project Name: Railroad Drum Site

Work Orders : 327527,

Project ID: TTEMI-05-001-0091

Lab Batch #: 753650

Sample: 327527-002 / DL

Batch: 1 Matrix: Solid Waste

Units: ug/kg

Date Analyzed: 03/23/09 17:41

### SURROGATE RECOVERY STUDY

SVOCs by SW-846 8270C Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	<0.0000	24000	0	30-115	***
2-Fluorophenol	<0.0000	49000	0	25-121	***
Nitrobenzene-d5	<0.0000	24000	0	23-120	***
Phenol-d5	<0.0000	49000	0	25-125	***
Terphenyl-D14	<0.0000	24000	0	18-137	***
2,4,6-Tribromophenol	<0.0000	49000	0	19-122	***

Lab Batch #: 753650

Sample: 327527-006 / SMP

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/23/09 18:09

### SURROGATE RECOVERY STUDY

SVOCs by SW-846 8270C Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	1600	1700	94	30-115	
2-Fluorophenol	2600	3300	79	25-121	
Nitrobenzene-d5	1400	1700	82	23-120	
Phenol-d5	2600	3300	79	25-125	
Terphenyl-D14	1700	1700	100	18-137	
2,4,6-Tribromophenol	4500	3300	136	19-122	**

Lab Batch #: 753650

Sample: 327527-005 / DL

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/23/09 18:38

### SURROGATE RECOVERY STUDY

SVOCs by SW-846 8270C Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	1400	1700	82	30-115	
2-Fluorophenol	1700	3300	52	25-121	
Nitrobenzene-d5	1300	1700	76	23-120	
Phenol-d5	1800	3300	55	25-125	
Terphenyl-D14	1700	1700	100	18-137	
2,4,6-Tribromophenol	8500	3300	258	19-122	***

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] =  $100 * A / B$

All results are based on MDL and validated for QC purposes.



## Form 2 - Surrogate Recoveries

Project Name: Railroad Drum Site

Work Orders : 327527,

Project ID: TTEMI-05-001-0091

Lab Batch #: 753053

Sample: 526679-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 03/18/09 10:55

### SURROGATE RECOVERY STUDY

TPH (Gasoline Range Organics) by SW8015B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
p-Cymene (p-Isopropyltoluene)	0.11	0.10	110	66-121	

Lab Batch #: 753053

Sample: 526679-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 03/18/09 12:26

### SURROGATE RECOVERY STUDY

TPH (Gasoline Range Organics) by SW8015B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
p-Cymene (p-Isopropyltoluene)	0.11	0.10	110	66-121	

Lab Batch #: 753053

Sample: 327527-006 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/18/09 13:27

### SURROGATE RECOVERY STUDY

TPH (Gasoline Range Organics) by SW8015B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
p-Cymene (p-Isopropyltoluene)	0.10	0.10	100	66-121	

Lab Batch #: 752766

Sample: 526511-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/17/09 06:29

### SURROGATE RECOVERY STUDY

VOCs by SW-846 8260B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,2-Dichloroethane-D4	46	50	92	46-167	
4-Bromofluorobenzene	50	50	100	57-158	
Toluene-D8	51	50	102	45-140	

Lab Batch #: 752766

Sample: 526511-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/17/09 07:25

### SURROGATE RECOVERY STUDY

VOCs by SW-846 8260B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,2-Dichloroethane-D4	48	50	96	46-167	
4-Bromofluorobenzene	49	50	98	57-158	
Toluene-D8	51	50	102	45-140	

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] =  $100 * A / B$

All results are based on MDL and validated for QC purposes.



## Form 2 - Surrogate Recoveries

Project Name: Railroad Drum Site

Work Orders : 327527,

Project ID: TTEMI-05-001-0091

Lab Batch #: 752766

Sample: 327527-004 / SMP

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/17/09 07:53

### SURROGATE RECOVERY STUDY

VOCs by SW-846 8260B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,2-Dichloroethane-D4	61	50	122	46-167	
4-Bromofluorobenzene	65	50	130	57-158	
Toluene-D8	57	50	114	45-140	

Lab Batch #: 752766

Sample: 327527-005 / SMP

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/17/09 09:18

### SURROGATE RECOVERY STUDY

VOCs by SW-846 8260B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,2-Dichloroethane-D4	74	50	148	46-167	
4-Bromofluorobenzene	88	50	176	57-158	**
Toluene-D8	66	50	132	45-140	

Lab Batch #: 752766

Sample: 327527-006 / SMP

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/17/09 09:46

### SURROGATE RECOVERY STUDY

VOCs by SW-846 8260B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,2-Dichloroethane-D4	67	50	134	46-167	
4-Bromofluorobenzene	74	50	148	57-158	
Toluene-D8	64	50	128	45-140	

Lab Batch #: 752766

Sample: 327527-004 S / MS

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/17/09 10:13

### SURROGATE RECOVERY STUDY

VOCs by SW-846 8260B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,2-Dichloroethane-D4	47	50	94	46-167	
4-Bromofluorobenzene	51	50	102	57-158	
Toluene-D8	52	50	104	45-140	

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] =  $100 * A / B$

All results are based on MDL and validated for QC purposes.



## Form 2 - Surrogate Recoveries

Project Name: Railroad Drum Site

Work Orders : 327527,

Project ID: TTEMI-05-001-0091

Lab Batch #: 753039

Sample: 526671-1-BKS / BKS

Batch: 1 Matrix: Water

Units: ug/L

Date Analyzed: 03/18/09 08:16

### SURROGATE RECOVERY STUDY

VOCs by SW-846 8260B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,2-Dichloroethane-D4	46.64	50.00	93	53-159	
4-Bromofluorobenzene	51.37	50.00	103	30-186	
Toluene-D8	47.49	50.00	95	70-130	

Lab Batch #: 753039

Sample: 526671-1-BLK / BLK

Batch: 1 Matrix: Water

Units: ug/L

Date Analyzed: 03/18/09 09:44

### SURROGATE RECOVERY STUDY

VOCs by SW-846 8260B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,2-Dichloroethane-D4	51.20	50.00	102	53-159	
4-Bromofluorobenzene	50.83	50.00	102	30-186	
Toluene-D8	46.24	50.00	92	70-130	

Lab Batch #: 753039

Sample: 327527-001 / SMP

Batch: 1 Matrix: Liquid

Units: ug/L

Date Analyzed: 03/18/09 13:07

### SURROGATE RECOVERY STUDY

VOCs by SW-846 8260B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,2-Dichloroethane-D4	110.1	50.00	220	53-159	**
4-Bromofluorobenzene	28.51	50.00	57	30-186	
Toluene-D8	23.46	50.00	47	70-130	**

Lab Batch #: 753394

Sample: 526674-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/18/09 08:16

### SURROGATE RECOVERY STUDY

VOCs by SW-846 8260B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,2-Dichloroethane-D4	47	50	94	46-167	
4-Bromofluorobenzene	51	50	102	57-158	
Toluene-D8	47	50	94	45-140	

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] =  $100 * A / B$

All results are based on MDL and validated for QC purposes.





## Form 2 - Surrogate Recoveries

Project Name: Railroad Drum Site

Work Orders : 327527,

Project ID: TTEMI-05-001-0091

Lab Batch #: 753394

Sample: 526674-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/18/09 09:44

### SURROGATE RECOVERY STUDY

VOCs by SW-846 8260B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,2-Dichloroethane-D4	51	50	102	46-167	
4-Bromofluorobenzene	51	50	102	57-158	
Toluene-D8	46	50	92	45-140	

Lab Batch #: 753394

Sample: 327527-003 / SMP

Batch: 1 Matrix: Solid Waste

Units: ug/kg

Date Analyzed: 03/18/09 10:44

### SURROGATE RECOVERY STUDY

VOCs by SW-846 8260B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,2-Dichloroethane-D4	43	50	86	46-167	
4-Bromofluorobenzene	60	50	120	57-158	
Toluene-D8	64	50	128	45-140	

Lab Batch #: 753394

Sample: 327527-002 / SMP

Batch: 1 Matrix: Solid Waste

Units: ug/kg

Date Analyzed: 03/18/09 11:10

### SURROGATE RECOVERY STUDY

VOCs by SW-846 8260B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,2-Dichloroethane-D4	42	50	84	46-167	
4-Bromofluorobenzene	55	50	110	57-158	
Toluene-D8	61	50	122	45-140	

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] =  $100 * A / B$

All results are based on MDL and validated for QC purposes.

**Project Name: Railroad Drum Site**

**Work Order #:** 327527

**Project ID:** TTEMI-05-001-0091

**Lab Batch #:** 753260

**Sample:** 526662-1-BKS

**Matrix:** Solid

**Date Analyzed:** 03/19/2009

**Date Prepared:** 03/17/2009

**Analyst:** VCH

**Reporting Units:** ug/kg

**Batch #:** 1

## BLANK /BLANK SPIKE RECOVERY STUDY

<b>Chlorinated Herbicides by SW-846 8151A</b>	<b>Blank Result [A]</b>	<b>Spike Added [B]</b>	<b>Blank Spike Result [C]</b>	<b>Blank Spike %R [D]</b>	<b>Control Limits %R</b>	<b>Flags</b>
<b>Analytes</b>						
2,4-D	<0.333	167	195	117	10-189	
2,4-Db	<1.67	167	163	98	10-169	
2,4,5-T	<0.167	167	199	119	30-159	
2,4,5-Tp	<0.167	167	186	111	32-140	
Dalapon	<0.167	167	99.3	59	24-147	
Dicamba	<0.167	167	161	96	20-173	
Dichloroprop	<0.333	167	202	121	10-152	
MCPA	<66.7	16700	17000	102	28-137	
MCP	<66.7	16700	17100	102	13-114	

**Lab Batch #:** 753263

**Sample:** 526701-1-BKS

**Matrix:** Solid

**Date Analyzed:** 03/20/2009

**Date Prepared:** 03/19/2009

**Analyst:** VCH

**Reporting Units:** ug/kg

**Batch #:** 1

## BLANK /BLANK SPIKE RECOVERY STUDY

<b>PCBs by SW846 8082</b>	<b>Blank Result [A]</b>	<b>Spike Added [B]</b>	<b>Blank Spike Result [C]</b>	<b>Blank Spike %R [D]</b>	<b>Control Limits %R</b>	<b>Flags</b>
<b>Analytes</b>						
PCB-1016	<33	170	140	82	17-171	
PCB-1260	<33	170	110	65	33-193	

Blank Spike Recovery [D] = 100\*[C]/[B]

All results are based on MDL and validated for QC purposes.

**Project Name: Railroad Drum Site**

**Work Order #:** 327527

**Project ID:** TTEMI-05-001-0091

**Lab Batch #:** 753926

**Sample:** 526588-1-BKS

**Matrix:** Solid

**Date Analyzed:** 03/18/2009

**Date Prepared:** 03/17/2009

**Analyst:** VCH

**Reporting Units:** ug/kg

**Batch #:** 1

## BLANK /BLANK SPIKE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
4,4-DDD	<3.33	16.7	19.1	114	40-176	
4,4-DDE	<3.33	16.7	18.8	113	45-187	
4,4-DDT	<3.33	16.7	21.3	128	32-178	
Aldrin	<1.67	16.7	17.3	104	45-151	
Alpha-BHC	<1.67	16.7	17.3	104	43-156	
Alpha-Chlordane	<1.67	16.7	19.0	114	66-192	
Beta-BHC	<1.67	16.7	18.0	108	43-155	
Delta-BHC	<1.67	16.7	20.3	122	56-170	
Dieldrin	<3.33	16.7	19.5	117	48-163	
Endosulfan I	<1.67	16.7	19.1	114	57-176	
Endosulfan II	<3.33	16.7	21.0	126	58-159	
Endosulfan Sulfate	<3.33	16.7	28.8	172	29-163	H
Endrin	<3.33	16.7	18.4	110	19-181	
Endrin Aldehyde	<3.33	16.7	21.6	129	35-155	
Endrin Ketone	<3.33	16.7	24.0	144	55-185	
Gamma-BHC (Lindane)	<1.67	16.7	18.0	108	43-159	
Gamma-Chlordane	<1.67	16.7	18.5	111	27-138	
Heptachlor	<1.67	16.7	19.3	116	45-170	
Heptachlor Epoxide	<1.67	16.7	18.6	111	33-163	
Methoxychlor	<16.7	50.0	70.2	140	50-196	

Blank Spike Recovery [D] = 100\*[C]/[B]

All results are based on MDL and validated for QC purposes.

## Project Name: Railroad Drum Site

Work Order #: 327527

Project ID: TTEMI-05-001-0091

Lab Batch #: 753650

Sample: 526543-1-BKS

Matrix: Solid

Date Analyzed: 03/23/2009

Date Prepared: 03/17/2009

Analyst: RYE

Reporting Units: ug/kg

Batch #: 1

### BLANK /BLANK SPIKE RECOVERY STUDY

SVOCs by SW-846 8270C	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Analytes						
1,2,4-Trichlorobenzene	<330	1700	1500	88	37-133	
1,4-Dichlorobenzene	<330	1700	1300	76	36-134	
2,4-Dinitrotoluene	<330	1700	1400	82	40-130	
2-Chlorophenol	<330	3300	2700	82	25-140	
4-chloro-3-methylphenol	<330	3300	3300	100	28-134	
4-Nitrophenol	<670	3300	2400	73	15-113	
Acenaphthene	<330	1700	1600	94	41-134	
N-Nitrosodi-n-Propylamine	<330	1700	1600	94	53-130	
Pentachlorophenol	<670	3300	1900	58	14-111	
Phenol	<330	3300	2500	76	27-127	
Pyrene	<330	1700	1700	100	24-132	

Lab Batch #: 753053

Sample: 526679-1-BKS

Matrix: Solid

Date Analyzed: 03/18/2009

Date Prepared: 03/18/2009

Analyst: ANI

Reporting Units: mg/kg

Batch #: 1

### BLANK /BLANK SPIKE RECOVERY STUDY

TPH (Gasoline Range Organics) by SW8015B	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Analytes						
TPH-GRO (Gasoline Range Organics)	<10	50	55	110	71-125	

Lab Batch #: 752766

Sample: 526511-1-BKS

Matrix: Solid

Date Analyzed: 03/17/2009

Date Prepared: 03/17/2009

Analyst: 4124

Reporting Units: ug/kg

Batch #: 1

### BLANK /BLANK SPIKE RECOVERY STUDY

VOCs by SW-846 8260B	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Analytes						
1,1-Dichloroethene	<5.0	50	48	96	35-170	
Benzene	<5.0	50	50	100	38-158	
Chlorobenzene	<10	50	53	106	47-153	
Toluene	<5.0	50	52	104	50-150	
Trichloroethene	<5.0	50	52	104	50-150	

Blank Spike Recovery [D] = 100\*[C]/[B]

All results are based on MDL and validated for QC purposes.

**Project Name: Railroad Drum Site**

**Work Order #:** 327527

**Project ID:** TTEMI-05-001-0091

**Lab Batch #:** 753039

**Sample:** 526671-1-BKS

**Matrix:** Water

**Date Analyzed:** 03/18/2009

**Date Prepared:** 03/18/2009

**Analyst:** 4124

**Reporting Units:** ug/L

**Batch #:** 1

## BLANK /BLANK SPIKE RECOVERY STUDY

VOCs by SW-846 8260B Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
1,1-Dichloroethene	<1.00	50.0	54.1	108	70-130	
Benzene	<1.00	50.0	47.0	94	80-120	
Chlorobenzene	<1.00	50.0	47.3	95	80-120	
Toluene	<1.00	50.0	46.0	92	75-120	
Trichloroethylene	<1.00	50.0	46.8	94	70-125	

**Lab Batch #:** 753394

**Sample:** 526674-1-BKS

**Matrix:** Solid

**Date Analyzed:** 03/18/2009

**Date Prepared:** 03/18/2009

**Analyst:** 4124

**Reporting Units:** ug/kg

**Batch #:** 1

## BLANK /BLANK SPIKE RECOVERY STUDY

VOCs by SW-846 8260B Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
1,1-Dichloroethene	<250	2500	2700	108	35-170	
Benzene	<250	2500	2300	92	38-158	
Chlorobenzene	<500	2500	2400	96	47-153	
Toluene	<250	2500	2300	92	50-150	
Trichloroethene	<250	2500	2300	92	50-150	

Blank Spike Recovery [D] =  $100 \times [C] / [B]$

All results are based on MDL and validated for QC purposes.



## BS / BSD Recoveries



**Project Name: Railroad Drum Site**

**Work Order #:** 327527

**Analyst:** VCH

**Date Prepared:** 03/17/2009

**Project ID:** TTEMI-05-001-0091

**Date Analyzed:** 03/19/2009

**Lab Batch ID:** 753224

**Sample:** 526665-1-BKS

**Batch #:** 1

**Matrix:** Water

**Units:** ug/L

### BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Chlorinated Herbicides by SW-846 8151A		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Col	Analytes											
1	2,4,5-T	<2.5	25	27	108	25	26	104	4	37-188	30	
1	2,4,5-Tp	<2.5	25	25	100	25	24	96	4	45-186	30	
1	2,4-D	<2.5	25	25	100	25	24	96	4	24-244	30	
1	2,4-Db	<2.5	25	24	96	25	22	88	9	11-211	30	
1	Dalapon	<2.5	25	18	72	25	17	68	6	32-118	30	
2	Dicamba	<2.5	25	26	104	25	26	104	0	61-141	30	
1	Dichloroprop	<2.5	25	26	104	25	25	100	4	57-154	30	
1	Dinoseb	<2.5	25	23	92	25	21	84	9	3-192	30	
2	MCPA	<250	2500	2500	100	2500	2600	104	4	71-124	30	
1	MCPP	<250	2500	2600	104	2500	2700	108	4	59-130	30	

**Analyst:** 4150

**Date Prepared:** 03/17/2009

**Date Analyzed:** 03/17/2009

**Lab Batch ID:** 752897

**Sample:** 526503-1-BKS

**Batch #:** 1

**Matrix:** Water

**Units:** mg/L

### BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Mercury by SW-846 7470A		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
	Mercury	<0.0020	0.0030	0.0029	97	0.003	0.0031	103	7	75-125	20	

Relative Percent Difference RPD =  $200 * |(C-F)/(C+F)|$

Blank Spike Recovery [D] =  $100 * (C)/[B]$

Blank Spike Duplicate Recovery [G] =  $100 * (F)/[E]$

All results are based on MDL and Validated for QC Purposes





## BS / BSD Recoveries



**Project Name: Railroad Drum Site**

**Work Order #:** 327527

**Analyst:** 4150

**Date Prepared:** 03/17/2009

**Project ID:** TTEMI-05-001-0091

**Date Analyzed:** 03/18/2009

**Lab Batch ID:** 753056

**Sample:** 526567-1-BKS

**Batch #:** 1

**Matrix:** Solid

**Units:** mg/kg

### BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Mercury by SW-846 7471A	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
<b>Analytes</b>											
Mercury	<0.0500	0.5000	0.4867	97	0.5	0.4958	99	2	85-115	20	

**Analyst:** JAN

**Date Prepared:** 03/19/2009

**Date Analyzed:** 03/25/2009

**Lab Batch ID:** 754021

**Sample:** 526633-1-BKS

**Batch #:** 1

**Matrix:** Water

**Units:** ug/L

### BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Organophosphorus Pesticides by SW846 8141A	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
<b>Analytes</b>											
Atrazine	<0.500	1.00	0.951	95	1	0.943	94	1	49-125	25	
azinthos-methyl	<2.00	10.0	8.33	83	10	9.13	91	9	50-150	25	
Chlorpyrifos	<0.500	1.00	0.743	74	1	0.649	65	14	75-125	25	L
Diazinon	<0.500	1.00	0.758	76	1	0.727	73	4	47-149	25	
Disulfoton	<0.500	1.00	1.16	116	1	1.24	124	7	50-150	25	
Ethion	<0.500	1.00	1.05	105	1	0.963	96	9	75-125	25	
Fenthion	<0.500	1.00	1.03	103	1	0.916	92	12	25-125	25	
Malathion	<0.500	1.00	0.700	70	1	0.618	62	12	25-125	25	
Parathion, Ethyl	<0.500	1.00	0.995	100	1	1.08	108	8	45-130	25	
Parathion, Methyl	<0.500	1.00	0.723	72	1	0.756	76	4	45-130	25	
Simazine	<2.00	1.00	0.664	66	1	0.615	62	8	50-150	25	
stirophos	<0.500	1.00	0.970	97	1	0.873	87	11	50-150	50	

Relative Percent Difference RPD =  $200 * |(C-F)/(C+F)|$

Blank Spike Recovery [D] =  $100 * (C)/[B]$

Blank Spike Duplicate Recovery [G] =  $100 * (F)/[E]$

All results are based on MDL and Validated for QC Purposes



## BS / BSD Recoveries



**Project Name: Railroad Drum Site**

**Work Order #: 327527**

**Analyst: JAN**

**Date Prepared: 03/19/2009**

**Project ID: TTEMI-05-001-0091**

**Date Analyzed: 03/25/2009**

**Lab Batch ID: 754487**

**Sample: 526634-1-BKS**

**Batch #: 1**

**Matrix: Solid**

**Units: ug/kg**

### BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

<b>Organophosphorus Pesticides by SW846 8141A</b>	<b>Blank Sample Result [A]</b>	<b>Spike Added [B]</b>	<b>Blank Spike Result [C]</b>	<b>Blank Spike %R [D]</b>	<b>Spike Added [E]</b>	<b>Blank Spike Duplicate Result [F]</b>	<b>Blk. Spk Dup. %R [G]</b>	<b>RPD %</b>	<b>Control Limits %R</b>	<b>Control Limits %RPD</b>	<b>Flag</b>
<b>Analytes</b>											
Atrazine	<16.7	33.3	27.7	83	33.3	22.5	68	21	49-125	25	
azinphos-methyl	<66.7	333	279	84	333	301	90	8	50-150	25	
Chlorpyrifos	<16.7	33.3	23.6	71	33.3	26.8	80	13	75-125	25	L
Diazinon	<16.7	33.3	31.5	95	33.3	24.7	74	24	47-149	25	
Disulfoton	<16.7	33.3	34.3	103	33.3	35.7	107	4	50-150	25	
Ethion	<16.7	33.3	38.2	115	33.3	42.4	127	10	75-125	25	H
Fenthion	<16.7	33.3	32.1	96	33.3	36.1	108	12	25-125	25	
Malathion	<16.7	33.3	22.4	67	33.3	26.0	78	15	25-125	25	
Parathion, Ethyl	<16.7	33.3	34.2	103	33.3	39.6	119	15	45-130	25	
Parathion, Methyl	<16.7	33.3	28.0	84	33.3	26.4	79	6	45-130	25	
Simazine	<66.7	33.3	17.6	53	33.3	14.4	43	20	50-150	25	L
stirophos	<16.7	33.3	30.4	91	33.3	33.0	99	8	50-150	50	

Relative Percent Difference RPD =  $200 * |(C-F)/(C+F)|$

Blank Spike Recovery [D] =  $100 * (C)/[B]$

Blank Spike Duplicate Recovery [G] =  $100 * (F)/[E]$

All results are based on MDL and Validated for QC Purposes



## BS / BSD Recoveries



**Project Name: Railroad Drum Site**

**Work Order #: 327527**

**Analyst: VCH**

**Date Prepared: 03/17/2009**

**Project ID: TTEMI-05-001-0091**

**Date Analyzed: 03/17/2009**

**Lab Batch ID: 752946**

**Sample: 526548-1-BKS**

**Batch #: 1**

**Matrix: Water**

**Units: ug/L**

### BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Pesticides by SW-846 8081A		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Col	Analytes											
2	4,4-DDD	<1.00	5.00	5.68	114	5	5.00	100	13	20-152	30	
2	4,4-DDE	<1.00	5.00	5.94	119	5	5.22	104	13	18-147	30	
1	4,4-DDT	<1.00	5.00	6.54	131	5	5.68	114	14	18-164	30	
2	Aldrin	<0.500	5.00	5.56	111	5	4.62	92	18	11-131	30	
2	Alpha-BHC	<0.500	5.00	5.24	105	5	4.25	85	21	24-141	30	
2	Alpha-Chlordane	<0.500	5.00	5.80	116	5	5.11	102	13	37-135	30	
2	Beta-BHC	<0.500	5.00	5.35	107	5	4.71	94	13	12-162	30	
1	Delta-BHC	<0.500	5.00	5.19	104	5	4.49	90	14	19-147	30	
2	Dieldrin	<1.00	5.00	5.92	118	5	5.17	103	14	35-140	30	
2	Endosulfan I	<0.500	5.00	5.84	117	5	5.12	102	13	20-135	30	
2	Endosulfan II	<1.00	5.00	6.30	126	5	5.53	111	13	34-122	30	H
1	Endosulfan Sulfate	<1.00	5.00	6.81	136	5	5.83	117	16	41-145	30	
1	Endrin	<1.00	5.00	5.87	117	5	5.04	101	15	36-158	30	
1	Endrin Aldehyde	<1.00	5.00	6.86	137	5	5.94	119	14	28-135	30	H
1	Endrin Ketone	<1.00	5.00	5.81	116	5	5.03	101	14	42-134	30	
2	Gamma-BHC (Lindane)	<0.500	5.00	5.52	110	5	4.67	93	17	23-143	30	
2	Heptachlor	<0.500	5.00	6.04	121	5	5.05	101	18	20-142	30	
2	Heptachlor Epoxide	<0.500	5.00	5.64	113	5	4.94	99	13	32-134	30	
2	Methoxychlor	<5.00	15.0	22.2	148	15	19.4	129	13	36-169	30	

Relative Percent Difference RPD =  $200 * |(C-F)/(C+F)|$

Blank Spike Recovery [D] =  $100 * (C)/[B]$

Blank Spike Duplicate Recovery [G] =  $100 * (F)/[E]$

All results are based on MDL and Validated for QC Purposes



## BS / BSD Recoveries



**Project Name: Railroad Drum Site**

**Work Order #: 327527**

**Analyst: RYE**

**Date Prepared: 03/17/2009**

**Project ID: TTEMI-05-001-0091**

**Date Analyzed: 03/23/2009**

**Lab Batch ID: 753416**

**Sample: 526547-1-BKS**

**Batch #: 1**

**Matrix: Water**

**Units: ug/L**

### BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

<b>SVOCs by SW-846 8270C</b>	<b>Blank Sample Result [A]</b>	<b>Spike Added [B]</b>	<b>Blank Spike Result [C]</b>	<b>Blank Spike %R [D]</b>	<b>Spike Added [E]</b>	<b>Blank Spike Duplicate Result [F]</b>	<b>Blk. Spk Dup. %R [G]</b>	<b>RPD %</b>	<b>Control Limits %R</b>	<b>Control Limits %RPD</b>	<b>Flag</b>
<b>Analytes</b>											
1,2,4-Trichlorobenzene	<100	500	410	82	500	448	90	9	10-96	30	
1,4-Dichlorobenzene	<100	500	346	69	500	391	78	12	10-87	30	
2,4-Dinitrotoluene	<100	500	358	72	500	391	78	9	23-124	30	
2-Chlorophenol	<100	1000	715	72	1000	795	80	11	25-80	30	
4-chloro-3-methylphenol	<100	1000	864	86	1000	929	93	7	15-98	30	
4-Nitrophenol	<200	1000	592	59	1000	675	68	13	11-129	30	
Acenaphthene	<100	500	406	81	500	437	87	7	16-112	30	
N-Nitrosodi-n-Propylamine	<100	500	420	84	500	467	93	11	15-118	30	
Pentachlorophenol	<200	1000	443	44	1000	508	51	14	22-120	30	
Phenol	<100	1000	647	65	1000	719	72	11	12-90	30	
Pyrene	<100	500	432	86	500	472	94	9	13-130	30	

Relative Percent Difference RPD =  $200 * |(C-F)/(C+F)|$

Blank Spike Recovery [D] =  $100 * (C)/[B]$

Blank Spike Duplicate Recovery [G] =  $100 * (F)/[E]$

All results are based on MDL and Validated for QC Purposes



## BS / BSD Recoveries



**Project Name: Railroad Drum Site**

**Work Order #:** 327527

**Analyst:** 4150

**Date Prepared:** 03/17/2009

**Project ID:** TTEMI-05-001-0091

**Date Analyzed:** 03/18/2009

**Lab Batch ID:** 752917

**Sample:** 526522-1-BKS

**Batch #:** 1

**Matrix:** Water

**Units:** mg/L

### BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TAL Metals by SW846 6010B	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Aluminum	<0.050	9.00	9.29	103	9	9.21	102	1	75-125	20	
Antimony	<0.006	1.00	1.01	101	1	1.00	100	1	75-125	20	
Arsenic	<0.010	1.00	1.00	100	1	0.998	100	0	75-125	20	
Barium	<0.050	1.00	1.01	101	1	1.00	100	1	75-125	20	
Beryllium	<0.003	1.00	1.02	102	1	1.02	102	0	75-125	20	
Cadmium	<0.005	1.00	1.02	102	1	1.02	102	0	75-125	20	
Calcium	<5.00	9.00	9.16	102	9	9.07	101	1	75-125	20	
Chromium	<0.050	1.00	1.02	102	1	1.02	102	0	75-125	20	
Cobalt	<0.010	1.00	1.03	103	1	1.03	103	0	75-125	20	
Copper	<0.050	1.00	1.02	102	1	1.01	101	1	75-125	20	
Iron	<0.100	9.00	8.95	99	9	8.87	99	1	75-125	20	
Lead	<0.010	1.00	1.01	101	1	1.01	101	0	75-125	20	
Magnesium	<5.00	9.00	9.28	103	9	9.19	102	1	75-125	20	
Manganese	<0.050	1.00	1.02	102	1	1.02	102	0	75-125	20	
Nickel	<0.010	1.00	1.01	101	1	0.997	100	1	75-125	20	
Potassium	<5.00	18.0	17.6	98	18	17.5	97	1	75-125	20	
Selenium	<0.010	1.00	1.03	103	1	1.01	101	2	75-125	20	
Silver	<0.050	1.00	0.962	96	1	0.957	96	1	75-125	20	
Sodium	<5.00	9.00	10.2	113	9	10.2	113	0	75-125	20	
Thallium	<0.002	1.00	1.00	100	1	1.00	100	0	75-125	20	

Relative Percent Difference RPD =  $200 * |(C-F)/(C+F)|$

Blank Spike Recovery [D] =  $100 * (C)/[B]$

Blank Spike Duplicate Recovery [G] =  $100 * (F)/[E]$

All results are based on MDL and Validated for QC Purposes



## BS / BSD Recoveries



**Project Name: Railroad Drum Site**

**Work Order #:** 327527

**Analyst:** 4150

**Date Prepared:** 03/17/2009

**Project ID:** TTEMI-05-001-0091

**Date Analyzed:** 03/18/2009

**Lab Batch ID:** 752917

**Sample:** 526522-1-BKS

**Batch #:** 1

**Matrix:** Water

**Units:** mg/L

TAL Metals by SW846 6010B	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Vanadium	<0.010	1.00	1.04	104	1	1.03	103	1	75-125	20	
Zinc	<0.100	1.00	1.02	102	1	1.02	102	0	75-125	20	

Relative Percent Difference RPD =  $200 * |(C-F)/(C+F)|$

Blank Spike Recovery [D] =  $100 * (C)/[B]$

Blank Spike Duplicate Recovery [G] =  $100 * (F)/[E]$

All results are based on MDL and Validated for QC Purposes





## BS / BSD Recoveries



**Project Name: Railroad Drum Site**

**Work Order #: 327527**

**Analyst: 4150**

**Date Prepared: 03/17/2009**

**Project ID: TTEMI-05-001-0091**

**Date Analyzed: 03/18/2009**

**Lab Batch ID: 753079**

**Sample: 526568-1-BKS**

**Batch #: 1**

**Matrix: Solid**

**Units: mg/kg**

### BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TAL Metals by SW-846 6010B	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Aluminum	<500	900	888	99	900	920	102	4	75-125	20	
Antimony	<5.00	100	98.8	99	100	102	102	3	75-125	20	
Arsenic	<5.00	100	95.1	95	100	97.8	98	3	75-125	20	
Barium	<5.00	100	99.1	99	100	102	102	3	75-125	20	
Beryllium	<0.300	100	97.9	98	100	101	101	3	75-125	20	
Cadmium	<0.500	100	98.3	98	100	101	101	3	75-125	20	
Calcium	<500	900	905	101	900	934	104	3	75-125	20	
Chromium	<5.00	100	101	101	100	104	104	3	75-125	20	
Cobalt	<1.00	100	97.6	98	100	100	100	2	75-125	20	
Copper	<5.00	100	100	100	100	102	102	2	75-125	20	
Iron	<500	900	883	98	900	916	102	4	75-125	20	
Lead	<5.00	100	97.5	98	100	100	100	3	75-125	20	
Magnesium	<500	900	896	100	900	938	104	5	75-125	20	
Manganese	<5.00	100	98.3	98	100	101	101	3	75-125	20	
Nickel	<5.00	100	98.7	99	100	101	101	2	75-125	20	
Potassium	<500	1800	1700	94	1800	1770	98	4	75-125	20	
Selenium	<5.00	100	96.9	97	100	100	100	3	75-125	20	
Silver	<5.00	100	96.0	96	100	98.0	98	2	75-125	20	
Sodium	<500	900	999	111	900	1040	116	4	75-125	20	
Thallium	<5.00	100	99.6	100	100	101	101	1	75-125	20	

Relative Percent Difference RPD =  $200 * |(C-F)/(C+F)|$

Blank Spike Recovery [D] =  $100 * (C)/[B]$

Blank Spike Duplicate Recovery [G] =  $100 * (F)/[E]$

All results are based on MDL and Validated for QC Purposes



## BS / BSD Recoveries



**Project Name: Railroad Drum Site**

**Work Order #: 327527**

**Analyst: 4150**

**Date Prepared: 03/17/2009**

**Project ID: TTEMI-05-001-0091**

**Date Analyzed: 03/18/2009**

**Lab Batch ID: 753079**

**Sample: 526568-1-BKS**

**Batch #: 1**

**Matrix: Solid**

**Units: mg/kg**

TAL Metals by SW-846 6010B	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Vanadium	<1.00	100	101	101	100	103	103	2	75-125	20	
Zinc	<100	100	102	102	100	103	103	1	75-125	20	

Relative Percent Difference RPD =  $200 * |(C-F)/(C+F)|$

Blank Spike Recovery [D] =  $100 * (C)/[B]$

Blank Spike Duplicate Recovery [G] =  $100 * (F)/[E]$

All results are based on MDL and Validated for QC Purposes



# Form 3 - MS Recoveries



Project Name: Railroad Drum Site

Work Order #: 327527

Lab Batch #: 752766

Date Analyzed: 03/17/2009

QC- Sample ID: 327527-004 S

Reporting Units: ug/kg

Date Prepared: 03/17/2009

Batch #: 1

Project ID: TTEMI-05-001-0091

Analyst: 4124

Matrix: Soil

## MATRIX / MATRIX SPIKE RECOVERY STUDY

VOCs by SW-846 8260B	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Analytes						
1,1-Dichloroethene	<4.4	48	46	96	35-170	
Benzene	<4.4	48	48	100	38-158	
Chlorobenzene	<8.7	48	51	106	47-153	
Toluene	<4.4	48	48	100	50-150	
Trichloroethene	<4.4	48	50	104	50-150	

Matrix Spike Percent Recovery [D] =  $100 \times (C-A)/B$   
Relative Percent Difference [E] =  $200 \times (C-A)/(C+B)$   
All Results are based on MDL and Validated for QC Purposes



# Form 3 - MS / MSD Recoveries



**Project Name: Railroad Drum Site**

**Work Order # :** 327527

**Project ID:** TTEMI-05-001-0091

**Lab Batch ID:** 753260

**QC- Sample ID:** 327527-006 S

**Batch #:** 1 **Matrix:** Soil

**Date Analyzed:** 03/19/2009

**Date Prepared:** 03/17/2009

**Analyst:** VCH

**Reporting Units:** ug/kg

Reporting Units: ug/kg			MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
Chlorinated Herbicides by SW-846 8151A			Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Col	Analytes												
1	2,4-D		<0.446	223	228	102	223	228	102	0	10-189	25	
2	2,4-Db		<2.23	223	207	93	223	175	78	17	10-169	25	
1	2,4,5-T		<0.223	223	229	103	223	224	100	2	30-159	25	
1	2,4,5-Tp		<0.223	223	235	105	223	206	92	13	32-140	25	
2	Dalapon		<0.223	223	149	67	223	143	64	4	24-147	25	
1	Dicamba		<0.223	223	212	95	223	188	84	12	20-173	25	
1	Dichloroprop		<0.446	223	204	91	223	199	89	2	10-152	25	
1	MCPA		<89.3	22300	15700	70	22300	13900	62	12	28-137	25	
1	MCP		<89.3	22300	25000	112	22300	23500	105	6	13-114	25	

**Lab Batch ID:** 752897

**QC- Sample ID:** 327116-001 S

**Batch #:** 1 **Matrix:** Water

**Date Analyzed:** 03/17/2009

**Date Prepared:** 03/17/2009

**Analyst:** 4150

**Reporting Units:** mg/L

Reporting Units: mg/L		MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
Mercury by SW-846 7470A		Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Mercury		<0.0020	0.0030	0.0031	103	0.0030	0.0031	103	0	75-125	20	

Matrix Spike Percent Recovery  $[D] = 100 * (C - A) / B$   
Relative Percent Difference  $RPD = 200 * |(C - F) / (C + F)|$

Matrix Spike Duplicate Percent Recovery  $[G] = 100 * (F - A) / E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not

ApplicableN = See Narrative, EQL = Estimated Quantitation Limit



# Form 3 - MS / MSD Recoveries



Project Name: Railroad Drum Site

Work Order #: 327527

Project ID: TTEMI-05-001-0091

Lab Batch ID: 753056

QC- Sample ID: 327527-006 S

Batch #: 1 Matrix: Soil

Date Analyzed: 03/18/2009

Date Prepared: 03/17/2009

Analyst: 4150

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY											
Mercury by SW-846 7471A	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Mercury	0.1297	0.6728	0.7462	92	0.6728	0.7465	92	0	85-115	20	

Lab Batch ID: 753263

QC- Sample ID: 327527-006 S

Batch #: 1 Matrix: Soil

Date Analyzed: 03/20/2009

Date Prepared: 03/19/2009

Analyst: VCH

Reporting Units: ug/kg

Reporting Units: ug/kg		MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
Col	PCBs by SW846 8082	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
	Analytes											
1	PCB-1016	<45	220	220	100	220	210	95	5	17-171	30	
1	PCB-1260	<45	220	3300	1500	220	3500	1591	6	33-193	30	X

Matrix Spike Percent Recovery  $[D] = 100 * (C - A) / B$   
Relative Percent Difference  $RPD = 200 * [(C - F) / (C + F)]$

Matrix Spike Duplicate Percent Recovery  $[G] = 100 * (F - A) / E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not

ApplicableN = See Narrative, EQL = Estimated Quantitation Limit



# Form 3 - MS / MSD Recoveries



Project Name: Railroad Drum Site

Work Order #: 327527

Project ID: TTEMI-05-001-0091

Lab Batch ID: 753926

QC- Sample ID: 327527-006 S

Batch #: 1 Matrix: Soil

Date Analyzed: 03/19/2009

Date Prepared: 03/17/2009

Analyst: VCH

Reporting Units: ug/kg

## MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Pesticides by SW-846 8081A		Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Col	Analytes											
2	4,4-DDD	<4.48	22.4	29.1	130	22.3	76.9	345	90	40-176	30	XF
2	4,4-DDE	208	22.4	174	0	22.3	180	0	3	45-187	30	X
1	Aldrin	<2.24	22.4	18.2	81	22.3	17.5	78	4	45-151	30	
2	Alpha-Chlordane	<2.24	22.4	20.8	93	22.3	18.4	83	12	66-192	30	
1	Beta-BHC	<2.24	22.4	19.4	87	22.3	15.1	68	25	43-155	30	
1	Delta-BHC	<2.24	22.4	18.9	84	22.3	17.2	77	9	56-170	30	
2	Dieldrin	<4.48	22.4	17.0	76	22.3	19.0	85	11	48-163	30	
1	Endosulfan I	<2.24	22.4	21.1	94	22.3	24.3	109	14	57-176	30	
2	Endosulfan II	<4.48	22.4	40.9	183	22.3	40.5	182	1	58-159	30	X
2	Endosulfan Sulfate	<4.48	22.4	16.2	72	22.3	18.6	83	14	29-163	30	
2	Endrin	<4.48	22.4	21.6	96	22.3	22.1	99	2	19-181	30	
1	Endrin Aldehyde	<4.48	22.4	19.8	88	22.3	23.7	106	18	35-155	30	

Matrix Spike Percent Recovery  $[D] = 100 * (C - A) / B$   
Relative Percent Difference  $RPD = 200 * [(C - F) / (C + F)]$

Matrix Spike Duplicate Percent Recovery  $[G] = 100 * (F - A) / E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not

ApplicableN = See Narrative, EQL = Estimated Quantitation Limit



# Form 3 - MS / MSD Recoveries



Project Name: Railroad Drum Site

Work Order # : 327527

Project ID: TTEMI-05-001-0091

Lab Batch ID: 753650

QC- Sample ID: 327527-006 S

Batch #: 1 Matrix: Soil

Date Analyzed: 03/23/2009

Date Prepared: 03/17/2009

Analyst: RYE

Reporting Units: ug/kg

## MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

SVOCs by SW-846 8270C Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
1,2,4-Trichlorobenzene	<4500	2200	1800	82	2200	2200	100	20	37-133	30	
1,4-Dichlorobenzene	<4500	2200	1400	64	2200	1800	82	25	36-134	30	
2,4-Dinitrotoluene	<4500	2200	2300	105	2200	2600	118	12	40-130	30	
2-Chlorophenol	<4500	4500	3100	69	4500	3600	80	15	25-140	30	
4-chloro-3-methylphenol	<4500	4500	3800	84	4500	4700	104	21	28-134	30	
4-Nitrophenol	<9000	4500	3900	87	4500	4700	104	19	15-113	30	
Acenaphthene	<4500	2200	1900	86	2200	2400	109	23	41-134	30	
N-Nitrosodi-n-Propylamine	<4500	2200	1600	73	2200	2100	95	27	53-130	30	
Pentachlorophenol	<9000	4500	<8900	0	4500	1100	24	200	14-111	30	XF
Phenol	<4500	4500	2700	60	4500	3400	76	23	27-127	30	
Pyrene	<4500	2200	2700	123	2200	3400	155	23	24-132	30	X

Matrix Spike Percent Recovery  $[D] = 100 * (C - A) / B$   
Relative Percent Difference  $RPD = 200 * [(C - F) / (C + F)]$

Matrix Spike Duplicate Percent Recovery  $[G] = 100 * (F - A) / E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not

ApplicableN = See Narrative, EQL = Estimated Quantitation Limit





# Form 3 - MS / MSD Recoveries



Project Name: Railroad Drum Site

Work Order # : 327527

Project ID: TTEMI-05-001-0091

Lab Batch ID: 752917

QC- Sample ID: 327336-001 S

Batch #: 1 Matrix: Water

Date Analyzed: 03/18/2009

Date Prepared: 03/17/2009

Analyst: 4150

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY											
TAL Metals by SW846 6010B  Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Aluminum	<0.050	9.00	9.31	103	9.00	9.10	101	2	75-125	20	
Antimony	<0.006	1.00	1.01	101	1.00	1.00	100	1	75-125	20	
Arsenic	<0.010	1.00	1.02	102	1.00	1.00	100	2	75-125	20	
Barium	0.166	1.00	1.17	100	1.00	1.15	98	2	75-125	20	
Beryllium	<0.003	1.00	1.03	103	1.00	1.01	101	2	75-125	20	
Cadmium	<0.005	1.00	1.02	102	1.00	0.996	100	2	75-125	20	
Calcium	34.8	9.00	43.5	97	9.00	42.5	86	2	75-125	20	
Chromium	<0.050	1.00	1.02	102	1.00	0.981	98	4	75-125	20	
Cobalt	<0.010	1.00	1.03	103	1.00	1.00	100	3	75-125	20	
Copper	<0.050	1.00	1.05	105	1.00	0.937	94	11	75-125	20	
Iron	<0.100	9.00	8.97	100	9.00	8.79	98	2	75-125	20	
Lead	<0.010	1.00	1.01	101	1.00	0.980	98	3	75-125	20	
Magnesium	6.96	9.00	16.4	105	9.00	15.9	99	3	75-125	20	
Manganese	<0.050	1.00	1.06	106	1.00	1.03	103	3	75-125	20	
Nickel	<0.010	1.00	0.997	100	1.00	0.912	91	9	75-125	20	
Potassium	<5.00	18.0	21.5	119	18.0	21.1	117	2	75-125	20	
Selenium	<0.010	1.00	1.04	104	1.00	1.02	102	2	75-125	20	
Silver	<0.050	1.00	0.983	98	1.00	0.888	89	10	75-125	20	
Sodium	11.0	9.00	20.2	102	9.00	19.8	98	2	75-125	20	
Thallium	<0.002	1.00	1.00	100	1.00	0.978	98	2	75-125	20	
Vanadium	<0.010	1.00	1.04	104	1.00	1.02	102	2	75-125	20	
Zinc	<0.100	1.00	1.04	104	1.00	1.01	101	3	75-125	20	

Matrix Spike Percent Recovery  $[D] = 100 \times (C-A)/B$   
Relative Percent Difference  $RPD = 200 \times |(C-F)/(C+F)|$

Matrix Spike Duplicate Percent Recovery  $[G] = 100 \times (F-A)/E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not

ApplicableN = See Narrative, EQL = Estimated Quantitation Limit



# Form 3 - MS / MSD Recoveries



**Project Name: Railroad Drum Site**

**Work Order # :** 327527

**Project ID:** TTEMI-05-001-0091

**Lab Batch ID:** 753079

**QC- Sample ID:** 327527-006 S

**Batch #:** 1 **Matrix:** Soil

**Date Analyzed:** 03/18/2009

**Date Prepared:** 03/17/2009

**Analyst:** 4150

**Reporting Units:** mg/kg

TAL Metals by SW-846 6010B  Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Aluminum	13900	1160	21500	655	1160	21300	638	1	75-125	20	X
Antimony	<6.47	129	91.3	71	129	95.4	74	4	75-125	20	X
Arsenic	<6.47	129	131	102	129	133	103	2	75-125	20	
Barium	75.7	129	204	99	129	207	102	1	75-125	20	
Beryllium	<0.388	129	129	100	129	129	100	0	75-125	20	
Cadmium	3.12	129	130	98	129	131	99	1	75-125	20	
Calcium	1830	1160	3200	118	1160	3270	124	2	75-125	20	
Chromium	17.7	129	150	103	129	148	101	1	75-125	20	
Cobalt	5.03	129	131	98	129	132	98	1	75-125	20	
Copper	12.8	129	144	102	129	146	103	1	75-125	20	
Iron	19700	1160	20100	34	1160	22500	241	11	75-125	20	X
Lead	51.3	129	179	99	129	181	101	1	75-125	20	
Magnesium	2270	1160	3470	103	1160	3520	108	1	75-125	20	
Manganese	383	129	528	112	129	542	123	3	75-125	20	
Nickel	<6.47	129	135	105	129	136	105	1	75-125	20	
Potassium	2260	2330	4960	116	2330	5060	120	2	75-125	20	
Selenium	<6.47	129	128	99	129	129	100	1	75-125	20	
Silver	<6.47	129	120	93	129	121	94	1	75-125	20	
Sodium	<6.47	1160	1150	99	1160	1160	100	1	75-125	20	
Thallium	<6.47	129	105	81	129	105	81	0	75-125	20	
Vanadium	37.8	129	168	101	129	170	102	1	75-125	20	
Zinc	336	129	482	113	129	530	150	9	75-125	20	X

Matrix Spike Percent Recovery  $[D] = 100 * (C - A) / B$   
Relative Percent Difference  $RPD = 200 * |(C - F) / (C + F)|$

Matrix Spike Duplicate Percent Recovery  $[G] = 100 * (F - A) / E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not

ApplicableN = See Narrative, EQL = Estimated Quantitation Limit

**Project Name: Railroad Drum Site**

**Work Order #:** 327527

**Lab Batch #:** 752897

**Date Analyzed:** 03/17/2009

**QC- Sample ID:** 327116-001 D

**Reporting Units:** mg/L

**Project ID:** TTEMI-05-001-0091

**Analyst:** 4150

**Date Prepared:** 03/17/2009

**Batch #:** 1

**Matrix:** Water

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Mercury by SW-846 7470A	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Mercury	<0.0020	<0.0020	NC	20	

**Lab Batch #:** 753056

**Date Analyzed:** 03/18/2009

**QC- Sample ID:** 327527-006 D

**Reporting Units:** mg/kg

**Date Prepared:** 03/17/2009

**Analyst:** 4150

**Batch #:** 1

**Matrix:** Soil

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Mercury by SW-846 7471A	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Mercury	0.1297	0.1183	9	20	

Spike Relative Difference RPD  $200 * |(B-A)/(B+A)|$   
 All Results are based on MDL and validated for QC purposes.

**Project Name: Railroad Drum Site**

**Work Order #:** 327527

**Lab Batch #:** 753079

**Date Analyzed:** 03/18/2009

**QC- Sample ID:** 327527-006 D

**Reporting Units:** mg/kg

**Date Prepared:** 03/17/2009

**Batch #:** 1

**Project ID:** TTEMI-05-001-0091

**Analyst:** 4150

**Matrix:** Soil

## SAMPLE / SAMPLE DUPLICATE RECOVERY

TAL Metals by SW-846 6010B	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Aluminum	13900	14300	3	20	
Antimony	<6.47	<6.47	NC	20	
Arsenic	<6.47	<6.47	NC	20	
Barium	75.7	77.5	2	20	
Beryllium	<0.388	<0.388	NC	20	
Cadmium	3.12	3.25	4	20	
Calcium	1830	1950	6	20	
Chromium	17.7	21.0	17	20	
Cobalt	5.03	5.30	5	20	
Copper	12.8	13.2	3	20	
Iron	19700	20000	2	20	
Lead	51.3	51.8	1	20	
Magnesium	2270	2280	0	20	
Manganese	383	406	6	20	
Nickel	<6.47	<6.47	NC	20	
Potassium	2260	2260	0	20	
Selenium	<6.47	<6.47	NC	20	
Silver	<6.47	<6.47	NC	20	
Sodium	<647	<647	NC	20	
Thallium	<6.47	<6.47	NC	20	
Vanadium	37.8	38.5	2	20	
Zinc	336	353	5	20	

Spike Relative Difference RPD  $200 * |(B-A)/(B+A)|$   
 All Results are based on MDL and validated for QC purposes.

**Project Name: Railroad Drum Site**

**Work Order #:** 327527

**Lab Batch #:** 752917

**Date Analyzed:** 03/18/2009

**QC- Sample ID:** 327336-001 D

**Reporting Units:** mg/L

**Project ID:** TTEMI-05-001-0091

**Analyst:** 4150

**Date Prepared:** 03/17/2009

**Batch #:** 1

**Matrix:** Water

SAMPLE / SAMPLE DUPLICATE RECOVERY					
TAL Metals by SW846 6010B	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Aluminum	<0.050	<0.050	NC	20	
Antimony	<0.006	<0.006	NC	20	
Arsenic	<0.010	<0.010	NC	20	
Barium	0.166	0.167	1	20	
Beryllium	<0.003	<0.003	NC	20	
Cadmium	<0.005	<0.005	NC	20	
Calcium	34.8	35.0	1	20	
Chromium	<0.050	<0.050	NC	20	
Cobalt	<0.010	<0.010	NC	20	
Copper	<0.050	<0.050	NC	20	
Iron	<0.100	<0.100	NC	20	
Lead	<0.010	<0.010	NC	20	
Magnesium	6.96	7.01	1	20	
Manganese	<0.050	<0.050	NC	20	
Nickel	<0.010	<0.010	NC	20	
Potassium	<5.00	<5.00	NC	20	
Selenium	<0.010	<0.010	NC	20	
Silver	<0.050	<0.050	NC	20	
Sodium	11.0	11.7	6	20	
Thallium	<0.002	<0.002	NC	20	
Vanadium	<0.010	<0.010	NC	20	
Zinc	<0.100	<0.100	NC	20	

**Lab Batch #:** 752849

**Date Analyzed:** 03/14/2009

**QC- Sample ID:** 327527-001 D

**Reporting Units:** SU

**Date Prepared:** 03/14/2009

**Batch #:** 1

**Analyst:** 4099

**Matrix:** Liquid

SAMPLE / SAMPLE DUPLICATE RECOVERY					
pH by SW-846 9040C	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
pH	8.13	8.14	0	20	

Spike Relative Difference RPD  $200 * |(B-A)/(B+A)|$   
 All Results are based on MDL and validated for QC purposes.



# Sample Duplicate Recovery



Project Name: Railroad Drum Site

Work Order #: 327527

Lab Batch #: 752847

Project ID: TTEMI-05-001-0091

Date Analyzed: 03/14/2009

Date Prepared: 03/14/2009

Analyst: 4099

QC- Sample ID: 327527-004 D

Batch #: 1

Matrix: Soil

Reporting Units: SU

## SAMPLE / SAMPLE DUPLICATE RECOVERY

pH by SW-846 9045D	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
pH	5.48	5.39	2	20	

Spike Relative Difference RPD  $200 * |(B-A)/(B+A)|$   
All Results are based on MDL and validated for QC purposes.

**Blank Summary****327527****Tetra Tech EM, Atlanta, Duluth, GA**

Railroad Drum Site

Sample Id: **526503-1-BLK**  
Lab Sample Id: **526503-1-BLK**Matrix: **WATER****Analytical Method: Mercury by SW-846 7470A**

Prep Method: SW7470P

Date Analyzed: Mar-17-09 13:36

Analyst: 4150

Date Prep: Mar-17-09 10:56

Tech: ABA

Seq Number: 752897

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Mercury	7439-97-6	U	0.0020	0.0001	mg/L	U	1



## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: 526511-1-BLK

Matrix: SOLID

Lab Sample Id: 526511-1-BLK

Analytical Method: VOCs by SW-846 8260B

Prep Method: SW5035

Date Analyzed: Mar-17-09 07:25

Analyst: 4124

Date Prep: Mar-17-09 05:39

Tech: 4148

Seq Number: 752766

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
1,1,1-Trichloroethane	71-55-6	U	5.0	0.75	ug/kg	U	1
1,1,2,2-Tetrachloroethane	79-34-5	U	5.0	1.2	ug/kg	U	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	U	5.0	1.1	ug/kg	U	1
1,1,2-Trichloroethane	79-00-5	U	5.0	0.67	ug/kg	U	1
1,1-Dichloroethane	75-34-3	U	5.0	0.80	ug/kg	U	1
1,1-Dichloroethene	75-35-4	U	5.0	1.2	ug/kg	U	1
1,2,4-Trichlorobenzene	120-82-1	U	5.0	0.87	ug/kg	U	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	U	5.0	1.6	ug/kg	U	1
1,2-Dibromoethane (EDB)	106-93-4	U	5.0	0.86	ug/kg	U	1
1,2-Dichlorobenzene	95-50-1	U	5.0	1.3	ug/kg	U	1
1,2-Dichloroethane	107-06-2	U	5.0	0.60	ug/kg	U	1
1,2-Dichloropropane	78-87-5	U	5.0	0.93	ug/kg	U	1
1,3-Dichlorobenzene	541-73-1	U	5.0	1.0	ug/kg	U	1
1,4-Dichlorobenzene	106-46-7	U	5.0	0.68	ug/kg	U	1
2-Butanone (MEK)	78-93-3	U	50	9.1	ug/kg	U	1
2-Hexanone	591-78-6	U	50	1.1	ug/kg	U	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	50	3.2	ug/kg	U	1
Acetone	67-64-1	U	50	6.9	ug/kg	U	1
Benzene	71-43-2	U	5.0	0.51	ug/kg	U	1
Bromodichloromethane	75-27-4	U	5.0	0.50	ug/kg	U	1
Bromoform	75-25-2	U	5.0	0.96	ug/kg	U	1
Bromomethane	74-83-9	U	5.0	2.5	ug/kg	U	1
Carbon disulfide	75-15-0	U	5.0	1.5	ug/kg	U	1
Carbon tetrachloride	56-23-5	U	5.0	0.74	ug/kg	U	1
Chlorobenzene	108-90-7	U	10	0.58	ug/kg	U	1
Chloroethane	75-00-3	U	5.0	2.4	ug/kg	U	1
Chloroform	67-66-3	U	5.0	0.74	ug/kg	U	1
Chloromethane	74-87-3	U	5.0	2.3	ug/kg	U	1
cis-1,2-Dichloroethene	156-59-2	U	5.0	0.66	ug/kg	U	1
cis-1,3-Dichloropropene	10061-01-5	U	5.0	0.54	ug/kg	U	1
Cyclohexane	110-82-7	U	5.0	0.95	ug/kg	U	1
Dibromochloromethane	124-48-1	U	5.0	0.99	ug/kg	U	1
Dichlorodifluoromethane	75-71-8	U	5.0	1.2	ug/kg	U	1
Ethylbenzene	100-41-4	U	5.0	0.57	ug/kg	U	1
Isopropylbenzene	98-82-8	U	5.0	0.76	ug/kg	U	1
m,p-Xylenes	179601-23-1	U	10	1.2	ug/kg	U	1
Methyl acetate	79-20-9	U	5.0	0.95	ug/kg	U	1
Methyl tert-butyl ether	1634-04-4	U	5.0	0.69	ug/kg	U	1
Methylcyclohexane	108-87-2	U	5.0	1.1	ug/kg	U	1
Methylene chloride	75-09-2	U	5.0	2.2	ug/kg	U	1
o-Xylene	95-47-6	U	5.0	0.72	ug/kg	U	1

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: **526511-1-BLK**  
Lab Sample Id: **526511-1-BLK**

Matrix: **SOLID**

**Analytical Method: VOCs by SW-846 8260B**

Prep Method: SW5035

Date Analyzed: Mar-17-09 07:25

Analyst: 4124

Date Prep: Mar-17-09 05:39

Tech: 4148

Seq Number: 752766

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Styrene	100-42-5	U	5.0	0.74	ug/kg	U	1
Tetrachloroethene	127-18-4	U	5.0	1.0	ug/kg	U	1
Toluene	108-88-3	U	5.0	0.59	ug/kg	U	1
trans-1,2-Dichloroethene	156-60-5	U	5.0	0.78	ug/kg	U	1
trans-1,3-Dichloropropene	10061-02-6	U	5.0	0.67	ug/kg	U	1
Trichloroethene	79-01-6	U	5.0	0.71	ug/kg	U	1
Trichlorofluoromethane	75-69-4	U	5.0	3.5	ug/kg	U	1
Vinyl chloride	75-01-4	U	5.0	2.0	ug/kg	U	1

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: 526522-1-BLK

Matrix: WATER

Lab Sample Id: 526522-1-BLK

Analytical Method: TAL Metals by SW846 6010B

Prep Method: SW3010A

Date Analyzed: Mar-18-09 11:17

Analyst: 4150

Date Prep: Mar-17-09 12:26

Tech: ABA

Seq Number: 752917

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Aluminum	7429-90-5	U	0.050	0.012	mg/L	U	1
Antimony	7440-36-0	U	0.006	0.005	mg/L	U	1
Arsenic	7440-38-2	U	0.010	0.007	mg/L	U	1
Barium	7440-39-3	U	0.050	0.002	mg/L	U	1
Beryllium	7440-41-7	U	0.003	0.001	mg/L	U	1
Cadmium	7440-43-9	U	0.005	0.001	mg/L	U	1
Calcium	7440-70-2	U	5.00	0.012	mg/L	U	1
Chromium	7440-47-3	U	0.050	0.001	mg/L	U	1
Cobalt	7440-48-4	U	0.010	0.001	mg/L	U	1
Copper	7440-50-8	U	0.050	0.001	mg/L	U	1
Iron	7439-89-6	U	0.100	0.021	mg/L	U	1
Lead	7439-92-1	U	0.010	0.002	mg/L	U	1
Magnesium	7439-95-4	U	5.00	0.004	mg/L	U	1
Manganese	7439-96-5	U	0.050	0.001	mg/L	U	1
Nickel	7440-02-0	0.001	0.010	0.001	mg/L		1
Potassium	2133-26-8	U	5.00	0.002	mg/L	U	1
Selenium	7782-49-2	U	0.010	0.008	mg/L	U	1
Silver	7440-22-4	U	0.050	0.001	mg/L	U	1
Sodium	7440-23-5	U	5.00	0.125	mg/L	U	1
Thallium	7440-28-0	U	0.002	0.004	mg/L	U	1
Vanadium	7440-62-2	U	0.010	0.001	mg/L	U	1
Zinc	7440-66-6	U	0.100	0.002	mg/L	U	1

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: 526543-1-BLK

Matrix: SOLID

Lab Sample Id: 526543-1-BLK

Analytical Method: SVOCs by SW-846 8270C

Prep Method: SW3545

Date Analyzed: Mar-23-09 09:13

Analyst: RYE

Date Prep: Mar-17-09 10:00

Tech: 4118

Seq Number: 753650

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
1,2,4,5-Tetrachlorobenzene	95-94-3	U	330	37	ug/kg	U	1
1,2,4-Trichlorobenzene	120-82-1	U	330	59	ug/kg	U	1
1,2-Dichlorobenzene	95-50-1	U	330	54	ug/kg	U	1
1,2-Dinitrobenzene	528-29-0	U	333	36.7	ug/kg	U	1
1,2-Diphenylhydrazine	122-66-7	U	330	37	ug/kg	U	1
1,3,5-Trinitrobenzene	99-35-4	U	330	37	ug/kg	U	1
1,3-Dichlorobenzene	541-73-1	U	330	53	ug/kg	U	1
1,3-Dinitrobenzene	99-65-0	U	330	37	ug/kg	U	1
1,4-Dichlorobenzene	106-46-7	U	330	52	ug/kg	U	1
1,4-Dinitrobenzene	100-25-4	U	330	37	ug/kg	U	1
1,4-Naphthoquinone	130-15-4	U	330	37	ug/kg	U	1
1-Methylnaphthalene	90-12-0	U	330	65	ug/kg	U	1
1-Naphthylamine	134-32-7	U	330	37	ug/kg	U	1
2,3,4,6-Tetrachlorophenol	58-90-2	U	330	50	ug/kg	U	1
2,4,5-Trichlorophenol	95-95-4	U	330	61	ug/kg	U	1
2,4,6-Trichlorophenol	88-06-2	U	330	64	ug/kg	U	1
2,4-Dichlorophenol	120-83-2	U	330	42	ug/kg	U	1
2,4-Dimethylphenol	105-67-9	U	330	61	ug/kg	U	1
2,4-Dinitrophenol	51-28-5	U	670	54	ug/kg	U	1
2,4-Dinitrotoluene	121-14-2	U	330	54	ug/kg	U	1
2,6-Dichlorophenol	87-65-0	U	330	53	ug/kg	U	1
2,6-Dinitrotoluene	606-20-2	U	330	43	ug/kg	U	1
2-Acetylaminofluorene	53-96-3	U	330	37	ug/kg	U	1
2-Chloronaphthalene	91-58-7	U	330	61	ug/kg	U	1
2-Chlorophenol	95-57-8	U	330	60	ug/kg	U	1
2-Methylnaphthalene	91-57-6	U	330	51	ug/kg	U	1
2-methylphenol	95-48-7	U	330	47	ug/kg	U	1
2-Naphthylamine	91-59-8	U	330	37	ug/kg	U	1
2-Nitroaniline	88-74-4	U	670	45	ug/kg	U	1
2-Nitrophenol	88-75-5	U	330	42	ug/kg	U	1
2-Picoline (Alpha-Picoline)	109-06-8	U	330	37	ug/kg	U	1
3&4-Methylphenol	3/4-CRESOL	U	670	99	ug/kg	U	1
3,3-Dichlorobenzidine	91-94-1	U	670	49	ug/kg	U	1
3,3'-Dimethylbenzidine	119-93-7	U	1700	37	ug/kg	U	1
3-Methylcholanthrene	56-49-5	U	330	37	ug/kg	U	1
3-Nitroaniline	99-09-2	U	670	46	ug/kg	U	1
4,6-dinitro-2-methyl phenol	534-52-1	U	670	58	ug/kg	U	1
4-Aminobiphenyl (4-Biphenylamine)	92-67-1	U	330	37	ug/kg	U	1
4-Bromophenyl-phenylether	101-55-3	U	330	57	ug/kg	U	1
4-chloro-3-methylphenol	59-50-7	U	330	48	ug/kg	U	1
4-Chloroaniline	106-47-8	U	330	55	ug/kg	U	1

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: 526543-1-BLK

Matrix: SOLID

Lab Sample Id: 526543-1-BLK

Analytical Method: SVOCs by SW-846 8270C

Prep Method: SW3545

Date Analyzed: Mar-23-09 09:13

Analyst: RYE

Date Prep: Mar-17-09 10:00

Tech: 4118

Seq Number: 753650

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
4-Chlorophenyl Phenyl Ether	7005-72-3	U	330	63	ug/kg	U	1
4-Nitroaniline	100-01-6	U	670	51	ug/kg	U	1
4-Nitrophenol	100-02-7	U	670	41	ug/kg	U	1
4-Nitroquinoline-N-Oxide	56-57-5	U	670	37	ug/kg	U	1
5-nitro-o-toluidine	99-55-8	U	330	37	ug/kg	U	1
Acenaphthene	83-32-9	U	330	47	ug/kg	U	1
Acenaphthylene	208-96-8	U	330	57	ug/kg	U	1
Acetophenone	98-86-2	U	330	61	ug/kg	U	1
Alpha, Alpha Dimethylphenethylamine	122-09-8	U	330	37	ug/kg	U	1
Aniline (Phenylamine, Aminobenzene)	62-53-3	U	330	37	ug/kg	U	1
Anthracene	120-12-7	U	330	49	ug/kg	U	1
Aramite	140-57-8	U	330	37	ug/kg	U	1
Azobenzene	103-33-3	U	330	66	ug/kg	U	1
Benzaldehyde	100-52-7	U	330	0.0033	ug/kg	U	1
Benzidine	92-87-5	U	1700	37	ug/kg	U	1
Benzo(a)anthracene	56-55-3	U	330	54	ug/kg	U	1
Benzo(a)pyrene	50-32-8	U	330	49	ug/kg	U	1
Benzo(b)fluoranthene	205-99-2	U	330	54	ug/kg	U	1
Benzo(g,h,i)perylene	191-24-2	U	330	55	ug/kg	U	1
Benzo(k)fluoranthene	207-08-9	U	330	57	ug/kg	U	1
Benzoic Acid	65-85-0	U	670	53	ug/kg	U	1
Benzyl Alcohol	100-51-6	U	330	53	ug/kg	U	1
Biphenyl (Diphenyl)	92-52-4	U	330	44	ug/kg	U	1
bis(2-chloroethoxy) methane	111-91-1	U	330	40	ug/kg	U	1
bis(2-chloroethyl) ether	111-44-4	U	330	47	ug/kg	U	1
bis(2-chloroisopropyl) ether	108-60-1	U	330	45	ug/kg	U	1
bis(2-ethylhexyl) phthalate	117-81-7	U	330	54	ug/kg	U	1
Benzyl Butyl Phthalate	85-68-7	U	330	50	ug/kg	U	1
Caprolactam	105-60-2	U	330	18	ug/kg	U	1
Carbazole	86-74-8	U	330	57	ug/kg	U	1
Chlorobenzilate	510-15-6	U	330	37	ug/kg	U	1
Chrysene	218-01-9	U	330	44	ug/kg	U	1
Diallate (trans or cis Isomers)	2303-16-4	U	670	37	ug/kg	U	1
Dibenz(a,h)anthracene	53-70-3	U	330	65	ug/kg	U	1
Dibenzofuran	132-64-9	U	330	43	ug/kg	U	1
Diethyl Phthalate	84-66-2	U	330	54	ug/kg	U	1
Dimethyl Phthalate	131-11-3	U	330	50	ug/kg	U	1
di-n-Butyl Phthalate	84-74-2	U	330	61	ug/kg	U	1
di-n-Octyl Phthalate	117-84-0	U	330	55	ug/kg	U	1
Dinoseb	88-85-7	U	330	37	ug/kg	U	1
Diphenylamine	122-39-4	U	667	36.7	ug/kg	U	1

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: 526543-1-BLK

Matrix: SOLID

Lab Sample Id: 526543-1-BLK

Analytical Method: SVOCs by SW-846 8270C

Prep Method: SW3545

Date Analyzed: Mar-23-09 09:13

Analyst: RYE

Date Prep: Mar-17-09 10:00

Tech: 4118

Seq Number: 753650

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Disulfoton	298-04-4	U	330	37	ug/kg	U	1
Ethyl Methanesulfonate	62-50-0	U	330	33	ug/kg	U	1
Famphur	52-85-7	U	1700	37	ug/kg	U	1
Fluoranthene	206-44-0	U	330	43	ug/kg	U	1
Fluorene	86-73-7	U	330	41	ug/kg	U	1
Hexachlorobenzene	118-74-1	U	330	56	ug/kg	U	1
Hexachlorobutadiene	87-68-3	U	330	37	ug/kg	U	1
Hexachlorocyclopentadiene	77-47-4	U	330	57	ug/kg	U	1
Hexachloroethane	67-72-1	U	330	52	ug/kg	U	1
Hexachlorophene	70-30-4	U	17000	37	ug/kg	U	1
Hexachloropropene	1888-71-7	U	330	37	ug/kg	U	1
Indeno(1,2,3-c,d)Pyrene	193-39-5	U	330	61	ug/kg	U	1
Isodrin	465-73-6	U	330	37	ug/kg	U	1
Isophorone	78-59-1	U	330	34	ug/kg	U	1
Isosafrole	120-58-1	U	670	37	ug/kg	U	1
Kepone	143-50-0	U	330	37	ug/kg	U	1
Methyl Methanesulfonate	66-27-3	U	330	47	ug/kg	U	1
Naphthalene	91-20-3	U	330	53	ug/kg	U	1
Nitrobenzene	98-95-3	U	330	59	ug/kg	U	1
Nitrosomethylethylamine	10595-95-6	U	330	37	ug/kg	U	1
N-Nitrosodiethylamine	55-18-5	U	330	37	ug/kg	U	1
N-Nitrosodimethylamine	62-75-9	U	330	51	ug/kg	U	1
N-Nitroso-di-n-Butylamine	924-16-3	U	330	37	ug/kg	U	1
N-Nitrosodi-n-Propylamine	621-64-7	U	330	48	ug/kg	U	1
N-Nitrosodiphenylamine	86-30-6	U	330	70	ug/kg	U	1
n-Nitrosomorpholine	59-89-2	U	330	37	ug/kg	U	1
N-Nitrosopiperidine	100-75-4	U	330	37	ug/kg	U	1
N-Nitrosopyrrolidine	930-55-2	U	330	37	ug/kg	U	1
O,O,O-Triethyl Phosphorothioate	126-68-1	U	330	37	ug/kg	U	1
o-Toluidine	95-53-4	U	330	37	ug/kg	U	1
Parathion, Ethyl	56-38-2	U	330	37	ug/kg	U	1
Parathion, Methyl	298-00-0	U	330	37	ug/kg	U	1
Pentachlorobenzene	608-93-5	U	330	37	ug/kg	U	1
Pentachloronitrobenzene	82-68-8	U	330	37	ug/kg	U	1
Pentachlorophenol	87-86-5	U	670	60	ug/kg	U	1
Phenacetin	62-44-2	U	330	37	ug/kg	U	1
Phenanthrene	85-01-8	U	330	55	ug/kg	U	1
Phenol	108-95-2	U	330	47	ug/kg	U	1
Phorate	298-02-2	U	330	37	ug/kg	U	1
p-Phenylenediamine	106-50-3	U	330	37	ug/kg	U	1
Pronamide	23950-58-5	U	330	37	ug/kg	U	1

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: **526543-1-BLK**  
Lab Sample Id: **526543-1-BLK**

Matrix: **SOLID**

**Analytical Method: SVOCs by SW-846 8270C**

Prep Method: SW3545

Date Analyzed: Mar-23-09 09:13

Analyst: RYE

Date Prep: Mar-17-09 10:00

Tech: 4118

Seq Number: 753650

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Pyrene	129-00-0	U	330	57	ug/kg	U	1
Sulfotep	3689-24-5	U	330	37	ug/kg	U	1
Unknown (TIC)		<0.0000	330		ug/kg	J	1
Zinophos	297-97-2	U	330	37	ug/kg	U	1



## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: 526547-1-BLK

Matrix: WATER

Lab Sample Id: 526547-1-BLK

Analytical Method: SVOCs by SW-846 8270C

Prep Method: SW3520C

Date Analyzed: Mar-23-09 10:09

Analyst: RYE

Date Prep: Mar-17-09 13:00

Tech: 5458

Seq Number: 753416

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Biphenyl (Diphenyl)	92-52-4	U	100	10.7	ug/L	U	1
1,2,4,5-Tetrachlorobenzene	95-94-3	U	500	172	ug/L	U	1
1,2,4-Trichlorobenzene	120-82-1	U	100	14.3	ug/L	U	1
1,2-Dichlorobenzene	95-50-1	U	100	18.3	ug/L	U	1
1,2-Dinitrobenzene	528-29-0	U	100	11.0	ug/L	U	1
1,2-Diphenylhydrazine	122-66-7	U	100	47.6	ug/L	U	1
1,3,5-Trinitrobenzene	99-35-4	U	500	109	ug/L	U	1
1,3-Dichlorobenzene	541-73-1	U	100	21.1	ug/L	U	1
1,3-Dinitrobenzene	99-65-0	U	500	201	ug/L	U	1
1,4-Dichlorobenzene	106-46-7	U	100	16.1	ug/L	U	1
1,4-Dinitrobenzene	100-25-4	U	100	11.0	ug/L	U	1
1,4-Naphthoquinone	130-15-4	U	500	342	ug/L	U	1
1-Chloronaphthalene	90-13-1	U	500	186	ug/L	U	1
1-Methylnaphthalene	90-12-0	U	100	13.1	ug/L	U	1
1-Naphthylamine	134-32-7	U	500	335	ug/L	U	1
2,3,4,6-Tetrachlorophenol	58-90-2	U	100	21.7	ug/L	U	1
2,4,5-Trichlorophenol	95-95-4	U	100	26.2	ug/L	U	1
2,4,6-Trichlorophenol	88-06-2	U	100	16.4	ug/L	U	1
2,4-Dichlorophenol	120-83-2	U	100	17.8	ug/L	U	1
2,4-Dimethylphenol	105-67-9	U	100	16.3	ug/L	U	1
2,4-Dinitrophenol	51-28-5	U	200	71.1	ug/L	U	1
2,4-Dinitrotoluene	121-14-2	U	100	21.4	ug/L	U	1
2,6-Dichlorophenol	87-65-0	U	100	16.4	ug/L	U	1
2,6-Dinitrotoluene	606-20-2	U	100	27.2	ug/L	U	1
2-Acetylaminofluorene	53-96-3	U	200	99.1	ug/L	U	1
2-Chloronaphthalene	91-58-7	U	100	12.9	ug/L	U	1
2-Chlorophenol	95-57-8	U	100	18.3	ug/L	U	1
2-Methylnaphthalene	91-57-6	U	100	11.9	ug/L	U	1
2-methylphenol	95-48-7	U	100	20.0	ug/L	U	1
2-Naphthylamine	91-59-8	U	500	231	ug/L	U	1
2-Nitroaniline	88-74-4	U	200	23.5	ug/L	U	1
2-Nitrophenol	88-75-5	U	100	19.5	ug/L	U	1
2-Picoline (Alpha-Picoline)	109-06-8	U	500	244	ug/L	U	1
3&4-Methylphenol	3/4-CRESOL	U	200	25.5	ug/L	U	1
3,3-Dichlorobenzidine	91-94-1	U	200	38.8	ug/L	U	1
3,3'-Dimethylbenzidine	119-93-7	U	500	388	ug/L	U	1
3-Methylcholanthrene	56-49-5	U	500	127	ug/L	U	1
3-Nitroaniline	99-09-2	U	200	27.5	ug/L	U	1
4,6-dinitro-2-methyl phenol	534-52-1	U	200	14.0	ug/L	U	1
4-Aminobiphenyl (4-Biphenylamine)	92-67-1	U	500	328	ug/L	U	1
4-Bromophenyl-phenylether	101-55-3	U	100	21.2	ug/L	U	1

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: 526547-1-BLK

Matrix: WATER

Lab Sample Id: 526547-1-BLK

Analytical Method: SVOCs by SW-846 8270C

Prep Method: SW3520C

Date Analyzed: Mar-23-09 10:09

Analyst: RYE

Date Prep: Mar-17-09 13:00

Tech: 5458

Seq Number: 753416

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
4-chloro-3-methylphenol	59-50-7	U	100	21.8	ug/L	U	1
4-Chloroaniline	106-47-8	U	100	30.9	ug/L	U	1
4-Chlorophenyl Phenyl Ether	7005-72-3	U	100	13.5	ug/L	U	1
4-Nitroaniline	100-01-6	U	200	32.0	ug/L	U	1
4-Nitrophenol	100-02-7	U	200	24.1	ug/L	U	1
4-Nitroquinoline-N-Oxide	56-57-5	U	500	292	ug/L	U	1
5-nitro-o-toluidine	99-55-8	U	500	184	ug/L	U	1
7,12-dimethylbenz(a)anthracene	57-97-6	U	500	130	ug/L	U	1
Acenaphthene	83-32-9	U	100	14.3	ug/L	U	1
Acenaphthylene	208-96-8	U	100	14.8	ug/L	U	1
Acetophenone	98-86-2	U	100	12.4	ug/L	U	1
Alpha, Alpha Dimethylphenethylamine	122-09-8	U	500	173	ug/L	U	1
Aniline (Phenylamine, Aminobenzene)	62-53-3	U	100	11.0	ug/L	U	1
Anthracene	120-12-7	U	100	20.1	ug/L	U	1
Aramite	140-57-8	U	500	146	ug/L	U	1
Azobenzene	103-33-3	U	100	19.1	ug/L	U	1
Benzidine	92-87-5	U	500	209	ug/L	U	1
Benzo(a)anthracene	56-55-3	U	100	19.0	ug/L	U	1
Benzo(a)pyrene	50-32-8	U	100	18.0	ug/L	U	1
Benzo(b)fluoranthene	205-99-2	U	100	19.7	ug/L	U	1
Benzo(g,h,i)perylene	191-24-2	U	100	19.7	ug/L	U	1
Benzo(k)fluoranthene	207-08-9	U	100	27.1	ug/L	U	1
Benzoic Acid	65-85-0	U	200	22.1	ug/L	U	1
Benzyl Alcohol	100-51-6	U	100	12.3	ug/L	U	1
bis(2-chloroethoxy) methane	111-91-1	U	100	12.5	ug/L	U	1
bis(2-chloroethyl) ether	111-44-4	U	100	17.8	ug/L	U	1
bis(2-chloroisopropyl) ether	108-60-1	U	100	12.4	ug/L	U	1
bis(2-ethylhexyl) phthalate	117-81-7	U	100	12.0	ug/L	U	1
Benzyl Butyl Phthalate	85-68-7	U	100	18.2	ug/L	U	1
Caprolactam	105-60-2	U	100	30.1	ug/L	U	1
Carbazole	86-74-8	U	100	18.2	ug/L	U	1
Chlorobenzilate	510-15-6	U	500	114	ug/L	U	1
Chrysene	218-01-9	U	100	20.9	ug/L	U	1
Diallate (trans or cis Isomers)	2303-16-4	U	200	99.2	ug/L	U	1
Dibenz(a,h)anthracene	53-70-3	U	100	18.3	ug/L	U	1
Dibenzofuran	132-64-9	U	100	16.4	ug/L	U	1
Diethyl Phthalate	84-66-2	U	100	19.0	ug/L	U	1
Dimethoate	60-51-5	U	500	121	ug/L	U	1
Dimethyl Phthalate	131-11-3	U	100	19.7	ug/L	U	1
di-n-Butyl Phthalate	84-74-2	U	100	20.8	ug/L	U	1
di-n-Octyl Phthalate	117-84-0	U	100	13.8	ug/L	U	1

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: **526547-1-BLK**  
Lab Sample Id: **526547-1-BLK**

Matrix: **WATER**

**Analytical Method: SVOCs by SW-846 8270C**

Prep Method: SW3520C

Date Analyzed: Mar-23-09 10:09

Analyst: RYE

Date Prep: Mar-17-09 13:00

Tech: 5458

Seq Number: 753416

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Dinoseb	88-85-7	U	500	108	ug/L	U	1
Diphenylamine	122-39-4	U	100	11.0	ug/L	U	1
Disulfoton	298-04-4	U	500	108	ug/L	U	1
Ethyl Methanesulfonate	62-50-0	U	100	16.5	ug/L	U	1
Famphur	52-85-7	U	500	125	ug/L	U	1
Fluoranthene	206-44-0	U	100	18.1	ug/L	U	1
Fluorene	86-73-7	U	100	15.6	ug/L	U	1
Hexachlorobenzene	118-74-1	U	100	22.1	ug/L	U	1
Hexachlorobutadiene	87-68-3	U	100	17.8	ug/L	U	1
Hexachlorocyclopentadiene	77-47-4	U	100	18.7	ug/L	U	1
Hexachloroethane	67-72-1	U	100	23.8	ug/L	U	1
Hexachlorophene	70-30-4	U	6000	2750	ug/L	U	1
Hexachloropropene	1888-71-7	U	500	117	ug/L	U	1
Indeno(1,2,3-c,d)Pyrene	193-39-5	U	100	18.7	ug/L	U	1
Isodrin	465-73-6	U	500	197	ug/L	U	1
Isophorone	78-59-1	U	100	14.1	ug/L	U	1
Isosafrole	120-58-1	U	500	157	ug/L	U	1
Kepone	143-50-0	U	500	200	ug/L	U	1
Methyl Methanesulfonate	66-27-3	U	100	17.2	ug/L	U	1
Parathion, Methyl	298-00-0	U	500	128	ug/L	U	1
Naphthalene	91-20-3	U	100	15.2	ug/L	U	1
Nitrobenzene	98-95-3	U	100	14.9	ug/L	U	1
Nitrosomethylethylamine	10595-95-6	U	500	216	ug/L	U	1
N-Nitrosodiethylamine	55-18-5	U	500	212	ug/L	U	1
N-Nitrosodimethylamine	62-75-9	U	100	62.4	ug/L	U	1
N-Nitroso-di-n-Butylamine	924-16-3	U	500	192	ug/L	U	1
N-Nitrosodi-n-Propylamine	621-64-7	U	100	13.6	ug/L	U	1
N-Nitrosodiphenylamine	86-30-6	U	100	25.0	ug/L	U	1
n-Nitrosomorpholine	59-89-2	U	500	199	ug/L	U	1
N-Nitrosopiperidine	100-75-4	U	500	202	ug/L	U	1
N-Nitrosopyrrolidine	930-55-2	U	500	222	ug/L	U	1
O,O,O-Triethyl Phosphorothioate	126-68-1	U	500	201	ug/L	U	1
o-Toluidine	95-53-4	U	500	259	ug/L	U	1
Parathion, Ethyl	56-38-2	U	500	130	ug/L	U	1
Pentachlorobenzene	608-93-5	U	500	192	ug/L	U	1
Pentachloronitrobenzene	82-68-8	U	500	209	ug/L	U	1
Pentachlorophenol	87-86-5	U	200	22.6	ug/L	U	1
Phenacetin	62-44-2	U	500	148	ug/L	U	1
Phenanthrene	85-01-8	U	100	20.4	ug/L	U	1
Phenol	108-95-2	U	100	17.6	ug/L	U	1
Phorate	298-02-2	U	200	99.7	ug/L	U	1

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: **526547-1-BLK**  
Lab Sample Id: **526547-1-BLK**

Matrix: **WATER**

**Analytical Method: SVOCs by SW-846 8270C**

Prep Method: SW3520C

Date Analyzed: Mar-23-09 10:09

Analyst: RYE

Date Prep: Mar-17-09 13:00

Tech: 5458

Seq Number: 753416

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
p-Phenylenediamine	106-50-3	U	500	241	ug/L	U	1
Pronamide	23950-58-5	U	500	285	ug/L	U	1
Pyrene	129-00-0	U	100	24.0	ug/L	U	1
Pyridine	110-86-1	U	100	26.5	ug/L	U	1
Safrole	94-59-7	U	500	188	ug/L	U	1
Sulfotep	3689-24-5	U	100	85.3	ug/L	U	1
Unknown (TIC)		U			ug/L	J	1

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: **526548-1-BLK**

Matrix: **WATER**

Lab Sample Id: **526548-1-BLK**

**Analytical Method: Pesticides by SW-846 8081A**

Prep Method: SW3510C

Date Analyzed: Mar-17-09 20:14

Analyst: VCH

Date Prep: Mar-17-09 13:00

Tech: 5458

Seq Number: 752946

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
4,4-DDD	72-54-8	0.317	1.00	0.037	ug/L		1
4,4-DDE	72-55-9	0.121	1.00	0.035	ug/L		1
4,4-DDT	50-29-3	0.513	1.00	0.049	ug/L		1
Aldrin	309-00-2	U	0.500	0.026	ug/L	U	1
Alpha-BHC	319-84-6	U	0.500	0.101	ug/L	U	1
Alpha-Chlordane	5103-71-9	U	0.500	0.022	ug/L	U	1
Beta-BHC	319-85-7	U	0.500	0.023	ug/L	U	1
Chlordane	57-74-9	U	5.00	0.963	ug/L	U	1
Delta-BHC	319-86-8	0.232	0.500	0.020	ug/L		1
Dieldrin	60-57-1	U	1.00	0.043	ug/L	U	1
Endosulfan I	959-98-8	U	0.500	0.024	ug/L	U	1
Endosulfan II	33213-65-9	U	1.00	0.045	ug/L	U	1
Endosulfan Sulfate	1031-07-8	0.171	1.00	0.070	ug/L		1
Endrin	72-20-8	U	1.00	0.046	ug/L	U	1
Endrin Aldehyde	7421-93-4	U	1.00	0.086	ug/L	U	1
Endrin Ketone	53494-70-5	U	1.00	0.045	ug/L	U	1
Gamma-BHC (Lindane)	58-89-9	U	0.500	0.016	ug/L	U	1
Gamma-Chlordane	5103-74-2	U	0.500	0.018	ug/L	U	1
Heptachlor	76-44-8	U	0.500	0.029	ug/L	U	1
Heptachlor Epoxide	1024-57-3	U	0.500	0.028	ug/L	U	1
Methoxychlor	72-43-5	U	5.00	0.288	ug/L	U	1
Toxaphene	8001-35-2	U	20.0	4.23	ug/L	U	1

**Blank Summary****327527****Tetra Tech EM, Atlanta, Duluth, GA**

Railroad Drum Site

Sample Id: <b>526567-1-BLK</b>	Matrix: <b>SOLID</b>
Lab Sample Id: <b>526567-1-BLK</b>	

Analytical Method: Mercury by SW-846 7471A					Prep Method: SW7471P		
Date Analyzed: Mar-18-09 11:13		Analyst: 4150		Date Prep: Mar-17-09 18:12		Tech: ABA	
Seq Number: 753056							
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Mercury	7439-97-6	U	0.0500	0.0030	mg/kg	U	1

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: 526568-1-BLK

Matrix: SOLID

Lab Sample Id: 526568-1-BLK

Analytical Method: TAL Metals by SW-846 6010B

Prep Method: SW3050B

Date Analyzed: Mar-18-09 16:22

Analyst: 4150

Date Prep: Mar-17-09 18:15

Tech: ABA

Seq Number: 753079

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Aluminum	7429-90-5	U	500	0.432	mg/kg	U	1
Antimony	7440-36-0	U	5.00	0.673	mg/kg	U	1
Arsenic	7440-38-2	U	5.00	0.617	mg/kg	U	1
Barium	7440-39-3	U	5.00	0.153	mg/kg	U	1
Beryllium	7440-41-7	U	0.300	0.007	mg/kg	U	1
Cadmium	7440-43-9	U	0.500	0.021	mg/kg	U	1
Calcium	7440-70-2	U	500	2.00	mg/kg	U	1
Chromium	7440-47-3	U	5.00	0.096	mg/kg	U	1
Cobalt	7440-48-4	U	1.00	0.092	mg/kg	U	1
Copper	7440-50-8	U	5.00	0.051	mg/kg	U	1
Iron	7439-89-6	U	500	0.550	mg/kg	U	1
Lead	7439-92-1	U	5.00	0.300	mg/kg	U	1
Magnesium	7439-95-4	U	500	0.090	mg/kg	U	1
Manganese	7439-96-5	U	5.00	0.081	mg/kg	U	1
Nickel	7440-02-0	U	5.00	0.157	mg/kg	U	1
Potassium	2133-26-8	U	500	0.300	mg/kg	U	1
Selenium	7782-49-2	U	5.00	0.956	mg/kg	U	1
Silver	7440-22-4	U	5.00	0.047	mg/kg	U	1
Sodium	7440-23-5	U	500	68.7	mg/kg	U	1
Thallium	7440-28-0	U	5.00	0.210	mg/kg	U	1
Vanadium	7440-62-2	0.060	1.00	0.027	mg/kg		1
Zinc	7440-66-6	U	100	0.256	mg/kg	U	1



## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: 526588-1-BLK

Matrix: SOLID

Lab Sample Id: 526588-1-BLK

Analytical Method: Pesticides by SW-846 8081A

Prep Method: SW3545

Date Analyzed: Mar-18-09 15:06

Analyst: VCH

Date Prep: Mar-17-09 15:00

Tech: 4118

Seq Number: 753926

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
4,4-DDD	72-54-8	1.06	3.33	0.183	ug/kg		1
4,4-DDE	72-55-9	0.403	3.33	0.181	ug/kg		1
4,4-DDT	50-29-3	1.71	3.33	0.297	ug/kg		1
Aldrin	309-00-2	U	1.67	0.105	ug/kg	U	1
Alpha-BHC	319-84-6	U	1.67	0.087	ug/kg	U	1
Alpha-Chlordane	5103-71-9	U	1.67	0.143	ug/kg	U	1
Beta-BHC	319-85-7	U	1.67	0.173	ug/kg	U	1
Chlordane	57-74-9	U	16.7	4.65	ug/kg	U	1
Delta-BHC	319-86-8	0.773	1.67	0.194	ug/kg		1
Dieldrin	60-57-1	U	3.33	0.168	ug/kg	U	1
Endosulfan I	959-98-8	U	1.67	0.136	ug/kg	U	1
Endosulfan II	33213-65-9	U	3.33	0.170	ug/kg	U	1
Endosulfan Sulfate	1031-07-8	0.570	3.33	0.222	ug/kg		1
Endrin	72-20-8	U	3.33	0.168	ug/kg	U	1
Endrin Aldehyde	7421-93-4	U	3.33	0.232	ug/kg	U	1
Endrin Ketone	53494-70-5	U	3.33	0.188	ug/kg	U	1
Gamma-BHC (Lindane)	58-89-9	U	1.67	0.093	ug/kg	U	1
Heptachlor	76-44-8	U	1.67	0.192	ug/kg	U	1
Gamma-Chlordane	5103-74-2	U	1.67	0.281	ug/kg	U	1
Heptachlor Epoxide	1024-57-3	U	1.67	0.093	ug/kg	U	1
Methoxychlor	72-43-5	U	16.7	1.13	ug/kg	U	1
Toxaphene	8001-35-2	U	66.7	14.1	ug/kg	U	1

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: 526633-1-BLK

Matrix: WATER

Lab Sample Id: 526633-1-BLK

Analytical Method: Organophosphorus Pesticides by SW846 8141A

Prep Method: SW3510C

Date Analyzed: Mar-25-09 07:15

Analyst: JAN

Date Prep: Mar-19-09 07:04

Tech: MAZ

Seq Number: 754021

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
o,o,o,o-Tetra-n-Propyl Dithiopyrophosphate	3244-90-4	U	0.120	0.050	ug/L	U	1
Atrazine		U	0.500	0.250	ug/L	U	1
Azinphos-ethyl	2642-71-9	U	2.00	0.180	ug/L	U	1
azinphos-methyl	86-50-0	U	2.00	0.410	ug/L	U	1
Bolstar	35400-43-2	U	0.500	0.120	ug/L	U	1
Chlorfenyphos		U	0.500	0.069	ug/L	U	1
Chlorpyrifos	2921-88-2	U	0.500	0.063	ug/L	U	1
Chlorpyrifos methyl	5598-13-0	U	0.500	0.059	ug/L	U	1
Coumaphos	56-72-4	U	1.50	0.210	ug/L	U	1
Crotoxyphos	7700-17-6	U	0.500	0.078	ug/L	U	1
Demeton-O	298-03-3	U	0.500	0.041	ug/L	U	1
Demeton-S	126-75-0	U	0.500	0.062	ug/L	U	1
Diazinon	333-41-5	U	0.500	0.061	ug/L	U	1
Dichlorofenthion	97-17-6	U	0.500	0.071	ug/L	U	1
Dichlorvos	62-73-7	U	0.500	0.075	ug/L	U	1
Dimethoate	60-51-5	U	0.500	0.250	ug/L	U	1
Dioxathion	78-34-2	U	0.500	0.140	ug/L	U	1
Disulfoton	298-04-4	U	0.500	0.210	ug/L	U	1
EPN (Ent)	2104-64-5	U	0.500	0.080	ug/L	U	1
Ethion	563-12-2	U	0.500	0.220	ug/L	U	1
Ethoprop	13194-48-4	U	0.500	0.250	ug/L	U	1
Famphur	52-85-7	U	0.500	0.180	ug/L	U	1
Fenithrothion		U	0.500	0.063	ug/L	U	1
Fenthion	55-38-9	U	0.500	0.074	ug/L	U	1
Fonophos		U	0.500	0.190	ug/L	U	1
Leptophos	21609-90-5	U	0.500	0.046	ug/L	U	1
Malathion	121-75-5	U	0.500	0.066	ug/L	U	1
Merphos	150-50-5	U	0.500	0.090	ug/L	U	1
Mevinphos	7786-34-7	U	0.500	0.190	ug/L	U	1
Monocrotophos		U	0.500	0.270	ug/L	U	1
Naled	300-76-5	U	0.500	0.280	ug/L	U	1
Parathion, Ethyl	56-38-2	U	0.500	0.045	ug/L	U	1
Parathion, Methyl	298-00-0	U	0.500	0.150	ug/L	U	1
Phorate	298-02-2	U	0.500	0.300	ug/L	U	1
Phosmet	732-11-6	U	0.120	0.050	ug/L	U	1
Phosphamidon	13171-21-6	U	0.500	0.210	ug/L	U	1
Simazine	SW8141A	U	2.00	0.410	ug/L	U	1
stirophos	22248-79-9	U	0.500	0.210	ug/L	U	1
Sulfotep	3689-24-5	U	0.500	0.160	ug/L	U	1
TEPP	21646-99-1	U	0.500	0.300	ug/L	U	1
Thionazin		U	0.500	0.140	ug/L	U	1

**Blank Summary****327527****Tetra Tech EM, Atlanta, Duluth, GA**

Railroad Drum Site

Sample Id: **526633-1-BLK**Matrix: **WATER**Lab Sample Id: **526633-1-BLK****Analytical Method: Organophosphorus Pesticides by SW846 8141A**

Prep Method: SW3510C

Date Analyzed: Mar-25-09 07:15

Analyst: JAN

Date Prep: Mar-19-09 07:04

Tech: MAZ

Seq Number: 754021

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Tokuthion	34643-46-4	U	0.500	0.054	ug/L	U	1
Trichlorfon	52-68-9	U	1.80	1.80	ug/L	U	1
Trichloronate	327-98-0	U	0.500	0.055	ug/L	U	1

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: 526634-1-BLK

Matrix: SOLID

Lab Sample Id: 526634-1-BLK

Analytical Method: Organophosphorus Pesticides by SW846 8141A

Prep Method: SW3550

Date Analyzed: Mar-24-09 23:32

Analyst: JAN

Date Prep: Mar-19-09 08:14

Tech: MAZ

Seq Number: 754487

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
o,o,o,o-Tetra-n-Propyl Dithiopyrophosphate	3244-90-4	U	4.00	1.67	ug/kg	U	1
Atrazine		U	16.7	8.33	ug/kg	U	1
Azinphos-ethyl	2642-71-9	U	66.7	6.00	ug/kg	U	1
azinphos-methyl	86-50-0	U	66.7	13.7	ug/kg	U	1
Bolstar	35400-43-2	U	16.7	4.00	ug/kg	U	1
Chlorfenyphos		U	16.7	2.30	ug/kg	U	1
Chlorpyrifos	2921-88-2	U	16.7	2.10	ug/kg	U	1
Chlorpyrifos methyl	5598-13-0	U	16.7	1.97	ug/kg	U	1
Coumaphos	56-72-4	U	50.0	7.00	ug/kg	U	1
Crotoxyphos	7700-17-6	U	16.7	2.60	ug/kg	U	1
Demeton-O	298-03-3	U	16.7	1.37	ug/kg	U	1
Demeton-S	126-75-0	U	16.7	2.07	ug/kg	U	1
Diazinon	333-41-5	U	16.7	2.03	ug/kg	U	1
Dichlorofenthion	97-17-6	U	16.7	2.37	ug/kg	U	1
Dichlorvos	62-73-7	U	16.7	2.50	ug/kg	U	1
Dimethoate	60-51-5	U	16.7	8.33	ug/kg	U	1
Dioxathion	78-34-2	U	16.7	4.67	ug/kg	U	1
Disulfoton	298-04-4	U	16.7	7.00	ug/kg	U	1
EPN (Ent)	2104-64-5	U	16.7	2.67	ug/kg	U	1
Ethion	563-12-2	U	16.7	7.33	ug/kg	U	1
Ethoprop	13194-48-4	U	16.7	8.33	ug/kg	U	1
Famphur	52-85-7	U	16.7	6.00	ug/kg	U	1
Fenithrothion		U	16.7	2.10	ug/kg	U	1
Fenthion	55-38-9	U	16.7	2.47	ug/kg	U	1
Fonophos		U	16.7	6.33	ug/kg	U	1
Leptophos	21609-90-5	U	16.7	1.53	ug/kg	U	1
Malathion	121-75-5	U	16.7	2.20	ug/kg	U	1
Merphos	150-50-5	U	16.7	3.00	ug/kg	U	1
Mevinphos	7786-34-7	U	16.7	6.33	ug/kg	U	1
Monocrotophos		U	16.7	9.00	ug/kg	U	1
Naled	300-76-5	U	16.7	9.33	ug/kg	U	1
Parathion, Ethyl	56-38-2	U	16.7	1.50	ug/kg	U	1
Parathion, Methyl	298-00-0	U	16.7	5.00	ug/kg	U	1
Phorate	298-02-2	U	16.7	10.0	ug/kg	U	1
Phosmet	732-11-6	U	4.00	1.67	ug/kg	U	1
Phosphamidon	13171-21-6	U	16.7	7.00	ug/kg	U	1
Simazine	SW8141A	U	66.7	13.7	ug/kg	U	1
stirophos	22248-79-9	U	16.7	7.00	ug/kg	U	1
Sulfotep	3689-24-5	U	16.7	5.33	ug/kg	U	1
TEPP	21646-99-1	U	16.7	10.0	ug/kg	U	1
Thionazin		U	16.7	4.67	ug/kg	U	1

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: **526634-1-BLK**  
Lab Sample Id: **526634-1-BLK**

Matrix: **SOLID**

**Analytical Method: Organophosphorus Pesticides by SW846 8141A**

Prep Method: SW3550

Date Analyzed: Mar-24-09 23:32

Analyst: JAN

Date Prep: Mar-19-09 08:14

Tech: MAZ

Seq Number: 754487

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Tokuthion	34643-46-4	U	16.7	1.80	ug/kg	U	1
Trichlorfon	52-68-9	U	60.0	60.0	ug/kg	U	1
Trichloronate	327-98-0	U	16.7	1.83	ug/kg	U	1

### Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: <b>526662-1-BLK</b>	Matrix: <b>SOLID</b>
Lab Sample Id: <b>526662-1-BLK</b>	

Analytical Method: Chlorinated Herbicides by SW-846 8151A				Prep Method: SW8151A_EXT			
Date Analyzed: Mar-19-09 17:38		Analyst: VCH		Date Prep: Mar-17-09 15:00		Tech: 4118	
Seq Number: 753260							
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
2,4-D	94-75-7	U	0.333	0.046	ug/kg	U	1
2,4-Db	94-82-6	U	1.67	0.101	ug/kg	U	1
2,4,5-T	93-76-5	U	0.167	0.057	ug/kg	U	1
2,4,5-Tp	93-72-1	U	0.167	0.032	ug/kg	U	1
Dalapon	75-99-0	U	0.167	0.073	ug/kg	U	1
Dicamba	1918-00-9	U	0.167	0.037	ug/kg	U	1
Dichloroprop	120-36-5	U	0.333	0.022	ug/kg	U	1
MCPA	94-74-6	U	66.7	12.6	ug/kg	U	1
MCPP	93-65-2	U	66.7	3.42	ug/kg	U	1

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: <b>526665-1-BLK</b>	Matrix: <b>WATER</b>
Lab Sample Id: <b>526665-1-BLK</b>	

Analytical Method: Chlorinated Herbicides by SW-846 8151A				Prep Method: SW8151A_EXT			
Date Analyzed: Mar-19-09 16:01		Analyst: VCH		Date Prep: Mar-17-09 14:00		Tech: 4118	
		Seq Number: 753224					
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
2,4,5-T	93-76-5	U	2.5	1.2	ug/L	U	1
2,4,5-Tp	93-72-1	U	2.5	0.73	ug/L	U	1
2,4-D	94-75-7	U	2.5	1.2	ug/L	U	1
2,4-Db	94-82-6	U	2.5	0.70	ug/L	U	1
Dalapon	75-99-0	U	2.5	0.81	ug/L	U	1
Dicamba	1918-00-9	U	2.5	1.1	ug/L	U	1
Dichloroprop	120-36-5	U	2.5	1.3	ug/L	U	1
Dinoseb	88-85-7	U	2.5	0.94	ug/L	U	1
MCPA	94-74-6	U	250	170	ug/L	U	1
MCPP	93-65-2	U	250	150	ug/L	U	1



## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: 526671-1-BLK

Matrix: WATER

Lab Sample Id: 526671-1-BLK

Analytical Method: VOCs by SW-846 8260B

Prep Method: SW5030B

Date Analyzed: Mar-18-09 09:44

Analyst: 4124

Date Prep: Mar-18-09 07:25

Tech: 5459

Seq Number: 753039

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
1,1,1,2-Tetrachloroethane	630-20-6	U	1.00	0.240	ug/L	U	1
1,1,1-Trichloroethane	71-55-6	U	1.00	0.160	ug/L	U	1
1,1,2,2-Tetrachloroethane	79-34-5	U	1.00	0.180	ug/L	U	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	U	1.00	0.110	ug/L	U	1
1,1,2-Trichloroethane	79-00-5	U	1.00	0.250	ug/L	U	1
1,1-Dichloroethane	75-34-3	U	1.00	0.110	ug/L	U	1
1,1-Dichloroethene	75-35-4	U	1.00	0.200	ug/L	U	1
1,1-Dichloropropene	563-58-6	U	1.00	0.100	ug/L	U	1
1,2,3-Trichlorobenzene	87-61-6	U	1.00	0.250	ug/L	U	1
1,2,3-Trichloropropane	96-18-4	U	1.00	0.210	ug/L	U	1
1,2,4-Trichlorobenzene	120-82-1	U	1.00	0.170	ug/L	U	1
1,2,4-Trimethylbenzene	95-63-6	U	1.00	0.140	ug/L	U	1
1,3,5-Trimethylbenzene	108-67-8	U	1.00	0.170	ug/L	U	1
1,3-Dichlorobenzene	541-73-1	U	1.00	0.170	ug/L	U	1
1,3-Dichloropropane	142-28-9	U	1.00	0.190	ug/L	U	1
1,4-Dichlorobenzene	106-46-7	U	1.00	0.170	ug/L	U	1
2,2-Dichloropropane	594-20-7	U	1.00	0.210	ug/L	U	1
2-Chloroethyl Vinyl Ether	110-75-8	U	1.00	0.290	ug/L	U	1
2-Chlorotoluene	95-49-8	U	1.00	0.190	ug/L	U	1
2-Hexanone	591-78-6	U	2.00	0.320	ug/L	U	1
4-Chlorotoluene	106-43-4	U	1.00	0.130	ug/L	U	1
4-Methyl-2-Pentanone	108-10-1	U	2.00	0.260	ug/L	U	1
Acetone	67-64-1	U	2.00	0.350	ug/L	U	1
Acrolein	107-02-8	U	20.0	3.50	ug/L	U	1
Acrylonitrile	107-13-1	U	2.00	0.490	ug/L	U	1
Benzene	71-43-2	U	1.00	0.160	ug/L	U	1
Bromobenzene	108-86-1	U	1.00	0.210	ug/L	U	1
Bromochloromethane	74-97-5	U	1.00	0.200	ug/L	U	1
Bromodichloromethane	75-27-4	U	1.00	0.250	ug/L	U	1
Bromoform	75-25-2	U	1.00	0.170	ug/L	U	1
Methyl bromide	74-83-9	U	1.00	0.250	ug/L	U	1
Carbon Disulfide	75-15-0	U	1.00	0.260	ug/L	U	1
Carbon Tetrachloride	56-23-5	U	1.00	0.330	ug/L	U	1
Chlorobenzene	108-90-7	U	1.00	0.150	ug/L	U	1
Chloroethane	75-00-3	U	1.00	0.260	ug/L	U	1
Chloroform	67-66-3	U	1.00	0.160	ug/L	U	1
Methyl Chloride	74-87-3	U	1.00	0.250	ug/L	U	1
cis-1,2-Dichloroethylene	156-59-2	U	1.00	0.210	ug/L	U	1
cis-1,3-Dichloropropene	10061-01-5	U	1.00	0.100	ug/L	U	1
Dibromochloromethane	124-48-1	U	1.00	0.150	ug/L	U	1
Methylene bromide	74-95-3	U	1.00	0.240	ug/L	U	1

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: **526671-1-BLK**  
Lab Sample Id: **526671-1-BLK**

Matrix: **WATER**

**Analytical Method: VOCs by SW-846 8260B**

Prep Method: SW5030B

Date Analyzed: Mar-18-09 09:44

Analyst: 4124

Date Prep: Mar-18-09 07:25

Tech: 5459

Seq Number: 753039

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Dichlorodifluoromethane	75-71-8	U	1.00	0.220	ug/L	U	1
Ethyl Methacrylate	97-63-2	U	1.00	0.210	ug/L	U	1
Ethylbenzene	100-41-4	U	1.00	0.190	ug/L	U	1
Hexachlorobutadiene	87-68-3	U	1.00	0.130	ug/L	U	1
isopropylbenzene	98-82-8	U	1.00	0.150	ug/L	U	1
m,p-Xylene	179601-23-1	U	2.00	0.510	ug/L	U	1
MTBE	1634-04-4	U	1.00	0.180	ug/L	U	1
Methylene Chloride	75-09-2	U	1.00	0.420	ug/L	U	1
Naphthalene	91-20-3	U	1.00	0.220	ug/L	U	1
n-Butylbenzene	104-51-8	U	1.00	0.170	ug/L	U	1
n-Propylbenzene	103-65-1	U	1.00	0.180	ug/L	U	1
o-Xylene	95-47-6	U	1.00	0.200	ug/L	U	1
p-Cymene (p-Isopropyltoluene)	99-87-6	U	1.00	0.130	ug/L	U	1
Sec-Butylbenzene	135-98-8	U	1.00	0.210	ug/L	U	1
Styrene	100-42-5	U	1.00	0.180	ug/L	U	1
tert-Butylbenzene	98-06-6	U	1.00	0.180	ug/L	U	1
Tetrachloroethylene	127-18-4	U	1.00	0.160	ug/L	U	1
Toluene	108-88-3	U	1.00	0.140	ug/L	U	1
trans-1,2-dichloroethylene	156-60-5	U	1.00	0.210	ug/L	U	1
trans-1,3-dichloropropene	10061-02-6	U	1.00	0.110	ug/L	U	1
Trichloroethylene	79-01-6	U	1.00	0.190	ug/L	U	1
Trichlorofluoromethane	75-69-4	U	1.00	0.530	ug/L	U	1
Vinyl Acetate	108-05-4	U	1.00	1.26	ug/L	U	1
Vinyl Chloride	75-01-4	U	1.00	0.190	ug/L	U	1

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: 526674-1-BLK

Matrix: SOLID

Lab Sample Id: 526674-1-BLK

Analytical Method: VOCs by SW-846 8260B

Prep Method: SW5030B

Date Analyzed: Mar-18-09 09:44

Analyst: 4124

Date Prep: Mar-18-09 07:25

Tech: 5459

Seq Number: 753394

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
1,1,1-Trichloroethane	71-55-6	U	250	38	ug/kg	U	50
1,1,2,2-Tetrachloroethane	79-34-5	U	250	59	ug/kg	U	50
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	U	250	56	ug/kg	U	50
1,1,2-Trichloroethane	79-00-5	U	250	34	ug/kg	U	50
1,1-Dichloroethane	75-34-3	U	250	40	ug/kg	U	50
1,1-Dichloroethene	75-35-4	U	250	58	ug/kg	U	50
1,2,4-Trichlorobenzene	120-82-1	U	250	44	ug/kg	U	50
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	U	250	81	ug/kg	U	50
1,2-Dibromoethane (EDB)	106-93-4	U	250	43	ug/kg	U	50
1,2-Dichlorobenzene	95-50-1	U	250	65	ug/kg	U	50
1,2-Dichloroethane	107-06-2	U	250	30	ug/kg	U	50
1,2-Dichloropropane	78-87-5	U	250	46	ug/kg	U	50
1,3-Dichlorobenzene	541-73-1	U	250	50	ug/kg	U	50
1,4-Dichlorobenzene	106-46-7	U	250	34	ug/kg	U	50
2-Butanone (MEK)	78-93-3	U	2500	460	ug/kg	U	50
2-Hexanone	591-78-6	U	2500	56	ug/kg	U	50
4-Methyl-2-pentanone (MIBK)	108-10-1	U	2500	160	ug/kg	U	50
Acetone	67-64-1	U	2500	340	ug/kg	U	50
Benzene	71-43-2	U	250	26	ug/kg	U	50
Bromodichloromethane	75-27-4	U	250	25	ug/kg	U	50
Bromoform	75-25-2	U	250	48	ug/kg	U	50
Bromomethane	74-83-9	U	250	120	ug/kg	U	50
Carbon disulfide	75-15-0	U	250	73	ug/kg	U	50
Carbon tetrachloride	56-23-5	U	250	37	ug/kg	U	50
Chlorobenzene	108-90-7	U	500	29	ug/kg	U	50
Chloroethane	75-00-3	U	250	120	ug/kg	U	50
Chloroform	67-66-3	U	250	37	ug/kg	U	50
Chloromethane	74-87-3	U	250	120	ug/kg	U	50
cis-1,2-Dichloroethene	156-59-2	U	250	33	ug/kg	U	50
cis-1,3-Dichloropropene	10061-01-5	U	250	27	ug/kg	U	50
Cyclohexane	110-82-7	U	250	47	ug/kg	U	50
Dibromochloromethane	124-48-1	U	250	50	ug/kg	U	50
Dichlorodifluoromethane	75-71-8	U	250	59	ug/kg	U	50
Ethylbenzene	100-41-4	U	250	28	ug/kg	U	50
Isopropylbenzene	98-82-8	U	250	38	ug/kg	U	50
m,p-Xylenes	179601-23-1	U	500	60	ug/kg	U	50
Methyl acetate	79-20-9	U	250	47	ug/kg	U	50
Methyl tert-butyl ether	1634-04-4	U	250	35	ug/kg	U	50
Methylcyclohexane	108-87-2	U	250	55	ug/kg	U	50
Methylene chloride	75-09-2	U	250	110	ug/kg	U	50
o-Xylene	95-47-6	U	250	36	ug/kg	U	50

**Blank Summary****327527****Tetra Tech EM, Atlanta, Duluth, GA**

Railroad Drum Site

Sample Id: **526674-1-BLK**Matrix: **SOLID**Lab Sample Id: **526674-1-BLK****Analytical Method: VOCs by SW-846 8260B**

Prep Method: SW5030B

Date Analyzed: Mar-18-09 09:44

Analyst: 4124

Date Prep: Mar-18-09 07:25

Tech: 5459

Seq Number: 753394

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Styrene	100-42-5	U	250	37	ug/kg	U	50
Tetrachloroethene	127-18-4	U	250	52	ug/kg	U	50
Toluene	108-88-3	U	250	29	ug/kg	U	50
trans-1,2-Dichloroethene	156-60-5	U	250	39	ug/kg	U	50
trans-1,3-Dichloropropene	10061-02-6	U	250	34	ug/kg	U	50
Trichloroethene	79-01-6	U	250	35	ug/kg	U	50
Trichlorofluoromethane	75-69-4	U	250	180	ug/kg	U	50
Vinyl chloride	75-01-4	U	250	100	ug/kg	U	50
Xylenes, Total	1330-20-7	U	250	36	ug/kg	U	50

**Blank Summary****327527****Tetra Tech EM, Atlanta, Duluth, GA**  
Railroad Drum SiteSample Id: **526679-1-BLK**  
Lab Sample Id: **526679-1-BLK**Matrix: **SOLID****Analytical Method: TPH (Gasoline Range Organics) by SW8015B**

Prep Method: SW5030B

Date Analyzed: Mar-18-09 12:26

Analyst: ANI

Date Prep: Mar-18-09 09:54

Tech: ANI

Seq Number: 753053

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
TPH-GRO (Gasoline Range Organics)	8006-61-9	U	10	1.5	mg/kg	U	50

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Drum Site

Sample Id: <b>526701-1-BLK</b>	Matrix: <b>SOLID</b>
Lab Sample Id: <b>526701-1-BLK</b>	

Analytical Method: PCBs by SW846 8082				Prep Method: SW3545			
Date Analyzed: Mar-20-09 03:10		Analyst: VCH		Date Prep: Mar-19-09 10:00		Tech: 4118	
		Seq Number: 753263					
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
PCB-1016	12674-11-2	U	33	3.7	ug/kg	U	1
PCB-1221	11104-28-2	U	33	3.5	ug/kg	U	1
PCB-1232	11141-16-5	U	33	3.4	ug/kg	U	1
PCB-1242	53469-21-9	U	33	3.7	ug/kg	U	1
PCB-1248	12672-29-6	U	33	3.5	ug/kg	U	1
PCB-1254	11097-69-1	U	33	3.8	ug/kg	U	1
PCB-1260	11096-82-5	U	33	4.2	ug/kg	U	1

COMPANY:		ADDRESS:		ANALYSIS REQUESTED		Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.		No # of Containers	
Tetra Tech Em Inc.		1955 Evergreen Blvd Bldg 200 Ste 300 Duluth, GA 30096		PRESERVATION (See codes)					
PHONE: (678) 775-3104		FAX: (678) 775-3138		DATE		TIME		REMARKS	
SAMPLED BY:		SIGNATURE:		SAMPLED		COMPOSITE			
Brandon Foskey		Brandon Foskey							
#	SAMPLE ID	DATE	TIME	Grab	Composite	Matrix	(See codes)		
1	WS-01	3-13-09	1315	X		WASTE			
2	WS-02	3-13-09	1330	X		WASTE			
3	WS-03	3-13-09	1445	X		WASTE			
4	WS-04	3-13-09		X		WASTE			
5	S-01	3-13-09	1340		X	SOIL			
6	S-02	3-13-09	1440		X	SOIL			
7	S-03	3-13-09	1505		X	SOIL			
8									
9									
10									
11									
12									
13									
14									
RELINQUISHED BY		DATE/TIME		RECEIVED BY		DATE/TIME		PROJECT INFORMATION	
Brandon Foskey		3-13-09/1705		Brandon Foskey		3-13-09/1705		PROJECT NAME: Railroad Drum Site	
								PROJECT #: TFM-05-001-0091	
								SITE ADDRESS: Haralson, GA	
								SEND REPORT TO: Jessica Vickers	
								INVOICE TO: (IF DIFFERENT FROM ABOVE) same as above	
SPECIAL INSTRUCTIONS/COMMENTS:				SHIPMENT METHOD				QUOTE #:	
				OUT / / VIA:				PO#:	
				IN / / VIA:					
				FedEx UPS MAIL COURIER					
				GREYHOUND OTHER					

SAMPLES RECEIVED AFTER 3PM OR SATURDAY ARE CONSIDERED AS RECEIVED ON THE NEXT BUSINESS DAY; IF NO TAT IS MARKED ON COC AES WILL PROCEED AS STANDARD TAT.

SAMPLES ARE DISPOSED OF 30 DAYS AFTER COMPLETION OF REPORT UNLESS OTHER ARRANGEMENTS ARE MADE.





Prelogin/Nonconformance Report- Sample Log-In

Client: Tetra Tech  
Date/ Time: 3/13/09 1205  
Lab ID #: 327527  
Initials: MA

Sample Receipt Checklist

#1	Temperature of cooler?				4°C
#2	Shipping container in good condition?	<u>YES</u>	No	None	
#3	Samples received on ice?	<u>YES</u>	No	N/A	Blue/Water
#4	Custody Seals intact on shipping container/ cooler?	Yes	No	<u>N/A</u>	
#5	Custody Seals intact on sample bottles/ container?	Yes	No	<u>N/A</u>	
#6	Chain of Custody present?	<u>YES</u>	No		
#7	Sample instructions complete of Chain of Custody?	<u>YES</u>	No		
#8	Any missing/extra samples?	Yes	<u>NO</u>		
#9	Chain of Custody signed when relinquished/ received?	<u>YES</u>	No		
#10	Chain of Custody agrees with sample label(s)?	<u>YES</u>	No		
#11	Container label(s) legible and intact?	<u>YES</u>	No		
#12	Sample matrix/ properties agree with Chain of Custody?	<u>YES</u>	No		
#13	Samples in proper container/ bottle?	<u>YES</u>	No		
#14	Samples properly preserved?	<u>YES</u>	No	N/A	
#15	Sample container(s) intact?	<u>YES</u>	No		
#16	Sufficient sample amount for indicated test(s)?	<u>YES</u>	No		
#17	All samples received within sufficient hold time?	<u>YES</u>	No		
#18	Subcontract of sample(s)?	Yes	NO		
#19	VOC samples have zero headspace?	YES	No	<u>N/A</u>	

Nonconformance Documentation

Contact: \_\_\_\_\_ Contacted by: \_\_\_\_\_ Date/ Time: \_\_\_\_\_

Regarding: \_\_\_\_\_

Corrective Action Taken: \_\_\_\_\_

Check all that Apply: ☐ Client understands and would like to proceed with analysis  
☐ Cooling process had begun shortly after sampling event

## Subcontract Data

Performed by

Data/Analysis Technologies, Inc.  
7715 Corporate Boulevard.  
Plain City, OH 43064  
Contact: Ronald K. Mitchum, Ph.D.  
(614) 873-00710

---

DAT Project ID: 0309036/41

# Data Analysis Technologies, Inc.

7715 Corporate Boulevard

Plain City, OH 43064

NELAP/NELAC Certification 03027

## Sample Analysis Certificate

Client: FTS/Xenco  
Address: 6017 Financial Dr.  
Norcross, GA 30071

Date: 3/30/2009  
Project ID: 0309036/41  
Sample Date: 3/13-17/2009  
Date Received: 3/17-19/2009  
Analyst: RKM/CSM

Attn: Eben Buchanan  
Project: 327527-Railroad Drum Site-TTEMI-05-001-0091


---

**Analysis:** Captan- Method 8270-GC/MS  
Carbamates- Method 8322 PBM Carbamates- LC/MS

**Results:** See attached summary tables. All values are reported at the reporting limit.

**QA/QC:** Met method criteria.

---

Reviewed and approved for release by: 

President, DAT Inc.

Date: 3/30/09

This document may not be reproduced, except in full, without written permission from DAT, Inc.

Data Analysis Technologies, Inc.  
7715 Corporate Boulevard  
Plain City, OH 43064

## Sample Analysis Certificate

### Method 8322 PBM Carbamates

<b>Client:</b>	FTS/Xenco	<b>Lab Project #:</b>	0309036
<b>Client ID:</b>	WS-01	<b>Lab Sample ID:</b>	0309036-1
		<b>Date Sampled:</b>	3/13/09
		<b>Date Received:</b>	3/17/09
<b>Matrix:</b>	Liquid		
<b>Extract Volume (mls)</b>	50.0	<b>Date Ext:</b>	3/24/09
<b>Sample wt/vol(g/ml)</b>	0.050	<b>Date Anal:</b>	3/276/2009
<b>Dilution factor</b>	1		

Analyte:	mg/kg(mg/L)	PQL
Aldicarb Sulfone	ND	10.0
Aldicarb Sulfoxide	ND	10.0
Oxamyl	ND	10.0
Methomyl	ND	10.0
3-Hydroxycarbofuran	ND	10.0
Aldicarb	ND	10.0
Propoxur	ND	10.0
Carbofuran	ND	10.0
Carbaryl	ND	10.0
Methiocarb	ND	10.0

Surrogate Recovery	% Rec
Tubuthiuron	36

PQL = Practical quantitation limit.  
ND = Not detected at the limit shown.

**Captan/8270**

Misc Info	WS-01
Matrix	Aqueous
Sample Name	0309036-1
Date Acquired	3/27/2009 5:24
Data File Name	03260916.D
Sample Amount (mL)	0.05
Dilution Factor	1.0
Extract Volume (mL)	50.0
Sample Type	S

<u>Name</u>	<u>Concentration (g/L)</u>	<u>RL (mg/L)</u>	<u>Q</u>
Captan	0.00	4000.00	ND

<u>Surrogate</u>	<u>%R</u>
Phenol-d5(surr)	102.4
2-fluorophenol(surr)	102.6
Nitrobenzene-d5(surr)	94.9
2-Fluorobiphenyl(surr)	86.1
2,4,6-Tribromophenol(surr)	86.2
Terphenyl-d14(surr)	79.9

ND = Not detected at the reporting limit

E= Exceeded the highest calibration point - use a dilution value

J= Value exceeded the lowest calibration point - It is an estimate

Data Analysis Technologies, Inc.  
7715 Corporate Boulevard  
Plain City, OH 43064

## Sample Analysis Certificate

### Method 8322 PBM Carbamates

<b>Client:</b>	FTS/Xenco	<b>Lab Project #:</b>	0309036
<b>Client ID:</b>	WS-02	<b>Lab Sample ID:</b>	0309036-2
		<b>Date Sampled:</b>	3/13/09
		<b>Date Received:</b>	3/17/09
<b>Matrix:</b>	Solid		
<b>Extract Volume (mls)</b>	50.0	<b>Date Ext:</b>	3/24/09
<b>Sample wt/vol(g/ml)</b>	0.0520	<b>Date Anal:</b>	3/26/09
<b>Dilution factor</b>	10		

Analyte:	mg/kg(mg/L)	PQL Q
Aldicarb Sulfone	ND	96.15
Aldicarb Sulfoxide	ND	96.15
Oxamyl	ND	96.15
Methomyl	ND	96.15
3-Hydroxycarbofuran	ND	96.15
Aldicarb	ND	96.15
Propoxur	ND	96.15
Carbofuran	ND	96.15
Carbaryl	ND	96.15
Methiocarb	ND	96.15

Surrogate Recovery	% Rec
Tubuthiuron	96

PQL = Practical quantitation limit.  
ND = Not detected at the limit shown.  
J = Below the lowest calibration point

**Captan/8270**

Misc Info	WS-02
Matrix	Soild
Sample Name	0309036-2 10x
Date Acquired	3/27/2009 2:07
Data File Name	03260912.D
Sample Amount (g)	0.0525
Dilution Factor	10.0
Extract Volume (mL)	50.0
Sample Type	S

<u>Name</u>	<u>Concentration (g/Kg)</u>	<u>RL (mg/Kg) Q</u>
Captan	0.00	3809.52 ND

<u>Surrogate</u>	<u>%R</u>
Phenol-d5(surr)	95.6
2-fluorophenol(surr)	95.7
Nitrobenzene-d5(surr)	106.4
2-Fluorobiphenyl(surr)	90.5
2,4,6-Tribromophenol(surr)	77.5
Terphenyl-d14(surr)	79.9

ND = Not detected at the reporting limit

E= Exceeded the highest calibration point - use a dilution value

J= Value exceeded the lowest calibration point - It is an estimate



Data Analysis Technologies, Inc.  
7715 Corporate Boulevard  
Plain City, OH 43064

## Sample Analysis Certificate

### Method 8322 PBM Carbamates

<b>Client:</b>	FTS/Xenco	<b>Lab Project #:</b>	0309036
<b>Client ID:</b>	WS-03	<b>Lab Sample ID:</b>	0309036-3
		<b>Date Sampled:</b>	3/13/09
		<b>Date Received:</b>	3/17/09
<b>Matrix:</b>	Solid		
<b>Extract Volume (mls)</b>	50.0	<b>Date Ext:</b>	3/24/09
<b>Sample wt/vol(g/ml)</b>	0.0510	<b>Date Anal:</b>	3/26/09
<b>Dilution factor</b>	1		

Analyte:	mg/kg(mg/L)	PQL Q
Aldicarb Sulfone	ND	9.80
Aldicarb Sulfoxide	ND	9.80
Oxamyl	ND	9.80
Methomyl	ND	9.80
3-Hydroxycarbofuran	ND	9.80
Aldicarb	ND	9.80
Propoxur	ND	9.80
Carbofuran	ND	9.80
Carbaryl	ND	9.80
Methiocarb	ND	9.80

Surrogate Recovery	% Rec
Tubuthiuron	26

PQL = Practical quantitation limit.  
ND = Not detected at the limit shown.  
J = Below the lowest calibration point

**Captan/8270**

Misc Info	WS-03
Matrix	Soild
Sample Name	0309036-3
Date Acquired	3/27/2009 6:13
Data File Name	03260917.D
Sample Amount (g)	0.0522
Dilution Factor	1.0
Extract Volume (mL)	50.0
Sample Type	S

<u>Name</u>	<u>Concentration (g/Kg)</u>	<u>RL (mg/Kg)</u>	<u>Q</u>
Captan	0.00	3831.42	ND

<u>Surrogate</u>	<u>%R</u>
Phenol-d5(surr)	102.4
2-fluorophenol(surr)	104.8
Nitrobenzene-d5(surr)	100.5
2-Fluorobiphenyl(surr)	86.8
2,4,6-Tribromophenol(surr)	96.0
Terphenyl-d14(surr)	84.4

ND = Not detected at the reporting limit

E= Exceeded the highest calibration point - use a dilution value

J= Value exceeded the lowest calibration point - It is an estimate

Data Analysis Technologies, Inc.  
7715 Corporate Boulevard  
Plain City, OH 43064

## Sample Analysis Certificate

### Method 8322 PBM Carbamates

<b>Client:</b>	FTS/Xenco	<b>Lab Project #:</b>	0309036
<b>Client ID:</b>	S-01	<b>Lab Sample ID:</b>	0309036-4
		<b>Date Sampled:</b>	3/13/09
		<b>Date Received:</b>	3/17/09
<b>Matrix:</b>	Solid		
<b>Extract Volume (mls)</b>	50.0	<b>Date Ext:</b>	3/24/09
<b>Sample wt/vol(g/ml)</b>	10.1000	<b>Date Anal:</b>	3/26/09
<b>Dilution factor</b>	1		

Analyte:	mg/kg(mg/L)	PQL Q
Aldicarb Sulfone	ND	0.05
Aldicarb Sulfoxide	ND	0.05
Oxamyl	ND	0.05
Methomyl	ND	0.05
3-Hydroxycarbofuran	ND	0.05
Aldicarb	ND	0.05
Propoxur	ND	0.05
Carbofuran	ND	0.05
Carbaryl	ND	0.05
Methiocarb	ND	0.05

Surrogate Recovery	% Rec
Tubuthiuron	24

PQL =Practical quantitation limit.  
ND = Not detected at the limit shown.  
J=Below the lowest calibration point

**Captan/8270**

Misc Info	S-01
Matrix	solid
Sample Name	0309036-4
Date Acquired	3/27/2009 3:23
Data File Name	03260925.D
Sample Amount (g)	10.0000
Dilution Factor	1.0
Extract Volume (mL)	50.0
Sample Type	S

<u>Name</u>	<u>Concentration (mg/Kg)</u>	<u>RL (mg/Kg)</u>	<u>Q</u>
Captan	0.00	20.00	ND

<u>Surrogate</u>	<u>%R</u>
Phenol-d5(surr)	79.5
2-fluorophenol(surr)	99.8
Nitrobenzene-d5(surr)	88.5
2-Fluorobiphenyl(surr)	115.3
2,4,6-Tribromophenol(surr)	51.1
Terphenyl-d14(surr)	105.1

ND = Not detected at the reporting limit

E= Exceeded the highest calibration point - use a dilution value

J= Value exceeded the lowest calibration point - It is an estimate

Data Analysis Technologies, Inc.  
7715 Corporate Boulevard  
Plain City, OH 43064

## Sample Analysis Certificate

### Method 8322 PBM Carbamates

<b>Client:</b>	FTS/Xenco	<b>Lab Project #:</b>	0309036
<b>Client ID:</b>	S-02	<b>Lab Sample ID:</b>	0309036-5
		<b>Date Sampled:</b>	3/13/09
		<b>Date Received:</b>	3/17/09
<b>Matrix:</b>	Solid		
<b>Extract Volume (mls)</b>	50.0	<b>Date Ext:</b>	3/24/09
<b>Sample wt/vol(g/ml)</b>	10.000	<b>Date Anal:</b>	3/26/09
<b>Dilution factor</b>	1		

Analyte:	mg/kg(mg/L)	PQL Q
Aldicarb Sulfone	ND	0.05
Aldicarb Sulfoxide	ND	0.05
Oxamyl	ND	0.05
Methomyl	ND	0.05
3-Hydroxycarbofuran	ND	0.05
Aldicarb	ND	0.05
Propoxur	ND	0.05
Carbofuran	ND	0.05
Carbaryl	0.576	0.05
Methiocarb	ND	0.05

Surrogate Recovery	% Rec
Tubuthiuron	86

PQL = Practical quantitation limit.  
ND = Not detected at the limit shown.  
J = Below the lowest calibration point

**Captan/8270**

Misc Info	S-02
Matrix	Solid
Sample Name	0309036-5
Date Acquired	3/27/2009 12:58
Data File Name	03260922.D
Sample Amount (g)	10.00
Dilution Factor	1.0
Extract Volume (mL)	50.0
Sample Type	S

<u>Name</u>	<u>Concentration (g/Kg)</u>	<u>RL (mg/Kg) Q</u>
Captan	0.00	20.00 ND

<u>Surrogate</u>	<u>%R</u>
Phenol-d5(surr)	123.0
2-fluorophenol(surr)	129.1
Nitrobenzene-d5(surr)	131.2
2-Fluorobiphenyl(surr)	128.5
2,4,6-Tribromophenol(surr)	111.0
Terphenyl-d14(surr)	103.9

ND = Not detected at the reporting limit

E= Exceeded the highest calibration point - use a dilution value

J= Value exceeded the lowest calibration point - It is an estimate

Data Analysis Technologies, Inc.  
7715 Corporate Boulevard  
Plain City, OH 43064

## Sample Analysis Certificate

### Method 8322 PBM Carbamates

<b>Client:</b>	FTS/Xenco	<b>Lab Project #:</b>	0309036
<b>Client ID:</b>	S-03	<b>Lab Sample ID:</b>	0309036-6
		<b>Date Sampled:</b>	3/13/09
		<b>Date Received:</b>	3/17/09
<b>Matrix:</b>	Solid		
<b>Extract Volume (mls)</b>	50.0	<b>Date Ext:</b>	3/24/09
<b>Sample wt/vol(g/ml)</b>	10.100	<b>Date Anal:</b>	3/26/09
<b>Dilution factor</b>	1		

Analyte:	mg/kg(mg/L)	PQL Q
Aldicarb Sulfone	ND	0.05
Aldicarb Sulfoxide	ND	0.05
Oxamyl	ND	0.05
Methomyl	ND	0.05
3-Hydroxycarbofuran	ND	0.05
Aldicarb	ND	0.05
Propoxur	ND	0.05
Carbofuran	ND	0.05
Carbaryl	ND	0.05
Methiocarb	ND	0.05

Surrogate Recovery	% Rec
Tubuthiuron	37

PQL = Practical quantitation limit.  
ND = Not detected at the limit shown.  
J = Below the lowest calibration point



**Captan/8270**

Misc Info	S-03
Matrix	Soild
Sample Name	0309036-6
Date Acquired	3/27/2009 1:46
Data File Name	03260923.D
Sample Amount (g)	10.1000
Dilution Factor	1.0
Extract Volume (mL)	50.0
Sample Type	S

<u>Name</u>	<u>Concentration (mg/Kg)</u>	<u>RL (mg/Kg) Q</u>
Captan	0.00	19.80 ND

<u>Surrogate</u>	<u>%R</u>
Phenol-d5(surr)	96.6
2-fluorophenol(surr)	109.1
Nitrobenzene-d5(surr)	97.8
2-Fluorobiphenyl(surr)	103.7
2,4,6-Tribromophenol(surr)	76.8
Terphenyl-d14(surr)	96.4

ND = Not detected at the reporting limit

E= Exceeded the highest calibration point - use a dilution value

J= Value exceeded the lowest calibration point - It is an estimate

Data Analysis Technologies, Inc.  
7715 Corporate Boulevard  
Plain City, OH 43064

## Sample Analysis Certificate

### Method 8322 PBM Carbamates

<b>Client:</b>	FTS/Xenco	<b>Lab Project #:</b>	0309036
<b>Client ID:</b>		<b>Lab Sample ID:</b>	0309036/41-MB
		<b>Date Sampled:</b>	NA
		<b>Date Received:</b>	NA
<b>Matrix:</b>	solid		
<b>Extract Volume (mls)</b>	1.0	<b>Date Ext:</b>	3/24/09
<b>Sample wt/vol(g/ml)</b>	1.0	<b>Date Anal:</b>	3/26/09
<b>Dilution factor</b>	1		

Analyte:	mg/kg(mg/L)	PQL Q
Aldicarb Sulfone	ND	0.01
Aldicarb Sulfoxide	ND	0.01
Oxamyl	ND	0.01
Methomyl	ND	0.01
3-Hydroxycarbofuran	ND	0.01
Aldicarb	ND	0.01
Propoxur	ND	0.01
Carbofuran	ND	0.01
Carbaryl	ND	0.01
Methiocarb	ND	0.01

Surrogate Recovery	% Rec
Tubuthiuron	87

PQL = Practical quantitation limit.  
ND = Not detected at the limit shown.  
J=Below the lowest calibration point

## QC SUMMARY

**Captan/8270**

Misc Info	Method Blank
Matrix	Aqueous
Sample Name	0309041-MB
Date Acquired	3/27/2009 12:29
Data File Name	03260910.D
Sample Amount (mL)	200.0
Dilution Factor	1.0
Extract Volume (mL)	1.0
Sample Type	S

Name	Concentration (ug/mL)	RL(ug/mL)	Q
Captan	0.00	0.02	ND

<b>Surrogate</b>	<b>%R</b>
Phenol-d5(surr)	35.9
2-fluorophenol(surr)	44.8
Nitrobenzene-d5(surr)	75.9
2-Fluorobiphenyl(surr)	32.2
2,4,6-Tribromophenol(surr)	67.8
Terphenyl-d14(surr)	66.3

ND = Not detected at the reporting limit

E= Exceeded the highest calibration point - use a dilution value

J= Value exceeded the lowest calibration point - It is an estimate

Data Analysis Technologies, Inc.  
7715 Corporate Boulevard  
Plain City, OH 43064

## Sample Analysis Certificate

### Method 8322 PBM Carbamates

<b>Client:</b>	FTS/Xenco	<b>Lab Project #:</b>	0309036
<b>Client ID:</b>		<b>Lab Sample ID:</b>	0309036/41-LS
		<b>Date Sampled:</b>	NA
		<b>Date Received:</b>	NA
<b>Matrix:</b>	Solid		
<b>Extract Volume (mls)</b>	1.0	<b>Date Ext:</b>	3/24/09
<b>Sample wt/vol(g/ml)</b>	1.00	<b>Date Anal:</b>	3/26/09
<b>Dilution factor</b>	1		

Analyte:	mg/kg(mg/L)	PQL Q	%R
Aldicarb Sulfone	1.013	0.01	101.3
Aldicarb Sulfoxide	0.895	0.01	89.5
Oxamyl	0.994	0.01	99.4
Methomyl	1.106	0.01	110.6
3-Hydroxycarbofuran	1.002	0.01	100.2
Aldicarb	1.002	0.01	100.2
Propoxur	0.970	0.01	97.0
Carbofuran	1.143	0.01	114.3
Carbaryl	1.012	0.01	101.2
Methiocarb	1.069	0.01	106.9

Surrogate Recovery	% Rec
Tubuthiuron	51

PQL =Practical quantitation limit.  
ND = Not detected at the limit shown.  
J=Below the lowest calibration point

**Captan/8270**

Misc Info	Lab Spike		
Matrix	Aqueous		
Sample Name	0309036-LS		
Date Acquired	3/26/2009 8:23		
Data File Name	03260908.D		
Sample Amount (mL)	1.0		
Dilution Factor	1.0		
Extract Volume (mL)	1.0		
Sample Type	QC		
QC Spike Amt	QC Spike ug	100	
Name	Concentration (ug/mL)	RL(ug/mL)	Q
Captan	109.99	4.00	% Recovery
			110.0

<u>Surrogate</u>	<u>%R</u>
Phenol-d5(surr)	114.8
2-fluorophenol(surr)	118.7
Nitrobenzene-d5(surr)	105.5
2-Fluorobiphenyl(surr)	96.8
2,4,6-Tribromophenol(surr)	100.0
Terphenyl-d14(surr)	95.5

ND = Not detected at the reporting limit

E= Exceeded the highest calibration point - use a dilution value

J= Value exceeded the lowest calibration point - It is an estimate

**Captan/8270**

Misc Info	Lab Spike Duplicate
Matrix	Aqueous
Sample Name	0309036-LSD
Date Acquired	3/26/2009 9:12
Data File Name	03260909.D
Sample Amount (mL)	1.0
Dilution Factor	1.0
Extract Volume (mL)	1.0
Sample Type	QC
QC Spike Amt	QC Spike ug                      100

Name	Concentration (ug/mL)	RL(ug/mL)	Q	% Recovery
Captan	113.94	4.00		113.9

<b>Surrogate</b>	<b>%R</b>
Phenol-d5(surr)	116.8
2-fluorophenol(surr)	120.1
Nitrobenzene-d5(surr)	107.1
2-Fluorobiphenyl(surr)	98.3
2,4,6-Tribromophenol(surr)	113.5
Terphenyl-d14(surr)	94.2

ND = Not detected at the reporting limit

E= Exceeded the highest calibration point - use a dilution value

J= Value exceeded the lowest calibration point - It is an estimate

Data Analysis Technologies, Inc.  
7715 Corporate Boulevard  
Plain City, OH 43064

## Sample Analysis Certificate

### Method 8322 PBM Carbamates

<b>Client:</b>	FTS/Xenco	<b>Lab Project #:</b>	0309036
<b>Client ID:</b>	S-01	<b>Lab Sample ID:</b>	0309036-4 MS
		<b>Date Sampled:</b>	3/13/09
		<b>Date Received:</b>	3/17/09
<b>Matrix:</b>	Solid		
<b>Extract Volume (mls)</b>	50.0	<b>Date Ext:</b>	3/24/09
<b>Sample wt/vol(g/ml)</b>	10.20	<b>Date Anal:</b>	3/26/09
<b>Dilution factor</b>	1		

Analyte:	mg/kg(mg/L)	PQL Q	%R
Aldicarb Sulfone	0.472	0.05	47.2
Aldicarb Sulfoxide	0.444	0.05	44.4
Oxamyl	0.395	0.05	39.5
Methomyl	0.209	0.05	20.9
3-Hydroxycarbofuran	0.368	0.05	36.8
Aldicarb	0.368	0.05	36.8
Propoxur	0.342	0.05	34.2
Carbofuran	0.170	0.05	17.0
Carbaryl	0.315	0.05	31.5
Methiocarb	0.214	0.05	21.4

Surrogate Recovery	% Rec
Tubuthiuron	56

PQL = Practical quantitation limit.  
ND = Not detected at the limit shown.  
J = Below the lowest calibration point



**Captan/8270**

Misc Info	S-01	
Matrix	solid	
Sample Name	0309036-4MS	
Date Acquired	3/27/2009 4:12	
Data File Name	03260926.D	
Sample Amount (g)	10.0000	
Dilution Factor	1.0	
Extract Volume (mL)	50.0	
Sample Type	QC	
QC Spike Amt	QC Spike ug	80

<u>Name</u>	<u>Concentration (mg/Kg)</u>	<u>RL (mg/Kg) Q</u>	<u>% Recovery</u>
Captan	227.72	20.00	56.9

<u>Surrogate</u>	<u>%R</u>
Phenol-d5(surr)	78.3
2-fluorophenol(surr)	93.4
Nitrobenzene-d5(surr)	92.2
2-Fluorobiphenyl(surr)	107.8
2,4,6-Tribromophenol(surr)	75.4
Terphenyl-d14(surr)	105.6

ND = Not detected at the reporting limit

E= Exceeded the highest calibration point - use a dilution value

J= Value exceeded the lowest calibration point - It is an estimate

Data Analysis Technologies, Inc.  
7715 Corporate Boulevard  
Plain City, OH 43064

## Sample Analysis Certificate

### Method 8322 PBM Carbamates

<b>Client:</b>	FTS/Xenco	<b>Lab Project #:</b>	0309036
<b>Client ID:</b>	S-01	<b>Lab Sample ID:</b>	0309036-4 MSD
		<b>Date Sampled:</b>	3/13/09
		<b>Date Received:</b>	3/17/09
<b>Matrix:</b>	Solid		
<b>Extract Volume (mls)</b>	50.0	<b>Date Ext:</b>	3/24/09
<b>Sample wt/vol(g/ml)</b>	10.100	<b>Date Anal:</b>	3/26/09
<b>Dilution factor</b>	1		

Analyte:	mg/kg(mg/L)	PQL Q	%R
Aldicarb Sulfone	0.475	0.05	47.5
Aldicarb Sulfoxide	0.466	0.05	46.6
Oxamyl	0.442	0.05	44.2
Methomyl	0.260	0.05	26.0
3-Hydroxycarbofuran	0.429	0.05	42.9
Aldicarb	0.429	0.05	42.9
Propoxur	0.382	0.05	38.2
Carbofuran	0.199	0.05	19.9
Carbaryl	0.356	0.05	35.6
Methiocarb	0.249	0.05	24.9

Surrogate Recovery	% Rec
Tubuthiuron	55

PQL = Practical quantitation limit.  
ND = Not detected at the limit shown.  
J = Below the lowest calibration point

**Captan/8270**

Misc Info	S-01	
Matrix	solid	
Sample Name	0309036-4MSD	
Date Acquired	3/27/2009 5:01	
Data File Name	03260927.D	
Sample Amount (g)	10.0000	
Dilution Factor	1.0	
Extract Volume (mL)	50.0	
Sample Type	QC	
QC Spike Amt	QC Spike ug	80

<u>Name</u>	<u>Concentration (mg/Kg)</u>	<u>RL (mg/Kg) Q</u>	<u>% Recovery</u>
Captan	253.63	20.00	63.4

<u>Surrogate</u>	<u>%R</u>
Phenol-d5(surr)	83.1
2-fluorophenol(surr)	118.0
Nitrobenzene-d5(surr)	127.7
2-Fluorobiphenyl(surr)	114.0
2,4,6-Tribromophenol(surr)	66.6
Terphenyl-d14(surr)	115.5

ND = Not detected at the reporting limit

E= Exceeded the highest calibration point - use a dilution value

J= Value exceeded the lowest calibration point - It is an estimate

# DOCUMENTATION

## ANALYSIS REQUEST &amp; CHAIN OF CUSTODY RECORD

- ☐ 10200 USA Today Way, Miramar, FL 33025 954-431-4444  
☐ 2505 Falkenburg Rd, Tampa, FL 33569 813-620-2000  
☐ 6017 Financial Drive, Norcross, Georgia 30071 770-449-8800



Serial #: 247723 Page 1 of 1

☐ South Carolina 803-543-8099 ☐ Other

Lab Only:

Company-City: Xenco Labs Atlanta GA Phone: 770-449-8800

Proj Name-Location: ☐ Previously done at XENCO Project ID: 770-449-8800

Proj State: AL, FL, GA, LA, MS, NC, NJ, PA, SC, TN, TX, UT Other Proj. Manager (PM): Even Buchanan

e-Mail Results to: even.buchanan@xenco.com Fax No:

Invoice to: ☐ Accounting ☒ Inc. Invoice with Final Report ☐ Invoice must have a P.O.

Bill to: Xenco

Quote/Pricing: FTS031391 P.O. No: 327527 ☐ Call for P.O.

Reg Program: UST DRY-CLEAN Land-Fill Waste-Disp NPDES DW GA HSRA

QAPP Per-Contract CLP AFCEE NAVY DOE DOD USACE OTHER:

Special DLs (GW DW QAPP MDLs RLS See Lab PM Included Call PM)

Sample ID	Sampling Date	Time	Signature	Depth	Matrix	Composite	Grab	# Containers	Container Size	Container Type	Preservatives
WS-01	3-13-09	1315		L							
WS-02		1330		P							
WS-03		1445		P							
S-01		1340		S							
S-02		1440		S							
S-03		1505		S							

Relinquished by (Initials and Sign)	Date & Time	Relinquished to (Initials and Sign)	Date & Time	Total Containers per COC	Cooler Temp:
Mark M	3/16/09 1533	FedEx			
		Linda Girdle	3-17-09 1030		

Preservatives: Various (V), HCl pH<2 (H), H2SO4 pH<2 (S), HNO3 pH<2 (N), Asbc Acid&NaOH (A), ZnAc&NaOH (Z), (Cool,<4C) (C), None (NA), See Label (L), Other (O)

Cont. Size: 4oz (4), 8oz (8), 32oz (32), 40ml VOA (40), 1L (1), 500ml (5), Tedlar Bag (B), Various (V), Other

Cont. Type: Glass Amb (A), Glass Clear (C), Plastic (P), Various (V)

Matrix: Air (A), Product (P), Solid(S), Water (W), Liquid (L)

Committed to Excellence in Service and Quality

www.xenco.com

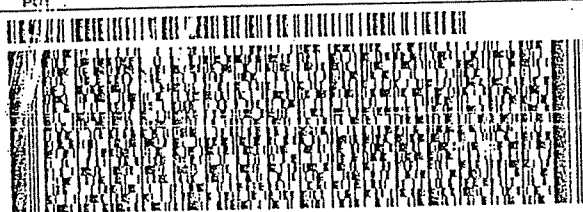
Notice: Signature of this document and relinquishment of these samples constitutes a valid purchase order from client company to Xenco Laboratories and its affiliates, subcontractors and assigns under Xenco's standard terms and conditions of service unless previously negotiated under a fully executed client contract.

0309036

BILL SENDER

REF:

DEPT



**FedEx**  
Express

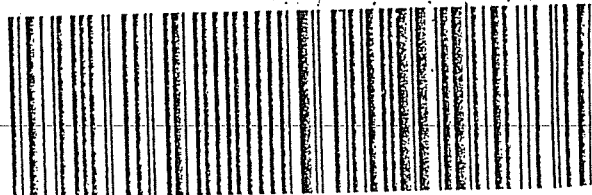


TRK# 7974 1989 9660  
0201

TUE - 17MAR A2  
STANDARD OVERNIGHT

# MU CHA

43064  
OH-US  
LCK



181 B  
9660  
03.17

DAT Labs, Inc. Extraction Form

Project # 0309036 / 0309041

Sample: SOLIDS LIQUID AIR

Analysis: Carbamates / carbo

Prepared By: RL

Date: 3/24/09

Spike Witness: \_\_\_\_\_

Solvent Manufac: \_\_\_\_\_

Solvent Lot #: \_\_\_\_\_

Extraction	Solvent	Volume mls	Reps
<input checked="" type="checkbox"/> Soxhlet	Hexane		
<input checked="" type="checkbox"/> Sep Funnel	Methanol		
<input type="checkbox"/> Sonication	<input checked="" type="checkbox"/> Methylene Chloride	<u>80</u>	<u>3</u>
<input type="checkbox"/> Cont. Ext	ACN		
<input type="checkbox"/> Vial	Ethyl Acetate		
<input type="checkbox"/> SPE Distill	IPA		
<input type="checkbox"/> Other	Toluene		
<input type="checkbox"/> No Extract	Water		
Other (Describe): <u>Acid phase extraction</u>			

Sc-1715 0309036-4-6 & 0309041-4

SURROGATE ID	VOL mls	CONC
SL-PS-78-19 Acid	<u>100 µL</u>	<u>10,000 µg/mL</u>
SL-PS-78-17 B/A	<u>200 µL</u>	<u>5,000 µg/mL</u>
SL-38-27A	<u>50 µL</u>	<u>1.0 µg (0309041-1)</u>

MS/MSD 0309036-4

LS/MS ID	VOL mls	CONC
SL-38-26	<u>4.0 mL</u>	<u>1,000 µg/mL</u>
SL-		
SL-		

INT STD ID	VOL mls	CONC
SL-		
SL-		
SL-		

COMMENTS \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

SAMPLE ID	TOTAL SAMPLE AMNT	SAMPLE AMNT EXTRACTED	TOTAL EXTRACT VOL (ADD ALL REPS)	FINAL EXTRACT VOL mls : ul	SURR INIT	SPK INIT	IS INIT
0309036-1		50 µL		50 MeOH			
0309036-2		1.0525 gm		50 MeOH			
0309036-3		1.0522 gm		50 MeOH			
0309036-4		1.121 gm		50 MeOH			
0309036-4 MS		1.029 gm		50			
0309036-4 MSD		1.011 gm		50			
0309036-5		1.010 gm		50			
0309036-6		1.011 gm		50			
0309041-1		1.2296 gm		50 µL 20% Acid Butter			
0309041-2		1.0497 gm		50 µL 50% Acid MeOH			
0309041-3		1.0515 gm		50 µL MeOH			
0309041-4		1.010 gm		50 µL MeOH			

If extract was split for additional analyses, please note the aliquot volume for this analysis and at what point the extract was split.

ALLOQUOT VOLUME: \_\_\_\_\_ mls \_\_\_\_\_ ul (Circle one)

Extract was split: Before After the split. (Circle one)

Additional samples may be listed on the back of this page.

**DAT LABS, INC. Extraction Sheet**

Project #

0309041

Continued from other side

[illegible]

**Notes:**

Notes:  
So-1/ sonicated 10 minutes 50% pulse rate -0307036 So-1's  
G309041-4 sonicated 10 minutes 50% pulse rate

Sp. Kes (Sur-jat ali.)

معارف

0309036-1-3 + 0309036/1-1-3

10x dilution -

50% - 50% 38-274 C = 1.0 mg/ml Acid + Biv substitutes Cr 50% 100% Sample via 100%

unrelated singles.

8, L - PS-18-19 > 80, 3/mt each

16/12 - PS-7517

Initial

DATFRM1013

DATFRM101!

35

Page 28 of 30

Page 176 of 178

007696



**DAT Labs Inc.**

The client has been contacted.

Yes  
No

Date:

Upon receipt of samples, check if any of the following discrepancies have been noted.

Discrepancy Type	Specify applicable client ID or "all"
COC and samples do not match	
No unique sample identifications	
Samples received outside of the required temp criteria.	Receipt Temp: 5.2 C
No preservation type was noted	Correction Factor: C
No date of collection stated	Corrected Temp: C
No time of collection stated	
The sample collector was not named	Client # 10011
Sample containers were not appropriate	name changed
Sample labels were destroyed or unreadable	from Address
Samples were received outside of holding time	to FTS/Neural
There was not enough sample to perform the requested analysis.	
Samples showed sign of damage or contamination.	
Aqueous samples for volatile analysis: Headspace? Y N	If Yes, list sample ID(s) in details:
Sample pH acidic basic neutral	Check pH of aqueous samples if no preservation is noted on COC.

Details:	"Caution"
Need to know what is soil for quarantine	Unknown substance
Sample 5-03 has no analysis requested	From illegal Dump site
Sample pH for nonvolatile aqueous samples and presence or absence of headspace (Y or N) for VOA aqueous samples shall be recorded at time of sample log-in.	

Sample pH for nonvolatile aqueous samples and presence or absence of headspace (Y or N) for VOA aqueous samples shall be recorded at time of sample log-in. Under no circumstances shall VOA vials be opened at time of sample receipt.

### Other Discrepancies:

Sample ID	Discrepancy
1	0.0000
2	0.0000
3	0.0000
4	0.0000
5	0.0000
6	0.0000
7	0.0000
8	0.0000
9	0.0000
10	0.0000
11	0.0000
12	0.0000
13	0.0000
14	0.0000
15	0.0000
16	0.0000
17	0.0000
18	0.0000
19	0.0000
20	0.0000
21	0.0000
22	0.0000
23	0.0000
24	0.0000
25	0.0000
26	0.0000
27	0.0000
28	0.0000
29	0.0000
30	0.0000
31	0.0000
32	0.0000
33	0.0000
34	0.0000
35	0.0000
36	0.0000
37	0.0000
38	0.0000
39	0.0000
40	0.0000
41	0.0000
42	0.0000
43	0.0000
44	0.0000
45	0.0000
46	0.0000
47	0.0000
48	0.0000
49	0.0000
50	0.0000
51	0.0000
52	0.0000
53	0.0000
54	0.0000
55	0.0000
56	0.0000
57	0.0000
58	0.0000
59	0.0000
60	0.0000
61	0.0000
62	0.0000
63	0.0000
64	0.0000
65	0.0000
66	0.0000
67	0.0000
68	0.0000
69	0.0000
70	0.0000
71	0.0000
72	0.0000
73	0.0000
74	0.0000
75	0.0000
76	0.0000
77	0.0000
78	0.0000
79	0.0000
80	0.0000
81	0.0000
82	0.0000
83	0.0000
84	0.0000
85	0.0000
86	0.0000
87	0.0000
88	0.0000
89	0.0000
90	0.0000
91	0.0000
92	0.0000
93	0.0000
94	0.0000
95	0.0000
96	0.0000
97	0.0000
98	0.0000
99	0.0000
100	0.0000

Upon receipt, the samples met all of DAT's acceptance criteria.

DAT Project # 0309036

# DAT SAMPLE RECEIVING

7715 Corporate Blvd. Plain City, OH 43064.

Project Number: 0309036

Date Received: 3/17/2009  
Client Name: FTS/Xenco laboratories  
Tracking number: 797419899660  
Custody Seals?: No

Carrier: Fed-X overnight  
Analysis: N-Methylcarbanates/831  
Package Temp: 5.2  
COC: ☒ check if COC from client

## Sample Information:

Client ID:	Laboratory ID	Date	Matrix:	Container:	Comment:
WS-01	0309036-1	3/13/2009	Liquid	150ml Clear Soil Jar	
WS-02	0309036-2	3/13/2009	Product	150ml Clear Soil Jar	Red Powder unknown sub.
WS-03	0309036-3	3/13/2009	Product	150ml Clear Soil Jar	Unknown Sub.
S-01	0309036-4	3/13/2009	Solid-Soil USDA	150ml Clear Soil Jar	
S-02	0309036-5	3/13/2009	Solid-Soil USDA	150ml Clear Soil Jar	
S-03	0309036-6	3/13/2009	Solid-Soil USDA	150ml Clear Soil Jar	

LA

Laboratory Receiving Initials

0309036

3/17/2009 3:27:41 PM

# **Analytical Report 327689**

**for**

**Tetra Tech EM, Atlanta**

**Project Manager: Jessica Vickers**

**Railroad Street ER**

**TTEMI-05-001-0092**

**06-APR-09**



**6017 Financial Dr., Norcross, GA 30071**

**Ph:(770) 449-8800 Fax:(770) 449-5477**

Texas certification numbers:

Houston, TX T104704215-08B-TX - Odessa/Midland, TX T104704400-08-TX

Florida certification numbers:

Houston, TX E871002 - Miami, FL E86678 - Tampa, FL E86675

Miramar, FL E86349

Norcross(Atlanta), GA E87429

South Carolina certification numbers:

Norcross(Atlanta), GA 98015

North Carolina certification numbers:

Norcross(Atlanta), GA 483

Houston - Dallas - San Antonio - Tampa - Miami - Latin America

Midland - Corpus Christi - Atlanta



06-APR-09

Project Manager: **Jessica Vickers**  
**Tetra Tech EM, Atlanta**  
10955 Evergreen Blvd. Bld. 200 Suite 300  
Duluth, GA 300967

Reference: XENCO Report No: **327689**  
**Railroad Street ER**  
Project Address: Haralson, GA

**Jessica Vickers:**

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 327689. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 327689 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

---

**Eben Buchanan**  
Project Manager

***Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.***

*Certified and approved by numerous States and Agencies.*

*A Small Business and Minority Status Company that delivers SERVICE and QUALITY*

Houston - Dallas - San Antonio - Austin - Tampa - Miami - Atlanta - Corpus Christi - Latin America



## Sample Cross Reference 327689



**Tetra Tech EM, Atlanta, Duluth, GA**

Railroad Street ER

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
WS-04	S	Mar-17-09 10:45		327689-001
WS-05	S	Mar-17-09 11:30		327689-002
WS-06	S	Mar-17-09 11:40		327689-003
S-04	S	Mar-16-09 14:45		327689-004



## CASE NARRATIVE

**Client Name:** Tetra Tech EM, Atlanta

**Project Name:** Railroad Drum Site

**Project ID:** TTEMI-05-001-0092

**Work Order Number:** 327689

**Report Date:** 06-APR-09

**Date Received:** 17-MAR-09

### Sample receipt non conformances and Comments:

The Captan by 8270-GC/MS and Carbamates by Method 8322 were subcontracted to Data/Analysis Technologies, Inc., 7715 Corporate Boulevard, Plain City, OH 43064. The Lab Contact at DAT, Inc. is Contact: Ronald K. Mitchum, Ph.D. at (614) 873-0710. The subcontractor's data report has been appended to the end of this report.

### Sample receipt Non Conformances and Comments per Sample:

None

#### Analytical Non Conformances and Comments:

Batch:	LBA-752969	Percent Moisture
--------	------------	------------------

None		
------	--	--

Batch:	LBA-753056	Mercury by SW-846 7471A
--------	------------	-------------------------

None		
------	--	--

Batch:	LBA-753079	Metals, Total by SW846 6010B
--------	------------	------------------------------

None		
------	--	--

Batch:	LBA-753260	Chlorinated Herbicides by SW-846 8151A
--------	------------	--

The recoveries of the surrogate DCAA were high out of the laboratory control limit on both columns for samples 327527-003, -005 due to co-elution with severe matrix interference.

Batch:	LBA-753926	Pesticides by SW-846 8081A
--------	------------	----------------------------

The spiking compound 4,4-DDD, 4,4-DDE and Endosulfan II failed for MS and MSD due to co-elution with severe matrix interference.

The spiking compound Endosulfan Sulfate failed high for BKS, but it was not detected in any of the samples.

The surrogate TCMX failed for the samples 327527-003 on column I, 327689-001 -003 and -004 on both columns; the surrogate DCB failed for the samples 327527-005 on column I, 327689-001 -002, -003, and -004 on both columns due to severe matrix interference.

Batch:	LBA-754487	Organophosphorus Pesticides by SW846 8141A
--------	------------	--

None		
------	--	--



# Certificate of Analytical Results 327689



## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Street ER

Sample Id: <b>WS-04</b>	Matrix: <b>SOLID</b>	% Moisture: <b>40.75</b>
Lab Sample Id: <b>327689-001</b>	Date Collected: <b>Mar-17-09 10:45</b>	Date Received: <b>Mar-17-09 14:10</b>

Analytical Method: Chlorinated Herbicides by SW-846 8151A				Prep Method: SW8151A_EXT			
Date Analyzed: Mar-19-09 22:04		Analyst: VCH		Date Prep: Mar-17-09 15:00		Tech: 4118	
Seq Number: 753260							
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
2,4-D	94-75-7	U	0.554	0.076	ug/kg	U	1
2,4-Db	94-82-6	U	2.77	0.168	ug/kg	U	1
2,4,5-T	93-76-5	U	0.277	0.095	ug/kg	U	1
2,4,5-Tp	93-72-1	U	0.277	0.054	ug/kg	U	1
Dalapon	75-99-0	U	0.277	0.121	ug/kg	U	1
Dicamba	1918-00-9	U	0.277	0.062	ug/kg	U	1
Dichloroprop	120-36-5	U	0.554	0.036	ug/kg	U	1
MCPA	94-74-6	U	111	21.0	ug/kg	U	1
MCPD	93-65-2	U	111	5.69	ug/kg	U	1
Analytical Method: Mercury by SW-846 7471A				Prep Method: SW7471P			
Date Analyzed: Mar-18-09 11:13		Analyst: 4150		Date Prep: Mar-17-09 18:12		Tech: ABA	
Seq Number: 753056							
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Mercury	7439-97-6	U	0.0827	0.0050	mg/kg	U	1

Project: Railroad Drum Site

Version: 1.026

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Street ER

Sample Id: <b>WS-04</b>	Matrix: <b>SOLID</b>	% Moisture: <b>40.75</b>
Lab Sample Id: <b>327689-001</b>	Date Collected: <b>Mar-17-09 10:45</b>	Date Received: <b>Mar-17-09 14:10</b>

Analytical Method: Organophosphorus Pesticides by SW846 8141A				Prep Method: SW3550			
Date Analyzed: Mar-25-09 03:44		Analyst: JAN		Date Prep: Mar-19-09 08:14		Tech: MAZ	
Seq Number: 754487				SUB: E86678 - Xenco Miami			
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
o,o,o,o-Tetra-n-Propyl Dithiopyrophosphate	3244-90-4	U	39.9	16.6	ug/kg	U	1
Atrazine		21400	166	83.1	ug/kg		1
Azinphos-ethyl	2642-71-9	U	664	59.8	ug/kg	U	1
azinphos-methyl	86-50-0	U	664	136	ug/kg	U	1
Bolstar	35400-43-2	U	166	39.9	ug/kg	U	1
Chlorfenyinhpos		U	166	22.9	ug/kg	U	1
Chlorpyrifos	2921-88-2	U	166	20.9	ug/kg	U	1
Chlorpyrifos mathyl	5598-13-0	U	166	19.6	ug/kg	U	1
Coumaphos	56-72-4	U	498	69.8	ug/kg	U	1
Crotoxyphos	7700-17-6	U	166	25.9	ug/kg	U	1
Demeton-O	298-03-3	U	166	13.6	ug/kg	U	1
Demeton-S	126-75-0	U	166	20.6	ug/kg	U	1
Diazinon	333-41-5	U	166	20.3	ug/kg	U	1
Dichlorofenthion	97-17-6	U	166	23.6	ug/kg	U	1
Dichlorvos	62-73-7	U	166	24.9	ug/kg	U	1
Dimethoate	60-51-5	U	166	83.1	ug/kg	U	1
Dioxathion	78-34-2	U	166	46.5	ug/kg	U	1
Disulfoton	298-04-4	U	166	69.8	ug/kg	U	1
EPN (Ent)	2104-64-5	U	166	26.6	ug/kg	U	1
Ethion	563-12-2	U	166	73.1	ug/kg	U	1
Ethoprop	13194-48-4	U	166	83.1	ug/kg	U	1
Famphur	52-85-7	U	166	59.8	ug/kg	U	1
Fenithrothion		U	166	20.9	ug/kg	U	1
Fenthion	55-38-9	U	166	24.6	ug/kg	U	1
Fonophos		U	166	63.1	ug/kg	U	1
Leptophos	21609-90-5	U	166	15.3	ug/kg	U	1
Malathion	121-75-5	U	166	21.9	ug/kg	U	1
Merphos	150-50-5	U	166	29.9	ug/kg	U	1
Mevinphos	7786-34-7	U	166	63.1	ug/kg	U	1
Monocrotophos		U	166	89.7	ug/kg	U	1
Naled	300-76-5	U	166	93.0	ug/kg	U	1
Parathion, Ethyl	56-38-2	U	166	15.0	ug/kg	U	1
Parathion, Methyl	298-00-0	U	166	49.8	ug/kg	U	1
Phorate	298-02-2	U	166	99.7	ug/kg	U	1
Phosmet	732-11-6	U	39.9	16.6	ug/kg	U	1
Phosphamidon	13171-21-6	U	166	69.8	ug/kg	U	1
Simazine	SW8141A	U	664	136	ug/kg	U	1
stirophos	22248-79-9	U	166	69.8	ug/kg	U	1
Sulfotep	3689-24-5	U	166	53.2	ug/kg	U	1

Project: Railroad Drum Site



## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Street ER

Sample Id: <b>WS-04</b>	Matrix: <b>SOLID</b>	% Moisture: <b>40.75</b>
Lab Sample Id: <b>327689-001</b>	Date Collected: <b>Mar-17-09 10:45</b>	Date Received: <b>Mar-17-09 14:10</b>

<b>Analytical Method: Organophosphorus Pesticides by SW846 8141A</b>	Prep Method: SW3550
Date Analyzed: Mar-25-09 03:44    Analyst: JAN	Date Prep: Mar-19-09 08:14    Tech: MAZ
Seq Number: 754487	SUB: E86678 - Xenco Miami

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
TEPP	21646-99-1	U	166	99.7	ug/kg	U	1
Thionazin		U	166	46.5	ug/kg	U	1
Tokuthion	34643-46-4	U	166	17.9	ug/kg	U	1
Trichlorfon	52-68-9	U	598	598	ug/kg	U	1
Trichloronate	327-98-0	U	166	18.3	ug/kg	U	1

<b>Analytical Method: Pesticides by SW-846 8081A</b>	Prep Method: SW3545
Date Analyzed: Mar-19-09 14:00    Analyst: VCH	Date Prep: Mar-17-09 15:00    Tech: 4118
Seq Number: 753926	

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
4,4-DDD	72-54-8	U	5.59	0.308	ug/kg	U	1
4,4-DDE	72-55-9	U	5.59	0.304	ug/kg	U	1
4,4-DDT	50-29-3	548	55.9	4.97	ug/kg	D	10
Aldrin	309-00-2	U	2.80	0.176	ug/kg	U	1
Alpha-BHC	319-84-6	U	2.80	0.146	ug/kg	U	1
Alpha-Chlordane	5103-71-9	U	2.80	0.241	ug/kg	U	1
Beta-BHC	319-85-7	U	2.80	0.290	ug/kg	U	1
Chlordane	57-74-9	U	28.0	7.80	ug/kg	U	1
Delta-BHC	319-86-8	U	2.80	0.325	ug/kg	U	1
Dieldrin	60-57-1	U	5.59	0.281	ug/kg	U	1
Endosulfan I	959-98-8	U	2.80	0.228	ug/kg	U	1
Endosulfan II	33213-65-9	U	5.59	0.285	ug/kg	U	1
Endosulfan Sulfate	1031-07-8	U	5.59	0.372	ug/kg	U	1
Endrin	72-20-8	U	5.59	0.282	ug/kg	U	1
Endrin Aldehyde	7421-93-4	U	5.59	0.389	ug/kg	U	1
Endrin Ketone	53494-70-5	U	5.59	0.315	ug/kg	U	1
Gamma-BHC (Lindane)	58-89-9	U	2.80	0.156	ug/kg	U	1
Gamma-Chlordane	5103-74-2	U	2.80	0.472	ug/kg	U	1
Heptachlor	76-44-8	U	2.80	0.322	ug/kg	U	1
Heptachlor Epoxide	1024-57-3	U	2.80	0.156	ug/kg	U	1
Methoxychlor	72-43-5	U	28.0	1.90	ug/kg	U	1
Toxaphene	8001-35-2	U	112	23.7	ug/kg	U	1

Project: Railroad Drum Site

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Street ER

Sample Id: <b>WS-04</b>	Matrix: <b>SOLID</b>	% Moisture: <b>40.75</b>
Lab Sample Id: <b>327689-001</b>	Date Collected: <b>Mar-17-09 10:45</b>	Date Received: <b>Mar-17-09 14:10</b>

<b>Analytical Method: TAL Metals by SW-846 6010B</b>	<b>Prep Method: SW3050B</b>
Date Analyzed: Mar-18-09 17:36    Analyst: 4150	Date Prep: Mar-17-09 18:15    Tech: ABA
Seq Number: 753079	

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Aluminum	7429-90-5	4000	774	0.669	mg/kg		1
Antimony	7440-36-0	U	7.74	1.04	mg/kg	U	1
Arsenic	7440-38-2	U	7.74	0.955	mg/kg	U	1
Barium	7440-39-3	U	7.74	0.237	mg/kg	U	1
Beryllium	7440-41-7	3.34	0.465	0.011	mg/kg		1
Cadmium	7440-43-9	14.2	0.774	0.033	mg/kg		1
Calcium	7440-70-2	U	774	3.10	mg/kg	U	1
Chromium	7440-47-3	230	7.74	0.149	mg/kg		1
Cobalt	7440-48-4	2.49	1.55	0.142	mg/kg		1
Copper	7440-50-8	U	7.74	0.079	mg/kg	U	1
Iron	7439-89-6	19000	7740	8.52	mg/kg	D	10
Lead	7439-92-1	U	7.74	0.465	mg/kg	U	1
Magnesium	7439-95-4	1440	774	0.139	mg/kg		1
Manganese	7439-96-5	94.1	7.74	0.125	mg/kg		1
Nickel	7440-02-0	U	7.74	0.243	mg/kg	U	1
Potassium	2133-26-8	27100	774	0.465	mg/kg		1
Selenium	7782-49-2	U	7.74	1.48	mg/kg	U	1
Silver	7440-22-4	U	7.74	0.073	mg/kg	U	1
Sodium	7440-23-5	899	774	106	mg/kg		1
Thallium	7440-28-0	U	7.74	0.325	mg/kg	U	1
Vanadium	7440-62-2	38.3	1.55	0.042	mg/kg		1
Zinc	7440-66-6	331	155	0.396	mg/kg		1

Project: Railroad Drum Site



## Certificate of Analytical Results 327689



**Tetra Tech EM, Atlanta, Duluth, GA**

Railroad Street ER

Sample Id: <b>WS-04</b>	Matrix: <b>SOLID</b>	% Moisture:
Lab Sample Id: <b>327689-001</b>	Date Collected: <b>Mar-17-09 10:45</b>	Date Received: <b>Mar-17-09 14:10</b>

Analytical Method: Percent Moisture					Prep Method:		
Date Analyzed: Mar-17-09 13:15		Analyst: 4099		Date Prep:		Tech: 4099	
Seq Number: 752969							
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Percent Moisture	TMOIST	40.7			%		1

Project: Railroad Drum Site

Version: 1.026



# Certificate of Analytical Results 327689



## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Street ER

Sample Id: <b>WS-05</b>	Matrix: <b>SOLID</b>	% Moisture: <b>.96</b>
Lab Sample Id: <b>327689-002</b>	Date Collected: <b>Mar-17-09 11:30</b>	Date Received: <b>Mar-17-09 14:10</b>

Analytical Method: Chlorinated Herbicides by SW-846 8151A				Prep Method: SW8151A_EXT			
Date Analyzed: Mar-19-09 22:28		Analyst: VCH		Date Prep: Mar-17-09 15:00		Tech: 4118	
Seq Number: 753260							
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
2,4-D	94-75-7	U	4.63	0.638	ug/kg	U	1
2,4-Db	94-82-6	U	23.2	1.41	ug/kg	U	1
2,4,5-T	93-76-5	U	2.32	0.794	ug/kg	U	1
2,4,5-Tp	93-72-1	U	2.32	0.449	ug/kg	U	1
Dalapon	75-99-0	U	2.32	1.01	ug/kg	U	1
Dicamba	1918-00-9	U	2.32	0.516	ug/kg	U	1
Dichloroprop	120-36-5	U	4.63	0.304	ug/kg	U	1
MCPA	94-74-6	U	926	175	ug/kg	U	1
MCPD	93-65-2	U	926	47.5	ug/kg	U	1
Analytical Method: Mercury by SW-846 7471A				Prep Method: SW7471P			
Date Analyzed: Mar-18-09 11:13		Analyst: 4150		Date Prep: Mar-17-09 18:12		Tech: ABA	
Seq Number: 753056							
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Mercury	7439-97-6	0.0946	0.0505	0.0030	mg/kg		1

Project: Railroad Drum Site

Version: 1.026

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Street ER

Sample Id: <b>WS-05</b>	Matrix: <b>SOLID</b>	% Moisture: <b>.96</b>
Lab Sample Id: <b>327689-002</b>	Date Collected: <b>Mar-17-09 11:30</b>	Date Received: <b>Mar-17-09 14:10</b>

Analytical Method: Organophosphorus Pesticides by SW846 8141A				Prep Method: SW3550			
Date Analyzed: Mar-25-09 05:50		Analyst: JAN		Date Prep: Mar-19-09 08:14		Tech: MAZ	
Seq Number: 754487				SUB: E86678 - Xenco Miami			
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
o,o,o,o-Tetra-n-Propyl Dithiopyrophosphate	3244-90-4	U	588	245	ug/kg	U	1
Atrazine		U	2450	1230	ug/kg	U	1
Azinphos-ethyl	2642-71-9	U	9800	882	ug/kg	U	1
azinphos-methyl	86-50-0	U	9800	2010	ug/kg	U	1
Bolstar	35400-43-2	U	2450	588	ug/kg	U	1
Chlorfenyinphos		U	2450	338	ug/kg	U	1
Chlorpyrifos	2921-88-2	U	2450	309	ug/kg	U	1
Chlorpyrifos mathyl	5598-13-0	U	2450	289	ug/kg	U	1
Coumaphos	56-72-4	U	7350	1030	ug/kg	U	1
Crotoxyphos	7700-17-6	U	2450	382	ug/kg	U	1
Demeton-O	298-03-3	U	2450	201	ug/kg	U	1
Demeton-S	126-75-0	U	2450	304	ug/kg	U	1
Diazinon	333-41-5	U	2450	299	ug/kg	U	1
Dichlorofenthion	97-17-6	U	2450	348	ug/kg	U	1
Dichlorvos	62-73-7	U	2450	368	ug/kg	U	1
Dimethoate	60-51-5	U	2450	1230	ug/kg	U	1
Dioxathion	78-34-2	U	2450	686	ug/kg	U	1
Disulfoton	298-04-4	U	2450	1030	ug/kg	U	1
EPN (Ent)	2104-64-5	U	2450	392	ug/kg	U	1
Ethion	563-12-2	U	2450	1080	ug/kg	U	1
Ethoprop	13194-48-4	U	2450	1230	ug/kg	U	1
Famphur	52-85-7	U	2450	882	ug/kg	U	1
Fenithrothion		U	2450	294	ug/kg	U	1
Fenthion	55-38-9	U	2450	343	ug/kg	U	1
Fonophos		U	2450	931	ug/kg	U	1
Leptophos	21609-90-5	U	2450	245	ug/kg	U	1
Malathion	121-75-5	U	2450	343	ug/kg	U	1
Merphos	150-50-5	U	2450	441	ug/kg	U	1
Mevinphos	7786-34-7	U	2450	931	ug/kg	U	1
Monocrotophos		U	2450	1320	ug/kg	U	1
Naled	300-76-5	U	2450	1370	ug/kg	U	1
Parathion, Ethyl	56-38-2	U	2450	245	ug/kg	U	1
Parathion, Methyl	298-00-0	U	2450	735	ug/kg	U	1
Phorate	298-02-2	U	2450	1470	ug/kg	U	1
Phosmet	732-11-6	U	588	245	ug/kg	U	1
Phosphamidon	13171-21-6	U	2450	1030	ug/kg	U	1
Simazine	SW8141A	U	9800	2010	ug/kg	U	1
stirophos	22248-79-9	U	2450	1030	ug/kg	U	1
Sulfotep	3689-24-5	U	2450	784	ug/kg	U	1

Project: Railroad Drum Site

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Street ER

Sample Id: <b>WS-05</b>	Matrix: <b>SOLID</b>	% Moisture: <b>.96</b>
Lab Sample Id: <b>327689-002</b>	Date Collected: <b>Mar-17-09 11:30</b>	Date Received: <b>Mar-17-09 14:10</b>

<b>Analytical Method: Organophosphorus Pesticides by SW846 8141A</b>	Prep Method: SW3550
Date Analyzed: Mar-25-09 05:50    Analyst: JAN	Date Prep: Mar-19-09 08:14    Tech: MAZ
Seq Number: 754487	SUB: E86678 - Xenco Miami

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
TEPP	21646-99-1	U	2450	1470	ug/kg	U	1
Thionazin		U	2450	686	ug/kg	U	1
Tokuthion	34643-46-4	U	2450	245	ug/kg	U	1
Trichlorfon	52-68-9	U	8820	8820	ug/kg	U	1
Trichloronate	327-98-0	U	2450	294	ug/kg	U	1

<b>Analytical Method: Pesticides by SW-846 8081A</b>	Prep Method: SW3545
Date Analyzed: Mar-19-09 14:28    Analyst: VCH	Date Prep: Mar-17-09 15:00    Tech: 4118
Seq Number: 753926	

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
4,4-DDD	72-54-8	16700000	2400000	132000	ug/kg	D	50000
4,4-DDE	72-55-9	15300000	2400000	131000	ug/kg	D	50000
4,4-DDT	50-29-3	46000000	24000000	2140000	ug/kg	D	500000
Aldrin	309-00-2	5840	1200	75.6	ug/kg	D	50
Alpha-BHC	319-84-6	8990	1200	62.8	ug/kg	D	50
Alpha-Chlordane	5103-71-9	U	24.0	2.07	ug/kg	U	1
Beta-BHC	319-85-7	U	24.0	2.50	ug/kg	U	1
Chlordane	57-74-9	U	240	67.0	ug/kg	U	1
Delta-BHC	319-86-8	U	24.0	2.79	ug/kg	U	1
Dieldrin	60-57-1	U	48.1	2.42	ug/kg	U	1
Endosulfan I	959-98-8	U	24.0	1.96	ug/kg	U	1
Endosulfan II	33213-65-9	U	48.1	2.45	ug/kg	U	1
Endosulfan Sulfate	1031-07-8	U	48.1	3.20	ug/kg	U	1
Endrin	72-20-8	U	48.1	2.42	ug/kg	U	1
Endrin Aldehyde	7421-93-4	U	48.1	3.35	ug/kg	U	1
Endrin Ketone	53494-70-5	U	48.1	2.71	ug/kg	U	1
Gamma-BHC (Lindane)	58-89-9	2620	240	13.4	ug/kg	D	10
Gamma-Chlordane	5103-74-2	U	24.0	4.06	ug/kg	U	1
Heptachlor	76-44-8	U	24.0	2.77	ug/kg	U	1
Heptachlor Epoxide	1024-57-3	U	24.0	1.34	ug/kg	U	1
Methoxychlor	72-43-5	U	240	16.3	ug/kg	U	1
Toxaphene	8001-35-2	U	962	204	ug/kg	U	1

Project: Railroad Drum Site

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Street ER

Sample Id: <b>WS-05</b>	Matrix: <b>SOLID</b>	% Moisture: <b>.96</b>
Lab Sample Id: <b>327689-002</b>	Date Collected: <b>Mar-17-09 11:30</b>	Date Received: <b>Mar-17-09 14:10</b>

<b>Analytical Method: TAL Metals by SW-846 6010B</b>	<b>Prep Method: SW3050B</b>
Date Analyzed: Mar-18-09 17:38    Analyst: 4150	Date Prep: Mar-17-09 18:15    Tech: ABA
Seq Number: 753079	

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Aluminum	7429-90-5	2200	463	0.400	mg/kg		1
Antimony	7440-36-0	U	4.63	0.623	mg/kg	U	1
Arsenic	7440-38-2	U	4.63	0.572	mg/kg	U	1
Barium	7440-39-3	U	4.63	0.142	mg/kg	U	1
Beryllium	7440-41-7	U	0.278	0.006	mg/kg	U	1
Cadmium	7440-43-9	U	0.463	0.020	mg/kg	U	1
Calcium	7440-70-2	826	463	1.85	mg/kg		1
Chromium	7440-47-3	U	4.63	0.089	mg/kg	U	1
Cobalt	7440-48-4	U	0.926	0.085	mg/kg	U	1
Copper	7440-50-8	U	4.63	0.047	mg/kg	U	1
Iron	7439-89-6	U	463	0.509	mg/kg	U	1
Lead	7439-92-1	17.5	4.63	0.278	mg/kg		1
Magnesium	7439-95-4	U	463	0.083	mg/kg	U	1
Manganese	7439-96-5	U	4.63	0.075	mg/kg	U	1
Nickel	7440-02-0	U	4.63	0.145	mg/kg	U	1
Potassium	2133-26-8	U	463	0.278	mg/kg	U	1
Selenium	7782-49-2	U	4.63	0.886	mg/kg	U	1
Silver	7440-22-4	U	4.63	0.044	mg/kg	U	1
Sodium	7440-23-5	8340	4630	636	mg/kg	D	10
Thallium	7440-28-0	U	4.63	0.195	mg/kg	U	1
Vanadium	7440-62-2	11.3	0.926	0.025	mg/kg		1
Zinc	7440-66-6	U	92.6	0.237	mg/kg	U	1

Project: Railroad Drum Site



## Certificate of Analytical Results 327689



**Tetra Tech EM, Atlanta, Duluth, GA**

Railroad Street ER

Sample Id: <b>WS-05</b>	Matrix: <b>SOLID</b>	% Moisture:
Lab Sample Id: <b>327689-002</b>	Date Collected: <b>Mar-17-09 11:30</b>	Date Received: <b>Mar-17-09 14:10</b>

Analytical Method: Percent Moisture					Prep Method:		
Date Analyzed: Mar-17-09 13:15		Analyst: 4099		Date Prep:		Tech: 4099	
Seq Number: 752969							
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Percent Moisture	TMOIST	0.958			%		1

Project: Railroad Drum Site

Version: 1.026





## Certificate of Analytical Results 327689



### Tetra Tech EM, Atlanta, Duluth, GA

Railroad Street ER

Sample Id: <b>WS-06</b>	Matrix: <b>SOLID</b>	% Moisture: <b>4.92</b>
Lab Sample Id: <b>327689-003</b>	Date Collected: <b>Mar-17-09 11:40</b>	Date Received: <b>Mar-17-09 14:10</b>

Analytical Method: Chlorinated Herbicides by SW-846 8151A					Prep Method: SW8151A_EXT		
Date Analyzed: Mar-19-09 22:52		Analyst: VCH	Date Prep: Mar-17-09 15:00		Tech: 4118		
Seq Number: 753260							
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
2,4-D	94-75-7	U	4.38	0.604	ug/kg	U	1
2,4-Db	94-82-6	U	21.9	1.33	ug/kg	U	1
2,4,5-T	93-76-5	U	2.19	0.751	ug/kg	U	1
2,4,5-Tp	93-72-1	U	2.19	0.425	ug/kg	U	1
Dalapon	75-99-0	U	2.19	0.955	ug/kg	U	1
Dicamba	1918-00-9	U	2.19	0.488	ug/kg	U	1
Dichloroprop	120-36-5	U	4.38	0.287	ug/kg	U	1
MCPA	94-74-6	U	876	166	ug/kg	U	1
MCPD	93-65-2	U	876	45.0	ug/kg	U	1

Project: Railroad Drum Site

Version: 1.026

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Street ER

Sample Id: <b>WS-06</b>	Matrix: <b>SOLID</b>	% Moisture: <b>4.92</b>
Lab Sample Id: <b>327689-003</b>	Date Collected: <b>Mar-17-09 11:40</b>	Date Received: <b>Mar-17-09 14:10</b>

Analytical Method: Organophosphorus Pesticides by SW846 8141A				Prep Method: SW3550			
Date Analyzed: Mar-25-09 06:22		Analyst: JAN		Date Prep: Mar-19-09 08:14		Tech: MAZ	
Seq Number: 754487				SUB: E86678 - Xenco Miami			
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
o,o,o,o-Tetra-n-Propyl Dithiopyrophosphate	3244-90-4	U	631	263	ug/kg	U	1
Atrazine		U	2630	1310	ug/kg	U	1
Azinphos-ethyl	2642-71-9	U	10500	947	ug/kg	U	1
azinphos-methyl	86-50-0	U	10500	2160	ug/kg	U	1
Bolstar	35400-43-2	U	2630	631	ug/kg	U	1
Chlorfenyinphos		U	2630	363	ug/kg	U	1
Chlorpyrifos	2921-88-2	U	2630	331	ug/kg	U	1
Chlorpyrifos methyl	5598-13-0	U	2630	310	ug/kg	U	1
Coumaphos	56-72-4	U	7890	1100	ug/kg	U	1
Crotoxyphos	7700-17-6	U	2630	410	ug/kg	U	1
Demeton-O	298-03-3	U	2630	216	ug/kg	U	1
Demeton-S	126-75-0	U	2630	326	ug/kg	U	1
Diazinon	333-41-5	U	2630	321	ug/kg	U	1
Dichlorofenthion	97-17-6	U	2630	373	ug/kg	U	1
Dichlorvos	62-73-7	U	2630	394	ug/kg	U	1
Dimethoate	60-51-5	U	2630	1310	ug/kg	U	1
Dioxathion	78-34-2	U	2630	736	ug/kg	U	1
Disulfoton	298-04-4	U	2630	1100	ug/kg	U	1
EPN (Ent)	2104-64-5	U	2630	421	ug/kg	U	1
Ethion	563-12-2	U	2630	1160	ug/kg	U	1
Ethoprop	13194-48-4	U	2630	1310	ug/kg	U	1
Famphur	52-85-7	U	2630	947	ug/kg	U	1
Fenithrothion		U	2630	316	ug/kg	U	1
Fenthion	55-38-9	U	2630	368	ug/kg	U	1
Fonophos		U	2630	999	ug/kg	U	1
Leptophos	21609-90-5	U	2630	263	ug/kg	U	1
Malathion	121-75-5	U	2630	368	ug/kg	U	1
Merphos	150-50-5	U	2630	473	ug/kg	U	1
Mevinphos	7786-34-7	U	2630	999	ug/kg	U	1
Monocrotophos		U	2630	1420	ug/kg	U	1
Naled	300-76-5	U	2630	1470	ug/kg	U	1
Parathion, Ethyl	56-38-2	U	2630	263	ug/kg	U	1
Parathion, Methyl	298-00-0	U	2630	789	ug/kg	U	1
Phorate	298-02-2	U	2630	1580	ug/kg	U	1
Phosmet	732-11-6	U	631	263	ug/kg	U	1
Phosphamidon	13171-21-6	U	2630	1100	ug/kg	U	1
Simazine	SW8141A	U	10500	2160	ug/kg	U	1
stirophos	22248-79-9	U	2630	1100	ug/kg	U	1
Sulfotep	3689-24-5	U	2630	841	ug/kg	U	1

Project: Railroad Drum Site

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Street ER

Sample Id: <b>WS-06</b>	Matrix: <b>SOLID</b>	% Moisture: <b>4.92</b>
Lab Sample Id: <b>327689-003</b>	Date Collected: <b>Mar-17-09 11:40</b>	Date Received: <b>Mar-17-09 14:10</b>

<b>Analytical Method: Organophosphorus Pesticides by SW846 8141A</b>	Prep Method: SW3550
Date Analyzed: Mar-25-09 06:22    Analyst: JAN	Date Prep: Mar-19-09 08:14    Tech: MAZ
Seq Number: 754487	SUB: E86678 - Xenco Miami

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
TEPP	21646-99-1	U	2630	1580	ug/kg	U	1
Thionazin		U	2630	736	ug/kg	U	1
Tokuthion	34643-46-4	U	2630	284	ug/kg	U	1
Trichlorfon	52-68-9	U	9470	9470	ug/kg	U	1
Trichloronate	327-98-0	U	2630	289	ug/kg	U	1

<b>Analytical Method: Pesticides by SW-846 8081A</b>	Prep Method: SW3545
Date Analyzed: Mar-19-09 14:55    Analyst: VCH	Date Prep: Mar-17-09 15:00    Tech: 4118
Seq Number: 753926	

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
4,4-DDD	72-54-8	U	48.2	2.65	ug/kg	U	1
4,4-DDE	72-55-9	U	48.2	2.63	ug/kg	U	1
4,4-DDT	50-29-3	149000	9650	858	ug/kg	D	200
Aldrin	309-00-2	U	24.1	1.52	ug/kg	U	1
Alpha-BHC	319-84-6	U	24.1	1.26	ug/kg	U	1
Alpha-Chlordane	5103-71-9	U	24.1	2.08	ug/kg	U	1
Beta-BHC	319-85-7	U	24.1	2.50	ug/kg	U	1
Chlordane	57-74-9	U	241	67.3	ug/kg	U	1
Delta-BHC	319-86-8	U	24.1	2.80	ug/kg	U	1
Dieldrin	60-57-1	U	48.2	2.43	ug/kg	U	1
Endosulfan I	959-98-8	U	24.1	1.97	ug/kg	U	1
Endosulfan II	33213-65-9	U	48.2	2.45	ug/kg	U	1
Endosulfan Sulfate	1031-07-8	U	48.2	3.21	ug/kg	U	1
Endrin	72-20-8	U	48.2	2.43	ug/kg	U	1
Endrin Aldehyde	7421-93-4	U	48.2	3.36	ug/kg	U	1
Endrin Ketone	53494-70-5	U	48.2	2.72	ug/kg	U	1
Gamma-BHC (Lindane)	58-89-9	U	24.1	1.34	ug/kg	U	1
Gamma-Chlordane	5103-74-2	U	24.1	4.07	ug/kg	U	1
Heptachlor	76-44-8	U	24.1	2.78	ug/kg	U	1
Heptachlor Epoxide	1024-57-3	U	24.1	1.34	ug/kg	U	1
Methoxychlor	72-43-5	40900	38600	3270	ug/kg	D	200
Toxaphene	8001-35-2	U	965	204	ug/kg	U	1

Project: Railroad Drum Site

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Street ER

Sample Id: <b>WS-06</b>	Matrix: <b>SOLID</b>	% Moisture: <b>4.92</b>
Lab Sample Id: <b>327689-003</b>	Date Collected: <b>Mar-17-09 11:40</b>	Date Received: <b>Mar-17-09 14:10</b>

<b>Analytical Method: TAL Metals by SW-846 6010B</b>	<b>Prep Method: SW3050B</b>
Date Analyzed: Mar-18-09 17:40    Analyst: 4150	Date Prep: Mar-17-09 18:15    Tech: ABA
Seq Number: 753079	

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Aluminum	7429-90-5	951	511	0.441	mg/kg		1
Antimony	7440-36-0	U	5.11	0.687	mg/kg	U	1
Arsenic	7440-38-2	U	5.11	0.630	mg/kg	U	1
Barium	7440-39-3	U	5.11	0.156	mg/kg	U	1
Beryllium	7440-41-7	U	0.306	0.007	mg/kg	U	1
Cadmium	7440-43-9	U	0.511	0.021	mg/kg	U	1
Calcium	7440-70-2	8660	511	2.04	mg/kg		1
Chromium	7440-47-3	6.24	5.11	0.098	mg/kg		1
Cobalt	7440-48-4	U	1.02	0.094	mg/kg	U	1
Copper	7440-50-8	U	5.11	0.052	mg/kg	U	1
Iron	7439-89-6	623	511	0.562	mg/kg		1
Lead	7439-92-1	U	5.11	0.306	mg/kg	U	1
Magnesium	7439-95-4	3370	511	0.092	mg/kg		1
Manganese	7439-96-5	12.3	5.11	0.083	mg/kg		1
Nickel	7440-02-0	7.48	5.11	0.160	mg/kg		1
Potassium	2133-26-8	U	511	0.306	mg/kg	U	1
Selenium	7782-49-2	U	5.11	0.976	mg/kg	U	1
Silver	7440-22-4	U	5.11	0.048	mg/kg	U	1
Sodium	7440-23-5	2260	511	70.2	mg/kg		1
Thallium	7440-28-0	U	5.11	0.214	mg/kg	U	1
Vanadium	7440-62-2	4.64	1.02	0.028	mg/kg		1
Zinc	7440-66-6	U	102	0.261	mg/kg	U	1

Project: Railroad Drum Site



## Certificate of Analytical Results 327689



**Tetra Tech EM, Atlanta, Duluth, GA**

Railroad Street ER

Sample Id: <b>WS-06</b>	Matrix: <b>SOLID</b>	% Moisture:
Lab Sample Id: <b>327689-003</b>	Date Collected: <b>Mar-17-09 11:40</b>	Date Received: <b>Mar-17-09 14:10</b>

Analytical Method: Mercury by SW-846 7471A				Prep Method: SW7471P			
Date Analyzed: Mar-18-09 11:13		Analyst: 4150		Date Prep: Mar-17-09 18:12		Tech: ABA	
		Seq Number: 753056					
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Mercury	7439-97-6	0.1853	0.0490	0.0029	mg/kg		1
Analytical Method: Percent Moisture				Prep Method:			
Date Analyzed: Mar-17-09 13:15		Analyst: 4099		Date Prep:		Tech: 4099	
		Seq Number: 752969					
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Percent Moisture	TMOIST	4.92			%		1

Project: Railroad Drum Site

Version: 1.026



## Certificate of Analytical Results 327689



**Tetra Tech EM, Atlanta, Duluth, GA**

Railroad Street ER

Sample Id: <b>S-04</b>	Matrix: <b>SOLID</b>	% Moisture: <b>9</b>
Lab Sample Id: <b>327689-004</b>	Date Collected: <b>Mar-16-09 14:45</b>	Date Received: <b>Mar-17-09 14:10</b>

Analytical Method: Chlorinated Herbicides by SW-846 8151A					Prep Method: SW8151A_EXT		
Date Analyzed: Mar-19-09 23:17		Analyst: VCH		Date Prep: Mar-17-09 15:00		Tech: 4118	
Seq Number: 753260							
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
2,4-D	94-75-7	U	4.47	0.616	ug/kg	U	1
2,4-Db	94-82-6	U	22.3	1.36	ug/kg	U	1
2,4,5-T	93-76-5	U	2.23	0.766	ug/kg	U	1
2,4,5-Tp	93-72-1	U	2.23	0.433	ug/kg	U	1
Dalapon	75-99-0	U	2.23	0.974	ug/kg	U	1
Dicamba	1918-00-9	U	2.23	0.498	ug/kg	U	1
Dichloroprop	120-36-5	U	4.47	0.293	ug/kg	U	1
MCPA	94-74-6	U	893	169	ug/kg	U	1
MCPP	93-65-2	U	893	45.8	ug/kg	U	1

Project: Railroad Drum Site

Version: 1.026

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Street ER

Sample Id: <b>S-04</b>	Matrix: <b>SOLID</b>	% Moisture: <b>9</b>
Lab Sample Id: <b>327689-004</b>	Date Collected: <b>Mar-16-09 14:45</b>	Date Received: <b>Mar-17-09 14:10</b>

Analytical Method: Organophosphorus Pesticides by SW846 8141A				Prep Method: SW3550			
Date Analyzed: Mar-25-09 05:19		Analyst: JAN		Date Prep: Mar-19-09 08:14		Tech: MAZ	
Seq Number: 754487				SUB: E86678 - Xenco Miami			
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
o,o,o,o-Tetra-n-Propyl Dithiopyrophosphate	3244-90-4	U	123	51.4	ug/kg	U	1
Atrazine		U	514	257	ug/kg	U	1
Azinphos-ethyl	2642-71-9	U	2050	185	ug/kg	U	1
azinphos-methyl	86-50-0	U	2050	421	ug/kg	U	1
Bolstar	35400-43-2	U	514	123	ug/kg	U	1
Chlorfenyinphos		U	514	70.9	ug/kg	U	1
Chlorpyrifos	2921-88-2	U	514	64.7	ug/kg	U	1
Chlorpyrifos mathyl	5598-13-0	U	514	60.6	ug/kg	U	1
Coumaphos	56-72-4	U	1540	216	ug/kg	U	1
Crotoxyphos	7700-17-6	U	514	80.1	ug/kg	U	1
Demeton-O	298-03-3	U	514	42.1	ug/kg	U	1
Demeton-S	126-75-0	U	514	63.7	ug/kg	U	1
Diazinon	333-41-5	U	514	62.6	ug/kg	U	1
Dichlorofenthion	97-17-6	U	514	72.9	ug/kg	U	1
Dichlorvos	62-73-7	U	514	77.0	ug/kg	U	1
Dimethoate	60-51-5	U	514	257	ug/kg	U	1
Dioxathion	78-34-2	U	514	144	ug/kg	U	1
Disulfoton	298-04-4	U	514	216	ug/kg	U	1
EPN (Ent)	2104-64-5	U	514	82.2	ug/kg	U	1
Ethion	563-12-2	U	514	226	ug/kg	U	1
Ethoprop	13194-48-4	U	514	257	ug/kg	U	1
Famphur	52-85-7	U	514	185	ug/kg	U	1
Fenithrothion		U	514	64.7	ug/kg	U	1
Fenthion	55-38-9	U	514	76.0	ug/kg	U	1
Fonophos		U	514	195	ug/kg	U	1
Leptophos	21609-90-5	U	514	47.2	ug/kg	U	1
Malathion	121-75-5	U	514	67.8	ug/kg	U	1
Merphos	150-50-5	U	514	92.4	ug/kg	U	1
Mevinphos	7786-34-7	U	514	195	ug/kg	U	1
Monocrotophos		U	514	277	ug/kg	U	1
Naled	300-76-5	U	514	288	ug/kg	U	1
Parathion, Ethyl	56-38-2	126000	514	46.2	ug/kg		1
Parathion, Methyl	298-00-0	74100	514	154	ug/kg		1
Phorate	298-02-2	U	514	308	ug/kg	U	1
Phosmet	732-11-6	U	123	51.4	ug/kg	U	1
Phosphamidon	13171-21-6	U	514	216	ug/kg	U	1
Simazine	SW8141A	U	2050	421	ug/kg	U	1
stirophos	22248-79-9	U	514	216	ug/kg	U	1
Sulfotep	3689-24-5	U	514	164	ug/kg	U	1

Project: Railroad Drum Site

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Street ER

Sample Id: <b>S-04</b>	Matrix: <b>SOLID</b>	% Moisture: <b>9</b>
Lab Sample Id: <b>327689-004</b>	Date Collected: <b>Mar-16-09 14:45</b>	Date Received: <b>Mar-17-09 14:10</b>

Analytical Method: Organophosphorus Pesticides by SW846 8141A				Prep Method: SW3550			
Date Analyzed: Mar-25-09 05:19		Analyst: JAN		Date Prep: Mar-19-09 08:14		Tech: MAZ	
Seq Number: 754487				SUB: E86678 - Xenco Miami			
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
TEPP	21646-99-1	U	514	308	ug/kg	U	1
Thionazin		U	514	144	ug/kg	U	1
Tokuthion	34643-46-4	U	514	55.5	ug/kg	U	1
Trichlorfon	52-68-9	U	1850	1850	ug/kg	U	1
Trichloronate	327-98-0	U	514	56.5	ug/kg	U	1
Analytical Method: Pesticides by SW-846 8081A				Prep Method: SW3545			
Date Analyzed: Mar-19-09 15:23		Analyst: VCH		Date Prep: Mar-17-09 15:00		Tech: 4118	
Seq Number: 753926							
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
4,4-DDD	72-54-8	U	49.5	2.72	ug/kg	U	1
4,4-DDE	72-55-9	U	49.5	2.69	ug/kg	U	1
4,4-DDT	50-29-3	U	49.5	4.40	ug/kg	U	1
Aldrin	309-00-2	U	24.8	1.56	ug/kg	U	1
Alpha-BHC	319-84-6	37200	2480	129	ug/kg	D	100
Alpha-Chlordane	5103-71-9	U	24.8	2.13	ug/kg	U	1
Beta-BHC	319-85-7	U	24.8	2.57	ug/kg	U	1
Chlordane	57-74-9	U	248	69.0	ug/kg	U	1
Delta-BHC	319-86-8	U	24.8	2.87	ug/kg	U	1
Dieldrin	60-57-1	U	49.5	2.49	ug/kg	U	1
Endosulfan I	959-98-8	U	24.8	2.02	ug/kg	U	1
Endosulfan II	33213-65-9	U	49.5	2.52	ug/kg	U	1
Endosulfan Sulfate	1031-07-8	U	49.5	3.29	ug/kg	U	1
Endrin	72-20-8	U	49.5	2.49	ug/kg	U	1
Endrin Aldehyde	7421-93-4	U	49.5	3.45	ug/kg	U	1
Endrin Ketone	53494-70-5	U	49.5	2.79	ug/kg	U	1
Gamma-BHC (Lindane)	58-89-9	U	24.8	1.38	ug/kg	U	1
Heptachlor	76-44-8	U	24.8	2.85	ug/kg	U	1
Gamma-Chlordane	5103-74-2	U	24.8	4.18	ug/kg	U	1
Heptachlor Epoxide	1024-57-3	U	24.8	1.38	ug/kg	U	1
Methoxychlor	72-43-5	U	248	16.8	ug/kg	U	1
Toxaphene	8001-35-2	67100000	9900000	2100000	ug/kg	D	10000

Project: Railroad Drum Site



## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Street ER

Sample Id: <b>S-04</b>	Matrix: <b>SOLID</b>	% Moisture: <b>9</b>
Lab Sample Id: <b>327689-004</b>	Date Collected: <b>Mar-16-09 14:45</b>	Date Received: <b>Mar-17-09 14:10</b>

Analytical Method: TAL Metals by SW-846 6010B				Prep Method: SW3050B			
Date Analyzed: Mar-18-09 17:41		Analyst: 4150		Date Prep: Mar-17-09 18:15		Tech: ABA	
Seq Number: 753079							
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Aluminum	7429-90-5	U	518	0.448	mg/kg	U	1
Antimony	7440-36-0	U	5.18	0.698	mg/kg	U	1
Arsenic	7440-38-2	18.6	5.18	0.640	mg/kg		1
Barium	7440-39-3	21.8	5.18	0.159	mg/kg		1
Beryllium	7440-41-7	U	0.311	0.007	mg/kg	U	1
Cadmium	7440-43-9	11.8	0.518	0.022	mg/kg		1
Calcium	7440-70-2	1240	518	2.07	mg/kg		1
Chromium	7440-47-3	25.9	5.18	0.100	mg/kg		1
Cobalt	7440-48-4	8.87	1.04	0.095	mg/kg		1
Copper	7440-50-8	36.5	5.18	0.053	mg/kg		1
Iron	7439-89-6	119000	51800	57.0	mg/kg	D	100
Lead	7439-92-1	50.3	5.18	0.311	mg/kg		1
Magnesium	7439-95-4	1690	518	0.093	mg/kg		1
Manganese	7439-96-5	397	5.18	0.084	mg/kg		1
Nickel	7440-02-0	19.2	5.18	0.163	mg/kg		1
Potassium	2133-26-8	10800	518	0.311	mg/kg		1
Selenium	7782-49-2	U	5.18	0.991	mg/kg	U	1
Silver	7440-22-4	U	5.18	0.049	mg/kg	U	1
Sodium	7440-23-5	U	518	71.2	mg/kg	U	1
Thallium	7440-28-0	U	5.18	0.218	mg/kg	U	1
Vanadium	7440-62-2	3.11	1.04	0.028	mg/kg		1
Zinc	7440-66-6	232	104	0.265	mg/kg		1

Project: Railroad Drum Site



## Certificate of Analytical Results 327689



**Tetra Tech EM, Atlanta, Duluth, GA**

Railroad Street ER

Sample Id: <b>S-04</b>	Matrix: <b>SOLID</b>	% Moisture:
Lab Sample Id: <b>327689-004</b>	Date Collected: <b>Mar-16-09 14:45</b>	Date Received: <b>Mar-17-09 14:10</b>

Analytical Method: Mercury by SW-846 7471A				Prep Method: SW7471P			
Date Analyzed: Mar-18-09 11:13		Analyst: 4150		Date Prep: Mar-17-09 18:12		Tech: ABA	
		Seq Number: 753056					
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Mercury	7439-97-6	3.458	0.5000	0.0300	mg/kg		10
Analytical Method: Percent Moisture				Prep Method:			
Date Analyzed: Mar-17-09 13:15		Analyst: 4099		Date Prep:		Tech: 4099	
		Seq Number: 752969					
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Percent Moisture	TMOIST	9			%		1

Project: Railroad Drum Site

Version: 1.026

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.
  - B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
  - D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
  - E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
  - F** RPD exceeded lab control limits.
  - J** The target analyte was positively identified below the MQL and above the SQL.
  - U** Analyte was not detected.
  - L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
  - H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
  - K** Sample analyzed outside of recommended hold time.
  - JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.
- \* Outside XENCO's scope of NELAC Accreditation.

***Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.***

*Certified and approved by numerous States and Agencies.*

*A Small Business and Minority Status Company that delivers SERVICE and QUALITY*

Houston - Dallas - San Antonio - Corpus Christi - Midland/Odessa - Tampa - Miami - Latin America

4143 Greenbriar Dr, Stafford, Tx 77477  
 9701 Harry Hines Blvd , Dallas, TX 75220  
 5332 Blackberry Drive, San Antonio TX 78238  
 2505 North Falkenburg Rd, Tampa, FL 33619  
 5757 NW 158th St, Miami Lakes, FL 33014  
 12600 West I-20 East, Odessa, TX 79765  
 842 Cantwell Lane, Corpus Christi, TX 78408

Phone	Fax
(281) 240-4200	(281) 240-4280
(214) 902 0300	(214) 351-9139
(210) 509-3334	(210) 509-3335
(813) 620-2000	(813) 620-2033
(305) 823-8500	(305) 823-8555
(432) 563-1800	(432) 563-1713
(361) 884-0371	(361) 884-9116



## Form 2 - Surrogate Recoveries

Project Name: Railroad Street ER

Work Orders : 327689,

Project ID: TTEMI-05-001-0092

Lab Batch #: 753260

Sample: 526662-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/19/09 17:38

### SURROGATE RECOVERY STUDY

Chlorinated Herbicides by SW-846 8151A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	134	167	80	45-139	

Lab Batch #: 753260

Sample: 526662-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/19/09 17:38

### SURROGATE RECOVERY STUDY

Chlorinated Herbicides by SW-846 8151A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	118	167	71	45-139	

Lab Batch #: 753260

Sample: 526662-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/19/09 18:03

### SURROGATE RECOVERY STUDY

Chlorinated Herbicides by SW-846 8151A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	176	167	105	45-139	

Lab Batch #: 753260

Sample: 526662-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/19/09 18:03

### SURROGATE RECOVERY STUDY

Chlorinated Herbicides by SW-846 8151A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	146	167	87	45-139	

Lab Batch #: 753260

Sample: 327527-006 S / MS

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/19/09 21:16

### SURROGATE RECOVERY STUDY

Chlorinated Herbicides by SW-846 8151A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	214	166	129	45-139	

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] =  $100 * A / B$

All results are based on MDL and validated for QC purposes.



## Form 2 - Surrogate Recoveries

Project Name: Railroad Street ER

Work Orders : 327689,

Project ID: TTEMI-05-001-0092

Lab Batch #: 753260

Sample: 327527-006 S / MS

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/19/09 21:16

### SURROGATE RECOVERY STUDY

Chlorinated Herbicides by SW-846 8151A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	143	166	86	45-139	

Lab Batch #: 753260

Sample: 327527-006 SD / MSD

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/19/09 21:40

### SURROGATE RECOVERY STUDY

Chlorinated Herbicides by SW-846 8151A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	134	166	81	45-139	

Lab Batch #: 753260

Sample: 327527-006 SD / MSD

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/19/09 21:40

### SURROGATE RECOVERY STUDY

Chlorinated Herbicides by SW-846 8151A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	112	166	67	45-139	

Lab Batch #: 753260

Sample: 327689-001 / SMP

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/19/09 22:04

### SURROGATE RECOVERY STUDY

Chlorinated Herbicides by SW-846 8151A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	106	164	65	45-139	

Lab Batch #: 753260

Sample: 327689-001 / SMP

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/19/09 22:04

### SURROGATE RECOVERY STUDY

Chlorinated Herbicides by SW-846 8151A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	77.8	164	47	45-139	

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] =  $100 * A / B$

All results are based on MDL and validated for QC purposes.



## Form 2 - Surrogate Recoveries

Project Name: Railroad Street ER

Work Orders : 327689,

Project ID: TTEMI-05-001-0092

Lab Batch #: 753260

Sample: 327689-002 / SMP

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/19/09 22:28

### SURROGATE RECOVERY STUDY

Chlorinated Herbicides by SW-846 8151A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	2680	2290	117	45-139	

Lab Batch #: 753260

Sample: 327689-002 / SMP

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/19/09 22:28

### SURROGATE RECOVERY STUDY

Chlorinated Herbicides by SW-846 8151A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	1880	2290	82	45-139	

Lab Batch #: 753260

Sample: 327689-003 / SMP

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/19/09 22:52

### SURROGATE RECOVERY STUDY

Chlorinated Herbicides by SW-846 8151A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	1940	2080	93	45-139	

Lab Batch #: 753260

Sample: 327689-003 / SMP

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/19/09 22:52

### SURROGATE RECOVERY STUDY

Chlorinated Herbicides by SW-846 8151A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	1850	2080	89	45-139	

Lab Batch #: 753260

Sample: 327689-004 / SMP

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/19/09 23:17

### SURROGATE RECOVERY STUDY

Chlorinated Herbicides by SW-846 8151A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	1820	2030	90	45-139	

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] =  $100 * A / B$

All results are based on MDL and validated for QC purposes.



## Form 2 - Surrogate Recoveries

Project Name: Railroad Street ER

Work Orders : 327689,

Project ID: TTEMI-05-001-0092

Lab Batch #: 753260

Sample: 327689-004 / SMP

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/19/09 23:17

### SURROGATE RECOVERY STUDY

Chlorinated Herbicides by SW-846 8151A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	1820	2030	90	45-139	

Lab Batch #: 754487

Sample: 526634-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/24/09 23:32

### SURROGATE RECOVERY STUDY

Organophosphorus Pesticides by SW846 8141A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Bromo-2-nitrobenzene	429	667	64	50-150	

Lab Batch #: 754487

Sample: 526634-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/25/09 00:04

### SURROGATE RECOVERY STUDY

Organophosphorus Pesticides by SW846 8141A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Bromo-2-nitrobenzene	490	667	73	50-150	

Lab Batch #: 754487

Sample: 526634-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/25/09 00:35

### SURROGATE RECOVERY STUDY

Organophosphorus Pesticides by SW846 8141A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Bromo-2-nitrobenzene	442	667	66	50-150	

Lab Batch #: 754487

Sample: 327689-001 / SMP

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/25/09 03:44

### SURROGATE RECOVERY STUDY

Organophosphorus Pesticides by SW846 8141A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Bromo-2-nitrobenzene	3090	3940	78	50-150	

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] =  $100 * A / B$

All results are based on MDL and validated for QC purposes.



## Form 2 - Surrogate Recoveries

Project Name: Railroad Street ER

Work Orders : 327689,

Project ID: TTEMI-05-001-0092

Lab Batch #: 754487

Sample: 327689-004 / SMP

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/25/09 05:19

### SURROGATE RECOVERY STUDY

Organophosphorus Pesticides by SW846 8141A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Bromo-2-nitrobenzene	10500	18700	56	50-150	

Lab Batch #: 754487

Sample: 327689-002 / SMP

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/25/09 05:50

### SURROGATE RECOVERY STUDY

Organophosphorus Pesticides by SW846 8141A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Bromo-2-nitrobenzene	14000	97100	14	50-150	**

Lab Batch #: 754487

Sample: 327689-003 / SMP

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/25/09 06:22

### SURROGATE RECOVERY STUDY

Organophosphorus Pesticides by SW846 8141A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Bromo-2-nitrobenzene	13300	100000	13	50-150	**

Lab Batch #: 754487

Sample: 327689-001 / DL

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/30/09 18:50

### SURROGATE RECOVERY STUDY

Organophosphorus Pesticides by SW846 8141A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Bromo-2-nitrobenzene	U	394000	0	50-150	***

Lab Batch #: 754487

Sample: 327689-004 / DL

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/31/09 10:11

### SURROGATE RECOVERY STUDY

Organophosphorus Pesticides by SW846 8141A	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Bromo-2-nitrobenzene	U	37400000	0	50-150	***

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] =  $100 * A / B$

All results are based on MDL and validated for QC purposes.





## Form 2 - Surrogate Recoveries

Project Name: Railroad Street ER

Work Orders : 327689,

Project ID: TTEMI-05-001-0092

Lab Batch #: 753926

Sample: 526588-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/18/09 15:06

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	16.78	16.67	101	32-145	
Tetrachloro-m-xylene	14.92	16.67	90	11-114	

Lab Batch #: 753926

Sample: 526588-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/18/09 15:06

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	16.23	16.67	97	32-145	
Tetrachloro-m-xylene	13.30	16.67	80	11-114	

Lab Batch #: 753926

Sample: 526588-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/18/09 15:34

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	17.55	16.67	105	32-145	
Tetrachloro-m-xylene	13.18	16.67	79	11-114	

Lab Batch #: 753926

Sample: 526588-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/18/09 15:34

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	16.63	16.67	100	32-145	
Tetrachloro-m-xylene	12.73	16.67	76	11-114	

Lab Batch #: 753926

Sample: 327527-006 S / MS

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/19/09 13:05

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	11.61	16.62	70	32-145	
Tetrachloro-m-xylene	9.262	16.62	56	11-114	

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] =  $100 * A / B$

All results are based on MDL and validated for QC purposes.



## Form 2 - Surrogate Recoveries

Project Name: Railroad Street ER

Work Orders : 327689,

Project ID: TTEMI-05-001-0092

Lab Batch #: 753926

Sample: 327527-006 S / MS

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/19/09 13:05

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	10.02	16.62	60	32-145	
Tetrachloro-m-xylene	10.73	16.62	65	11-114	

Lab Batch #: 753926

Sample: 327527-006 SD / MSD

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/19/09 13:32

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	16.43	16.61	99	32-145	
Tetrachloro-m-xylene	8.645	16.61	52	11-114	

Lab Batch #: 753926

Sample: 327527-006 SD / MSD

Batch: 1 Matrix: Soil

Units: ug/kg

Date Analyzed: 03/19/09 13:32

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	10.56	16.61	64	32-145	
Tetrachloro-m-xylene	9.582	16.61	58	11-114	

Lab Batch #: 753926

Sample: 327689-001 / SMP

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/19/09 14:00

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	28.58	16.57	172	32-145	**
Tetrachloro-m-xylene	10.93	16.57	66	11-114	

Lab Batch #: 753926

Sample: 327689-001 / SMP

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/19/09 14:00

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	4.225	16.57	25	32-145	**
Tetrachloro-m-xylene	15.41	16.57	93	11-114	

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] =  $100 * A / B$

All results are based on MDL and validated for QC purposes.



## Form 2 - Surrogate Recoveries

Project Name: Railroad Street ER

Work Orders : 327689,

Project ID: TTEMI-05-001-0092

Lab Batch #: 753926

Sample: 327689-002 / SMP

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/19/09 14:28

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	52790	238.1	22171	32-145	**
Tetrachloro-m-xylene	<0.0000	238.1	0	11-114	**

Lab Batch #: 753926

Sample: 327689-002 / SMP

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/19/09 14:28

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	1266	238.1	532	32-145	**
Tetrachloro-m-xylene	<0.0000	238.1	0	11-114	**

Lab Batch #: 753926

Sample: 327689-003 / SMP

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/19/09 14:55

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	1087	229.4	474	32-145	**
Tetrachloro-m-xylene	1807	229.4	788	11-114	**

Lab Batch #: 753926

Sample: 327689-003 / SMP

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/19/09 14:55

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	1791	229.4	781	32-145	**
Tetrachloro-m-xylene	<0.0000	229.4	0	11-114	**

Lab Batch #: 753926

Sample: 327689-004 / SMP

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/19/09 15:23

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	163400	225.2	72558	32-145	**
Tetrachloro-m-xylene	<0.0000	225.2	0	11-114	**

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] =  $100 * A / B$

All results are based on MDL and validated for QC purposes.



## Form 2 - Surrogate Recoveries

Project Name: Railroad Street ER

Work Orders : 327689,

Project ID: TTEMI-05-001-0092

Lab Batch #: 753926

Sample: 327689-004 / SMP

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/19/09 15:23

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	37140	225.2	16492	32-145	**
Tetrachloro-m-xylene	<0.0000	225.2	0	11-114	**

Lab Batch #: 753926

Sample: 327689-003 DL / DL

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/23/09 15:34

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	<0.0000	229.4	0	32-145	***
Tetrachloro-m-xylene	<0.0000	229.4	0	11-114	***

Lab Batch #: 753926

Sample: 327689-003 DL / DL

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/23/09 15:34

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	<0.0000	229.4	0	32-145	***
Tetrachloro-m-xylene	<0.0000	229.4	0	11-114	***

Lab Batch #: 753926

Sample: 327689-001 DL / DL

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/24/09 23:12

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	47.45	33.13	143	32-145	
Tetrachloro-m-xylene	26.97	33.13	81	11-114	

Lab Batch #: 753926

Sample: 327689-001 DL / DL

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/24/09 23:12

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	44.47	33.13	134	32-145	
Tetrachloro-m-xylene	26.97	33.13	81	11-114	

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] =  $100 * A / B$

All results are based on MDL and validated for QC purposes.



## Form 2 - Surrogate Recoveries

Project Name: Railroad Street ER

Work Orders : 327689,

Project ID: TTEMI-05-001-0092

Lab Batch #: 753926

Sample: 327689-002 DL / DL

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/24/09 23:40

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	1106	238.1	465	32-145	***
Tetrachloro-m-xylene	<0.0000	238.1	0	11-114	***

Lab Batch #: 753926

Sample: 327689-002 DL / DL

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/24/09 23:40

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	<0.0000	238.1	0	32-145	***
Tetrachloro-m-xylene	<0.0000	238.1	0	11-114	***

Lab Batch #: 753926

Sample: 327689-002 DL2 / DL

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/25/09 00:07

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	<0.0000	238.1	0	32-145	***
Tetrachloro-m-xylene	<0.0000	238.1	0	11-114	***

Lab Batch #: 753926

Sample: 327689-002 DL2 / DL

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/25/09 00:07

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	<0.0000	238.1	0	32-145	***
Tetrachloro-m-xylene	<0.0000	238.1	0	11-114	***

Lab Batch #: 753926

Sample: 327689-002 DL3 / DL

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/25/09 01:30

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	<0.0000	238.1	0	32-145	***
Tetrachloro-m-xylene	<0.0000	238.1	0	11-114	***

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] =  $100 * A / B$

All results are based on MDL and validated for QC purposes.



## Form 2 - Surrogate Recoveries

Project Name: Railroad Street ER

Work Orders : 327689,

Project ID: TTEMI-05-001-0092

Lab Batch #: 753926

Sample: 327689-002 DL3 / DL

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/25/09 01:30

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	<0.0000	238.1	0	32-145	***
Tetrachloro-m-xylene	<0.0000	238.1	0	11-114	***

Lab Batch #: 753926

Sample: 327689-004 DL / DL

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/25/09 01:58

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	<0.0000	225.2	0	32-145	***
Tetrachloro-m-xylene	<0.0000	225.2	0	11-114	***

Lab Batch #: 753926

Sample: 327689-004 DL / DL

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/25/09 01:58

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	<0.0000	225.2	0	32-145	***
Tetrachloro-m-xylene	<0.0000	225.2	0	11-114	***

Lab Batch #: 753926

Sample: 327689-004 DL2 / DL

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/25/09 02:25

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	<0.0000	225.2	0	32-145	***
Tetrachloro-m-xylene	<0.0000	225.2	0	11-114	***

Lab Batch #: 753926

Sample: 327689-004 DL2 / DL

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/25/09 02:25

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	<0.0000	225.2	0	32-145	***
Tetrachloro-m-xylene	<0.0000	225.2	0	11-114	***

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] =  $100 * A / B$

All results are based on MDL and validated for QC purposes.



## Form 2 - Surrogate Recoveries

Project Name: Railroad Street ER

Work Orders : 327689,

Project ID: TTEMI-05-001-0092

Lab Batch #: 753926

Sample: 327689-002 DL4 / DL

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/26/09 11:46

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	<0.0000	238.1	0	32-145	***
Tetrachloro-m-xylene	<0.0000	238.1	0	11-114	***

Lab Batch #: 753926

Sample: 327689-002 DL4 / DL

Batch: 1 Matrix: Solid

Units: ug/kg

Date Analyzed: 03/26/09 11:46

### SURROGATE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Decachlorobiphenyl	<0.0000	238.1	0	32-145	***
Tetrachloro-m-xylene	<0.0000	238.1	0	11-114	***

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] =  $100 * A / B$

All results are based on MDL and validated for QC purposes.



# Blank Spike Recovery



**Project Name: Railroad Street ER**

**Work Order #:** 327689

**Project ID:** TTEMI-05-001-0092

**Lab Batch #:** 753260

**Sample:** 526662-1-BKS

**Matrix:** Solid

**Date Analyzed:** 03/19/2009

**Date Prepared:** 03/17/2009

**Analyst:** VCH

**Reporting Units:** ug/kg

**Batch #:** 1

## BLANK /BLANK SPIKE RECOVERY STUDY

Chlorinated Herbicides by SW-846 8151A  Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
2,4-D	<0.333	167	195	117	10-189	
2,4-Db	<1.67	167	163	98	10-169	
2,4,5-T	<0.167	167	199	119	30-159	
2,4,5-Tp	<0.167	167	186	111	32-140	
Dalapon	<0.167	167	99.3	59	24-147	
Dicamba	<0.167	167	161	96	20-173	
Dichloroprop	<0.333	167	202	121	10-152	
MCPA	<66.7	16700	17000	102	28-137	
MCP	<66.7	16700	17100	102	13-114	

Blank Spike Recovery [D] =  $100 \times [C] / [B]$

All results are based on MDL and validated for QC purposes.



**Project Name: Railroad Street ER**

**Work Order #:** 327689

**Project ID:** TTEMI-05-001-0092

**Lab Batch #:** 753926

**Sample:** 526588-1-BKS

**Matrix:** Solid

**Date Analyzed:** 03/18/2009

**Date Prepared:** 03/17/2009

**Analyst:** VCH

**Reporting Units:** ug/kg

**Batch #:** 1

## BLANK /BLANK SPIKE RECOVERY STUDY

Pesticides by SW-846 8081A Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
4,4-DDD	<3.33	16.7	19.1	114	40-176	
4,4-DDE	<3.33	16.7	18.8	113	45-187	
4,4-DDT	<3.33	16.7	21.3	128	32-178	
Aldrin	<1.67	16.7	17.3	104	45-151	
Alpha-BHC	<1.67	16.7	17.3	104	43-156	
Alpha-Chlordane	<1.67	16.7	19.0	114	66-192	
Beta-BHC	<1.67	16.7	18.0	108	43-155	
Delta-BHC	<1.67	16.7	20.3	122	56-170	
Dieldrin	<3.33	16.7	19.5	117	48-163	
Endosulfan I	<1.67	16.7	19.1	114	57-176	
Endosulfan II	<3.33	16.7	21.0	126	58-159	
Endosulfan Sulfate	<3.33	16.7	28.8	172	29-163	H
Endrin	<3.33	16.7	18.4	110	19-181	
Endrin Aldehyde	<3.33	16.7	21.6	129	35-155	
Endrin Ketone	<3.33	16.7	24.0	144	55-185	
Gamma-BHC (Lindane)	<1.67	16.7	18.0	108	43-159	
Gamma-Chlordane	<1.67	16.7	18.5	111	27-138	
Heptachlor	<1.67	16.7	19.3	116	45-170	
Heptachlor Epoxide	<1.67	16.7	18.6	111	33-163	
Methoxychlor	<16.7	50.0	70.2	140	50-196	

Blank Spike Recovery [D] = 100\*[C]/[B]

All results are based on MDL and validated for QC purposes.



## BS / BSD Recoveries



**Project Name: Railroad Street ER**

**Work Order #:** 327689

**Analyst:** 4150

**Date Prepared:** 03/17/2009

**Project ID:** TTEMI-05-001-0092

**Date Analyzed:** 03/18/2009

**Lab Batch ID:** 753056

**Sample:** 526567-1-BKS

**Batch #:** 1

**Matrix:** Solid

**Units:** mg/kg

### BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Mercury by SW-846 7471A	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
<b>Analytes</b>											
Mercury	<0.0500	0.5000	0.4867	97	0.5	0.4958	99	2	85-115	20	

**Analyst:** JAN

**Date Prepared:** 03/19/2009

**Date Analyzed:** 03/25/2009

**Lab Batch ID:** 754487

**Sample:** 526634-1-BKS

**Batch #:** 1

**Matrix:** Solid

**Units:** ug/kg

### BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Organophosphorus Pesticides by SW846 8141A	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
<b>Analytes</b>											
Atrazine	<16.7	33.3	27.7	83	33.3	22.5	68	21	49-125	25	
azinphos-methyl	<66.7	333	279	84	333	301	90	8	50-150	25	
Chlorpyrifos	<16.7	33.3	23.6	71	33.3	26.8	80	13	75-125	25	L
Diazinon	<16.7	33.3	31.5	95	33.3	24.7	74	24	47-149	25	
Disulfoton	<16.7	33.3	34.3	103	33.3	35.7	107	4	50-150	25	
Ethion	<16.7	33.3	38.2	115	33.3	42.4	127	10	75-125	25	H
Fenthion	<16.7	33.3	32.1	96	33.3	36.1	108	12	25-125	25	
Malathion	<16.7	33.3	22.4	67	33.3	26.0	78	15	25-125	25	
Parathion, Ethyl	<16.7	33.3	34.2	103	33.3	39.6	119	15	45-130	25	
Parathion, Methyl	<16.7	33.3	28.0	84	33.3	26.4	79	6	45-130	25	
Simazine	<66.7	33.3	17.6	53	33.3	14.4	43	20	50-150	25	L
stirophos	<16.7	33.3	30.4	91	33.3	33.0	99	8	50-150	50	

Relative Percent Difference RPD =  $200 * |(C-F)/(C+F)|$

Blank Spike Recovery [D] =  $100 * (C)/[B]$

Blank Spike Duplicate Recovery [G] =  $100 * (F)/[E]$

All results are based on MDL and Validated for QC Purposes



## BS / BSD Recoveries



**Project Name: Railroad Street ER**

**Work Order #:** 327689

**Analyst:** 4150

**Date Prepared:** 03/17/2009

**Project ID:** TTEMI-05-001-0092

**Date Analyzed:** 03/18/2009

**Lab Batch ID:** 753079

**Sample:** 526568-1-BKS

**Batch #:** 1

**Matrix:** Solid

**Units:** mg/kg

### BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TAL Metals by SW-846 6010B	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Aluminum	<500	900	888	99	900	920	102	4	75-125	20	
Antimony	<5.00	100	98.8	99	100	102	102	3	75-125	20	
Arsenic	<5.00	100	95.1	95	100	97.8	98	3	75-125	20	
Barium	<5.00	100	99.1	99	100	102	102	3	75-125	20	
Beryllium	<0.300	100	97.9	98	100	101	101	3	75-125	20	
Cadmium	<0.500	100	98.3	98	100	101	101	3	75-125	20	
Calcium	<500	900	905	101	900	934	104	3	75-125	20	
Chromium	<5.00	100	101	101	100	104	104	3	75-125	20	
Cobalt	<1.00	100	97.6	98	100	100	100	2	75-125	20	
Copper	<5.00	100	100	100	100	102	102	2	75-125	20	
Iron	<500	900	883	98	900	916	102	4	75-125	20	
Lead	<5.00	100	97.5	98	100	100	100	3	75-125	20	
Magnesium	<500	900	896	100	900	938	104	5	75-125	20	
Manganese	<5.00	100	98.3	98	100	101	101	3	75-125	20	
Nickel	<5.00	100	98.7	99	100	101	101	2	75-125	20	
Potassium	<500	1800	1700	94	1800	1770	98	4	75-125	20	
Selenium	<5.00	100	96.9	97	100	100	100	3	75-125	20	
Silver	<5.00	100	96.0	96	100	98.0	98	2	75-125	20	
Sodium	<500	900	999	111	900	1040	116	4	75-125	20	
Thallium	<5.00	100	99.6	100	100	101	101	1	75-125	20	

Relative Percent Difference RPD =  $200 * |(C-F)/(C+F)|$

Blank Spike Recovery [D] =  $100 * (C)/[B]$

Blank Spike Duplicate Recovery [G] =  $100 * (F)/[E]$

All results are based on MDL and Validated for QC Purposes



## BS / BSD Recoveries



**Project Name: Railroad Street ER**

**Work Order #: 327689**

**Analyst: 4150**

**Date Prepared: 03/17/2009**

**Project ID: TTEMI-05-001-0092**

**Date Analyzed: 03/18/2009**

**Lab Batch ID: 753079**

**Sample: 526568-1-BKS**

**Batch #: 1**

**Matrix: Solid**

**Units: mg/kg**

TAL Metals by SW-846 6010B	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Vanadium	<1.00	100	101	101	100	103	103	2	75-125	20	
Zinc	<100	100	102	102	100	103	103	1	75-125	20	

Relative Percent Difference RPD =  $200 * |(C-F)/(C+F)|$

Blank Spike Recovery [D] =  $100 * (C)/[B]$

Blank Spike Duplicate Recovery [G] =  $100 * (F)/[E]$

All results are based on MDL and Validated for QC Purposes



# Form 3 - MS / MSD Recoveries



**Project Name: Railroad Street ER**

**Work Order # :** 327689

**Project ID:** TTEMI-05-001-0092

**Lab Batch ID:** 753260

**QC- Sample ID:** 327527-006 S

**Batch #:** 1 **Matrix:** Soil

**Date Analyzed:** 03/19/2009

**Date Prepared:** 03/17/2009

**Analyst:** VCH

**Reporting Units:** ug/kg

Reporting Units: ug/kg			MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
Chlorinated Herbicides by SW-846 8151A			Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Col	Analytes												
2	2,4-D		<0.446	223	216	97	223	233	104	8	10-189	25	
2	2,4-Db		<2.23	223	207	93	223	175	78	17	10-169	25	
1	2,4,5-T		<0.223	223	229	103	223	224	100	2	30-159	25	
1	2,4,5-Tp		<0.223	223	235	105	223	206	92	13	32-140	25	
1	Dalapon		<0.223	223	145	65	223	156	70	7	24-147	25	
1	Dicamba		<0.223	223	212	95	223	188	84	12	20-173	25	
1	Dichloroprop		<0.446	223	204	91	223	199	89	2	10-152	25	
2	MCPA		<89.3	22300	15500	70	22300	17900	80	14	28-137	25	
2	MCPD		<89.3	22300	23300	104	22300	24400	109	5	13-114	25	

**Lab Batch ID:** 753056

**QC- Sample ID:** 327527-006 S

**Batch #:** 1 **Matrix:** Soil

**Date Analyzed:** 03/18/2009

**Date Prepared:** 03/17/2009

**Analyst:** 4150

**Reporting Units:** mg/kg

Reporting Units: mg/kg		MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
Mercury by SW-846 7471A		Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Mercury		0.1297	0.6728	0.7462	92	0.6728	0.7465	92	0	85-115	20	

Matrix Spike Percent Recovery [D] = 100\*(C-A)/B  
Relative Percent Difference RPD = 200\*|(C-F)/(C+F)|

Matrix Spike Duplicate Percent Recovery [G] = 100\*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not

ApplicableN = See Narrative, EQL = Estimated Quantitation Limit



# Form 3 - MS / MSD Recoveries



**Project Name: Railroad Street ER**

**Work Order # :** 327689

**Project ID:** TTEMI-05-001-0092

**Lab Batch ID:** 753926

**QC- Sample ID:** 327527-006 S

**Batch #:** 1 **Matrix:** Soil

**Date Analyzed:** 03/19/2009

**Date Prepared:** 03/17/2009

**Analyst:** VCH

**Reporting Units:** ug/kg

		MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
Pesticides by SW-846 8081A		Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Col	Analytes											
2	4,4-DDD	<4.48	22.4	29.1	130	22.3	76.9	345	90	40-176	30	XF
2	4,4-DDE	208	22.4	174	0	22.3	180	0	3	45-187	30	X
1	Aldrin	<2.24	22.4	18.2	81	22.3	17.5	78	4	45-151	30	
2	Alpha-Chlordane	<2.24	22.4	20.8	93	22.3	18.4	83	12	66-192	30	
1	Beta-BHC	<2.24	22.4	19.4	87	22.3	15.1	68	25	43-155	30	
1	Delta-BHC	<2.24	22.4	18.9	84	22.3	17.2	77	9	56-170	30	
2	Dieldrin	<4.48	22.4	17.0	76	22.3	19.0	85	11	48-163	30	
1	Endosulfan I	<2.24	22.4	21.1	94	22.3	24.3	109	14	57-176	30	
2	Endosulfan II	<4.48	22.4	40.9	183	22.3	40.5	182	1	58-159	30	X
2	Endosulfan Sulfate	<4.48	22.4	16.2	72	22.3	18.6	83	14	29-163	30	
2	Endrin	<4.48	22.4	21.6	96	22.3	22.1	99	2	19-181	30	
1	Endrin Aldehyde	<4.48	22.4	19.8	88	22.3	23.7	106	18	35-155	30	

Matrix Spike Percent Recovery [D] = 100\*(C-A)/B  
Relative Percent Difference RPD = 200\*|(C-F)/(C+F)|

Matrix Spike Duplicate Percent Recovery [G] = 100\*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable  
N = See Narrative, EQL = Estimated Quantitation Limit



# Form 3 - MS / MSD Recoveries



**Project Name: Railroad Street ER**

**Work Order # :** 327689

**Project ID:** TTEMI-05-001-0092

**Lab Batch ID:** 753079

**QC- Sample ID:** 327527-006 S

**Batch #:** 1 **Matrix:** Soil

**Date Analyzed:** 03/18/2009

**Date Prepared:** 03/17/2009

**Analyst:** 4150

**Reporting Units:** mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY											
TAL Metals by SW-846 6010B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Aluminum	13900	1160	21500	655	1160	21300	638	1	75-125	20	X
Antimony	<6.47	129	91.3	71	129	95.4	74	4	75-125	20	X
Arsenic	<6.47	129	131	102	129	133	103	2	75-125	20	
Barium	75.7	129	204	99	129	207	102	1	75-125	20	
Beryllium	<0.388	129	129	100	129	129	100	0	75-125	20	
Cadmium	3.12	129	130	98	129	131	99	1	75-125	20	
Calcium	1830	1160	3200	118	1160	3270	124	2	75-125	20	
Chromium	17.7	129	150	103	129	148	101	1	75-125	20	
Cobalt	5.03	129	131	98	129	132	98	1	75-125	20	
Copper	12.8	129	144	102	129	146	103	1	75-125	20	
Iron	19700	1160	20100	34	1160	22500	241	11	75-125	20	X
Lead	51.3	129	179	99	129	181	101	1	75-125	20	
Magnesium	2270	1160	3470	103	1160	3520	108	1	75-125	20	
Manganese	383	129	528	112	129	542	123	3	75-125	20	
Nickel	<6.47	129	135	105	129	136	105	1	75-125	20	
Potassium	2260	2330	4960	116	2330	5060	120	2	75-125	20	
Selenium	<6.47	129	128	99	129	129	100	1	75-125	20	
Silver	<6.47	129	120	93	129	121	94	1	75-125	20	
Sodium	<6.47	1160	1150	99	1160	1160	100	1	75-125	20	
Thallium	<6.47	129	105	81	129	105	81	0	75-125	20	
Vanadium	37.8	129	168	101	129	170	102	1	75-125	20	
Zinc	336	129	482	113	129	530	150	9	75-125	20	X

Matrix Spike Percent Recovery  $[D] = 100 * (C - A) / B$   
Relative Percent Difference  $RPD = 200 * |(C - F) / (C + F)|$

Matrix Spike Duplicate Percent Recovery  $[G] = 100 * (F - A) / E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not

ApplicableN = See Narrative, EQL = Estimated Quantitation Limit

**Project Name: Railroad Street ER**

**Work Order #:** 327689

**Lab Batch #:** 753056

**Date Analyzed:** 03/18/2009

**QC- Sample ID:** 327527-006 D

**Reporting Units:** mg/kg

**Project ID:** TTEMI-05-001-0092

**Analyst:** 4150

**Date Prepared:** 03/17/2009

**Batch #:** 1

**Matrix:** Soil

## SAMPLE / SAMPLE DUPLICATE RECOVERY

Mercury by SW-846 7471A	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Mercury	0.1297	0.1183	9	20	

**Lab Batch #:** 753079

**Date Analyzed:** 03/18/2009

**QC- Sample ID:** 327527-006 D

**Reporting Units:** mg/kg

**Date Prepared:** 03/17/2009

**Analyst:** 4150

**Batch #:** 1

**Matrix:** Soil

## SAMPLE / SAMPLE DUPLICATE RECOVERY

TAL Metals by SW-846 6010B	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Aluminum	13900	14300	3	20	
Antimony	<6.47	<6.47	NC	20	
Arsenic	<6.47	<6.47	NC	20	
Barium	75.7	77.5	2	20	
Beryllium	<0.388	<0.388	NC	20	
Cadmium	3.12	3.25	4	20	
Calcium	1830	1950	6	20	
Chromium	17.7	21.0	17	20	
Cobalt	5.03	5.30	5	20	
Copper	12.8	13.2	3	20	
Iron	19700	20000	2	20	
Lead	51.3	51.8	1	20	
Magnesium	2270	2280	0	20	
Manganese	383	406	6	20	
Nickel	<6.47	<6.47	NC	20	
Potassium	2260	2260	0	20	
Selenium	<6.47	<6.47	NC	20	
Silver	<6.47	<6.47	NC	20	
Sodium	<647	<647	NC	20	
Thallium	<6.47	<6.47	NC	20	
Vanadium	37.8	38.5	2	20	
Zinc	336	353	5	20	

Spike Relative Difference RPD  $200 * |(B-A)/(B+A)|$   
 All Results are based on MDL and validated for QC purposes.



**Blank Summary****327689****Tetra Tech EM, Atlanta, Duluth, GA**

Railroad Street ER

Sample Id: 526567-1-BLK		Matrix: SOLID					
Lab Sample Id: 526567-1-BLK							
Analytical Method: Mercury by SW-846 7471A				Prep Method: SW7471P			
Date Analyzed: Mar-18-09 11:13		Analyst: 4150		Date Prep: Mar-17-09 18:12		Tech: ABA	
Seq Number: 753056							
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Mercury	7439-97-6	U	0.0500	0.0030	mg/kg	U	1

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Street ER

Sample Id: 526568-1-BLK

Matrix: SOLID

Lab Sample Id: 526568-1-BLK

Analytical Method: TAL Metals by SW-846 6010B

Prep Method: SW3050B

Date Analyzed: Mar-18-09 16:22

Analyst: 4150

Date Prep: Mar-17-09 18:15

Tech: ABA

Seq Number: 753079

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Aluminum	7429-90-5	U	500	0.432	mg/kg	U	1
Antimony	7440-36-0	U	5.00	0.673	mg/kg	U	1
Arsenic	7440-38-2	U	5.00	0.617	mg/kg	U	1
Barium	7440-39-3	U	5.00	0.153	mg/kg	U	1
Beryllium	7440-41-7	U	0.300	0.007	mg/kg	U	1
Cadmium	7440-43-9	U	0.500	0.021	mg/kg	U	1
Calcium	7440-70-2	U	500	2.00	mg/kg	U	1
Chromium	7440-47-3	U	5.00	0.096	mg/kg	U	1
Cobalt	7440-48-4	U	1.00	0.092	mg/kg	U	1
Copper	7440-50-8	U	5.00	0.051	mg/kg	U	1
Iron	7439-89-6	U	500	0.550	mg/kg	U	1
Lead	7439-92-1	U	5.00	0.300	mg/kg	U	1
Magnesium	7439-95-4	U	500	0.090	mg/kg	U	1
Manganese	7439-96-5	U	5.00	0.081	mg/kg	U	1
Nickel	7440-02-0	U	5.00	0.157	mg/kg	U	1
Potassium	2133-26-8	U	500	0.300	mg/kg	U	1
Selenium	7782-49-2	U	5.00	0.956	mg/kg	U	1
Silver	7440-22-4	U	5.00	0.047	mg/kg	U	1
Sodium	7440-23-5	U	500	68.7	mg/kg	U	1
Thallium	7440-28-0	U	5.00	0.210	mg/kg	U	1
Vanadium	7440-62-2	0.060	1.00	0.027	mg/kg		1
Zinc	7440-66-6	U	100	0.256	mg/kg	U	1

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Street ER

Sample Id: 526588-1-BLK

Matrix: SOLID

Lab Sample Id: 526588-1-BLK

Analytical Method: Pesticides by SW-846 8081A

Prep Method: SW3545

Date Analyzed: Mar-18-09 15:06

Analyst: VCH

Date Prep: Mar-17-09 15:00

Tech: 4118

Seq Number: 753926

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
4,4-DDD	72-54-8	1.06	3.33	0.183	ug/kg		1
4,4-DDE	72-55-9	0.403	3.33	0.181	ug/kg		1
4,4-DDT	50-29-3	1.71	3.33	0.297	ug/kg		1
Aldrin	309-00-2	U	1.67	0.105	ug/kg	U	1
Alpha-BHC	319-84-6	U	1.67	0.087	ug/kg	U	1
Alpha-Chlordane	5103-71-9	U	1.67	0.143	ug/kg	U	1
Beta-BHC	319-85-7	U	1.67	0.173	ug/kg	U	1
Chlordane	57-74-9	U	16.7	4.65	ug/kg	U	1
Delta-BHC	319-86-8	0.773	1.67	0.194	ug/kg		1
Dieldrin	60-57-1	U	3.33	0.168	ug/kg	U	1
Endosulfan I	959-98-8	U	1.67	0.136	ug/kg	U	1
Endosulfan II	33213-65-9	U	3.33	0.170	ug/kg	U	1
Endosulfan Sulfate	1031-07-8	0.570	3.33	0.222	ug/kg		1
Endrin	72-20-8	U	3.33	0.168	ug/kg	U	1
Endrin Aldehyde	7421-93-4	U	3.33	0.232	ug/kg	U	1
Endrin Ketone	53494-70-5	U	3.33	0.188	ug/kg	U	1
Gamma-BHC (Lindane)	58-89-9	U	1.67	0.093	ug/kg	U	1
Gamma-Chlordane	5103-74-2	U	1.67	0.281	ug/kg	U	1
Heptachlor	76-44-8	U	1.67	0.192	ug/kg	U	1
Heptachlor Epoxide	1024-57-3	U	1.67	0.093	ug/kg	U	1
Methoxychlor	72-43-5	U	16.7	1.13	ug/kg	U	1
Toxaphene	8001-35-2	U	66.7	14.1	ug/kg	U	1

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Street ER

Sample Id: 526634-1-BLK

Matrix: SOLID

Lab Sample Id: 526634-1-BLK

Analytical Method: Organophosphorus Pesticides by SW846 8141A

Prep Method: SW3550

Date Analyzed: Mar-24-09 23:32

Analyst: JAN

Date Prep: Mar-19-09 08:14

Tech: MAZ

Seq Number: 754487

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
o,o,o,o-Tetra-n-Propyl Dithiopyrophosphate	3244-90-4	U	4.00	1.67	ug/kg	U	1
Atrazine		U	16.7	8.33	ug/kg	U	1
Azinphos-ethyl	2642-71-9	U	66.7	6.00	ug/kg	U	1
azinphos-methyl	86-50-0	U	66.7	13.7	ug/kg	U	1
Bolstar	35400-43-2	U	16.7	4.00	ug/kg	U	1
Chlorfenyphos		U	16.7	2.30	ug/kg	U	1
Chlorpyrifos	2921-88-2	U	16.7	2.10	ug/kg	U	1
Chlorpyrifos methyl	5598-13-0	U	16.7	1.97	ug/kg	U	1
Coumaphos	56-72-4	U	50.0	7.00	ug/kg	U	1
Crotoxyphos	7700-17-6	U	16.7	2.60	ug/kg	U	1
Demeton-O	298-03-3	U	16.7	1.37	ug/kg	U	1
Demeton-S	126-75-0	U	16.7	2.07	ug/kg	U	1
Diazinon	333-41-5	U	16.7	2.03	ug/kg	U	1
Dichlorofenthion	97-17-6	U	16.7	2.37	ug/kg	U	1
Dichlorvos	62-73-7	U	16.7	2.50	ug/kg	U	1
Dimethoate	60-51-5	U	16.7	8.33	ug/kg	U	1
Dioxathion	78-34-2	U	16.7	4.67	ug/kg	U	1
Disulfoton	298-04-4	U	16.7	7.00	ug/kg	U	1
EPN (Ent)	2104-64-5	U	16.7	2.67	ug/kg	U	1
Ethion	563-12-2	U	16.7	7.33	ug/kg	U	1
Ethoprop	13194-48-4	U	16.7	8.33	ug/kg	U	1
Famphur	52-85-7	U	16.7	6.00	ug/kg	U	1
Fenithrothion		U	16.7	2.10	ug/kg	U	1
Fenthion	55-38-9	U	16.7	2.47	ug/kg	U	1
Fonophos		U	16.7	6.33	ug/kg	U	1
Leptophos	21609-90-5	U	16.7	1.53	ug/kg	U	1
Malathion	121-75-5	U	16.7	2.20	ug/kg	U	1
Merphos	150-50-5	U	16.7	3.00	ug/kg	U	1
Mevinphos	7786-34-7	U	16.7	6.33	ug/kg	U	1
Monocrotophos		U	16.7	9.00	ug/kg	U	1
Naled	300-76-5	U	16.7	9.33	ug/kg	U	1
Parathion, Ethyl	56-38-2	U	16.7	1.50	ug/kg	U	1
Parathion, Methyl	298-00-0	U	16.7	5.00	ug/kg	U	1
Phorate	298-02-2	U	16.7	10.0	ug/kg	U	1
Phosmet	732-11-6	U	4.00	1.67	ug/kg	U	1
Phosphamidon	13171-21-6	U	16.7	7.00	ug/kg	U	1
Simazine	SW8141A	U	66.7	13.7	ug/kg	U	1
stirophos	22248-79-9	U	16.7	7.00	ug/kg	U	1
Sulfotep	3689-24-5	U	16.7	5.33	ug/kg	U	1
TEPP	21646-99-1	U	16.7	10.0	ug/kg	U	1
Thionazin		U	16.7	4.67	ug/kg	U	1

**Blank Summary****327689****Tetra Tech EM, Atlanta, Duluth, GA**

Railroad Street ER

Sample Id: **526634-1-BLK**Matrix: **SOLID**Lab Sample Id: **526634-1-BLK****Analytical Method: Organophosphorus Pesticides by SW846 8141A**

Prep Method: SW3550

Date Analyzed: Mar-24-09 23:32

Analyst: JAN

Date Prep: Mar-19-09 08:14

Tech: MAZ

Seq Number: 754487

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Tokuthion	34643-46-4	U	16.7	1.80	ug/kg	U	1
Trichlorfon	52-68-9	U	60.0	60.0	ug/kg	U	1
Trichloronate	327-98-0	U	16.7	1.83	ug/kg	U	1

## Tetra Tech EM, Atlanta, Duluth, GA

Railroad Street ER

Sample Id: <b>526662-1-BLK</b>	Matrix: <b>SOLID</b>
Lab Sample Id: <b>526662-1-BLK</b>	

Analytical Method: Chlorinated Herbicides by SW-846 8151A				Prep Method: SW8151A_EXT			
Date Analyzed: Mar-19-09 17:38		Analyst: VCH		Date Prep: Mar-17-09 15:00		Tech: 4118	
Seq Number: 753260							
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
2,4-D	94-75-7	U	0.333	0.046	ug/kg	U	1
2,4-Db	94-82-6	U	1.67	0.101	ug/kg	U	1
2,4,5-T	93-76-5	U	0.167	0.057	ug/kg	U	1
2,4,5-Tp	93-72-1	U	0.167	0.032	ug/kg	U	1
Dalapon	75-99-0	U	0.167	0.073	ug/kg	U	1
Dicamba	1918-00-9	U	0.167	0.037	ug/kg	U	1
Dichloroprop	120-36-5	U	0.333	0.022	ug/kg	U	1
MCPA	94-74-6	U	66.7	12.6	ug/kg	U	1
MCPD	93-65-2	U	66.7	3.42	ug/kg	U	1



ANALYTICAL ENVIRONMENTAL SERVICES, INC  
3785 Presidential Parkway, Atlanta GA 30340-3704  
AES TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

# CHAIN OF CUSTODY

Work Order: **327689**

Date: **3-17-09** Page **1** of **1**

COMPANY: <b>Tetra Tech Em Inc.</b>		ADDRESS: <b>1955 Evergreen Blvd. Bldg 200, Ste 300 Duluth, GA 30096</b>		PHONE: <b>(678) 775-3104</b>		FAX: <b>(678) 775-3138</b>		SIGNED BY: <b>Brian Craft / Brandon Foskey</b>		SIGNATURE: <i>Brian Craft</i>				
#	SAMPLE ID	SAMPLED		Grab	Composite	Matrix (See codes)	ANALYSIS REQUESTED						REMARKS	No # of Containers
		DATE	TIME				DO Pesticides	Triazine Herbicides	Chlorinated Herbicides	N-methyl/carbamate	TAL Metals	Mercury		
1	WS-04	3-17-09	1045	X		WASTE	X	X	X	X			fertilizer test sample	5
2	WS-05	3-17-09	1130	X		WASTE	X	X	X	X			DDT (donor)	5
3	WS-06	3-17-09	1140	X		WASTE	X	X	X	X			Captan (donor)	5
4	S-04	3-16-09	1445		X	SOIL	X	X	X	X				4
5														
6														
7														
8														
9														
10														
11														
12														
13														
14														

RELINQUISHED BY: <i>Brian Craft</i>	DATE/TIME <b>3-17-09/1410</b>	RECEIVED BY: <i>Dario Lagunas</i>	DATE/TIME <b>3/17/09 1410</b>
PROJECT NAME: <b>Railroad Street ER</b>		PROJECT #: <b>ITEM-05-001-0092</b>	
SITE ADDRESS: <b>Harcourt, GA</b>		SEND REPORT TO: <b>Jessica Vickers</b>	
INVOICE TO: (IF DIFFERENT FROM ABOVE) <b>Same as above</b>		QUOTE #: <b>PO#:</b>	
SHIPMENT METHOD OUT / / VIA: IN / / VIA: CLIENT FedEx UPS MAIL COURIER GREYHOUND OTHER		TURNAROUND TIME REQUEST Standard 5 Business Days 2 Business Day Rush Next Business Day Rush Same Day Rush (auth req.) Other	
SPECIAL INSTRUCTIONS/COMMENTS:		STATE PROGRAM (if any): E-mail? Y / N; Fax? Y / N DATA PACKAGE: I II III IV	

SAMPLES RECEIVED AFTER 3PM OR SATURDAY ARE CONSIDERED AS RECEIVED ON THE NEXT BUSINESS DAY; IF NO TAT IS MARKED ON COC AES WILL PROCEED AS STANDARD TAT.  
SAMPLES ARE DISPOSED OF 30 DAYS AFTER COMPLETION OF REPORT UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)  
PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client



## Prelogin/Nonconformance Report- Sample Log-In

Client:

Tetra Tech.

Date/ Time:

03/17/09 14:10

Lab ID #:

327689

Initials:

DL

## Sample Receipt Checklist

#1 Temperature of cooler?					° C
#2 Shipping container in good condition?	<u>YES</u>	No	None		
#3 Samples received on ice?	<u>YES</u>	No	N/A	Blue/Water	
#4 Custody Seals intact on shipping container/ cooler?	Yes	No	<u>N/A</u>		
#5 Custody Seals intact on sample bottles/ container?	Yes	No	<u>N/A</u>		
#6 Chain of Custody present?	<u>YES</u>	No			
#7 Sample instructions complete of Chain of Custody?	<u>YES</u>	No			
#8 Any missing/extra samples?	Yes	<u>NO</u>			
#9 Chain of Custody signed when relinquished/ received?	<u>YES</u>	No			
#10 Chain of Custody agrees with sample label(s)?	<u>YES</u>	No			
#11 Container label(s) legible and intact?	<u>YES</u>	No			
#12 Sample matrix/ properties agree with Chain of Custody?	<u>YES</u>	No			
#13 Samples in proper container/ bottle?	<u>YES</u>	No			
#14 Samples properly preserved?	YES	No	<u>N/A</u>		
#15 Sample container(s) intact?	<u>YES</u>	No			
#16 Sufficient sample amount for indicated test(s)?	<u>YES</u>	No			
#17 All samples received within sufficient hold time?	<u>YES</u>	No			
#18 Subcontract of sample(s)?	Yes	<u>NO</u>			
#19 VOC samples have zero headspace?	YES	No	<u>N/A</u>		

## Nonconformance Documentation

Contact: \_\_\_\_\_ Contacted by: \_\_\_\_\_ Date/ Time: \_\_\_\_\_

Regarding: \_\_\_\_\_

Corrective Action Taken:

Check all that Apply:

☐  
☐Client understands and would like to proceed with analysis  
Cooling process had begun shortly after sampling event



## Subcontract Data

Performed by

Data/Analysis Technologies, Inc.  
7715 Corporate Boulevard.  
Plain City, OH 43064  
Contact: Ronald K. Mitchum, Ph.D.  
(614) 873-0710

DAT Project ID: 0309041

# Data Analysis Technologies, Inc.

7715 Corporate Boulevard  
Plain City, OH 43064  
NELAP/NELAC Certification 03027

## Sample Analysis Certificate

Client: FTS/Xenco  
Address: 6017 Financial Dr.  
Norcross, GA 30071

Date: 3/30/2009  
Project ID: 0309041  
Sample Date: 3/17/2009  
Date Received: 3/19/2009  
Analyst: RKM/CSM

Attn: Eben Buchanan  
Project: 327527-Railroad Drum Site-TTEMI-05-001-0091


---

**Analysis:** Captan- Method 8270- GC/MS  
Carbamates- Method 8322 PBM Carbamates-LC/MS

**Results:** See attached summary tables. All values are reported at the reporting limit.

**QA/QC:** Met method criteria.

Reviewed and approved for release by: \_\_\_\_\_

  
President, DAT Inc.

Date: 3/30/09

Data Analysis Technologies, Inc.  
7715 Corporate Boulevard  
Plain City, OH 43064

## Sample Analysis Certificate

### Method 8322 PBM Carbamates

<b>Client:</b>	FTS/Xenco	<b>Lab Project #:</b>	0309041
<b>Client ID:</b>	WS-04	<b>Lab Sample ID:</b>	0309041-1
		<b>Date Sampled:</b>	3/17/09
		<b>Date Received:</b>	3/19/09
<b>Matrix:</b>	Semi-solid		
<b>Extract Volume (mls)</b>	50.0	<b>Date Ext:</b>	3/24/09
<b>Sample wt/vol(g/ml)</b>	0.2296	<b>Date Anal:</b>	3/26/09
<b>Dilution factor</b>	1		

Analyte:	mg/kg(mg/L)	PQL Q
Aldicarb Sulfone	ND	2.18
Aldicarb Sulfoxide	ND	2.18
Oxamyl	ND	2.18
Methomyl	ND	2.18
3-Hydroxycarbofuran	ND	2.18
Aldicarb	ND	2.18
Propoxur	ND	2.18
Carbofuran	ND	2.18
Carbaryl	0.184	2.18 J
Methiocarb	0.003	2.18 J

Surrogate Recovery	% Rec
Tubuthiuron	93

PQL =Practical quantitation limit.  
ND = Not detected at the limit shown.  
J=Below the lowest calibration point

**Captan/8270**

Misc Info	WS-04
Matrix	Soild
Sample Name	0309041-1
Date Acquired	3/27/2009 12:09
Data File Name	03260920.D
Sample Amount (g)	5.0000
Dilution Factor	1.0
Extract Volume (mL)	1.0
Sample Type	S

<u>Name</u>	<u>Concentration (g/Kg)</u>	<u>RL (mg/Kg) Q</u>
Captan	0.00	0.80 ND

<u>Surrogate</u>	<u>%R</u>
Phenol-d5(surr)	54.2
2-fluorophenol(surr)	56.6
Nitrobenzene-d5(surr)	85.0
2-Fluorobiphenyl(surr)	77.1
2,4,6-Tribromophenol(surr)	96.3
Terphenyl-d14(surr)	77.7

ND = Not detected at the reporting limit

E= Exceeded the highest calibration point - use a dilution value

J= Value exceeded the lowest calibration point - It is an estimate

Data Analysis Technologies, Inc.  
7715 Corporate Boulevard  
Plain City, OH 43064

## Sample Analysis Certificate

### Method 8322 PBM Carbamates

<b>Client:</b>	FTS/Xenco	<b>Lab Project #:</b>	0309041
<b>Client ID:</b>	WS-05	<b>Lab Sample ID:</b>	0309041-2
		<b>Date Sampled:</b>	3/17/09
		<b>Date Received:</b>	3/19/09
<b>Matrix:</b>	Solid		
<b>Extract Volume (mls)</b>	50.0	<b>Date Ext:</b>	3/24/09
<b>Sample wt/vol(g/ml)</b>	0.0497	<b>Date Anal:</b>	3/26/09
<b>Dilution factor</b>	1		

Analyte:	mg/kg(mg/L)	PQL Q
Aldicarb Sulfone	ND	10.06
Aldicarb Sulfoxide	ND	10.06
Oxamyl	ND	10.06
Methomyl	ND	10.06
3-Hydroxycarbofuran	ND	10.06
Aldicarb	ND	10.06
Propoxur	ND	10.06
Carbofuran	ND	10.06
Carbaryl	ND	10.06
Methiocarb	ND	10.06

Surrogate Recovery	% Rec
Tubuthiuron	10

PQL = Practical quantitation limit.  
ND = Not detected at the limit shown.  
J=Below the lowest calibration point

Data Analysis Technologies, Inc.  
7715 Corporate Boulevard  
Plain City, OH 43064

## Sample Analysis Certificate

### Method 8322 PBM Carbamates

<b>Client:</b>	FTS/Xenco	<b>Lab Project #:</b>	0309041
<b>Client ID:</b>	WS-05	<b>Lab Sample ID:</b>	0309041-2 dup
		<b>Date Sampled:</b>	3/17/09
		<b>Date Received:</b>	3/19/09
<b>Matrix:</b>	Solid		
<b>Extract Volume (mls)</b>	50.0	<b>Date Ext:</b>	3/24/09
<b>Sample wt/vol(g/ml)</b>	0.0497	<b>Date Anal:</b>	3/26/09
<b>Dilution factor</b>	1		

Analyte:	mg/kg(mg/L)	PQL Q
Aldicarb Sulfone	ND	10.06
Aldicarb Sulfoxide	ND	10.06
Oxamyl	ND	10.06
Methomyl	ND	10.06
3-Hydroxycarbofuran	ND	10.06
Aldicarb	ND	10.06
Propoxur	ND	10.06
Carbofuran	ND	10.06
Carbaryl	ND	10.06
Methiocarb	ND	10.06

Surrogate Recovery	% Rec
Tubuthiuron	19

PQL =Practical quantitation limit.  
ND = Not detected at the limit shown.  
J=Below the lowest calibration point

**Captan/8270**

Misc Info	WS-05
Matrix	Soild
Sample Name	0309041-2
Date Acquired	3/27/2009 7:02
Data File Name	03260918.D
Sample Amount (g)	0.0497
Dilution Factor	1.0
Extract Volume (mL)	50.0
Sample Type	S

<u>Name</u>	<u>Concentration (g/Kg)</u>	<u>RL (mg/Kg) Q</u>
Captan	0.00	4024.14 ND

<u>Surrogate</u>	<u>%R</u>
Phenol-d5(surr)	102.6
2-fluorophenol(surr)	95.8
Nitrobenzene-d5(surr)	97.0
2-Fluorobiphenyl(surr)	91.0
2,4,6-Tribromophenol(surr)	83.3
Terphenyl-d14(surr)	91.1

ND = Not detected at the reporting limit

E= Exceeded the highest calibration point - use a dilution value

J= Value exceeded the lowest calibration point - It is an estimate

Data Analysis Technologies, Inc.  
7715 Corporate Boulevard  
Plain City, OH 43064

## Sample Analysis Certificate

### Method 8322 PBM Carbamates

<b>Client:</b>	FTS/Xenco	<b>Lab Project #:</b>	0309041
<b>Client ID:</b>	WS-06	<b>Lab Sample ID:</b>	0309041-3
		<b>Date Sampled:</b>	3/17/09
		<b>Date Received:</b>	3/19/09
<b>Matrix:</b>	Solid Product		
<b>Extract Volume (mls)</b>	50.0	<b>Date Ext:</b>	3/24/09
<b>Sample wt/vol(g/ml)</b>	0.0515	<b>Date Anal:</b>	3/26/09
<b>Dilution factor</b>	1		

Analyte:	mg/kg(mg/L)	PQL Q
Aldicarb Sulfone	ND	9.71
Aldicarb Sulfoxide	ND	9.71
Oxamyl	ND	9.71
Methomyl	ND	9.71
3-Hydroxycarbofuran	ND	9.71
Aldicarb	ND	9.71
Propoxur	ND	9.71
Carbofuran	ND	9.71
Carbaryl	0.777	9.71 J
Methiocarb	ND	9.71

Surrogate Recovery	% Rec
Tubuthiuron	35

PQL =Practical quantitation limit.  
ND = Not detected at the limit shown.  
J=Below the lowest calibration point



**Captan/8270**

Misc Info	WS-05
Matrix	Soild
Sample Name	0309041-2 10x
Date Acquired	3/27/2009 3:46
Data File Name	03260914.D
Sample Amount (g)	0.0497
Dilution Factor	10.0
Extract Volume (mL)	50.0
Sample Type	S

<u>Name</u>	<u>Concentration (g/Kg)</u>	<u>RL (mg/Kg) Q</u>
Captan	0.00	4024.14 ND

<u>Surrogate</u>	<u>%R</u>
Phenol-d5(surr)	106.1
2-fluorophenol(surr)	108.6
Nitrobenzene-d5(surr)	101.4
2-Fluorobiphenyl(surr)	86.2
2,4,6-Tribromophenol(surr)	89.6
Terphenyl-d14(surr)	82.0

ND = Not detected at the reporting limit

E= Exceeded the highest calibration point - use a dilution value

J= Value exceeded the lowest calibration point - It is an estimate

Data Analysis Technologies, Inc.  
7715 Corporate Boulevard  
Plain City, OH 43064

## Sample Analysis Certificate

### Method 8322 PBM Carbamates

<b>Client:</b>	FTS/Xenco	<b>Lab Project #:</b>	0309041
<b>Client ID:</b>	S-04	<b>Lab Sample ID:</b>	0309041-4
		<b>Date Sampled:</b>	3/17/09
		<b>Date Received:</b>	3/19/09
<b>Matrix:</b>	Solid		
<b>Extract Volume (mls)</b>	50.0	<b>Date Ext:</b>	3/24/09
<b>Sample wt/vol(g/ml)</b>	10.0000	<b>Date Anal:</b>	3/26/09
<b>Dilution factor</b>	1		

Analyte:	mg/kg(mg/L)	PQL Q
Aldicarb Sulfone	ND	0.05
Aldicarb Sulfoxide	ND	0.05
Oxamyl	ND	0.05
Methomyl	ND	0.05
3-Hydroxycarbofuran	0.010	0.05 J
Aldicarb	ND	0.05
Propoxur	0.001	0.05 J
Carbofuran	0.003	0.05 J
Carbaryl	ND	0.05
Methiocarb	ND	0.05

Surrogate Recovery	% Rec
Tubuthiuron	81

PQL = Practical quantitation limit.  
ND = Not detected at the limit shown.  
J=Below the lowest calibration point

**Captan/8270**

Misc Info	WS-06
Matrix	Soild
Sample Name	0309041-3 10x
Date Acquired	3/27/2009 4:35
Data File Name	03260915.D
Sample Amount (g)	0.0515
Dilution Factor	10.0
Extract Volume (mL)	50.0
Sample Type	S

<u>Name</u>	<u>Concentration (mg/Kg)</u>	<u>RL (mg/Kg) Q</u>
Captan	650248.70	3883.50

<u>Surrogate</u>	<u>%R</u>
Phenol-d5(surr)	104.8
2-fluorophenol(surr)	104.5
Nitrobenzene-d5(surr)	99.8
2-Fluorobiphenyl(surr)	85.6
2,4,6-Tribromophenol(surr)	100.7
Terphenyl-d14(surr)	82.9

ND = Not detected at the reporting limit

E= Exceeded the highest calibration point - use a dilution value

J= Value exceeded the lowest calibration point - It is an estimate

## QC SUMMARY

Data Analysis Technologies, Inc.  
7715 Corporate Boulevard  
Plain City, OH 43064

## Sample Analysis Certificate

### Method 8322 PBM Carbamates

<b>Client:</b>	FTS/Xenco	<b>Lab Project #:</b>	0309036
<b>Client ID:</b>		<b>Lab Sample ID:</b>	0309036/41-MB
		<b>Date Sampled:</b>	NA
		<b>Date Received:</b>	NA
<b>Matrix:</b>	solid		
<b>Extract Volume (mls)</b>	1.0	<b>Date Ext:</b>	3/24/09
<b>Sample wt/vol(g/ml)</b>	1.0	<b>Date Anal:</b>	3/26/09
<b>Dilution factor</b>	1		

Analyte:	mg/kg(mg/L)	PQL Q
Aldicarb Sulfone	ND	0.01
Aldicarb Sulfoxide	ND	0.01
Oxamyl	ND	0.01
Methomyl	ND	0.01
3-Hydroxycarbofuran	ND	0.01
Aldicarb	ND	0.01
Propoxur	ND	0.01
Carbofuran	ND	0.01
Carbaryl	ND	0.01
Methiocarb	ND	0.01

Surrogate Recovery	% Rec
Tubuthiuron	87

PQL =Practical quantitation limit.  
ND = Not detected at the limit shown.  
J=Below the lowest calibration point

**Captan/8270**

Misc Info	Method Blank
Matrix	Aqueous
Sample Name	0309041-MB
Date Acquired	3/27/2009 12:29
Data File Name	03260910.D
Sample Amount (mL)	200.0
Dilution Factor	1.0
Extract Volume (mL)	1.0
Sample Type	S

Name	Concentration (ug/mL)	RL(ug/mL)	Q
Captan	0.00	0.02	ND

<u>Surrogate</u>	<u>%R</u>
Phenol-d5(surr)	35.9
2-fluorophenol(surr)	44.8
Nitrobenzene-d5(surr)	75.9
2-Fluorobiphenyl(surr)	32.2
2,4,6-Tribromophenol(surr)	67.8
Terphenyl-d14(surr)	66.3

ND = Not detected at the reporting limit

E= Exceeded the highest calibration point - use a dilution value

J= Value exceeded the lowest calibration point - It is an estimate

Data Analysis Technologies, Inc.  
7715 Corporate Boulevard  
Plain City, OH 43064

## Sample Analysis Certificate

### Method 8322 PBM Carbamates

<b>Client:</b>	FTS/Xenco	<b>Lab Project #:</b>	0309036
<b>Client ID:</b>		<b>Lab Sample ID:</b>	0309036/41-LS
		<b>Date Sampled:</b>	NA
		<b>Date Received:</b>	NA
<b>Matrix:</b>	Solid		
<b>Extract Volume (mls)</b>	1.0	<b>Date Ext:</b>	3/24/09
<b>Sample wt/vol(g/ml)</b>	1.00	<b>Date Anal:</b>	3/26/09
<b>Dilution factor</b>	1		

Analyte:	mg/kg(mg/L)	PQL Q	%R
Aldicarb Sulfone	1.013	0.01	101.3
Aldicarb Sulfoxide	0.895	0.01	89.5
Oxamyl	0.994	0.01	99.4
Methomyl	1.106	0.01	110.6
3-Hydroxycarbofuran	1.002	0.01	100.2
Aldicarb	1.002	0.01	100.2
Propoxur	0.970	0.01	97.0
Carbofuran	1.143	0.01	114.3
Carbaryl	1.012	0.01	101.2
Methiocarb	1.069	0.01	106.9

Surrogate Recovery	% Rec
Tubuthiuron	51

PQL =Practical quantitation limit.  
ND = Not detected at the limit shown.  
J=Below the lowest calibration point

**Captan/8270**

Misc Info	Lab Spike	
Matrix	Aqueous	
Sample Name	0309036-LS	
Date Acquired	3/26/2009 8:23	
Data File Name	03260908.D	
Sample Amount (mL)	1.0	
Dilution Factor	1.0	
Extract Volume (mL)	1.0	
Sample Type	QC	
QC Spike Amt	QC Spike ug	100

Name	Concentration (ug/mL)	RL(ug/mL)	Q	% Recovery
Captan	109.99	4.00		110.0

<u>Surrogate</u>	<u>%R</u>
Phenol-d5(surr)	114.8
2-fluorophenol(surr)	118.7
Nitrobenzene-d5(surr)	105.5
2-Fluorobiphenyl(surr)	96.8
2,4,6-Tribromophenol(surr)	100.0
Terphenyl-d14(surr)	95.5

ND = Not detected at the reporting limit

E= Exceeded the highest calibration point - use a dilution value

J= Value exceeded the lowest calibration point - It is an estimate



**Captan/8270**

Misc Info	Lab Spike Duplicate
Matrix	Aqueous
Sample Name	0309036-LSD
Date Acquired	3/26/2009 9:12
Data File Name	03260909.D
Sample Amount (mL)	1.0
Dilution Factor	1.0
Extract Volume (mL)	1.0
Sample Type	QC
QC Spike Amt	QC Spike ug 100

Name	Concentration (ug/mL)	RL(ug/mL)	Q	% Recovery
Captan	113.94	4.00		113.9

<u>Surrogate</u>	<u>%R</u>
Phenol-d5(surr)	116.8
2-fluorophenol(surr)	120.1
Nitrobenzene-d5(surr)	107.1
2-Fluorobiphenyl(surr)	98.3
2,4,6-Tribromophenol(surr)	113.5
Terphenyl-d14(surr)	94.2

ND = Not detected at the reporting limit

E= Exceeded the highest calibration point - use a dilution value

J= Value exceeded the lowest calibration point - It is an estimate

Data Analysis Technologies, Inc.  
7715 Corporate Boulevard  
Plain City, OH 43064

## Sample Analysis Certificate

### Method 8322 PBM Carbamates

<b>Client:</b>	FTS/Xenco	<b>Lab Project #:</b>	0309036
<b>Client ID:</b>	S-01	<b>Lab Sample ID:</b>	0309036-4 MS
		<b>Date Sampled:</b>	3/13/09
		<b>Date Received:</b>	3/17/09
<b>Matrix:</b>	Solid		
<b>Extract Volume (mls)</b>	50.0	<b>Date Ext:</b>	3/24/09
<b>Sample wt/vol(g/ml)</b>	10.20	<b>Date Anal:</b>	3/26/09
<b>Dilution factor</b>	1		

Analyte:	mg/kg(mg/L)	PQL Q	%R
Aldicarb Sulfone	0.472	0.05	47.2
Aldicarb Sulfoxide	0.444	0.05	44.4
Oxamyl	0.395	0.05	39.5
Methomyl	0.209	0.05	20.9
3-Hydroxycarbofuran	0.368	0.05	36.8
Aldicarb	0.368	0.05	36.8
Propoxur	0.342	0.05	34.2
Carbofuran	0.170	0.05	17.0
Carbaryl	0.315	0.05	31.5
Methiocarb	0.214	0.05	21.4

Surrogate Recovery	% Rec
Tubuthiuron	56

PQL = Practical quantitation limit.  
ND = Not detected at the limit shown.  
J=Below the lowest calibration point

**Captan/8270**

Misc Info	S-01	
Matrix	solid	
Sample Name	0309036-4MS	
Date Acquired	3/27/2009 4:12	
Data File Name	03260926.D	
Sample Amount (g)	10.0000	
Dilution Factor	1.0	
Extract Volume (mL)	50.0	
Sample Type	QC	
QC Spike Amt	QC Spike ug	80

<u>Name</u>	<u>Concentration (mg/Kg)</u>	<u>RL (mg/Kg) Q</u>	<u>% Recovery</u>
Captan	227.72	20.00	56.9

<u>Surrogate</u>	<u>%R</u>
Phenol-d5(surr)	78.3
2-fluorophenol(surr)	93.4
Nitrobenzene-d5(surr)	92.2
2-Fluorobiphenyl(surr)	107.8
2,4,6-Tribromophenol(surr)	75.4
Terphenyl-d14(surr)	105.6

ND = Not detected at the reporting limit

E= Exceeded the highest calibration point - use a dilution value

J= Value exceeded the lowest calibration point - It is an estimate

Data Analysis Technologies, Inc.  
7715 Corporate Boulevard  
Plain City, OH 43064

## Sample Analysis Certificate

### Method 8322 PBM Carbamates

<b>Client:</b>	FTS/Xenco	<b>Lab Project #:</b>	0309036
<b>Client ID:</b>	S-01	<b>Lab Sample ID:</b>	0309036-4 MSD
		<b>Date Sampled:</b>	3/13/09
		<b>Date Received:</b>	3/17/09
<b>Matrix:</b>	Solid		
<b>Extract Volume (mls)</b>	50.0	<b>Date Ext:</b>	3/24/09
<b>Sample wt/vol(g/ml)</b>	10.100	<b>Date Anal:</b>	3/26/09
<b>Dilution factor</b>	1		

Analyte:	mg/kg(mg/L)	PQL Q	%R
Aldicarb Sulfone	0.475	0.05	47.5
Aldicarb Sulfoxide	0.466	0.05	46.6
Oxamyl	0.442	0.05	44.2
Methomyl	0.260	0.05	26.0
3-Hydroxycarbofuran	0.429	0.05	42.9
Aldicarb	0.429	0.05	42.9
Propoxur	0.382	0.05	38.2
Carbofuran	0.199	0.05	19.9
Carbaryl	0.356	0.05	35.6
Methiocarb	0.249	0.05	24.9

Surrogate Recovery	% Rec
Tubuthiuron	55

PQL =Practical quantitation limit.  
ND = Not detected at the limit shown.  
J=Below the lowest calibration point

**Captan/8270**

Misc Info	S-01	
Matrix	solid	
Sample Name	0309036-4MSD	
Date Acquired	3/27/2009 5:01	
Data File Name	03260927.D	
Sample Amount (g)	10.0000	
Dilution Factor	1.0	
Extract Volume (mL)	50.0	
Sample Type	QC	
QC Spike Amt	QC Spike ug	80

<u>Name</u>	<u>Concentration (mg/Kg)</u>	<u>RL (mg/Kg) Q</u>	<u>% Recovery</u>
Captan	253.63	20.00	63.4

<u>Surrogate</u>	<u>%R</u>
Phenol-d5(surr)	83.1
2-fluorophenol(surr)	118.0
Nitrobenzene-d5(surr)	127.7
2-Fluorobiphenyl(surr)	114.0
2,4,6-Tribromophenol(surr)	66.6
Terphenyl-d14(surr)	115.5

ND = Not detected at the reporting limit

E= Exceeded the highest calibration point - use a dilution value

J= Value exceeded the lowest calibration point - It is an estimate

# DOCUMENTATION

## SUBCONTRACTOR CHAIN OF CUSTODY

# Data/Analysis Technologies, Inc

SUBCONTRACTED TO:

7715 Corporate Boulevard

Plain City, OH 43064

Subcontracted by: Xenco Laboratories Atlanta Office

Address: 6017 Financial Drive, Norcross, GA 30071

Lab Contact Name:

**Eben D. Buchanan, Jr.** (eben.buchanan@xenco.com)

Contact Phone # (770) 449 - 8800, ext. 1635

Fax Number: (770) 449 - 5477

PROJECT / PO#:

327527

**Quote Number:**

**\*\*\*Please reference PO # on the invoice\*\*\***

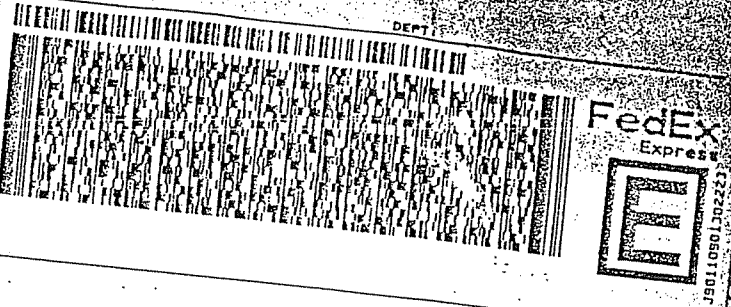
Page 22	Sample #	Sample Type	Sample Date / Time	Comp	Grab	Matrix	Preserved	Xenco ID:	Container No.	n-Methylcarbamates EPA 8318 Captan EPA 8270										Remarks	LAB #			
	WS-04	Waste	3/17/2009 10:45		X			327689-001		X	X					fertilizer Tank Sample								
	WS-05	Waste	3/17/2009 11:30		X			327689-002		X	X					DDT (Drum)								
	WS-06	Waste	3/17/2009 11:40		X			327689-003		X	X					Captan (Drum)								
	S-04	Soil	3/16/2009 14:45	X				327689-004		X	X													

Matrix Guide: (S = Soil) (W = Water) (L = Liquid) (SD = Solid) (C = Cartridge) (SL = Sludge) (A = Air Sample) (F = Foods) (M = Miscellaneous) (D = Digestate)

0309041

IN 50-10-10000-  
100-100

SHIPPING AND RECEIVING  
DATAANALYSIS TECHNOLOGIES, INC.  
7715 CORPORATE BLVD  
PLAIN CITY OH 43064  
(614) 873-0710  
INVT REF: PO: DEPT:

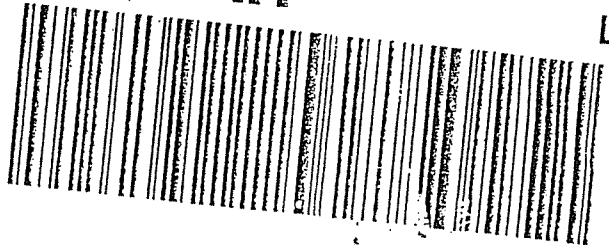


TRK# 7964 3911 4462  
0201

THU - 19MAR A2  
STANDARD OVERNIGHT

NU CMHA

43064  
OH-US  
LCK



**ymate**  
by igloo  
*lite*



# **DAT Labs Inc.** **Sample Receipt Report**

Client/Number: FTS/Xenco Laboratories (10011)      The client has been contacted.      Yes \_\_\_\_\_ No \_\_\_\_\_

Custodian Initial: LC      Date: 3-19-09

Secondary Review: Initials: BZ      Date: 3/20/09

Upon receipt of samples, check if any of the following discrepancies have been noted.

Discrepancy Type	Specify applicable client ID or "all"
COC and samples do not match	
No unique sample identifications	
Samples received outside of the required temp criteria.      Receipt Temp: <u>5.6</u> C	
No preservation type was noted      Correction Factor: <u>-1.7</u> C	
No date of collection stated      Corrected Temp: <u>4.1</u> C	
No time of collection stated	
The sample collector was not named	
Sample containers were not appropriate	
Sample labels were destroyed or unreadable	
Samples were received outside of holding time	
There was not enough sample to perform the requested analysis.	
Samples showed sign of damage or contamination.	
Aqueous samples for volatile analysis:      Headspace?      Y      N      If Yes, list sample ID(s) in details:	
Sample pH      acidic      basic      neutral      Check pH of aqueous samples if no preservation is noted on COC.	

Details: \_\_\_\_\_

Sample pH for nonvolatile aqueous samples and presence or absence of headspace (Y or N) for VOA aqueous samples shall be recorded at time of sample log-in.  
Under no circumstances shall VOA vials be opened at time of sample receipt.

Other Discrepancies:

Sample ID	Discrepancy

☒ Upon receipt, the samples met all of DAT's acceptance criteria.      DAT Project #      0309041

# DAT SAMPLE RECEIVING

7715 Corporate Blvd. Plain City, OH 43064.

Project Number: 0309041

Date Received: 3/19/2009  
Client Name: FTS/Xenco Laboratories  
Tracking number: 796439114462  
Custody Seals?: No

Carrier: Fed-X Overnight  
Analysis: N-Methylcarbamates, Ca  
Package Temp: 4.1  
COC: ☒ check if COC from client

## Sample Information

Client ID:	Laboratory ID	Date	Matrix:	Container:	Comment:
WS-04	0309041-1	3/17/2009	Semi-solid	150ml Clear Soil Jar	Fertilizer Tank
WS-05	0309041-2	3/17/2009	Solid	150ml Clear Soil Jar	DDT(Drum)
WS-06	0309041-3	3/17/2009	Solid	150ml Clear Soil Jar	Captan(Drum)
S-04	0309041-4	3/16/2009	Soil ??	150ml Clear Soil Jar	

La

Laboratory Receiving Initials

0309041

3/19/2009 2:58:10 PM

**DAT Labs, Inc. Extraction Form**

Project # 0309036 / 0309041

Sample: SOLIDS LIQUID AIR  
 Analysis: Carbamates / carbox  
 Prepared By: RL  
 Date: 3/24/09  
 Spike Witness: \_\_\_\_\_  
 Solvent Manufac: \_\_\_\_\_  
 Solvent Lot #: \_\_\_\_\_

Extraction	Solvent	Volume mls	Reps
<input checked="" type="checkbox"/> Soxhlet	Hexane		
<input checked="" type="checkbox"/> Sep Funnel	Methanol		
<input type="checkbox"/> Sonication	<input checked="" type="checkbox"/> Methylene Chloride	<u>80</u>	<u>3</u>
<input type="checkbox"/> Cont. Ext	ACN		
<input type="checkbox"/> Vial	Ethyl Acetate		
<input type="checkbox"/> SPE Distill	IPA		
<input type="checkbox"/> Other	Toluene		
<input type="checkbox"/> No Extract	Water		
Other (Describe): <u>Acid / Base Extraction</u>			

Surrogate ID 0309036-4-6 & 0309041-4

SURROGATE ID	VOL mls / ul	CONC
SL-PS-75-19 Acid	<u>100 µL</u>	<u>10,000 µg/mL</u> <u>20 µg/mL</u>
SL-PS-78-17 B/W	<u>200 µL</u>	<u>5,000 µg/mL</u> <u>20 µg/mL</u>
SL-38-27A	<u>50 µL</u>	<u>1.0 µg</u> <u>0309041-1</u>

MS/MSD 0309036-4

LS/MS ID	VOL mls / ul	CONC
SL-38-26	<u>4.0 mL</u>	<u>1,000 µg/mL</u>
SL-		
SL-		

INT STD ID	VOL mls / ul	CONC
SL-		
SL-		
SL-		

COMMENTS \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

SAMPLE ID	TOTAL SAMPLE AMNT	SAMPLE AMNT EXTRACTED	TOTAL EXTRACT VOL (ADD ALL REPS)	FINAL EXTRACT VOL mls / ul	SURR INIT	SPK INIT	IS INIT
<u>0309036-1</u>		<u>50 µL</u>		<u>50 MeOH</u>			
<u>0309036-2</u>		<u>1.0525 gm</u>		<u>50 MeOH</u>			
<u>0309036-3</u>		<u>1.0522 gm</u>		<u>50 MeOH</u>			
<u>0309036-4</u>		<u>1.61 gm</u>		<u>50 MeOH</u>			
<u>0309036-4 MS</u>		<u>10.29 gm</u>		<u>50</u>			
<u>0309036-4 MSD</u>		<u>10.1 gm</u>		<u>50</u>			
<u>0309036-5</u>		<u>10.09 gm</u>		<u>50</u>			
<u>0309036-6</u>		<u>10.1 gm</u>		<u>50</u>			
<u>0309041-1</u>		<u>1.2296 gm</u>		<u>50 µL 20% ACN Butter</u>			
<u>0309041-2</u>		<u>1.0497 gm</u>		<u>50 µL 50% ACN MeOH</u>			
<u>0309041-3</u>		<u>1.0515 gm</u>		<u>50 µL MeOH</u>			
<u>0309041-4</u>		<u>10.09 gm</u>		<u>50 µL MeOH</u>			

If extract was split for additional analyses, please note the aliquot volume for this analysis and at what point the extract was spiked.

ALIUQUOT VOLUME: \_\_\_\_\_ mls ul (Circle one)  
 Extract was spiked: Before After the split. (Circle one)

Additional samples may be listed on the back of this page.

Project # 0309041

Continued from other side

[illegible]

**Notes:**

Notes:  
So-1/ sonicated 10 minutes 50% pulse rate - 0309036 So-1's  
0309041-4 sonicated 10 minutes 50% pulse rate

Sp. Kes (Surge & solid.)

سید علی

0309036-1-3 + 0309051-1-3

Box dilution -

50% of 50-38-27H C=1.0mg/ml Acid + Bile surrogates Cr 50% 10% Sample Wt 1.0ml

undiluted sample.

8, L - PS-18-14 > 80, not read.

1674 - P.S. 7517

**Initial**