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VCC-WINSTON-SALEM

Subsite:

Site Name: *Do not enter text.*

NCN000410344

Full Site Name (Subject): *Do not enter text.*

VCC-WINSTON-SALEM

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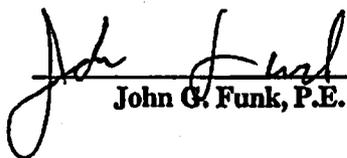
**SOIL AND GROUNDWATER ASSESSMENT
REPORT**

FOR

**ATLANTIC SCRAP AND PROCESSING
3411 N. GLENN AVENUE
WINSTON-SALEM, NORTH CAROLINA
Latitude: N 36° 7' 60"
Longitude: W 80° 14' 19"**

Prepared for

**ATLANTIC SCRAP AND PROCESSING
1426 WEST MOUNTAIN STREET
KERNERSVILLE, NC 27284**


John G. Funk, P.E.

**Earth Tech of North Carolina, Inc.
Raleigh, North Carolina**



October 26, 2005

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1.0 INTRODUCTION

1.1 Background Information

Atlantic Scrap and Processing (Atlantic Scrap) contracted with Earth Tech of North Carolina Inc. (Earth Tech) to perform a Soil and Groundwater Assessment in response to a North Carolina Department of Environment and Natural Resources (NCDENR) Notice of Violation (NOV) letter dated August 2, 2005. The Atlantic Scrap site (the "Site"), which Atlantic Scrap acquired in 2001, is located at 3411 N. Glenn Avenue in Winston-Salem, North Carolina (see Figure 1).

The NOV letter stated the following: "Since November 9, 2004 personnel from the Aquifer Protection Section Winston-Salem regional Office have been investigating the source of two contaminated springs (SW-555 and SW-556) that discharge off of the subject property and into Bowen Branch. Please see the pictures accompanying this letter for the locations of these springs (See Figure 2 of this report) as well as the data summary table below that contain laboratory analysis for samples collected from these springs.

Spring Discharge Samples to Bowen Branch on East Side of Atlantic Scrap and Processing Property

Monitoring Point	Date		pH	Specific Conductance (mhos)	Chloride (mg/l)	Manganese Total (mg/l)	NH3 (mg/l)	NO3 + NO2 as N (mg/l)	Sulfate (mg/l)	Zinc total (mg/l)	Lead (mg/l)	Cadmium (mg/l)
		NC 2L Groundwater Standard	6.5-8.5	-	250	0.05	-	10	250	2.1	0.015	0.005
SW555	11/9/2004		8.37	1600	NM	0.840	NM	NM	NM	4.6	0.45	0.011
	1/12/2004		8.42	2450	564	1.09	200	3.6	628	1.45	0.088	<0.0005
	2/22/2005		8.5	3200	NM	NM	200	1.4	NM	NM	NM	NM
SW556	11/9/2004		7.29	12000	NM	6.4	NM	NM	NM	2.6	<0.01	0.0098
	1/12/2004		7.35	7500	2125	14.38	530	30	2428	3.10	<0.005	0.011
	2/22/2005		7.5	10000	NM	NM	550	35	NM	NM	NM	NM
SW-406	11/9/2004		5.2	2700	484	4.71	140	46	NM	2.3	0.11	0.016
	5/8/2005		5.8	2200	269	4.38	98	38	607	2.07	0.014	NM

You will notice that the data denoted in bold font indicates that inorganic contamination in one or both of these springs is being discharged at levels that exceed the maximum allowable concentrations established by N.C.A.C. Title 15A 2L .0202. As a result, these reported values are in violation of the water quality standards for the groundwaters of the State. You will notice that a third spring, labeled as SW-406, is also listed on the table. Inorganic contamination contained in this spring is attributed to that originating from the Royster Clark Fertilizer Plant, which is located to the West-Southwest and hydraulically up gradient of you facility. The inorganic constituents of this spring, while being similar to those contained in springs SW-555 and SW-556 differ in one very notable exception, that being an elevated pH. You will also note that the chemistry between the two springs SW-555 and SW-556 differ in the concentration and type of nitrogen compounds present within the discharge. Given the very short linear distance between these two springs, the differing chemistry is even more anomalous. Consequently, a separate source for inorganic contamination appears to be present within the subsurface of the Atlantic Scrap Facility.

You are required to conduct an investigation of the soil and groundwater within the immediate vicinity of the subject springs in order to determine both the contaminant sources/as well as the physical hydrogeology. To this end the collection of soil and groundwater samples along with the installation of both monitoring wells and dedicated piezometers is warranted."

As required by the Notice of Violation, Atlantic Scrap, working in cooperation with NCDENR Division of Water Quality (DWQ) Winston-Salem regional office representatives, conducted the investigation requested and also expanded the scope of the investigation to include a larger area on the southern portion of the Site. The NCDENR DWQ representative indicated that the North Carolina Department of Transportation had recently conducted a soil and groundwater investigation on the Site in anticipation of the widening of US 52. At the Regional Office representative's request, Atlantic Scrap supplemented that investigation by installing a series of soil and groundwater-sampling points near the southwestern boundary of the Site.

The purpose of this report is to describe the results of Atlantic Scrap's investigation. The following sections of this report include a site description, methods of investigation, results, and conclusions and recommendations.

1.2 Site Description

The Site is a triangular-shaped parcel covering approximately 25 acres along US 52 (see Figure 2). The Site is accessed from Glenn Avenue. Norfolk and Western Railway Company borders the Site to the east, and US 52 borders the Site to the west. The NCDENR Division of Water Quality Aquifer Protection Section identified an Area of Concern (AOC) at a discharge area along the east-central portion of the site (see Figures 2 and 3). NCDENR provided Earth Tech with the latitude and longitude of the six spring sampling monitoring points. Four of these points (SW-555, SW-556, SW-406 and SW-503) are shown on Figures 2 and 3. The other two points (SW-557 and RMC) were outside the boundaries of the figures included in this report. SW-557 lies approximately 510 feet east of SW-406. RMC lies approximately 482 feet southeast of SW-406.

2.0 METHODS OF INVESTIGATION AND RESULTS

Earth Tech conducted its site investigation in August 2005 using direct push technology to collect soil and groundwater samples. A NCDENR Division of Water Quality (DWQ) representative was onsite during the Site investigation. The purposes of the sampling activity were to determine if current or former operations at the Site have adversely impacted the groundwater chemistry of two springs (SW-555 and SW-566) that discharge off the Site (see Figures 2 and 3), and to examine whether groundwater contamination is coming onto the Site from the west. The following sections describe the methods of investigation.

2.1 Groundwater Sampling

Earth Tech installed fifteen piezometers and five temporary wells using direct push technology. The sample identifications were coded as follows:

- 'PZ' prefix samples were collected from a piezometer.
- 'TW' prefix samples were collected from a temporary well

Sample location PZ-11 was dry and location PZ-7 filled with sand. No groundwater elevation data was gathered from PZ-7 and PZ-11. However, groundwater field parameters were collected from PZ-7 before it filled with sand. At the request of the NCDENR DWQ representative three piezometers (PZ-3, PZ-3A, and PZ-3B) were installed at various depths near the same location to attempt to determine potentiometric head. The results were inconclusive. Groundwater field parameters were only collected from PZ-3.

2.1.1 Groundwater Hydrology

After allowing sufficient time to stabilize in the piezometers and temporary wells, water levels were measured and recorded for each location. A North Carolina-licensed Professional Land Surveyor surveyed each piezometer and temporary well location for location and elevation. Surface and groundwater elevation data is presented in Table 1. This data was incorporated into the site map (Figure 2) and used to construct a groundwater contour map (Figure 3).

The data indicates groundwater is moving across the site to the east-northeast. The calculated hydraulic gradient ranges from 0.015 ft/ft to 0.022 ft/ft. Depth to groundwater ranges from around four to ten feet below ground surface across the site.

2.1.2 Groundwater Chemistry

On August 18, 2005, the groundwater field parameters of pH, specific conductivity, dissolved oxygen, oxidation-reduction potential (ORP), and turbidity was measured in seven piezometers (PZ-1, PZ-2, PZ-3, PZ-4, PZ-5, PZ-6 and PZ-7) located within the AOC. On August 25, 2005, the groundwater field parameters were collected from temporary wells, TW-5 and TW-6. TW-5 and TW-6 are upgradient from the AOC. A peristaltic pump connected to a flow cell and water quality meter were used to measure the field parameters. Each piezometer and temporary well was purged at a low flow rate until the

groundwater parameters had stabilized. In the case of a piezometer being pumped dry, the pump was turned off and the point was allowed to recharge before pumping resumed. The results of the field parameter measurements are presented in Table 2.

Groundwater samples were collected from three sample points (TW-5, TW-6, and PZ-6) by Earth Tech and one sample point (SW-555) by the NCDENR DWQ representative. TW-5 and TW-6 are located upgradient from the AOC. Chain-of-Custody forms were completed and the samples were placed in laboratory-supplied coolers with ice for shipping via common courier to Paradigm Analytical Laboratories for analysis. Samples collected from points TW-5 and TW-6 were analyzed for volatile organic compounds (VOCs) using USEPA Method 8260, semi-volatile organic compounds (SVOCs) using USEPA Method 8270, target analyte list (TAL) metals, sulfate, nitrite, ammonia, ortho-phosphorus and phosphorus. The samples collected from points PZ-6 and SW-555 were analyzed for VOCs only. The analytical results are summarized in Table 3.

2.2 Soil Sampling

Two soil samples were collected from the Site. Samples SS-2 and SS-3 were collected on August 24, 2005 from the south and north side of the drainage ditch, respectively. The drainage ditch channels surface water to the east and off the Site. The samples were collected from a depth of four to six feet, just above the saturated zone, and were analyzed for VOCs and SVOCs by the laboratory. The analytical results are summarized in Table 4.

One soil sample, SS-1, was collected from the former Carolina Ore site by a NCDENR DWQ representative on August 17, 2005. SS-1 was analyzed for Resource Conservation and Recovery Act (RCRA) metals and Toxic Characteristic Leaching Procedure (TCLP) metals. The analytical results are summarized in Tables 5 and 6. Sample SS-1 was collected from an area outside the AOC of this soil and groundwater assessment report.

Chain-of-Custody forms were completed and the samples were placed in laboratory-supplied coolers with ice and shipped via common courier to Paradigm Analytical Laboratories.

3.0 CONCLUSIONS

This section provides conclusions developed from the results of groundwater field parameter measurements and groundwater and soil analysis conducted during the August sampling event.

3.1 Groundwater Assessment Conclusions

A comparison of the groundwater field parameters of pH and oxidation-reduction potential (ORP) in the up gradient piezometers within the AOC (PZ-2, PZ-4, PZ-7) versus the down gradient piezometers (PZ-1, PZ-3, and PZ-6) indicates that pH is increased and ORP is reduced as groundwater moves through the AOC as indicated in the following table:

Up Gradient Piezometer	pH	ORP
PZ-2	5.53	177
PZ-4	6.02	116
PZ-7	6.39	34
Down Gradient Piezometer		
PZ-1	7.84	-21
PZ-3	8.53	-183
PZ-5	8.09	-204
PZ-6	7.12	-105

The results of the field parameters show that the groundwater in the AOC near the drainage ditch is a reducing environment as indicated by the low (negative) ORP measurements. The AOC likely contains a pocket of trapped or very slow moving groundwater, and coupled with decaying organic material, creates a reduced oxygen environment typical of areas where stagnant water is present. Cattails (*Typha latifolia*) and other reed like plants are present in the AOC and ditch, indicating a wetland-like drainage feature has been created on the Site within the AOC (Wetlands, Mitsch and Gosselink, 1993). In addition, an increase in pH often occurs in newly created wetlands formed in soils with high iron content (Wetlands, Mitsch and Gosselink, 1993). Based on the elevated iron concentrations detected in site groundwater samples (0.814 mg/L and 1.0 mg/L), it can be inferred that the small wetland-like feature that has developed in the AOC is in an iron-rich environment. The pH increase can also be attributed to the reduction in ferric iron hydroxide caused by the reducing environment. Additionally, the growth of reed type plant life in a wetland-like environment can lead to an increase in the pH that can be attributed to plant respiration consuming available CO₂, thereby reducing the amount of carbon available to form carbonic acid (Windell, J.T.; Rink, L.P.; and Knud-Hansen, C.F). In addition, pH and ORP was measured in groundwater from two up gradient wells (TW-5 and TW-6). The results (pH 5.27 – 5.98) and ORP

(146 – 187) are comparable to the results measured in the up gradient piezometers. The conclusion drawn from the comparison of field parameters is that the high pH measured in the AOC is most likely a result of natural processes associated with wetland conditions occurring within the area, and are not attributable to actions of Atlantic Scrap and Processing.

As described in the previously, groundwater was collected from temporary monitoring wells TW-5 and TW-6 that are located up gradient of the AOC and springs SW555 and SW-556. A comparison of the analytical parameters listed in the NOV collected from the springs and the temporary wells are provided in the following table:

Monitoring Point	Date Sample Collected	pH	Specific Conductance (mhos)	Manganese Total (mg/l)	NH3 (mg/l)	NO3 + NO2 as N (mg/l)	Sulfate (mg/l)	Zinc total (mg/l)	Lead (mg/l)
SW555	1/12/2004	8.42	2450	1.09	200	3.6	628	1.45	0.088
SW556	1/12/2004	7.35	75000	14.38	530	30	2428	3.1	<0.01
TW-5	8/25/2005	5.41	44100	14.4	1038	89.8	5800	0.843	0.0935
TW-6	8/25/2005	5.78	214	3.17	0.2	7.18	0.809	0.0972	0.0106

As indicated in the above table, the concentration of ammonia, nitrate/nitrite reported as nitrogen, and sulfate in groundwater up gradient of the springs is greater than the concentration of those compounds detected in the springs. The concentrations of lead and manganese detected in up gradient well TW-5 are comparable to the concentrations detected in the springs. The concentration of zinc detected in the springs is slightly elevated from the concentration detected in the up gradient groundwater. Given the location of well TW-5 in relation to the Site, it is evident that the source of compounds cited in the NOV originate from off Atlantic Scrap and Processing's property.

In addition, groundwater samples were collected from wells TW-5 and TW-6 and analyzed for volatile and semi-volatile organic compounds by EPA Methods 8260 and 8270 respectively. No volatile or semi-volatile compounds were detected in either sample indicating that those compounds are not contaminants of concern at the Atlantic Scrap Site

3.2 Soil Assessment Results

No volatile or semi-volatile compounds were detected above method detection limits in SS-2, on the south side of the drainage ditch within the AOC. At SS-3, on the north side of the drainage ditch, four compounds were detected at low levels, but North Carolina has not adopted soil-to-groundwater cleanup levels for those compounds. Based on the results, volatile and semi-volatile compounds are at an issue at the Atlantic Scrap Site.

At SS-1, former Carolina Ore Site, barium and lead were detected in concentrations that exceed the NCDENR DWQ Soil to Groundwater Cleanup Levels, but the Site is topographically up gradient from and to the west of the AOC. The compounds did not originate from activities conducted by Atlantic Scrap and Processing.

4.0 RECOMMENDATIONS

The data collected and presented in this report indicate that current and former business operations at the Atlantic Scrap and Processing Site have not impacted the Site groundwater with regard to metals, VOCs or nutrient compounds. In summary:

- High pH groundwater measured in the AOC is most likely the result of natural processes originating within a wetland created on the Site.
- Inorganic parameters detected in springs SW-555 and SW-556 and cited in the NOV most likely originate from off the Atlantic Scrap Site.

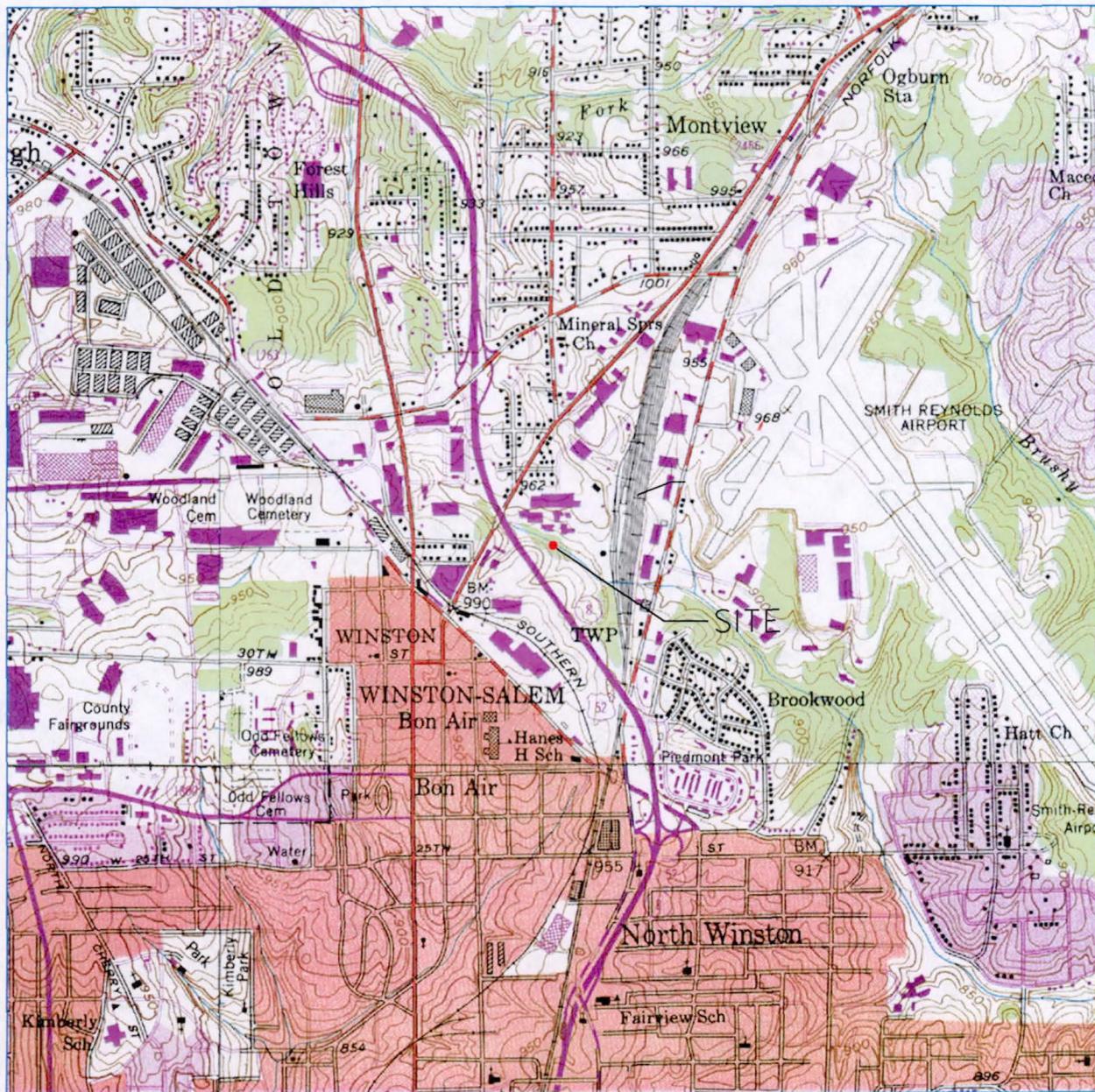
Based on the findings presented in this report, it is recommended that no further action be required of Atlantic Scrap and Processing and that the NOV be rescinded.

5.0 REFERENCES

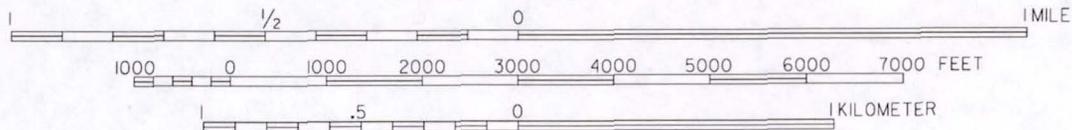
Wetlands, Mitsch, William J. and James G. Gosselink, Van Nostrand Reinhold, 2nd Ed, 1993.

Windell, J.T.; Rink, L.P.; and Knud-Hansen, C.F. (Aquatic Wetland Consultants, Inc.) 1987. "A One Year, Biweekly, 24-Hour Sampling Study of Boulder Creek and Coal Creek Water Quality." Prepared for the City of Boulder Public Works Department

Analytical Chemistry, Skoog, Douglas A.; and Donald M. West, Holt, Rinehart and Winston, 1965.



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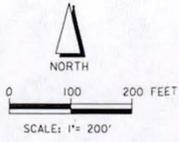
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RURAL HALL, NC, 1950, REV 1981; WALKERTOWN, NC, 1951, PR 1986;
WINSTON-SALEM WEST, NC, 1950, REV 1994; WINSTON-SALEM EAST, NC, 1950, REV 1994.



OCTOBER 2005

FIGURE I
LOCATION MAP
ATLANTIC SCRAP AND PROCESSING
3411 N. GLENN AVENUE
FORSYTH COUNTY, NORTH CAROLINA

88074

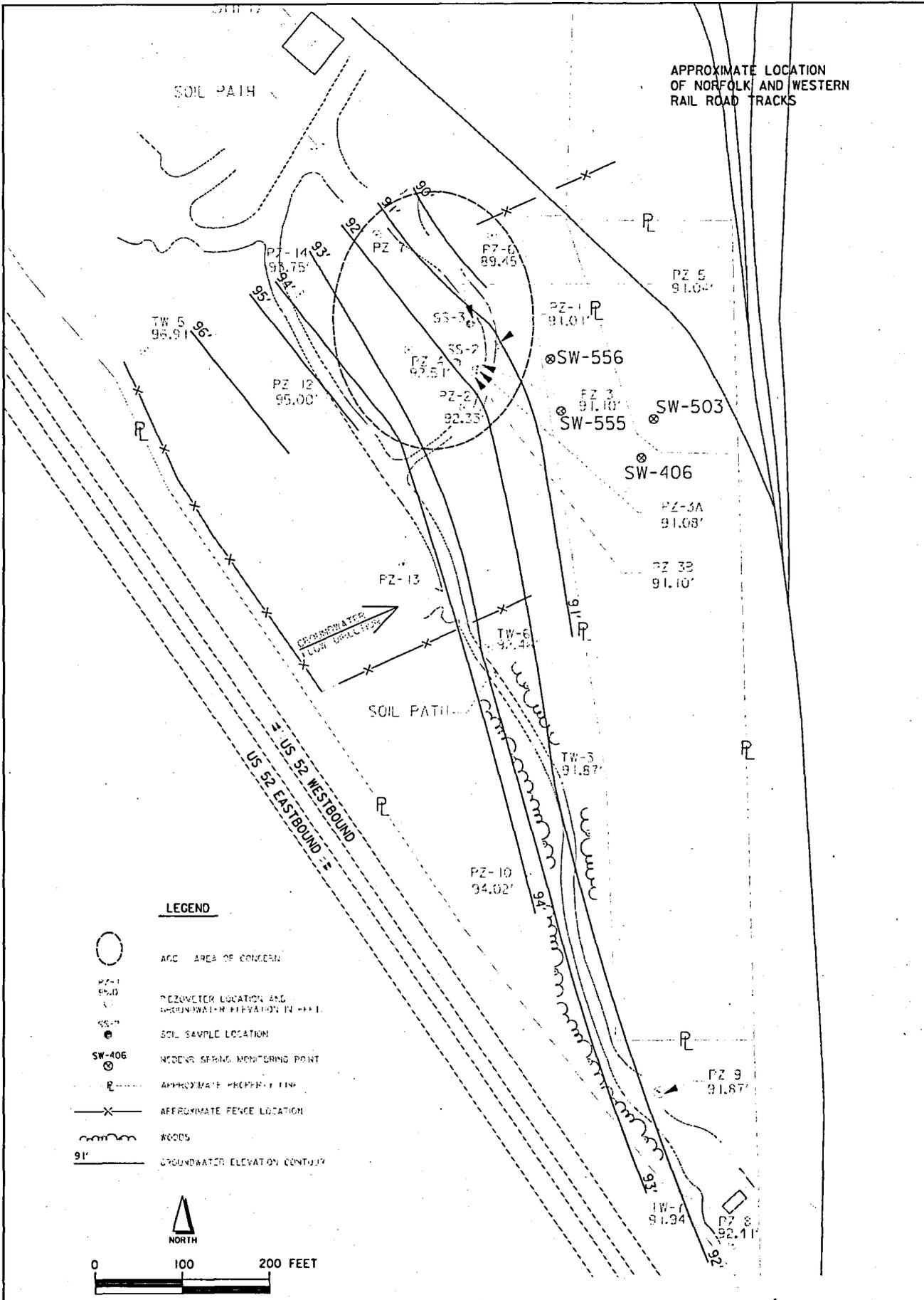


LEGEND

- PZ-1
95.0
○ PIEZOMETER LOCATION AND GROUND ELEVATION IN FEET.
- SS-2
● SOIL SAMPLE LOCATION
- SW-556
⊗ NCDENR SPRING MONITORING POINT
- P — APPROXIMATE PROPERTY LINE
- AREA OF CONCERN

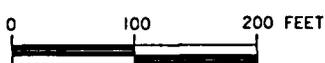
Soil and Groundwater Assessment
**ATLANTIC SCRAP
AND PROCESSING**

Date 10-05	Site Plan	Figure
Project No. 88074	EarthTech A Tyco International Ltd. Company	2



LEGEND

- AGC AREA OF CONCERN
- PZ-1 95.00' REZONATOR LOCATION AND GROUNDWATER ELEVATION IN FEET
- SS-1 SOIL SAMPLE LOCATION
- SW-406 WELLS SPRING MONITORING POINT
- APPROXIMATE PROPERTY LINE
- APPROXIMATE FENCE LOCATION
- WOODS
- 91' GROUNDWATER ELEVATION CONTOUR



SCALE: 1" = 100'

Soil and Groundwater Assessment		
ATLANTIC SCRAP AND PROCESSING		
Date 09-05	Groundwater Elevation Map	Figure
Project No. 88074	EarthTech <small>A Tyco International Ltd. Company</small>	3

APPENDIX A

ANALYTICAL REPORTS

Mr. Rob Holland
Earth Tech
701 Corporate Dr. Suite 475
Raleigh NC 27607

Report Number: G204-481

Client Project: Atlantic Scrap

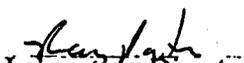
Dear Mr. Holland:

Enclosed are the results of the analytical services performed under the referenced project. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of five years in the event they are required for future reference. Any samples submitted to our laboratory will be retained for a maximum of thirty (30) days from the date of this report unless other arrangements are requested.

If there are any questions about the report or the services performed during this project, please call Paradigm at (910) 350-1903. We will be happy to answer any questions or concerns which you may have.

Thank you for using Paradigm Analytical Labs for your analytical services. We look forward to working with you again on any additional analytical needs which you may have.

Sincerely,
Paradigm Analytical Laboratories, Inc.


Laboratory Director 9/6/2005 Date
J. Patrick Weaver

**Results for Volatiles
by GCMS 8260B**

Client Sample ID: TW-6
Client Project ID: Atlantic Scrap
Lab Sample ID: G204-481-1A
Lab Project ID: G204-481

Analyzed By: JTF
Date Collected: 8/25/2005 12:00
Date Received: 8/27/2005
Matrix: Water

Compound	Result UG/L	Quantitation Limit UG/L	Dilution Factor	Date Analyzed
Acetone	BQL	25.0	1	8/31/2005
Benzene	BQL	1.00	1	8/31/2005
Bromobenzene	BQL	1.00	1	8/31/2005
Bromochloromethane	BQL	1.00	1	8/31/2005
Bromodichloromethane	BQL	1.00	1	8/31/2005
Bromoform	BQL	1.00	1	8/31/2005
Bromomethane	BQL	1.00	1	8/31/2005
2-Butanone	BQL	25.0	1	8/31/2005
n-Butylbenzene	BQL	1.00	1	8/31/2005
sec-Butylbenzene	BQL	1.00	1	8/31/2005
tert-Butylbenzene	BQL	1.00	1	8/31/2005
Carbon disulfide	BQL	1.00	1	8/31/2005
Carbon tetrachloride	BQL	1.00	1	8/31/2005
Chlorobenzene	BQL	1.00	1	8/31/2005
Chloroethane	BQL	1.00	1	8/31/2005
Chloroform	BQL	1.00	1	8/31/2005
Chloromethane	BQL	1.00	1	8/31/2005
2-Chlorotoluene	BQL	1.00	1	8/31/2005
4-Chlorotoluene	BQL	1.00	1	8/31/2005
Dibromochloromethane	BQL	1.00	1	8/31/2005
1,2-Dibromo-3-chloropropane	BQL	5.00	1	8/31/2005
Dibromomethane	BQL	1.00	1	8/31/2005
1,2-Dibromoethane (EDB)	BQL	1.00	1	8/31/2005
1,2-Dichlorobenzene	BQL	1.00	1	8/31/2005
1,3-Dichlorobenzene	BQL	1.00	1	8/31/2005
1,4-Dichlorobenzene	BQL	1.00	1	8/31/2005
trans-1,4-Dichloro-2-butene	BQL	5.00	1	8/31/2005
1,1-Dichloroethane	BQL	1.00	1	8/31/2005
1,1-Dichloroethene	BQL	1.00	1	8/31/2005
1,2-Dichloroethane	BQL	1.00	1	8/31/2005
cis-1,2-Dichloroethene	BQL	1.00	1	8/31/2005
trans-1,2-dichloroethene	BQL	1.00	1	8/31/2005
1,2-Dichloropropane	BQL	1.00	1	8/31/2005
1,3-Dichloropropane	BQL	1.00	1	8/31/2005
2,2-Dichloropropane	BQL	1.00	1	8/31/2005
1,1-Dichloropropene	BQL	1.00	1	8/31/2005
cis-1,3-Dichloropropene	BQL	1.00	1	8/31/2005
trans-1,3-Dichloropropene	BQL	1.00	1	8/31/2005
Dichlorodifluoromethane	BQL	5.00	1	8/31/2005
Diisopropyl ether (DIPE)	BQL	1.00	1	8/31/2005
Ethylbenzene	BQL	1.00	1	8/31/2005
Hexachlorobutadiene	BQL	1.00	1	8/31/2005
2-Hexanone	BQL	5.00	1	8/31/2005
Iodomethane	BQL	1.00	1	8/31/2005
Isopropylbenzene	BQL	1.00	1	8/31/2005

**Results for Volatiles
by GCMS 8260B**

Client Sample ID: TW-6
 Client Project ID: Atlantic Scrap
 Lab Sample ID: G204-481-1A
 Lab Project ID: G204-481

Analyzed By: JTF
 Date Collected: 8/25/2005 12:00
 Date Received: 8/27/2005
 Matrix: Water

Compound	Result UG/L	Quantitation Limit UG/L	Dilution Factor	Date Analyzed
4-Isopropyltoluene	BQL	1.00	1	8/31/2005
Methylene chloride	BQL	5.00	1	8/31/2005
4-Methyl-2-pentanone	BQL	5.00	1	8/31/2005
Methyl-tert-butyl ether (MTBE)	BQL	1.00	1	8/31/2005
Naphthalene	BQL	1.00	1	8/31/2005
n-Propyl benzene	BQL	1.00	1	8/31/2005
Styrene	BQL	1.00	1	8/31/2005
1,1,1,2-Tetrachloroethane	BQL	1.00	1	8/31/2005
1,1,2,2-Tetrachloroethane	BQL	1.00	1	8/31/2005
Tetrachloroethene	BQL	1.00	1	8/31/2005
Toluene	BQL	1.00	1	8/31/2005
1,2,3-Trichlorobenzene	BQL	1.00	1	8/31/2005
1,2,4-Trichlorobenzene	BQL	1.00	1	8/31/2005
Trichloroethene	BQL	1.00	1	8/31/2005
1,1,1-Trichloroethane	BQL	1.00	1	8/31/2005
1,1,2-Trichloroethane	BQL	1.00	1	8/31/2005
Trichlorofluoromethane	BQL	1.00	1	8/31/2005
1,2,3-Trichloropropane	BQL	1.00	1	8/31/2005
1,2,4-Trimethylbenzene	BQL	1.00	1	8/31/2005
1,3,5-Trimethylbenzene	BQL	1.00	1	8/31/2005
Vinyl chloride	BQL	1.00	1	8/31/2005
m-,p-Xylene	BQL	2.00	1	8/31/2005
o-Xylene	BQL	1.00	1	8/31/2005

	Spike Added	Spike Result	Percent Recovered
4-Bromofluorobenzene	10	9.55	96
1,2-Dichloroethane-d4	10	10.4	104
Toluene-d8	10	9.99	100

Comments:

Flags:

BQL = Below Quantitation Limits.

Reviewed By: JTF

**Results for Volatiles
by GCMS 8260B**

Client Sample ID: TW-5
Client Project ID: Atlantic Scrap
Lab Sample ID: G204-481-2A
Lab Project ID: G204-481

Analyzed By: JTF
Date Collected: 8/25/2005 13:10
Date Received: 8/27/2005
Matrix: Water

Compound	Result UG/L	Quantitation Limit UG/L	Dilution Factor	Date Analyzed
Acetone	BQL	25.0	1	8/31/2005
Benzene	BQL	1.00	1	8/31/2005
Bromobenzene	BQL	1.00	1	8/31/2005
Bromochloromethane	BQL	1.00	1	8/31/2005
Bromodichloromethane	BQL	1.00	1	8/31/2005
Bromoform	BQL	1.00	1	8/31/2005
Bromomethane	BQL	1.00	1	8/31/2005
2-Butanone	BQL	25.0	1	8/31/2005
n-Butylbenzene	BQL	1.00	1	8/31/2005
sec-Butylbenzene	BQL	1.00	1	8/31/2005
tert-Butylbenzene	BQL	1.00	1	8/31/2005
Carbon disulfide	BQL	1.00	1	8/31/2005
Carbon tetrachloride	BQL	1.00	1	8/31/2005
Chlorobenzene	BQL	1.00	1	8/31/2005
Chloroethane	BQL	1.00	1	8/31/2005
Chloroform	2.73	1.00	1	8/31/2005
Chloromethane	BQL	1.00	1	8/31/2005
2-Chlorotoluene	BQL	1.00	1	8/31/2005
4-Chlorotoluene	BQL	1.00	1	8/31/2005
Dibromochloromethane	BQL	1.00	1	8/31/2005
1,2-Dibromo-3-chloropropane	BQL	5.00	1	8/31/2005
Dibromomethane	BQL	1.00	1	8/31/2005
1,2-Dibromoethane (EDB)	BQL	1.00	1	8/31/2005
1,2-Dichlorobenzene	BQL	1.00	1	8/31/2005
1,3-Dichlorobenzene	BQL	1.00	1	8/31/2005
1,4-Dichlorobenzene	BQL	1.00	1	8/31/2005
trans-1,4-Dichloro-2-butene	BQL	5.00	1	8/31/2005
1,1-Dichloroethane	BQL	1.00	1	8/31/2005
1,1-Dichloroethene	BQL	1.00	1	8/31/2005
1,2-Dichloroethane	BQL	1.00	1	8/31/2005
cis-1,2-Dichloroethene	BQL	1.00	1	8/31/2005
trans-1,2-dichloroethene	BQL	1.00	1	8/31/2005
1,2-Dichloropropane	BQL	1.00	1	8/31/2005
1,3-Dichloropropane	BQL	1.00	1	8/31/2005
2,2-Dichloropropane	BQL	1.00	1	8/31/2005
1,1-Dichloropropene	BQL	1.00	1	8/31/2005
cis-1,3-Dichloropropene	BQL	1.00	1	8/31/2005
trans-1,3-Dichloropropene	BQL	1.00	1	8/31/2005
Dichlorodifluoromethane	BQL	5.00	1	8/31/2005
Diisopropyl ether (DIPE)	BQL	1.00	1	8/31/2005
Ethylbenzene	BQL	1.00	1	8/31/2005
Hexachlorobutadiene	BQL	1.00	1	8/31/2005
2-Hexanone	BQL	5.00	1	8/31/2005
Iodomethane	BQL	1.00	1	8/31/2005
Isopropylbenzene	BQL	1.00	1	8/31/2005

**Results for Volatiles
by GCMS 8260B**

Client Sample ID: TW-5
 Client Project ID: Atlantic Scrap
 Lab Sample ID: G204-481-2A
 Lab Project ID: G204-481

Analyzed By: JTF
 Date Collected: 8/25/2005 13:10
 Date Received: 8/27/2005
 Matrix: Water

Compound	Result UG/L	Quantitation Limit UG/L	Dilution Factor	Date Analyzed
4-Isopropyltoluene	BQL	1.00	1	8/31/2005
Methylene chloride	BQL	5.00	1	8/31/2005
4-Methyl-2-pentanone	BQL	5.00	1	8/31/2005
Methyl-tert-butyl ether (MTBE)	BQL	1.00	1	8/31/2005
Naphthalene	BQL	1.00	1	8/31/2005
n-Propyl benzene	BQL	1.00	1	8/31/2005
Styrene	BQL	1.00	1	8/31/2005
1,1,1,2-Tetrachloroethane	BQL	1.00	1	8/31/2005
1,1,2,2-Tetrachloroethane	BQL	1.00	1	8/31/2005
Tetrachloroethene	BQL	1.00	1	8/31/2005
Toluene	BQL	1.00	1	8/31/2005
1,2,3-Trichlorobenzene	BQL	1.00	1	8/31/2005
1,2,4-Trichlorobenzene	BQL	1.00	1	8/31/2005
Trichloroethene	BQL	1.00	1	8/31/2005
1,1,1-Trichloroethane	BQL	1.00	1	8/31/2005
1,1,2-Trichloroethane	BQL	1.00	1	8/31/2005
Trichlorofluoromethane	BQL	1.00	1	8/31/2005
1,2,3-Trichloropropane	BQL	1.00	1	8/31/2005
1,2,4-Trimethylbenzene	BQL	1.00	1	8/31/2005
1,3,5-Trimethylbenzene	BQL	1.00	1	8/31/2005
Vinyl chloride	BQL	1.00	1	8/31/2005
m-,p-Xylene	BQL	2.00	1	8/31/2005
o-Xylene	BQL	1.00	1	8/31/2005

	Spike Added	Spike Result	Percent Recovered
4-Bromofluorobenzene	10	9.46	95
1,2-Dichloroethane-d4	10	11	110
Toluene-d8	10	9.82	98

Comments:

Flags:

BQL = Below Quantitation Limits.

Reviewed By:

**Results for Volatiles
by GCMS 8260B**

Client Sample ID: PZ-6
Client Project ID: Atlantic Scrap
Lab Sample ID: G204-481-3A
Lab Project ID: G204-481

Analyzed By: JTF
Date Collected: 8/25/2005 14:05
Date Received: 8/27/2005
Matrix: Water

Compound	Result UG/L	Quantitation Limit UG/L	Dilution Factor	Date Analyzed
Acetone	BQL	25.0	1	8/31/2005
Benzene	BQL	1.00	1	8/31/2005
Bromobenzene	BQL	1.00	1	8/31/2005
Bromochloromethane	BQL	1.00	1	8/31/2005
Bromodichloromethane	BQL	1.00	1	8/31/2005
Bromoform	BQL	1.00	1	8/31/2005
Bromomethane	BQL	1.00	1	8/31/2005
2-Butanone	BQL	25.0	1	8/31/2005
n-Butylbenzene	BQL	1.00	1	8/31/2005
sec-Butylbenzene	BQL	1.00	1	8/31/2005
tert-Butylbenzene	BQL	1.00	1	8/31/2005
Carbon disulfide	BQL	1.00	1	8/31/2005
Carbon tetrachloride	BQL	1.00	1	8/31/2005
Chlorobenzene	BQL	1.00	1	8/31/2005
Chloroethane	BQL	1.00	1	8/31/2005
Chloroform	BQL	1.00	1	8/31/2005
Chloromethane	BQL	1.00	1	8/31/2005
2-Chlorotoluene	BQL	1.00	1	8/31/2005
4-Chlorotoluene	BQL	1.00	1	8/31/2005
Dibromochloromethane	BQL	1.00	1	8/31/2005
1,2-Dibromo-3-chloropropane	BQL	5.00	1	8/31/2005
Dibromomethane	BQL	1.00	1	8/31/2005
1,2-Dibromoethane (EDB)	BQL	1.00	1	8/31/2005
1,2-Dichlorobenzene	BQL	1.00	1	8/31/2005
1,3-Dichlorobenzene	BQL	1.00	1	8/31/2005
1,4-Dichlorobenzene	BQL	1.00	1	8/31/2005
trans-1,4-Dichloro-2-butene	BQL	5.00	1	8/31/2005
1,1-Dichloroethane	BQL	1.00	1	8/31/2005
1,1-Dichloroethene	BQL	1.00	1	8/31/2005
1,2-Dichloroethane	BQL	1.00	1	8/31/2005
cis-1,2-Dichloroethene	BQL	1.00	1	8/31/2005
trans-1,2-dichloroethene	BQL	1.00	1	8/31/2005
1,2-Dichloropropane	BQL	1.00	1	8/31/2005
1,3-Dichloropropane	BQL	1.00	1	8/31/2005
2,2-Dichloropropane	BQL	1.00	1	8/31/2005
1,1-Dichloropropene	BQL	1.00	1	8/31/2005
cis-1,3-Dichloropropene	BQL	1.00	1	8/31/2005
trans-1,3-Dichloropropene	BQL	1.00	1	8/31/2005
Dichlorodifluoromethane	BQL	5.00	1	8/31/2005
Diisopropyl ether (DIPE)	BQL	1.00	1	8/31/2005
Ethylbenzene	BQL	1.00	1	8/31/2005
Hexachlorobutadiene	BQL	1.00	1	8/31/2005
2-Hexanone	BQL	5.00	1	8/31/2005
Iodomethane	BQL	1.00	1	8/31/2005
Isopropylbenzene	BQL	1.00	1	8/31/2005

**Results for Volatiles
by GCMS 8260B**

Client Sample ID: PZ-6
Client Project ID: Atlantic Scrap
Lab Sample ID: G204-481-3A
Lab Project ID: G204-481

Analyzed By: JTF
Date Collected: 8/25/2005 14:05
Date Received: 8/27/2005
Matrix: Water

Compound	Result UG/L	Quantitation Limit UG/L	Dilution Factor	Date Analyzed
4-Isopropyltoluene	BQL	1.00	1	8/31/2005
Methylene chloride	BQL	5.00	1	8/31/2005
4-Methyl-2-pentanone	BQL	5.00	1	8/31/2005
Methyl-tert-butyl ether (MTBE)	BQL	1.00	1	8/31/2005
Naphthalene	BQL	1.00	1	8/31/2005
n-Propyl benzene	BQL	1.00	1	8/31/2005
Styrene	BQL	1.00	1	8/31/2005
1,1,1,2-Tetrachloroethane	BQL	1.00	1	8/31/2005
1,1,2,2-Tetrachloroethane	BQL	1.00	1	8/31/2005
Tetrachloroethene	BQL	1.00	1	8/31/2005
Toluene	BQL	1.00	1	8/31/2005
1,2,3-Trichlorobenzene	BQL	1.00	1	8/31/2005
1,2,4-Trichlorobenzene	BQL	1.00	1	8/31/2005
Trichloroethene	BQL	1.00	1	8/31/2005
1,1,1-Trichloroethane	BQL	1.00	1	8/31/2005
1,1,2-Trichloroethane	BQL	1.00	1	8/31/2005
Trichlorofluoromethane	BQL	1.00	1	8/31/2005
1,2,3-Trichloropropane	BQL	1.00	1	8/31/2005
1,2,4-Trimethylbenzene	BQL	1.00	1	8/31/2005
1,3,5-Trimethylbenzene	BQL	1.00	1	8/31/2005
Vinyl chloride	BQL	1.00	1	8/31/2005
m-,p-Xylene	BQL	2.00	1	8/31/2005
o-Xylene	BQL	1.00	1	8/31/2005
		Spike Added	Spike Result	Percent Recovered
4-Bromofluorobenzene		10	9.04	90
1,2-Dichloroethane-d4		10	10.9	109
Toluene-d8		10	10.1	101

Comments:**Flags:**

BQL = Below Quantitation Limits.

Reviewed By:

**Results for Volatiles
by GCMS 8260B**

Client Sample ID: Trip Blank
Client Project ID: Atlantic Scrap
Lab Sample ID: G204-481-4A
Lab Project ID: G204-481

Analyzed By: JTF
Date Collected: 8/25/2005 0:00
Date Received: 8/27/2005
Matrix: Water

Compound	Result UG/L	Quantitation Limit UG/L	Dilution Factor	Date Analyzed
Acetone	BQL	25.0	1	8/31/2005
Benzene	BQL	1.00	1	8/31/2005
Bromobenzene	BQL	1.00	1	8/31/2005
Bromochloromethane	BQL	1.00	1	8/31/2005
Bromodichloromethane	BQL	1.00	1	8/31/2005
Bromoform	BQL	1.00	1	8/31/2005
Bromomethane	BQL	1.00	1	8/31/2005
2-Butanone	BQL	25.0	1	8/31/2005
n-Butylbenzene	BQL	1.00	1	8/31/2005
sec-Butylbenzene	BQL	1.00	1	8/31/2005
tert-Butylbenzene	BQL	1.00	1	8/31/2005
Carbon disulfide	BQL	1.00	1	8/31/2005
Carbon tetrachloride	BQL	1.00	1	8/31/2005
Chlorobenzene	BQL	1.00	1	8/31/2005
Chloroethane	BQL	1.00	1	8/31/2005
Chloroform	BQL	1.00	1	8/31/2005
Chloromethane	BQL	1.00	1	8/31/2005
2-Chlorotoluene	BQL	1.00	1	8/31/2005
4-Chlorotoluene	BQL	1.00	1	8/31/2005
Dibromochloromethane	BQL	1.00	1	8/31/2005
1,2-Dibromo-3-chloropropane	BQL	5.00	1	8/31/2005
Dibromomethane	BQL	1.00	1	8/31/2005
1,2-Dibromoethane (EDB)	BQL	1.00	1	8/31/2005
1,2-Dichlorobenzene	BQL	1.00	1	8/31/2005
1,3-Dichlorobenzene	BQL	1.00	1	8/31/2005
1,4-Dichlorobenzene	BQL	1.00	1	8/31/2005
trans-1,4-Dichloro-2-butene	BQL	5.00	1	8/31/2005
1,1-Dichloroethane	BQL	1.00	1	8/31/2005
1,1-Dichloroethene	BQL	1.00	1	8/31/2005
1,2-Dichloroethane	BQL	1.00	1	8/31/2005
cis-1,2-Dichloroethene	BQL	1.00	1	8/31/2005
trans-1,2-dichloroethene	BQL	1.00	1	8/31/2005
1,2-Dichloropropane	BQL	1.00	1	8/31/2005
1,3-Dichloropropane	BQL	1.00	1	8/31/2005
2,2-Dichloropropane	BQL	1.00	1	8/31/2005
1,1-Dichloropropene	BQL	1.00	1	8/31/2005
cis-1,3-Dichloropropene	BQL	1.00	1	8/31/2005
trans-1,3-Dichloropropene	BQL	1.00	1	8/31/2005
Dichlorodifluoromethane	BQL	5.00	1	8/31/2005
Diisopropyl ether (DIPE)	BQL	1.00	1	8/31/2005
Ethylbenzene	BQL	1.00	1	8/31/2005
Hexachlorobutadiene	BQL	1.00	1	8/31/2005
2-Hexanone	BQL	5.00	1	8/31/2005
Iodomethane	BQL	1.00	1	8/31/2005
Isopropylbenzene	BQL	1.00	1	8/31/2005

**Results for Volatiles
by GCMS 8260B**

Client Sample ID: Trip Blank
 Client Project ID: Atlantic Scrap
 Lab Sample ID: G204-481-4A
 Lab Project ID: G204-481

Analyzed By: JTF
 Date Collected: 8/25/2005 0:00
 Date Received: 8/27/2005
 Matrix: Water

Compound	Result UG/L	Quantitation Limit UG/L	Dilution Factor	Date Analyzed
4-Isopropyltoluene	BQL	1.00	1	8/31/2005
Methylene chloride	BQL	5.00	1	8/31/2005
4-Methyl-2-pentanone	BQL	5.00	1	8/31/2005
Methyl-tert-butyl ether (MTBE)	BQL	1.00	1	8/31/2005
Naphthalene	BQL	1.00	1	8/31/2005
n-Propyl benzene	BQL	1.00	1	8/31/2005
Styrene	BQL	1.00	1	8/31/2005
1,1,1,2-Tetrachloroethane	BQL	1.00	1	8/31/2005
1,1,2,2-Tetrachloroethane	BQL	1.00	1	8/31/2005
Tetrachloroethene	BQL	1.00	1	8/31/2005
Toluene	BQL	1.00	1	8/31/2005
1,2,3-Trichlorobenzene	BQL	1.00	1	8/31/2005
1,2,4-Trichlorobenzene	BQL	1.00	1	8/31/2005
Trichloroethene	BQL	1.00	1	8/31/2005
1,1,1-Trichloroethane	BQL	1.00	1	8/31/2005
1,1,2-Trichloroethane	BQL	1.00	1	8/31/2005
Trichlorofluoromethane	BQL	1.00	1	8/31/2005
1,2,3-Trichloropropane	BQL	1.00	1	8/31/2005
1,2,4-Trimethylbenzene	BQL	1.00	1	8/31/2005
1,3,5-Trimethylbenzene	BQL	1.00	1	8/31/2005
Vinyl chloride	BQL	1.00	1	8/31/2005
m-,p-Xylene	BQL	2.00	1	8/31/2005
o-Xylene	BQL	1.00	1	8/31/2005

	Spike Added	Spike Result	Percent Recovered
4-Bromofluorobenzene	10	9.51	95
1,2-Dichloroethane-d4	10	10.3	103
Toluene-d8	10	9.76	98

Comments:

Flags:

BQL = Below Quantitation Limits.

Reviewed By: JTF

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: TW-6
Client Project ID: Atlantic Scrap
Lab Sample ID: G204-481-1L
Lab Project ID: G204-481

Analyzed By: MRC
Date Collected: 8/25/2005 12:00
Date Received: 8/27/2005
Date Extracted: 8/30/2005
Matrix: Water

Compound	Result ug/L	Quantitation Limit ug/L	Dilution Factor	Date Analyzed
Acenaphthene	BQL	10.0	1	9/1/2005
Acenaphthylene	BQL	10.0	1	9/1/2005
Anthracene	BQL	10.0	1	9/1/2005
Benzo[a]anthracene	BQL	10.0	1	9/1/2005
Benzo[a]pyrene	BQL	10.0	1	9/1/2005
Benzo[b]fluoranthene	BQL	10.0	1	9/1/2005
Benzo[g,h,i]perylene	BQL	10.0	1	9/1/2005
Benzo[k]fluoranthene	BQL	10.0	1	9/1/2005
Benzoic Acid	BQL	20.0	1	9/1/2005
Bis(2-chloroethoxy)methane	BQL	10.0	1	9/1/2005
Bis(2-chloroethyl)ether	BQL	10.0	1	9/1/2005
Bis(2-chloroisopropyl)ether	BQL	10.0	1	9/1/2005
Bis(2-ethylhexyl)phthalate	BQL	10.0	1	9/1/2005
4-bromophenyl phenyl ether	BQL	10.0	1	9/1/2005
Butylbenzylphthalate	BQL	10.0	1	9/1/2005
2-Chloronaphthalene	BQL	10.0	1	9/1/2005
2-Chlorophenol	BQL	10.0	1	9/1/2005
4-Chloro-3-methylphenol	BQL	10.0	1	9/1/2005
4-Chloroaniline	BQL	50.0	1	9/1/2005
4-Chlorophenyl phenyl ether	BQL	10.0	1	9/1/2005
Chrysene	BQL	10.0	1	9/1/2005
Dibenzo[a,h]anthracene	BQL	10.0	1	9/1/2005
Dibenzofuran	BQL	10.0	1	9/1/2005
Di-n-Butylphthalate	BQL	10.0	1	9/1/2005
1,2-Dichlorobenzene	BQL	10.0	1	9/1/2005
1,3-Dichlorobenzene	BQL	10.0	1	9/1/2005
1,4-Dichlorobenzene	BQL	10.0	1	9/1/2005
3,3'-Dichlorobenzidine	BQL	20.0	1	9/1/2005
2,4-Dichlorophenol	BQL	10.0	1	9/1/2005
Diethylphthalate	BQL	10.0	1	9/1/2005
Dimethylphthalate	BQL	10.0	1	9/1/2005
2,4-Dimethylphenol	BQL	10.0	1	9/1/2005
Di-n-octylphthalate	BQL	10.0	1	9/1/2005
4,6-Dinitro-2-methylphenol	BQL	50.0	1	9/1/2005
2,4-Dinitrophenol	BQL	50.0	1	9/1/2005
2,4-Dinitrotoluene	BQL	10.0	1	9/1/2005
2,6-Dinitrotoluene	BQL	10.0	1	9/1/2005
Diphenylamine *	BQL	10.0	1	9/1/2005
Fluoranthene	BQL	10.0	1	9/1/2005
Fluorene	BQL	10.0	1	9/1/2005
Hexachlorobenzene	BQL	10.0	1	9/1/2005
Hexachlorobutadiene	BQL	10.0	1	9/1/2005

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: TW-6
 Client Project ID: Atlantic Scrap
 Lab Sample ID: G204-481-1L
 Lab Project ID: G204-481

Analyzed By: MRC
 Date Collected: 8/25/2005 12:00
 Date Received: 8/27/2005
 Date Extracted: 8/30/2005
 Matrix: Water

Compound	Result ug/L	Quantitation Limit ug/L	Dilution Factor	Date Analyzed
Hexachlorocyclopentadiene	BQL	20.0	1	9/1/2005
Hexachloroethane	BQL	10.0	1	9/1/2005
Indeno(1,2,3-c,d)pyrene	BQL	10.0	1	9/1/2005
Isophorone	BQL	10.0	1	9/1/2005
2-Methylnaphthalene	BQL	10.0	1	9/1/2005
2-Methylphenol	BQL	10.0	1	9/1/2005
3- & 4-Methylphenol	BQL	10.0	1	9/1/2005
Naphthalene	BQL	10.0	1	9/1/2005
2-Nitroaniline	BQL	10.0	1	9/1/2005
3-Nitroaniline	BQL	50.0	1	9/1/2005
4-Nitroaniline	BQL	50.0	1	9/1/2005
Nitrobenzene	BQL	10.0	1	9/1/2005
2-Nitrophenol	BQL	10.0	1	9/1/2005
4-Nitrophenol	BQL	50.0	1	9/1/2005
N-Nitrosodi-n-propylamine	BQL	10.0	1	9/1/2005
Pentachlorophenol	BQL	50.0	1	9/1/2005
Phenanthrene	BQL	10.0	1	9/1/2005
Phenol	BQL	10.0	1	9/1/2005
Pyrene	BQL	10.0	1	9/1/2005
1,2,4-Trichlorobenzene	BQL	10.0	1	9/1/2005
2,4,5-Trichlorophenol	BQL	10.0	1	9/1/2005
2,4,6-Trichlorophenol	BQL	10.0	1	9/1/2005

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	6.6	66
2-Fluorophenol	10	6.2	62
Nitrobenzene-d5	10	6.2	62
Phenol-d6	10	6.1	61
2,4,6-Tribromophenol	10	5.5	55
4-Terphenyl-d14	10	7.2	72

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

Reviewed By:

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: TW-5
Client Project ID: Atlantic Scrap
Lab Sample ID: G204-481-2M
Lab Project ID: G204-481

Analyzed By: MRC
Date Collected: 8/25/2005 13:10
Date Received: 8/27/2005
Date Extracted: 8/30/2005
Matrix: Water

Compound	Result ug/L	Quantitation Limit ug/L	Dilution Factor	Date Analyzed
Acenaphthene	BQL	10.0	1	9/1/2005
Acenaphthylene	BQL	10.0	1	9/1/2005
Anthracene	BQL	10.0	1	9/1/2005
Benzo[a]anthracene	BQL	10.0	1	9/1/2005
Benzo[a]pyrene	BQL	10.0	1	9/1/2005
Benzo[b]fluoranthene	BQL	10.0	1	9/1/2005
Benzo[g,h,i]perylene	BQL	10.0	1	9/1/2005
Benzo[k]fluoranthene	BQL	10.0	1	9/1/2005
Benzoic Acid	BQL	20.0	1	9/1/2005
Bis(2-chloroethoxy)methane	BQL	10.0	1	9/1/2005
Bis(2-chloroethyl)ether	BQL	10.0	1	9/1/2005
Bis(2-chloroisopropyl)ether	BQL	10.0	1	9/1/2005
Bis(2-ethylhexyl)phthalate	BQL	10.0	1	9/1/2005
4-bromophenyl phenyl ether	BQL	10.0	1	9/1/2005
Butylbenzylphthalate	BQL	10.0	1	9/1/2005
2-Chloronaphthalene	BQL	10.0	1	9/1/2005
2-Chlorophenol	BQL	10.0	1	9/1/2005
4-Chloro-3-methylphenol	BQL	10.0	1	9/1/2005
4-Chloroaniline	BQL	50.0	1	9/1/2005
4-Chlorophenyl phenyl ether	BQL	10.0	1	9/1/2005
Chrysene	BQL	10.0	1	9/1/2005
Dibenzo[a,h]anthracene	BQL	10.0	1	9/1/2005
Dibenzofuran	BQL	10.0	1	9/1/2005
Di-n-Butylphthalate	BQL	10.0	1	9/1/2005
1,2-Dichlorobenzene	BQL	10.0	1	9/1/2005
1,3-Dichlorobenzene	BQL	10.0	1	9/1/2005
1,4-Dichlorobenzene	BQL	10.0	1	9/1/2005
3,3'-Dichlorobenzidine	BQL	20.0	1	9/1/2005
2,4-Dichlorophenol	BQL	10.0	1	9/1/2005
Diethylphthalate	BQL	10.0	1	9/1/2005
Dimethylphthalate	BQL	10.0	1	9/1/2005
2,4-Dimethylphenol	BQL	10.0	1	9/1/2005
Di-n-octylphthalate	BQL	10.0	1	9/1/2005
4,6-Dinitro-2-methylphenol	BQL	50.0	1	9/1/2005
2,4-Dinitrophenol	BQL	50.0	1	9/1/2005
2,4-Dinitrotoluene	BQL	10.0	1	9/1/2005
2,6-Dinitrotoluene	BQL	10.0	1	9/1/2005
Diphenylamine *	BQL	10.0	1	9/1/2005
Fluoranthene	BQL	10.0	1	9/1/2005
Fluorene	BQL	10.0	1	9/1/2005
Hexachlorobenzene	BQL	10.0	1	9/1/2005
Hexachlorobutadiene	BQL	10.0	1	9/1/2005

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: TW-5
Client Project ID: Atlantic Scrap
Lab Sample ID: G204-481-2M
Lab Project ID: G204-481

Analyzed By: MRC
Date Collected: 8/25/2005 13:10
Date Received: 8/27/2005
Date Extracted: 8/30/2005
Matrix: Water

Compound	Result ug/L	Quantitation Limit ug/L	Dilution Factor	Date Analyzed
Hexachlorocyclopentadiene	BQL	20.0	1	9/1/2005
Hexachloroethane	BQL	10.0	1	9/1/2005
Indeno(1,2,3-c,d)pyrene	BQL	10.0	1	9/1/2005
Isophorone	BQL	10.0	1	9/1/2005
2-Methylnaphthalene	BQL	10.0	1	9/1/2005
2-Methylphenol	BQL	10.0	1	9/1/2005
3- & 4-Methylphenol	BQL	10.0	1	9/1/2005
Naphthalene	BQL	10.0	1	9/1/2005
2-Nitroaniline	BQL	10.0	1	9/1/2005
3-Nitroaniline	BQL	50.0	1	9/1/2005
4-Nitroaniline	BQL	50.0	1	9/1/2005
Nitrobenzene	BQL	10.0	1	9/1/2005
2-Nitrophenol	BQL	10.0	1	9/1/2005
4-Nitrophenol	BQL	50.0	1	9/1/2005
N-Nitrosodi-n-propylamine	BQL	10.0	1	9/1/2005
Pentachlorophenol	BQL	50.0	1	9/1/2005
Phenanthrene	BQL	10.0	1	9/1/2005
Phenol	BQL	10.0	1	9/1/2005
Pyrene	BQL	10.0	1	9/1/2005
1,2,4-Trichlorobenzene	BQL	10.0	1	9/1/2005
2,4,5-Trichlorophenol	BQL	10.0	1	9/1/2005
2,4,6-Trichlorophenol	BQL	10.0	1	9/1/2005

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	6.5	65
2-Fluorophenol	10	6.5	65
Nitrobenzene-d5	10	6.2	62
Phenol-d6	10	6.1	61
2,4,6-Tribromophenol	10	6.7	67
4-Terphenyl-d14	10	7.1	71

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

Reviewed By:

Results for Metals

Client Sample ID: TW-6
 Client Project ID: Atlantic Scrap
 Lab Sample ID: G204-481-1
 Lab Project ID: G204-481
 Batch ID: 3565 3550

Analyzed By: PSW
 Date Collected: 8/25/2005 12:00
 Date Received: 8/27/2005
 Matrix: WATER

Metals	Result	RL	DF	Units	Method	Date Analyzed
Aluminum	0.825	0.100	1	MG/L	6010B	9/7/2005
Antimony	BQL	0.0600	1	MG/L	6010B	9/12/2005
Arsenic	BQL	0.0100	1	MG/L	6010B	9/7/2005
Barium	0.656	0.100	1	MG/L	6010B	9/12/2005
Beryllium	BQL	0.0100	1	MG/L	6010B	9/7/2005
Cadmium	BQL	0.0100	1	MG/L	6010B	9/12/2005
Calcium	3.04	0.100	1	MG/L	6010B	9/12/2005
Chromium	BQL	0.0100	1	MG/L	6010B	9/12/2005
Cobalt	0.0267	0.0100	1	MG/L	6010B	9/12/2005
Copper	BQL	0.0100	1	MG/L	6010B	9/12/2005
Iron	0.814	0.100	1	MG/L	6010B	9/12/2005
Lead	0.0106	0.0100	1	MG/L	6010B	9/12/2005
Magnesium	3.37	0.100	1	MG/L	6010B	9/12/2005
Manganese	3.17	0.100	10	MG/L	6010B	9/12/2005
Mercury	BQL	0.000250	1	MG/L	7470	8/31/2005
Nickel	BQL	0.0100	1	MG/L	6010B	9/12/2005
Potassium	8.06	2.00	10	MG/L	6010B	9/13/2005
Selenium	BQL	0.0200	1	MG/L	6010B	9/12/2005
Silver	BQL	0.0100	1	MG/L	6010B	9/7/2005
Sodium	38.5	0.200	1	MG/L	6010B	9/7/2005
Thallium	BQL	0.0100	1	MG/L	6010B	9/12/2005
Vanadium	BQL	0.0500	1	MG/L	6010B	9/12/2005
Zinc	0.0972	0.0200	1	MG/L	6010B	9/12/2005

Comments

BQL = Below Quantitation Limits

DF = Dilution Factor

J = Between MDL and RL

B= Amount in Prep Blank > RL

Reviewed By:
 MET_LIMS_3.3

Results for Metals

Client Sample ID: TW-5
 Client Project ID: Atlantic Scrap
 Lab Sample ID: G204-481-2
 Lab Project ID: G204-481
 Batch ID: 3565 3550

Analyzed By: PSW
 Date Collected: 8/25/2005 13:10
 Date Received: 8/27/2005
 Matrix: WATER

Metals	Result	RL	DF	Units	Method	Date Analyzed
Aluminum	4.71	0.100	1	MG/L	6010B	9/7/2005
Antimony	BQL	0.0600	1	MG/L	6010B	9/12/2005
Arsenic	0.171	0.0100	1	MG/L	6010B	9/7/2005
Barium	BQL	0.100	1	MG/L	6010B	9/12/2005
Beryllium	BQL	0.0100	1	MG/L	6010B	9/7/2005
Cadmium	BQL	0.0100	1	MG/L	6010B	9/12/2005
Calcium	223	0.100	1	MG/L	6010B	9/12/2005
Chromium	BQL	0.0100	1	MG/L	6010B	9/12/2005
Cobalt	0.0801	0.0100	1	MG/L	6010B	9/12/2005
Copper	0.0449	0.0100	1	MG/L	6010B	9/12/2005
Iron	1.00	0.100	1	MG/L	6010B	9/12/2005
Lead	0.0935	0.0100	1	MG/L	6010B	9/12/2005
Magnesium	87.3	0.100	1	MG/L	6010B	9/12/2005
Manganese	14.4	1.00	100	MG/L	6010B	9/12/2005
Mercury	BQL	0.000250	1	MG/L	7470	8/31/2005
Nickel	0.0464	0.0100	1	MG/L	6010B	9/12/2005
Potassium	6910	20.0	100	MG/L	6010B	9/13/2005
Selenium	BQL	0.0200	1	MG/L	6010B	9/12/2005
Silver	0.0160	0.0100	1	MG/L	6010B	9/7/2005
Sodium	1520	20.0	100	MG/L	6010B	9/13/2005
Thallium	0.0557	0.0100	1	MG/L	6010B	9/12/2005
Vanadium	BQL	0.0500	1	MG/L	6010B	9/12/2005
Zinc	0.843	0.0200	1	MG/L	6010B	9/12/2005

Comments

BQL = Below Quantitation Limits
 DF = Dilution Factor
 J = Between MDL and RL
 B= Amount in Prep Blank > RL

Reviewed By: PSW
 MET_LIMS_3.3

Results for Anions
by IC 300.0

Client Sample ID: TW-6
Client Project ID: Atlantic Scrap
Lab Sample ID: G204-481-1F
Lab Project ID: G204-481

Analyzed By: PSW
Date Collected: 8/25/2005 12:00
Date Received: 8/27/2005
Matrix: Water

Analyte	Result mg/L	RL mg/L	Dilution Factor	Date Analyzed
Sulfate	0.809	0.300	1	9/1/2005
Nitrate	7.18	0.300	1	9/1/2005

Comments:
All values corrected for dilution.
BQL = Below quantitation limit.

Reviewed By: PSW
IC_LIMS_v1.2(water)

Results for Anions
by IC 300.0

Client Sample ID: TW-5
Client Project ID: Atlantic Scrap
Lab Sample ID: G204-481-2F
Lab Project ID: G204-481

Analyzed By: PSW
Date Collected: 8/25/2005 13:10
Date Received: 8/27/2005
Matrix: Water

Analyte	Result mg/L	RL mg/L	Dilution Factor	Date Analyzed
Sulfate	5800	150	500	9/9/2005
Nitrate	89.6	30.0	100	9/1/2005

Comments:

All values corrected for dilution.
BQL = Below quantitation limit.

Reviewed By: PSW
IC_LIMS_v1.2(water)

Analytical Results

Client Sample ID: TW-6
 Client Project ID: Atlantic Scrap
 Lab Sample ID: G204-481-1
 Lab Project ID: G204-481

Date Collected: 8/25/2005
 Date Received: 8/27/2005
 Matrix: Water

Analyte	Result	RL	Units	Method	Date Analyzed	Analyst
Ammonia	0.2	0.1	mg/l	SM4500NH3-F	8/31/2005	Envirochem
Nitrite*	BQL	0.025	mg/l	365.2	8/30/2005	Envirochem
Ortho-Phosphorus*	BQL	0.02	mg/l	365.2	8/30/2005	Envirochem
Phosphorus	0.02	0.02	mg/l	353.3	9/2/2005	Envirochem

Comments

BQL = Below Quantitation Limits

DF = Dilution Factor

RL = Report Limit

* = Samples analyzed outside of holding time.

Reviewed By:
subout_LIMS_v12

Analytical Results

Client Sample ID: TW-5
Client Project ID: Atlantic Scrap
Lab Sample ID: G204-481-2
Lab Project ID: G204-481

Date Collected: 8/25/2005
Date Received: 8/27/2005
Matrix: Water

Analyte	Result	RL	Units	Method	Date Analyzed	Analyst
Ammonia	1038	0.1	mg/l	SM4500NH3-F	8/31/2005	Envirochem
Nitrite*	0.23	0.025	mg/l	365.2	8/30/2005	Envirochem
Ortho-Phosphorus*	BQL	0.02	mg/l	365.2	8/30/2005	Envirochem
Phosphorus	BQL	0.02	mg/l	353.3	9/2/2005	Envirochem

Comments

BQL = Below Quantitation Limits

DF = Dilution Factor

RL = Report Limit

* = Samples analyzed outside of holding time.

Reviewed By: RW
subout_LIMS_v12

**List of Reporting Abbreviations
and Data Qualifiers**

B = Compound also detected in batch blank

BQL = Below Quantitation Limit

DF = Dilution Factor

Dup = Duplicate

E = Estimated concentration, exceeds calibration range.

J = Estimated concentration, below calibration range and above MDL

LCS(D) = Laboratory Control Spike (Duplicate)

MDL = Method Detection Limit

MS(D) = Matrix Spike (Duplicate)

PQL = Practical Quantitation Limit

RL = Reporting Limit

RPD = Relative Percent Difference

mg/kg = milligram per kilogram, ppm, parts per million

ug/kg = micrograms per kilogram, ppb, parts per billion

mg/L = milligram per liter, ppm, parts per million

ug/L = micrograms per liter, ppb, parts per billion

% Rec = Percent Recovery

% solids = Percent Solids

Special Notes:

1) Metals and mercury samples are digested with a hot block, see the standard operating procedure document for details.

2) Uncertainty for all reported data is less than or equal to 30 percent.

PARADIGM ANALYTICAL LABORATORIES, INC.

5500 Business Drive, Wilmington, NC 28405

Phone: (910)-350-1903 FAX: (910)-350-1557

Chain-of Custody Record & Analytical Request

COC# 50558

Page 1 of 1

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Client: EarthTech Project ID: Atlantic Scrap Date: 8/25/05 Report To: Rob Holland
 Address: 701 Corporate Center Dr. Contact: Rob Holland Turnaround: Std
 Address: Suite 475 Ral 27607 Phone: 919 854 6241 Job Number: _____
 Quote #: _____ Fax: _____ P.O. Number: _____ Invoice To: Rob Holland

Sample ID	Date	Time	Matrix	Preservatives			Analytes							Comments: Please specify any special reporting requirements	
				HCL	HNO3	H3SO4	8260	8270	TAL metals	sulfate	Nitrate/nitrite	ammonia phosphorus	ortho-phosphate		ammonia
TW-6	8/25/05	1200	GW	X	X	X	3	1	1	1	1	1	1	1	G204-481
TW-5	8/25/05	1310	GW	X	X	X	3	1	1	1	1	1	1		
PZ-6	8/25/05	1405	GW	X			2								Low water volume
Trip Blank							2								analyse nitrate and o-phosphate wet of hold for Rob Holland 8/26/05
Relinquished By:				Date	Time	Received By			Date	Time	Temperature	State Certification Requested			
Rob Holland				8/26/05	1345	Ray Pen			8/27/05	1150	5.60C	NC _____ SC _____ Other _____			

PARADIGM ANALYTICAL LABORATORIES, INC.

NC CERTIFICATION #481

ORIGINAL

SEE REVERSE FOR TERMS AND CONDITIONS

Mr. Rob Holland
Earth Tech
701 Corporate Dr. Suite 475
Raleigh NC 27607

Report Number: G204-480

Client Project: Atlantic Scrap

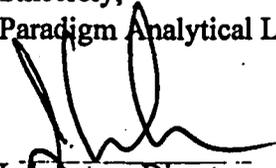
Dear Mr. Holland:

Enclosed are the results of the analytical services performed under the referenced project. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of five years in the event they are required for future reference. Any samples submitted to our laboratory will be retained for a maximum of thirty (30) days from the date of this report unless other arrangements are requested.

If there are any questions about the report or the services performed during this project, please call Paradigm at (910) 350-1903. We will be happy to answer any questions or concerns which you may have.

Thank you for using Paradigm Analytical Labs for your analytical services. We look forward to working with you again on any additional analytical needs which you may have.

Sincerely,
Paradigm Analytical Laboratories, Inc.



Laboratory Director
J. Patrick Weaver

9/7/05

Date

**Results for Volatiles
by GCMS 8260B**

Client Sample ID: SW-555
Client Project ID: Atlantic Scrap
Lab Sample ID: G204-480-1A
Lab Project ID: G204-480

Analyzed By: JTF
Date Collected: 8/25/2005 11:25
Date Received: 8/27/2005
Matrix: Water

Compound	Result UG/L	Quantitation Limit UG/L	Dilution Factor	Date Analyzed
Acetone	BQL	25.0	1	8/31/2005
Benzene	BQL	1.00	1	8/31/2005
Bromobenzene	BQL	1.00	1	8/31/2005
Bromochloromethane	BQL	1.00	1	8/31/2005
Bromodichloromethane	BQL	1.00	1	8/31/2005
Bromoform	BQL	1.00	1	8/31/2005
Bromomethane	BQL	1.00	1	8/31/2005
2-Butanone	BQL	25.0	1	8/31/2005
n-Butylbenzene	BQL	1.00	1	8/31/2005
sec-Butylbenzene	BQL	1.00	1	8/31/2005
tert-Butylbenzene	BQL	1.00	1	8/31/2005
Carbon disulfide	BQL	1.00	1	8/31/2005
Carbon tetrachloride	BQL	1.00	1	8/31/2005
Chlorobenzene	BQL	1.00	1	8/31/2005
Chloroethane	BQL	1.00	1	8/31/2005
Chloroform	BQL	1.00	1	8/31/2005
Chloromethane	BQL	1.00	1	8/31/2005
2-Chlorotoluene	BQL	1.00	1	8/31/2005
4-Chlorotoluene	BQL	1.00	1	8/31/2005
Dibromochloromethane	BQL	1.00	1	8/31/2005
1,2-Dibromo-3-chloropropane	BQL	5.00	1	8/31/2005
Dibromomethane	BQL	1.00	1	8/31/2005
1,2-Dibromoethane (EDB)	BQL	1.00	1	8/31/2005
1,2-Dichlorobenzene	BQL	1.00	1	8/31/2005
1,3-Dichlorobenzene	BQL	1.00	1	8/31/2005
1,4-Dichlorobenzene	BQL	1.00	1	8/31/2005
trans-1,4-Dichloro-2-butene	BQL	5.00	1	8/31/2005
1,1-Dichloroethane	BQL	1.00	1	8/31/2005
1,1-Dichloroethene	BQL	1.00	1	8/31/2005
1,2-Dichloroethane	BQL	1.00	1	8/31/2005
cis-1,2-Dichloroethene	BQL	1.00	1	8/31/2005
trans-1,2-dichloroethene	BQL	1.00	1	8/31/2005
1,2-Dichloropropane	BQL	1.00	1	8/31/2005
1,3-Dichloropropane	BQL	1.00	1	8/31/2005
2,2-Dichloropropane	BQL	1.00	1	8/31/2005
1,1-Dichloropropene	BQL	1.00	1	8/31/2005
cis-1,3-Dichloropropene	BQL	1.00	1	8/31/2005
trans-1,3-Dichloropropene	BQL	1.00	1	8/31/2005
Dichlorodifluoromethane	BQL	5.00	1	8/31/2005
Diisopropyl ether (DIPE)	BQL	1.00	1	8/31/2005
Ethylbenzene	BQL	1.00	1	8/31/2005
Hexachlorobutadiene	BQL	1.00	1	8/31/2005
2-Hexanone	BQL	5.00	1	8/31/2005
Iodomethane	BQL	1.00	1	8/31/2005
Isopropylbenzene	BQL	1.00	1	8/31/2005

**Results for Volatiles
by GCMS 8260B**

Client Sample ID: SW-555
 Client Project ID: Atlantic Scrap
 Lab Sample ID: G204-480-1A
 Lab Project ID: G204-480

Analyzed By: JTF
 Date Collected: 8/25/2005 11:25
 Date Received: 8/27/2005
 Matrix: Water

Compound	Result UG/L	Quantitation Limit UG/L	Dilution Factor	Date Analyzed
4-Isopropyltoluene	BQL	1.00	1	8/31/2005
Methylene chloride	BQL	5.00	1	8/31/2005
4-Methyl-2-pentanone	BQL	5.00	1	8/31/2005
Methyl-tert-butyl ether (MTBE)	BQL	1.00	1	8/31/2005
Naphthalene	BQL	1.00	1	8/31/2005
n-Propyl benzene	BQL	1.00	1	8/31/2005
Styrene	BQL	1.00	1	8/31/2005
1,1,1,2-Tetrachloroethane	BQL	1.00	1	8/31/2005
1,1,2,2-Tetrachloroethane	BQL	1.00	1	8/31/2005
Tetrachloroethene	BQL	1.00	1	8/31/2005
Toluene	BQL	1.00	1	8/31/2005
1,2,3-Trichlorobenzene	BQL	1.00	1	8/31/2005
1,2,4-Trichlorobenzene	BQL	1.00	1	8/31/2005
Trichloroethene	BQL	1.00	1	8/31/2005
1,1,1-Trichloroethane	BQL	1.00	1	8/31/2005
1,1,2-Trichloroethane	BQL	1.00	1	8/31/2005
Trichlorofluoromethane	BQL	1.00	1	8/31/2005
1,2,3-Trichloropropane	BQL	1.00	1	8/31/2005
1,2,4-Trimethylbenzene	BQL	1.00	1	8/31/2005
1,3,5-Trimethylbenzene	BQL	1.00	1	8/31/2005
Vinyl chloride	BQL	1.00	1	8/31/2005
m-,p-Xylene	BQL	2.00	1	8/31/2005
o-Xylene	BQL	1.00	1	8/31/2005

	Spike Added	Spike Result	Percent Recovered
4-Bromofluorobenzene	10	9.41	94
1,2-Dichloroethane-d4	10	10.2	102
Toluene-d8	10	9.79	98

Comments:

Flags:

BQL = Below Quantitation Limits.

Reviewed By:

**List of Reporting Abbreviations
and Data Qualifiers**

B = Compound also detected in batch blank

BQL = Below Quantitation Limit

DF = Dilution Factor

Dup = Duplicate

E = Estimated concentration, exceeds calibration range.

J = Estimated concentration, below calibration range and above MDL

LCS(D) = Laboratory Control Spike (Duplicate)

MDL = Method Detection Limit

MS(D) = Matrix Spike (Duplicate)

PQL = Practical Quantitation Limit

RL = Reporting Limit

RPD = Relative Percent Difference

mg/kg = milligram per kilogram, ppm, parts per million

ug/kg = micrograms per kilogram, ppb, parts per billion

mg/L = milligram per liter, ppm, parts per million

ug/L = micrograms per liter, ppb, parts per billion

% Rec = Percent Recovery

% solids = Percent Solids

Special Notes:

- 1) Metals and mercury samples are digested with a hot block, see the standard operating procedure document for details.**
- 2) Uncertainty for all reported data is less than or equal to 30 percent.**

Mr. Rob Holland
Earth Tech
701 Corporate Dr. Suite 475
Raleigh NC 27607

Report Number: G204-479

Client Project: Atlantic Scrap

Dear Mr. Holland:

Enclosed are the results of the analytical services performed under the referenced project. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of five years in the event they are required for future reference. Any samples submitted to our laboratory will be retained for a maximum of thirty (30) days from the date of this report unless other arrangements are requested.

If there are any questions about the report or the services performed during this project, please call Paradigm at (910) 350-1903. We will be happy to answer any questions or concerns which you may have.

Thank you for using Paradigm Analytical Labs for your analytical services. We look forward to working with you again on any additional analytical needs which you may have.

Sincerely,
Paradigm Analytical Laboratories, Inc.


Laboratory Director
J. Patrick Weaver

9/6/2005
Date

CASE NARRATIVE

Date: September 6, 2005

Earth Tech Project ID: Atlantic Scrap
Paradigm Analytical ID: G204-479

Two soil samples were received at the laboratory August 27 for analysis of volatiles and semi-volatiles. The samples were received in good condition, within temperature and holding time limits.

All extractions and analyses were completed within holding time and without quality control exception.

Sample SS-3 was analyzed multiple times, twice undiluted and at 40:1.

Bromomethane was detected in the original undiluted analysis above the calibration range. The sample was then prepared from the methanol vial to dilute the bromomethane and measure it within the linear range of the GC/MS system.

However, no bromoethane was detected in the dilution.

The sample was analyzed again from another undiluted sodium bisulfate vial. The bromomethane detection was confirmed in the undiluted sample.

These are several possible reasons bromomethane was not detected in the dilution from the methanol preserved vial. The leading possibility is that the sample was a soil. Soils are non-homogenous.

Both the undiluted and diluted results for bromoethane are presented in the report. The undiluted hit is E-flagged as an estimated concentration as it exceeded the linear range for the compound. The diluted analysis shows the compound not detected at 37.8 ug/kg.

The E-flag result with detection is supported by the second undiluted analysis of the sample that also shows the presence of bromomethane.

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: SS-2
 Client Project ID: Atlantic Scrap
 Lab Sample ID G204-479-1A
 Lab Project ID: G204-479
 Report Basis: Dry Weight

Analyzed By: JTF
 Date Collected: 08-24-2005 11:50
 Date Received: 8/27/2005
 Matrix: Soil
 %Solids: 74.0

Report Name Compound	Result UG/KG	Quantitation Limit UG/KG	Dilution Factor	Date Analyzed
Acetone	BQL	50.8	1	8/30/2005
Benzene	BQL	5.08	1	8/30/2005
Bromobenzene	BQL	5.08	1	8/30/2005
Bromochloromethane	BQL	5.08	1	8/30/2005
Bromodichloromethane	BQL	5.08	1	8/30/2005
Bromoform	BQL	5.08	1	8/30/2005
Bromomethane	BQL	5.08	1	8/30/2005
2-Butanone	BQL	25.4	1	8/30/2005
n-Butylbenzene	BQL	5.08	1	8/30/2005
sec-Butylbenzene	BQL	5.08	1	8/30/2005
tert-Butylbenzene	BQL	5.08	1	8/30/2005
Carbon disulfide	BQL	5.08	1	8/30/2005
Carbon tetrachloride	BQL	5.08	1	8/30/2005
Chlorobenzene	BQL	5.08	1	8/30/2005
Chloroethane	BQL	5.08	1	8/30/2005
Chloroform	BQL	5.08	1	8/30/2005
Chloromethane	BQL	5.08	1	8/30/2005
2-Chlorotoluene	BQL	5.08	1	8/30/2005
4-Chlorotoluene	BQL	5.08	1	8/30/2005
Dibromochloromethane	BQL	5.08	1	8/30/2005
1,2-Dibromo-3-chloropropane	BQL	5.08	1	8/30/2005
Dibromomethane	BQL	5.08	1	8/30/2005
1,2-Dibromoethane (EDB)	BQL	5.08	1	8/30/2005
1,2-Dichlorobenzene	BQL	5.08	1	8/30/2005
1,3-Dichlorobenzene	BQL	5.08	1	8/30/2005
1,4-Dichlorobenzene	BQL	5.08	1	8/30/2005
trans-1,4-Dichloro-2-butene	BQL	5.08	1	8/30/2005
1,1-Dichloroethane	BQL	5.08	1	8/30/2005
1,1-Dichloroethene	BQL	5.08	1	8/30/2005
1,2-Dichloroethane	BQL	5.08	1	8/30/2005
cis-1,2-Dichloroethene	BQL	5.08	1	8/30/2005
trans-1,2-dichloroethene	BQL	5.08	1	8/30/2005
1,2-Dichloropropane	BQL	5.08	1	8/30/2005
1,3-Dichloropropane	BQL	5.08	1	8/30/2005
2,2-Dichloropropane	BQL	5.08	1	8/30/2005
1,1-Dichloropropene	BQL	5.08	1	8/30/2005
cis-1,3-Dichloropropene	BQL	5.08	1	8/30/2005
trans-1,3-Dichloropropene	BQL	5.08	1	8/30/2005
Dichlorodifluoromethane	BQL	5.08	1	8/30/2005
Diisopropyl ether (DIPE)	BQL	5.08	1	8/30/2005
Ethylbenzene	BQL	5.08	1	8/30/2005
Hexachlorobutadiene	BQL	5.08	1	8/30/2005
2-Hexanone	BQL	5.08	1	8/30/2005
Iodomethane	BQL	5.08	1	8/30/2005

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: SS-2
 Client Project ID: Atlantic Scrap
 Lab Sample ID G204-479-1A
 Lab Project ID: G204-479
 Report Basis: Dry Weight

Analyzed By: JTF
 Date Collected: 08-24-2005 11:50
 Date Received: 8/27/2005
 Matrix: Soil
 %Solids: 74.0

Report Name Compound	Result UG/KG	Quantitation Limit UG/KG	Dilution Factor	Date Analyzed
Isopropylbenzene	BQL	5.08	1	8/30/2005
4-Isopropyltoluene	BQL	5.08	1	8/30/2005
Methylene chloride	BQL	20.3	1	8/30/2005
4-Methyl-2-pentanone	BQL	5.08	1	8/30/2005
Methyl-tert-butyl ether (MTBE)	BQL	5.08	1	8/30/2005
Naphthalene	BQL	5.08	1	8/30/2005
n-Propyl benzene	BQL	5.08	1	8/30/2005
Styrene	BQL	5.08	1	8/30/2005
1,1,1,2-Tetrachloroethane	BQL	5.08	1	8/30/2005
1,1,2,2-Tetrachloroethane	BQL	5.08	1	8/30/2005
Tetrachloroethene	BQL	5.08	1	8/30/2005
Toluene	BQL	5.08	1	8/30/2005
1,2,3-Trichlorobenzene	BQL	5.08	1	8/30/2005
1,2,4-Trichlorobenzene	BQL	5.08	1	8/30/2005
Trichloroethene	BQL	5.08	1	8/30/2005
1,1,1-Trichloroethane	BQL	5.08	1	8/30/2005
1,1,2-Trichloroethane	BQL	5.08	1	8/30/2005
Trichlorofluoromethane	BQL	5.08	1	8/30/2005
1,2,3-Trichloropropane	BQL	5.08	1	8/30/2005
1,2,4-Trimethylbenzene	BQL	5.08	1	8/30/2005
1,3,5-Trimethylbenzene	BQL	5.08	1	8/30/2005
Vinyl chloride	BQL	5.08	1	8/30/2005
m-,p-Xylene	BQL	10.2	1	8/30/2005
o-Xylene	BQL	5.08	1	8/30/2005

	Spike Added	Spike Result	Percent Recovered
4-Bromofluorobenzene	50	51.6	103
1,2-Dichloroethane-d4	50	54.5	109
Toluene-d8	50	52.5	105

Comments:

Flags:

BQL = Below Quantitation Limits.

Reviewed By: _____

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: SS-3
 Client Project ID: Atlantic Scrap
 Lab Sample ID G204-479-2A
 Lab Project ID: G204-479
 Report Basis: Dry Weight

Analyzed By: JTF
 Date Collected: 08-24-2005 11:58
 Date Received: 8/27/05
 Matrix: Soil
 %Solids: 73.6

Report Name Compound	Result UG/KG	Quantitation Limit UG/KG	Dilution Factor	Date Analyzed
Acetone	BQL	48.6	1	8/30/05
Benzene	BQL	4.86	1	8/30/05
Bromobenzene	BQL	4.86	1	8/30/05
Bromochloromethane	BQL	4.86	1	8/30/05
Bromodichloromethane	BQL	4.86	1	8/30/05
Bromoform	BQL	4.86	1	8/30/05
Bromomethane	272	4.86	1	8/30/05
2-Butanone	BQL	24.3	1	8/30/05
n-Butylbenzene	BQL	4.86	1	8/30/05
sec-Butylbenzene	BQL	4.86	1	8/30/05
tert-Butylbenzene	BQL	4.86	1	8/30/05
Carbon disulfide	BQL	4.86	1	8/30/05
Carbon tetrachloride	BQL	4.86	1	8/30/05
Chlorobenzene	BQL	4.86	1	8/30/05
Chloroethane	BQL	4.86	1	8/30/05
Chloroform	BQL	4.86	1	8/30/05
Chloromethane	BQL	4.86	1	8/30/05
2-Chlorotoluene	BQL	4.86	1	8/30/05
4-Chlorotoluene	BQL	4.86	1	8/30/05
Dibromochloromethane	BQL	4.86	1	8/30/05
1,2-Dibromo-3-chloropropane	BQL	4.86	1	8/30/05
Dibromomethane	BQL	4.86	1	8/30/05
1,2-Dibromoethane (EDB)	BQL	4.86	1	8/30/05
1,2-Dichlorobenzene	BQL	4.86	1	8/30/05
1,3-Dichlorobenzene	BQL	4.86	1	8/30/05
1,4-Dichlorobenzene	BQL	4.86	1	8/30/05
trans-1,4-Dichloro-2-butene	BQL	4.86	1	8/30/05
1,1-Dichloroethane	BQL	4.86	1	8/30/05
1,1-Dichloroethene	BQL	4.86	1	8/30/05
1,2-Dichloroethane	BQL	4.86	1	8/30/05
cis-1,2-Dichloroethene	BQL	4.86	1	8/30/05
trans-1,2-dichloroethene	BQL	4.86	1	8/30/05
1,2-Dichloropropane	BQL	4.86	1	8/30/05
1,3-Dichloropropane	BQL	4.86	1	8/30/05
2,2-Dichloropropane	BQL	4.86	1	8/30/05
1,1-Dichloropropene	BQL	4.86	1	8/30/05
cis-1,3-Dichloropropene	BQL	4.86	1	8/30/05
trans-1,3-Dichloropropene	BQL	4.86	1	8/30/05
Dichlorodifluoromethane	BQL	4.86	1	8/30/05
Diisopropyl ether (DIPE)	BQL	4.86	1	8/30/05
Ethylbenzene	BQL	4.86	1	8/30/05
Hexachlorobutadiene	BQL	4.86	1	8/30/05

E

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: SS-3
 Client Project ID: Atlantic Scrap
 Lab Sample ID G204-479-2A
 Lab Project ID: G204-479
 Report Basis: Dry Weight

Analyzed By: JTF
 Date Collected: 08-24-2005 11:58
 Date Received: 8/27/05
 Matrix: Soil
 %Solids: 73.6

Report Name Compound	Result UG/KG	Quantitation Limit UG/KG	Dilution Factor	Date Analyzed
2-Hexanone	BQL	4.86	1	8/30/05
Iodomethane	19.4	4.86	1	8/30/05
Isopropylbenzene	BQL	4.86	1	8/30/05
4-Isopropyltoluene	BQL	4.86	1	8/30/05
Methylene chloride	BQL	19.4	1	8/30/05
4-Methyl-2-pentanone	BQL	4.86	1	8/30/05
Methyl-tert-butyl ether (MTBE)	BQL	4.86	1	8/30/05
Naphthalene	BQL	4.86	1	8/30/05
n-Propyl benzene	BQL	4.86	1	8/30/05
Styrene	BQL	4.86	1	8/30/05
1,1,1,2-Tetrachloroethane	BQL	4.86	1	8/30/05
1,1,2,2-Tetrachloroethane	BQL	4.86	1	8/30/05
Tetrachloroethene	BQL	4.86	1	8/30/05
Toluene	BQL	4.86	1	8/30/05
1,2,3-Trichlorobenzene	BQL	4.86	1	8/30/05
1,2,4-Trichlorobenzene	BQL	4.86	1	8/30/05
Trichloroethene	BQL	4.86	1	8/30/05
1,1,1-Trichloroethane	BQL	4.86	1	8/30/05
1,1,2-Trichloroethane	BQL	4.86	1	8/30/05
Trichlorofluoromethane	BQL	4.86	1	8/30/05
1,2,3-Trichloropropane	BQL	4.86	1	8/30/05
1,2,4-Trimethylbenzene	BQL	4.86	1	8/30/05
1,3,5-Trimethylbenzene	BQL	4.86	1	8/30/05
Vinyl chloride	BQL	4.86	1	8/30/05
m,p-Xylene	BQL	9.72	1	8/30/05
o-Xylene	BQL	4.86	1	8/30/05

	Spike Added	Spike Result	Percent Recovered
4-Bromofluorobenzene	50	51.7	103
1,2-Dichloroethane-d4	50	53.1	106
Toluene-d8	50	51.7	103

Comments:

Flags:

BQL = Below Quantitation Limits.
 E = Estimated, above calibration range. See case narrative.

Reviewed By: _____

**Results for Volatiles
by GCMS 8260B/5035**

Client Sample ID: SS-3
 Client Project ID: Atlantic Scrap
 Lab Sample ID: G204-479-2D
 Lab Project ID: G204-479
 Report Basis: Dry Weight

Analyzed By: JTF
 Date Collected: 8/24/05 11:58
 Date Received: 8/27/05
 Matrix: Soil
 %Solids: 73.6

Compound	Result UG/KG	Quantitation Limit UG/KG	Dilution Factor	Date Analyzed
Bromomethane	BQL	37.8	40	9/1/05
		Spike Added	Spike Result	Percent Recovered
4-Bromofluorobenzene		10	8.77	88
1,2-Dichloroethane-d4		10	10.2	102
Toluene-d8		10	9.93	99

Comments:

Flags:

Reviewed By: _____

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: SS-2
 Client Project ID: Atlantic Scrap
 Lab Sample ID: G204-479-1F
 Lab Project ID: G204-479
 Report Basis: Dry weight

Analyzed By: MRC
 Date Collected: 8/24/2005 11:50
 Date Received: 8/27/2005
 Date Extracted: 8/30/2005
 Matrix: Soil
 % Solids: 73.95

Compound	Result ug/Kg	Quantitation Limit ug/Kg	Dilution Factor	Date Analyzed
Acenaphthene	BQL	391	1	8/31/2005
Acenaphthylene	BQL	391	1	8/31/2005
Anthracene	BQL	391	1	8/31/2005
Benzo[a]anthracene	BQL	391	1	8/31/2005
Benzo[a]pyrene	BQL	391	1	8/31/2005
Benzo[b]fluoranthene	BQL	391	1	8/31/2005
Benzo[g,h,i]perylene	BQL	391	1	8/31/2005
Benzo[k]fluoranthene	BQL	391	1	8/31/2005
Benzoic Acid	BQL	781	1	8/31/2005
Bis(2-chloroethoxy)methane	BQL	391	1	8/31/2005
Bis(2-chloroethyl)ether	BQL	391	1	8/31/2005
Bis(2-chloroisopropyl)ether	BQL	391	1	8/31/2005
Bis(2-ethylhexyl)phthalate	BQL	391	1	8/31/2005
4-bromophenyl phenyl ether	BQL	391	1	8/31/2005
Butylbenzylphthalate	BQL	391	1	8/31/2005
2-Chloronaphthalene	BQL	391	1	8/31/2005
2-Chlorophenol	BQL	391	1	8/31/2005
4-Chloro-3-methylphenol	BQL	391	1	8/31/2005
4-Chloroaniline	BQL	1950	1	8/31/2005
4-Chlorophenyl phenyl ether	BQL	391	1	8/31/2005
Chrysene	BQL	391	1	8/31/2005
Dibenzo[a,h]anthracene	BQL	391	1	8/31/2005
Dibenzofuran	BQL	391	1	8/31/2005
Di-n-Butylphthalate	BQL	391	1	8/31/2005
1,2-Dichlorobenzene	BQL	391	1	8/31/2005
1,3-Dichlorobenzene	BQL	391	1	8/31/2005
1,4-Dichlorobenzene	BQL	391	1	8/31/2005
3,3'-Dichlorobenzidine	BQL	781	1	8/31/2005
2,4-Dichlorophenol	BQL	391	1	8/31/2005
Diethylphthalate	BQL	391	1	8/31/2005
Dimethylphthalate	BQL	391	1	8/31/2005
2,4-Dimethylphenol	BQL	391	1	8/31/2005
Di-n-octylphthalate	BQL	391	1	8/31/2005
4,6-Dinitro-2-methylphenol	BQL	1950	1	8/31/2005
2,4-Dinitrophenol	BQL	1950	1	8/31/2005
2,4-Dinitrotoluene	BQL	391	1	8/31/2005
2,6-Dinitrotoluene	BQL	391	1	8/31/2005
Diphenylamine *	BQL	391	1	8/31/2005
Fluoranthene	BQL	391	1	8/31/2005
Fluorene	BQL	391	1	8/31/2005
Hexachlorobenzene	BQL	391	1	8/31/2005
Hexachlorobutadiene	BQL	391	1	8/31/2005

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: SS-2
 Client Project ID: Atlantic Scrap
 Lab Sample ID: G204-479-1F
 Lab Project ID: G204-479
 Report Basis: Dry weight

Analyzed By: MRC
 Date Collected: 8/24/2005 11:50
 Date Received: 8/27/2005
 Date Extracted: 8/30/2005
 Matrix: Soil
 % Solids: 73.95

Compound	Result ug/Kg	Quantitation Limit ug/Kg	Dilution Factor	Date Analyzed
Hexachlorocyclopentadiene	BQL	781	1	8/31/2005
Hexachloroethane	BQL	391	1	8/31/2005
Indeno(1,2,3-c,d)pyrene	BQL	391	1	8/31/2005
Isophorone	BQL	391	1	8/31/2005
2-Methylnaphthalene	BQL	391	1	8/31/2005
2-Methylphenol	BQL	391	1	8/31/2005
3- & 4-Methylphenol	BQL	391	1	8/31/2005
Naphthalene	BQL	391	1	8/31/2005
2-Nitroaniline	BQL	391	1	8/31/2005
3-Nitroaniline	BQL	1950	1	8/31/2005
4-Nitroaniline	BQL	1950	1	8/31/2005
Nitrobenzene	BQL	391	1	8/31/2005
2-Nitrophenol	BQL	391	1	8/31/2005
4-Nitrophenol	BQL	1950	1	8/31/2005
N-Nitrosodi-n-propylamine	BQL	391	1	8/31/2005
Pentachlorophenol	BQL	1950	1	8/31/2005
Phenanthrene	BQL	391	1	8/31/2005
Phenol	BQL	391	1	8/31/2005
Pyrene	BQL	391	1	8/31/2005
1,2,4-Trichlorobenzene	BQL	391	1	8/31/2005
2,4,5-Trichlorophenol	BQL	391	1	8/31/2005
2,4,6-Trichlorophenol	BQL	391	1	8/31/2005

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	7.7	77
2-Fluorophenol	10	9.9	99
Nitrobenzene-d5	10	7.6	76
Phenol-d6	10	9.8	98
2,4,6-Tribromophenol	10	6.3	63
4-Terphenyl-d14	10	7.9	79

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

Reviewed By: _____

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: SS-3
Client Project ID: Atlantic Scrap
Lab Sample ID: G204-479-2F
Lab Project ID: G204-479
Report Basis: Dry weight

Analyzed By: MRC
Date Collected: 8/24/2005 11:58
Date Received: 8/27/2005
Date Extracted: 8/30/2005
Matrix: Soil
% Solids: 73.61

Compound	Result ug/Kg	Quantitation Limit ug/Kg	Dilution Factor	Date Analyzed
Acenaphthene	BQL	412	1	8/31/2005
Acenaphthylene	BQL	412	1	8/31/2005
Anthracene	BQL	412	1	8/31/2005
Benzo[a]anthracene	BQL	412	1	8/31/2005
Benzo[a]pyrene	BQL	412	1	8/31/2005
Benzo[b]fluoranthene	BQL	412	1	8/31/2005
Benzo[g,h,i]perylene	BQL	412	1	8/31/2005
Benzo[k]fluoranthene	BQL	412	1	8/31/2005
Benzoic Acid	BQL	825	1	8/31/2005
Bis(2-chloroethoxy)methane	BQL	412	1	8/31/2005
Bis(2-chloroethyl)ether	BQL	412	1	8/31/2005
Bis(2-chloroisopropyl)ether	BQL	412	1	8/31/2005
Bis(2-ethylhexyl)phthalate	553	412	1	8/31/2005
4-bromophenyl phenyl ether	BQL	412	1	8/31/2005
Butylbenzylphthalate	540	412	1	8/31/2005
2-Chloronaphthalene	BQL	412	1	8/31/2005
2-Chlorophenol	BQL	412	1	8/31/2005
4-Chloro-3-methylphenol	BQL	412	1	8/31/2005
4-Chloroaniline	BQL	2060	1	8/31/2005
4-Chlorophenyl phenyl ether	BQL	412	1	8/31/2005
Chrysene	BQL	412	1	8/31/2005
Dibenzo[a,h]anthracene	BQL	412	1	8/31/2005
Dibenzofuran	BQL	412	1	8/31/2005
Di-n-Butylphthalate	BQL	412	1	8/31/2005
1,2-Dichlorobenzene	BQL	412	1	8/31/2005
1,3-Dichlorobenzene	BQL	412	1	8/31/2005
1,4-Dichlorobenzene	BQL	412	1	8/31/2005
3,3'-Dichlorobenzidine	BQL	825	1	8/31/2005
2,4-Dichlorophenol	BQL	412	1	8/31/2005
Diethylphthalate	BQL	412	1	8/31/2005
Dimethylphthalate	BQL	412	1	8/31/2005
2,4-Dimethylphenol	BQL	412	1	8/31/2005
Di-n-octylphthalate	BQL	412	1	8/31/2005
4,6-Dinitro-2-methylphenol	BQL	2060	1	8/31/2005
2,4-Dinitrophenol	BQL	2060	1	8/31/2005
2,4-Dinitrotoluene	BQL	412	1	8/31/2005
2,6-Dinitrotoluene	BQL	412	1	8/31/2005
Diphenylamine *	BQL	412	1	8/31/2005
Fluoranthene	BQL	412	1	8/31/2005
Fluorene	BQL	412	1	8/31/2005
Hexachlorobenzene	BQL	412	1	8/31/2005
Hexachlorobutadiene	BQL	412	1	8/31/2005

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: SS-3
 Client Project ID: Atlantic Scrap
 Lab Sample ID: G204-479-2F
 Lab Project ID: G204-479
 Report Basis: Dry weight

Analyzed By: MRC
 Date Collected: 8/24/2005 11:58
 Date Received: 8/27/2005
 Date Extracted: 8/30/2005
 Matrix: Soil
 % Solids: 73.61

Compound	Result ug/Kg	Quantitation Limit ug/Kg	Dilution Factor	Date Analyzed
Hexachlorocyclopentadiene	BQL	825	1	8/31/2005
Hexachloroethane	BQL	412	1	8/31/2005
Indeno(1,2,3-c,d)pyrene	BQL	412	1	8/31/2005
Isophorone	BQL	412	1	8/31/2005
2-Methylnaphthalene	BQL	412	1	8/31/2005
2-Methylphenol	BQL	412	1	8/31/2005
3- & 4-Methylphenol	BQL	412	1	8/31/2005
Naphthalene	BQL	412	1	8/31/2005
2-Nitroaniline	BQL	412	1	8/31/2005
3-Nitroaniline	BQL	2060	1	8/31/2005
4-Nitroaniline	BQL	2060	1	8/31/2005
Nitrobenzene	BQL	412	1	8/31/2005
2-Nitrophenol	BQL	412	1	8/31/2005
4-Nitrophenol	BQL	2060	1	8/31/2005
N-Nitrosodi-n-propylamine	BQL	412	1	8/31/2005
Pentachlorophenol	BQL	2060	1	8/31/2005
Phenanthrene	BQL	412	1	8/31/2005
Phenol	BQL	412	1	8/31/2005
Pyrene	BQL	412	1	8/31/2005
1,2,4-Trichlorobenzene	BQL	412	1	8/31/2005
2,4,5-Trichlorophenol	BQL	412	1	8/31/2005
2,4,6-Trichlorophenol	BQL	412	1	8/31/2005

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	8.7	87
2-Fluorophenol	10	10.4	104
Nitrobenzene-d5	10	9	90
Phenol-d6	10	10.2	102
2,4,6-Tribromophenol	10	7.6	76
4-Terphenyl-d14	10	8	80

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

Reviewed By: _____

Mr. Rob Holland
Earth Tech
701 Corporate Dr. Suite 475
Raleigh NC 27607

Report Number: G204-481

Client Project: Atlantic Scrap

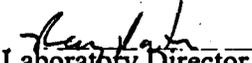
Dear Mr. Holland:

Enclosed are the results of the analytical services performed under the referenced project. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of five years in the event they are required for future reference. Any samples submitted to our laboratory will be retained for a maximum of thirty (30) days from the date of this report unless other arrangements are requested.

If there are any questions about the report or the services performed during this project, please call Paradigm at (910) 350-1903. We will be happy to answer any questions or concerns which you may have.

Thank you for using Paradigm Analytical Labs for your analytical services. We look forward to working with you again on any additional analytical needs which you may have.

Sincerely,
Paradigm Analytical Laboratories, Inc.


Laboratory Director 9/6/2005 Date
J. Patrick Weaver

**Results for Volatiles
by GCMS 8260B**

Client Sample ID: TW-6
Client Project ID: Atlantic Scrap
Lab Sample ID: G204-481-1A
Lab Project ID: G204-481

Analized By: JTF
Date Collected: 8/25/2005 12:00
Date Received: 8/27/2005
Matrix: Water

Compound	Result UG/L	Quantitation Limit UG/L	Dilution Factor	Date Analyzed
Acetone	BQL	25.0	1	8/31/2005
Benzene	BQL	1.00	1	8/31/2005
Bromobenzene	BQL	1.00	1	8/31/2005
Bromochloromethane	BQL	1.00	1	8/31/2005
Bromodichloromethane	BQL	1.00	1	8/31/2005
Bromoform	BQL	1.00	1	8/31/2005
Bromomethane	BQL	1.00	1	8/31/2005
2-Butanone	BQL	25.0	1	8/31/2005
n-Butylbenzene	BQL	1.00	1	8/31/2005
sec-Butylbenzene	BQL	1.00	1	8/31/2005
tert-Butylbenzene	BQL	1.00	1	8/31/2005
Carbon disulfide	BQL	1.00	1	8/31/2005
Carbon tetrachloride	BQL	1.00	1	8/31/2005
Chlorobenzene	BQL	1.00	1	8/31/2005
Chloroethane	BQL	1.00	1	8/31/2005
Chloroform	BQL	1.00	1	8/31/2005
Chloromethane	BQL	1.00	1	8/31/2005
2-Chlorotoluene	BQL	1.00	1	8/31/2005
4-Chlorotoluene	BQL	1.00	1	8/31/2005
Dibromochloromethane	BQL	1.00	1	8/31/2005
1,2-Dibromo-3-chloropropane	BQL	5.00	1	8/31/2005
Dibromomethane	BQL	1.00	1	8/31/2005
1,2-Dibromoethane (EDB)	BQL	1.00	1	8/31/2005
1,2-Dichlorobenzene	BQL	1.00	1	8/31/2005
1,3-Dichlorobenzene	BQL	1.00	1	8/31/2005
1,4-Dichlorobenzene	BQL	1.00	1	8/31/2005
trans-1,4-Dichloro-2-butene	BQL	5.00	1	8/31/2005
1,1-Dichloroethane	BQL	1.00	1	8/31/2005
1,1-Dichloroethene	BQL	1.00	1	8/31/2005
1,2-Dichloroethane	BQL	1.00	1	8/31/2005
cis-1,2-Dichloroethene	BQL	1.00	1	8/31/2005
trans-1,2-dichloroethene	BQL	1.00	1	8/31/2005
1,2-Dichloropropane	BQL	1.00	1	8/31/2005
1,3-Dichloropropane	BQL	1.00	1	8/31/2005
2,2-Dichloropropane	BQL	1.00	1	8/31/2005
1,1-Dichloropropene	BQL	1.00	1	8/31/2005
cis-1,3-Dichloropropene	BQL	1.00	1	8/31/2005
trans-1,3-Dichloropropene	BQL	1.00	1	8/31/2005
Dichlorodifluoromethane	BQL	5.00	1	8/31/2005
Diisopropyl ether (DIPE)	BQL	1.00	1	8/31/2005
Ethylbenzene	BQL	1.00	1	8/31/2005
Hexachlorobutadiene	BQL	1.00	1	8/31/2005
2-Hexanone	BQL	5.00	1	8/31/2005
Iodomethane	BQL	1.00	1	8/31/2005
Isopropylbenzene	BQL	1.00	1	8/31/2005

**Results for Volatiles
by GCMS 8260B**

Client Sample ID: TW-6
 Client Project ID: Atlantic Scrap
 Lab Sample ID: G204-481-1A
 Lab Project ID: G204-481

Analyzed By: JTF
 Date Collected: 8/25/2005 12:00
 Date Received: 8/27/2005
 Matrix: Water

Compound	Result UG/L	Quantitation Limit UG/L	Dilution Factor	Date Analyzed
4-Isopropyltoluene	BQL	1.00	1	8/31/2005
Methylene chloride	BQL	5.00	1	8/31/2005
4-Methyl-2-pentanone	BQL	5.00	1	8/31/2005
Methyl-tert-butyl ether (MTBE)	BQL	1.00	1	8/31/2005
Naphthalene	BQL	1.00	1	8/31/2005
n-Propyl benzene	BQL	1.00	1	8/31/2005
Styrene	BQL	1.00	1	8/31/2005
1,1,1,2-Tetrachloroethane	BQL	1.00	1	8/31/2005
1,1,2,2-Tetrachloroethane	BQL	1.00	1	8/31/2005
Tetrachloroethene	BQL	1.00	1	8/31/2005
Toluene	BQL	1.00	1	8/31/2005
1,2,3-Trichlorobenzene	BQL	1.00	1	8/31/2005
1,2,4-Trichlorobenzene	BQL	1.00	1	8/31/2005
Trichloroethene	BQL	1.00	1	8/31/2005
1,1,1-Trichloroethane	BQL	1.00	1	8/31/2005
1,1,2-Trichloroethane	BQL	1.00	1	8/31/2005
Trichlorofluoromethane	BQL	1.00	1	8/31/2005
1,2,3-Trichloropropane	BQL	1.00	1	8/31/2005
1,2,4-Trimethylbenzene	BQL	1.00	1	8/31/2005
1,3,5-Trimethylbenzene	BQL	1.00	1	8/31/2005
Vinyl chloride	BQL	1.00	1	8/31/2005
m-,p-Xylene	BQL	2.00	1	8/31/2005
o-Xylene	BQL	1.00	1	8/31/2005

	Spike Added	Spike Result	Percent Recovered
4-Bromofluorobenzene	10	9.55	96
1,2-Dichloroethane-d4	10	10.4	104
Toluene-d8	10	9.99	100

Comments:

Flags:

BQL = Below Quantitation Limits.

Reviewed By: BN

**Results for Volatiles
by GCMS 8260B**

Client Sample ID: TW-5
Client Project ID: Atlantic Scrap
Lab Sample ID: G204-481-2A
Lab Project ID: G204-481

Analyzed By: JTF
Date Collected: 8/25/2005 13:10
Date Received: 8/27/2005
Matrix: Water

Compound	Result UG/L	Quantitation Limit UG/L	Dilution Factor	Date Analyzed
Acetone	BQL	25.0	1	8/31/2005
Benzene	BQL	1.00	1	8/31/2005
Bromobenzene	BQL	1.00	1	8/31/2005
Bromochloromethane	BQL	1.00	1	8/31/2005
Bromodichloromethane	BQL	1.00	1	8/31/2005
Bromoform	BQL	1.00	1	8/31/2005
Bromomethane	BQL	1.00	1	8/31/2005
2-Butanone	BQL	25.0	1	8/31/2005
n-Butylbenzene	BQL	1.00	1	8/31/2005
sec-Butylbenzene	BQL	1.00	1	8/31/2005
tert-Butylbenzene	BQL	1.00	1	8/31/2005
Carbon disulfide	BQL	1.00	1	8/31/2005
Carbon tetrachloride	BQL	1.00	1	8/31/2005
Chlorobenzene	BQL	1.00	1	8/31/2005
Chloroethane	BQL	1.00	1	8/31/2005
Chloroform	2.73	1.00	1	8/31/2005
Chloromethane	BQL	1.00	1	8/31/2005
2-Chlorotoluene	BQL	1.00	1	8/31/2005
4-Chlorotoluene	BQL	1.00	1	8/31/2005
Dibromochloromethane	BQL	1.00	1	8/31/2005
1,2-Dibromo-3-chloropropane	BQL	5.00	1	8/31/2005
Dibromomethane	BQL	1.00	1	8/31/2005
1,2-Dibromoethane (EDB)	BQL	1.00	1	8/31/2005
1,2-Dichlorobenzene	BQL	1.00	1	8/31/2005
1,3-Dichlorobenzene	BQL	1.00	1	8/31/2005
1,4-Dichlorobenzene	BQL	1.00	1	8/31/2005
trans-1,4-Dichloro-2-butene	BQL	5.00	1	8/31/2005
1,1-Dichloroethane	BQL	1.00	1	8/31/2005
1,1-Dichloroethene	BQL	1.00	1	8/31/2005
1,2-Dichloroethane	BQL	1.00	1	8/31/2005
cis-1,2-Dichloroethene	BQL	1.00	1	8/31/2005
trans-1,2-dichloroethene	BQL	1.00	1	8/31/2005
1,2-Dichloropropane	BQL	1.00	1	8/31/2005
1,3-Dichloropropane	BQL	1.00	1	8/31/2005
2,2-Dichloropropane	BQL	1.00	1	8/31/2005
1,1-Dichloropropene	BQL	1.00	1	8/31/2005
cis-1,3-Dichloropropene	BQL	1.00	1	8/31/2005
trans-1,3-Dichloropropene	BQL	1.00	1	8/31/2005
Dichlorodifluoromethane	BQL	5.00	1	8/31/2005
Diisopropyl ether (DIPE)	BQL	1.00	1	8/31/2005
Ethylbenzene	BQL	1.00	1	8/31/2005
Hexachlorobutadiene	BQL	1.00	1	8/31/2005
2-Hexanone	BQL	5.00	1	8/31/2005
Iodomethane	BQL	1.00	1	8/31/2005
Isopropylbenzene	BQL	1.00	1	8/31/2005

**Results for Volatiles
by GCMS 8260B**

Client Sample ID: TW-5
 Client Project ID: Atlantic Scrap
 Lab Sample ID: G204-481-2A
 Lab Project ID: G204-481

Analyzed By: JTF
 Date Collected: 8/25/2005 13:10
 Date Received: 8/27/2005
 Matrix: Water

Compound	Result UG/L	Quantitation Limit UG/L	Dilution Factor	Date Analyzed
4-Isopropyltoluene	BQL	1.00	1	8/31/2005
Methylene chloride	BQL	5.00	1	8/31/2005
4-Methyl-2-pentanone	BQL	5.00	1	8/31/2005
Methyl-tert-butyl ether (MTBE)	BQL	1.00	1	8/31/2005
Naphthalene	BQL	1.00	1	8/31/2005
n-Propyl benzene	BQL	1.00	1	8/31/2005
Styrene	BQL	1.00	1	8/31/2005
1,1,1,2-Tetrachloroethane	BQL	1.00	1	8/31/2005
1,1,2,2-Tetrachloroethane	BQL	1.00	1	8/31/2005
Tetrachloroethene	BQL	1.00	1	8/31/2005
Toluene	BQL	1.00	1	8/31/2005
1,2,3-Trichlorobenzene	BQL	1.00	1	8/31/2005
1,2,4-Trichlorobenzene	BQL	1.00	1	8/31/2005
Trichloroethene	BQL	1.00	1	8/31/2005
1,1,1-Trichloroethane	BQL	1.00	1	8/31/2005
1,1,2-Trichloroethane	BQL	1.00	1	8/31/2005
Trichlorofluoromethane	BQL	1.00	1	8/31/2005
1,2,3-Trichloropropane	BQL	1.00	1	8/31/2005
1,2,4-Trimethylbenzene	BQL	1.00	1	8/31/2005
1,3,5-Trimethylbenzene	BQL	1.00	1	8/31/2005
Vinyl chloride	BQL	1.00	1	8/31/2005
m-,p-Xylene	BQL	2.00	1	8/31/2005
o-Xylene	BQL	1.00	1	8/31/2005

	Spike Added	Spike Result	Percent Recovered
4-Bromofluorobenzene	10	9.46	95
1,2-Dichloroethane-d4	10	11	110
Toluene-d8	10	9.82	98

Comments:

Flags:

BQL = Below Quantitation Limits.

Reviewed By:

**Results for Volatiles
by GCMS 8260B**

Client Sample ID: PZ-6
Client Project ID: Atlantic Scrap
Lab Sample ID: G204-481-3A
Lab Project ID: G204-481

Analyzed By: JTF
Date Collected: 8/25/2005 14:05
Date Received: 8/27/2005
Matrix: Water

Compound	Result UG/L	Quantitation Limit UG/L	Dilution Factor	Date Analyzed
Acetone	BQL	25.0	1	8/31/2005
Benzene	BQL	1.00	1	8/31/2005
Bromobenzene	BQL	1.00	1	8/31/2005
Bromochloromethane	BQL	1.00	1	8/31/2005
Bromodichloromethane	BQL	1.00	1	8/31/2005
Bromoform	BQL	1.00	1	8/31/2005
Bromomethane	BQL	1.00	1	8/31/2005
2-Butanone	BQL	25.0	1	8/31/2005
n-Butylbenzene	BQL	1.00	1	8/31/2005
sec-Butylbenzene	BQL	1.00	1	8/31/2005
tert-Butylbenzene	BQL	1.00	1	8/31/2005
Carbon disulfide	BQL	1.00	1	8/31/2005
Carbon tetrachloride	BQL	1.00	1	8/31/2005
Chlorobenzene	BQL	1.00	1	8/31/2005
Chloroethane	BQL	1.00	1	8/31/2005
Chloroform	BQL	1.00	1	8/31/2005
Chloromethane	BQL	1.00	1	8/31/2005
2-Chlorotoluene	BQL	1.00	1	8/31/2005
4-Chlorotoluene	BQL	1.00	1	8/31/2005
Dibromochloromethane	BQL	1.00	1	8/31/2005
1,2-Dibromo-3-chloropropane	BQL	5.00	1	8/31/2005
Dibromomethane	BQL	1.00	1	8/31/2005
1,2-Dibromoethane (EDB)	BQL	1.00	1	8/31/2005
1,2-Dichlorobenzene	BQL	1.00	1	8/31/2005
1,3-Dichlorobenzene	BQL	1.00	1	8/31/2005
1,4-Dichlorobenzene	BQL	1.00	1	8/31/2005
trans-1,4-Dichloro-2-butene	BQL	5.00	1	8/31/2005
1,1-Dichloroethane	BQL	1.00	1	8/31/2005
1,1-Dichloroethene	BQL	1.00	1	8/31/2005
1,2-Dichloroethane	BQL	1.00	1	8/31/2005
cis-1,2-Dichloroethene	BQL	1.00	1	8/31/2005
trans-1,2-dichloroethene	BQL	1.00	1	8/31/2005
1,2-Dichloropropane	BQL	1.00	1	8/31/2005
1,3-Dichloropropane	BQL	1.00	1	8/31/2005
2,2-Dichloropropane	BQL	1.00	1	8/31/2005
1,1-Dichloropropene	BQL	1.00	1	8/31/2005
cis-1,3-Dichloropropene	BQL	1.00	1	8/31/2005
trans-1,3-Dichloropropene	BQL	1.00	1	8/31/2005
Dichlorodifluoromethane	BQL	5.00	1	8/31/2005
Diisopropyl ether (DIPE)	BQL	1.00	1	8/31/2005
Ethylbenzene	BQL	1.00	1	8/31/2005
Hexachlorobutadiene	BQL	1.00	1	8/31/2005
2-Hexanone	BQL	5.00	1	8/31/2005
Iodomethane	BQL	1.00	1	8/31/2005
Isopropylbenzene	BQL	1.00	1	8/31/2005

**Results for Volatiles
by GCMS 8260B**

Client Sample ID: PZ-6
 Client Project ID: Atlantic Scrap
 Lab Sample ID: G204-481-3A
 Lab Project ID: G204-481

Analyzed By: JTF
 Date Collected: 8/25/2005 14:05
 Date Received: 8/27/2005
 Matrix: Water

Compound	Result UG/L	Quantitation Limit UG/L	Dilution Factor	Date Analyzed
4-Isopropyltoluene	BQL	1.00	1	8/31/2005
Methylene chloride	BQL	5.00	1	8/31/2005
4-Methyl-2-pentanone	BQL	5.00	1	8/31/2005
Methyl-tert-butyl ether (MTBE)	BQL	1.00	1	8/31/2005
Naphthalene	BQL	1.00	1	8/31/2005
n-Propyl benzene	BQL	1.00	1	8/31/2005
Styrene	BQL	1.00	1	8/31/2005
1,1,1,2-Tetrachloroethane	BQL	1.00	1	8/31/2005
1,1,2,2-Tetrachloroethane	BQL	1.00	1	8/31/2005
Tetrachloroethene	BQL	1.00	1	8/31/2005
Toluene	BQL	1.00	1	8/31/2005
1,2,3-Trichlorobenzene	BQL	1.00	1	8/31/2005
1,2,4-Trichlorobenzene	BQL	1.00	1	8/31/2005
Trichloroethene	BQL	1.00	1	8/31/2005
1,1,1-Trichloroethane	BQL	1.00	1	8/31/2005
1,1,2-Trichloroethane	BQL	1.00	1	8/31/2005
Trichlorofluoromethane	BQL	1.00	1	8/31/2005
1,2,3-Trichloropropane	BQL	1.00	1	8/31/2005
1,2,4-Trimethylbenzene	BQL	1.00	1	8/31/2005
1,3,5-Trimethylbenzene	BQL	1.00	1	8/31/2005
Vinyl chloride	BQL	1.00	1	8/31/2005
m-,p-Xylene	BQL	2.00	1	8/31/2005
o-Xylene	BQL	1.00	1	8/31/2005
		Spike Added	Spike Result	Percent Recovered
4-Bromofluorobenzene		10	9.04	90
1,2-Dichloroethane-d4		10	10.9	109
Toluene-d8		10	10.1	101

Comments:

Flags:

BQL = Below Quantitation Limits.

Reviewed By:

**Results for Volatiles
by GCMS 8260B**

Client Sample ID: Trip Blank
Client Project ID: Atlantic Scrap
Lab Sample ID: G204-481-4A
Lab Project ID: G204-481

Analyzed By: JTF
Date Collected: 8/25/2005 0:00
Date Received: 8/27/2005
Matrix: Water

Compound	Result UG/L	Quantitation Limit UG/L	Dilution Factor	Date Analyzed
Acetone	BQL	25.0	1	8/31/2005
Benzene	BQL	1.00	1	8/31/2005
Bromobenzene	BQL	1.00	1	8/31/2005
Bromochloromethane	BQL	1.00	1	8/31/2005
Bromodichloromethane	BQL	1.00	1	8/31/2005
Bromoform	BQL	1.00	1	8/31/2005
Bromomethane	BQL	1.00	1	8/31/2005
2-Butanone	BQL	25.0	1	8/31/2005
n-Butylbenzene	BQL	1.00	1	8/31/2005
sec-Butylbenzene	BQL	1.00	1	8/31/2005
tert-Butylbenzene	BQL	1.00	1	8/31/2005
Carbon disulfide	BQL	1.00	1	8/31/2005
Carbon tetrachloride	BQL	1.00	1	8/31/2005
Chlorobenzene	BQL	1.00	1	8/31/2005
Chloroethane	BQL	1.00	1	8/31/2005
Chloroform	BQL	1.00	1	8/31/2005
Chloromethane	BQL	1.00	1	8/31/2005
2-Chlorotoluene	BQL	1.00	1	8/31/2005
4-Chlorotoluene	BQL	1.00	1	8/31/2005
Dibromochloromethane	BQL	1.00	1	8/31/2005
1,2-Dibromo-3-chloropropane	BQL	5.00	1	8/31/2005
Dibromomethane	BQL	1.00	1	8/31/2005
1,2-Dibromoethane (EDB)	BQL	1.00	1	8/31/2005
1,2-Dichlorobenzene	BQL	1.00	1	8/31/2005
1,3-Dichlorobenzene	BQL	1.00	1	8/31/2005
1,4-Dichlorobenzene	BQL	1.00	1	8/31/2005
trans-1,4-Dichloro-2-butene	BQL	5.00	1	8/31/2005
1,1-Dichloroethane	BQL	1.00	1	8/31/2005
1,1-Dichloroethene	BQL	1.00	1	8/31/2005
1,2-Dichloroethane	BQL	1.00	1	8/31/2005
cis-1,2-Dichloroethene	BQL	1.00	1	8/31/2005
trans-1,2-dichloroethene	BQL	1.00	1	8/31/2005
1,2-Dichloropropane	BQL	1.00	1	8/31/2005
1,3-Dichloropropane	BQL	1.00	1	8/31/2005
2,2-Dichloropropane	BQL	1.00	1	8/31/2005
1,1-Dichloropropene	BQL	1.00	1	8/31/2005
cis-1,3-Dichloropropene	BQL	1.00	1	8/31/2005
trans-1,3-Dichloropropene	BQL	1.00	1	8/31/2005
Dichlorodifluoromethane	BQL	5.00	1	8/31/2005
Diisopropyl ether (DIPE)	BQL	1.00	1	8/31/2005
Ethylbenzene	BQL	1.00	1	8/31/2005
Hexachlorobutadiene	BQL	1.00	1	8/31/2005
2-Hexanone	BQL	5.00	1	8/31/2005
Iodomethane	BQL	1.00	1	8/31/2005
Isopropylbenzene	BQL	1.00	1	8/31/2005

**Results for Volatiles
by GCMS 8260B**

Client Sample ID: Trip Blank
 Client Project ID: Atlantic Scrap
 Lab Sample ID: G204-481-4A
 Lab Project ID: G204-481

Analyzed By: JTF
 Date Collected: 8/25/2005 0:00
 Date Received: 8/27/2005
 Matrix: Water

Compound	Result UG/L	Quantitation Limit UG/L	Dilution Factor	Date Analyzed
4-Isopropyltoluene	BQL	1.00	1	8/31/2005
Methylene chloride	BQL	5.00	1	8/31/2005
4-Methyl-2-pentanone	BQL	5.00	1	8/31/2005
Methyl-tert-butyl ether (MTBE)	BQL	1.00	1	8/31/2005
Naphthalene	BQL	1.00	1	8/31/2005
n-Propyl benzene	BQL	1.00	1	8/31/2005
Styrene	BQL	1.00	1	8/31/2005
1,1,1,2-Tetrachloroethane	BQL	1.00	1	8/31/2005
1,1,2,2-Tetrachloroethane	BQL	1.00	1	8/31/2005
Tetrachloroethene	BQL	1.00	1	8/31/2005
Toluene	BQL	1.00	1	8/31/2005
1,2,3-Trichlorobenzene	BQL	1.00	1	8/31/2005
1,2,4-Trichlorobenzene	BQL	1.00	1	8/31/2005
Trichloroethene	BQL	1.00	1	8/31/2005
1,1,1-Trichloroethane	BQL	1.00	1	8/31/2005
1,1,2-Trichloroethane	BQL	1.00	1	8/31/2005
Trichlorofluoromethane	BQL	1.00	1	8/31/2005
1,2,3-Trichloropropane	BQL	1.00	1	8/31/2005
1,2,4-Trimethylbenzene	BQL	1.00	1	8/31/2005
1,3,5-Trimethylbenzene	BQL	1.00	1	8/31/2005
Vinyl chloride	BQL	1.00	1	8/31/2005
m-,p-Xylene	BQL	2.00	1	8/31/2005
o-Xylene	BQL	1.00	1	8/31/2005

	Spike Added	Spike Result	Percent Recovered
4-Bromofluorobenzene	10	9.51	95
1,2-Dichloroethane-d4	10	10.3	103
Toluene-d8	10	9.76	98

Comments:

Flags:

BQL = Below Quantitation Limits.

Reviewed By:

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: TW-6
Client Project ID: Atlantic Scrap
Lab Sample ID: G204-481-1L
Lab Project ID: G204-481

Analyzed By: MRC
Date Collected: 8/25/2005 12:00
Date Received: 8/27/2005
Date Extracted: 8/30/2005
Matrix: Water

Compound	Result ug/L	Quantitation Limit ug/L	Dilution Factor	Date Analyzed
Acenaphthene	BQL	10.0	1	9/1/2005
Acenaphthylene	BQL	10.0	1	9/1/2005
Anthracene	BQL	10.0	1	9/1/2005
Benzo[a]anthracene	BQL	10.0	1	9/1/2005
Benzo[a]pyrene	BQL	10.0	1	9/1/2005
Benzo[b]fluoranthene	BQL	10.0	1	9/1/2005
Benzo[g,h,i]perylene	BQL	10.0	1	9/1/2005
Benzo[k]fluoranthene	BQL	10.0	1	9/1/2005
Benzoic Acid	BQL	20.0	1	9/1/2005
Bis(2-chloroethoxy)methane	BQL	10.0	1	9/1/2005
Bis(2-chloroethyl)ether	BQL	10.0	1	9/1/2005
Bis(2-chloroisopropyl)ether	BQL	10.0	1	9/1/2005
Bis(2-ethylhexyl)phthalate	BQL	10.0	1	9/1/2005
4-bromophenyl phenyl ether	BQL	10.0	1	9/1/2005
Butylbenzylphthalate	BQL	10.0	1	9/1/2005
2-Chloronaphthalene	BQL	10.0	1	9/1/2005
2-Chlorophenol	BQL	10.0	1	9/1/2005
4-Chloro-3-methylphenol	BQL	10.0	1	9/1/2005
4-Chloroaniline	BQL	50.0	1	9/1/2005
4-Chlorophenyl phenyl ether	BQL	10.0	1	9/1/2005
Chrysene	BQL	10.0	1	9/1/2005
Dibenzo[a,h]anthracene	BQL	10.0	1	9/1/2005
Dibenzofuran	BQL	10.0	1	9/1/2005
Di-n-Butylphthalate	BQL	10.0	1	9/1/2005
1,2-Dichlorobenzene	BQL	10.0	1	9/1/2005
1,3-Dichlorobenzene	BQL	10.0	1	9/1/2005
1,4-Dichlorobenzene	BQL	10.0	1	9/1/2005
3,3'-Dichlorobenzidine	BQL	20.0	1	9/1/2005
2,4-Dichlorophenol	BQL	10.0	1	9/1/2005
Diethylphthalate	BQL	10.0	1	9/1/2005
Dimethylphthalate	BQL	10.0	1	9/1/2005
2,4-Dimethylphenol	BQL	10.0	1	9/1/2005
Di-n-octylphthalate	BQL	10.0	1	9/1/2005
4,6-Dinitro-2-methylphenol	BQL	50.0	1	9/1/2005
2,4-Dinitrophenol	BQL	50.0	1	9/1/2005
2,4-Dinitrotoluene	BQL	10.0	1	9/1/2005
2,6-Dinitrotoluene	BQL	10.0	1	9/1/2005
Diphenylamine *	BQL	10.0	1	9/1/2005
Fluoranthene	BQL	10.0	1	9/1/2005
Fluorene	BQL	10.0	1	9/1/2005
Hexachlorobenzene	BQL	10.0	1	9/1/2005
Hexachlorobutadiene	BQL	10.0	1	9/1/2005

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: TW-6
 Client Project ID: Atlantic Scrap
 Lab Sample ID: G204-481-1L
 Lab Project ID: G204-481

Analyzed By: MRC
 Date Collected: 8/25/2005 12:00
 Date Received: 8/27/2005
 Date Extracted: 8/30/2005
 Matrix: Water

Compound	Result ug/L	Quantitation Limit ug/L	Dilution Factor	Date Analyzed
Hexachlorocyclopentadiene	BQL	20.0	1	9/1/2005
Hexachloroethane	BQL	10.0	1	9/1/2005
Indeno(1,2,3-c,d)pyrene	BQL	10.0	1	9/1/2005
Isophorone	BQL	10.0	1	9/1/2005
2-Methylnaphthalene	BQL	10.0	1	9/1/2005
2-Methylphenol	BQL	10.0	1	9/1/2005
3- & 4-Methylphenol	BQL	10.0	1	9/1/2005
Naphthalene	BQL	10.0	1	9/1/2005
2-Nitroaniline	BQL	10.0	1	9/1/2005
3-Nitroaniline	BQL	50.0	1	9/1/2005
4-Nitroaniline	BQL	50.0	1	9/1/2005
Nitrobenzene	BQL	10.0	1	9/1/2005
2-Nitrophenol	BQL	10.0	1	9/1/2005
4-Nitrophenol	BQL	50.0	1	9/1/2005
N-Nitrosodi-n-propylamine	BQL	10.0	1	9/1/2005
Pentachlorophenol	BQL	50.0	1	9/1/2005
Phenanthrene	BQL	10.0	1	9/1/2005
Phenol	BQL	10.0	1	9/1/2005
Pyrene	BQL	10.0	1	9/1/2005
1,2,4-Trichlorobenzene	BQL	10.0	1	9/1/2005
2,4,5-Trichlorophenol	BQL	10.0	1	9/1/2005
2,4,6-Trichlorophenol	BQL	10.0	1	9/1/2005

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	6.6	66
2-Fluorophenol	10	6.2	62
Nitrobenzene-d5	10	6.2	62
Phenol-d6	10	6.1	61
2,4,6-Tribromophenol	10	5.5	55
4-Terphenyl-d14	10	7.2	72

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

Reviewed By:

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: TW-5
Client Project ID: Atlantic Scrap
Lab Sample ID: G204-481-2M
Lab Project ID: G204-481

Analyzed By: MRC
Date Collected: 8/25/2005 13:10
Date Received: 8/27/2005
Date Extracted: 8/30/2005
Matrix: Water

Compound	Result ug/L	Quantitation Limit ug/L	Dilution Factor	Date Analyzed
Acenaphthene	BQL	10.0	1	9/1/2005
Acenaphthylene	BQL	10.0	1	9/1/2005
Anthracene	BQL	10.0	1	9/1/2005
Benzo[a]anthracene	BQL	10.0	1	9/1/2005
Benzo[a]pyrene	BQL	10.0	1	9/1/2005
Benzo[b]fluoranthene	BQL	10.0	1	9/1/2005
Benzo[g,h,i]perylene	BQL	10.0	1	9/1/2005
Benzo[k]fluoranthene	BQL	10.0	1	9/1/2005
Benzoic Acid	BQL	20.0	1	9/1/2005
Bis(2-chloroethoxy)methane	BQL	10.0	1	9/1/2005
Bis(2-chloroethyl)ether	BQL	10.0	1	9/1/2005
Bis(2-chloroisopropyl)ether	BQL	10.0	1	9/1/2005
Bis(2-ethylhexyl)phthalate	BQL	10.0	1	9/1/2005
4-bromophenyl phenyl ether	BQL	10.0	1	9/1/2005
Butylbenzylphthalate	BQL	10.0	1	9/1/2005
2-Chloronaphthalene	BQL	10.0	1	9/1/2005
2-Chlorophenol	BQL	10.0	1	9/1/2005
4-Chloro-3-methylphenol	BQL	10.0	1	9/1/2005
4-Chloroaniline	BQL	50.0	1	9/1/2005
4-Chlorophenyl phenyl ether	BQL	10.0	1	9/1/2005
Chrysene	BQL	10.0	1	9/1/2005
Dibenzo[a,h]anthracene	BQL	10.0	1	9/1/2005
Dibenzofuran	BQL	10.0	1	9/1/2005
Di-n-Butylphthalate	BQL	10.0	1	9/1/2005
1,2-Dichlorobenzene	BQL	10.0	1	9/1/2005
1,3-Dichlorobenzene	BQL	10.0	1	9/1/2005
1,4-Dichlorobenzene	BQL	10.0	1	9/1/2005
3,3'-Dichlorobenzidine	BQL	20.0	1	9/1/2005
2,4-Dichlorophenol	BQL	10.0	1	9/1/2005
Diethylphthalate	BQL	10.0	1	9/1/2005
Dimethylphthalate	BQL	10.0	1	9/1/2005
2,4-Dimethylphenol	BQL	10.0	1	9/1/2005
Di-n-octylphthalate	BQL	10.0	1	9/1/2005
4,6-Dinitro-2-methylphenol	BQL	50.0	1	9/1/2005
2,4-Dinitrophenol	BQL	50.0	1	9/1/2005
2,4-Dinitrotoluene	BQL	10.0	1	9/1/2005
2,6-Dinitrotoluene	BQL	10.0	1	9/1/2005
Diphenylamine *	BQL	10.0	1	9/1/2005
Fluoranthene	BQL	10.0	1	9/1/2005
Fluorene	BQL	10.0	1	9/1/2005
Hexachlorobenzene	BQL	10.0	1	9/1/2005
Hexachlorobutadiene	BQL	10.0	1	9/1/2005

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: TW-5
Client Project ID: Atlantic Scrap
Lab Sample ID: G204-481-2M
Lab Project ID: G204-481

Analyzed By: MRC
Date Collected: 8/25/2005 13:10
Date Received: 8/27/2005
Date Extracted: 8/30/2005
Matrix: Water

Compound	Result ug/L	Quantitation Limit ug/L	Dilution Factor	Date Analyzed
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Isophorone	BQL	10.0	1	9/1/2005
2-Methylnaphthalene	BQL	10.0	1	9/1/2005
2-Methylphenol	BQL	10.0	1	9/1/2005
3- & 4-Methylphenol	BQL	10.0	1	9/1/2005
Naphthalene	BQL	10.0	1	9/1/2005
2-Nitroaniline	BQL	10.0	1	9/1/2005
3-Nitroaniline	BQL	50.0	1	9/1/2005
4-Nitroaniline	BQL	50.0	1	9/1/2005
Nitrobenzene	BQL	10.0	1	9/1/2005
2-Nitrophenol	BQL	10.0	1	9/1/2005
4-Nitrophenol	BQL	50.0	1	9/1/2005
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Phenanthrene	BQL	10.0	1	9/1/2005
Phenol	BQL	10.0	1	9/1/2005
Pyrene	BQL	10.0	1	9/1/2005
1,2,4-Trichlorobenzene	BQL	10.0	1	9/1/2005
2,4,5-Trichlorophenol	BQL	10.0	1	9/1/2005
2,4,6-Trichlorophenol	BQL	10.0	1	9/1/2005

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	6.5	65
2-Fluorophenol	10	6.5	65
Nitrobenzene-d5	10	6.2	62
Phenol-d6	10	6.1	61
2,4,6-Tribromophenol	10	6.7	67
4-Terphenyl-d14	10	7.1	71

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

Reviewed By:

**List of Reporting Abbreviations
and Data Qualifiers**

B = Compound also detected in batch blank

BQL = Below Quantitation Limit

DF = Dilution Factor

Dup = Duplicate

E = Estimated concentration, exceeds calibration range.

J = Estimated concentration, below calibration range and above MDL

LCS(D) = Laboratory Control Spike (Duplicate)

MDL = Method Detection Limit

MS(D) = Matrix Spike (Duplicate)

PQL = Practical Quantitation Limit

RL = Reporting Limit

RPD = Relative Percent Difference

mg/kg = milligram per kilogram, ppm, parts per million

ug/kg = micrograms per kilogram, ppb, parts per billion

mg/L = milligram per liter, ppm, parts per million

ug/L = micrograms per liter, ppb, parts per billion

% Rec = Percent Recovery

% solids = Percent Solids

Special Notes:

- 1) Metals and mercury samples are digested with a hot block, see the standard operating procedure document for details.**
- 2) Uncertainty for all reported data is less than or equal to 30 percent.**

PARADIGM ANALYTICAL LABORATORIES, INC.

5500 Business Drive, Wilmington, NC 28405

Phone: (910)-350-1903 FAX: (910)-350-1557

Chain-of Custody Record & Analytical Request

COC# 50558

Page 1 of 1

15 of 15

Client: EarthTech

Project ID: Atlantic Scrap

Date: 8/25/05

Report To: Rob Holland

Address: 701 Corporate Center Dr.

Contact: Rob Holland

Turnaround: Std

Address: Suite 475 Ral 27607

Phone: 919 854 6241

Job Number: _____

Quote #: _____

Fax: _____

P.O. Number: _____

Invoice To: Rob Holland

Sample ID	Date	Time	Matrix	Preservatives			Analytes							Comments: Please specify any special reporting requirements	
				HCL	HNO3	H2SO4	8260	8270	TAL Metals	sulfate	Nitrate/nitrite	ammonia phosphorus	ortho-phosphate		ammonia
TW-6	8/25/05	1200	GW	X	X	X	3	1	1	1	1	1	1	1	G204-481
TW-5	8/25/05	1310	GW	X	X	X	3	1	1	1	1	1	1	1	
PZ-6	8/25/05	1405	GW	X			2								Low water volume
Trip Blank							2								analyse nitrate and o-phosphate out of hold per Rob Holland 8/30/05

Relinquished By	Date	Time	Received By	Date	Time	Temperature	State Certification Requested
<u>Rob Holland</u>	<u>8/26/05</u>	<u>1345</u>	<u>Ray P...</u>	<u>8/27/05</u>	<u>11:00</u>	<u>5.60C</u>	NC _____ SC _____ Other _____

SEE REVERSE FOR TERMS AND CONDITIONS

ORIGINAL

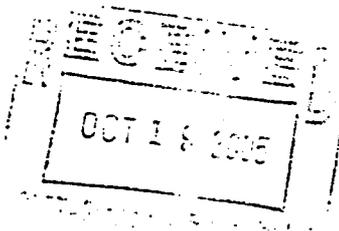
PARADIGM ANALYTICAL LABORATORIES, INC.

NC CERTIFICATION #481



LIMITED PRELIMINARY SITE ASSESSMENT

Parcel 008 and Parcel 011
Waste Management of Carolinas, Inc.
3301 North Glenn Avenue
Winston-Salem, NC 27105



WBS Element # 34871.1.1
TIP # U-2826A
EI Project No. ENMO050015.00

Prepared For:

Gregory A. Smith
State of North Carolina
Department of Transportation
Geotechnical Unit
GeoEnvironmental Section
1589 Mail Service Center
Raleigh, NC 27699-1589

Prepared by:

Environmental Investigations, Inc.
2101 Gateway Centre Boulevard, Suite 200
Morrisville, NC 27560
PH (919) 657-7500 FAX (919) 544-2199

October 19, 2005



LIMITED PRELIMINARY SITE ASSESSMENT (PSA)

Conducted on

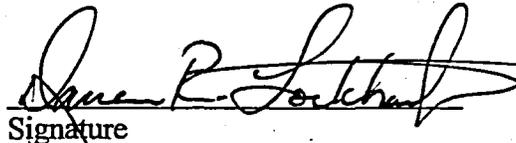
Parcel 008 and Parcel 011
Waste Management of Carolinas, Inc.
3301 North Glenn Avenue
Winston-Salem, NC 27105
NCDOT TIP #U-2826A
WBS Element # 34871.1.1
EI Project No. ENMO050015.00

For

Mr. Gregory A. Smith
State of North Carolina
Department of Transportation
Geotechnical Engineering Unit
GeoEnvironmental Section
1589 Mail Service Center
Raleigh, NC 27699-1589

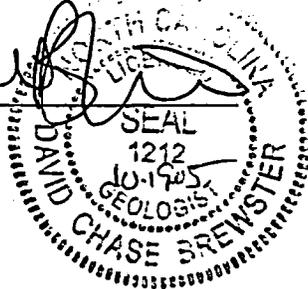
Issue Date: October 19, 2005

Darren R. Lockhart
Project Manager/Environmental Geologist


Signature

David C. Brewster, P.G.
Principal Geologist


Signature



Prepared By:

Environmental Investigations, Inc. (EI)
2101 Gateway Centre Blvd., Suite 200
Morrisville, North Carolina 27560
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1.0 INTRODUCTION

Environmental Investigations, Inc. (EI) conducted a *Limited Preliminary Site Assessment (PSA)* within the existing and proposed North Carolina Department of Transportation (NCDOT) *right-of-way (ROW)* adjacent to a parcel (identified by the NCDOT as Parcel 008 and Parcel 011) located southwest of the overpass of North Glenn Avenue by US Highway 52, in Winston-Salem, North Carolina.

Waste Management of Carolinas, Inc. is currently located on the subject parcel (adjacent to ROW). This report documents the findings of the PSA that was conducted within the described ROW. For purposes of this report, the terms "subject property" and/or "site" include the *existing* NCDOT ROW and the *proposed* ROW, and/or the abutting property/parcel.

1.1 Report Organization

Mr. Darren R. Lockhart and Mr. Robert Michael Shaut, Environmental Geologists with EI conducted field activities from mid-August to early September 2005. This report summarizes the scope of work conducted, discusses sampling activities, and presents findings, conclusions and our recommendations. Laboratory analytical data for this assessment are summarized in three (3) tables: "Table 1 - Summary of Soil Analytical Results for 8 RCRA Metals", "Table 2 - Summary of Soil Analytical Results VOCs, SVOCs, and Pesticides", and "Table 3 - Summary of Soil Analytical Results for TPH". A "Site Location Map", an "Aerial Photograph", a "Site Map" with two accompanying inset figures (Figures 3A - "Site Map (Inset A)" and Figure 3B - "Site Map (Inset B)"), and a "Soil Analytical Results Map" are presented in Figures 1, 2, 3, and 4 respectively. A compilation of "Site Photographs" are presented in Appendix A, "Soil Boring Logs" are presented in Appendix B, and copies of the "Laboratory Analytical Reports" for soil and groundwater are included in Appendices C and D, respectively.

1.2 Background

EI received a "Request for Technical and Cost Proposal" (RFP), dated July 7, 2005 signed by Cyrus F. Parker, LG, GeoEnvironmental Project Manager with the NCDOT GeoTechnical Engineering Unit. The RFP solicited a technical and cost proposal to perform PSAs on a total of 10 Parcels located within a NCDOT Highway Project, identified as WBS Element 34871.1.1, TIP # U-2826A, located in Winston-Salem, NC. The RFP outlined site information on each of the 10 parcels and NCDOT Figures (Plan Sheets) were attached to the RFP. Mr. Gregory A. Smith, LG, PE, GeoEnvironmental Supervisor with the NCDOT, GeoTechnical Engineering Unit, GeoEnvironmental Section authorized EI to perform the PSAs, as documented in a "Notice to Proceed" dated July 28, 2005.

1.3 Objectives

The objective of performing the PSAs was to investigate parcel histories, locate potential underground storage tanks (USTs), and/or potential adverse sources of contamination and determine if these systems or sources have impacted the subsurface within the *existing* and *proposed* ROW. The study (PSA) conducted on the referenced parcel (Parcel 008 and Parcel 011 – Waste Management of Carolinas, Inc.) was performed with a reasonable effort to investigate and quantify potentially impacted subsurface soils. However, the findings documented in the report do not constitute a guarantee that all potential sources of environmental contamination have been assessed and subsequently analyzed.

This report is provided for the sole use of the NCDOT on the project for which it was prepared. All materials and information used for this project were obtained or provided to EI, Inc. Use of this report by any third parties other than the NCDOT will be at such party's sole risk. EI, Inc. disclaims liability for any use of or reliance on this report by third parties.

1.4 Site History

The North Carolina Department of Environment and Natural Resources (NCDENR) maintains environmental records of all known and reported incidents throughout the state of North Carolina. The following summary of the site history was obtained from NCDENR's Division of Waste Management (DWM), Underground Storage Tank Section (UST) and the Division of Water Quality (DWQ), Aquifer Protection Section (APS), located in the Winston-Salem Regional Office (WSRO).

According to the public record, two (2) petroleum USTs (1 x 10,000-gallon capacity UST storing gasoline and 1 x 6,000-gallon capacity UST storing diesel) were permanently closed by removal methods at the subject property in March 1992 by M & M Pump and Tank Service. Reportedly, at that time, the subject facility operated under the name, Brenner Iron & Metal – Waste Management. A release of petroleum hydrocarbons was detected in the tank pit and in groundwater present in the tank pit by laboratory analysis. Laboratory analysis of soil samples obtained from adjacent to the tank pit confirmed petroleum hydrocarbon impact to subsurface soils. Reportedly, approximately 70 cubic yards of petroleum-impacted soils were excavated from the UST area. Furthermore, the impacted soils were permitted for onsite land application and bioremediated to accepted levels. Petroleum impact to groundwater was confirmed at levels above the 2L groundwater quality standards via a monitoring well network and laboratory analysis. Based on the information presented in a Limited Site Assessment that was performed on the subject property by Earth Tech, Inc. in 2002, the NCDEHNR classified the release as a "Low Risk". After a review of a Soil Sampling Report (dated: September 12, 2003) and a Notice of Residual Petroleum, NCDENR issued a letter of "No Further Action" for the incident on July 27, 2004.

In addition, the Virginia Carolina Chemical Company operated a fertilizer facility near the study area in the early 1900s. Based on a review of the "*Comprehensive Site Assessment Addendum and Corrective Action Report*" by CLP Services (dated January 2005), the northwestern portion of the historical Virginia Carolina Chemical Company property boundary overlaps the current southeastern portion of the Waste Management property. The Virginia Carolina Chemical Company appeared to have paralleled the Norfolk Southern Railroad ROW. Although the specifics of historical facility operations and the layout of the site were not reasonably ascertainable for this project, reportedly, there were furnaces and acid pits onsite.

Reportedly, the NC Superfund Section performed a preliminary screening of the Virginia Carolina Chemical Company site, but could not match information from historic resources correctly with actual field conditions. No additional information on the Virginia Carolina Chemical Company property was available at the time of this PSA. In addition to the Virginia Carolina Chemical Company operating a facility near the study area, reportedly, the Carolina Ore Company operated during the early 1900s and was said to have been an ore smelter. Reportedly, the foundation for the Carolina Ore Company's rotary kiln is situated adjacent to the former Virginia Carolina Chemical Company facility site.

1.4.1 Potential Offsite Source of Impact to Study Area

IMC Rainbow, a division of IMC Global Operations, Inc. (IMC), acquired by Royster-Clark Agribusiness (Royster-Clark), currently occupies the adjacent and abutting parcel to the west of the Waste Management property. The Royster-Clark facility is situated hydraulically upgradient from the Waste Management facility. Reportedly, IMC Rainbow has produced nitrogen-phosphate potassium fertilizer at their facility located at 3105 North Glenn Avenue in Winston-Salem, NC since 1948. Over the history of the Royster-Clark facility, there have been numerous, inadvertent, releases of acid and 448-nitrogen solution (a mixture of ammonia, ammonium nitrate, and water) at the IMC/Royster-Clark facility over the years.

Reportedly, a few tons of oversized product (primarily super phosphate) from an earlier granulation operation that failed, was discarded near the northeast corner of the shop and near the railcar unloading area. In addition, approximately 85 tons of sulfuric acid was accidentally released in 1971. And, in 1991, approximately 40 tons of 448-nitrogen solution was released from a railcar. Reportedly, these releases discharged into two (2) retention ponds located in the northeastern portion of the facility where they were neutralized and reclaimed. Groundwater and surface water monitoring activities are ongoing at the Royster-Clark facility to monitor for total metals, ammonia, chloride, nitrate, total phosphorus, sulfate, and radionuclides.

2.0 SCOPE OF WORK & ENVIRONMENTAL SERVICES

2.1 Requested Scope of Work

Documented in the RFP, dated July 7, 2005, the NCDOT requested the following scope of work:

- Investigate site histories.
- Locate USTs and determine approximate size and contents, if any.
- Determine if contaminated soils are present.
- Investigate all proposed drainage areas on the project.
- If contamination is evident, estimate the quantity of impacted soils and indicate the approximate area of soil contamination on a site map.
- If groundwater is encountered and the project manager suspects the possibility of groundwater contamination, obtain a sample for analysis by converting one of the soil borings to a temporary monitoring well.
- Prepare a set of NCDOT plansheets (11" x 17") as a separate deliverable showing a summary of suspected impacted areas of contamination.
- Prepare a report including field activities, findings, and recommendations for each site and submit and submit to this office in triplicate.

2.2 Scope of Services

To perform our scope-of-services, a field reconnaissance was performed to identify general site conditions, and Direct Push Technology (DPT) was utilized to collect soil samples and install a temporary groundwater well (piezometer) and collect a groundwater sample on the subject property.

To perform the requested *Limited PSA*, EI personnel visited the site on several occasions to supervise, oversee and/or perform site reconnaissance activities and/or collect appropriate samples to complete the project objectives. To complete the study on the subject parcel, EI performed the following scope of services:

- Supervision, direction and oversight of the advancement of seventy-five (75) soil test borings utilizing DPT and/or auger methods to depths ranging between 1.0 and 20.0 feet below the land surface (bls) across the site.
- Collection and submittal of seventy-five (75) soil samples for laboratory analysis for either 8 RCRA Metals, volatile and semi-volatile organics, pesticides, and/or total petroleum hydrocarbons.
- Photo documentation of pertinent site features.
- Preparation of this *Limited PSA Report* in triplicate format, presenting our findings and conclusions along with our recommendations.

3.0 SITE CHARACTERIZATION

3.1 Site Location

The subject property, Waste Management of Carolinas, Inc. is addressed at 3301 North Glenn Avenue, Winston-Salem, (Forsyth County), North Carolina (Figures 1 and 2). The subject property (Parcels 008 and 011) is currently located immediately adjacent to the DOT ROW as identified in DOT's U-2826A Plan Sheets 5, 6, and 7. Digital site photographs are presented in Appendix A.

3.2 Property Ownership

According to the Forsyth County, NC Tax Office Geo-Data Explorer website, the subject property has a Parcel Identification Number (PIN): 6836-58-0260 and is currently owned by Waste Management of Carolinas, Inc. The subject parcel covers a total of 18.5 acres.

3.3 Physical Setting

The subject site operates as a terminal for Waste Management, Inc. garbage collection vehicles and a facility for reconditioning waste dumpsters. The 18.5-acre tract is developed with an office building, and maintenance buildings. The subject property is surfaced by asphalt pavement for parking near the entrance to the property, but is surfaced by gravel in other accessible areas. The remaining portion of the subject property is undeveloped and covered by tall grasses and wooded areas. The eastern boundary of the subject property abuts the NCDOT ROW and is buffered from US Highway 52 by a wood line. See Figure 3 for pertinent site features.

City municipal water services and natural gas services were observed that supply the parcel via underground utility lines. Utility lines were marked both parallel and perpendicular to North Glenn Avenue. No other underground utility lines were marked in the NCDOT ROW at the time of field activities. Overhead utility lines are currently located along the northwest portion of the parcel that traverses parallel to North Glenn Avenue.

3.3.1 Number and Capacities of USTs

As mentioned earlier, two (2) USTs were permanently closed by removal methods in 1992: 1 x 10,000-gallon capacity UST storing gasoline and 1 x 6,000-gallon capacity UST storing diesel.

There were no indications of USTs observed within the *proposed NCDOT ROW*.

3.4 Site Topography

The subject property is found on the Walkertown Quadrangle published by the United States Geological Survey (USGS) Topographic Quadrangle Map (1980). The subject site is located at an elevation of approximately 990 feet above mean sea level (msl) (Figure 1). Topographically, the site slopes gently to the east/northeast in the northern portion of the subject property and towards the east/southeast in the southern portion of the subject property. Surface water runoff is shown to flow to the southeast to a confluence with Brushy Fork Creek located approximately 2.0 miles from the site.

3.5 Land Use & Surrounding Properties

The subject property is located inside the city limits of Winston-Salem, NC. Land use in the immediate vicinity of the site is characterized mainly by commercial and industrial properties. Land usage to the north is characterized by vacant/undeveloped land; then developed by commercial and retail; to the east by US Highway 52; to the south by the Royster-Clark facility, then the Kaba Ilco facility; and to the west by residences and US Highway 52.

4.0 SUBSURFACE INVESTIGATION

4.1 Subsurface Soils Investigation

Subsurface Environmental Investigations, Inc., based in Statesville, North Carolina, and EnviroProbe, based in Clayton, North Carolina were subcontracted to provide DPT services. An EI Geologist directed and supervised the advancement of 75 soil test borings ("P8GP1" - "P8GP32", "P8HA33" - "P8HA39", "P11GP1" - "P11GP14", "P11GPA" - "P11GPP", and "P11HAQ" - "P11HAV") in the existing and/or proposed DOT ROW for the referenced site. A track-hoe and operator cleared access corridors where heavily wooded areas prevented access.

The soil sampling program was designed in order to evaluate the absence/presence of potential subsurface soil (vadose zone) impact and/or subsurface groundwater impact associated with potential current or historical onsite operations, or offsite impacts. The subsurface soils investigation ranged in depth from 1.0 feet to a depth of 20.0 feet bls. The soil sampling locations are shown on Figure 3A, and 3B.

4.1.1 Soil Sample Collection Procedures

Soil samples were collected as grab samples using powder-free nitrile gloves. The soils were placed in laboratory-prepared containers; then, placed in a cooler on ice. Soil samples retained for laboratory analyses were shipped, via overnight courier service (Federal Express) to Paradigm Analytical Laboratory, for laboratory analytical testing.

4.1.2 Backfill Activities

At the completion of the exploratory subsurface advancement activities, the test borings were backfilled to surface grade.

4.1.3 Subsurface Soil Lithology

During boring advancement activities, soil samples were classified in the field by an EI geologist utilizing the Unified Soil Classification System (USCS). Subsurface soils encountered in the area of study were fairly consistent. Soils within the northwestern portion of the subject property (Parcel 011) beneath an 11.0-inch layer of gravel were described as follows: (ML) SILT, reddish-brown, sandy (fine) to approximately 15 feet bls. Soils in the upland areas within this portion of the subject property (Parcel 011) were also described as: (SM) SAND, silty, pale pink to reddish orange down to approximately 12.0 feet bls becoming more micaceous and saprolitic. Soils within the southeastern portion of the subject property (Parcel 008) were described as: (ML) SILT, reddish-

orange, sandy (fine to very fine), clayey, micaceous to approximately 8.0 feet bls; underlain by saprolite down to 15.0 feet bls. Detailed descriptions are presented in Soil Boring Logs included in Appendix B. The boring logs include an interpretation of subsurface conditions based on field samples.

4.2 Groundwater Investigation

4.2.1 Temporary Monitoring Well Installation

Where available, existing groundwater quality data was utilized for the purposes of this *Limited PSA*. For Parcel 011, groundwater quality data was available from a Limited Site Assessment performed for the UST release that was mentioned earlier (Incident #8854). For Parcel 008, one (1) temporary monitoring well was installed by advancing one (1) soil boring down through the water table and inserting a slotted, PVC column to allow fresh groundwater to enter. The temporary monitoring well was developed and allowed to stand one (1) day prior to sampling. The approximate locations of the groundwater monitoring wells are depicted in Figures 3A and 3B.

5.0 LABORATORY TESTING AND RESULTS

5.1 Subsurface Soil Analytical Methods

The laboratory analytical methods selected for this *Limited PSA* were based on the history and usage of the subject property, as well as the history and usage of potential offsite sources of impact to the subject property. For instance, since there were no known sources of metal impacts onsite, soil samples that were selected for metals analysis generally coincided with those locations on the subject property that were likely to have been affected by an offsite release. Furthermore, soil samples selected for total petroleum hydrocarbon analysis generally coincided with those areas on the subject property that were likely to have been affected by the known petroleum release. For general screening purposes, the laboratory analyses that were selected consisted of volatile and semi-volatile organics (VOCs and SVOCs, respectively).

A total of seventy-five (75) soil samples were submitted for one or more of the following laboratory analyses: total petroleum hydrocarbons (TPH) by EPA Method 5030/5035 (gasoline range organics - GRO) and 3550 (diesel range organics - DRO), 8 RCRA Metals by EPA Method 6010B, 7471, VOCs and SVOCs by EPA Method 8260/5035 and 8270, respectively, and for pesticides by EPA Method 8081.

5.2 Laboratory Analytical Results - Soil

The laboratory analytical results indicated that twenty-two (22) of the total twenty-four (24) soil samples that were submitted for metals analysis contained elevated levels of lead, arsenic, and mercury above current state and/or federal regulatory standards. Specifically, total lead was detected at a maximum concentration of 342 mg/kg (parts per million) with a secondary maximum concentration value of 162 mg/kg. Arsenic was detected at a maximum concentration of 18.5 mg/kg with a secondary maximum concentration of 14.6 mg/kg. Mercury was detected at a maximum concentration of 0.144 mg/kg with a secondary maximum concentration of 0.142 mg/kg. The results of the analytical testing of the soil samples for 8 RCRA Metals are summarized in Table 1.

For comparison purposes, the calculated values (2x's the arithmetic mean) for the naturally occurring levels of metals were used for the subject property as reported in a "*Limited Preliminary Site Assessment - Parcel 009 Recycling Industries (Atlantic Scrap & Processing, LLC)*". The background sample data for metals are believed to be comparable for Parcels 008 and 011 and thus, are included in Table 1. In addition, the metals analyses were tabulated and compared to the Environmental Protection Agency (EPA), Region IX, Preliminary Remediation Guidelines (PRGs); the NC Hazardous Waste Section's (HWS) Soil Screening Levels (SSLs); and the NC DENR Groundwater (GW) Section Soil Clean-up Levels. The laboratory results and Chain-of-Custody

Records (COC) for soils are presented in **Appendix C**.

The laboratory analytical results indicated that forty-six (46) of the seventy-five (75) total soil samples submitted for VOC and SVOC analysis, only two (2) soil samples were reported as having one (1) VOC constituent above the current, respective NCDENR Soil-to-GW Maximum Soil Contaminant Concentration (MSCC) standard. Specifically, tetrachloroethene (PCE) was detected at a concentration of 0.00941 mg/kg in soil sample “P11GP4-20” and at a concentration of 0.00919 mg/kg in soil sample “P8GP11-8”. Both of the concentrations reported are slightly above the MSCC standard of 0.0074 mg/kg for this compound. Other VOC constituents were detected only in the two samples listed above and at residual levels well below regulatory limits.

For SVOCs, the laboratory analytical results indicated that bis (2-ethylhexyl) phthalate was present in soil sample “P11GP3-15” at a concentration of 1.04 mg/kg. The reported concentration for bis (2-ethylhexyl) phthalate is below the respective MSCC standard of 6.67mg/kg. The laboratory analytical results indicated pesticides were not detectable in any of the seven (7) soil samples that were submitted for the analysis. The laboratory analytical results for VOCs, SVOCs, and pesticides are summarized in **Table 2**.

The laboratory analytical results indicated that out of the twenty-one (21) of seventy-five (75) soil samples submitted for TPH analysis, showed only one soil sample was reported as having DROs present in the sample above the current, respective DWQ Action Limit of 40 mg/kg. Specifically, DROs were detected in soil sample “P11GPD-8” at a concentration of 116 mg/kg. DROs were also detected in soil sample “P11GPE-4” at a concentration of 25.9 mg/kg, which is below the respective Action Limit. There were no other detectable DROs or GROs in any other samples analyzed for TPH. The laboratory analytical results for TPH are summarized in **Table 3**.

5.3 Laboratory Analytical Results - Groundwater

Review of the groundwater analytical data from a May 2002 groundwater monitoring event for an LSA (May 2002) on Parcel 011 indicated that five (5) of five (5) samples collected from monitoring wells installed for previous assessment/investigation activities contained concentrations of VOC analytes above the 15A NCAC 02L .0202 Groundwater Quality Standards. Specific results are summarized as follows:

Analytical results for “MW-1” reported the following analytes above the 2L Groundwater Quality Standards: benzene (22 ug/L), PCE (4 ug/L), and butylbenzylphthalate (1,700 ug/L). For “MW-2” and “MW-3”, butylbenzylphthalate (2,700 and 1,000 ug/L, respectively) was the only constituent detected above the 2L Groundwater Quality Standard of 100 ug/L. For “MW-4”, the constituents detected above the 2L Groundwater Quality Standards were: benzene (54 ug/L), ethylbenzene (48 ug/L), and C₅ –C₈ aliphatics (430 ug/L). The laboratory analytical results for

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Limited Preliminary Site Assessment
Parcel 008 and Parcel 011 - Waste Management of Carolinas, Inc.
3301 North Glenn Avenue
Winston-Salem, NC

"MW-5" indicated that PCE was present at a concentration of 11 ug/L and butylbenzylphthalate at a concentration of 3,100 ug/L. A copy of the laboratory analytical report for groundwater is included in Appendix D.

6.0 SUMMARY OF FINDINGS

EI has reviewed information gathered for the Limited PSA study including site reconnaissance, review of DOT plan sheets, review of former site investigations, review of site investigations including soil and groundwater collection activities, and review of the laboratory analytical report. Compiled below is a summarized list of the significant findings.

- A review of the public record indicated that two (2) petroleum USTs were permanently closed by removal methods in 1992. A release was discovered and subsequent assessment and corrective actions were undertaken to mitigate the release. On July 27, 2004, a “Notice of No Further Action” was issued by the WSRO.
- Further review indicated that Virginia Carolina Chemical Company operated a fertilizer facility and the Carolina Ore Company operated a smelting operation near the subject property in the early 1900s. Based on historical reports, the northeastern portion of the historical Virginia Carolina Chemical Company property boundary overlaps the current southeastern portion of the Atlantic Scrap and Processing facility. Although the specifics of historical facility operations and the layout of the site were not reasonably ascertainable for this project, reportedly, there were furnaces and acid pits onsite. Reportedly, the NC Superfund Section performed a preliminary screening of the Virginia Carolina Chemical Company site, but could not match information from historic resources correctly with actual field conditions. No additional information on the subject property was available at the time of this PSA.
- Seventy-five (75) soil samples were collected in the existing and proposed NCDOT ROW and within the vicinity of the *proposed or existing drainage areas* within the proposed ROW and submitted for select laboratory analysis for impact from metals, VOCs, SVOCs, TPHs, and pesticides. The laboratory analytical results showed elevated concentrations of total lead, arsenic, mercury, PCE, and DROs above current regulatory standards.
- Review of the historical groundwater analytical data indicated that five (5) of five (5) groundwater samples collected from monitoring wells installed for previous assessment/investigation activities showed concentrations of VOC analytes above the 15A NCAC 02L .0202 Groundwater Quality Standards. Groundwater quality data collected from one (1) temporary monitoring well (“P8-TW1”) installed in the southeastern portion of the subject property did not indicate the presence of regulated compounds.

7.0 CONCLUSIONS AND RECOMMENDATIONS

EI personnel have reviewed information obtained during the *Limited PSA* at the site and present the following conclusions and recommendations. Note that because of the limited scope-of-work for this assessment, full delineation of impacts to soil and/or groundwater would require more comprehensive assessment activities. Therefore, the estimated quantities of impacted soils provided below are based on the available information and likely represent the upper limits for tonnages of impacted soil accordingly.

Metal-Impacted Soils

The vadose zone in the southeastern portion of the subject property (Parcel 008) near soil sample location "P8GP3", plus four (4) smaller, isolated areas (Parcel 011), *within* the *proposed* ROW have been impacted by heavy metals including lead, arsenic, and mercury. Given the number of soil samples collected, the range of metal concentrations that were detected, and the spatial distribution of elevated metal concentrations, total lead was selected for quantification of general metal-impact to the study area.

Spatial Extent of Metal-Impacted Soils - Parcels 008 and 011

Figure 4A depicts the spatial extent of lead-impacted soils for Parcel 008 based on the laboratory analytical data. The extent of lead-impacted soils with concentrations above NC Groundwater Section Soil Cleanup Levels for lead of 270 mg/kg appears to cover a total area of 1,500 ft² (0.034 acres) and is centered on soil sampling location "P8GP3". The extent of lead-impacted soils with concentrations above the background lead concentrations of 40.4 mg/kg appears to cover a total area of 9,325 ft² (0.21 acres) and includes of four (4) smaller, isolated areas located on Parcel 011. Note that the isolated areas correspond to the following soil sampling locations: "P11GP3", "P11GP5", "P11GP8", and "P11GP11". For volumetric estimation of impacted soils, all four (4) isolated areas were utilized to estimate total lead-impacted soils above background level. Figure 4B depicts the spatial extent of lead-impacted soils for the isolated areas of lead-impact on Parcel 011.

Volumetric Estimation of Metal-Impacted Soils - Parcels 008 and 011

Based on the sample depths for the lead-impacted soils on Parcel 008, the affected soils appear to exist between eight (8) feet to twenty (20) feet bls. The total estimate of impacted soils above the background lead concentrations of 40.4 mg/kg on Parcel 008 ranges from 2,600 cubic yards (approximately 3,900 tons) to 6,500 cubic yards (approximately 9,750 tons). Based on the laboratory analytical results from soil samples obtained on Parcel 008, it appears that an estimated volume of 445 cubic yards (approximately 667 tons) to 1,111 cubic yards (approximately 1,666 tons) is present above the NC GW Section's Soil Clean-up Level of 270 mg/kg.

Based on the sample depth for lead-impacted soils at the four isolated areas on (Parcel 011), the affected soils appear to extend to approximately 15 feet bgs. Based on calculations, it appears that at the most, there are approximately 200 cubic yards (approximately 300 tons) of impacted soils per isolated area present, or approximately a total of 1,200 tons of lead-impacted soil for the four isolated areas. Note that based on the laboratory analytical results, the lead-impacted soils on Parcel 011 contain total lead levels above the background concentrations, but below the NC GW Section's Soil Cleanup Level for lead of 270 mg/kg.

Should the NCDOT proceed with acquiring the ROW as proposed or otherwise that would encompass the metal-impacted soils as described, EI recommends that corrective actions be undertaken to minimize the risk to health and environment. It should be noted that the corrective action planning for lead-impacted soils should include the remediation of arsenic, and mercury-impacted soils as well. Among other remedial options, immobilization technologies may prove effective for minimizing remedial costs, as well as the risk to health and environment.

VOC and SVOC-Impacted-Soils

Based on the laboratory analytical results, the vadose zone at the subject property has been impacted by PCE *within the proposed ROW* for Parcel 008 and *within the study area* for Parcel 011. PCE was detected in only two (2) soil samples and more importantly, at levels slightly above current, respective regulatory limits (0.0074 mg/kg). The two (2) sample locations were remote to each other and at varying depths bls.

TPH-Impacted Soils

DROs were detected in the vadose zone near the AST containment area and *within the proposed ROW*. Laboratory analytical results reported DRO concentrations above DWQ Action Limits (40 mg/kg) in one (1) soil sample. Detected concentrations of DROs in soil sample "P11GPD-8" are reportable. Based on the available information, the quantity of DRO-impacted soil is estimated between 460 cubic yards (approximately 690 tons) and 920 cubic yards (approximately 1,380 tons).

Groundwater Impact

Review of historical analytical data that indicated that five (5) of five (5) samples collected from monitoring wells installed for previous assessment/investigation activities showed concentrations of VOC analytes above the 15A NCAC 02L .0202 Groundwater Quality Standards. Based on the existing groundwater quality data from Parcel 011 and the date of collection for the data, it appears that the groundwaters beneath Parcel 011 have been impacted by regulated compounds at levels such that the respective groundwaters are likely to be impacted above current regulatory standards at this time. Groundwater quality data from one (1) temporary monitoring well ("P8-

TWI”) installed in the southeastern portion of the subject property did not indicate the presence of regulated compounds above detection limits. Based on the available information, groundwater quality at the southeastern limits of Parcel 008 does not appear to be impacted with respect to VOCs and SVOCs.

Prior to the NCDOT proceeding with installing drainage piping or cut areas in the northwestern portion of the subject property, planning for the capture and disposal of petroleum-impacted groundwaters in the ROW should be considered. The specifics regarding construction detail for the drainage areas were not available at the time of this project.

Based on the data collected for this *Limited PSA* and the available information, the study area has been impacted by regulated substances; and thus, is reportable.

Note: This report does not constitute a guarantee that all potential sources of environmental contamination have been assessed and subsequently analyzed.

TABLES

TABLE 1
SUMMARY OF SOIL ANALYTICAL RESULTS for 8 RCRA Metals
P008, P011-Waste Management of Carolinas, Inc.
3301 North Glenn Avenue
Winston-Salem (Forsyth Co.), NC
EI Project No.: ENMO050015.00

	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
EPA Region 9 PRGs (mg/kg)	0.39	5400	37	210	400	23	390	390
NC HWS SSLs (mg/kg)	5.24	848	2.72	27.2	270	0.0154	12.2	0.223
NC DENR GW Section Soil Clean-up Levels (mg/kg)	NS	848	NS	27	270	NS	NS	NS
Background Concentrations (mg/kg)	5.75	NA	0	5.76	40.4	0	5.26	0
Sample Identification	Laboratory Analysis (mg/kg) RCRA Metals 6010B & 7471							
P8GP1-20	3.03	BQL	BQL	BQL	12.1	0.0253	BQL	BQL
P8GP2-13	BQL	BQL	BQL	BQL	12.7	BQL	BQL	BQL
P8GP3-8	7.30	63.1	BQL	BQL	342	0.0237	BQL	BQL
P8GP4-20	1.87	42.2	BQL	3.56	48.0	BQL	BQL	BQL
P8GP5-20	1.68	BQL	BQL	1.68	16.3	BQL	BQL	BQL
P8GP6-20	NA	NA	NA	NA	NA	NA	NA	NA
P8GPF7-20	NA	NA	NA	NA	NA	NA	NA	NA
P8GPF8-20	NA	NA	NA	NA	NA	NA	NA	NA
P8GPF9-20	NA	NA	NA	NA	NA	NA	NA	NA
P8GP10-15	NA	NA	NA	NA	NA	NA	NA	NA
P8GP11-8	NA	NA	NA	NA	NA	NA	NA	NA
P8GP12-5	NA	NA	NA	NA	NA	NA	NA	NA
P8GP13-8	NA	NA	NA	NA	NA	NA	NA	NA
P8GP14-18	NA	NA	NA	NA	NA	NA	NA	NA
P8GP15-18	NA	NA	NA	NA	NA	NA	NA	NA
P8GP16-20	NA	NA	NA	NA	NA	NA	NA	NA
P8GP17-14	NA	NA	NA	NA	NA	NA	NA	NA
P8GP18-14	NA	NA	NA	NA	NA	NA	NA	NA
P8GP19-16	NA	NA	NA	NA	NA	NA	NA	NA
P8GP20-13	NA	NA	NA	NA	NA	NA	NA	NA
P8GP21	NA	NA	NA	NA	NA	NA	NA	NA
P8GP22-8	NA	NA	NA	NA	NA	NA	NA	NA
P8GP23-12	NA	NA	NA	NA	NA	NA	NA	NA
P8GP24-12	NA	NA	NA	NA	NA	NA	NA	NA
P8GP25-12	NA	NA	NA	NA	NA	NA	NA	NA
P8GP26-11	NA	NA	NA	NA	NA	NA	NA	NA
P8GP27-11	NA	NA	NA	NA	NA	NA	NA	NA
P8GP28-15	NA	NA	NA	NA	NA	NA	NA	NA
P8GP29-15	NA	NA	NA	NA	NA	NA	NA	NA
P8GP30-15	NA	NA	NA	NA	NA	NA	NA	NA

NS = No Standard
 BQL = Below Quantitation Limit
 PRGs = Prelim. Remediation Goals
 SSLs = Soil Screening Levels
Bold Font = above one or more regulatory standard

TABLE 1
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P008, P011-Waste Management of Carolinas, Inc.
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Winston-Salem (Forsyth Co.), NC
EI Project No.: ENMO050015.00

	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
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NC DENR GW Section Soil Clean-up Levels (mg/kg)	NS	848	NS	27	270	NS	NS	NS
Background Concentrations (mg/kg)	5.75	NA	0	5.76	40.4	0	5.26	0
Sample Identification	Laboratory Analysis (mg/kg) RCRA Metals 6010B & 7471							
P8GP31-15	NA	NA	NA	NA	NA	NA	NA	NA
P8GP32-15	NA	NA	NA	NA	NA	NA	NA	NA
P8HA33-1	5.5	36.3	BQL	12.5	35.8	0.0398	BQL	BQL
P8GP34-1.5	3.85	15.3	BQL	12.7	25.5	0.0410	BQL	BQL
P8HA35-1.5	4.88	BQL	BQL	13.6	22.5	0.0589	BQL	BQL
P8HA36-1.5	6.55	21.6	BQL	20.9	66.5	0.142	BQL	BQL
P8HA37-1.5	5.71	33.9	BQL	16.1	28.2	0.144	BQL	BQL
P8HA38-1.5	5.43	21.4	BQL	17.2	25.7	0.0736	BQL	BQL
P8HA39-1.5	9.43	22.9	BQL	23.3	31.0	0.0835	BQL	BQL
P11GP1-10	NA	NA	NA	NA	NA	NA	NA	NA
P11GP2-16	NA	NA	NA	NA	NA	NA	NA	NA
P11GP3-15	5.62	45.5	1.76	13.3	137	0.123	3.51	BQL
P11GP4-20	12.7	87.9	BQL	BQL	12.3	BQL	BQL	BQL
P11GP5-15	3.25	24.2	BQL	BQL	120	BQL	2.08	BQL
P11GP6-15	NA	NA	NA	NA	NA	NA	NA	NA
P11GP7-9	4.55	16.3	BQL	12.2	30.2	0.0888	BQL	BQL
P11GP8-9	14.6	144	BQL	12.4	162	0.120	3.37	BQL
P11GP9-15	2	BQL	BQL	2.29	34.9	BQL	BQL	BQL
P11GP10-1	2.12	BQL	BQL	BQL	3.6	BQL	BQL	BQL
P11GP11-1	18.5	108	BQL	BQL	129	0.0430	BQL	BQL
P11GP12	BQL	BQL	BQL	BQL	26.7	BQL	BQL	BQL
P11GP13-20	NA	NA	NA	NA	NA	NA	NA	NA
P11GP14-15	NA	NA	NA	NA	NA	NA	NA	NA
P11GPA-10	NA	NA	NA	NA	NA	NA	NA	NA
P11GPB-10	NA	NA	NA	NA	NA	NA	NA	NA
P11GPC-8	NA	NA	NA	NA	NA	NA	NA	NA
P11GPD-8	NA	NA	NA	NA	NA	NA	NA	NA
P11GPE-4	NA	NA	NA	NA	NA	NA	NA	NA
P11GPF-4	NA	NA	NA	NA	NA	NA	NA	NA
P11GPG-8	NA	NA	NA	NA	NA	NA	NA	NA
P11GPH-8	NA	NA	NA	NA	NA	NA	NA	NA
P11GPI-5	NA	NA	NA	NA	NA	NA	NA	NA
P11GPJ-6	NA	NA	NA	NA	NA	NA	NA	NA
P11GPK-8	NA	NA	NA	NA	NA	NA	NA	NA
P11GPL-8	NA	NA	NA	NA	NA	NA	NA	NA
P11HAQ-1	4.64	15.8	BQL	15.9	23.5	0.0453	BQL	BQL
P11HAR-1	8.42	18.8	BQL	19.6	22.2	0.05205	BQL	BQL
P11HAS-1.5	0.964	BQL	BQL	1.10	7.31	BQL	BQL	BQL
P11HAT-4	NA	NA	NA	NA	NA	NA	NA	NA
P11HAU-4	NA	NA	NA	NA	NA	NA	NA	NA
P11HAV-3.5	NA	NA	NA	NA	NA	NA	NA	NA

NS = No Standard
BQL = Below Quantitation Limit
PRGs = Prelim. Remediation Goals
SSLs = Soil Screening Levels
Bold Font = above one or more regulatory standard

TABLE 2
Summary of Soil Analytical Results
VOCs, SVOCs, and Pesticides
P008, P011-Waste Management of Carolinas, Inc.
3301 North Glenn Avenue
Winston-Salem (Forsyth Co.), NC
EI Project No.: ENMO50015.00

Sample Point Location				P8GP1-20	P8GP2-13	P8GP3-8	P8GP4-20	P8GP5-20	P8GP6-20	P8GP7-20	P8GP8-15	P8GP9-20	P8GP10-15	P8GP11-8
Sample Depth - Feet				10.0-11.0	15.0-16.0	15.0-16.0	20.0-21.0	15.0-16.0	15.0-16.0	9.0-10.0	9.0-10.0	15.0-16.0	9.0-10.0	18.0-19.0
Sample Date				8/10/2005	8/10/2005	8/10/2005	8/10/2005	8/10/2005	8/28/2005	8/28/2005	8/28/2005	8/28/2005	8/28/2005	8/28/2005
Field Screening Results-PIU (ppm)				0	0	0	0	0	0	0	0	0	0	
Laboratory Analysis	Cleanup Standards (MSCC)			Laboratory Analytical Results/ mg/kg										
	Residential MSCCs (mg/kg)	Industrial/Commercial MSCCs (mg/kg)	Soil-to-GW MSCCs (mg/kg)											
VOC's														
GCMS 8260/5035														
Acetone	1564	40880	3	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
2-Butanone	NS	NS	NS	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Carbon disulfide	1564	40880	4	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
2-Hexanone	625	16352	1.9	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Benzene	22	200	0.0056	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Toluene	3200	82000	7	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Ethylbenzene	1560	40000	0.24	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Xylene	32000	200000	5	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Isopropylbenzene (Cumene)	1564	40880	2	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1,2,3-Trichloropropane	NS	NS	NS	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
n-Propylbenzene	NS	NS	NS	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1,3,5-Trimethylbenzene	782	20440	7	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1,2,4-Trimethylbenzene	782	20440	8	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
n-Butylbenzene	156	4088	4	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1,2-dichloropropane	NS	NS	NS	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Naphthalene	63	1635	0.58	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Tetrachloroethene	12	110	0.0074	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.00919
Methyl-tert-butyl Ether	156	4088	0.62	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Semi-VOC's GCMS 8270														
Acenaphthene	940	24000	8	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Anthracene	4600	12200	995	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Benzo[a]anthracene	0.88	8	0.34	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Benzo[a]pyrene	0.088	0.78	0.091/0.088	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Benzo[b]fluoranthene	0.88	8	1	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Benzo[g,h,i]perylene	469	12264	6720	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Benzo[k]fluoranthene	9	78	12	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Chrysene	88	780	38	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Dibenzofuran	62	1635	4.7	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Dibenzofuran	62	1635	4.7	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Fluoranthene	620	16400	276	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Fluorene	620	16400	44	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Indeno(1,2,3-cd)pyrene	0.88	8	3	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Phenol	NS	NS	NS	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Naphthalene	63	1635	0.58	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
2-Methylnaphthalene	63	1635	3	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Fluorene	620	16400	44	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
bis(2-Ethylhexyl)phthalate	NS	NS	NS	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Phenanthrene	469	12264	60	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Pyrene	469	12264	286	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Pesticides EPA 8081														
All analytes	NA	NA	NA	BQL	BQL	BQL	BQL	BQL	BQL	BQL	NA	NA	NA	NA

NA = Not analyzed/applicable
BQL = Below Quantitation Limits

TABLE 2
Summary of Soil Analytical Results
VOCs, SVOCs, and Pesticides
P008, P011-Waste Management of Carolinas, Inc.
3301 North Glenn Avenue
Winston-Salem (Forsyth Co.), NC
EI Project No.: ENMO050015.00

Sample Point Location				P8GP12-5	P8GP13-8	P8GP14-18	P8GP15-18	P8GP16-20	P8GP17-14	P8GP18-14	P8GP19-16	P8GP20-13	P8GP21
Sample Depth - Feet				15.0-16.0	20.0-21.0	15.0-16.0	10.0-11.0	10.0-11.0	8.0-9.0	8.0-9.0	3.5-4.0	3.5-4.0	8.0-9.0
Sample Date				8/9/2005	8/28/2005	8/28/2005	9/2/2005	9/2/2005	9/2/2005	9/2/2005	9/2/2005	9/2/2005	9/8/2005
Field Screening Results-PID (ppm)				0	0	0	0	0	0	0	0	0	0
Laboratory Analysis	Cleanup Standards (MSCC)			Laboratory Analytical Results/ mg/kg									
	Residential MSCCs (mg/kg)	Industrial/Commercial MSCCs (mg/kg)	Soil-to-GW MSCCs (mg/kg)										
VOC's GCMS 8260/5035													
Acetone	1564	40880	3	BQL	BQL	NA	BQL	NA	BQL	NA	NA	NA	BQL
2-Butanone	NS	NS	NS	BQL	BQL	NA	BQL	NA	BQL	NA	NA	NA	BQL
Carbon disulfide	1564	40880	4	BQL	BQL	NA	BQL	NA	BQL	NA	NA	NA	BQL
2-Hexanone	625	16352	1.9	BQL	BQL	NA	BQL	NA	BQL	NA	NA	NA	BQL
Benzene	22	200	0.0058	BQL	BQL	NA	BQL	NA	BQL	NA	NA	NA	BQL
Toluene	3200	82000	7	BQL	BQL	NA	BQL	NA	BQL	NA	NA	NA	BQL
Ethylbenzene	1560	40000	0.24	BQL	BQL	NA	BQL	NA	BQL	NA	NA	NA	BQL
Xylene	32000	200000	5	BQL	BQL	NA	BQL	NA	BQL	NA	NA	NA	BQL
Isopropylbenzene (Cumene)	1564	40880	2	BQL	BQL	NA	BQL	NA	BQL	NA	NA	NA	BQL
1,2,3-Trichloropropane	NS	NS	NS	BQL	BQL	NA	BQL	NA	BQL	NA	NA	NA	BQL
n-Propylbenzene	NS	NS	NS	BQL	BQL	NA	BQL	NA	BQL	NA	NA	NA	BQL
1,3,5-Trimethylbenzene	782	20440	7	BQL	BQL	NA	BQL	NA	BQL	NA	NA	NA	BQL
1,2,4-Trimethylbenzene	782	20440	8	BQL	BQL	NA	BQL	NA	BQL	NA	NA	NA	BQL
n-Butylbenzene	156	4088	4	BQL	BQL	NA	BQL	NA	BQL	NA	NA	NA	BQL
1,2-dichloropropane	NS	NS	NS	BQL	BQL	NA	BQL	NA	BQL	NA	NA	NA	BQL
Naphthalene	63	1635	0.58	BQL	BQL	NA	BQL	NA	BQL	NA	NA	NA	BQL
Tetrachloroethene	12	110	0.0074	BQL	BQL	NA	BQL	NA	BQL	NA	NA	NA	BQL
Methyl-tert-butyl Ether	156	4088	0.92	BQL	BQL	NA	BQL	NA	BQL	NA	NA	NA	BQL
Semi-VOC's GCMS 8270													
Acenaphthene	940	24000	8	BQL	BQL	BQL	BQL	NA	BQL	NA	NA	NA	BQL
Anthracene	4600	12200	995	BQL	BQL	BQL	BQL	NA	BQL	NA	NA	NA	BQL
Benzo[a]anthracene	0.88	8	0.34	BQL	BQL	BQL	BQL	NA	BQL	NA	NA	NA	BQL
Benzo[a]pyrene	0.088	0.78	0.091/0.088	BQL	BQL	BQL	BQL	NA	BQL	NA	NA	NA	BQL
Benzo[b]fluoranthene	0.88	8	1	BQL	BQL	BQL	BQL	NA	BQL	NA	NA	NA	BQL
Benzo[g,h,i]perylene	469	12264	6720	BQL	BQL	BQL	BQL	NA	BQL	NA	NA	NA	BQL
Benzo[k]fluoranthene	9	78	12	BQL	BQL	BQL	BQL	NA	BQL	NA	NA	NA	BQL
Chrysene	88	780	38	BQL	BQL	BQL	BQL	NA	BQL	NA	NA	NA	BQL
Dibenzo[a,h]anthracene	NS	NS	0.17/0.088	BQL	BQL	BQL	BQL	NA	BQL	NA	NA	NA	BQL
Dibenzofuran	62	1635	4.7	BQL	BQL	BQL	BQL	NA	BQL	NA	NA	NA	BQL
Fluoranthene	620	16400	276	BQL	BQL	BQL	BQL	NA	BQL	NA	NA	NA	BQL
Fluorene	620	16400	44	BQL	BQL	BQL	BQL	NA	BQL	NA	NA	NA	BQL
Indeno(1,2,3-cd)pyrene	0.88	8	3	BQL	BQL	BQL	BQL	NA	BQL	NA	NA	NA	BQL
Phenol	NS	NS	NS	BQL	BQL	BQL	BQL	NA	BQL	NA	NA	NA	BQL
Naphthalene	63	1635	0.58	BQL	BQL	BQL	BQL	NA	BQL	NA	NA	NA	BQL
2-Methylnaphthalene	63	1635	3	BQL	BQL	BQL	BQL	NA	BQL	NA	NA	NA	BQL
Fluorene	620	16400	44	BQL	BQL	BQL	BQL	NA	BQL	NA	NA	NA	BQL
bis (2-Ethylhexyl)phthalate	NS	NS	NS	BQL	BQL	BQL	BQL	NA	BQL	NA	NA	NA	BQL
Phenanthrene	469	12264	60	BQL	BQL	BQL	BQL	NA	BQL	NA	NA	NA	BQL
Pyrene	469	12264	286	BQL	BQL	BQL	BQL	NA	BQL	NA	NA	NA	BQL
Pesticides EPA 8081													
All analytes	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

NA = Not analyzed/applicable
BQL = Below Quantitation Limits

TABLE 2
Summary of Soil Analytical Results
VOCs, SVOCs, and Pesticides
P008, P011-Waste Management of Carolinas, Inc.
3301 North Glenn Avenue
Winston-Salem (Forsyth Co.), NC
EI Project No.: ENMO050015.00

Sample Point Location				P8GP22	P8GP23	P8GP24	P8GP25	P8GP26	P8GP27	P8GP28	P8GP29	P8GP30	P8GP31	P8GP32				
Sample Depth - Feet				8.0-9.0	8.0-9.1	8.0-9.2	8.0-9.3	8.0-9.4	8.0-9.5	8.0-9.6	8.0-9.7	8.0-9.8	8.0-9.9	8.0-9.10				
Sample Date				9/8/2005	9/9/2005	9/10/2005	9/11/2005	9/12/2005	9/13/2005	9/14/2005	9/15/2005	9/16/2005	9/17/2005	9/18/2005				
Field Screening Results-PID (ppm)				0	0	0	0	0	0	0	0	0	0	0				
Laboratory Analysis	Cleanup Standards (MSCC)			Laboratory Analytical Results/ mg/kg														
	Residential MSCCs (mg/kg)	Industrial/Commercial MSCCs (mg/kg)	Soil-to-GW MSCCs (mg/kg)															
VOC's																		
GCMS 8260/5035																		
Acetone	1564	40880	3	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
2-Butanone	NS	NS	NS	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Carbon disulfide	1564	40880	4	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
2-Hexanone	625	16352	1.9	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Benzene	22	200	0.0058	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Toluene	3200	82000	7	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Ethylbenzene	1560	40000	0.24	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Xylene	32000	200000	5	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Isopropylbenzene (Cumene)	1564	40880	2	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1,2,3-Trichloropropane	NS	NS	NS	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
n-Propylbenzene	NS	NS	NS	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1,3,5-Trimethylbenzene	782	20440	7	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1,2,4-Trimethylbenzene	782	20440	8	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
n-Butylbenzene	156	4088	4	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1,2-dichloropropane	NS	NS	NS	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Naphthalene	63	1635	0.58	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Tetrachloroethene	12	110	0.0074	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Methyl-tert-butyl Ether	156	4088	0.92	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Semi-VOC's GCMS 8270																		
Acenaphthene	940	24000	8	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Anthracene	4600	12200	895	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Benzo[a]anthracene	0.88	8	0.34	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Benzo[a]pyrene	0.088	0.78	0.091/0.088	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Benzo[b]fluoranthene	0.88	8	1	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Benzo[g,h,i]perylene	469	12264	6720	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Benzo[k]fluoranthene	9	78	12	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Chrysene	88	780	38	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Dibenzo[a,h]anthracene	NS	NS	0.17/0.088	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Dibenzofuran	62	1635	4.7	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Fluoranthene	620	16400	278	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Fluorene	620	16400	44	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Indeno(1,2,3-cd)pyrene	0.88	8	3	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Phenol	NS	NS	NS	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Naphthalene	63	1635	0.58	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
2-Methylnaphthalene	63	1635	3	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Fluorene	620	16400	44	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
bis(2-Ethylhexyl)phthalate	NS	NS	NS	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Phenanthrene	469	12264	60	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Pyrene	469	12264	286	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Pesticides EPA 8081																		
All analytes	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

NA = Not analyzed/applicable
BQL = Below Quantitation Limits

TABLE 2
Summary of Soil Analytical Results
VOCs, SVOCs, and Pesticides
P008, P011-Waste Management of Carolinas, Inc.
3301 North Glenn Avenue
Winston-Salem (Forsyth Co.), NC
EI Project No.: ENMO050015.00

Sample Point Location				P8HA33-1	P8HA34-1.5	P8HA35-1.5	P8HA36-1.5	P8HA37-1.5	P8HA38-1.5	P8HA39-1.5
Sample Depth - Feet				1.0-2.0	1.5-2.5	1.5-2.5	1.5-2.5	1.5-2.5	1.5-2.5	1.5-2.5
Sample Date				9/29/2005	9/29/2005	9/29/2005	9/29/2005	9/29/2005	9/29/2005	9/29/2005
Field Screening Results-PID (ppm)				0	0	0	0	0	0	0
Laboratory Analysis	Cleanup Standards (MSCC)			Laboratory Analytical Results mg/kg						
	Residential MSCCs (mg/kg)	Industrial/Commercial MSCCs (mg/kg)	Soil-to-GW MSCCs (mg/kg)							
VOC's GCMS 8260/5035										
Acetone	1564	40880	3	NA	NA	NA	NA	NA	NA	NA
2-Butanone	NS	NS	NS	NA	NA	NA	NA	NA	NA	NA
Carbon disulfide	1564	40880	4	NA	NA	NA	NA	NA	NA	NA
2-Hexanone	625	16352	1.9	NA	NA	NA	NA	NA	NA	NA
Benzene	22	200	0.0056	NA	NA	NA	NA	NA	NA	NA
Toluene	3200	82000	7	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	1560	40000	0.24	NA	NA	NA	NA	NA	NA	NA
Xylene	32000	200000	5	NA	NA	NA	NA	NA	NA	NA
Isopropylbenzene (Cumene)	1564	40880	2	NA	NA	NA	NA	NA	NA	NA
1,2,3-Trichloropropane	NS	NS	NS	NA	NA	NA	NA	NA	NA	NA
n-Propylbenzene	NS	NS	NS	NA	NA	NA	NA	NA	NA	NA
1,3,5-Trimethylbenzene	782	20440	7	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	782	20440	8	NA	NA	NA	NA	NA	NA	NA
n-Butylbenzene	156	4088	4	NA	NA	NA	NA	NA	NA	NA
1,2-dichloropropane	NS	NS	NS	NA	NA	NA	NA	NA	NA	NA
Naphthalene	63	1635	0.58	NA	NA	NA	NA	NA	NA	NA
Tetrachloroethene	12	110	0.0074	NA	NA	NA	NA	NA	NA	NA
Methyl-tert-butyl Ether	156	4088	0.92	NA	NA	NA	NA	NA	NA	NA
Semi-VOC's GCMS 8270										
Acenaphthene	940	24000	8	NA	NA	NA	NA	NA	NA	NA
Anthracene	4600	12200	995	NA	NA	NA	NA	NA	NA	NA
Benzo[a]anthracene	0.88	8	0.34	NA	NA	NA	NA	NA	NA	NA
Benzo[a]pyrene	0.088	0.78	0.091/0.088	NA	NA	NA	NA	NA	NA	NA
Benzo[b]fluoranthene	0.88	8	1	NA	NA	NA	NA	NA	NA	NA
Benzo[g,h,i]perylene	469	12284	6720	NA	NA	NA	NA	NA	NA	NA
Benzo[k]fluoranthene	9	78	12	NA	NA	NA	NA	NA	NA	NA
Chrysene	88	780	38	NA	NA	NA	NA	NA	NA	NA
Dibenzo[a,h]anthracene	NS	NS	0.17/0.088	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	62	1635	4.7	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	620	16400	278	NA	NA	NA	NA	NA	NA	NA
Fluorene	620	16400	44	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	0.88	8	3	NA	NA	NA	NA	NA	NA	NA
Phenol	NS	NS	NS	NA	NA	NA	NA	NA	NA	NA
Naphthalene	63	1635	0.58	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	63	1635	3	NA	NA	NA	NA	NA	NA	NA
Fluorene	620	16400	44	NA	NA	NA	NA	NA	NA	NA
bis(2-Ethylhexyl)phthalate	NS	NS	NS	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	469	12264	60	NA	NA	NA	NA	NA	NA	NA
Pyrene	469	12284	288	NA	NA	NA	NA	NA	NA	NA
Pesticides EPA 8081										
All analytes	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

NA = Not analyzed/applicable
BQL = Below Quantitation Limits

TABLE 2
Summary of Soil Analytical Results
VOCs, SVOCs, and Pesticides
P008, P011-Waste Management of Carolinas, Inc.
3301 North Glenn Avenue
Winston-Salem (Forsyth Co.), NC
EI Project No.: ENMO050015.00

Sample Point Location				P11GP1-10	P11GP2-18	P11GP3-15	P11GP4-20	P11GP5-15	P11GP6-15	P11GP7-9	P11GP8-9	P11GP9-15	P11GP10-9	P11GP11-18	P11GP12-15	P11GP13-20
Sample Depth - Feet				10.0-11.0	16.0-17.0	15.0-16.0	20.0-21.0	15.0-16.0	15.0-16.0	9.0-10.0	9.0-10.0	15.0-16.0	9.0-10.0	18.0-19.0	15.0-16.0	20.0-21.0
Sample Date				8/10/2005	8/10/2005	8/10/2005	8/10/2005	8/10/2005	8/10/2005	8/10/2005	8/10/2005	8/10/2005	8/10/2005	8/10/2005	8/10/2005	8/10/2005
Field Screening Results-PID (ppm)				0	0	0	0	0	0	0	0	0	0	0	0	
Laboratory Analysis	Cleanup Standards (MSCC)			Laboratory Analytical Results/ mg/kg												
	Residential MSCCs (mg/kg)	Industrial/Commercial MSCCs (mg/kg)	Soil-to-GW MSCCs (mg/kg)													
VOC's																
GCMS 8280/5035																
Acetone	1564	40880	3	NA	NA	BQL	BQL	BQL	NA	0.471	BQL	BQL	BQL	BQL	BQL	NA
2-Butanone	NS	NS	NS	NA	NA	BQL	BQL	BQL	NA	0.129	BQL	BQL	BQL	BQL	BQL	NA
Carbon disulfide	1564	40880	4	NA	NA	BQL	BQL	BQL	NA	0.00837	BQL	BQL	BQL	BQL	BQL	NA
2-Hexanone	625	18352	1.9	NA	NA	BQL	BQL	BQL	NA	0.0136	BQL	BQL	BQL	BQL	BQL	NA
Benzene	22	200	0.0056	NA	NA	BQL	BQL	BQL	NA	BQL	BQL	BQL	BQL	BQL	BQL	NA
Toluene	3200	82000	7	NA	NA	BQL	BQL	BQL	NA	BQL	BQL	BQL	BQL	BQL	BQL	NA
Ethylbenzene	1560	40000	0.24	NA	NA	BQL	BQL	BQL	NA	BQL	BQL	BQL	BQL	BQL	BQL	NA
Xylene	32000	200000	5	NA	NA	BQL	BQL	BQL	NA	BQL	BQL	BQL	BQL	BQL	BQL	NA
Isopropylbenzene (Cumene)	1564	40880	2	NA	NA	BQL	BQL	BQL	NA	BQL	BQL	BQL	BQL	BQL	BQL	NA
1,2,3-Trichloropropane	NS	NS	NS	NA	NA	BQL	BQL	BQL	NA	BQL	BQL	BQL	BQL	BQL	BQL	NA
n-Propylbenzene	NS	NS	NS	NA	NA	BQL	BQL	BQL	NA	BQL	BQL	BQL	BQL	BQL	BQL	NA
1,3,5-Trimethylbenzene	782	20440	7	NA	NA	BQL	BQL	BQL	NA	BQL	BQL	BQL	BQL	BQL	BQL	NA
1,2,4-Trimethylbenzene	782	20440	8	NA	NA	BQL	BQL	BQL	NA	BQL	BQL	BQL	BQL	BQL	BQL	NA
n-Butylbenzene	156	4088	4	NA	NA	BQL	BQL	BQL	NA	BQL	BQL	BQL	BQL	BQL	BQL	NA
1,2-dichloropropane	NS	NS	NS	NA	NA	BQL	0.0141	BQL	NA	BQL	BQL	BQL	BQL	BQL	BQL	NA
Naphthalene	63	1835	0.58	NA	NA	BQL	BQL	BQL	NA	BQL	BQL	BQL	BQL	BQL	BQL	NA
Tetrachloroethene	12	110	0.0074	NA	NA	BQL	0.00941	BQL	NA	BQL	BQL	BQL	BQL	BQL	BQL	NA
Methyl-tert-butyl Ether	156	4088	0.92	NA	NA	BQL	BQL	BQL	NA	BQL	BQL	BQL	BQL	BQL	BQL	NA
Semi-VOC's GCMS 827d																
Acenaphthene	940	24000	8	NA	NA	BQL	BQL	BQL	NA	BQL	BQL	BQL	BQL	BQL	BQL	NA
Anthracene	4600	12200	995	NA	NA	BQL	BQL	BQL	NA	BQL	BQL	BQL	BQL	BQL	BQL	NA
Benzo[a]anthracene	0.88	8	0.34	NA	NA	BQL	BQL	BQL	NA	BQL	BQL	BQL	BQL	BQL	BQL	NA
Benzo[a]pyrene	0.088	0.78	0.091/0.088	NA	NA	BQL	BQL	BQL	NA	BQL	BQL	BQL	BQL	BQL	BQL	NA
Benzo[b]fluoranthene	0.88	8	1	NA	NA	BQL	BQL	BQL	NA	BQL	BQL	BQL	BQL	BQL	BQL	NA
Benzo[g,h,i]perylene	469	12264	6720	NA	NA	BQL	BQL	BQL	NA	BQL	BQL	BQL	BQL	BQL	BQL	NA
Benzo[k]fluoranthene	9	78	12	NA	NA	BQL	BQL	BQL	NA	BQL	BQL	BQL	BQL	BQL	BQL	NA
Chrysene	88	780	38	NA	NA	BQL	BQL	BQL	NA	BQL	BQL	BQL	BQL	BQL	BQL	NA
Dibenzo[a,h]anthracene	NS	NS	0.17/0.088	NA	NA	BQL	BQL	BQL	NA	BQL	BQL	BQL	BQL	BQL	BQL	NA
Dibenzofuran	62	1835	4.7	NA	NA	BQL	BQL	BQL	NA	BQL	BQL	BQL	BQL	BQL	BQL	NA
Fluoranthene	620	16400	276	NA	NA	BQL	BQL	BQL	NA	BQL	BQL	BQL	BQL	BQL	BQL	NA
Fluorene	620	16400	44	NA	NA	BQL	BQL	BQL	NA	BQL	BQL	BQL	BQL	BQL	BQL	NA
Indeno(1,2,3-cd)pyrene	0.88	8	3	NA	NA	BQL	BQL	BQL	NA	BQL	BQL	BQL	BQL	BQL	BQL	NA
Phenol	NS	NS	NS	NA	NA	BQL	BQL	BQL	NA	BQL	BQL	BQL	BQL	BQL	BQL	NA
Naphthalene	63	1835	0.58	NA	NA	BQL	BQL	BQL	NA	BQL	BQL	BQL	BQL	BQL	BQL	NA
2-Methylnaphthalene	63	1835	3	NA	NA	BQL	BQL	BQL	NA	BQL	BQL	BQL	BQL	BQL	BQL	NA
Fluorene	620	16400	44	NA	NA	BQL	BQL	BQL	NA	BQL	BQL	BQL	BQL	BQL	BQL	NA
bis (2-Ethylhexyl)phthalate	NS	NS	NS	NA	NA	1.04	BQL	BQL	NA	BQL	BQL	BQL	BQL	BQL	BQL	NA
Phenanthrene	469	12264	60	NA	NA	BQL	BQL	BQL	NA	BQL	BQL	BQL	BQL	BQL	BQL	NA
Pyrene	469	12264	286	NA	NA	BQL	BQL	BQL	NA	BQL	BQL	BQL	BQL	BQL	BQL	NA
Pesticides EPA 8081																
All analytes	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

NA = Not analyzed/applicable
BQL = Below Quantitation Limits

TABLE 2
Summary of Soil Analytical Results
VOCs, SVOCs, and Pesticides
P008, P011-Waste Management of Carolinas, Inc.
3301 North Glenn Avenue
Winston-Salem (Forsyth Co.), NC
EI Project No.: ENMO050015.00

Sample Point Location				P11GPI4-15	P11GPA-10	P11GPB-10	P11GPC-8	P11GPD-8	P11GPE-4	P11GPF-4	P11GPG-8	P11GPH-8	P11GPI-5	P11GPJ-8	P11GPK-8	
Sample Depth - Feet				15.0-16.0	10.0-11.0	10.0-11.0	8.0-9.0	8.0-9.0	4.0-5.0	4.0-5.0	8.0-9.0	8.0-9.0	4.5-5.0	6.0-6.5	8.0-9.0	
Sample Date				8/10/2005	9/2/2005	9/2/2005	9/2/2005	9/2/2005	9/2/2005	9/2/2005	9/8/2005	9/8/2005	9/8/2005	9/8/2005	9/8/2005	9/8/2005
Field Screening Results-PID (ppm)				0	0	0	0	0	0	0	0	0	0	0	0	
Cleanup Standards (MSCC)				Laboratory Analytical Results/ mg/kg												
Laboratory Analysis	Cleanup Standards (MSCC)			Laboratory Analytical Results/ mg/kg												
	Residential MSCCs (mg/kg)	Industrial/Commercial MSCCs (mg/kg)	Soil-to-GW MSCCs (mg/kg)													
VOC's																
GCMS 8260/5035																
Acetone	1564	40880	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2-Butanone	NS	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Carbon disulfide	1564	40880	4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2-Hexanone	625	16352	1.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Benzene	22	200	0.0056	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Toluene	3200	82000	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Ethylbenzene	1560	40000	0.24	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Xylene	32000	200000	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Isopropylbenzene (Cumene)	1564	40880	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,2,3-Trichloropropane	NS	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
n-Propylbenzene	NS	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,3,5-Trimethylbenzene	782	20440	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,2,4-Trimethylbenzene	782	20440	8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
n-Butylbenzene	156	4088	4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,2-dichloropropane	NS	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Naphthalene	63	1635	0.58	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Tetrachloroethene	12	110	0.0074	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Methyl-tert-butyl Ether	156	4088	0.92	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Semi-VOC's GCMS 8270				Laboratory Analytical Results mg/kg												
Acenaphthene	940	24000	8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Anthracene	4600	12200	995	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Benzo[a]anthracene	0.88	8	0.34	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Benzo[a]pyrene	0.088	0.78	0.091/0.088	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Benzo[b]fluoranthene	0.88	8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Benzo[g,h,i]perylene	469	12264	6720	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Benzo[k]fluoranthene	9	78	12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Chrysene	88	780	38	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Dibenzo[a,h]anthracene	NS	NS	0.17/0.088	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Dibenzofuran	62	1635	4.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Fluoranthene	620	16400	276	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Fluorene	620	16400	44	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Indeno(1,2,3-cd)pyrene	0.88	8	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Phenol	NS	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Naphthalene	63	1635	0.58	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2-Methylnaphthalene	63	1635	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Fluorene	620	16400	44	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
bis (2-Ethylhexyl)phthalate	NS	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Phenanthrene	469	12264	60	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Pyrene	469	12264	286	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Pesticides EPA 8081				Laboratory Analytical Results mg/kg												
All analytes	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

NA = Not analyzed/applicable
BQL = Below Quantitation Limits

TABLE 2
Summary of Soil Analytical Results
VOCs, SVOCs, and Pesticides
P008, P011-Waste Management of Carolinas, Inc.
3301 North Glenn Avenue
Winston-Salem (Forsyth Co.), NC
EI Project No.: ENMO050015.00

Sample Point Location				P11GPL-8	P11GPM-8	P11GPN-15	P11GPO-15	P11GPP-15	P11HAQ-8	P11HAR-15	P11HAS-15	P11HA-15	P11HAU-15	P11HAV-15
Sample Depth - Feet				8.0-9.0	8.0-9.0	15.0-16.0	15.0-16.0	15.0-16.0	8.0-9.0	15.0-16.0	15.0-16.0	15.0-16.0	15.0-16.0	15.0-16.0
Sample Date				8/8/2005	8/12/2005	8/12/2005	8/12/2005	8/12/2005	8/12/2005	8/12/2005	8/12/2005	8/12/2005	8/12/2005	8/12/2005
Field Screening Results-PID (ppm)				0	0	0	0	0	0	0	0	0	0	
Laboratory Analysis	Cleanup Standards (MSCC)			Laboratory Analytical Results/ mg/kg										
	Residential MSCCs (mg/kg)	Industrial/Commercial MSCCs (mg/kg)	Soil-to-GW MSCCs (mg/kg)											
VOC's														
GCMS 8260/5035														
Acetone	1564	40880	3	NA	BQL	NA	BQL	NA	BQL	NA	BQL	NA	NA	NA
2-Butanone	NS	NS	NS	NA	BQL	NA	BQL	NA	BQL	NA	BQL	NA	NA	NA
Carbon disulfide	1564	40880	4	NA	BQL	NA	BQL	NA	BQL	NA	BQL	NA	NA	NA
2-Hexanone	625	16352	1.9	NA	BQL	NA	BQL	NA	BQL	NA	BQL	NA	NA	NA
Benzene	22	200	0.0056	NA	BQL	NA	BQL	NA	BQL	NA	BQL	NA	NA	NA
Toluene	3200	82000	7	NA	BQL	NA	BQL	NA	BQL	NA	BQL	NA	NA	NA
Ethylbenzene	1560	40000	0.24	NA	BQL	NA	BQL	NA	BQL	NA	BQL	NA	NA	NA
Xylene	32000	200000	5	NA	BQL	NA	BQL	NA	BQL	NA	BQL	NA	NA	NA
Isopropylbenzene (Cumene)	1564	40880	2	NA	BQL	NA	BQL	NA	BQL	NA	BQL	NA	NA	NA
1,2,3-Trichloropropane	NS	NS	NS	NA	BQL	NA	BQL	NA	BQL	NA	BQL	NA	NA	NA
n-Propylbenzene	NS	NS	NS	NA	BQL	NA	BQL	NA	BQL	NA	BQL	NA	NA	NA
1,3,5-Trimethylbenzene	782	20440	7	NA	BQL	NA	BQL	NA	BQL	NA	BQL	NA	NA	NA
1,2,4-Trimethylbenzene	782	20440	8	NA	BQL	NA	BQL	NA	BQL	NA	BQL	NA	NA	NA
n-Butylbenzene	156	4088	4	NA	BQL	NA	BQL	NA	BQL	NA	BQL	NA	NA	NA
1,2-dichloropropane	NS	NS	NS	NA	BQL	NA	BQL	NA	BQL	NA	BQL	NA	NA	NA
Naphthalene	63	1835	0.58	NA	BQL	NA	BQL	NA	BQL	NA	BQL	NA	NA	NA
Tetrachloroethene	12	110	0.0074	NA	BQL	NA	BQL	NA	BQL	NA	BQL	NA	NA	NA
Methyl-tert-butyl Ether	156	4088	0.92	NA	BQL	NA	BQL	NA	BQL	NA	BQL	NA	NA	NA
Semi-VOC's GCMS 8270														
Acenaphthene	940	24000	8	NA	BQL	NA	BQL	NA	BQL	NA	BQL	NA	NA	NA
Anthracene	4600	12200	995	NA	BQL	NA	BQL	NA	BQL	NA	BQL	NA	NA	NA
Benzo[a]anthracene	0.88	8	0.34	NA	BQL	NA	BQL	NA	BQL	NA	BQL	NA	NA	NA
Benzo[a]pyrene	0.088	0.78	0.091/0.088	NA	BQL	NA	BQL	NA	BQL	NA	BQL	NA	NA	NA
Benzo[b]fluoranthene	0.88	8	1	NA	BQL	NA	BQL	NA	BQL	NA	BQL	NA	NA	NA
Benzo[g,h,i]perylene	469	12264	8720	NA	BQL	NA	BQL	NA	BQL	NA	BQL	NA	NA	NA
Benzo[k]fluoranthene	9	78	12	NA	BQL	NA	BQL	NA	BQL	NA	BQL	NA	NA	NA
Chrysene	88	780	38	NA	BQL	NA	BQL	NA	BQL	NA	BQL	NA	NA	NA
Dibenzo[a,h]anthracene	NS	NS	0.17/0.088	NA	BQL	NA	BQL	NA	BQL	NA	BQL	NA	NA	NA
Dibenzofuran	62	1835	4.7	NA	BQL	NA	BQL	NA	BQL	NA	BQL	NA	NA	NA
Fluoranthene	620	16400	278	NA	BQL	NA	BQL	NA	BQL	NA	BQL	NA	NA	NA
Fluorene	620	16400	44	NA	BQL	NA	BQL	NA	BQL	NA	BQL	NA	NA	NA
Indeno(1,2,3-cd)pyrene	0.88	8	3	NA	BQL	NA	BQL	NA	BQL	NA	BQL	NA	NA	NA
Phenol	NS	NS	NS	NA	BQL	NA	BQL	NA	BQL	NA	BQL	NA	NA	NA
Naphthalene	63	1835	0.58	NA	BQL	NA	BQL	NA	BQL	NA	BQL	NA	NA	NA
2-Methylnaphthalene	63	1835	3	NA	BQL	NA	BQL	NA	BQL	NA	BQL	NA	NA	NA
Fluorene	620	16400	44	NA	BQL	NA	BQL	NA	BQL	NA	BQL	NA	NA	NA
bis(2-Ethylhexyl)phthalate	NS	NS	NS	NA	BQL	NA	BQL	NA	BQL	NA	BQL	NA	NA	NA
Phenanthrene	469	12264	80	NA	BQL	NA	BQL	NA	BQL	NA	BQL	NA	NA	NA
Pyrene	469	12264	288	NA	BQL	NA	BQL	NA	BQL	NA	BQL	NA	NA	NA
Pesticides EPA 8081														
All analytes	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

NA = Not analyzed/applicable
BQL = Below Quantitation Limits

TABLE 3
SUMMARY OF SOIL ANALYTICAL RESULTS for TPII
P008, P011-Waste Management of Carolinas, Inc.
3301 North Glenn Avenue
Winston-Salem (Forsyth Co.), NC
EI Project No.: ENMO050015.00

Sample Identification		P11GP1-10	P11GP2-16	P11GP3-15	P11GP4-20	P11GP5-15	P11GP6-15	P11GP7-9	P11GP8-9
Sample Depth - Feet		10.0-11.0	15.5-16.0	15.0-15.5	20.0-21.0	15.0-15.5	15.0-15.5	9.0-9.5	9.0-9.5
Sample Date		8/9/2005	8/9/2005	NA	NA	NA	8/9/2005	NA	NA
Field Screening Results-PID (ppm)		0	0	0	0	0	0	0	0
Laboratory Analysis	NC DWQ Action Limits	LABORATORY ANALYTICAL RESULTS (mg/kg)							
TPH- GC/PID/FID/8021 GRO	10	BQL	BQL	NA	NA	NA	BQL	NA	NA
TPH-OC/FID/8015 DRO	40	BQL	BQL	NA	NA	NA	BQL	NA	NA

NA = Not Applicable/Analyzed
 BQL = Below Quantitation Limits
 Bold Font = above DWM Action Limits

TABLE 3
SUMMARY OF SOIL ANALYTICAL RESULTS for TPH
P008, P011-Waste Management of Carolinas, Inc.
3301 North Glenn Avenue
Winston-Salem (Forsyth Co.), NC
EI Project No.: ENMO050015.00

Sample Identification	P11GP9-15	P11GP10-9	P11GP11-1	P11GP12	P11GP13-20	P11GP14-15	P11GPA-10	P11GPB-10	P11GPC-8	P11GPD-8	P11GPE-4	P11GPF-4
Sample Depth - Feet	15.0-15.5	9.0-9.5	29.5-30.0	28.0-29.0	21.0-21.5	28.0-29.0	10.0-11.0	10.0-11.0	8.0-9.0	8.0-9.0	4.0-5.0	4.0-5.0
Sample Date	NA	NA	NA	NA	8/29/2005	8/29/2005	9/2/2005	9/2/2005	9/2/2005	9/2/2005	9/2/2005	9/2/2005
Field Screening Results-PID (ppm)	0	0	0	0	0	0	0	0	0	27	0	0
Laboratory Analysis	LABORATORY ANALYTICAL RESULTS (mg/kg)											
	NC DWQ Action Limits											
TPH-GC/FID/8021 ORO	10	NA	NA	NA	NA	BQL	BQL	BQL	BQL	BQL	BQL	BQL
TPH-GC/FID/8015 DRO	40	NA	BQL	NA	NA	BQL	BQL	BQL	BQL	BQL	116	25.9

NA = Not Applicable/Analyzed
 BQL = Below Quantitation Limits
 Bold Font = above DWM Action Limits

TABLE 3
SUMMARY OF SOIL ANALYTICAL RESULTS for TPH
P008, P011-Waste Management of Carolinas, Inc.
3301 North Glenn Avenue
Winston-Salem (Forsyth Co.), NC
EI Project No.: ENMO050015.00

Sample Identification		P11GPG-8	P11GPH-8	P11GPI-5	P11GPJ-8	P11GPK-8	P11GPL-8	P11GM-15	P11GPN-15	P11GPO-15	P11GPP-15	P11HAQ-1	P11HAR-1.5	
Sample Depth - Feet		8.0-9.0	8.0-9.0	5.0-8.0	6.0-7.0	8.0-9.0	8.0-9.0	15.0-16.0	15.0-16.0	15.0-16.0	15.0-16.0	1.0-2.0	1.5-2.5	
Sample Date		9/8/2005	9/8/2005	9/8/2005	9/8/2005	9/8/2005	9/8/2005	9/12/2005	9/12/2005	9/12/2005	9/12/2005	9/29/2005	9/29/2005	
Field Screening Results-PID (ppm)		0	0	0	0	0	0	0	0	0	0	0	0	
Laboratory Analysis	NC DWQ Action Limits	LABORATORY ANALYTICAL RESULTS (mg/kg)												
TPH-GC/FID/8021 GRO	10	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	NA	NA
TPH-GC/FID/8013 DRO	40	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	NA	NA

NA = Not Applicable/Analyzed
BQL = Below Quantitation Limits
Bold Font = above DWM Action Limits

TABLE 3
SUMMARY OF SOIL ANALYTICAL RESULTS for TPII
P008, P011-Waste Management of Carolinas, Inc.
3301 North Glenn Avenue
Winston-Salem (Forsyth Co.), NC
EI Project No.: ENMO050015.00

Sample Identification		P11HAS-1.5	P11HAT-4	P11HAU-4	P11HAV-3.5	P8GP1-20	P8GP2-13	P8GP3-8	P8GP4-20	P8GP5-20	P8GP6-20	P8GP7-20	P8GP8-20
Sample Depth - Feet		1.5-2.5	4.0-5.0	4.0-5.0	3.5-4.5	10.0-11.0	15.5-18.0	15.0-15.5	20.0-21.0	15.0-15.5	15.0-15.5	9.0-9.5	9.0-9.5
Sample Date		8/25/2005	8/29/2005	8/29/2005	8/29/2005	8/9/2005	8/9/2005	8/9/2005	NA	NA	8/9/2005	NA	NA
Field Screening Results-PID (ppm)		0	0	0	0	0	0	0	0	0	0	0	0
Laboratory Analysis	NC DWQ Action Limits	LABORATORY ANALYTICAL RESULTS (mg/kg)											
TPH- GC/PID/FID/8021 GRO	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TPH-GC/FID/8015 DRO	40	NA	BQL	BQL	BQL	NA	NA	NA	NA	NA	NA	NA	NA

NA = Not Applicable/Analyzed
BQL = Below Quantitation Limits
Bold Font = above DWM Action Limits

TABLE 3
SUMMARY OF SOIL ANALYTICAL RESULTS for TPH
P008, P011-Waste Management of Carolinas, Inc.
3301 North Glenn Avenue
Winston-Salem (Forsyth Co.), NC
EI Project No.: ENMO050015.00

Sample Identification		P8GP9-20	P8GP10-15	P8GP11-8	P8GP12-5	P8GP13-8	P8GP14-18	P8GP15-18	P8GP16-20	P8GP17-14	P8GP18-14	P8GP19-15	P8GP20-13
Sample Depth - Feet		15.0-15.5	9.0-9.5	29.5-30.0	28.0-29.0	21.0-21.5	28.0-29.0	10.0-11.0	10.0-11.0	8.0-9.0	8.0-9.0	4.0-5.0	4.0-5.0
Sample Date		NA	NA	NA	NA	8/29/2005	8/29/2005	9/2/2005	9/2/2005	9/2/2005	9/2/2005	9/2/2005	9/2/2005
Field Screening Results-PID (ppm)		0	0	0	0	0	0	0	0	0	27	0	0
Laboratory Analysis	NC DWQ Action Limits	LABORATORY ANALYTICAL RESULTS (mg/kg)											
TPH-OC/FID/8021 GRO	10	NA	NA	NA	NA	BQL							
TPH-OC/FID/8015 DRO	40	NA	NA	NA	NA	BQL							

NA = Not Applicable/Analyzed
 BQL = Below Quantitation Limits
 Bold Font = above DWM Action Limits

TABLE 3
SUMMARY OF SOIL ANALYTICAL RESULTS for TPII
P008, P011-Waste Management of Carolinas, Inc.
3301 North Glenn Avenue
Winston-Salem (Forsyth Co.), NC
EI Project No.: ENMO050015.00

Sample Identification		P8GP21	P8GP22-8	P8GP23-12	P8GP24-12	P8GP25-12	P8GP26-11	P8GP27-11	P8GP28-15	P8GP29-15	P8GP30-15
Sample Depth - Feet		8.0-9.0	8.0-9.0	5.0-6.0	6.0-7.0	8.0-9.0	8.0-9.0	15.0-16.0	15.0-16.0	15.0-16.0	15.0-16.0
Sample Date		9/8/2005	9/8/2005	9/8/2005	9/8/2005	9/8/2005	9/8/2005	9/12/2005	9/12/2005	9/12/2005	9/12/2005
Field Screening Results-PID (ppm)		0	0	0	0	0	0	0	0	0	0
Laboratory Analysis	NC DWQ Action Limits	LABORATORY ANALYTICAL RESULTS (mg/kg)									
TPH- GC/FID/8021 GRO	10	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
TPH-OC/FID/8015 DRO	40	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

NA = Not Applicable/Analyzed
 BQL = Below Quantitation Limits
 Bold Font = above DWM Action Limits

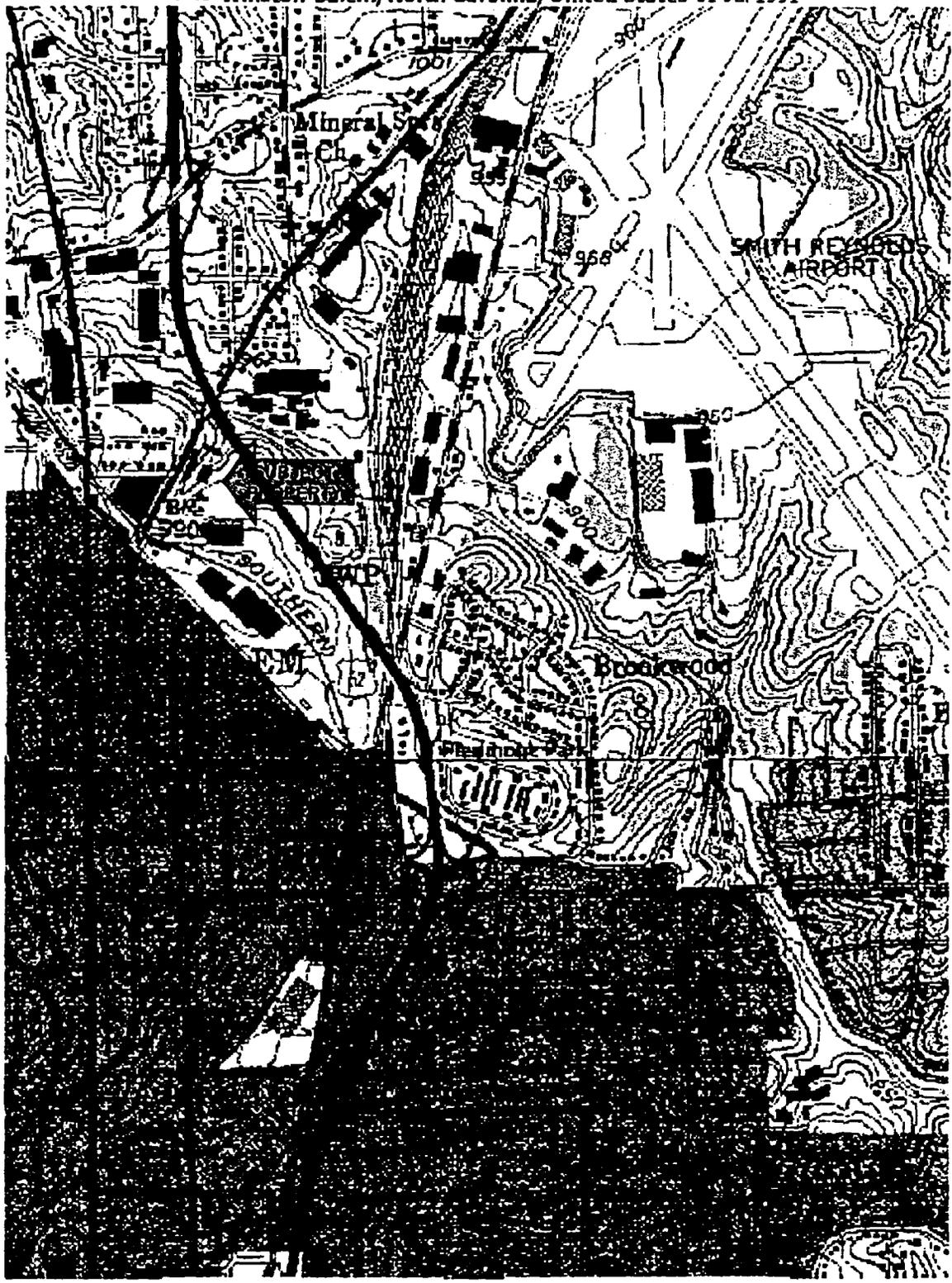
TABLE 3
SUMMARY OF SOIL ANALYTICAL RESULTS for TPH
P008, P011-Waste Management of Carolinas, Inc.
3301 North Glenn Avenue
Winston-Salem (Forsyth Co.), NC
EI Project No.: ENMO050015.00

Sample Identification		P8GP31-15	P8GP32-15	P8HA33-1	P8HA34-1.5	P8HA35-1.5	P8HA36-1.5	P8HA37-1.5	P8HA38-1.5	P8HA39-1.5
Sample Depth - Feet		15.0-16.0	15.0-16.0	1.0-2.0	1.5-2.5	1.5-2.5	1.5-2.5	1.5-2.5	1.5-2.5	1.5-2.5
Sample Date		9/8/2005	9/8/2005	9/29/2005	9/29/2005	9/29/2005	9/29/2005	9/29/2005	9/29/2005	9/29/2005
Field Screening Results-PID (ppm)		0	0	NA	NA	NA	NA	NA	NA	NA
Laboratory Analyte	NC DWQ Action Limits	LABORATORY ANALYTICAL RESULTS (mg/kg)								
TPH-GC/FID/8021 GRO	10	BQL	BQL	NA	NA	NA	NA	NA	NA	NA
TPH-GC/FID/8015 DRO	40	BQL	BQL	NA	NA	NA	NA	NA	NA	NA

NA = Not Applicable/Analyzed
 BQL = Below Quantitation Limits
 Bold Font = above DWM Action Limits

FIGURES

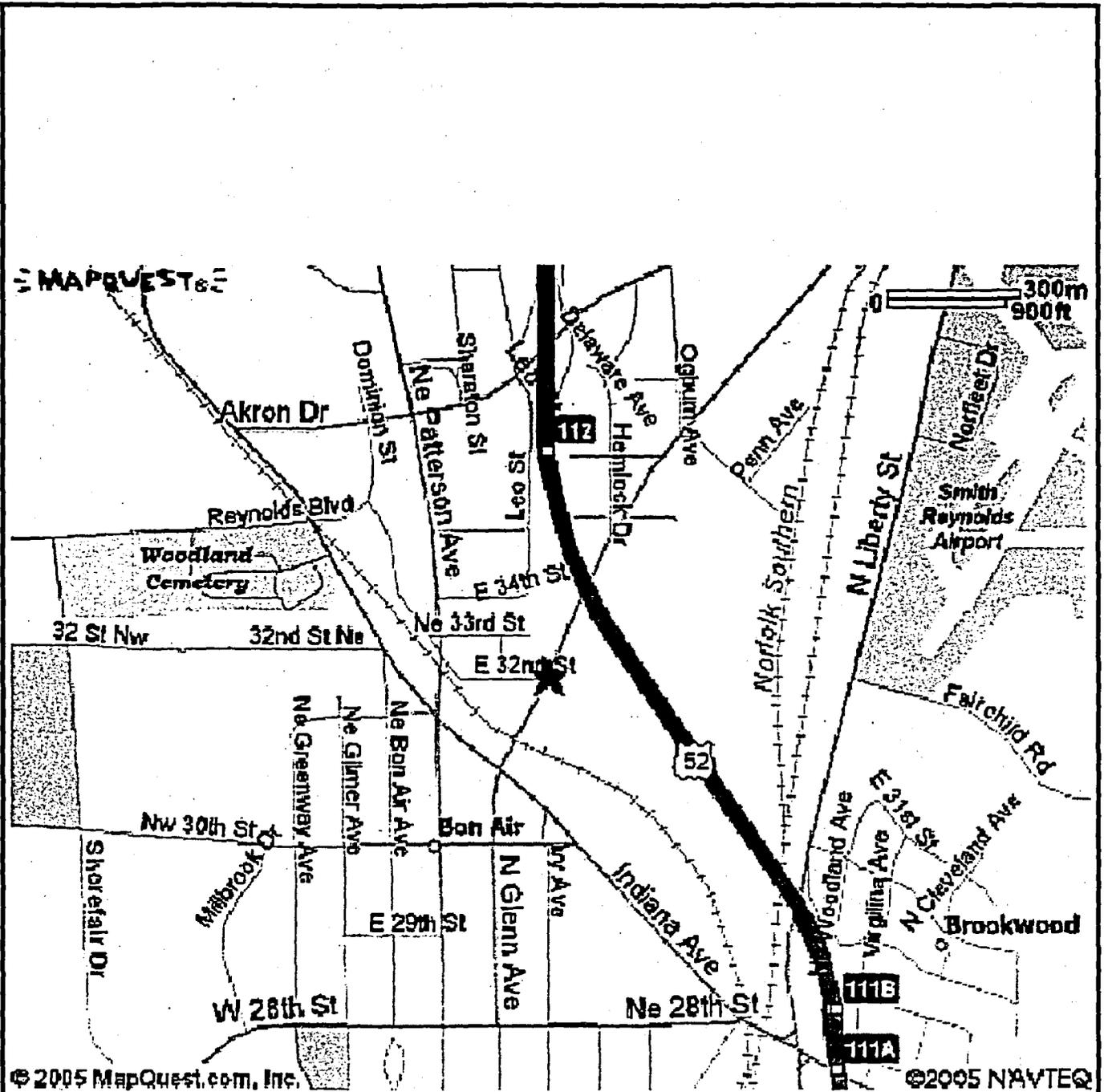
USGS Winston-Salem, North Carolina, United States 01 Jul 1991



0 — .5Km 0 — .25MI



FIGURE NUMBER: 1	SITE LOCATION MAP Parcel # 008 & #11 – Waste Management of Carolinas, Inc. Property 3301 North Glenn Avenue Winston-Salem, North Carolina	 ENVIRONMENTAL INVESTIGATIONS, INC
QUAD: 1980 Winston-Salem		
PROJECT NUMBER: ENMO050015.00		
SCALE: As Shown		



© 2005 MapQuest.com, Inc.

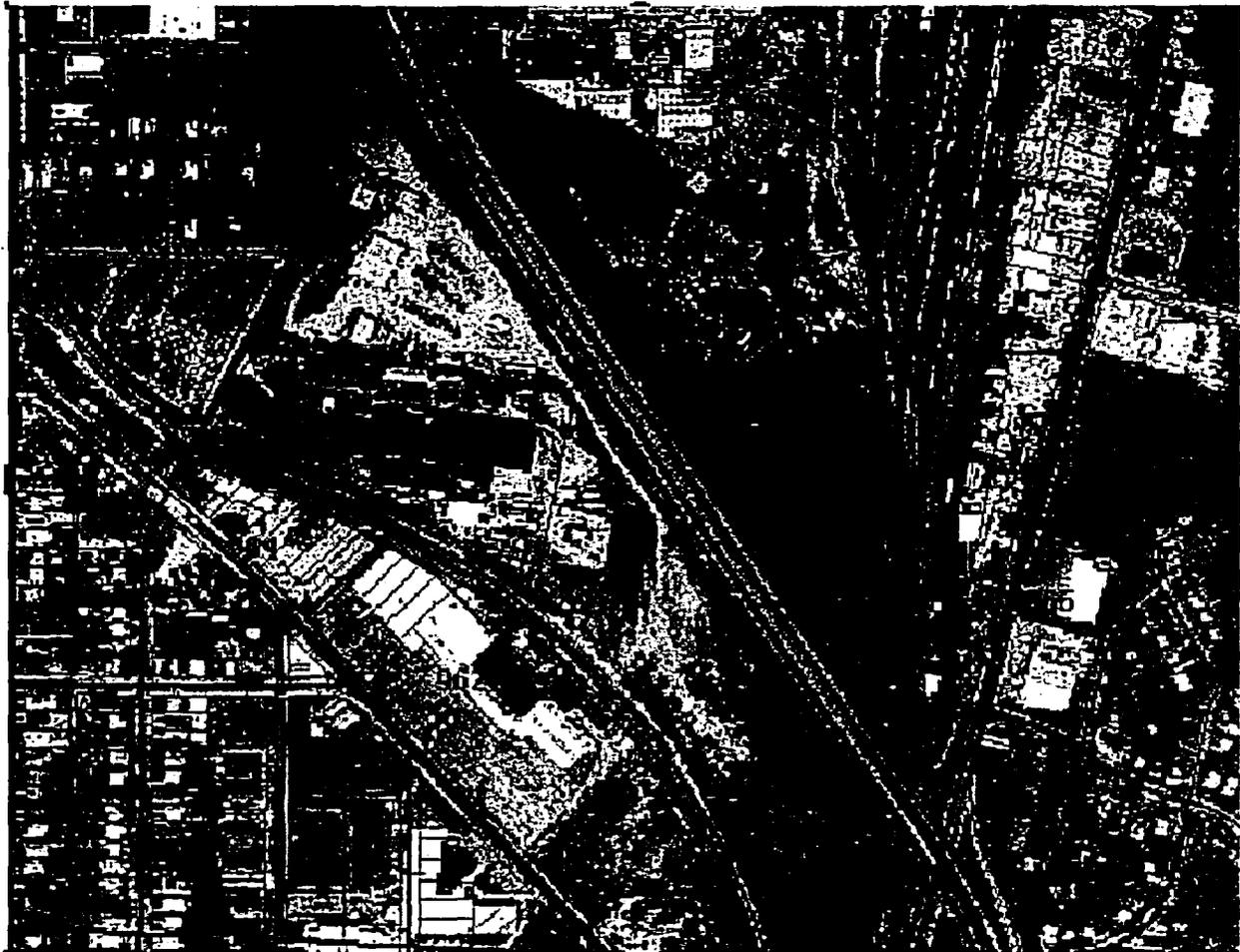
© 2005 NAVTEQ



FIGURE NUMBER:	1A
QUAD:	1980 Winston-Salem
PROJECT NUMBER:	ENMO050015.00
SCALE:	As Shown

SITE LOCATION MAP
 Parcel # 008 & #11 – Waste
 Management of Carolinas, Inc.
 Property
 3301 North Glenn Avenue
 Winston-Salem, North Carolina

ENVIRONMENTAL INVESTIGATIONS, INC



0 Feet 621

SCALE 1 : 7461



FIGURE NUMBER:

2

QUAD:

1991 Winston-Salem

PROJECT NUMBER: ENMO050015.00

SCALE:

AS SHOWN

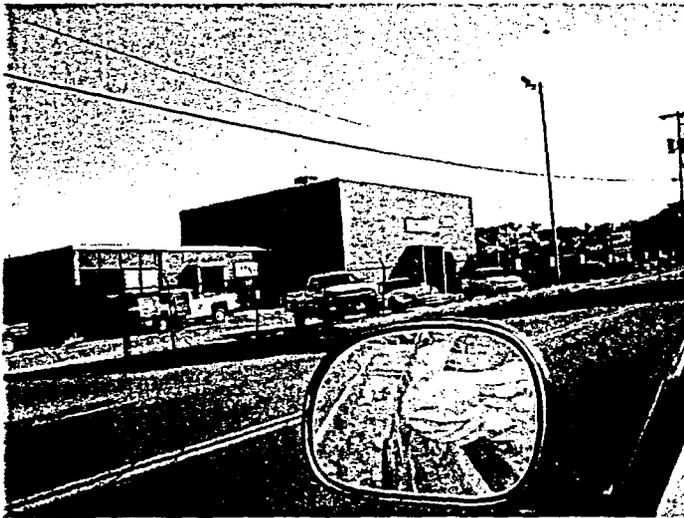
AERIAL PHOTOGRAPH
Parcel #008 – Waste
Management of Carolinas, Inc.
Property
3301 North Glenn Avenue
Winston-Salem, North Carolina



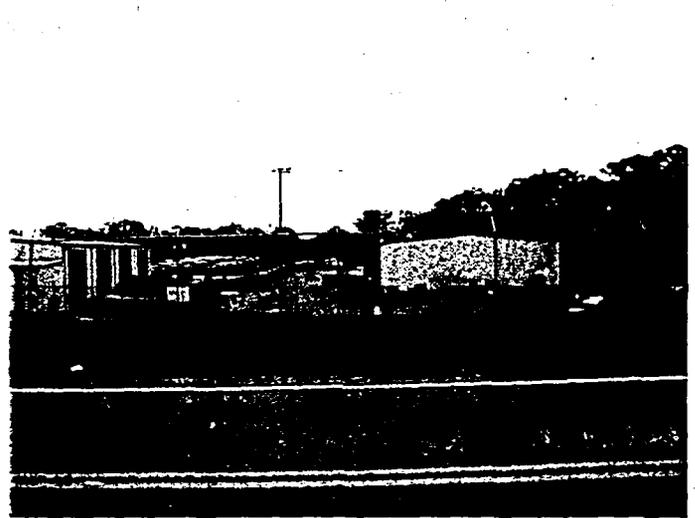
EI

ENVIRONMENTAL INVESTIGATIONS, INC

APPENDIX A
SITE PHOTOGRAPHS



Photograph 1: View of subject property.



Photograph 2: View of additional structures on subject property.



Photograph 3: View of subject parcel & DOT ROW abutting US 52 (in foreground).



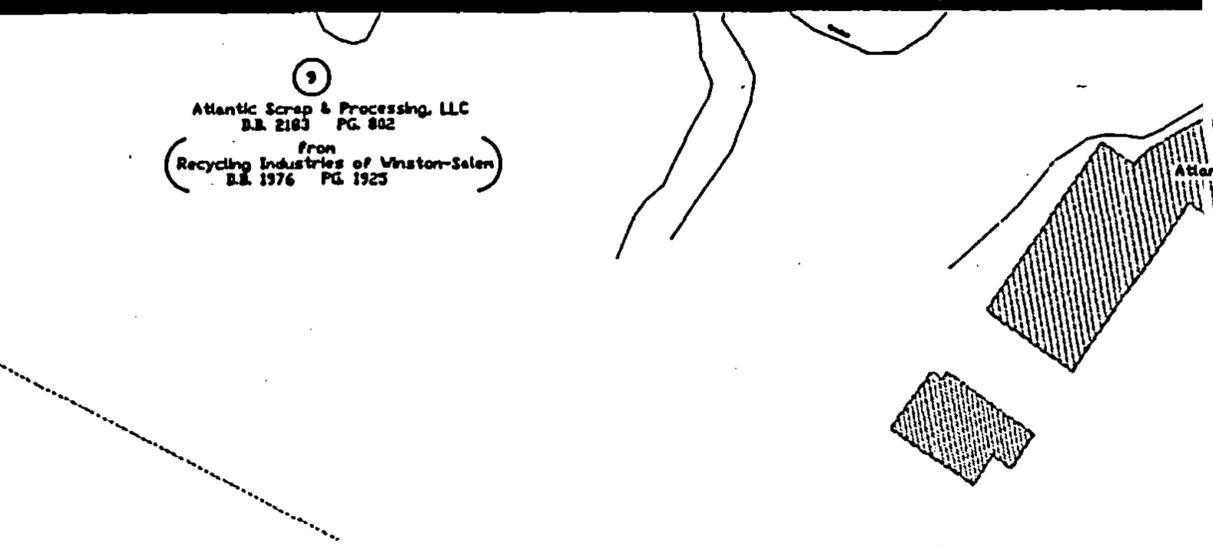
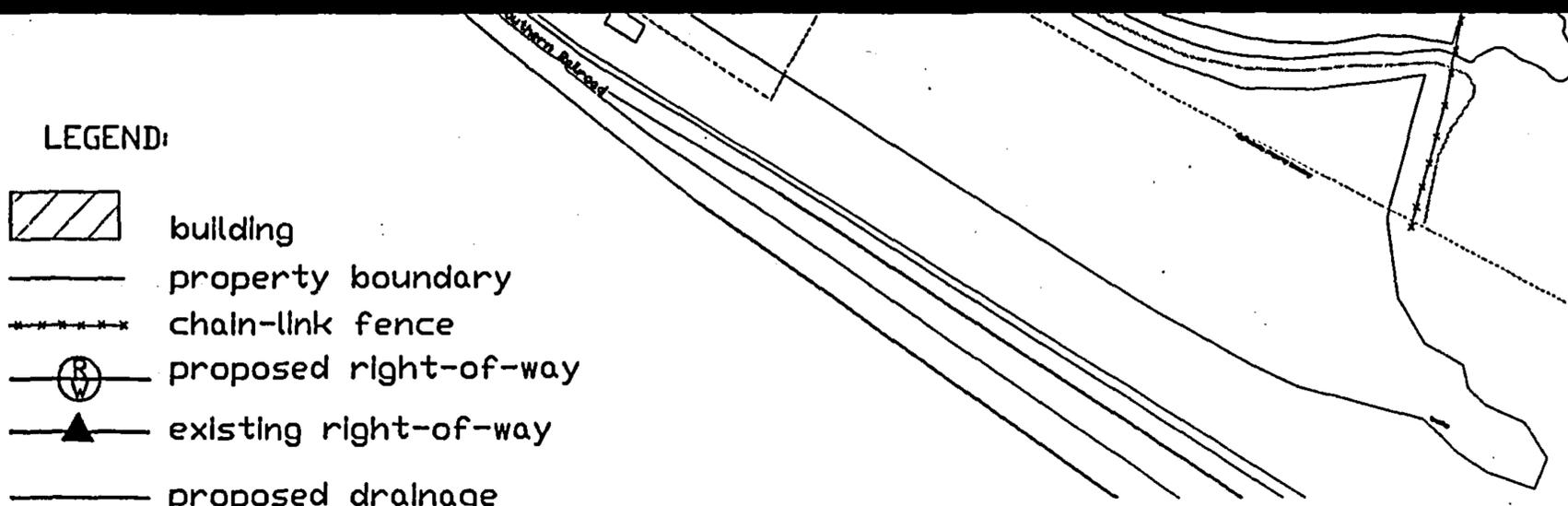
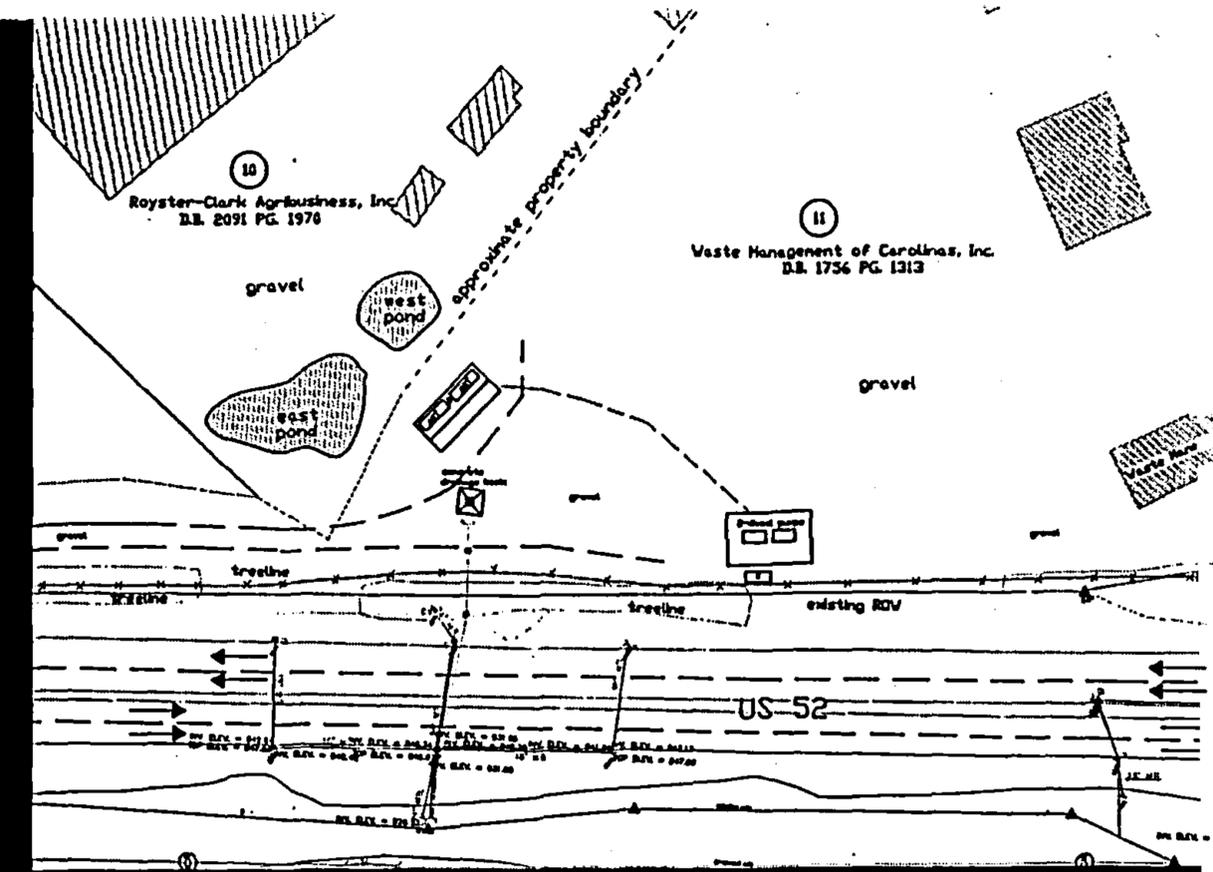
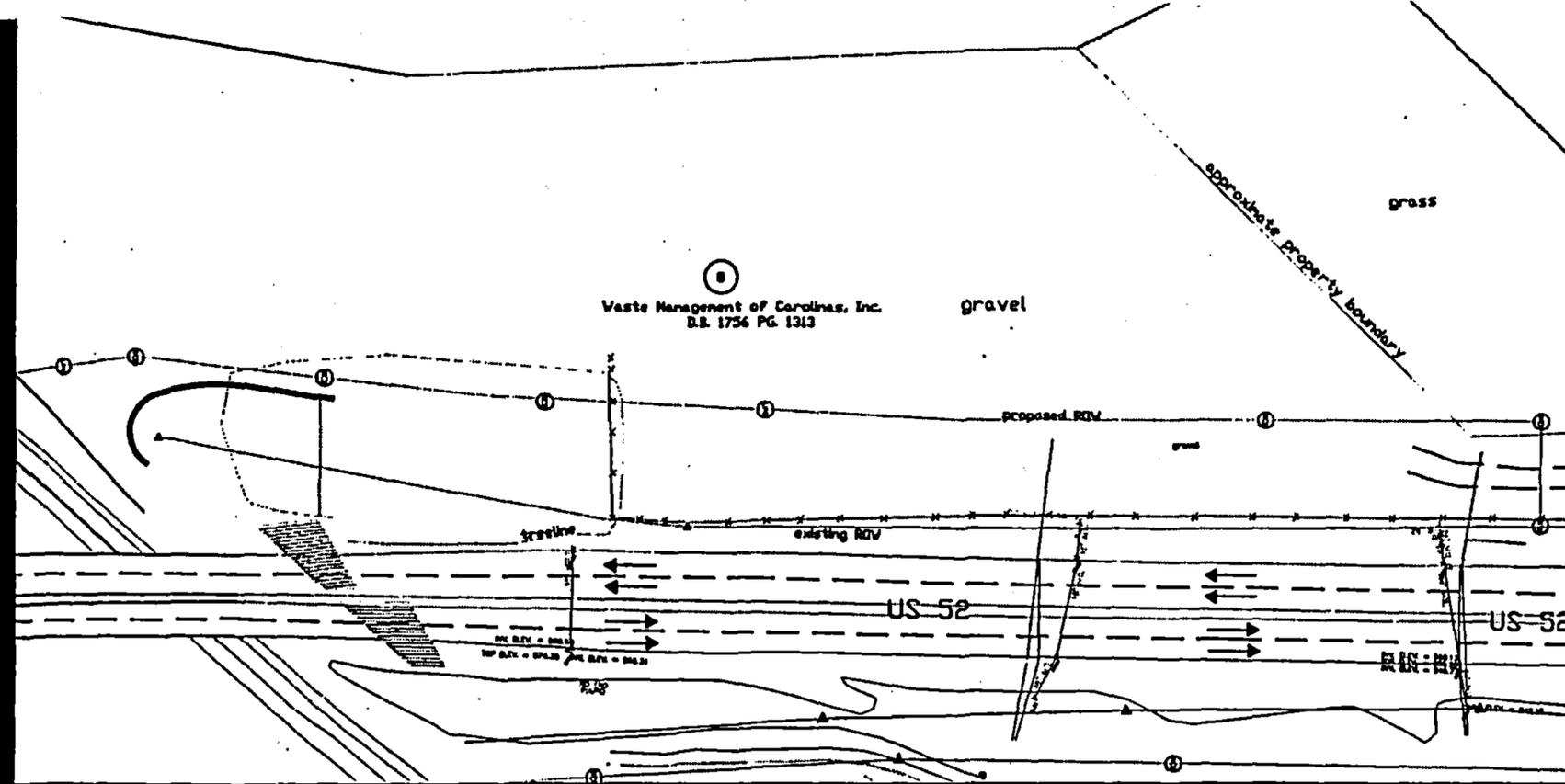
Photograph 4: View of diesel pump island.



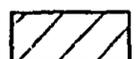
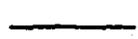
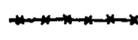
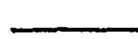
Photograph 5: View of Parcel 008-storage area for dumpsters and roll-off boxes.



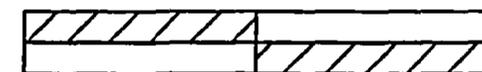
Photograph 6: View of access path cleared for assessment activities.



LEGEND:

-  building
-  property boundary
-  chain-link fence
-  proposed right-of-way
-  existing right-of-way
-  proposed drainage
-  soil test boring
-  monitoring well

0' 180' 360'

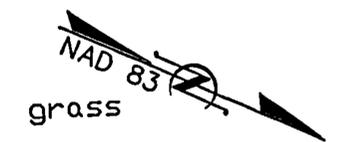


approximate scale in feet

FIGURE NO.:	3
DRN BY:	DOT/DRL
CHK BY:	DCB
DATE:	8/2005
REVISED:	N/A
SCALE:	1" = 180'

SITE MAP

Parcel 8 & Parcel 11
 Waste Management of Carolinas, Inc.
 3301, 3303 North Glenn Avenue
 Winston-Salem, North Carolina

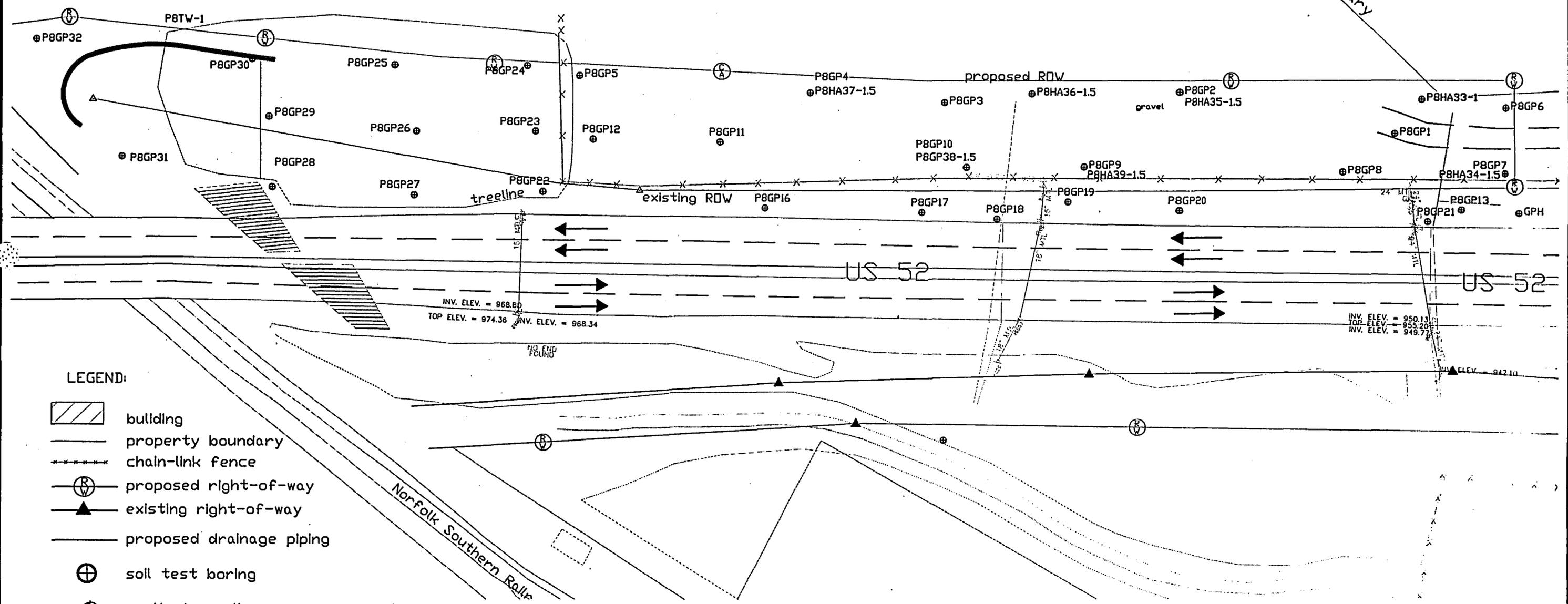


8

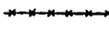
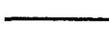
Waste Management of Carolinas, Inc.
D.B. 1756 PG. 1313

gravel

approximate property boundary



LEGEND:

-  building
-  property boundary
-  chain-link fence
-  proposed right-of-way
-  existing right-of-way
-  proposed drainage piping
-  soil test boring
-  monitoring well

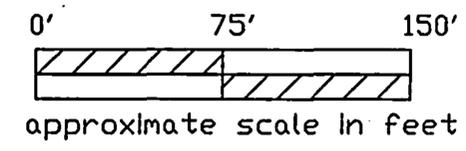


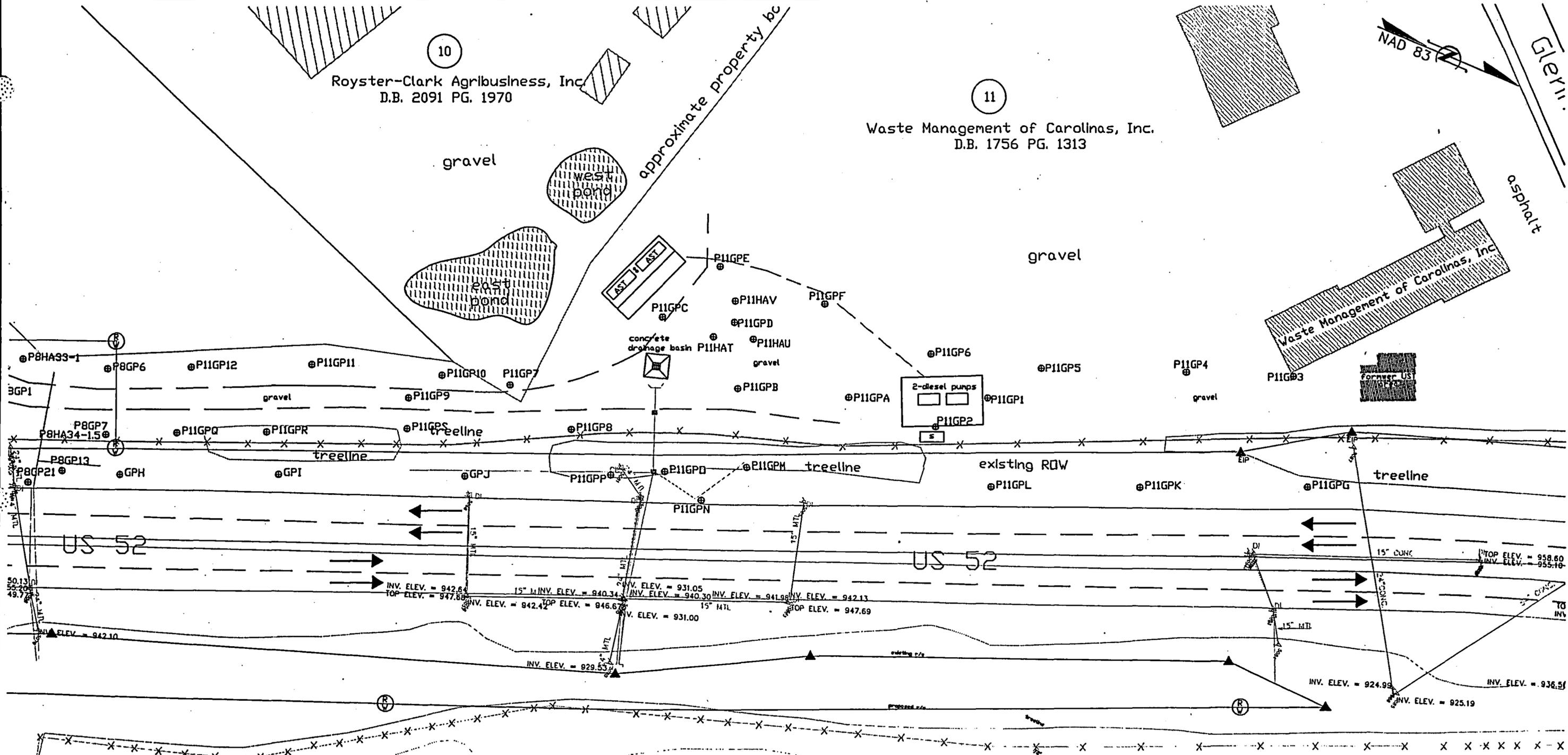
FIGURE NO.:	3A
DRN BY:	DOT/DRL
CHK BY:	DCB
DATE:	8/2005
REVISED:	N/A
SCALE:	1" = 75'

SITE MAP
(Inset A)
Parcel 8 & Parcel 11
Waste Management of Carolinas, Inc.
3301, 3303 North Glenn Avenue
Winston-Salem, North Carolina



10
Royster-Clark Agribusiness, Inc.
D.B. 2091 PG. 1970

11
Waste Management of Carolinas, Inc.
D.B. 1756 PG. 1313



- LEGEND**
- building
 - property boundary
 - chain-link fence
 - proposed right-of-way
 - existing right-of-way
 - proposed drainage piping
 - soil test boring
 - monitoring well

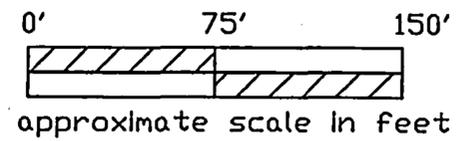


FIGURE NO.:	3B
DRN BY:	DOT/DRL
CHK BY:	DCB
DATE:	8/2005
REVISED:	N/A
SCALE:	1" = 75'

SITE MAP
(Inset B)
Parcel 8 & Parcel 11
Waste Management of Carolinas, Inc.
3301, 3303 North Glenn Avenue
Winston-Salem, North Carolina



8

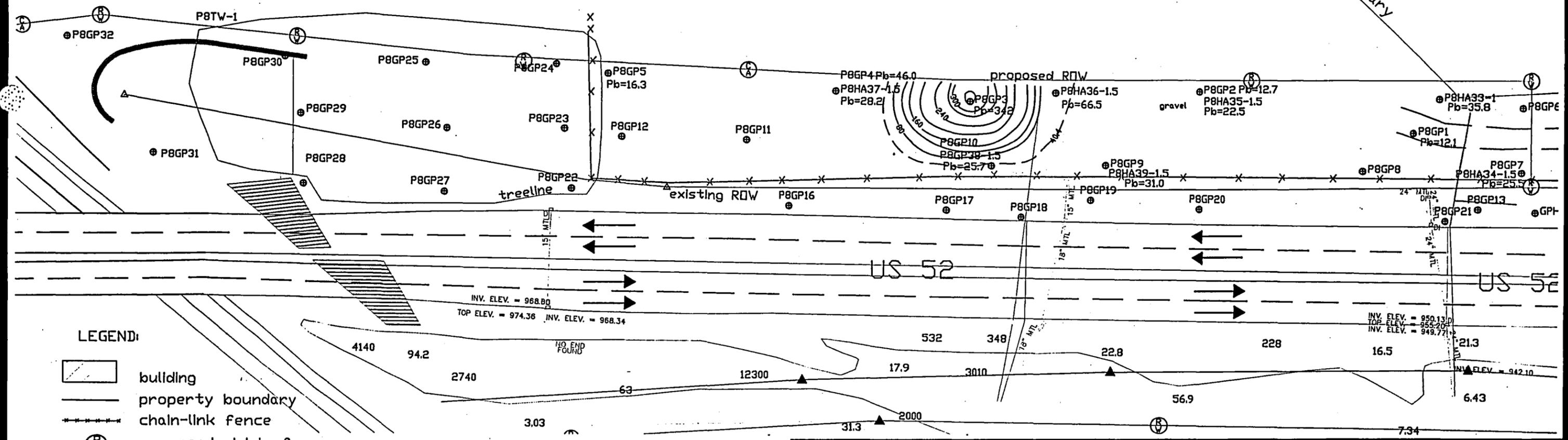
Waste Management of Carolinas, Inc.
D.B. 1756 PG. 1313

gravel

gravel

grass

approximate property boundary



LEGEND:

- building
- property boundary
- chain-link fence
- proposed right-of-way
- existing right-of-way
- proposed drainage piping
- soil test boring
- monitoring well

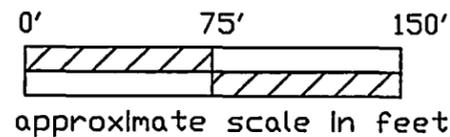
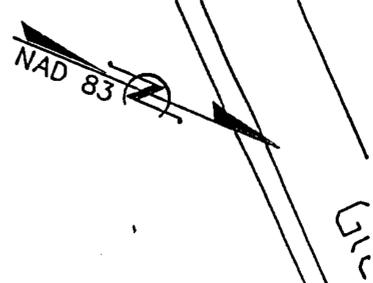


FIGURE NO.:	4A
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CHK BY:	DCB
DATE:	9/2005
REVISED:	N/A
SCALE:	1" = 75'

DISTRIBUTION OF LEAD-IMPACTED SOILS (PARCEL 008)

Waste Management of Carolinas, Inc.
3301, 3303 North Glenn Avenue
Winston-Salem, North Carolina



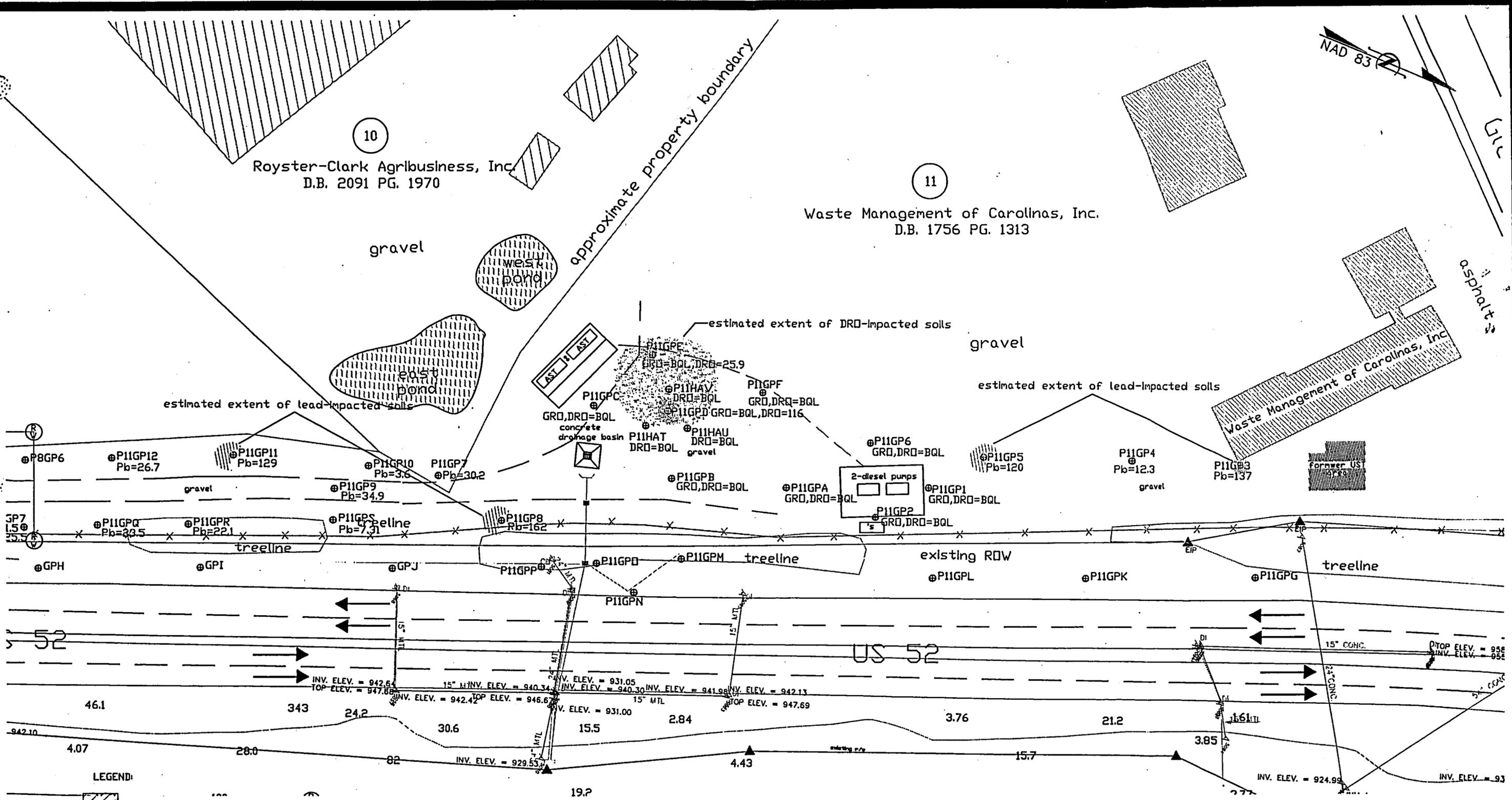


10

Royster-Clark Agribusiness, Inc.
D.B. 2091 PG. 1970

11

Waste Management of Carolinas, Inc.
D.B. 1756 PG. 1313



LEGEND:

- building
- property boundary
- chain-link fence
- proposed right-of-way
- existing right-of-way
- proposed drainage piping
- soil test boring
- monitoring well

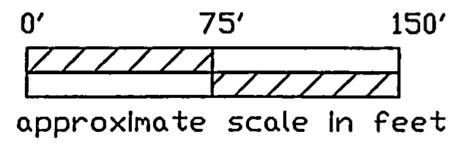


FIGURE NO.:	4B
DRN BY:	DOT/DRL
CHK BY:	DCB
DATE:	8/2005
REVISED:	N/A
SCALE:	1' = 75'

DISTRIBUTION OF
IMPACTED SOILS (PARCEL 011)

Waste Management of Carolinas, Inc.
3301, 3303 North Glenn Avenue
Winston-Salem, North Carolina



APPENDIX B
SOIL BORING LOGS

APPENDIX C

LABORATORY ANALYTICAL REPORT - SOIL

Organic Compounds Detected in Groundwater

Brenner Iron & Waste Management

May 15, 2002

Well ID	MW-1	MW-2	MW-3	MW-4	MW-5	NCAC 2L GW Standard
Benzene	22	BQL	BQL	52	BQL	1
n-Butylbenzene	0.9	BQL	BQL	2	BQL	70
DIPE	0.9	BQL	BQL	7	BQL	70
Ethylbenzene	2	BQL	BQL	48	BQL	29
Isopropylbenzene	0.6	BQL	BQL	2	BQL	70
MTBE	BQL	BQL	BQL	18	BQL	200
Naphthalene	0.8	BQL	BQL	BQL	BQL	21
n-Propyl benzene	1	BQL	BQL	4	BQL	70
Tetrachloroethene	2	BQL	0.5	BQL	11	0.7
Toluene	0.6	BQL	BQL	48	BQL	1000
1,2,4-Trimethylbenzene	4	BQL	BQL	43	BQL	350
1,3,5-Trimethylbenzene	2	BQL	BQL	17	BQL	350
Total Xylenes	6	BQL	BQL	193	BQL	530 (total)
Butylbenzylphthalate	700	2700	1000	NA	1000	100
C5 - C8 Aliphatics	110	BQL	BQL	200	BQL	420
C9 - C18 Aliphatics	BQL	BQL	BQL	420	BQL	4200
C19 - C36 Aliphatics	BQL	BQL	200	NA	BQL	42000
C9 - C22 Aromatics	BQL	BQL	130	NA	BQL	210

All concentrations expressed in micrograms per liter (ug/L)

BQL - Below method quantitation limit

Shaded value denotes concentration exceeding groundwater standard

NA - Parameter not analyzed

Mr. Rob Holland
Earth Tech
701 Corporate Dr. Suite 475
Raleigh NC 27607

Report Number: G204-478

Client Project: Carolina Ore

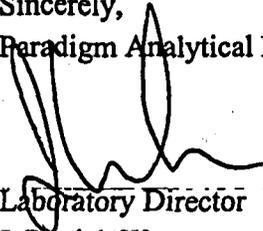
Dear Mr. Holland:

Enclosed are the results of the analytical services performed under the referenced project. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of five years in the event they are required for future reference. Any samples submitted to our laboratory will be retained for a maximum of thirty (30) days from the date of this report unless other arrangements are requested.

If there are any questions about the report or the services performed during this project, please call Paradigm at (910) 350-1903. We will be happy to answer any questions or concerns which you may have.

Thank you for using Paradigm Analytical Labs for your analytical services. We look forward to working with you again on any additional analytical needs which you may have.

Sincerely,
Paradigm Analytical Laboratories, Inc.


Laboratory Director
J. Patrick Weaver

8/26/05
Date

Results for Metals

Client Sample ID: SS-1
 Client Project ID: Carolina Ore
 Lab Sample ID: G204-478-1
 Lab Project ID: G204-478
 Batch ID: 3518 3502
 Report Basis: Dry

Analyzed By: PSW
 Date Collected: 8/17/2005 13:00
 Date Received: 8/20/2005
 Matrix: SOIL
 Solids 69.59

Metals	Result	RL	DF	Units	Method	Date Analyzed
Arsenic	877	1.20	1	MG/KG	6010B	8/25/2005
Barium	1430	120	10	MG/KG	6010B	8/25/2005
Cadmium	2.65	1.20	1	MG/KG	6010B	8/24/2005
Chromium	7.80	1.20	1	MG/KG	6010B	8/24/2005
Lead	6580	12.0	10	MG/KG	6010B	8/25/2005
Mercury	5.00	0.285	10	MG/KG	7471	8/25/2005
Selenium	7.94	2.39	1	MG/KG	6010B	8/24/2005
Silver	30.6	1.20	1	MG/KG	6010B	8/24/2005

Comments

BQL = Below Quantitation Limits
 DF = Dilution Factor
 J = Between MDL and RL
 B= Amount in Prep Blank > RL

Reviewed By: 
 MET_LIMS_3.3

Results for Metals

Client Sample ID: SS-1
 Client Project ID: Carolina Ore
 Lab Sample ID: G204-478-2
 Lab Project ID: G204-478
 Batch ID: 3529 3528

Analyzed By: PSW
 Date Collected: 8/17/2005 13:00
 Date Received: 8/20/2005
 Matrix: LEACHATE

Metals TCLP	Result	RL	DF	Units	Method	Date Analyzed
Arsenic	0.149	0.100	1	MG/L	6010B	8/26/2005
Barium	1.55	1.00	1	MG/L	6010B	8/26/2005
Cadmium	BQL	0.100	1	MG/L	6010B	8/26/2005
Chromium	BQL	0.100	1	MG/L	6010B	8/26/2005
Lead	1.21	0.100	1	MG/L	6010B	8/26/2005
Mercury	0.000916	0.000500	1	MG/L	7470	8/26/2005
Selenium	BQL	0.200	1	MG/L	6010B	8/26/2005
Silver	BQL	0.100	1	MG/L	6010B	8/26/2005

Comments

BQL = Below Quantitation Limits

DF = Dilution Factor

J = Between MDL and RL

B= Amount in Prep Blank > RL

Reviewed By: 
 MET_LIMS_3.3

**List of Reporting Abbreviations
and Data Qualifiers**

B = Compound also detected in batch blank

BQL = Below Quantitation Limit

DF = Dilution Factor

Dup = Duplicate

E = Estimated concentration, exceeds calibration range.

J = Estimated concentration, below calibration range and above MDL

LCS(D) = Laboratory Control Spike (Duplicate)

MDL = Method Detection Limit

MS(D) = Matrix Spike (Duplicate)

PQL = Practical Quantitation Limit

RL = Reporting Limit

RPD = Relative Percent Difference

mg/kg = milligram per kilogram, ppm, parts per million

ug/kg = micrograms per kilogram, ppb, parts per billion

mg/L = milligram per liter, ppm, parts per million

ug/L = micrograms per liter, ppb, parts per billion

% Rec = Percent Recovery

% solids = Percent Solids

Special Notes:

- 1) Metals and mercury samples are digested with a hot block, see the standard operating procedure document for details.**
- 2) Uncertainty for all reported data is less than or equal to 30 percent.**

Memorandum

Date: August 11, 2005

To: Linda Culpepper, DWM Deputy Director

From: Jim Bateson
Site Evaluation and Removal branch

Subject: CERCLIS and IHSB sites near Bowen Branch, Winston-Salem.

I've attached copies of Superfund Section file documents pertaining to the VC Chemical site in Winston Salem. These include:

1. *The Site Evaluation and Removal Branch's August 1999 Pre-CERCLIS Site Screening letter to Region 4 EPA.* The Branch was tasked by EPA to screen all VC Chemical sites in North Carolina during the period that EPA Region 4 was negotiating a n agreement with Exxon for their voluntary cleanup of VC Chemical sites throughout Region 4. The screening letter recommends that the site not be added to CERCLIS, due to a lack of targets sufficient to score the site using the Hazard Ranking System (HRS) to qualify the site for further work under CERCLA.
2. A January 2001 "Site Universe Report" listing the sites covered under Exxon's AOC with EPA Region 4. The Winston Salem site is one of 40 VC Chemical sites in the agreement and one of 13 in North Carolina.
3. *An October 2004 memo to file documents additional information about the site.* Better information about the layout of the site became available through a comprehensive review of Sanborn Fire Insurance maps performed as part of our CERCLA Site Discovery Initiative. Branch staff visited the site on October 4, 2004 in search of building foundations, and for the visual clues in soil typically present at the older lead-acid phosphate fertilizer plants. Staff determined that most of the likely affected areas were now covered by Highway 52, and that the area was remote form residential areas, and was also not likely to attract recreational use.

Information more recently compiled by DOT and DWQ (Colin Day) suggests that persistently denuded areas located to the east of Highway 52 may have been the location of ore roasting operations by Carolina Ore Company. Even if soil and groundwater at this location contain hazardous concentrations of metals, the lack of targets in the area would still result in an HRS score insufficient to qualify the site for further work under CERCLA.

On October 4, 2004, Branch staff also visited the Royster Fertilizer site with Colin Day of DWQ. This was approximately one week after Colin Day had requested that the Superfund Section reassess the site for possible CERCLA action. The Branch obtained EPA Region 4 permission to add a Site Reassessment Report (SRR) of the Royster site (listed as "IMC" on CERCLIS) to its workload. The Branch conducted its sampling event for the SRR on December 14, 2004.

The Final report for the SRR will be completed by the end of August 2005. The report will conclude that no further work under CERCLA is warranted, due to the lack of nearby groundwater targets, and the lack of measurable impacts to targets located downstream in the surface water pathway.



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Raleigh Field Office
Post Office Box 33726
Raleigh, North Carolina 27636-3726

July 27, 2004

Mr. Ken Mallery, Remedial Project Manager
North Superfund Remedial Branch
Waste Management Division
U.S. Environmental Protection Agency
Atlanta Federal Center
61 Forsyth Street
Atlanta, Georgia 30303-8960

Dear Mr. Mallery:

The U.S. Fish and Wildlife Service (Service) received the *Final Engineering Evaluations / Cost Analyses (EE/CA) Report Revision 2 (July 2004)* for the Northeast Chemical Company Site in Wilmington, North Carolina and offer the following comments and concerns for your consideration. Comments of the Service are provided pursuant to the Fish and Wildlife Coordination Act, as amended (16 U.S.C. 661-667e). These comments are intended as technical assistance for the U.S. Environmental Protection Agency's (USEPA) assessments and planning conducted pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended (42 U.S.C. 9601 et seq.); they do not represent any position that the U.S. Department of the Interior may adopt concerning possible injury to natural resources under their trusteeship.

The Service understands that the EE/CA approach is intended to promote accelerated site cleanup and reduced chemical risk to human health and the environment, and we fully support streamlined assessments when all potential exposure routes are considered for both human and ecological receptors. Please recall that the Service has raised concerns regarding the completeness of the ecological risk assessment for this site on several occasions (letter to USEPA dated September 4, 2003, email correspondence dated February 3, 2004 and comments submitted via facsimile on March 19, 2004). These comments are attached and should be referenced for a detailed discussion of Service concerns related to the following important issues: 1) the need to address the exposure of terrestrial organisms to surface soil as a primary exposure pathway, 2) the importance of the surface water pathway as a primary exposure route for terrestrial and aquatic receptors, 3) the inappropriateness of relying solely on the mean effects range median (ERM) quotient approach to identify areas where sediment contamination risks are to be addressed (and within that approach considering only those areas where ERMs were exceeded for five or more analytes), and 4) the completeness of data reporting for all analytes measured in each media of concern (including soil, sediment, groundwater, and surface water) at all sample sites.

While some progress has been made to address the concerns highlighted above (notably the collection of five surface water samples during a rain event, and inclusion of a table comparing individual analytical results for sediment contaminants to screening values), we are disappointed to note in the final EE/CA report that risks to ecological receptors from direct exposure to surface soils and surface water runoff will not be addressed at this time. However, we are encouraged by the assertion in the report that risks associated with soil and surface water exposure pathways will be evaluated after removal actions identified in this EE/CA are complete. With this in mind, the Service believes that confirmatory sampling and monitoring is essential to determine the amount of risk reduction achieved during the upcoming removal and potential residual risks to ecological receptors that may require additional action. In particular, thorough surface water sampling (both in onsite ditches and in areas of the Northeast Cape Fear River adjacent to the site receiving site runoff and groundwater discharge) is essential to assess the effectiveness of the proposed removal in minimizing documented surface water environmental hazards (as evidenced by exceedances of USEPA water quality criteria and violation of state standards for nearly all analytes in each of the five samples collected last December).

The Service encourages the responsible party, or USEPA, to develop a confirmatory monitoring plan for post-removal assessment prior to implementation of the removal action so any changes in surface water quality resulting from removal activities can be determined. We would be pleased to review these plans when complete. Although post-removal monitoring will provide a mechanism for evaluating the effectiveness of this action, the Service cannot conclude that the removal action will be protective of ecological receptors as proposed.

Thank you for the opportunity to comment on the final EE/CA report. If you have any questions regarding our comments or would like to discuss the site further, please contact me at Sara_Ward@fws.gov or 919/856-4520 (ext. 30).

Sincerely,



Sara Ward
Ecologist

Enclosures

cc: Mr. Greg Hogue, REO, DOI/OEPC, Atlanta, GA
Dr. Bill Starkel, FWS, AES/HC, Atlanta, GA
Dr. Diane Beeman, FWS, AES/HC, Atlanta, GA
Acting Chief, USEPA/ETAG, Atlanta, GA
NCDSWM-Superfund Section, Raleigh, NC
Dr. Michel Gielazyn, NOAA, Atlanta, GA



COPY

North Carolina Department of Environment and Natural Resources

Dexter R. Matthews, Director

Division of Waste Management

Michael F. Easley, Governor

July 7, 2004

William G. Ross Jr., Secretary

Mr. McKenzie Mallary
Superfund Branch
Waste Management Division
US EPA Region IV
61 Forsyth Street, 11th Floor
Atlanta, Georgia 30303

RE: Revised Engineering Evaluation/Cost Analysis Report
(Redline Version)
Northeast Chemical Site
Wilmington, New Hanover County

Dear Mr. Mallary:

The North Carolina Department of Environment and Natural Resources (NC DENR) Superfund Section has received and reviewed the Revised Engineering Evaluation/Cost Analysis Report (Redline Version) for the Northeast Chemical Site. This Engineering Evaluation/Cost Analysis (EE/CA) Report has been developed with the collaboration of the United States Environmental Protection Agency (US EPA) Region IV, the NC DENR Superfund Section, the US Fish & Wildlife Service, the National Oceanic and Atmospheric Administration (NOAA), the responsible parties and the consultants retained by the responsible parties. As this process has transpired over the last two years through numerous site visits, meetings, teleconference calls, emails, etc., the US EPA requested that the NC DENR Superfund Section review the Revised Engineering Evaluation/Cost Analysis Report (Redline Version) in a streamlined fashion for consistency with previous discussions and decisions. The Superfund Section has reviewed this document and approves of the document in this context. The Superfund Section looks forward to receiving the Final Engineering Evaluation/Cost Analysis Report reflecting the modifications made in this current report. However, please note that the NC DENR Superfund Section shall conduct a thorough review of the Final Engineering Evaluation/Cost Analysis Report including all text, data, conclusions, etc.

The NC DENR Superfund Section appreciates the opportunity to comment on this document. If you have any questions or comments, please feel free to contact me at (919) 733-2801, extension 349.

Sincerely,

David B. Mattison / dg

David B. Mattison, CHMM
Environmental Engineer
NC DENR Superfund Section

1646 Mail Service Center, Raleigh, North Carolina 27699-1646
Phone 919-733-4996 \ FAX 919-715-3605 \ Internet <http://wastenotnc.org>

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(sent via fax on 3/19/2004)

March 19, 2004

Hi, Ken.

As requested during yesterday's conference call, I've summarized a few issues that I think are important to resolve prior to finalizing the EE/CA report. Clearly, there are several issues of concern that have not been adequately addressed in this phase of the EE/CA; however, the commitment of the responsible party to conduct a streamlined risk evaluation to assess remaining ecorisk concerns after the removal action is complete should provide a mechanism for reducing hazards to terrestrial and aquatic receptors. It is important to note, though (as mentioned in my 2/3/2003 email to you), that based on the RPs decision not to address additional areas of the site posing significant risks to ecological receptors during this removal action, the Service is unable to conclude that this proposed removal action will be protective of ecological receptors. With this in mind, any screening risk evaluation should be coupled with additional action (whether this be capping, removal, chemical stabilization, or a combination of approaches) in order to achieve the EE/CA goal of risk reduction to human and ecological receptors. Recommended action items that should be considered at a **minimum** prior to finalization of the EE/CA report include:

1. Inclusion of all data for all analytes measured (not just those identified as COPCs for the human health risk assessment portion of the EE/CA) at every sample location for all media evaluated in the assessment (including soil, sediment, groundwater, and surface water).
2. Incorporation of a complete characterization of the surface water pathway as a primary exposure route for terrestrial and aquatic receptors. This should include a figure documenting all on-site drainage pathways -- the RPs response to comments indicates that this will be included, but I haven't been provided with a copy for review. Additionally, the site conceptual model and text describing relevant exposure routes for ecological receptors must be revised to reflect the risk associated with this route (as mentioned previously, the 12/03 sampling indicates that a real hazard exists given significant exceedances of state water quality and federal aquatic life criteria).
3. Given that the screening risk evaluation proposed to follow (or run concurrent with the removal action) is intended to be an extension of the current EE/CA, it is essential that some data collection post-removal be conducted to determine whether the removal action (and reduction of source material) resulted in reduced surface water exposure risks. Confirmatory sampling plans should be outlined in the discussion of the preferred alternative in this EE/CA report. Short-term follow-up monitoring will allow us to determine the extent to which future risk reduction will be necessary.

We appreciate your efforts to address ecological risks at the site and look forward to a continued dialog on these issues both during and following the removal action. If you would like us to review any materials generated during the EE/CA report finalization, please give me a call.

Take care,
Sara

Sent 2/03/2004 via email

Ken,

Thanks for your request for our review of Response to Comments on the Draft Engineering Evaluations/Cost Analyses (EE/CA) Report for the Northeast Chemical Site. Some progress has been made regarding concerns we raised in previous comments (letter to you dated September 4, 2003) and during our November 19th meeting at the site. In particular, the PRPs commitment to revise the EE/CA report to include both an ecological assessment of surface soil contaminant levels and a synopsis of recently collected surface water data in the final report is important; however, I'm still concerned that by targeting the removal action to address only soil areas exceeding industrial preliminary remedial goals (PRGs) that the primary goal of the EE/CA approach (e.g., accelerated site cleanup and reduction of risks to human and ecological receptors) will not be achieved during this non-time critical removal action (NTCRA). Industrial PRGs for arsenic and lead (100 mg/kg and 1,200 mg/kg, respectively) exceed levels for soil contamination considered harmful for terrestrial organisms by 10 and 75 times, respectively.

The hesitancy to address risks to terrestrial receptors based on conservative soil screening values is understandable, but recently documented exceedences of state and federal water quality criteria (which less conservative screening values) is a problem. Ecological risks via the soil pathway can be addressed in this removal action in a streamlined fashion (either by addressing areas in close proximity to those already proposed for removal or by developing an ecological cleanup level for contaminants driving terrestrial ecological risks to capture hot spots). By expanding the current soil removal action to address at least some of the areas with known ecological contaminant risk, terrestrial and surface water hazards can be immediately reduced. Follow-up monitoring will allow us to determine the extent to which future risk reduction will be necessary. With this in mind, the following items are provided to guide finalization of the EE/CA report so that these environmental hazards can be expeditiously addressed:

1. I mentioned in our November meeting that existing data for all analytes was not included in the EE/CA report (tables currently report data for COPCs only). After reviewing the EE/CA Work Plan received in December 2003, I still can't locate these data. Since COPCs for soils were determined based on human health screening data only, it's important to include data for all analytes so we can evaluate potential risks to ecological receptors for chemicals other than those determined as human health COPCs. Contaminants driving ecological risks may be similar to those identified in the human health screening, but without review of the complete dataset, this remains uncertain. Appendix F (*Analytical Results from EE/CA Field Investigation*) might contain this data; however, the report and data CD I received did not include this information.
2. The areas targeted for soil removal in the preferred alternative (Alternative 4) address human health risks, but should be expanded to assure protectiveness for ecological receptors. Several soil samples exceed ecological screening levels of 10 mg/kg d.w. for arsenic (from EPA Region 4 soil screening values) and 16 mg/kg d.w. for lead (EPA ecological soil screening level for avian effects (USEPA 2003)):

KP-SS-09*, KP-SS-08*, KP-SS-06*, KP-SS-05*, KP-SS-04*, KP-SS-10*, KPSS-11*, KP-SB-12*, KP-SB-13*, KP-SB-29, KP-SB-18, KP-SB-45, KP-SB-46, KP-SB-42, KP-SB-43, KP-SB, 44, KP-SB-24*, KP-SB-40*, KP-SB-39*, KP-SB-41*, KP-SB-19*, KP-SB-38, FP-SB-36, FP-SB-35, FP-SB-37, AND FP-SB-34.

Because the maximum arsenic and lead concentrations (37 and 210 mg/kg) in areas not being addressed in the removal action exceed screening levels by 3 and 13 times, respectively, the comment that the respondents "do not feel that ecological risks will be significant enough to require a removal action at these locations" is not substantiated in the report and appears to grossly underestimate contaminant risks to these receptors.

Of the samples listed above, a review of the areas proposed for soil removal (Figure 9-2, *Potential Areas for Excavation for Alternative 4*) indicates that expanding the excavation to include the sample areas noted with an asterisk above could be achieved with minimal additional effort and cost based on the proximity of these areas to areas currently proposed for removal. I recommend that these areas be included in the current removal to address risks to terrestrial organisms in an expedited fashion and to minimize source areas for reduction of contaminant loads to other media (surface water, in particular). Alternatively, since the screening levels for ecological soil risks are highly conservative, the PRP could develop an ecological soil cleanup level based on site-specific conditions or a mass-based approach to target hot spots for cleanup.

In addition, no data are presented in Table 5-4 of the EE/CA report (*Laboratory Analytical Results for Metal COPCs for Soil Samples*) for several samples identified in Figure 5-5 (*Laboratory Analysis of Surface Soil for Arsenic, Lead and Iron*). These data gaps (KP-SS-48 and -49, KP-SB-56, -59, -60, -74, and -75) should be addressed.

3. Results of the surface water sampling (conducted in December 2003) that we requested indicate that chemical-specific applicable or relevant and appropriate requirements (USEPA water quality criteria and NC Surface Water Quality Standards) have been violated for nearly all analytes reported in each of the five samples collected. Water quality criteria are inherently less conservative than other ecological screening values; consequently, surface water contaminant levels exceeding state and federal water quality standards reflect a significant environmental hazard (**a real hazard that exists, not just an exceedance of screening values**) that should be addressed during the current EE/CA. All analytes measured should be reported (Table 5-x reports just seven), a list of surface water COPCs should be determined, and risks to receptors via the surface water route must be evaluated. Exceedances of water quality standards during storm events provides further justification for including additional removal of soil contaminant hot spots (based on ecological cleanup goals or proximity to removal areas) to prevent source area runoff from causing routine violations of surface water quality standards.
4. The comparison of individual analytical results for sediment contaminants to ERM values

will be added to the EE/CA report as requested previously and that is good; however, I question the basis for only addressing samples where five or more analytes exceeded ERM values. While several sediment samples that I referenced in our September letter exceed ERMs for multiple analytes; it is important to address all areas where chemicals of concern exceed screening level values.

5. The January 15, 2004 email from the consultants included a figure (Sampling Locations.pdf); however, the version we received does not contain sample locations for the most recent December 2003 sampling event. We recommend that a figure including most recent sample sites be incorporated in the final EE/CA report.
6. Based on a review of the EE/CA Work Plan (sent to us via email in December 2003), previous actions (in-situ stabilization with triple super phosphate) on the Flowers Property have reduced the leachability of soil contaminants to groundwater and surface water; however, elevated soil contaminants levels remain and are still bioavailable (though the Work Plan states that post-removal grading and reseeded likely precludes ecological exposure from surface soils). Several samples reported in Table 5-5 of the EE/CA report contain lead levels above ecological screening levels on the Flowers Property. Ecological effects screening of post-removal soil data from the Flowers property should be included and the ecological cleanup level determined for the site (see comment 1) should be applied to target hot spots for removal on the Flowers site as well.

I'm happy to see some of the progress that has been made since our November meeting (ecological screening of soil contaminants and surface water data collection), but there are still several important concerns that need to be addressed prior to finalizing the EE/CA report and conducting the pending removal action to address immediate environmental hazards at the site. **As proposed, it would be difficult for the Service to conclude that the action would be protective of ecological receptors; particularly given the surface water data indicating an existing ecorisk problem.** I believe this can be achieved quickly with little additional effort (as mentioned above, by targeting soil areas near portions of the site slated for removal or by developing a site-specific ecological cleanup goal to target contaminant hot spots) so that the EE/CA schedule isn't impeded. I'd be happy to review any of these developments quickly so that remedial planning can move forward. I'll be in the office Thursday of this week and Monday and Tuesday next week if you would like to discuss the above concerns further.

Take care,
Sara



United States Department of the Interior

FILE COPY

FISH AND WILDLIFE SERVICE

Raleigh Field Office
Post Office Box 33726
Raleigh, North Carolina 27636-3726

September 4, 2003

Mr. Ken Mallary, Remedial Project Manager
North Superfund Remedial Branch
Waste Management Division
U.S. Environmental Protection Agency
Atlanta Federal Center
61 Forsyth Street
Atlanta, Georgia 30303-8960

Dear Mr. Mallary:

Thank you for your August 11, 2003 correspondence requesting U.S. Fish and Wildlife Service (Service) review of the Draft Engineering Evaluation / Cost Analyses Report for the Northeast Chemical Site in Wilmington, NC. These comments are intended as technical assistance for the USEPA's assessments and planning conducted pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended (42 U.S.C. 9601 et seq.); they do not represent any position that the U.S. Department of the Interior may adopt concerning possible injury to natural resources under their trusteeship.

1. The streamlined ecological risk assessment (Section 7) of the draft Engineering Evaluation / Cost Analyses (EE/CA) report identifies ingestion and dermal contact with soil by terrestrial organisms as secondary exposure pathways that will not be further evaluated until after the implementation of the EE/CA and non-time critical removal action (NTCRA). We believe the exposure of terrestrial organisms needs to be evaluated. Despite the industrial nature of part of the site, the vegetated areas and surrounding environs will be used by terrestrial invertebrates and insectivorous mammals and birds for which direct exposure to site-related contamination is likely. Results for metal contaminants of potential concern (COPCs) for soil samples collected during the EE/CA field investigation exceed levels identified as EPA Region 4 ecological soil screening values for arsenic (10 mg/kg) and lead (50 mg/kg) by up to 460 and 190 times, respectively. Because screening values are exceeded by such large amounts, we recommend that exposure to surface soils be evaluated as a primary pathway in this assessment. Several areas where sampling results exceeded Region 4 ecological screening values for either arsenic or lead (e.g., KP-SS-05, -06, -19, -29, -35, -36, -39, -42, -43) are located outside of the proposed areas to be addressed in the preferred alternative (Alternative 4) but are not necessarily paved or covered with crushed stone (as indicated in section 7.2 of the draft EE/CA report).

Although EPA Region 4 screening values for soil (USEPA 2001) are an appropriate starting point, the values presented for arsenic and lead are based on benchmarks derived from the literature in 1997 and 1990. We encourage derivation of ecological soil screening levels for representative species potentially effected by site-related COPCs. This does not need to be elaborate; comparing the recent exposure data (soil concentrations) to updated soil screening

levels (based on adding new information on bioaccumulation and toxicity to that available in previously described methods (USEPA 2000; ORNL 1997a,b)) would suffice. In short, since soil invertebrates, birds, and mammals use the site, soil contamination risks to these receptors need to be evaluated.

2. The COPC identification and refinement process for ecological receptors is not described in this report. The Service cannot evaluate the completeness of the list of COPCs for various media of concern without data for metals and other analytes at all sampling locations, toxicity reference values used for risk screening, and a discussion of the rationale for COPC selection. These data should be provided.
3. It is clear from the aerial photography (Figure 1-2) and from our previous site visit that there are several ditches onsite that drain to the river. In addition, drainage towards the railroad tracks that traverse the Flowers property ultimately reaches the river via a subsurface pipe and culvert. A more detailed figure presenting all onsite drainage ditches, wetlands, and other surface water areas (including sampling locations from this and previous investigations) should be provided.

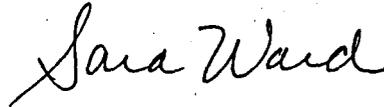
Section 7.2 (*Ecological Conceptual Model*) of the draft EE/CA report indicates that surface water will not be evaluated as a potential exposure pathway because analytical results were evaluated during the development of the EE/CA work plan and no COPCs were identified. These data should be presented in a table in the report. Currently, the only surface water sample results presented are those from investigations conducted prior to remedial actions completed on the former Koch Sulfur Products Company Site and the Flowers property. Confirmatory sampling to assure that elevated metals concentrations previously documented (samples NE-023-SW, NE-001-SW, NE-002-SW) are now below screening levels (EPA ambient water quality criteria and NC surface water standards) should be conducted (or reported if it has already been completed) prior to eliminating this potential exposure pathway. In addition, it is important that surface water sampling results for all drainage pathways (including the Northeast Cape Fear River immediately adjacent to these drainage outfalls) be presented.

4. The ecological conceptual model identifies ingestion and dermal contact with sediment as a primary exposure pathway for ecological receptors. Contaminant concentrations in sediment samples were evaluated using effects range low (ERL) and effects range median (ERM) levels identified by NOAA (Buchman 1999) to screen for potential toxicological impacts to receptors exposed via the sediment pathway. A mean ERM quotient approach was also utilized to compartmentalize portions of the site shoreline into risk categories and to address potential mixture concerns. While this approach may provide some means of evaluating the mix of contaminants to which receptors may be exposed to in nearshore sediments, it is important to examine exceedences of effects thresholds for individual contaminants. Recently derived and validated consensus-based probable effect concentrations (PECs) (i.e., concentrations above which harmful effects are likely to be observed) reported by MacDonald et al. (2000) suggest that several sediment samples (e.g., KP-SD-01-2.5, KP-SD-01-2.5D, KP-SD-02-0.5, KP-SD-04-3.5, KP-SD-06-0.5, KP-SD-08-0.5, and KP-SD-08-1.5) identified as Category 2 (potentially toxic, but not to be included in the NTCRA based on the mean ERM quotient approach) should be addressed based on probable toxicological impacts to sediment receptors.
5. Although a portion of the site is dominated by active industry and the remaining areas slated for

remedial action are likely to be used industrially in the future, we recommend that efforts be made in the interim to enhance wildlife habitat functions of excavated, regraded, and capped areas onsite. Provided that ecological cleanup goals are protective of wildlife expected to use the site (see Comment 1 above), revegetation of regraded and capped areas with native plants should be a remedial goal. We would be pleased to provide assistance in the selection of appropriate plant species and sources of plant material for site restoration activities. Consistent with the goal of revegetation with native plant species, it is important to detail performance criteria for this objective (e.g., percent cover of desirable vegetation to be achieved in a given time period) in future remedial design plans.

The Service appreciates the opportunity to comment on the Draft EE/CA Report for the Northeast Chemical Site. We recognize that the EE/CA approach is intended to promote accelerated site cleanup and reduction of risks to human and ecological receptors and we support streamlining of the site investigation and assessment process provided that all potential exposure routes are sufficiently addressed. With little additional effort, it is possible to expand the evaluation of the sediment and soil ecological exposure pathways during this NTCRA using existing data and readily available effects threshold information. Depending on the availability of sufficient surface water sampling results, this exposure pathway might also be more fully addressed at this time. If it is not possible to evaluate these ecological exposure pathways during this NTCRA (and potentially realize significant time and cost savings in doing so), the Service recommends that these concerns be revisited either in another phase of the EE/CA process or in a remedial investigation / feasibility study (RI/FS). If you have any questions or comments regarding our recommendations, please contact me at 919/856-4520, (Ext. 30).

Sincerely,



Sara Ward
Ecologist

References

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