

**REMOVAL PROGRAM
PRELIMINARY ASSESSMENT/
SITE INVESTIGATION REPORT
FOR THE
MARINO PROPERTY SITE
MIDDLETOWN, MIDDLESEX COUNTY, CONNECTICUT
21 April 2009, 11-14 May 2009, 19 May 2009, 4 June 2009,
11 June 2009, 23-24 June 2009, 25-28 August 2009, and
25 September 2009**

Prepared For:

U.S. Environmental Protection Agency
Region I
Emergency Planning and Response Branch
1 Congress Street, Suite 1100
Boston, MA 02114-2023

CONTRACT NO. EP-W-05-042

TDD NO. 01-09-03-0004

TASK NO. 0512

DC NO. R-5746

Submitted By:

Weston Solutions, Inc.
Region I
Superfund Technical Assessment and Response Team (START)
3 Riverside Drive
Andover, MA 01810

January 2010

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I. Preliminary Assessment/Site Investigation Forms

REMOVAL PRELIMINARY ASSESSMENT

Source of Information

Roy F. Weston (now known as Weston Solutions, Inc.). 1990. *Removal Program Preliminary Assessment/Site Investigation Report for the Marino Property, Middletown, Connecticut*. December.

Roy F. Weston (now known as Weston Solutions, Inc.). 1991. *Addendum to the Removal Program Preliminary Assessment/Site Investigation Report for the Marino Property, Middletown, Connecticut*. May.

CDM Federal Programs Corporation. 1994. *Site Inspection Trip Report for Onsite Reconnaissance and Sampling Activities, Marino Property, Middletown, Connecticut*. 21 September.

CDM Federal Programs Corporation. 1995. *Final Site Inspection Report, Marino Property, Middletown, Connecticut*, 5 May.

Roy F. Weston (now known as Weston Solutions, Inc.). 1999. *Removal Program Preliminary Assessment/Site Investigation Report for the Marino Property, Middletown, Connecticut*. September.

Lockheed Martin Company, Response Engineering and Analytical Contract (REAC). 2000. *Trip Report, Marino Property Site*. 10 May.

Weston Solutions, Inc. 2007. *Trip Report for Marino Property Site Reassessment, Middletown, Connecticut*, 6 April.

() **Other:**

Potential Responsible Parties

Owners: RLO Properties Inc. **Telephone:** (203) 773-3637
% Attorney Katharine Goodbody

Address: 129 Whitney Ave. New Haven, CT 06515

Operator: American Contractors LLC, % Mrs. Tamba Marino **Telephone:** (860) 346-7410

Address: 50 Walnut Street # A, Middletown, CT

Site Access

Authorizing Person: Mr. J.R. Marino

Date: 24 March 2005 **(X) Obtained** **() Verbal**
Telephone: (860) 346-7410 **() Not Obtained** **(X) Written**

REMOVAL PRELIMINARY ASSESSMENT

Historical Preservation

() Site is Historically Significant or Eligible for Historic Preservation

Contacts Identified

1) State Historical Preservation Officer (SHPO)

Name: Ms. Karen J. Senich

Telephone: (860) 256-2753

2) Tribal Historical Preservation Officer (THPO)

Name:

Telephone: ()

Comments: This site is not considered historically significant or eligible for historical preservation.

Physical Site Characterization

Background Information: The Marino Property Site (the Site) is located at 50 Walnut Street, in Middletown, Middlesex County, CT. The geographic coordinates of the site, as measured from its approximate center, are 41° 33' 23.1" north latitude and 72° 38' 25.6" west longitude. The property is identified by the City of Middletown (the City) Tax Assessor's Map Number (No.) 34, as Block No. 24-7, Lot No. 9. The Site is bordered to the north by River Road, railroad tracks, and the Connecticut River; to the east by Walnut Street; to the south by Route 9 and state-owned land; and to the west by Sumner Brook, a small drainage ditch, Route 9, and state-owned land. The Site is owned by RLO Properties Inc., % Mr. J.R. Marino. Mrs. Tamba Marino is the president of American Contractors, LLC, which operates on the Site. The Site is approximately 10.2 acres, of which approximately 1.25 acres are occupied by the footprint of the two on-site buildings. The eastern portion of the property contains two buildings, Building No. 1 (located on the northeastern portion of the Site and approximately 35,600 square feet) and Building No. 2 (located on the southeastern portion of the Site and approximately 18,600 square feet), which the property owner currently leases to several small businesses that utilize the space for light manufacturing, storage, and/or office space. Both on-site buildings have been modified and expanded in stages, creating numerous partitioned spaces that are linked through a maze of hallways and entrances. A discontinuous fence surrounds the Site, with openings in the northwest corner and along the western edge of the Site. The nearest residence is located east of Building No. 2. A parking area/vacant lot is located east of Building No. 1, across Walnut Street.

The Site was originally the location of OMO Manufacturing Company, a rubber and artificial leather factory that was built in the late 1800s. Prior to the 1930s, a 2- to 4-acre wetland area was located in the western portion of the Site. From the early 1930s to approximately 1955, the wetlands were used by the City as a municipal landfill (the City Landfill). According to the property owner, the City Landfill accepted industrial waste from facilities located throughout the City. Waste oils, paints, and refuse from the on-site rubber manufacturing process were also allegedly disposed of west of Building No. 1. In 1955, during the construction of Route 9, the State of Connecticut altered the topography of the Site, including modifying the course of Sumner Brook and constructing a drainage ditch, located adjacent to (west of) the Site. Also in 1955, the City Landfill was relocated

REMOVAL PRELIMINARY ASSESSMENT

Physical Site Characterization (Continued)

approximately 2 miles northwest of the Site. In 1968, the Site was purchased by Georgia Bonded Fibers. In 1969, the property was purchased by Hildebrand Industries. In the early 1970s, the Connecticut Development Commission obtained the rights to the Site through a foreclosure of Hildebrand Industries. In 1973, the Site was purchased by Mr. Salvatore J. Marino who reportedly filled the wetland portion of the property with approximately 2 to 3 feet of soil of unknown origin.

On 17 May 1983, CT DEP WEED received a general environmental complaint alleging that a pit had been excavated near the western portion of the Site and that approximately 200 to 300 55-gallon drums of chemicals were buried in the pit. The complaint also cited several companies for disposing of waste on the Site, including (alleged dates of disposal in parentheses): OMO Manufacturing (1800s to 1934), Middletown Rubber (1934 to 1959), Middletown Industries (1959 to 1963), and Hildebrand Industries (1963 to 1972). Chemicals allegedly disposed of on the Site include acetone, methyl ethyl ketone (MEK), naphthalene, and xylene. In 1972, Hildebrand Industries ceased to operate on the property and known disposal of waste at the Site ceased.

On 16 September 1983, CT DEP conducted an inspection of the Site to determine if evidence existed of previous on-site disposal activities. CT DEP observed site conditions and collected several samples, including two drum samples, two leachate samples, one paint sample, one sediment sample, and two surface water samples. CT DEP observed six empty 55-gallon drums and two 55-gallon drums containing an unknown liquid within the drainage ditch located west of the Site. CT DEP also observed an area in the northwestern portion of the Site containing discarded paint cans, paint brushes, and plaster containers.

From 22 November 1985 through 2 January 1986, Connecticut Test Borings, Inc., on behalf of Heynen Teale Engineers and as part of a hazardous waste site assessment, excavated 10 test borings and installed 10 groundwater monitoring wells on the Site. Depth to groundwater was recorded during the installation of monitoring wells, and ranged from 8.5 feet to 31.0 feet below ground surface (bgs). During test pitting activities, 3 to 20 feet of fill, overlying miscellaneous refuse, sand and gravel, and silt and clay, was noted. As part of the hazardous waste site assessment, Heynen Teale Engineers collected six groundwater samples. Analytical results of groundwater samples indicated the presence of six volatile organic compounds (VOCs), as well as "other mineral spirit hydrocarbons". At the time of the 2007 EPA Site Reassessment (SR), the groundwater monitoring wells had been destroyed.

On 14 August 1990, CT DEP Site Remediation and Closure Division (SRCD) received an anonymous complaint alleging that a damaged drum, seeping a dark, thick liquid, and surrounding purplish-colored soil were uncovered during the removal of soils at the Site. The complainant also stated that a former employee of OMO Manufacturing Company witnessed the disposal of five to 10 chemical liquids at the Site on a weekly basis over a period of 20 to 30 years.

REMOVAL PRELIMINARY ASSESSMENT

Physical Site Characterization (Continued)

On 2 October 1990, in response to the 14 August 1990 complaint, CT DEP SRCD referred the Site to the U.S. Environmental Protection Agency (EPA) Response and Prevention Section for an investigation and potential removal of buried drums containing unknown chemical liquids.

In December 1990, in response to the referral from CT DEP SRCD, EPA and Roy F. Weston, Inc. (now known as Weston Solutions, Inc.), Technical Assistance Team (TAT), completed a Preliminary Assessment/Site Investigation (PA/SI) for the Site under the EPA Removal Program. On 31 October 1990, as part of the Removal Program PA/SI, EPA and TAT conducted a geophysical subsurface screening investigation to measure the inphase component of the subsurface magnetic field in order to detect large metallic objects. The geophysical subsurface screening investigation was conducted using a Geonics LTD EM-D non-contacting terrain conductivity meter (EM-31) in a 325-foot by 275-foot area in the northwestern portion of the Site. TAT reported that six large subsurface electromagnetic conductors (*i.e.*, metallic objects) were detected, and their locations were marked for incorporation into a designated area grid system. Also on 31 October 1990, as part of the Removal Program PA/SI, EPA and TAT collected three soil samples from the Site, and collected one soil sample from the lower bank of the drainage ditch located west of the Site. On-site screening of the surface soil samples for heavy metals detected one metal (lead) at a concentration above "normal background". Analytical results of the surface soil samples indicated the presence of methylene chloride and acetone in all four samples. Trichlorofluoroethane was also detected in one surface soil sample.

On 15 and 17 April 1991, as part of the Removal Program PA/SI, additional work was conducted by the EPA Emergency Planning and Response Branch (EPRB) and TAT. This work included the excavation of eight on-site test pits, conducted by TAT subcontractor National Oil Service. TAT described the excavated material as consisting of processed gravel and brownish-red sand and gravel. Several 55-gallon drums and metal 5-gallon pails were encountered during test-pitting activities. TAT collected six samples of various matrices (soil, solid products, and liquid products) during excavation of the eight test pits. Eleven VOCs, five base neutral acids (BNAs), one metal, and one polychlorinated biphenyl (PCB) were detected at concentrations above analytical detection limits.

On 26 August 1991, based on the results of the Removal Program PA/SI, EPA determined that a time-critical Removal Action at the Site was warranted. According to EPA, the major hazardous substances, pollutants, and/or contaminants that were released, or for which there was a threat of release, include the following substances in soil: Aroclor-1260, ethylbenzene, MEK, toluene, vinyl acetate, and xylenes (total). However, based on information available to the Weston Solutions, Inc., Superfund Technical Assessment and Response Team (START), at the time this report was prepared, a Removal Action was not conducted following the completion of the PA/SI in the early 1990s.

On 8 September 1992, EPA entered the Site into the EPA Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) database (EPA Identification No. CTD062199369).

REMOVAL PRELIMINARY ASSESSMENT

Physical Site Characterization (Continued)

On 5 May 1995, on behalf of EPA, the Camp, Dresser, and McKee (CDM) Federal Programs Corporation Alternative Remedial Contracting Strategy (ARCS) completed a Site Inspection (SI) of the Site. As part of the SI, on 7 and 8 September 1994, CDM ARCS collected three groundwater samples from two locations in the northwest corner of the Site using a Geoprobe®. In addition, CDM ARCS collected seven sediment samples, including two background sediment samples from Sumner Brook, two sediment samples from the drainage ditch located west of the Site, and three sediment samples from two locations along Sumner Brook, downstream of the drainage ditch. Sediment samples were analyzed for VOCs, semivolatile organic compounds (SVOCs), pesticides, PCBs, and total metals. One VOC, 19 SVOCs, two pesticides, and 16 total metals were detected in CDM ARCS sediment samples at concentrations three times the respective concentrations of the two reference sediment samples (above reference criteria).

In 1997, the City seized the property from the owner of the Site, Mr. Salvatore J. Marino, due to tax foreclosure; and RLO Properties Inc. (Mr. J.R. Marino) subsequently purchased the property.

In September 1999, at the request of CT DEP, EPA and START completed a second Removal Program PA/SI of the Site.

On 30 September 1999, after completion of the second Removal Program PA/SI of the Site, EPA determined that a Removal Action was not warranted at the time, in order to allow a Comprehensive Site Assessment and Hydrologic Study to be coordinated between the Pre-Remedial Programs of EPA and CT DEP. EPA reported that the major hazardous substances, pollutants, and/or contaminants present at the Site included VOCs in buried drums/containers and Aroclor-1260, ethylbenzene, and methyl isobutyl ketone (MIBK) in on-site soil.

Between 6 and 10 March 2000, on behalf of EPA Environmental Response Team/Response Engineering and Analytical Contract (ERT/REAC), an un-named contractor installed eight groundwater monitoring wells on the Site. ERT/REAC reported that groundwater flow was in a northwesterly direction toward Sumner Brook and that depth to groundwater ranged from approximately 8 to 17 feet bgs. On 14 and 15 March 2000, ERT/REAC collected nine groundwater samples from the eight groundwater monitoring wells. Analytical results of the groundwater samples indicated the presence of seven VOCs and 15 metals at concentrations greater than three times the respective reference concentration or exceeding the method detection limit (MDL).

On 22 February 2007, as part of an EPA Site Reassessment (SR), EPA and START conducted an on-site reconnaissance. EPA and START inspected the two on-site buildings (Building Nos. 1 and 2), as well as sections of the exterior portion of the Site. Mr. J.R. Marino, informed START that his business, American Contractors LLC, operates on the Site, and that the remaining space was being rented to various businesses and private citizens. It was observed that the western portion of the Site was being used for the storage of vehicles, miscellaneous construction debris, and equipment. A combined sewer line, as well as piles of fill material, topsoil, bricks, timber, concrete pieces,

REMOVAL PRELIMINARY ASSESSMENT

Physical Site Characterization (Continued)

timber, concrete pieces, and steel, was observed in the northwestern portion of the Site. Vehicles, trailers, and a former diner car were observed in the central-western portion of the Site. The southern portion of the Site was observed to contain drums, box and tanker trailers, a pile of tires, a bus, and aboveground storage tanks (ASTs) used by Mulch Seal (a company operating on site).

During the February 2007 on-site reconnaissance, three monitoring wells (ERT-1, ERT-2, and ERT-3) were observed along the northern site boundary among piles of brick, timber, topsoil, and fill material. In the central portion of the Site, START observed monitoring well ERT-7, which was surrounded by large concrete pipe structures. East of monitoring well ERT-7, across a dirt access roadway, START observed monitoring well ERT-8, which was surrounded by a concrete barrier, a pile of steel beams, and a pile of fill material. Monitoring well ERT-4 was observed south of monitoring well ERT-7, among several abandoned vehicles. Monitoring well ERT-5 was observed south of monitoring well ERT-4, adjacent to a trailer-mounted AST and surrounded by a concrete barrier. Monitoring well ERT-6 was observed in the eastern portion of the property, in a parking area east of Walnut Street. South of monitoring well ERT-8, START observed construction equipment and trucks, a portable AST, and a gasoline pump mounted on a concrete slab. START could not determine whether the AST contained liquid or whether the gas pump was operational. START observed two cylinders of unknown contents beneath a trailer located south of monitoring well ERT-4. West of the trailers, START observed approximately 300 tires, a 55-gallon steel drum (contents unknown), and several 5-gallon buckets (contents unknown). West of the drum, START observed a steep embankment leading to a drainage ditch. The drainage ditch begins along the southwestern portion of the Site, where a pipe discharges to a sump, which in turn discharges to the drainage ditch flowing along Route 9. The drainage ditch extends north-northwest to Sumner Brook. To the southeast of the tire pile, START observed three trailers, a small camper, 18 200-gallon ASTs, and a bus. The ASTs appeared to be empty; and according to the property owner, they belonged to Mulch Seal. Within the bus, START observed five 30-gallon plastic containers labeled "Plasdone K29/32", five 5-gallon buckets of unknown material, and miscellaneous construction debris. South of the bus, adjacent to monitoring well ERT-5, START observed a stainless steel AST mounted on a flatbed construction trailer. According to the property owner, the AST had not been used by its owner, Mulch Seal.

Description of Substances Possibly Present, Known or Alleged:

In September 1983, a paint sample collected during a CT DEP inspection of the Site was found to contain the following compounds via hydrocarbon screening analysis (concentration in parentheses): benzene [250,000 micrograms per liter ($\mu\text{g/L}$)]; MEK (1,000,000 $\mu\text{g/L}$); toluene (750,000 $\mu\text{g/L}$); and total xylene (14,000,000 $\mu\text{g/L}$). In addition, the following metals were detected (concentration in parentheses): cadmium [0.40 milligrams per Kilogram (mg/Kg)]; chromium (170 mg/Kg); lead (1,700 mg/Kg); and zinc (7.3 mg/Kg).

Analytical results of groundwater samples collected during a November 1985 site assessment conducted by Heynen Teale Engineers indicated the presence of the following six VOCs (maximum

REMOVAL PRELIMINARY ASSESSMENT

Physical Site Characterization (Continued)

concentration in parentheses): benzene (1,956.7 µg/L); carbon tetrachloride (32.8 µg/L); ethylbenzene (282.1 µg/L); toluene (11,660.9 µg/L); trichloroethylene (250.7 µg/L); and xylenes (674.8 µg/L). The maximum values for all VOCs detected were from monitoring well #8-JT, which was located in the north-central portion of the Site.

Metal screening results of one off-site and three on-site surface soil samples collected by EPA during an October 1990 PA/SI revealed the presence of lead at concentrations above "normal background". In addition, methylene chloride and acetone were detected in all four surface soil samples, and trichlorofluoroethane was detected in one surface soil sample.

Material encountered during test-pitting activities in April 1991 included solid red and white material, black incinerator waste, and viscous liquids. Analytical results of six soil samples (S001 through S006) collected during test-pitting activities indicated the presence of seven VOCs (maximum concentration and location in parentheses): benzene {0.79 micrograms per gram (µg/gm) [equivalent to parts per million (ppm)] in S002}; chlorobenzene (0.52 µg/gm in S002); ethyl benzene (230 µg/gm in S001); MEK (29 µg/gm in S002); MIBK (11,000 µg/gm in S001); toluene (13,000 µg/gm in S001); and total xylenes (1,400 µg/gm in S001). In addition, two SVOCs, bis(2-ethylhexyl)phthalate and di-n-octylphthalate, were detected at maximum concentrations of 150,000 mg/Kg in S004 and 7,900 mg/Kg in S001, respectively. One PCB (Aroclor-1260) was detected at a maximum concentration of 640 mg/Kg in S001. Metals analysis indicated the presence of lead at a maximum concentration of 1,100 mg/Kg in S002.

On 7 September 1994, as part of an SI conducted by CDM ARCS, a total of seven sediment samples were collected from the drainage ditch and Sumner Brook, located west of the Site. The sediment samples were analyzed for VOCs, SVOCs, pesticides, PCBs, and total metals. The following substances were detected in sediment at concentrations above background (maximum concentration in parentheses): ethylbenzene [16 micrograms per kilogram (µg/Kg)]; acenaphthene (2,200 µg/Kg); acenaphthylene (1,000 µg/Kg); anthracene (1,700 µg/Kg); bis(2-ethylhexyl)phthalate (1,800 µg/Kg); carbazole (870 µg/Kg); dibenzofuran (620 µg/Kg); fluoranthene (8,600 µg/Kg); fluorene (2,800 µg/Kg); 2-methylnaphthalene (2,400 µg/Kg); naphthalene (1,300 µg/Kg); phenanthrene (9,600 µg/Kg); pyrene (6,900 µg/Kg); total xylenes (36 µg/Kg); 4,4-DDD (15 µg/Kg); 4,4'-DDT (6.7 µg/Kg); barium (984 µg/Kg); cadmium (2.3 mg/Kg); copper (1,370 mg/Kg); lead (865 µg/Kg); mercury (0.3 µg/Kg); and zinc (2,210 µg/Kg).

In addition, on 8 September 1994, as part of the CDM ARCS SI, three groundwater samples were collected from two temporary well points installed on the Site. Two metals, chromium and cobalt, were detected above reference criteria in GW-02 at concentrations of 45.8 µg/L and 18.1 µg/L, respectively.

On 14 and 15 March 2000, ERT/REAC collected nine groundwater samples from eight on-site groundwater monitoring wells. Analytical results indicated the presence of seven VOCs and 15 metals at concentrations above reference criteria when compared against background samples which were collected. The following substances were detected in groundwater samples (maximum

REMOVAL PRELIMINARY ASSESSMENT

Physical Site Characterization (Concluded)

concentration in parentheses): acetone (13 B µg/L); chlorobenzene (7.1 µg/L); dichlorodifluoromethane (3.0 B µg/L); p-isopropyltoluene (2.6 µg/L); methyl-t-butyl ether (1.9 µg/L); naphthalene (1.6 µg/L); m/p xylene (1.9 µg/L); aluminum (13,000 µg/L); arsenic (4.5 µg/L); barium (1,300 µg/L); chromium (20 µg/L); copper (29 µg/L); iron (25,000 µg/L); lead (29 µg/L); magnesium (35,000 µg/L); manganese (24,000 µg/L); mercury (0.62 µg/L); nickel (31 µg/L); potassium (60,000 µg/L); sodium (140,000 µg/L); vanadium (22 µg/L); and zinc (460 µg/L).

Existing Analytical Data

(X) Real-Time Monitoring Data:

Roy F. Weston, Inc. Technical Assistance Team, Region I. 1991. *Addendum to the Removal Program Preliminary Assessment/Site Investigation for the Marino Property Site, Middletown, Connecticut*. May.

(X) Sampling Data:

McDaniel, Michael, CT DEP. 1983. *RE: Complaint #303 Marino Property, Middletown*, 16 September.

Heynen Teale Engineers.1994. Cover Letter and Attachments, *RE: Test Boring Logs and Monitoring Well Specifications Generated During Hazardous Waste Site Assessment of 50 Walnut Street*, March.

Roy F. Weston, Inc. TAT. 1990. *Removal Program Preliminary Assessment/Site Investigation for the Marino Property Site, Middletown, Connecticut*, December.

Roy F. Weston, Inc. TAT. 1991. *Addendum to the Removal Program Preliminary Assessment/Site Investigation for the Marino Property Site, Middletown, Connecticut*, May.

CDM Federal Programs Corporation. 1995. *Final Site Inspection Report for the Marino Property, Middletown, Connecticut*, 5 May.

Roy F. Weston, Inc. START. 1999. *Removal Program Preliminary Assessment/Site Investigation for the Marino Property Site, Middletown, Connecticut*, 12 August 1999, September.

Lockheed Martin Company, Inc. REAC. 2000. *Trip Report, Marino Property Site*, Work Assignment No. 0-128, Contract No. 68-C-99-223, 10 May.

REMOVAL PRELIMINARY ASSESSMENT

Potential Threat

Description of potential hazards to environment and/or population-identify any of the criteria for a Removal Action (from NCP) that may be met by the site under 40 CFR 300.415 [b] [2].

- i. Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances, pollutants or contaminants.
- ii. Actual or potential contamination of drinking water supplies or sensitive ecosystems.
- iii. Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers, that may pose a threat of release.
- iv. High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate.
- v. Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released.
- vi. Threat of fire or explosion.
- vii. The availability of other appropriate federal or state response mechanisms to respond to the release.
- viii. Other situations or factors that may pose threats to public health or welfare or the environment.

Prior Response Activities

() PRP (X) STATE (X) FEDERAL (X) OTHER

Brief Description: CT DEP conducted a site inspection due to a complaint and generated a record of the inspection, dated 16 September 1983. In December 1985, Heynen Teale Engineers performed on-site boring activities to install monitoring wells throughout the Site at the request of a potential buyer for the property. Roy F. Weston (now known as Weston Solutions, Inc.) conducted a Removal Program PA/SI under the EPA TAT contract, and prepared a PA/SI report, dated December 1990. Additional sampling performed at the Site by EPA and TAT is described in a May 1991 Addendum to the December 1990 PA/SI report. An SI was performed by CDM Federal Programs Division and a report was generated, dated 5 May 1995. In September 1999, a second EPA Removal Program PA/SI was completed at the Site. In March 2000, EPA ERT installed and sampled additional groundwater monitoring wells on the Site and generated a Trip Report. A reconnaissance of the Site conducted by the EPA Site Assessment program on 22 February 2007 is described in a Trip Report, dated 6 April 2007.

REMOVAL PRELIMINARY ASSESSMENT

Priority for Site Investigation

(X) High

() Medium

Low ()

None ()

Comments: Previous investigations have indicated the presence of hazardous substances on the Site. In addition, the Site is in close proximity to the Connecticut River as well as the public drinking water supply well located east of the Site. The Site is currently active, and potential exposure to on-site workers and tenants is unknown.

Report Generation

Originator: Gerald Hornok

Affiliation: Weston Solutions, Inc. (START)

TDD No.: 01-09-03-0004

Date: 5 January 2010

Telephone: (978) 552-2100

Task No.: 0512



**EPA REGION I
REMOVAL SITE INVESTIGATION**

Inspection Information

Site Name: Marino Property Site **Address:** 50 Walnut Street
Town: Middletown **County:** Middlesex **State:** Connecticut

Date of Inspection: 21 April 2009 **Time of Inspection:** 1030 hours
Weather Conditions: Overcast skies, temperature in the mid-40 degrees Fahrenheit (°F) to low 50s °F, a slight breeze from the north, with rain in the afternoon.

Date of Inspection: 11 May 2009 **Time of Inspection:** 0900 hours
Weather Conditions: Clear skies, temperature in the mid-50s to the mid-60s °F, and slight winds from the west and northwest.

Date of Inspection: 12 May 2009 **Time of Inspection:** 0718 hours
Weather Conditions: Overcast skies, temperature in the mid-50s to the mid-60s °F, and sporadic winds from the west and northwest.

Date of Inspection: 13 May 2009 **Time of Inspection:** 0715 hours
Weather Conditions: Clear skies, temperature in the mid-50s to the mid-70s °F, and winds gusting from the west and southwest.

Date of Inspection: 14 May 2009 **Time of Inspection:** 0730 hours
Weather Conditions: Overcast skies, temperature in the high 50s to low 60s °F, a slight breeze from the north, and misting.

Date of Inspection: 19 May 2009 **Time of Inspection:** 0820 hours
Weather Conditions: Clear skies, temperature in the mid-60s to mid-70s °F, and calm winds.

Date of Inspection: 4 June 2009 **Time of Inspection:** 1100 hours
Weather Conditions: Clear skies, temperature in the mid-60s to mid-70s °F, and slight winds from the northeast.

Date of Inspection: 11 June 2009 **Time of Inspection:** 1100 hours
Weather Conditions: Overcast skies, temperature in the low to mid-60s °F, calm, slight winds from the northwest, and misting.

Date of Inspection: 23 June 2009 **Time of Inspection:** 0730 hours
Weather Conditions: Clear skies, temperature in the mid-60s to the mid-70s °F, and slight winds from the northeast.

REMOVAL SITE INVESTIGATION

Inspection Information (Concluded)

Date of Inspection: 24 June 2009

Time of Inspection: 0730 hours

Weather Conditions: Overcast skies, temperature in the mid- to high 60s °F, calm, and humid.

Date of Inspection: 26 August 2009

Time of Inspection: 0555 hours

Weather Conditions: Clear skies, sunny, high humidity, temperature in the mid-70s to the mid-80s °F, and slight winds from the northwest.

Date of Inspection: 27 August 2009

Time of Inspection: 0545 hours

Weather Conditions: Clear skies, sunny, moderate humidity, temperature in the 60s to the low-80s °F, and slight winds from the north.

Date of Inspection: 28 August 2009

Time of Inspection: 0550 hours

Weather Conditions: Overcast skies, misting to light showers, temperature in the 60s to the low 70s °F, and slight winds from the northwest.

Date of Inspection: 25 September 2009

Time of Inspection: 1030 hours

Weather Conditions: Clear skies, temperature in the mid-60s °F, a slight breeze from the northwest.

Site Status at Time of Inspections: (X) ACTIVE () INACTIVE

Comments: The Marino Property Site (the Site) is located at 50 Walnut Street, in Middletown, Middlesex County, CT. The geographic coordinates of the site, as measured from its approximate center, are 41° 33' 23.1" north latitude and 72° 38' 25.6" west longitude. The property is identified by the City of Middletown (the City) Tax Assessor's Map Number (No.) 34, as Block No. 24-7, Lot No. 9. The Site is bordered to the north by River Road, railroad tracks, and the Connecticut River; to the east by Walnut Street; to the south by Route 9 and state-owned land; and to the west by Sumner Brook, a small drainage ditch, Route 9, and state-owned land.

Agencies/Personnel Performing Inspection

	<u>Names</u>	<u>Program</u>
(X) EPA:	Janis Tsang	U.S. Environmental Protection Agency (EPA) Region I, Emergency Planning and Response Branch (EPRB), On-Scene Coordinator (OSC)
	Alan Humphrey	EPA Environmental Response Team (ERT)
	Gerardo Millan-Ramos	EPA Region I, Technical & Enforcement Support Section, Site Assessment Manager

REMOVAL SITE INVESTIGATION

Agencies/Personnel Performing Inspection

(X) EPA Contractor:	John F. Kelly	Weston Solutions, Inc. (WESTON), Superfund Technical Assessment and Response Team (START)
	Gerald Hornok	START
	Timothy Benton	START
	George Mavris	START
	Carolyn Imbres	START
	Paul Callahan	START
	John Mitchell	Eagle Instruments
(X) State:	Mike McDaniel	Connecticut Department of Environmental Protection (CT DEP), Bureau of Waste Management
	Dave Ringquist	CT DEP, Bureau of Waste Management
(X) Other	J.R. Marino	RLO Properties Inc. and American Contractors LLC
	Tamba Marino	American Contractors LLC
	Preston Marino	American Contractors LLC
	Vic Casteluano	American Contractors LLC
	Mike Armino	American Contractors LLC
	James (Rick) Lardie	Field Safety Corporation
	Michael Ziskin	Field Safety Corporation

Current Owner Based on Field Interview: RLO Properties Inc.

Physical Site Characteristics

<u>Parameter</u>	<u>Quantities/Extent</u>
(X) Cylinders:	Cylinders of various types and sizes were observed throughout the two on-site buildings [Building Numbers (Nos.) 1 and 2]. Additional 20- and 40-pound propane cylinders were observed adjacent to the exterior of Building No. 2, located on the southeastern portion of the Site.

REMOVAL SITE INVESTIGATION

Physical Site Characteristics (Continued)

<u>Parameter</u>	<u>Quantities/Extent</u>
() Lagoons:	
(X) Tanks:	
(X) Above:	One portable fuel aboveground storage tank (AST), with attached containment basin, was located in the central portion of the Site, and appeared to be used for refueling construction vehicles. One approximately 5,000-gallon white AST with "2 fuel oil" written on the west facing end is located adjacent to the garage area operated by the property owner. Three approximately 5,000- to 8,000-gallon ASTs, reportedly belonging to Mulch Seal and containing blacktop sealant material, were located in the southern portion of the Site. One 275-gallon AST containing heating oil was observed in the southwestern corner of Building No. 2. Four propane ASTs of various volumes were observed along the exterior of Building Nos. 1 and 2. In addition, 19 275-gallon oil tanks were observed on the western portion of the site.
(X) Below:	Previous investigations at the Site indicated the presence of two underground storage tanks (USTs). A gasoline pump was observed mounted on a concrete pad in the central portion of the Site; however, it could not be determined whether a UST was attached to this pump. According to the property owner, one UST was decommissioned in place on the Site. A rectangular bunker containing what appear to be UST manifolds exists near the white AST with "2 fuel oil".
() Asbestos:	
(X) Piles:	Multiple piles were observed throughout the Site. Construction debris, topsoil, brick, concrete blocks, tree stumps, and gravel piles were observed along the northern site boundary. In addition, piles of asphalt millings were observed along the western site boundary in the central portion of the Site. Additional asphalt millings piles were noted in Area of Investigation No. 1 following investigation activities.
(X) Stained Soil:	Areas of various stained soil (generally suspected petroleum staining) were observed throughout the Site. The extent of the stained soil varied by location.

REMOVAL SITE INVESTIGATION

Physical Site Characteristics (Continued)

<u>Parameter</u>	<u>Quantities/Extent</u>
(X) Sheens:	A petroleum sheen was observed at the bottom of test pit TP-06 during August 2009 test-pitting activities. A sample of the material was collected for Total Petroleum Hydrocarbon (TPH) analysis. Analytical results revealed 4.65 milligrams per liter (mg/L) of TPH. During the installation of a piezometer (DD-01) within the drainage ditch located west of the Site, and during sediment sampling activities, petroleum sheens were observed along the drainage ditch and its confluence with Sumner Brook.
() Stressed Vegetation:	
(X) Landfill:	During site activities, evidence of former landfilling activities was observed on the Site. Site background information indicates that incinerator ash was buried throughout the Site as part of City of Middletown municipal landfill operations. Ash material was observed during test-pitting activities at a depth of approximately 1 to 16 feet below ground surface (bgs). In addition to ash material, various containers with waste product material were noted in one test pit (TP-02/04) excavated in August 2009. In addition, ash material and debris (glass, brick, metal, fabric, <i>etc.</i>) were noted in all five test pits excavated in August 2009.
(X) Population in Vicinity:	The Site is bordered to the north by River Road, railroad tracks, and the Connecticut River; to the east by Walnut Street and residential units; to the south by Route 9 and state-owned land; and to the west by Sumner Brook, a small drainage ditch, Route 9, and state-owned land. According to the EPA Geographic Information Systems (GIS) Center, 2,359 people reside within 0.5 miles of the Site.

REMOVAL SITE INVESTIGATION

Physical Site Characteristics (Continued)

<u>Parameter</u>	<u>Quantities/Extent</u>
(X) Wells:	The John S. Roth Well Field is located between 0.6 and 0.85 miles east of the Site. The John S. Roth Well Field is comprised of 10 overburden wells which provide drinking water to approximately 42,000 people within the City of Middletown. A file search conducted at the Middletown Water Department indicated that there are approximately two residences within 1.0 mile of the Site that are served by private drinking water supply wells. These two residences are located approximately 1.0 mile southeast of the Site.
(X) Drinking:	
(X) Monitoring:	During a 2000 EPA Removal Program Preliminary Assessment/ Site Investigation (PA/SI), eight groundwater monitoring wells (ERT-1 through ERT-8) were installed on the Site, to a maximum total depth of 25 feet bgs (screened interval at 10 to 15 feet bgs).
() Other:	

Physical Site Observations

The Site is approximately 10.2 acres, of which approximately 1.25 acres are occupied by the footprint of the two on-site buildings. The eastern portion of the property contains two buildings, Building No. 1 (located on the northeastern portion of the Site and approximately 35,600 square feet) and Building No. 2 (located on the southeastern portion of the Site and approximately 18,600 square feet), which the property owner currently leases out to several small businesses that utilize the space for light manufacturing, storage, and/or office space. Both on-site buildings have been modified and expanded in stages, creating numerous partitioned spaces that are linked through a maze of hallways and entrances. A discontinuous fence surrounds the Site, with openings in the northwest corner and along the western edge of the Site. The nearest residence is located east of Building No. 2. A parking area is located east of Building No. 1, across Walnut Street.

REMOVAL SITE INVESTIGATION

Field Sampling and Analysis					
<u>Matrix/Analytical</u> <u>Parameter</u>	Field Instrumentation (Maximum Readings *)				Other
Background Readings:	CGI (%LEL)/O ₂	RAD	PID	FID	
	0.0% / 20.9%	5-10 µR/hr	0 ppm	27 ppm	
Air (Ambient):					
Subsurface Soils:					
Surface Soils:	0.0% / 20.9%	5-10 µR/hr	0 ppm	N/A	
Water:					
Tanks:					
Drums (Salvage):	84% / 20.9%	N/A	809 ppm	N/A	
Vats:					
Lagoons:					
Spillage:					
Run Off:					
Piles:					
Sediments:					
Groundwater:	0% / 20.9%	N/A	0.5 ppm	6 ppm	
Other:					
Test Pitting (Ambient)	0.0% / 20.9%	8-10 µR/hr	677 ppm	N/A	
Test Pitting (Subsurface Soil)	4% / 20.9	8-10 µR/hr	2197 ppm	N/A	
Monitoring Well Headspace	72% / 12.4%	N/A	2 ppm	4,000 ppm	

*Note that the values provided are the maximum readings detected during Site Investigation activities. See Appendix E and K for the complete air monitoring results for all on-site operations.

µR/hr = microRoentgen per hour

N/A = not applicable

ppm = parts per million

% = percent

CGI = Combustible Gas Indicator

LEL = Lower Explosive Limit

O₂ = Oxygen

RAD = Radiation Meter

PID = Photoionization Detector

FID = Flame Ionization Detector

REMOVAL SITE INVESTIGATION

Field Quality Control Procedures

(X) SOP Followed

() Deviation From SOP

Comments: START followed the protocol outlined in the document entitled, *Removal Program Sampling and Analysis Plan (SAP) for the Marino Property Site, Middletown, Middlesex County, Connecticut*, dated May 2009, Revision I: August 2009.

Description of Sampling Conducted

On 11 and 12 May 2009, as part of the EPA Removal Program Preliminary Assessment/Site Investigation (PA/SI), START personnel collected eight groundwater samples from seven monitoring wells located on the Site. Analytical results of the groundwater sampling indicated the presence of volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), total metals and cyanide. Two substances [bis(2-ethylhexyl)phthalate and barium] were detected at concentrations exceeding CT DEP Groundwater Protection Criteria (GWPC).

On 23 and 24 June 2009, START personnel conducted a geophysical survey of the northwestern portion of the Site to determine areas for future test-pitting activities. EM-31 and Magnetometer data suggested the presence of many areas containing metal debris, and START identified 28 potential areas for test-pitting activities.

Between 25 August and 28 August 2009, as part of the EPA Removal Program PA/SI, START conducted surface and subsurface soil sampling. Samples were collected from an approximate 1.1-acre area located on the northwestern portion of the Site, identified as Area of Investigation No. 1. As part of this investigation, EPA and American Contractors, the Potentially Responsible Party (PRP)'s construction company working with EPA, excavated six test pits to a maximum depth of 16 feet within Area of Investigation No. 1. Groundwater was encountered between 12 and 16 feet bgs within each of the test pits. START collected 30 subsurface soil samples for polychlorinated biphenyl (PCB) and metals [X-Ray Fluorescence (XRF)] screening, and eight subsurface soil samples for VOC, SVOC, PCB, total metals (including mercury) and cyanide analyses at the EPA Office of Environmental Measurement and Evaluation (OEME) Laboratory.

Subsurface soil sample analytical results indicated detectable concentrations above state standards. Screening results of the subsurface soil samples indicated elevated concentrations (maximum concentrations in parentheses) of Aroclor-1260 (740 ppm), lead (2,000 ppm), and arsenic (13 ppm). EPA OEME Laboratory analytical results of subsurface soil samples indicated 20 VOCs, 23 SVOCs, two PCBs, 18 total metals, and cyanide at concentrations above detection limits.

START collected 27 surface soil samples at depths of less than 6 inches from Area of Investigation No. 1, located on the northwestern portion of the Site. Surface soil samples were screened for PCBs and metals (XRF) by EPA OEME personnel. Analytical results of the surface soil samples indicated elevated concentrations of Aroclor-1260, lead, and arsenic, with maximum concentrations of 100 parts per million (ppm), 1,600 ppm, and 13 ppm, respectively.

REMOVAL SITE INVESTIGATION

Description of Sampling Conducted (Concluded)

START also collected three product samples from three 5-gallon pails from within test pit TP-02/04. Analytical results indicated several detectable concentrations above CT DEP Remediation Standard Regulation (RSR) GB Pollutant Mobility Criteria (PMC) for soil. EPA OEME Laboratory analytical results indicated the presence of 21 VOCs, three SVOCs, one PCB, and 13 total metals.

For further information regarding sampling activities conducted at the Site, see the Narrative Chronology section of the Removal Program Preliminary Assessment/Site Investigation Report.

Analyses

Analytical Parameter	Media	Laboratory
(X) VOC	() AIR	(X) NERL
(X) PCB	(X) WATER	() CLP
() PESTICIDE	(X) SOIL	() PRIVATE
(X) METALS	(X) SOURCE	() SAS
(X) CYANIDE	() SEDIMENT	() SOW
(X) SVOC	() SOIL GAS	() FIELD
() TOXICITY		
() DIOXIN		
() ASBESTOS		
(X) OTHER: Total Petroleum Hydrocarbons		

Analytical results: See Appendix G – Analytical Data

Receptors

		<u>Comments</u>
(X) Drinking Water:	(X) Private:	A file search conducted at the Middletown Water Department indicated that there are approximately two residences located within 1.0 mile of the Site which are served by private drinking water supply wells. These two residences are located approximately 1.0 mile southeast of the Site.
	(X) Municipal:	The John S. Roth Well Field is located between 0.6 and 0.85 miles east of the Site, and is comprised of 10 overburden wells which provide drinking water to approximately 42,000 people within the City of Middletown.

REMOVAL SITE INVESTIGATION

Receptors (Concluded)

Comments

- (X) Groundwater:** On 11 and 12 May 2009, START personnel collected eight groundwater samples from seven monitoring wells located on the Site. Analytical results of the groundwater sampling indicated the presence of VOCs, SVOCs, metals and cyanide. None of the substances detected above laboratory detection limits exceeded State of Connecticut GA groundwater protection criteria standards.
- (X) Unrestricted Access:** The Site is surrounded by a discontinuous fence. According to the property owner, a closed-circuit camera system monitors the central and western portions of the Site. The interior and exterior portions of the Site are used by various tenants. Throughout field activities, a large number of vehicles were observed passing through the paved area located directly west of the two on-site buildings.
- (X) Population in Proximity:** According to the EPA GIS Center, 2,359 people reside within 0.5 miles of the Site.
- (X) Sensitive Ecosystem:** The Connecticut River is located approximately 400 feet north of the Site.
- () Other:**

Additional Procedures for Site Determination

- () Biological Evaluation** **() ATSDR**

To be determined by the Task Monitor.

REMOVAL SITE INVESTIGATION

Site Determination

Depending on further information, criteria that may be met by the site include 40 CFR 300.415 [b] [2], parts:

- i. Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances, pollutants or contaminants.
- ii. Actual or potential contamination of drinking water supplies or sensitive ecosystems.
- iii. Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers, that may pose a threat of release.
- iv. High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate.
- v. Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released.
- vi. Threat of fire or explosion.
- vii. The availability of other appropriate federal or state response mechanisms to respond to the release.
- viii. Other situations or factors that may pose threats to public health or welfare or the environment.

Report Generation

Originator:	Gerald Hornok	Date:	5 January 2010
Affiliation:	Weston Solutions, Inc. (START)	Telephone:	(978) 552-2112
TDD No.:	01-09-03-0004	Task No.:	0512

II. Narrative Chronology

Narrative Chronology

Site Description

The Marino Property Site (the Site) is located at 50 Walnut Street, in Middletown, Middlesex County, Connecticut (CT) [1]. The geographical coordinates of the site, as measured from its approximate center, are 41° 33' 23.1" north latitude and 72° 38' 25.6" west longitude (see Appendix A, Figure 1) [3; 4]. The property is identified by the City of Middletown (the City) Tax Assessor's Map Number (No.) 34, as Block No. 24-7, Lot No. 9 [2; 12; 52]. The Site is bordered to the north by River Road, railroad tracks, and the Connecticut River; to the east by Walnut Street and residential properties; to the south by Route 9 and state-owned land; and to the west by Sumner Brook, a small drainage ditch, Route 9, and state-owned land [12]. The Site is owned by RLO Properties Inc., % Mr. J.R. Marino [52]. Mrs. Tamba Marino is the president of American Contractors, LLC, which operates on the Site [12]. The Site measures approximately 10.2 acres, of which approximately 1.25 acres is occupied by the footprint of the two on-site buildings [52]. The eastern portion of the property contains two buildings, Building No. 1 (located on the northeastern portion of the Site and approximately 35,600 square feet) and Building No. 2 (located on the southeastern portion of the Site and approximately 18,600 square feet), which the property owner currently leases to several small businesses and private individuals that utilize the space for light manufacturing, storage, and/or office space. Both on-site buildings have been modified and expanded in stages, creating numerous partitioned spaces that are linked through a maze of hallways and entrances. A discontinuous fence surrounds the Site, with openings in the northwest corner and along the western edge of the Site. The nearest residence is located east of Building No. 2. A parking area is located east of the Building No. 1, east of Walnut Street (see Appendix A, Figure 2) [2].

Site History/Background

The Site was originally the location of OMO Manufacturing Company, a rubber and artificial leather factory that was built in the late 1800s. Prior to the 1930s, a 2- to 4-acre wetland area was located in the western portion of the Site. From the early 1930s to approximately 1955, the wetlands were used by the City as a municipal landfill (the City Landfill). According to Mr. JR Marino, the City Landfill accepted industrial waste from facilities located throughout the City. Waste oils, paints, and refuse from the on-site rubber manufacturing process were also allegedly disposed of west of Building No. 1. In 1955, during the construction of Route 9, the State of Connecticut altered the topography of the Site, including modifying the course of Sumner Brook and constructing a drainage ditch, located adjacent to (west of) the Site. Also in 1955, a portion of the City Landfill was relocated approximately 2 miles northwest of the Site. In 1968, the Site was purchased by Georgia Bonded Fibers. In 1969, the property was purchased by Hildebrand Industries. In the early 1970s, the Connecticut Development Commission obtained the rights to the Site through a foreclosure of Hildebrand Industries. In 1973, the Site was purchased by Mr. Salvatore J. Marino, who reportedly filled the wetland portion of the property with approximately 2 to 3 feet of soil of unknown origin [5; 7-10].

On 17 May 1983, Connecticut Department of Environmental Protection (CT DEP) Waste Engineering & Enforcement Division (WEED) received a general environmental complaint alleging that a pit had been excavated near the western portion of the Site and that approximately

200 to 300 55-gallon drums of chemicals were buried in the pit. The complaint also cited several companies for disposing of waste on the Site, including (alleged dates of disposal in parentheses): OMO Manufacturing (1800s to 1934), Middletown Rubber (1934 to 1959), Middletown Industries (1959 to 1963), and Hildebrand Industries (1963 to 1972). Chemicals allegedly disposed of on the Site include acetone, methyl ethyl ketone (MEK), naphthalene, and xylene. In 1972, Hildebrand Industries ceased operation on site, and known disposal of waste at the Site ended [5].

On 16 September 1983, CT DEP conducted an inspection of the Site to determine if evidence existed of previous on-site disposal activities. CT DEP observed site conditions and collected several samples, including two drum samples, two leachate samples, one paint sample, one sediment sample, and two surface water samples. CT DEP observed six empty 55-gallon drums and two 55-gallon drums containing an unknown liquid within the drainage ditch located west of the Site. CT DEP also observed an area in the northwestern portion of the Site containing discarded paint cans, paint brushes, and plaster containers [5].

From 22 November 1985 through 2 January 1986, Connecticut Test Borings, Inc., on behalf of Heynen Teale Engineers and as part of a hazardous waste site assessment, excavated 10 test borings and installed 10 groundwater monitoring wells on the Site. Depth to groundwater was recorded during the installation of monitoring wells, and ranged from 8.5 feet to 31.0 feet below ground surface (bgs). During test-pitting activities, 3 to 20 feet of fill, overlying miscellaneous refuse, sand and gravel, and silt and clay, was noted. As part of the hazardous waste site assessment, Heynen Teale Engineers collected six groundwater samples. Analytical results of groundwater samples indicated the presence of six volatile organic compounds (VOCs), as well as "other mineral spirit hydrocarbons" [6].

On 14 August 1990, CT DEP Site Remediation and Closure Division (SRCD) received an anonymous complaint alleging that a damaged drum, seeping a dark, thick liquid, and surrounding purplish-colored soil were uncovered during the removal of soils at the Site. The complainant also stated that a former employee of OMO Manufacturing Company witnessed the disposal of five to 10 chemical liquids at the Site on a weekly basis over a period of 20 to 30 years [7].

On 2 October 1990, in response to the 14 August 1990 complaint, CT DEP SRCD referred the Site to the U.S. Environmental Protection Agency (EPA) Response and Prevention Section for an investigation and potential removal of buried drums containing unknown chemical liquids [7].

In December 1990, in response to the referral from CT DEP SRCD, EPA and Roy F. Weston, Inc. (now known as Weston Solutions, Inc.), Technical Assistance Team (TAT), completed a Preliminary Assessment/Site Investigation (PA/SI) for the Site under the EPA Removal Program. On 31 October 1990, as part of the Removal Program PA/SI, EPA and TAT conducted a geophysical subsurface screening investigation to measure the inphase component of the subsurface magnetic field in order to detect large metallic objects. The geophysical subsurface screening investigation was conducted using a Geonics LTD EM-D non-contacting terrain conductivity meter (EM-31) in a 325-foot by 275-foot area in the northwestern portion of the Site. TAT reported that six large subsurface electromagnetic conductors (*i.e.*, metallic objects) were detected, and their locations were marked for incorporation into a designated area grid

system. Also on 31 October 1990, as part of the Removal Program PA/SI, EPA and TAT collected three surface soil samples from the Site, and collected one surface soil sample from the lower bank of the drainage ditch located west of the Site. On-site screening of the surface soil samples for heavy metals detected one metal (lead) at a concentration above “normal background”. Analytical results of the surface soil samples indicated the presence of methylene chloride and acetone in all four samples. Trichlorofluoroethane was also detected in one surface soil sample [7].

On 15 and 17 April 1991, as part of the Removal Program PA/SI, additional work was conducted by the EPA Emergency Planning and Response Branch (EPRB) and TAT. This work included the excavation of eight on-site test pits, conducted by National Oil Service on behalf of TAT. TAT described the excavated material as consisting of processed gravel and brownish-red sand and gravel. Several 55-gallon drums and metal 5-gallon pails were encountered during test-pitting activities. TAT collected six samples of various matrices (soil, solid products, and liquid products) during excavation of the eight test pits. Eleven VOCs, five base neutral acids (BNAs), one metal, and one polychlorinated biphenyl (PCB) were detected at concentrations above analytical detection limits [8].

On 26 August 1991, based on the results of the Removal Program PA/SI, EPA determined that a time-critical Removal Action at the Site was warranted. According to EPA, the major hazardous substances, pollutants, and/or contaminants that were released, or for which there was a threat of release, include the following substances in soil: Aroclor-1260, ethylbenzene, MEK, toluene, vinyl acetate, and xylenes (total). However, based on information available to the Weston Solutions, Inc., Superfund Technical Assessment and Response Team (START) at the time this 2009 PA/SI report was prepared, a Removal Action was not conducted following the completion of the PA/SI in the early 1990s [7; 8; 53].

On 8 September 1992, EPA entered the Site into the EPA Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) database (EPA Identification No. CTD062199369) [1].

On 5 May 1995, on behalf of EPA, the Camp, Dresser and McKee (CDM) Federal Programs Corporation Alternative Remedial Contracting Strategy (ARCS) completed a Site Inspection (SI) of the Site. As part of the SI, on 7 and 8 September 1994, CDM ARCS collected three groundwater samples from two locations in the northwest corner of the Site using a Geoprobe®. In addition, CDM ARCS collected seven sediment samples, including two background sediment samples from Sumner Brook, two sediment samples from the drainage ditch located west of the Site, and three sediment samples from two locations along Sumner Brook, downstream of the drainage ditch. Sediment samples were analyzed for VOCs, semivolatile organic compounds (SVOCs), pesticides, PCBs, and total metals. One VOC, 19 SVOCs, two pesticides, and 16 total metals were detected in ARCS sediment samples at concentrations three times the respective concentration of the two reference sediment samples (above reference criteria) [9].

In 1997, the City seized the property from the owner of the Site, Mr. Salvatore J. Marino, due to tax foreclosure; and RLO Properties Inc. (Mr. J.R. Marino) subsequently purchased the property [2].

In September 1999, at the request of CT DEP, EPA and START completed a second Removal Program PA/SI of the Site [10].

On 30 September 1999, after completion of the second Removal Program PA/SI of the Site, EPA determined that a Removal Action was not warranted at the time, in order to allow a Comprehensive Site Assessment and Hydrologic Study to be coordinated by the Pre-Remedial Programs of EPA and CT DEP. EPA reported that the hazardous substances, pollutants, and/or contaminants present at the Site included VOCs in buried drums/containers and Aroclor-1260, ethylbenzene, and methyl isobutyl ketone (MIBK) in on-site soil [10; 54].

Between 6 and 10 March 2000, on behalf of EPA Environmental Response Team/Response Engineering and Analytical Contract (ERT/REAC), an unnamed contractor installed eight groundwater monitoring wells on the Site. ERT/REAC reported that groundwater flow was in a northwesterly direction toward Sumner Brook and that depth to groundwater ranged from approximately 8 to 17 feet bgs. On 14 and 15 March 2000, ERT/REAC collected nine groundwater samples from the eight groundwater monitoring wells. Analytical results of the groundwater samples indicated the presence of seven VOCs and 15 metals at concentrations greater than three times the respective reference concentrations or exceeding the method detection limits (MDL) [11].

On 22 February 2007, as part of an EPA Site Reassessment (SR), EPA and START conducted an on-site reconnaissance. EPA and START inspected the two on-site buildings (Building Nos. 1 and 2), as well as sections of the exterior portion of the Site. The property owner, Mr. J.R. Marino, informed START that his business, American Contractors LLC, operates on the Site, and that the remaining space was being rented to various businesses and private citizens. It was observed that the western portion of the Site was being used for the storage of vehicles, miscellaneous construction debris, and equipment. A combined sewer line, as well as piles of fill material, topsoil, bricks, timber, and steel, was observed in the northwestern portion of the Site. Vehicles, trailers, and a former diner were observed in the central-western portion of the Site. The southern portion of the Site was observed to contain drums, box and tanker trailers, a pile of tires, a bus, and aboveground storage tanks (ASTs) used by Mulch Seal, a company operating on site (see Appendix B, *Trip Report for Marino Property, Site Reassessment, Middletown, Connecticut, dated 6 April 2007*) [13].

During the February 2007 on-site reconnaissance, three monitoring wells (ERT-1, ERT-2, and ERT-3) were observed along the northern site boundary among piles of brick, timber, topsoil, and fill material. In the central portion of the Site, START observed monitoring well ERT-7, which was surrounded by large concrete pipe structures. East of monitoring well ERT-7, across a dirt access roadway, START observed monitoring well ERT-8, which was surrounded by a concrete barrier, a pile of steel beams, and a pile of fill material. Monitoring well ERT-4 was observed south of monitoring well ERT-7, among several abandoned vehicles. Monitoring well ERT-5 was observed south of monitoring well ERT-4, adjacent to a trailer-mounted AST and surrounded by concrete barriers. Monitoring well ERT-6 was observed in the eastern portion of the property, in a parking area east of Walnut Street. South of monitoring well ERT-8, START observed construction equipment and trucks, a portable AST, and a gasoline pump mounted on a concrete slab. START could not determine whether the AST contained liquid or whether the gas pump was operational. START observed two cylinders of unknown contents beneath a trailer

located south of monitoring well ERT-4. West of the trailers, START observed approximately 300 tires, a 55-gallon steel drum (contents unknown), and several 5-gallon buckets (contents unknown). West of the drum, START observed a steep embankment leading to a drainage ditch. The drainage ditch begins along the southwestern portion of the Site, where a pipe discharges to a sump, which in turn discharges to the drainage ditch flowing along Route 9 and the site. The drainage ditch extends north-northwest to Sumner Brook. To the southeast of the tire pile, START observed three trailers, a small camper, 18 200-gallon ASTs, and a bus. The ASTs appeared to be empty; and according to the property owner, they belonged to Mulch Seal. Within the bus, START observed five 30-gallon plastic containers labeled "Plasdone K29/32", five 5-gallon buckets of unknown material, and miscellaneous construction debris. South of the bus, adjacent to monitoring well ERT-5, START observed a stainless steel AST mounted on a flatbed construction trailer. According to the property owner, the AST had not been used by its owner, Mulch Seal [13].

Site Activities

21 April 2009 - Pre-Sampling Site Walk

On 21 April 2009, EPA Region I Removal Program On-Scene Coordinator (OSC) Janis Tsang, EPA Region I Site Assessment Manager (SAM) Gerardo Millán-Ramos, EPA ERT representative Alan Humphrey, and START members John F. Kelly and Gerald Hornok mobilized to the Site to conduct a non-intrusive Site Walk and to meet with the property owner's representative, Mr. JR Marino. According to Mr. JR Marino, the property is owned by RLO Properties, Inc. [2].

Upon arrival at the Site, START personnel established a support zone and calibrated air monitoring instruments, including a combination photoionization detector (PID)/flame ionization detector (FID) meter (TVA 1000B); a combined carbon monoxide (CO), VOC, hydrogen sulfide (H₂S), lower explosive limit (LEL), and oxygen (O₂) meter (MultiRAE Plus); and a radiation meter (MicroR meter). Background levels were recorded in the site-specific Health and Safety Plan (HASP) as follows: TVA 1000B (FID = 0 units, PID = 0.5 units); MultiRAE Plus [CO = 0.0 parts per million (ppm), VOC = 0.0 units, H₂S = 0.0 ppm, LEL = 0 percent (%), O₂ = 20.9 %]; and MicroR meter [10-12 microRoentgens per hour (μR/hr)]. START member Kelly conducted a safety and operations briefing, and on-site personnel reviewed and signed the site-specific HASP. The site-specific HASP was prepared as a separate document, entitled *Weston Solutions, Inc, Region I START Site Health and Safety Plan (HASP) for the Marino Property Site, 50 Walnut Street, Middletown, Middlesex County, Connecticut*, dated 20 April 2009. All field activities were conducted in accordance with the specifications in the site HASP. Weather conditions were as follows: overcast, temperature in the mid-40s to low 50s degrees Fahrenheit (°F), a slight breeze from the north, with rain in the afternoon [2; 18; 19].

OSC Tsang and SAM Millán-Ramos met with Mr. JR Marino to discuss the history of the Site and to explain the involvement of EPA's Superfund Removal and Site Assessment Programs. Mr. JR Marino discussed former uses of the property, which included the operation of a rubber manufacturing facility, OMO Manufacturing, and a landfill and waste incinerator ash disposal area operated by the City. According to Mr. JR Marino, more recent uses of the property included light manufacturing and storage by numerous tenants occupying the on-site buildings.

EPA personnel explained the Superfund program, including the role of the Removal Program and Site Assessment Program, and determination of a potentially responsible party (PRP) under the Superfund program. EPA further discussed the known environmental investigations which had been previously conducted by the State of Connecticut and EPA and the proposed site activities to be conducted during this Pre-Sampling Site Walk. EPA provided Mr. JR Marino with copies of reports and documents generated to-date for his records, including previous EPA Removal and Site Assessment Programs documents. EPA discussed proposed future work to be conducted at the Site under the EPA programs, including a tentative geophysical survey, on-site monitoring well sampling, on-site test pitting, on-site soil sampling, drum/container sampling, and removal of potential on-site contaminants; and the potential for off-site sampling of sediment and residential wells. Mr. JR Marino and EPA personnel also discussed conducting additional work to assess the on-site subsurface contamination levels. In addition, the possibility of moving directly to an EPA Removal Program Removal Action was also discussed, since contamination had previously been found by EPA during a 1991 Test Pitting Investigation. According to Mr. JR Marino, subsurface conditions and levels of contamination were not likely to have changed since 1991 [2].

Mr. JR Marino, EPA, and START personnel conducted a site walk of the exterior portions of the Site, noting eight on-site monitoring wells; numerous plies of construction materials and supplies; concrete, brick, asphalt milling, and soil piles; scrap metal; automobiles, trucks, and trailers; and other miscellaneous objects (including a former diner on wooden blocks, tree trunks, *etc.*) located on the Site. EPA requested that Mr. JR Marino clear or relocate the construction company supplies, materials, and equipment from an area located along the northwestern section of the property to allow for a geophysical survey to be conducted. EPA and START personnel delineated an approximate 1-acre area (the tentative area for the geophysical survey to be conducted) for Mr. JR Marino to clear of debris and materials. EPA and START personnel noted that the exterior portion of the Site generally remained similar to the description noted during the 2007 EPA Site Assessment SR Reconnaissance conducted by START and EPA on 22 February 2007 [2; 12].

OSC Tsang and START personnel, accompanied by site representatives [Mr. JR Marino, Mrs. Tamba Marino, and Mr. Mike Armino (American Contractors worker)], continued the site walk within the interior of the on-site buildings. It was noted that numerous tenants occupied the facility, and a variety of operations are conducted within the buildings, including woodworking/cabinetmaking, automobile repair and body work services, construction equipment repairs, office work, meeting space (Motorcycle Club), and storage of various types of materials (see Appendix C, Marino Property Site: Tenant List). EPA and START personnel noted that the interior portions of the Site generally remained similar to the description noted during the EPA Site Assessment Program SR Reconnaissance conducted by START and EPA on 22 February 2007. START personnel noted that general housekeeping activities (storage, labeling, and containment of containers) had improved since the 2007 reconnaissance. START personnel photodocumented site conditions (see Appendix D, Photodocumentation Log) [2].

11 through 14 May, 19 May, 4 June, and 11 June 2009 - Groundwater Sampling Activities

On 11 May 2009, START members Kelly, Hornok, and Tim Benton mobilized to the Site to conduct non-intrusive sampling of existing on-site groundwater monitoring wells, referred to as the ERT wells; to conduct a groundwater elevation survey; and to photodocument site conditions [2; 13; 14].

Upon arrival, START personnel established a support zone and calibrated air monitoring instruments, including a TVA 1000B; a MultiRAE Plus; and a MicroR meter. Background levels were recorded in the site-specific HASP as follows: TVA 1000B (FID = 27 units; PID = 0 units); MultiRAE Plus (CO = 0.0 ppm, VOC = 0.0 units, H₂S = 0.0 ppm, LEL = 0%, O₂ = 20.9%); and MicroR meter (5-8 µR/hr). START personnel conducted calibration checks of the YSI 650 Water Quality Parameter meters and LaMotte 2020 Turbidity meters, in accordance with START standard operating procedures (SOPs) and manufacturing specifications [2; 13; 14; 18; 19].

START member Kelly conducted a safety and operations briefing, and on-site personnel reviewed and signed the site-specific HASP. The site-specific HASP was prepared as a separate document, entitled *Weston Solutions, Inc, Region I START Site Health and Safety Plan (HASP) for the Marino Property Site, 50 Walnut Street, Middletown, Middlesex County, Connecticut*, revision dated May 2009. All field activities were conducted in accordance with the specifications in the site HASP. Weather conditions were as follows: clear skies, temperature in the mid-50s and increasing to the mid-60s °F, and slight winds from the west and northwest [2].

START member Kelly spoke with Mr. JR Marino regarding the temporary storage location of a 55-gallon steel, investigation-derived waste (IDW) drum, which would contain purge water from the on-site wells. Mr. JR Marino agreed to allow START to store the IDW drum outside Building No. 1, adjacent to the entrance to the American Contractors LLC (American Contractors) equipment garage [2].

The following activities were conducted in modified Level D personal protective equipment (PPE). START personnel opened the eight on-site ERT monitoring wells (ERT-1 through ERT-8) and conducted initial headspace screening and water level and well depth readings at each well. Initial air monitoring headspace screenings within the wellhead indicated elevated readings for VOCs, utilizing both PID and FID meters, as well as elevated LEL readings in selected wells on the property. START member Kelly contacted START Health and Safety Officer (HSO) Paul Callahan to discuss elevated reading within 6 to 12 inches of the wellheads and other conditions noted at the Site. START member Kelly received approval from the START HSO to continue well development and sampling in modified Level D with continuous air monitoring within the breathing zone (see Appendix E, Sample Descriptions Tables - Marino Property Site, Middletown, Connecticut – Tables 1 and 2) [2].

The following activities were conducted in modified Level D PPE. START personnel purged and collected groundwater samples ERT-1, ERT-3, and ERT-7/ERT-9 (field duplicate of ERT-7), utilizing low-flow groundwater sampling techniques. All sampling activities were performed in accordance with the site-specific Sampling and Analysis Plan (SAP) which was prepared as a separate document entitled, *Removal Program Sampling and Analysis Plan (SAP) for the Marino Property Site, Middletown, Middlesex County, Connecticut*, dated May 2009 [2; 13; 14].

START personnel completed sampling activities for the day and shipped samples via Federal Express to the EPA Office of Environmental Measurement and Evaluation (OEME) Laboratory, located in North Chelmsford Massachusetts, for VOC, SVOC, PCB, total metals (including mercury), and cyanide analyses. The chain-of-custody records for the Site groundwater samples collected on 11 and 12 May 2009 are included as Appendix F, and sample locations are illustrated in Appendix A, Figure 3 [2].

On 12 May 2009, EPA OSC Tsang and START members Kelly, Hornok, and Benton mobilized to the Site to continue conducting non-intrusive groundwater sampling of existing on-site monitoring wells and conducting a groundwater elevation survey [2; 13; 14].

Upon arrival, START personnel established a support zone and calibrated air monitoring instruments, including a TVA 1000B; MultiRAE Plus; and MicroR meter. Background levels were recorded in the site-specific HASP as follows: TVA 1000B (FID = 18 units); MultiRAE Plus (CO = 0.0 ppm, VOC = 0.0 units, H₂S = 0.0 ppm, LEL = 0%, O₂ = 20.9%; VOC = 0.5 units); and MicroR meter (5-8 µR/hr). START personnel also conducted calibration checks of the YSI 650 Water Quality Parameter meters and LaMotte 2020 Turbidity meters, in accordance with START SOPs and manufacturing specifications [2; 13; 14; 18; 19].

START member Kelly conducted a safety and operations briefing in accordance with the site-specific HASP. Weather conditions were as follows: clear to overcast skies, temperature in the mid-50s and increasing to the mid-60s °F, and variable winds from the west and northwest [2].

START personnel purged and collected groundwater samples ERT-2, ERT-4, ERT-5, ERT-6, and ERT-8, utilizing low-flow groundwater sampling techniques in modified Level D PPE. Sampling activities were performed in accordance with the site-specific SAP [2; 13; 14].

START personnel completed sampling activities for the day and shipped groundwater samples via Federal Express to EPA OEME Laboratory for VOC, SVOC, PCB, total metals (including mercury), and cyanide analyses. The chain-of-custody records for the Site groundwater samples collected 11 and 12 May 2009 are included as Appendix F, and sample locations are illustrated in Appendix A, Figure 3 [2].

On 13 May 2009, OSC Tsang and START members Kelly, Hornok, and Benton mobilized to the Site, to survey the elevation and location of each of the ERT monitoring wells; to install a water level survey data logger (Troll®, manufactured by In-Situ, Inc.) in each of the on-site monitoring wells; and to place a piezometer and water level survey data logger within the drainage ditch at the confluence of Sumner Brook [2].

Upon arrival, START personnel established a support zone and calibrated air monitoring instruments, including a MultiRAE Plus and MicroR meter. Background levels were recorded in the site-specific HASP as follows: MultiRAE Plus (CO = 0.0 ppm, VOC = 0.0 units, H₂S = 0.0 ppm, LEL = 0%, O₂ = 20.9%); and MicroR meter (5-8 µR/hr) [2; 18].

START member Kelly conducted a safety and operations briefing in accordance with the site-specific HASP. Weather conditions were as follows: clear skies, temperature in the mid-50s and increasing to the mid-70s °F, and winds gusting out of the west and southwest [2].

CT DEP member Michael McDaniel arrived on site and held discussions with OSC Tsang regarding the Site and previous activities conducted by CT DEP. START member Kelly conducted a safety and operations briefing with Mr. McDaniel in accordance with the site-specific HASP [2].

The following activities were conducted in modified Level D PPE. START personnel installed a piezometer (DD-01) in the center of the drainage ditch, approximately 35 feet upstream of the confluence of Sumner Brook. START personnel conducted an elevation survey of ERT monitoring wells ERT-1 through ERT-8 and Piezometer DD-01 utilizing a survey transit. START personnel set up and installed a Troll® data logger in monitoring wells ERT-1, ERT-3 through ERT-8, and piezometer DD-01 in accordance with the manufacturer's protocols. Per OSC Tsang, no Troll® data logger was installed in ERT-2 due to the well's proximity to ERT-1 and ERT-3. START personnel conducted data logging checks of all installed Troll® data loggers to ensure they were operational and then departed the Site [2].

On 14 May 2009, START members Kelly, Hornok, and Benton mobilized to the Site to collect Global Positioning System (GPS) measurements; to verify data logging activities; and to download electronic water-level data from the Troll® data loggers installed in each of the on-site monitoring wells, with the exception of monitoring well ERT-2, and the piezometer placed within the drainage ditch [2; 17].

Upon arrival, START members Kelly, Hornok, and Benton established a support zone and calibrated air monitoring instruments including a MultiRAE Plus. Background levels recorded in the site-specific HASP were as follows: CO = 0.0 ppm, VOC = 0.0 units, H₂S = 0.0 ppm, LEL = 0%, and O₂ = 20.9% [2; 18].

START member Kelly conducted a safety and operations briefing in accordance with the site-specific HASP. Weather conditions were as follows: overcast skies, temperature in the high-50s to low-60s °F, a slight breeze out of the north, and misting [2].

START Members Kelly and Hornok verified electronic water level data and downloaded the available electronic data from each Troll® data logger, while START member Benton conducted GPS measurements before departing the Site. Site activities were conducted in modified Level D PPE [2].

On 19 May 2009, START member Benton mobilized to the Site to download electronic water-level data from the Troll® data loggers installed in the on-site monitoring wells and the piezometer placed within the drainage ditch. Weather conditions were as follows: clear skies, temperature in the mid-60s to 70s °F, and calm winds. Upon arrival, START member Benton established a support zone and calibrated air monitoring instruments, including a MultiRAE Plus. Background levels were recorded in the site-specific HASP as follows: CO = 0.0 ppm, VOC = 0.0 units, H₂S = 0.0 ppm, LEL = 0%, O₂ = 20.9%. In modified Level D PPE, START member Benton downloaded the electronic data and departed the Site [2; 18].

On 4 June 2009, START member Kelly mobilized to the Site to download electronic water-level data from the Troll® data loggers installed in the on-site monitoring wells and the piezometer placed within the drainage ditch. Weather conditions were as follows: clear skies, temperature in the mid-60s and increasing to the mid-70s °F, and slight winds from the northeast. Upon arrival, START member Kelly established a support zone and calibrated air monitoring instruments, including a MultiRAE Plus. Background levels were recorded in the site-specific HASP as follows: CO = 0.0 ppm, VOC = 0.0 units, H₂S = 0.0 ppm, LEL = 0%; O₂ = 20.9%. In modified Level D PPE, START member Kelly downloaded the electronic data and departed the Site [2; 18].

On 11 June 2009, START members Kelly and Callahan mobilized to the Site to download electronic water-level data from the Troll® data loggers installed in the on-site monitoring wells and the piezometer placed within the drainage ditch. Weather conditions were as follows: overcast skies, temperature in the low to mid-60s °F, calm, slight winds out of northwest, and misting. Upon arriving at the Site, START members Kelly and Callahan established a support zone and calibrated air monitoring instruments, including a MultiRAE Plus. Background levels were recorded in the site-specific HASP as follows: CO = 0.0 ppm, VOC = 0.0 units, H₂S = 0.0 ppm, LEL = 0%, O₂ = 20.9%. START member Kelly conducted a safety and operations briefing and on-site personnel reviewed and signed the site-specific HASP [2; 18].

In modified Level D PPE, START members Kelly and Callahan downloaded the electronic data and removed the Trolls® from each of the seven on-site monitoring wells and from the piezometer placed within the drainage ditch, and departed the Site [2].

Analytical data for groundwater sampling are included in Appendix G, Analytical Data - U.S. Environmental Protection Agency, Office of Environmental Measurement and Evaluation, Laboratory Results. Summary tables of the analytical data were prepared and are included in Appendix H, Summary of U.S. Environmental Protection Agency, Office of Environmental Measurement and Evaluation, Laboratory Results.

Groundwater survey data were plotted, and the data indicated that groundwater flow direction is to the west-northwest, as illustrated in Appendix A, Figure 4 (see Appendix A, Figure 4 and Appendix I, Groundwater Elevation Survey Data – Marino Property Site, Middletown, Connecticut).

23 and 24 June 2009 - Geophysical Surveys

On 23 June 2009, OSC Tsang and START members Hornok, George Mavris, and Carolyn Imbres mobilized to the Site to establish a 5- and a 10-square-foot (ft²) grid over the area of investigation for the non-intrusive geophysical surveys. Upon arrival, START members established a support zone and calibrated air monitoring instruments, including a MultiRAE Plus. Background levels were recorded in the site-specific HASP as follows: CO = 0.0 ppm, VOC = 0.0 units, H₂S = 0.0 ppm, LEL = 0%, O₂ = 20.9%. START members Mavris and Imbres also conducted geophysical instrument calibration checks in accordance with START and manufacturer's specifications [2; 18].

START member Hornok conducted a safety and operations briefing, and on-site personnel reviewed and signed the site-specific HASP. Weather conditions were as follows: clear skies, temperature in the mid-60s and increasing to the mid-70s °F, and slight winds from the northeast [2].

In modified Level D PPE, START established a grid system consisting of 5- by 5-foot (ft) squares (grids) on the Site using a surveyor's transit and tape measures. One baseline of the grid system was established in a northeast-southwest direction (N35° east), along the eastern side of the Site, and extended from 0 feet to 80 feet southeast of the Site. Each 5-ft interval along this baseline was marked using wooden stakes, pin flags, or spray paint. The baseline was labeled as Line 0 (L0), and the 5-ft points along the baseline were labeled as Points 0 (P0) through P80. A second baseline was established perpendicular to the first baseline (L0) and extended northwestward 270 feet. Fifty-six additional northeast-southwest lines (L1 through L56) were established across the Site, and extended from 0 to 200 feet to the southwest. The differences in the lengths of these lines were a result of the tree line to the west. Each 5-ft interval was also marked along these lines using wooden stakes, pin flags, or spray paint and followed the same labeling nomenclature as before. Following establishment of the grid, START member Hornok departed the Site [2].

START members Mavris and Imbres initiated a geophysical survey using an EM-31 Geonics Limited non-contacting terrain conductivity meter (EM-31) over the entire grid system in the investigation area, beginning on Line L0 and proceeding southeast from Point P0 to P80, stopping at each 5-ft grid node and recording both conductivity and in-phase measurements. The instrument was rotated 90° at points where either elevated positive or negative readings were noted to check for lateral inhomogeneities. Any metal debris observed on the surface of the Site that could potentially interfere with the instrument was moved; however, some larger pieces of metal debris could not be moved. The survey then proceeded to the northwest along Line L1 from Point P85 to P0, again stopping at each 5-ft grid node and recording both conductivity and in-phase measurements, and rotating the instrument 90° at points where either elevated positive or negative readings were noted. This procedure was continued for Lines L2 through L56, covering all the points on each line. The grid system encompassed an area of approximately 44,250 ft² (approximately 1 acre), and conductivity and in-phase readings were recorded at approximately 1,650 points during the surveys [2].

On 24 June 2009, OSC Tsang and START members Mavris and Imbres mobilized to the Site to complete the EM-31 survey and to conduct a magnetometer survey using a Geometrics Proton Precession Magnetometer (G-856) [magnetometer]. Upon arrival, START members Mavris and Imbres established a support zone and calibrated air monitoring instruments, including a MultiRAE Plus. Background levels were recorded in the site-specific HASP as follows: CO = 0.0 ppm, VOC = 0.0 units, H₂S = 0.0 ppm, LEL = 0%, O₂ = 20.9%. START members Mavris and Imbres also conducted geophysical instrument calibration checks in accordance with START and manufacturer's specifications [2].

START member Mavris conducted a safety and operations briefing in accordance with the site-specific HASP. Weather conditions were as follows: overcast skies, temperature in the mid- to high-60s °F, calm, and humid [2].

START members completed the EM-31 survey initiated on 23 June 2009 and proceeded to conduct the magnetometer survey. The magnetometer survey was conducted over the grid system at 10-ft intervals, beginning on Line L0 and proceeding southeast from Point P0 to P80, stopping at each 10-ft grid node and recording a reading. A second reading was recorded at select points where there were either elevated positive or negative magnetometer readings. The survey then proceeded to the northwest along Line L2 from Point P200 to P0, again stopping at each 10-ft grid node and recording a reading. This procedure was continued for all even-numbered lines (L4, L6, L8.....L56), covering all points at 10-ft intervals along the entire line. Magnetometer readings were recorded from approximately 418 points during the surveys [2].

Following field activities, START members Mavris and Imbres processed the geophysical data and prepared a START Memorandum to the Site File, entitled *Geophysical Surveys at the Marino Property Site, Middletown, Connecticut*, dated 7 August 2009 (see Appendix J, *START Memorandum to the Site File, Geophysical Surveys at the Marino Property Site, Middletown, Connecticut*, dated 7 August 2009).

The investigation identified geophysical anomalies which may be indicative of buried metallic debris. Several anomalies were identified during the EM-31 and magnetometer surveys throughout the study area, with the most significant anomalies identified using the in-phase and magnetometer data. The high positive conductivity anomaly occupying the center of the Site may be indicative of a disturbed area, such as a landfill. Since the entire area where the geophysical survey was conducted has allegedly been used as a landfill, and surrounding areas have been disturbed during previous road construction and other activities, the elevated conductivity readings are not unexpected. These elevated readings are most likely indicative of disturbed soil, which has a higher porosity than non-disturbed soil, with subsequently higher water content, and therefore higher conductivity values. The in-phase readings are more indicative of buried metal than the conductivity readings.

The memorandum concluded that the presence of subsurface metallic debris cannot be ruled out without further investigations, such as test pitting, and removal of any metallic debris found within these areas of interest. The START memorandum suggested test pit locations to identify any metallic debris in the subsurface; and recommended that a phased approach be used to investigate the anomalies identified during this survey, beginning test-pitting operations at the more pronounced anomalies first, then proceeding to the lesser pronounced anomalies.

25 through 28 August 2009 - Test Pitting Phase I

On 25 August 2009, OSC Tsang, EPA ERT representative Humphrey, and START members Kelly, Hornok, and Mavris mobilized to the Site to conduct ambient air monitoring, surface and subsurface soil sampling, container/drum sampling, and documenting/photodocumenting of site activities and conditions. Additional personnel on site to conduct test-pitting operations under the direction of EPA included Mr. JR Marino (RLO Properties, Inc./American Contractors representative), Mrs. Marino (American Contractors president), Mr. Preston Marino (American Contractors technician/laborer), Mr. Vic Casteluano (American Contractors excavator operator/laborer), Mr. Mike Armino (American Contractors representative), Mr. James (Rick) Lardie (Field Safety Corp. – American Contractors’ representative; and American Contractors

technician/laborer), and Mr. Michael Ziskin (Field Safety Corp. - American Contractors' representative acting as HSO for American Contractors) [2].

Weather conditions on Site on 25 August 2009 were as follows: clear skies, sunny, high humidity, temperature in the mid-70s and increasing to the mid-80s °F, and slight winds from the north-northwest [2].

OSC Tsang (EPA On-Site HSO) discussed and reviewed emergency evacuation procedures for tenants with Mr. JR Marino and Mrs. Tamba Marino (RLO Properties, Inc. and American Contractors representatives), including the possibility of an emergency event that might require the Site to be closed and tenants evacuated. Mr. JR Marino took responsibility for notifying and evacuating the tenants in the building, if needed. Mr. JR Marino said that either Mrs. Marino or Mr. Armino would notify and direct tenants in case of emergency [2].

OSC Tsang, START member Kelly, and American Contractors representative Ziskin discussed and agreed to the delineation of work zones based on Site conditions (including wind direction, available work space, proximity to other Site features, work zone requirements, anticipated contaminants, and anticipated contaminant levels). OSC Tsang, EPA ERT representative Humphrey, START member Kelly, and American Contractors representative Ziskin discussed and agreed to the location and requirements for personnel and equipment decontamination based on Site conditions (including wind direction, available work space, proximity to other Site features, work zone requirements, anticipated contaminants, and anticipated contaminant levels) [2].

START personnel established and delineated the exclusion zone (EZ), contamination reduction zone (CRZ), and support zone. American Contractors personnel established heavy equipment and a personnel decontamination line per EPA HSO requirements. START personnel calibrated air monitoring instruments, including combined VOC/H₂S/LEL/CO/O₂ meters (Ibrid MX6 and AreaRAEs); and a MicroR meter. Background levels were recorded in the site-specific HASP as follows: Ibrid No. 1 (CO = 0.0 ppm, VOC = 0.8 units, H₂S = 0.0 ppm, LEL = 0%, O₂ = 20.9%); Ibrid No. 2 (CO = 0.0 ppm, VOC = 0.1 units, H₂S = 0.0 ppm, LEL = 0%, O₂ = 20.9%); AreaRAE Unit 5 (CO = 1.9 ppm, VOC = 0.0 units, H₂S = 0.0 ppm, LEL = 0%, O₂ = 20.9%); AreaRAE Unit 6 (CO = 0.6 ppm, VOC = 0.0 units, H₂S = 0.0 ppm, LEL = 0%, O₂ = 20.9%); and MicroR meter (8-10 µR/hr) [2; 18].

START personnel established two AreaRAE base stations. One station (AreaRAE Unit 6) was established to the east of the EZ, along the west side of Building No. 1, at a height of approximately 5 feet above ground surface. The second station (AreaRAE Unit 5) was established to the southeast of the EZ, on a concrete barrier, approximately 4 ft above ground surface. Continuous ambient air monitoring was conducted at the two AreaRAE base stations while excavation activities were being conducted on site (see Appendix A, Figure 5) [2].

OSC Tsang conducted a safety and operations briefing with EPA, American Contractors, and START personnel. On-site personnel reviewed and signed the EPA site-specific HASP. The site-specific HASP was prepared as a separate document entitled, *EPA Region I Site Health and Safety Plan for the Marino Property Site, Middletown, Middlesex County, Connecticut*, dated August 2009 [2].

American Contractors personnel, under the direction of EPA personnel, conducted test-pitting operations utilizing a Caterpillar (CAT) 320 excavator. START personnel, under the direction of EPA personnel, collected soil and container samples from each of the test pits. Decontamination activities conducted in the CRZ were conducted in Level C PPE. Equipment decontamination and others activities conducted within the EZ were conducted in Level B PPE [2].

Excavation activities were conducted with the presumption that the top 6 to 12 inches of surface materials was clean/free of contaminants. American Contractors personnel initiated test-pitting operations by scraping off the top 6 to 12 inches of surface materials and separating and placing the material on polyethylene sheeting. This material would be placed back on the surface (top) of the test pit following completion of the excavation. Below 6 to 12 inches, excavated materials were sampled as deemed appropriate by OSC Tsang and were placed on separate polyethylene sheeting, isolated from the surface material, for further examination, and backfilling upon completion of the test pit excavation. All test-pitting operations would be conducted in this manner for the remainder of site operations. American Contractors completed test pit TP-09 to a depth of 16 feet (see Appendix A, Figure 6). Materials at the base of the test pit were moist but not saturated. START collected one sample from a 16-foot depth within the test pit for VOC, SVOC, PCB, total metals (including mercury), and cyanide analyses. Sample material was collected from the center of the excavated material within the bucket prior to it being placed on the polyethylene sheeting. START noted the types of waste materials excavated, and the air monitoring reading within the excavation and in the vicinity surrounding the test pit. Material generally consisted of incinerator waste, with brick, glass, and metal debris (see Appendix E, Table 3) [2].

All sampling activities were performed in accordance with the site-specific SAP which was prepared as a separate document entitled, *Removal Program Sampling and Analysis Plan (SAP) for the Marino Property Site, Middletown, Middlesex County, Connecticut*, dated May 2009, *Revision I: August 2009* [2; 15].

Following completion of the test pit TP-09 excavation, OSC Tsang agreed to allow American Contractors to complete excavator bucket decontamination over the excavation instead of over a separate centralized decontamination pad. This decision was based on discussions with American Contractors personnel, ERT, and START personnel. American Contractors personnel backfilled the test pit and conducted equipment (excavator bucket) decontamination over the excavation hole. The presumably clean top 6 to 12 inches of surface materials were placed back on top of the test pit, and the polyethylene sheeting was disposed of in accordance with EPA protocols. This decontamination procedure was used for the duration of test-pitting operations (with the exception of TP-02/04). START, EPA, and American Contractors personnel conducted personnel decontamination, staged the heavy equipment inside the EZ, and secured the Site for the night. START personnel retrieved and downloaded AeraRAE data-loggers. START, EPA, and American Contractors personnel departed Site [2].

A review of the AreaRAE air monitoring data indicated that no significant levels above background were recorded for CO, VOC, H₂S, O₂, or LEL on AreaRAE Unit 6, established to the east, or AreaRAE Unit 5, established to the southeast of the EZ (see Appendix K, AreaRAE Air Monitoring – Marino Property Site, Middletown, Connecticut) [2].

On 26 August 2009, OSC Tsang, EPA ERT representative Humphrey, and START members Kelly, Hornok, and Mavris mobilized to the Site to continue ambient air monitoring, test pit monitoring, surface and subsurface soil sampling, container/drum sampling, and documenting/photodocumenting of site activities and conditions. Additional personnel on site included Mr. JR Marino, Mrs. Tamba Marino, Mr. Preston Marino, Mr. Casteluano, Mr. Armino, Mr. Lardie, and Mr. Ziskin [2].

Weather conditions were as follows: clear skies, sunny, high humidity, temperature in the mid-70s and increasing to the mid-80s °F, and slight winds from the northwest [2].

START and American Contractors personnel re-established the heavy equipment and personnel decontamination line per EPA HSO requirements. START personnel calibrated air monitoring instruments, including combined VOC/H₂S/LEL/CO/O₂ meters (Ibrid MX6 and AreaRAEs); and a MicroR meter. Background levels were recorded in the site-specific HASP as follows: Ibrid No 1 (CO = 0.0 ppm, VOC = 0.8 units, H₂S = 0.0 ppm, LEL = 0%, O₂ = 20.9%); Ibrid No. 2 (CO = 0.0 ppm, VOC = 0.1 units, H₂S = 0.0 ppm, LEL = 0%, O₂ = 20.9%); AreaRAE Unit 5 (CO = 1.0 ppm, VOC = 0.0 units, H₂S = 0.0 ppm, LEL = 0%, O₂ = 20.9%); AreaRAE Unit 6 (CO = 0.1 ppm, VOC = 0.0 units, H₂S = 0.0 ppm, LEL = 0%, O₂ = 20.9%); and MicroR meter (8-10 µR/hr) [2; 18].

START personnel re-established the two AreaRAE base stations previously established for continuous ambient air monitoring while excavation activities were being conducted on site [2].

OSC Tsang conducted a safety and operations briefing with EPA, American Contractors, and START personnel [2].

American Contractors personnel, under the direction of EPA personnel, continued test-pitting operations utilizing a CAT 320 excavator. START personnel, under the direction of EPA personnel, collected soil and container samples from each of the test pits. Decontamination activities conducted in the CRZ were conducted in Level C PPE. Equipment decontamination and others activities conducted within the EZ were conducted in Level B PPE [2].

American Contractors representative Ziskin requested that EPA consider a change in PPE requirements, during the middle of the day, to allow use of Tyvek instead of Sarenex coveralls due to high heat and humidity. OSC Tsang consulted with off-site EPA and START resources (EPA HSO Tony Honnellio and START HSO Callahan), but determined the PPE requirements would remain as outlined and agreed to by all parties in the site-specific HASP [2].

American Contractors initiated test-pitting operations and completed test pit TP-05/10 to a depth of 16 feet. Materials at the base of the test pit were saturated, and groundwater was percolating into the excavation. START collected one soil sample from a 16-foot depth for VOC, SVOC, PCB, total metals (including mercury), and cyanide analyses; and seven samples for PCB and metals [by X-Ray Fluorescence (XRF)] screening analyses at various depths within the test pit. START noted the types of waste materials excavated and the elevated air monitoring readings within the excavation and in the vicinity surrounding the test pit. Material generally consisted of

clay, silt, sand and ash material, with metal, glass, cans, plastic bags, ceramic, and wood debris; an empty crushed pail was also noted in the debris (see Appendix E, Table 3) [2].

Following completion of the excavation, American Contractors personnel backfilled the test pit trench and conducted equipment (excavator bucket) decontamination. START, EPA, and American Contractors personnel conducted personnel decontamination, staged the heavy equipment inside the EZ, and secured the Site for the night. START personnel retrieved and downloaded AreaRAE data-loggers (see Appendix K – AreaRAE Air Monitoring Summary, Marino Property Site, Middletown, Connecticut) [2].

OSC Tsang held a daily debriefing and outlined the plan for the following work period, scheduled to begin at 0600 hours on 27 August 2009. START, EPA, and American Contractors personnel departed the Site [2].

A review of the AreaRAE air monitoring data indicated that no significant levels above background were recorded for CO, VOC, H₂S, O₂, or LEL on AreaRAE Unit 6, established to the east, or AreaRAE Unit 5, established to the southeast of the EZ [2].

On 27 August 2009, OSC Tsang, EPA ERT representative Humphrey, and START members Kelly, Hornok, and Mavris mobilized to the Site to continue ambient air monitoring, test pit monitoring, surface and subsurface soil sampling, container/drum sampling, and documenting/photodocumenting of site activities and conditions. Additional personnel on site included Mr. JR Marino, Mrs. Tamba Marino, Mr. Preston Marino, Mr. Casteluano, Mr. Armino, Mr. Lardie, and Mr. Ziskin [2].

Weather conditions were as follows: clear skies, sunny, moderate humidity, temperature in the 60s and climbing to the low-80s °F, and slight winds from the north [2].

START personnel re-established the two AreaRAE base stations previously established for continuous ambient air monitoring while excavation activities were being conducted on site [2].

START and American Contractors personnel re-established the heavy equipment and personnel decontamination line per EPA HSO requirements. START personnel calibrated air monitoring instruments, including combined VOC/H₂S/LEL/CO/O₂ meters (Ibrid MX6 and AreaRAEs); and a MicroR meter. Background levels were recorded in the site-specific HASP as follows: Ibrid No. 1 (CO = 0.0 ppm, VOC = 0.8 units, H₂S = 0.0 ppm, LEL = 0%, O₂ = 20.9%); Ibrid No. 2 (CO = 0.0 ppm, VOC = 0.1 units, H₂S = 0.0 ppm, LEL = 0%, O₂ = 20.9%); AreaRAE Unit 5 (CO = 0.7 ppm, VOC = 0.1 units, H₂S = 0.0 ppm, LEL = 0%, O₂ = 20.9%); AreaRAE Unit 6 (CO = 0.2 ppm, VOC = 0.0 units, H₂S = 0.0 ppm, LEL = 0%, O₂ = 20.9%); and MicroR meter (8-10 µR/hr) [2].

START personnel re-established the two AreaRAE base stations previously established for continuous ambient air monitoring while excavation activities were being conducted on site [2].

OSC Tsang conducted a safety and operations briefing with EPA, American Contractors, and START personnel [2].

American Contractors personnel, under the direction of EPA personnel, conducted test-pitting operations utilizing a CAT 320 excavator. START personnel, under the direction of EPA personnel, collected soil and container samples from each of the test pits. Decontamination activities conducted in the CRZ were conducted in Level C PPE. Equipment decontamination and others activities conducted within EZ were conducted in Level B PPE [2].

American Contractors initiated test-pitting operations and completed test pit TP-01 to a depth of 14 feet. Materials at the base of the test pit were saturated, and groundwater was percolating into the excavation. START collected one soil sample from a 14-foot depth for VOC, SVOC, PCB, total metals (including mercury), and cyanide analyses; and 11 samples for PCB and metals (XRF) screening analyses at various depths within the test pit. START noted the types of waste materials excavated, and the elevated ambient air reading within the excavation and in the vicinity surrounding the test pit. The test pit material generally consisted of fine sand and silt, fine to coarse gravel, cobbles, with ash material, and metal, glass, plastic, wood, brick, and concrete debris (see Appendix E, Table 3) [2].

Following completion of the test pit TP-01 excavation, American Contractors personnel backfilled the test pit trench and conducted equipment (excavator bucket) decontamination over the excavation hole. The presumably clean top 6 to 12 inches of surface materials were placed back on top of the test pit, and the polyethylene sheeting was disposed of in accordance with EPA protocols [2].

START member Benton arrived on site to replace START member Mavris and to deliver additional supplies and equipment. START member Mavris departed the Site with samples collected from test pit TP-09, test pit TP-05/10, and test pit TP-01. START member Mavris delivered subsurface soil samples and Quality Assurance/Quality Control (QA/QC) samples to the EPA OEME Laboratory for VOC, SVOC, PCB, total metals (including mercury), and cyanide analyses, along with selected samples for PCB and metals (XRF) screening analyses (see Appendix F – Chain-of-Custody Record) [2].

American Contractors continued test-pitting operations at test pit TP-06 and completed test pit TP-06 to a depth of 12 feet. Materials at the base of the test pit were saturated, and groundwater was percolating into the excavation. START collected one soil sample from a 12-foot depth for VOC, SVOC, PCB, total metals (including mercury), and cyanide analyses; and eight samples for PCB and metals (XRF) screening analyses at various depths within the test pit. START noted the types of waste materials excavated and the elevated ambient air readings within the excavation and in the vicinity surrounding the test pit. Material generally consisted of fine to coarse sand, and gravel, with debris (including glass, metal wire, wood, plastic, paper, brick, asphalt, concrete, textile material, resin material, brake pad, and rubber) (see Appendix E, Table 3) [2].

START personnel also noted a petroleum-like sheen on the surface of the groundwater percolating into the excavation. At the request of OSC Tsang, START collected a sample of the liquid material from test pit TP-06 for Petroleum Hydrocarbon - OIL Identification analyses through the EPA OEME Laboratory (see Appendix F – Chain-of-Custody Record) [2].

Following completion of the excavation, American Contractors personnel backfilled the test pit trench and conducted equipment (excavator bucket) decontamination over the excavation hole. The presumably clean top 6 to 12 inches of surface materials were placed back on top of the test pit, and the polyethylene sheeting was disposed of in accordance with EPA protocols [2].

In Level C PPE, START personnel established the surface soil sampling grid and marked locations in anticipation for sampling during the next work period. START, EPA, and American Contractors personnel conducted personnel decontamination, staged the heavy equipment inside the EZ, and secured the Site for the night. START personnel retrieved and downloaded AreaRAE data-loggers (see Appendix K – AreaRAE Air Monitoring Summary – Marino Property Site, Middletown, Connecticut) [2].

OSC Tsang held a daily debriefing and outlined the plan for the following work period, scheduled to begin at 0600 hours on 28 August 2009. START, EPA, and American Contractors personnel departed Site [2].

A review of the AreaRAE air monitoring data indicated that no significant levels above background were recorded for CO, VOC, H₂S, O₂, or LEL on AreaRAE Unit 6, established to the east, or AreaRAE Unit 5, established to the southeast of the EZ [2].

On 28 August 2009, OSC Tsang and START members Kelly, Hornok, and Benton mobilized to the Site to continue ambient air monitoring, test pit monitoring, surface and subsurface soil sampling, container/drum sampling, and documenting/photodocumenting of site activities and conditions. Additional personnel on site included Mr. JR Marino, Mrs. Tamba Marino, Mr. Preston Marino, Mr. Casteluano, Mr. Armino, Mr. Lardie, and Mr. Ziskin [2].

Weather conditions were as follows: overcast skies, misting to light showers, temperature in the 60s and climbing to the low-70s °F, and slight winds from the northwest [2].

START and American Contractors personnel re-established the heavy equipment and personnel decontamination line per EPA HSO requirements. START Personnel calibrated air monitoring equipment instruments, including combined VOC/H₂S/LEL/CO/O₂ meters (MultiRAE Plus and AreaRAEs); combination PID/FID meter (TVA 1000B); and a radiation meter (MicroR meter). Background levels were recorded in the site-specific HASP as follows: MultiRAE Plus (Unit 1 and Unit 2) (CO = 0.0 ppm, VOC = 0.0 units, H₂S = 0.0 ppm, LEL = 0%, O₂ = 20.9%); AreaRAE Unit 5 (CO = 0.7 ppm, VOC = 0.0 units, H₂S = 0.0 ppm, LEL = 0%, O₂ = 20.9%); AreaRAE Unit 6 (CO = 0.7 ppm, VOC = 0.1 units, H₂S = 0.0 ppm, LEL = 0%, O₂ = 20.9%); and MicroR meter (5-8 µR/hr).

START personnel re-established two AreaRAE base stations for continuous ambient air monitoring while excavation activities were being conducted on site [2; 18].

OSC Tsang conducted a safety and operations briefing with EPA, American Contractors, and START personnel. OSC Tsang agreed to allow the excavator operators to use the excavators to scrape the top surface at each sampling point pre-marked by EPA/START to facilitate the surface soil sampling. The scraping activities were to be performed, with OSC Tsang approval,

in Level D PPE based on site conditions, including drizzling/raining conditions which reduced the potential for airborne dust [2].

Following ambient air screening in the EZ, surface soil samples locations were delineated. American Contractors excavator operators Mr. Casteluno and Mr. JR Marino, under the direction of EPA personnel, utilized a CAT 320 excavator and a CAT 225B LC excavator to scrape the surface soil to loosen the top approximately 6 inches of soil material at each surface soil sample location. START personnel donned Level C PPE, and collected and documented 27 surface soil samples for PCB and metals (XRF) screening analyses (see Appendix A, Figure 7, and Appendix E, Table 4). Excavator buckets were decontaminated following completion of the surface soil scraping activities. Operator Mr. JR Marino departed from the EZ in the CAT 225B LC excavator. Decontamination activities conducted in the CRZ were conducted in Level D PPE. Equipment decontamination and other activities conducted within the EZ were conducted in Level C PPE [2].

American Contractors personnel, under the direction of EPA personnel, continued test-pitting operations utilizing a CAT 320 excavator. START personnel, under the direction of EPA personnel, collected soil and container samples from each of the test pits. Decontamination activities conducted in the CRZ were conducted in Level C PPE. Equipment decontamination and others activities conducted within the EZ were conducted in Level B PPE [2].

American Contractors initiated test-pitting operations at test pit TP-02/04. Beginning at a depth of approximately 2 feet bgs, START noted several partially crushed 5-gallon pails, some containing product material. Numerous 55-gallon drum lids were also unearthed. START personnel noted a pipe, possibly a former groundwater monitoring well casing, protruding from the excavation. Per OSC direction, American Contractors continued excavating and removing a multi-colored, sandy, rubber product mixture material, which was staged on polyethylene sheeting. Elevated readings were noted by START ranging up to 2,197 VOC units above background and 9% LEL on the MultiRAE at the test pit excavation and in vicinity of the staged soil pile. Pails of product materials were separated and staged on polyethylene sheeting for overpacking and off-site disposal. START collected three samples of the product material from three separate pails excavated from the test pit, referred to as Pail No. 1, Pail No. 2, and Pail No. 3. Pail No. 1 sample material consisted of a maroon to red, semi-viscous (gooey) material with lumps of solid material. Pail No. 2 sample material consisted of a beige, semi-viscous (glue-like), plastic-like material. Pail No. 3 sample material consisted of a hot pink, rubber eraser-like, semi-solid material. The three product samples were collected for VOC, SVOC, PCB, total metals (including mercury), and cyanide analyses (see Appendix E, Table 5) [2].

American Contractors continued excavation of test pit TP-02/04 to a depth of 14 feet. Excavated materials included residue paint, rubber and resin products, crushed and dented containers and lids (one-quart to 55-gallon sizes), plastic, cloth rags, metal, and ash materials. Waste materials continued through the trench to the base of the excavation. Materials at the base of the test pit were saturated, and groundwater was percolating into the excavation, which resulted in side wall collapse. Due to trench side wall collapse, OSC Tsang stopped excavation activities at 14 feet and had American Contractors personnel stabilize the trench by quickly backfilling the lower portion of the trench. Upon initiation of the backfilling of the trench, START and the American Contractors representative within the support zone noted a sweet, pungent odor wafting into the

support zone, approximately 90 feet from the test pit location. START noted a VOC reading of 23 units above background on a MultiRAE plus staged at the edge of the CRZ/support zone boundary. Elevated ambient air readings within the support zone lasted a brief time (less than 5 minutes). START personnel in the EZ also noted elevated VOC readings ranging up to 1,400 units above background on a PID [2].

Per OSC Tsang request, START collected one five-point composite soil sample from the excavated soil materials staged on the polyethylene sheeting (sample SPC-01). Sample SPC-01 consisted of dark brown sandy silt, with a large percentage of ash, gravel, paint material, and some plastic, metal, brick, and concrete debris. START noted the material had a semi-viscous texture. Sample SPC-01 was collected for VOC, SVOC, PCB, total metals (including mercury), and cyanide analyses. START also collected two grab samples (SPG-01 and SPG-02) from the excavated soil materials staged on the polyethylene sheeting. Sample SPG-01 consisted of dark brown sandy silt, with a large percentage of ash and debris (including nails, plastic, metal, and paint fragments). Sample SPG-02 consisted of wet, dark brown to orange brown, fine-sand and clay, some ash and debris. Samples SPG-01 and SPG-02 were collected for VOC, SVOC, PCB, total metals (including mercury), and cyanide analyses (see Appendix E, Table 3) [2].

START also collected two samples from depths above 2 feet, prior to encountering the containers and product materials. These two samples were collected for PCB and metals (XRF) screening analyses. START noted the types of waste materials excavated and the elevated ambient air reading within the excavation and in the vicinity surrounding the test pit (see Appendix E, Table 3) [2].

Per OSC Tsang direction, following completion of test pit TP-02/04 excavation, American Contractors personnel separated 5-gallon pails, small containers, lumps of colored solid (product) materials, and a minor amount of product-rich soil material; and then overpacked these materials into 55- and 85-gallon steel salvage drums for off-site disposal. Due to high VOC and LEL headspace readings within the salvage drums, ranging up to 809 VOC units above background and 84% LEL, activated carbon provided by American Contractors representative was added to the drums, significantly lowering the VOC and LEL headspace readings (see Appendix E, Table 3) [2].

American Contractors personnel backfilled the test pit trench, conducted equipment (excavator bucket) decontamination over a central decontamination pad, and containerized the IDW wash and rinse materials. The presumably clean top 6 to 12 inches of surface materials were placed back on top of the test pit, and the polyethylene sheeting was disposed of in accordance with EPA protocols. American Contractors personnel again conducted equipment (excavator bucket) decontamination over a central decontamination pad, following placement of the top 6 to 12 inches of materials back on the trench, and containerized the IDW wash and rinse materials. START, EPA and American Contractors personnel conducted personnel and equipment decontamination and secured the equipment and salvage/IDW drums in the support zone [2].

American Contractors established a drum storage area to store the salvage drums and IDW drum adjacent to the Building No. 1 entrance to the American Contractors equipment garage. American Contractors personnel moved the salvage/IDW drums to the drum storage area. American Contractors representatives labeled each drum, identifying the drum's contents, and

prepared a drum inventory record. American Contractors generated a total of three 85-gallon steel salvage drums and seven 55-gallon IDW drums (decontamination fluids and waste PPE). START also labeled and stored two 55-gallon IDW drums (one drum of decontamination fluids and one drum of waste PPE) within the storage area. The drums were stored on pallets and covered with a tarp [2].

START personnel retrieved and downloaded AreaRAE data-loggers. OSC Tsang held a debriefing of the test-pitting and soil sampling event and discussed potential plans for follow-up work to potentially be performed. START, EPA, and American Contractors personnel on site attended the debriefing. At the conclusion of the debriefing START, EPA, and American Contractors personnel departed Site [2].

A review of the AreaRAE air monitoring data indicated that no significant levels above background were recorded for CO, VOC, H₂S, O₂, or LEL on AreaRAE Unit 6, established to the east, or AreaRAE Unit 5, established to the southeast of the EZ (see Appendix K, AreaRAE Air Monitoring Summary, Marino Property Site, Middletown, Connecticut) [2].

START member Kelly delivered subsurface soil samples to the EPA OEME Laboratory for VOC, SVOC, PCB, total metals (including mercury), and cyanide analyses, and selected samples for PCB and metals (XRF) screening analyses [2]. The chain-of-custody record is included as Appendix F, and sample locations are illustrated in Appendix A, Figure 6.

Analytical results of the test pitting and surface soil sampling are included in Appendix G, U.S. Environmental Protection Agency, Office of Measurement and Evaluation, Laboratory Results. Summary tables of the analytical data were prepared and are included in Appendix H, Summary of U.S. Environmental Protection Agency, Office of Measurement and Evaluation, Laboratory Results.

25 September 2009 - Post-Sampling Site Walk

On 25 September 2009, OSC Tsang, EPA ERT representative Humphrey, START members Kelly and Hornok, and CT DEP representative David Ringquist mobilized to the Site to conduct a non-intrusive Site Walk and a meeting with the property owner and their representative to discuss the draft findings of the surface and subsurface sampling activities. Additional attendees at the meeting included Mr. JR Marino, Mrs. Tamba Marino, and Mr. Ziskin [2].

Weather conditions on site on 25 September 2009 were as follows: clear skies, temperature in the mid-60s degrees °F, a slight breeze from the northwest [2].

EPA and START provided a general summary of the available data results from the August 2009 surface and subsurface soil sampling activities. Data results and figures indicating concentrations above State standards were provided to the various parties. Analytical data summaries of VOCs, PCB screening, and metals-XRF screening data were discussed. Sample locations and depths were discussed as they related to analytical results. START personnel, using GPS technology, re-located and marked the locations of particular samples which exceeded State action levels for PCBs, lead, and arsenic. On-site personnel proceeded to the locations of selected samples and discussed the findings for the locations containing elevated

levels of contaminants. OSC Tsang, CT DEP representative Ringquist, and EPA ERT representative Humphrey explained health and safety concerns associated with regard to detection of contaminants above State action levels and potential for worker, tenant, and/or trespasser exposure (especially as it related to PCB and lead in surface soils). Mr. JR Marino asked if he could cover the localized areas of elevated contaminants with polyethylene sheeting and/or asphalt millings (currently stockpiled on site) to protect people from coming into contact with the contaminants. OSC Tsang suggested that he quadrant off the areas, establish signs, and inform his tenants and workers of the risk, but that he should not cover the materials as it could convey the misperception that all areas not covered are uncontaminated [2].

OSC Tsang, CT DEP representative Ringquist, and EPA ERT representative Humphrey explained and discussed potential liability and timelines for IDW drum disposal from the August 2009 surface and subsurface test-pitting and sampling activities with Mr. and Mrs. Marino and their consultant. Mr. JR Marino suggested that he might wish to proceed with a PRP-Lead Removal Action going forward. The group also discussed fundamentals of a PRP-Lead Removal Action verses an EPA Fund-Lead Removal Action. Mr. JR Marino also mentioned obtaining the services of an environmental attorney. OSC Tsang requested that Mr. JR Marino provide EPA with his decision to go forward with either a PRP-Lead Removal Action or an EPA Fund-Lead Removal Action as soon as he made his decision. OSC Tsang also requested that he provide the contact information for his environmental attorney as soon as possible [2].

OSC Tsang and CT DEP representative Ringquist departed the Site, while EPA ERT representative Humphrey and START members Kelly and Hornok continued the site walk and discussions with Mr. JR Marino and Mr. Ziskin (Field Safety Corp.). EPA and START personnel discussed the EPA plan to conduct additional work in the areas to west of the buildings, provided a phased-approach work zone map, and indicated additional work areas to be cleared of materials to allow EPA to assess the on-site surface and subsurface contamination. Mr. JR Marino expressed concern over where he could move the materials and the effort and costs associated with moving the materials stored on his lot. EPA ERT and START personnel also discussed with Mr. JR Marino his understanding of where potential underground utilities were located on site, including stormwater culverts and pipes, sewage pipes, water lines, underground storage tanks and others potential utilities. EPA ERT and START personnel further discussed with Mr. J.R. Marino the need for EPA to obtain a list of information regarding his current tenants (company name, representative, contact information, address, phone number, location within the building, *etc.*) in case of the need for evacuation during future on-site activities. EPA ERT and START personnel discussed with Mr. JR Marino whether there was a manner for his tenants and workers to enter the Site if access to and from the River Street entrance was closed or restricted during future excavation activities. Mr. JR Marino said that there was a gate located to the southeast of Building No. 2 which could be used, and a gate/access way between the two buildings that was not wide enough for a truck but could be used in an emergency for people to enter or exit the Site. EPA ERT representative Humphrey and START members Kelly and Hornok departed the Site [2].

Analytical Data Summaries

Groundwater Sample Results

On 11 and 12 May 2009, START personnel collected nine groundwater samples (GW-01 through GW-09) from eight on-site groundwater monitoring wells. The nine groundwater samples were submitted to EPA OEME Laboratory for VOC, SVOC, PCB, and metals analyses (see Appendix F, Chain-of-Custody Record) [2].

Analytical results of the groundwater samples indicated the presence of six VOCs above laboratory detection limits (maximum concentration and sample location number in parentheses): chlorobenzene [1.8 micrograms per liter (µg/L) in GW-04]; chloroform (3.1 µg/L in GW-06); ethyl ether (75 µg/L in GW-01); methyl-t-butyl-ether (MTBE) (8.7 µg/L in GW-01); 2-propanone (acetone) (3.1 µg/L in GW-03); and tetrahydrofuran (74 µg/L in GW-04) (see Appendix G, Table 1 and Appendix H, Table 1) [2; 20; 21].

Three SVOCs were detected above laboratory detection limits (maximum concentration and sample location number in parentheses): 2-Methylphenol (790 µg/L in GW-01), chrysene (790 µg/L in GW-01), and bis(2-Ethylhexyl)phthalate (12 µg/L in GW-05) (see Appendix G, Table 2 and Appendix H, Table 1) [2; 22; 23].

No PCB compounds were detected above EPA OEME Laboratory detection limits in groundwater samples (see Appendix G, Table 3 and Appendix H, Table 1) [2; 24; 25].

Seven metals were detected above laboratory detection limits (maximum concentration and sample location number in parentheses): aluminum (470 µg/L in GW-06); barium (1,100 µg/L in GW-07, GW-08, and GW-09); calcium (120,000 µg/L in GW-03); iron (51,000 µg/L in GW-05); magnesium (37,000 µg/L in GW-04); manganese (23,000 µg/L in GW-05); and zinc (120 µg/L in GW-08). In addition, cyanide was detected at a concentration of 11 µg/L in groundwater sample location GW-04 (see Appendix G, Table 4 and Appendix H, Table 1) [2; 26-31].

Groundwater Exceedances

Comparison of the Marino Property Site groundwater analytical results indicated that two substances, bis(2-ethylhexyl)phthalate and barium, detected in the groundwater samples were found to exceed their respective CT DEP Groundwater Protection Criteria (GWPC) for GB Areas of 2 µg/L and 1,000 µg/L, in seven of nine well samples and three of nine well samples, respectively [2; 22; 23; 26; 27; 55].

Subsurface Soil Sample Results

Between 25 August and 28 August 2009, START personnel collected 38 subsurface soil samples from six test pits excavated in the northwestern section of the Site. Eight of the 38 subsurface soil samples were submitted to the EPA OEME Laboratory for VOC, SVOC, PCB, and metals analyses utilizing high resolution capillary chromatograph/Quadrupole Mass Spectrometry (GC/MS), gas chromatograph/electron capture detector (GC/ECD), Inductively Coupled Plasma (ICP), Cold Vapor Atomic Absorption (CVAA) and Semi-Automated Colorimetry (SA)

analytical methods. The remaining 30 subsurface soil samples were submitted to the EPA OEME Laboratory for PCB and metal (XRF) screening analyses. Samples screened for PCBs were screened for six Aroclor compounds (Aroclor-1242, -1248, -1254, -1260, -1262, and -1268) utilizing GC/ECD analytical methods. Samples screened for metals were screened for seven elements (arsenic, cadmium, chromium, lead, mercury, selenium, and silver) utilizing XRF methods. Confirmation analyses were performed on selected surface soil screening samples by EPA OEME for PCBs utilizing GC/ECD analytical methods, and for Metals utilizing ICP, CVAA and SA analytical methods (see Appendix F – Chain-of-custody Record) [2].

Fixed-based laboratory analytical results of the eight subsurface soil samples indicated the presence of 20 VOCs, 24 SVOCs, two PCBs, 18 metals, and cyanide, at levels above laboratory detection limits [2; 32-37; 41; 42; 47-50].

Screenings results of the 30 subsurface soil samples detected one PCB (Aroclor-1260) and three metals (arsenic, chromium, and lead) at levels above screening detection limits [2; 38; 39; 43; 44].

Subsurface Soil Sample Exceedances and Maximum Values

Comparison of analytical results indicated that the following 14 VOCs were detected at concentrations above CT DEP Remediation Standard Regulation (RSR) GB Pollutant Mobility Criteria (PMC) for soil, used for comparison purposes only (maximum concentration and location in parentheses): 1,2,4-trimethylbenzene [360,000 micrograms per Kilogram (µg/Kg) in TP-02/04 (SPG-01)]; 1,3,5-trimethylbenzene [140,000 µg/Kg in TP-02/04 (SPG-01)]; 2-butanone [methyl ethyl ketone (MEK)] [2,300,000 µg/Kg in TP-02/04 (SPG-01)]; 4-Methyl-2-Pentanone (MIBK) [1,800,000 µg/Kg in TP-02/04 (SPG-01)]; 2-propanone (acetone) [190,000 µg/Kg in TP-02/04 (SPG-01)]; benzene [170,000 µg/Kg in TP-02/04 (SPG-01)]; chlorobenzene [110,000 µg/Kg in TP-02/04 (SPG-01)]; ethylbenzene [250,000 µg/Kg in TP-02/04 (SPG-01)]; m/p xylene [1,200,000 µg/Kg in TP-02/04 (SPG-01)]; n-butylbenzene [72,000 µg/Kg in TP-02/04 (SPG-01)]; n-propylbenzene [55,000 µg/Kg in TP-02/04 (SPG-01)]; ortho xylene [300,000 µg/Kg in TP-02/04 (SPG-01)]; sec-butylbenzene [38,000 µg/Kg in TP-02/04 (SPG-01)]; and toluene [8,200,000 µg/Kg in TP-02/04 (SPG-01)] (see Appendix G, Table 5 and Appendix H, Table 2) [2; 32; 33; 55].

A total of seven SVOCs were detected at concentrations above CT DEP RSR GB PMC for soil, used for comparison purposes only (maximum concentration and location in parentheses): benzo(a)anthracene [1,900 µg/Kg in TP-05/10 (16 ft)]; benzo(a)pyrene [1,800 µg/Kg in TP-05/10 (16 ft)]; benzo(b)fluoranthene [2,300 µg/Kg in TP-05/10 (16 ft)]; bis(2-ethylhexyl)phthalate [22,000,000 µg/Kg in TP-02/04 (SPG-01)]; chrysene [2,200 µg/Kg in TP-05/10 (16 ft)]; di-n-octyl phthalate [1,600,000 µg/Kg in TP-02/04 (SPG-01)]; and indeno(1,2,3-cd)pyrene [1,200 µg/Kg in TP-05/10 (16 ft)] (see Appendix G, Table 6 and Appendix H, Table 3) [2; 34; 35; 55].

A total of two PCBs were detected through laboratory analysis. Comparison values do not exist for the fixed based laboratory analysis performed. Therefore, the maximum values of the two PCBs are listed (maximum concentration and location in parentheses): Aroclor-1254 [0.53

milligrams per kilogram (mg/Kg) in TP-09 (16 ft)] and Aroclor-1260 [70 mg/Kg in TP-02/04 (SPC-01)] (see Appendix G, Table 7 and Appendix H, Table 4) [2; 36; 37; 55].

A total of 18 metals were detected through laboratory analysis. Comparison values do not exist for the fixed based laboratory analysis performed. Therefore the maximum values of the 18 metals are listed (maximum concentration and location in parentheses): aluminum [13,000 mg/Kg in TP-05/10 (16 ft) and TP-11 (12 ft)]; antimony [8.5 mg/Kg in TP-02/04 (SPG-01)]; arsenic [32 mg/Kg in TP-11 (12 ft)]; barium [2,500 mg/Kg in TP-06 (12 ft)]; cadmium [42 mg/Kg in TP-02/04 (SPG-01)]; calcium [30,000 mg/Kg in TP-06 (12 ft)]; chromium [110 mg/Kg in TP-06 (12 ft)]; cobalt [18 mg/Kg in TP-05/10 (16 ft) and TP-11 (12 ft)]; copper [10,000 mg/Kg in TP-06 (12 ft)]; iron [99,000 mg/Kg in TP-11 (12 ft)]; lead [2,000 mg/Kg in TP-11 (12 ft)]; magnesium [20,000 mg/Kg in TP-06 (12 ft)]; manganese [880 mg/Kg in TP-05/10 (16 ft)]; mercury [14 mg/Kg in TP-11 (12 ft)]; nickel [180 mg/Kg in TP-06 (12 ft)]; silver [38 mg/Kg in TP-02/04 (SPG-01)]; vanadium [47 mg/Kg in TP-05/10 (16 ft)]; and zinc [26,000 mg/Kg in TP-06 (12 ft)] (see Appendix G, Table 8 and Appendix H, Table 5) [2; 41; 42; 47; 48; 55].

Cyanide was detected through laboratory analysis. A comparison value does not exist for the fixed laboratory analysis performed. The maximum value of cyanide detected was 21 mg/Kg in TP-09 (16 ft) (see Appendix G, Table 8 and Appendix H, Table 5) [2; 49; 50].

PCB screening results indicated the presence of Aroclor-1260 in six of the 30 Test Pit samples, at a maximum concentration of 740 mg/Kg at sample location TP-02/04 (2 ft), which is above the CT DEP RSR Industrial/Commercial (I/C) Direct Exposure Criteria (DEC) for total PCBs in soil. CT DEP RSR I/C DEC are utilized for samples collected at depths of less than 3 feet below ground surface (see Appendix G, Table 9, and Appendix H, Table 10). For comparison purposes, results of Test Pit soil samples collected below depths of 3 feet would be compared to CT DEP GB Mobility Criteria. However, there are no standards listed for PCBs under CT DEP GB Mobility Criteria for the analysis method performed (see Appendix G, Table 9, and Appendix H, Table 11) [2; 38; 39; 55].

XRF screening results indicated the presence of lead at concentrations of 1,200 mg/Kg in Test Pit sample TP-02/04 (2 ft), exceeding the CT DEP RSR I/C DEC for lead. Arsenic, lead, and chromium were detected in samples collected below 3 feet below ground surface, with a maximum concentration of 110 mg/Kg, 3,700 mg/Kg, and 610 mg/Kg, respectively (see Appendix G, Table 10, and Appendix H, Table 12). For comparison purposes, results of Test Pit soil samples collected below depths of 3 feet would be compared to CT DEP GB Mobility Criteria. However, no standards exist for metals (including lead, arsenic, and chromium) under CT DEP GB Mobility Criteria for the analysis method performed (see Appendix G, Table 10, and Appendix H, Table 13) [2; 38; 39; 55].

See Appendix G for analytical data tables for all subsurface soil sample results, including confirmation sample results (Tables 11 and 12). See Appendix H for analytical data summary tables.

Surface Soil Sample Results

On 28 August 2009, START personnel collected 27 surface soil samples (0 to 6 inches bgs) from 24 locations in the northwestern portion of the Site (Area of Investigation No. 1). The 27 surface soil samples (SS-01 through SS-27) were submitted to the EPA OEME Laboratory for PCB and metals screening analysis. Samples screened for PCBs were screened for six Aroclor compounds (Aroclor-1242, -1248, -1254, -1260, -1262, -1268) utilizing GC/ECD analytical methods. Samples screened for metals were screened for seven elements (arsenic, cadmium, chromium, lead, mercury, selenium, and silver) via XRF. Confirmation analyses were performed on selected surface soil screening samples by EPA OEME for PCBs utilizing GC/ECD analytical methods and for metals utilizing ICP, CVAA and SA analytical methods (see Appendix F, Chain-of-Custody Record) [2].

Screenings results of the 27 surface soil samples detected one PCB (Aroclor-1260) and three metals (arsenic, chromium, and lead) at levels above screening detection limits [2; 38; 39; 44; 45].

Surface Soil Sample Exceedances and Maximum Values

PCBs consistent with Aroclor-1260 were detected at a maximum concentration of 100 mg/Kg at surface soil sample location SS-12, which is above the CT DEP RSR I/C DEC for total PCBs in soil (see Appendix G, Table 9 and Appendix H, Table 14) [2; 38; 39; 55].

Two metals were detected in surface soil samples at concentrations exceeding the CT DEP RSR I/C DEC (maximum concentration and sample location in parentheses): arsenic (13 mg/Kg in SS-26) and lead (1,600 mg/Kg in SS-21) (see Appendix G, Table 10 and Appendix H, Table 15) [2; 43; 44; 55].

See Appendix G for analytical data tables for all surface soil sample results, including confirmation sample results (Tables 11 and 12). See Appendix H for analytical data summary tables.

Product/Container Sample Results

On 28 August 2009, START collected three product samples from three 5-gallon pails (Pail 1, Pail 2, and Pail 3) encountered during excavation at Test Pit location TP-02/04. The three product samples were submitted to the EPA OEME Laboratory for VOC, SVOC, PCB, and metals analyses via GC/MS, GC/ECD, ICP, CVAA and SA analytical methods (see Appendix F, Chain-of-Custody Record) [2].

Analytical results of the product samples indicated the presence of 21 VOCs, three SVOCs, one PCB, and 13 metals at levels above laboratory detection limits [2; 32-37; 40-42; 47-50].

The 21 VOCs detected in the product samples from Test Pit TP-02/04 are as follows (maximum concentration and Pail Sample Number in parentheses): 1,2,4-trimethylbenzene (2,900,000 µg/Kg in Pail 2); 1,3,5-trimethylbenzene (910,000 µg/Kg in Pail 2); MEK (97,000,000 µg/Kg in Pail 2); 2-propanone (acetone) (440,000 µg/Kg in Pail 1); MIBK (11,000,000 µg/Kg in Pail 2);

benzene (35,000,000 µg/Kg in Pail 2); ethylbenzene (1,090,000 µg/Kg in Pail 2); isopropylbenzene (120,000 µg/Kg in Pail 2); m/p xylene (6,600,000 µg/Kg in Pail 2); methylene chloride (920,000 µg/Kg in Pail 2); n-butylbenzene (380,000 µg/Kg in Pail 2); n-propylbenzene (340,000 µg/Kg in Pail 2); naphthalene (95,000 µg/Kg in Pail 2); ortho xylene (1,200,000 µg/Kg in Pail 2); para-isopropyltoluene (230,000 µg/Kg in Pail 2); sec-butylbenzene (170,000 µg/Kg in Pail 2); tert-butylbenzene (21,000 µg/Kg in Pail 2); tetrahydrofuran (26,000,000 µg/Kg in Pail 2); toluene (160,000,000 µg/Kg in Pail 2); trichloroethylene (TCE) (30,000 µg/Kg in Pail 2); and vinyl chloride (25,000 µg/Kg in Pail 2). Of the 21 VOCs detected in product samples, 19 were detected above CT DEP GB PMC (see Appendix G, Table 5 and Appendix H, Table 6) [2; 32; 33; 55].

Three SVOCs were detected in the product samples from Test Pit TP-02/04 and are as follows (maximum concentration and Pail Sample Number in parentheses): bis(2-Ethylhexyl)phthalate (38,000,000 µg/Kg in Pail 1); butylbenzylphthalate (25,000,000 µg/Kg in Pail 3); and di-n-octyl phthalate (2,100,000 µg/Kg in Pail 1). In addition, all three SVOCs were detected at concentrations exceeding CT DEP RSR GB PMC (see Appendix G, Table 6 and Appendix H, Table 7) [2; 34; 35; 55].

PCBs consistent with Aroclor-1260 were detected in the product samples from Test Pit TP-02/04 at a maximum concentration of 8,100 µg/Kg in Pail 3. A comparison value does not exist for the laboratory analysis performed on the samples collected from the pails (see Appendix G, Table 7 and Appendix H, Table 8) [2; 36; 37; 55].

The 13 total metals detected in the product samples from Test Pit TP-02/04 are as follows (maximum concentration and Pail Sample Number in parentheses): aluminum (1,100 mg/Kg in Pail 1); barium (1,100 mg/Kg in Pail 1); cadmium (450 mg/Kg in Pail 1); calcium (16,000 mg/Kg in Pail 3); chromium (550 mg/Kg in Pail 1); copper (58 mg/Kg in Pail 1); iron (6,400 mg/Kg in Pail 1); lead (3,100 mg/Kg in Pail 1); magnesium (380 mg/Kg in Pail 1); manganese (40 mg/Kg in Pail 1); mercury (0.083 mg/Kg in Pail 1); nickel (3.7 mg/Kg in Pail 1); and zinc (560 mg/Kg in Pail 1). A comparison value does not exist for the laboratory analysis performed on the samples collected from the pails (see Appendix G, Table 10 and Appendix H, Table 9) [2; 38; 39; 47; 48; 55].

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III. Appendices

Appendix A

Figures

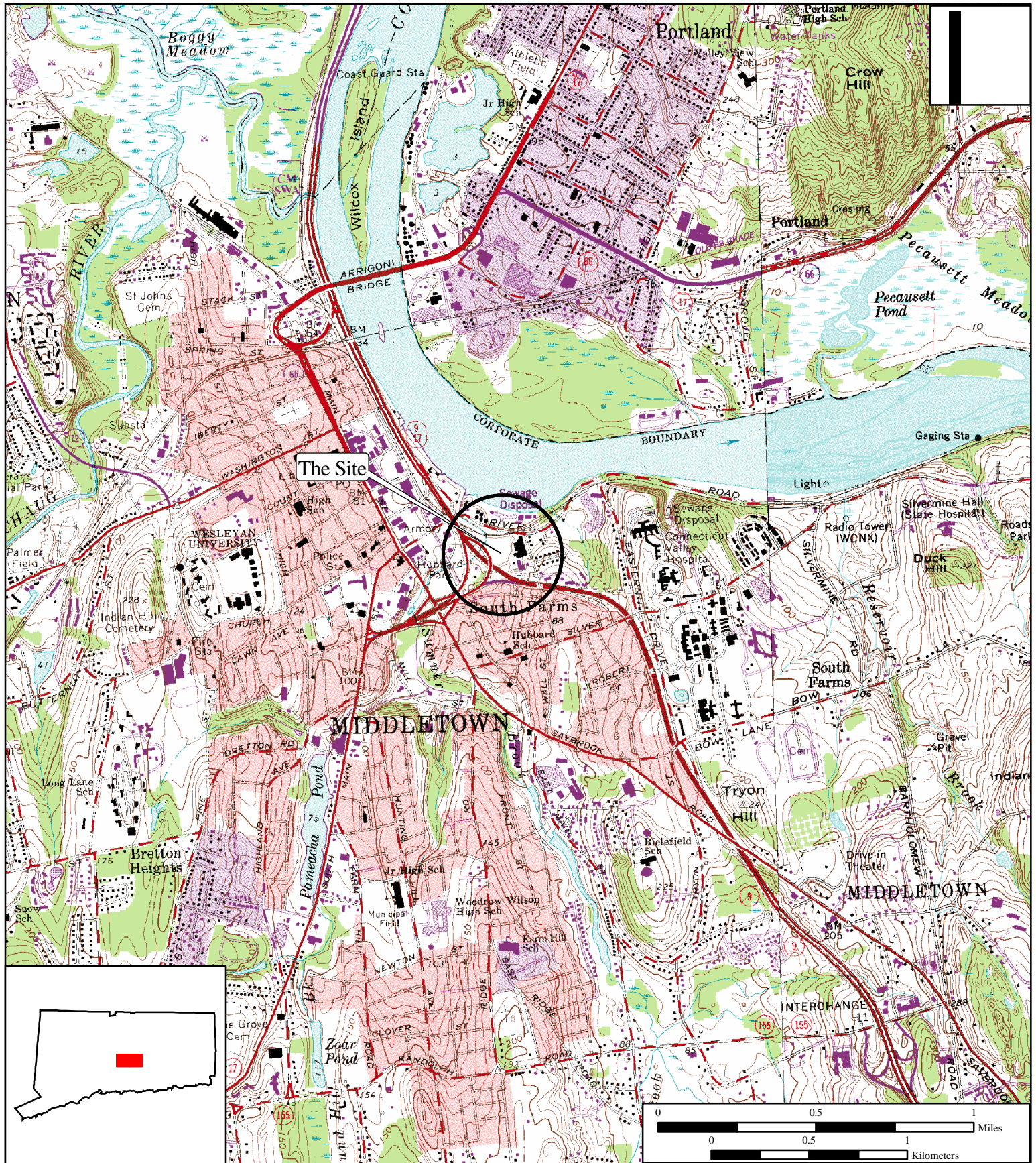


Figure 1

Site Location Map

**Marino Property Site
50 Walnut Street
Middletown, Connecticut**

**EPA Region I
Superfund Technical Assessment and
Response Team (START) III
Contract No. EP-W-05-042**

TDD Number: 09-03-0004
Created by: G. Hornok
Created on: 8 March 2007
Modified by: G. Hornok
Modified on: 31 December 2009

Data Sources:

Topos: MicroPath/USGS
Quadrangle Name(s): Middle Haddam, Middletown
All other data: START



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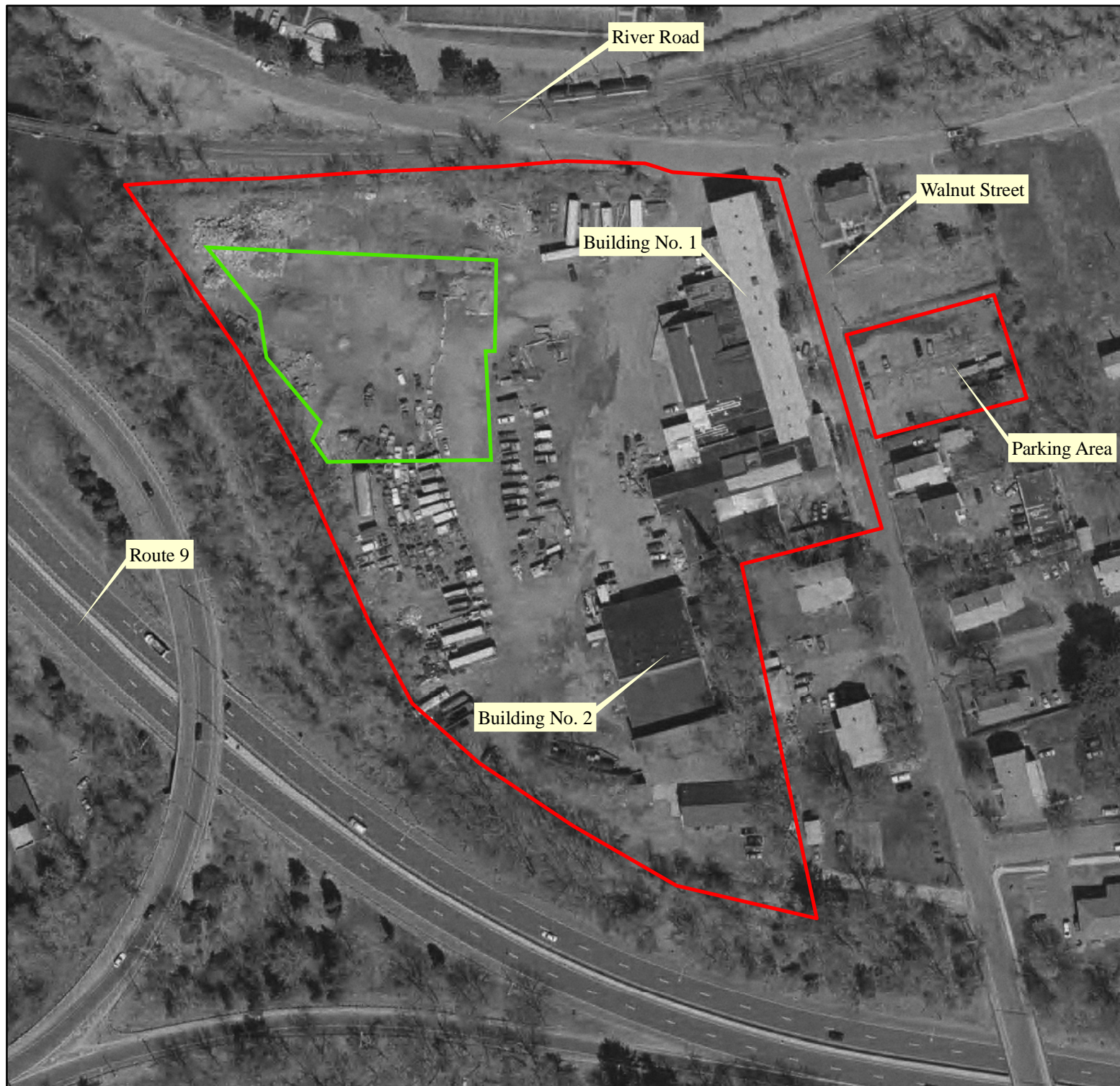


Figure 2
Site Map and
Area of Investigation No. 1
Marino Property Site
50 Walnut Street
Middletown, Connecticut

EPA Region I
Superfund Technical Assessment and
Response Team (START) III
Contract No. EP-W-05-042
TDD Number: 09-03-0004
Created by: G. Hornok
Created on: 24 September 2009
Modified by: G. Hornok
Modified on: 31 December 2009

LEGEND

-  **Site Boundary**
 **Area of Investigation No. 1**



0 25 50 100
Feet

Data Sources:

Imagery: CT CLEAR
All other data: START



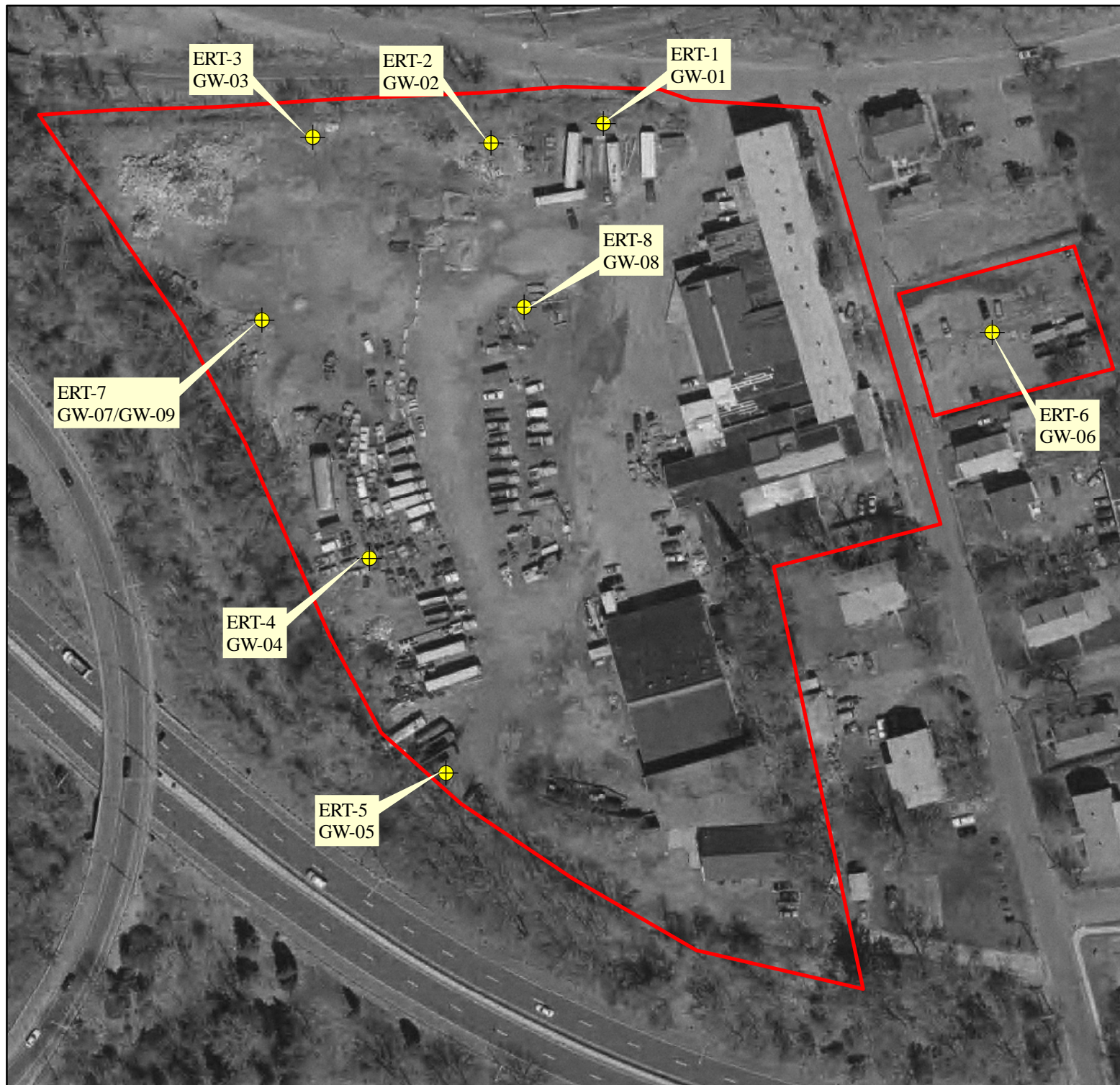


Figure 3
Groundwater Sample
Location Map
Marino Property Site
50 Walnut Street
Middletown, Connecticut

EPA Region I
Superfund Technical Assessment and
Response Team (START) III
Contract No. EP-W-05-042
TDD Number: 09-03-0004
Created by: G. Hornok
Created on: 24 September 2009
Modified by: G. Hornok
Modified on: 31 December 2009

LEGEND

-  **Site Boundary**
-  **Monitoring Well**



Data Sources:

Imagery: CT CLEAR
 All other data: START






Figure 4
Marino Property Site
Groundwater Flow Direction

Marino Property Site
50 Walnut Street
Middletown, Connecticut

EPA Region I
Superfund Technical Assessment and
Response Team (START) III
Contract No. EP-W-05-042

TDD Number: 09-03-0004
Created by: G. Hornok
Created on: 3 November 2009
Modified by: G. Hornok
Modified on: 31 December 2009

LEGEND
 **Site Boundary**
 **Average GW Elevation**
 **Monitoring Wells**

Arrows indicate Generalized
Flow Direction



Data Sources:
Imagery: CT CLEAR
All other data: START

* Note: The locations of the various facilities are
approximate and based on interviews with local
residents and workers.

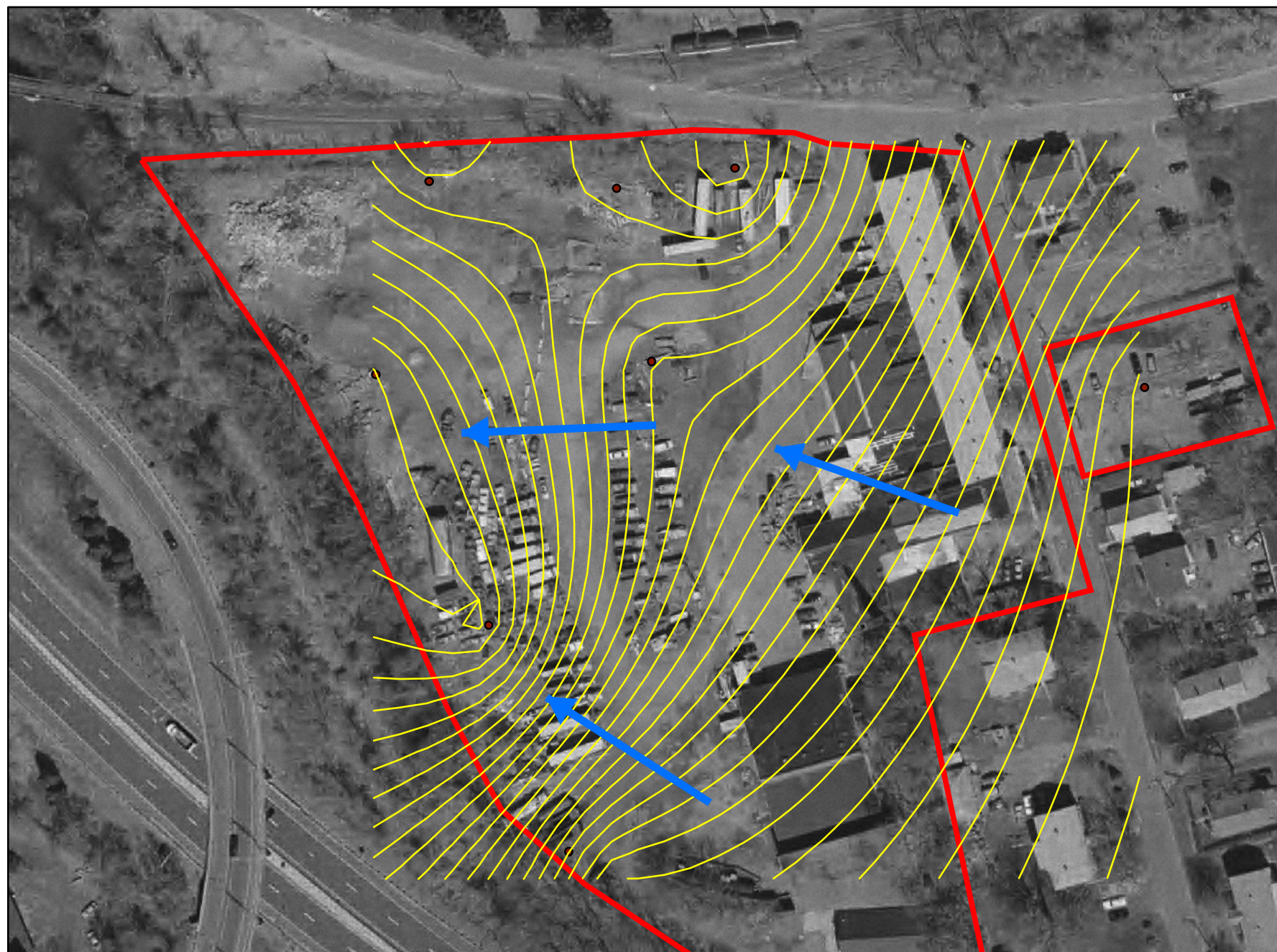




Figure 5

**Air Monitoring Station Locations
(August 2009 Test Pit Excavations)**

**Marino Property Site
50 Walnut Street
Middletown, Connecticut**

**EPA Region I
Superfund Technical Assessment and
Response Team (START) III
Contract No. EP-W-05-042**

TDD Number: 09-03-0004

Created by: G. Hornok

Created on: 24 September 2009

Modified by: G. Hornok

Modified on: 31 December 2009

LEGEND



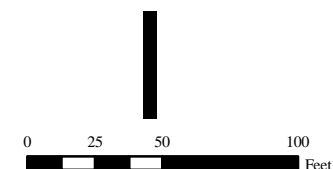
Air Monitoring Location



Site Boundary



Area of Investigation No. 1



Data Sources:

Imagery: CT CLEAR

All other data: START



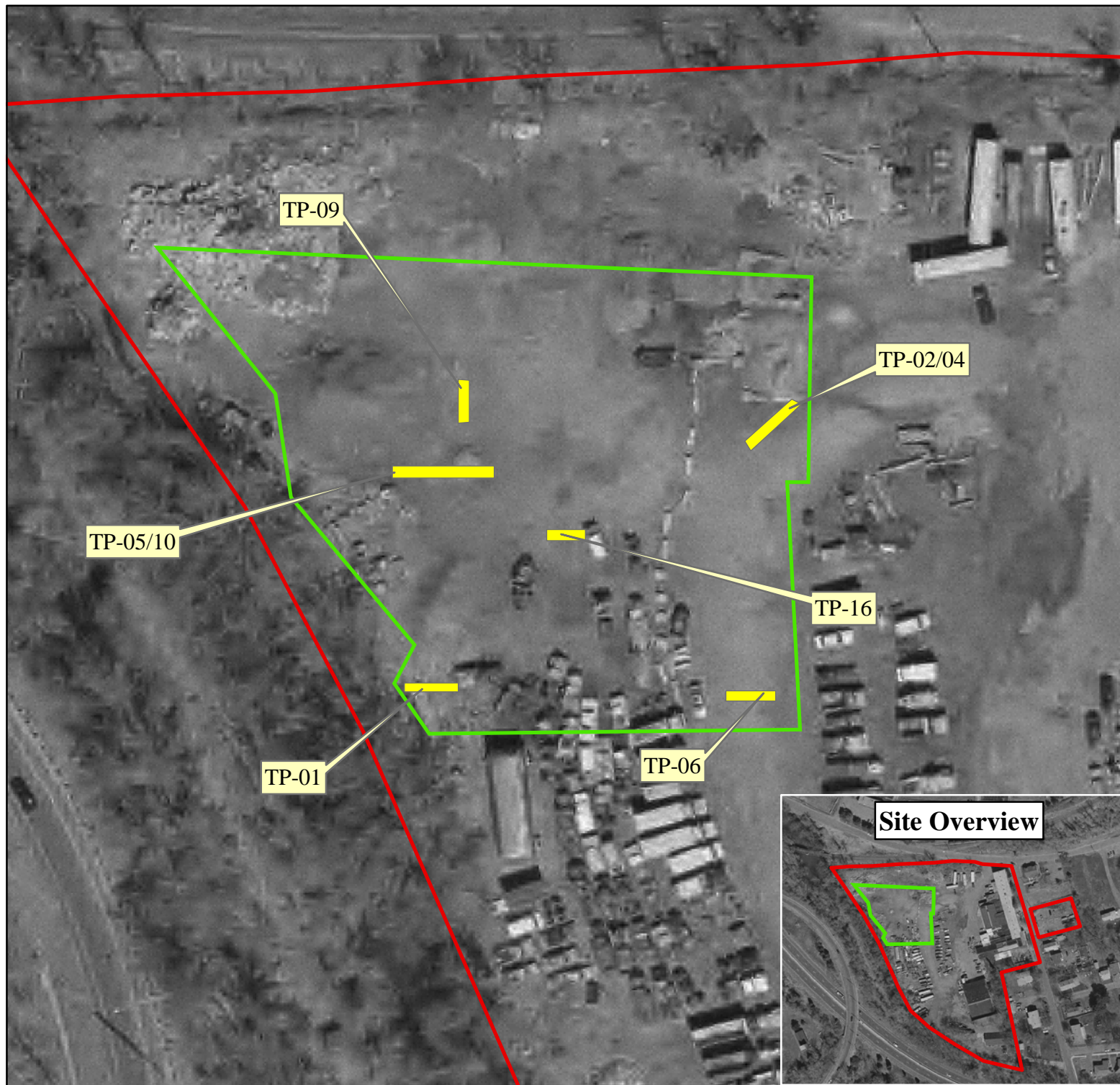


Figure 6

Test Pit Location Map

**Marino Property Site
50 Walnut Street
Middletown, Connecticut**

**EPA Region I
Superfund Technical Assessment and
Response Team (START) III
Contract No. EP-W-05-042**

TDD Number: 09-03-0004

Created by: G. Hornok

Created on: 24 September 2009

Modified by: G. Hornok

Modified on: 31 December 2009

LEGEND

-  **Site Boundary**
-  **Area of Investigation No. 1**
-  **Test Pits**



0 25 50 100
Feet

Data Sources:

Imagery: CT CLEAR

All other data: START





Figure 7
Surface Soil
Sample Location Map
Marino Property Site
50 Walnut Street
Middletown, Connecticut

EPA Region I
Superfund Technical Assessment and
Response Team (START) III
Contract No. EP-W-05-042
TDD Number: 09-03-0004
Created by: G. Hornok
Created on: 24 September 2009
Modified by: T. Benton
Modified on: 7 December 2009

LEGEND

- ▲ Surface Soil Samples
- Site Boundary
- Area of Investigation No. 1



0 25 50 100
Feet

Data Sources:

Imagery: CT CLEAR
All other data: START



Appendix B

Trip Report for Marino Property Site Reassessment, Middletown Connecticut, dated 6
April 2007



Weston Solutions, Inc.
Federal Programs Division
3 Riverside Drive
Andover, Massachusetts 01810
978-552-2100 - Fax 978-689-2794

SUPERFUND TECHNICAL ASSESSMENT AND RESPONSE TEAM
EPA CONTRACT EP-W-05-042

6 April 2007
20114-021-998-0213-40
DC No. A-6247

Mr. Gerardo Millán-Ramos
Site Assessment Manager
EPA Region I
1 Congress Street
Suite 1100 (HBS)
Boston, MA 02114-2023

Subject: Trip Report
Marino Property
Middletown, Connecticut
CERCLIS No. CTD062199369
State ID No. 950
TDD No. 06-07-0002

Dear Mr. Millán-Ramos:

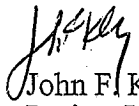
Please find enclosed one copy of the Trip Report regarding the Marino Property located in Middletown, Connecticut. Copies of this Trip Report have been forwarded to Mr. Steve Novick, U.S. Environmental Protection Agency (EPA) Removal Section Chief, and Ms. Patricia DeRosa, Connecticut Department of Environmental Protection. Also, please find enclosed one copy of the Trip Report, under a separate cover letter, for distribution to the property owner of the aforementioned site. This Trip Report was prepared in response to TDD No. 06-07-0002.

Please contact the undersigned at (978) 552-2100 if you have any questions regarding the contents of this report.

Very truly yours,

WESTON SOLUTIONS, INC.
Region I START III


Gerald Hornok
Site Leader


John F. Kelly
Project Leader/Deputy Program Manager

GH:gh
Enclosures

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Weston Solutions, Inc.
Federal Programs Division
3 Riverside Drive
Andover, Massachusetts 01810
978-552-2100 - Fax 978-689-2794

SUPERFUND TECHNICAL ASSESSMENT AND RESPONSE TEAM
EPA CONTRACT EP-W-05-042

6 April 2007
20114-021-998-0213-40
DC No. A-6247

Mr. Steve Novick
Removal Section Chief
U.S. EPA Region I
1 Congress Street
Suite 1100 (HBR)
Boston, MA 02114-2023

Subject: Trip Report
Marino Property
Middletown, Connecticut
CERCLIS No. CTD062199369
State ID No. 950
TDD No. 06-07-0002

Dear Mr. Novick:

Please find enclosed one copy of the Trip Report regarding the Marino Property located in Middletown, Connecticut. Copies of this Trip Report have been forwarded to Mr. Gerardo Millán-Ramos, U.S. Environmental Protection Agency (EPA) Site Assessment Manager, and Ms. Patricia DeRosa, Connecticut Department of Environmental Protection. One copy of the Trip Report will be forwarded to the property owner by way of the EPA Site Assessment Manager.

Please contact the undersigned at (978) 552-2100 if you have any questions regarding the contents of this report.

Very truly yours,

WESTON SOLUTIONS, INC.
Region I START III

Gerald Hornok
Site Leader

John F. Kelly
Project Leader/Deputy Program Manager

GH:gh

Enclosure

cc: G. Millán-Ramos (EPA Site Assessment Manager/COR) w/o enclosure

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Weston Solutions, Inc.
Federal Programs Division
3 Riverside Drive
Andover, Massachusetts 01810
978-552-2100 - Fax 978-689-2794

SUPERFUND TECHNICAL ASSESSMENT AND RESPONSE TEAM
EPA CONTRACT EP-W-05-042

6 April 2007
20114-021-998-0213-40
DC No. A-6247

Ms. Patricia DeRosa
Connecticut Department of Environmental Protection
Bureau of Waste Management
Remediation Division
79 Elm Street
Hartford, CT 06106-5127

Subject: Trip Report
Marino Property
Middletown, Connecticut
CERCLIS No. CTD062199369
State ID No. 950
TDD No. 06-07-0002

Dear Ms. DeRosa:

Please find enclosed one copy of the Trip Report regarding the Marino Property located in Middletown, Connecticut. This Trip Report summarizes the site conditions noted by Weston Solutions, Inc. Superfund Technical Assessment and Response Team III (START) personnel during an on-site reconnaissance conducted on 22 February 2007.

Please contact the undersigned at (978) 552-2100 if you have any questions regarding the contents of this report.

Very truly yours,

WESTON SOLUTIONS, INC.
Region I START III


Gerald Hornok
Site Leader


John F. Kelly
Project Leader/Deputy Program Manager

GH:gh

Enclosure

cc: G. Millán-Ramos (EPA Site Assessment Manager/COR) w/o enclosure

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**TRIP REPORT
FOR
MARINO PROPERTY
SITE REASSESSMENT
MIDDLETOWN, CONNECTICUT**

Prepared For:
U.S. Environmental Protection Agency
Region I
Office of Site Remediation and Restoration
1 Congress Street, Suite 1100
Boston, MA 02114-2023

CONTRACT NO. EP-W-05-042

CERCLIS NO. CTD062199369
STATE ID NO. 950
TDD NO. 06-07-0002
TASK NO. 0213
DC NO. A-6247

Submitted By:
Weston Solutions, Inc.
Region I
Superfund Technical Assessment and Response Team III (START)
3 Riverside Drive
Andover, MA 01810

6 April 2007

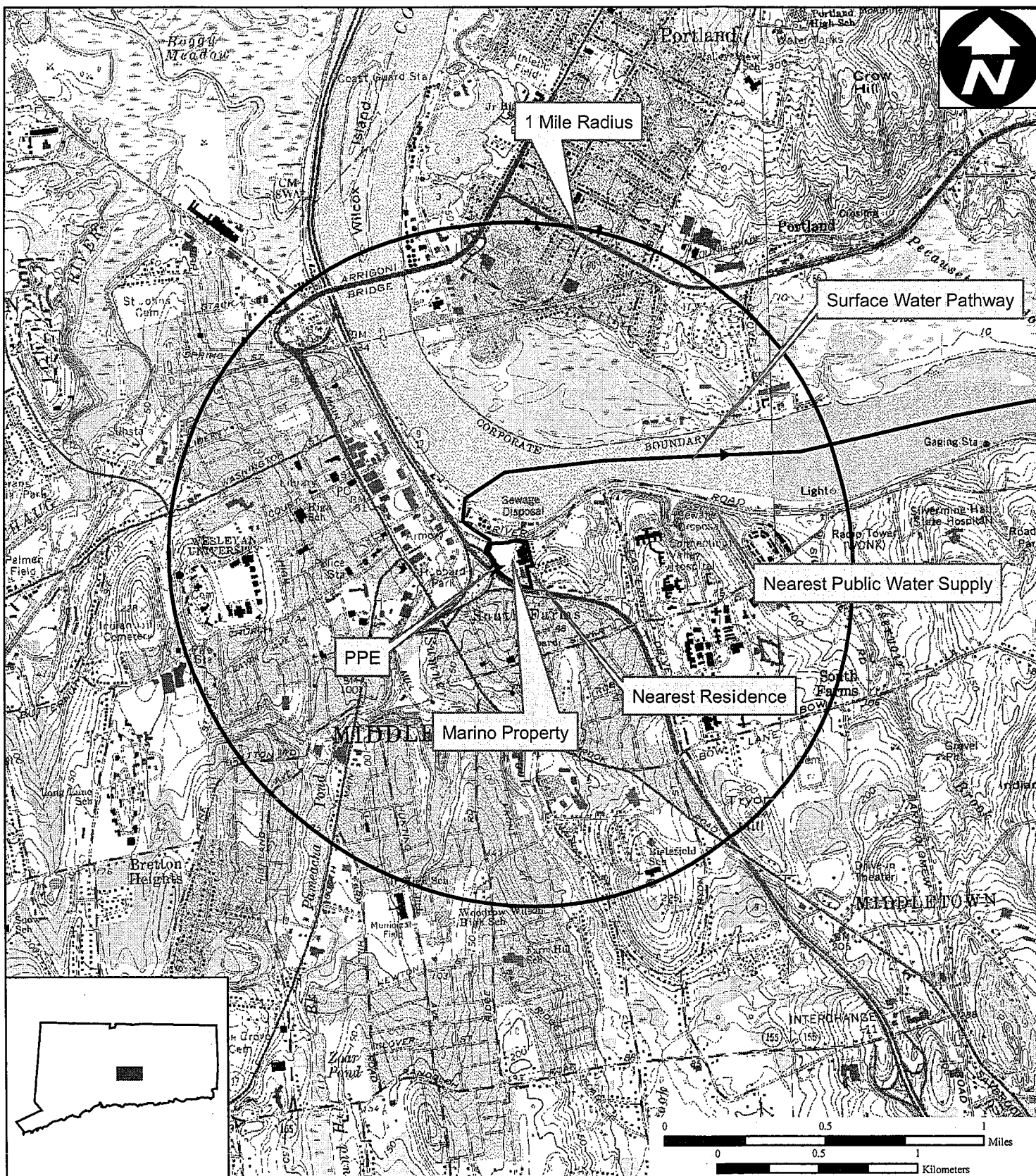


Figure 1

Site Location Map

**Marino Property
50 Walnut Street
Middletown, Connecticut**

**EPA Region I
Superfund Technical Assessment and
Response Team (START) III
Contract No. EP-W-05-042**

TDD Number: 06-07-0002
Created by: G. HORNOK
Created on: 8 MARCH 2007
Modified by: G. HORNOK
Modified on: 9 MARCH 2007

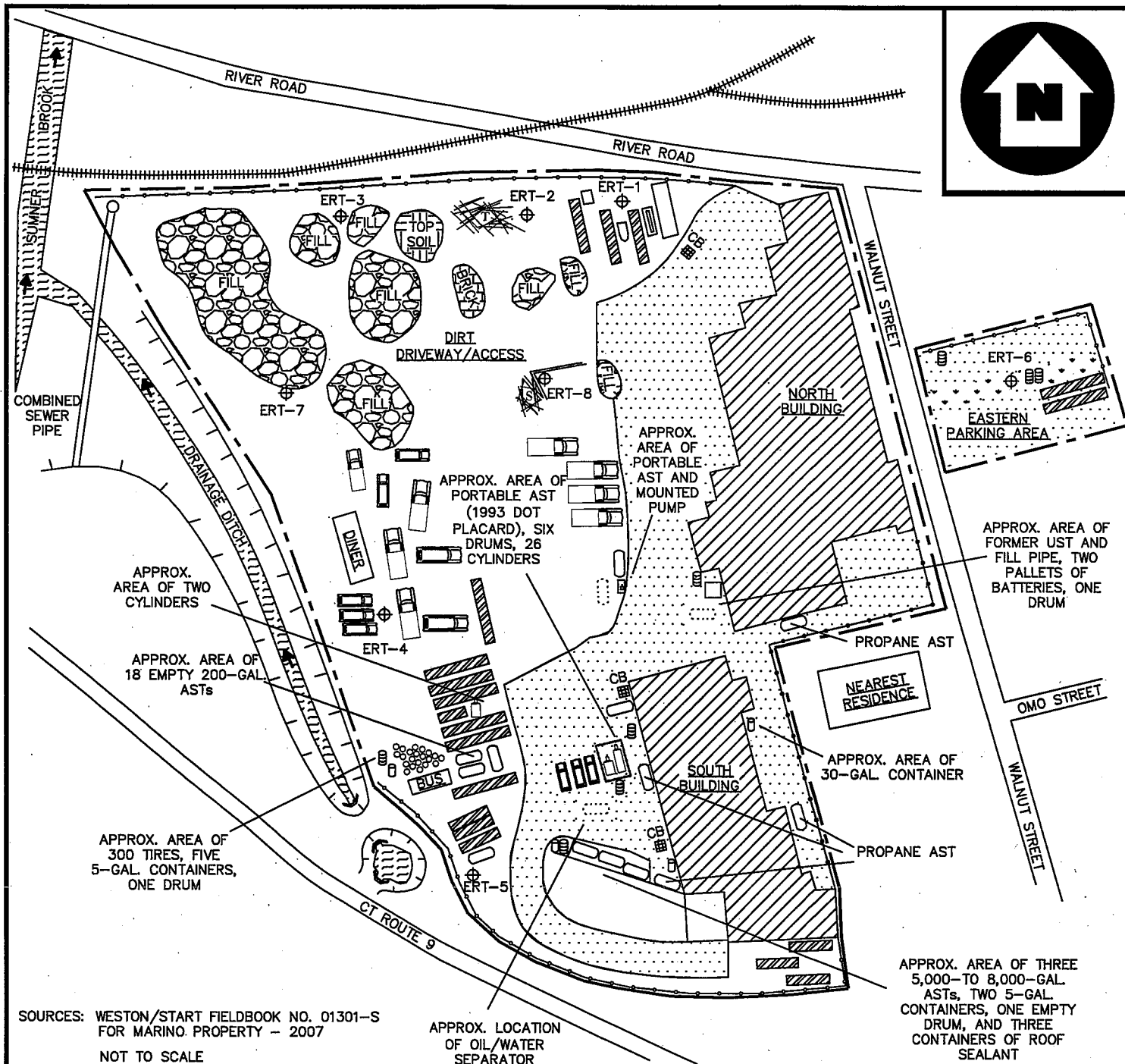
Data Sources:

Topos: MicroPath/USGS
Quadrangle Name(s): Middle Haddam, Middletown
All other data: START



Restoring Resource Efficiency

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LEGEND			
CYLINDERS	MISC. FILL MATERIAL	PILE - TIMBER	PAVED AREA
TRAILER	TOP SOIL	PILE - STEEL	GRASS AREA
TRUCK/CAR	PILE OF BRICK	UNDERGROUND STORAGE TANK (UST)	SLOPE
DRUM/CONTAINER	ABOVEGROUND STORAGE TANK (AST)	USED TIRE PILE	PROPERTY LINE
DRAINAGE DITCH			FENCE
			RAILROAD
			MONITORING WELL (SCREENED IN OVERBURDEN)

SITE SKETCH
MARINO PROPERTY
50 WALNUT STREET
MIDDLETOWN, CT



REGION I SUPERFUND TECHNICAL ASSESSMENT AND RESPONSE TEAM

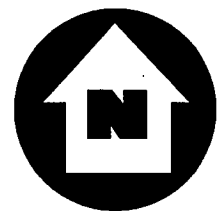
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06-07-0002

DRAWN BY:
G. HORNOK

DATE
3/28/2007

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FIGURE 2



APPROX. AREA OF TWO BAGS OF FERTILIZER, TWO BAGS OF HERBICIDE, SPRAY CANS, THREE 5-GAL. HYDRAULIC FLUID, 30-GAL. CONTAINER OF UNKNOWN

APPROX. AREA OF ENGINE STORAGE AND OIL STAINING

APPROX. AREA OF TWO CYLINDERS, THREE 5-GAL. CRYSTAL CLEAR, FOUR 5-GAL. HARRIS SUPER X VOC FORM RELEASE AGENT

APPROX. AREA OF 25 5-GAL. 5% SILICA WATER REPELLANT, 18 CRYSTAL CLEAR SEALER, SIX 5-GAL. TREMCO TREMPROOF SEALANT, EIGHT 5-GAL. CAULKING COMPOUND, SIX 5-GAL. UNKNOWN LABELED "V-500" AND THREE 5-GAL. PLASTIC ROOF CEMENT

1-GAL. POLYURETHANE

FRONT END LOADER

APPROX. AREA OF ONE 1-GAL. DX394 1.4 LOW VOC CLEANER, ONE 1-GAL. MURIATIC ACID, ONE 1-GAL. STOP AND SHOP UNKNOWN, ONE 1-LITER CAMPING FUEL, ONE 1-GAL. DUPONT 227, ONE 5-GAL. FINE LINE WAX AND GREASE REMOVER, SPRAY CANS AND CAULKING

275-GAL. AST (OIL TANK)

START DID NOT ENTER AREA

MULCH SEAL

TWO 55-GAL. DRUMS CONTAINING HYDRAULIC FLUID

SAND
FINAL PHAZE (SECOND FLOOR)

BOBCAT

APPROX. AREA OF TWO PALLETS OF ICE MELT

SOURCES: WESTON/START FIELDBOOK NO. 01301-S FOR MARINO PROPERTY - 2007
NOT TO SCALE

LEGEND

TRUCK/CAR CONTAINER CYLINDER OIL STAIN ABOVEGROUND STORAGE TANK (AST) DRUM PALLET SAND

SOUTH BUILDING
MARINO PROPERTY
50 WALNUT STREET
MIDDLETOWN, CT



REGION I SUPERFUND TECHNICAL ASSESSMENT AND RESPONSE TEAM

TDD #
06-07-0002

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G. HORNOK

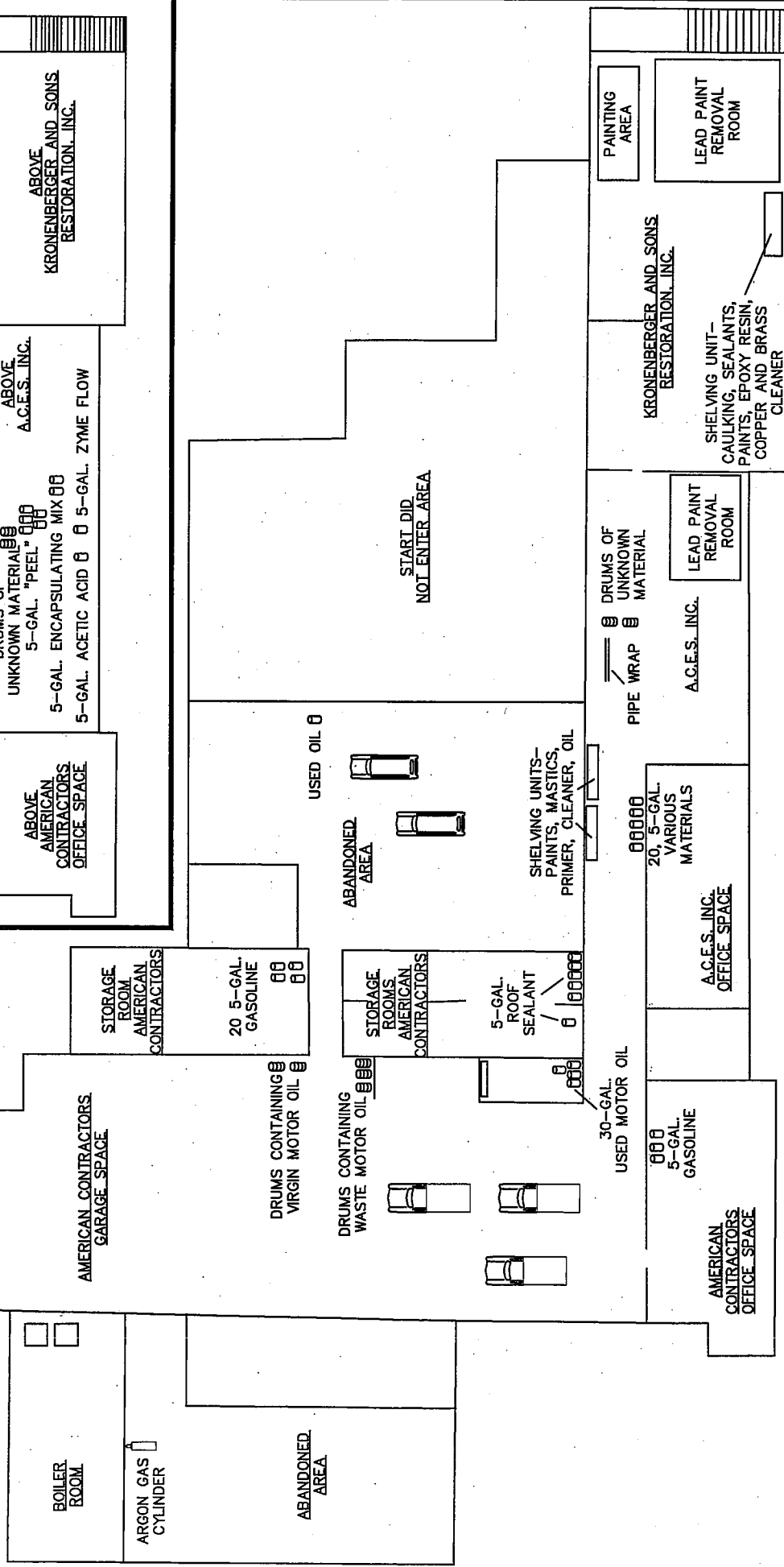
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Figure_3_South_Building

FIGURE 3

FIRST FLOOR

SECOND FLOOR



NOT TO SCALE

LEGEND

- AUTOMOBILE
- DRUM
- CONTAINER
- CYLINDER

NORTH BUILDING
MARINO PROPERTY
50 WALNUT STREET
MIDDLETOWN, CT



REGION I SUPERFUND TECHNICAL ASSESSMENT AND RESPONSE TEAM

TDD # 06-07-0002
 DRAWN BY: G. HORNOK
 DATE 3/28/2007

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 Figure_4_North_Building

FIGURE 4

TRIP REPORT

Personnel Performing Inspection

<u>Agency/Organization</u>	<u>Names</u>	<u>Program</u>
(✓) EPA Region I:	Gerardo Millán-Ramos	EPA*
(✓) EPA Region I Contractor:	Gerald Hornok John F. Kelly	START** START

() State:

() Other:

* U.S. Environmental Protection Agency Region I (EPA).

** Weston Solutions, Inc. Superfund Technical Assessment and Response Team III (START).

Site Ownership-Current Owner

Name: American Contractors, LLC	Telephone: (860) 346-7410
Contact: J.R. Marino	
Address: 50 Walnut Street Middletown, CT 06457	

On-Site Sampling Trip: Brief Chronology

Details of the site visit are included in the site observations/concerns section.

On-site Reconnaissance: 22 February 2007

0910 hrs Weston Solutions, Inc. Superfund Technical Assessment and Response Team III (START) personnel Mr. Gerald Hornok and Mr. John Kelly, and U.S. Environmental Protection Agency Region I (EPA) Site Assessment Manager (SAM) Mr. Gerardo Millán-Ramos arrived at the Marino Property located at 50 Walnut Street, Middletown, Connecticut.

0925 hrs START personnel completed calibration checks on a TVA-1000B [combined photoionization detector (PID) and flame ionization detector (FID)], MultiRAE Plus [carbon monoxide (CO), lower explosive limit (LEL), oxygen (O₂), volatile organic compound (VOC), and hydrogen sulfide (H₂S) meter], and gamma radiation detector, and documented ambient background conditions.

0930 hrs Mr. Kelly, START Site Health and Safety Coordinator (SHSC), conducted a health and safety meeting, and START personnel reviewed and signed the site-specific health and safety plan.

0940 hrs START personnel, EPA SAM Mr. Millán-Ramos, and Mr. J.R. Marino began on-site reconnaissance activities in the South Building, located in the southeastern portion of the Marino Property.

TRIP REPORT

On-Site Sampling Trip: Brief Chronology (Concluded)

1040 hrs	START personnel, EPA SAM Mr. Millán-Ramos, and Mr. Marino continued on-site reconnaissance activities in the North Building, located in the northeastern portion of the Marino Property.
1200 hrs	EPA SAM Mr. Gerardo Millán-Ramos departed the property. START personnel continued reconnaissance activities on the remaining exterior portions of the property.
1230 hrs	START personnel departed the site.
1330 hrs	START personnel returned to the site and continued reconnaissance activities on the exterior portion of the site.
1635 hrs	START personnel Mr. Hornok and Mr. Kelly completed the on-site reconnaissance and departed the Marino Property.
1640 hrs	START personnel met with Mr. Marino to let him know that START had finished the reconnaissance and was departing the site.

Site Characteristics Quantities/Extent/Details

(✓) **Cylinders:** START personnel observed 31 cylinders throughout the property. A fenced area located to the west of the South Building contained 24 cylinders, which appeared to contain propane (20-pound/5-gallon cylinders), as well as two larger, unmarked cylinders. Two additional unmarked cylinders were located in the western area of the property beneath a parked trailer. Two unmarked cylinders were located in the South Building, along the western wall. One additional cylinder, labeled as containing Argon gas, was observed in the southern vacant area of the North Building.

(✓) **Drums:** START personnel observed over 20 55-gallon steel drums throughout the property. Six drums of unknown contents were observed along the western exterior wall of the South Building, one of which was bulging but did not appear to be leaking. A drum, which appeared to be empty, was observed in the southern portion of the property. An additional drum of unknown contents was observed on the southwestern edge of the property, adjacent to a pile of tires. Another drum of unknown contents was observed along the exterior southwestern wall of the North Building. Two drums, labeled as containing transmission fluid, were observed on the second floor of the South Building. START personnel observed nine drums within the North Building. Of the nine drums in the North Building, five drums were observed in the area operated by American Contractors, LLC. According to the Mr. Marino, three of the drums contained waste oil and two contained virgin motor oil. Two drums of unknown material were observed on the first floor of the North Building in the area operated by ACES. According to the ACES representative, these drums were within the area prior to ACES leasing the space approximately 10 years ago. Two additional drums of unknown material were observed on the second floor in the storage area containing materials belonging to ACES.

TRIP REPORT

Site Characteristics Quantities/Extent/Details (Continued)

() Lagoons:

(✓) Tanks: **(✓) Aboveground:** START personnel observed 29 ASTs throughout the property. Four propane ASTs of various volumes were observed along the exterior of the North and South Buildings. START observed 18 approximately 200-gallon ASTs, which appeared to be empty, staged in the western portion of the property. START was informed that the 18 empty ASTs were the property of Mulch Seal. One portable stainless steel AST, mounted on a construction trailer, was located adjacent to monitoring well ERT-5. One portable fuel AST, with attached containment basin, was located in the central portion of the property and appeared to be used for refueling construction vehicles. One portable fuel AST, with attached containment basin and red 1993 Department of Transportation (DOT) placard, was located along the western wall of the South Building. Three estimated 5,000- to 8,000-gallon ASTs, belonging to Mulch Seal and containing blacktop sealant material, were located in the southern portion of the property. One additional 275-gallon AST containing heating oil was observed in the southwestern corner of the South Building.

(✓) Below ground: One fill pipe was observed along the southwestern side of the North Building. Previous investigations at the Marino Property indicated the presence of two underground storage tanks (USTs). START could not confirm whether the fill pipe was attached to an intact UST. START also observed a gasoline pump mounted on a concrete pad in the central portion of the property. START could not determine whether there was an UST attached to this pump.

(✓) Asbestos: START observed overhead pipes within the North Building (ACES area) with pipe wrap of an unknown material, possibly asbestos containing material (ACM). In addition, START personnel observed an open flat-bed trailer, covered by a tarp and located along the western side of the North Building, that contained waste materials wrapped in plastic sheeting and sealed with tape. START suspects that the material may contain ACM, as one tenant (ACES) in the North Building performs asbestos removal/abatement operations. The ACES representative stated that no asbestos materials were brought back to the property. START could not confirm whether either areas of concern contained asbestos.

(✓) Piles: START personnel observed 13 piles throughout the property. Eight piles of concrete debris, rock, gravel, and sand fill material were observed in the northern portion of the property. The largest of these eight piles, located in the northwest corner of the property, was estimated by START to be 50 feet wide by 150 feet long and 20 feet high [150,000 cubic feet (ft³)]. Additionally, START personnel observed one conical pile of topsoil with an estimated diameter of 25 feet and an estimated height of 15 feet (2,500 ft³). START personnel also observed one conical pile of bricks, in the north-central portion of the property, which is estimated by START to have a diameter of 15 feet and a height of 5 feet (300 ft³). One pile of timber was observed in the north-central portion of the property, and is estimated by START to be 50 feet long by 20 feet wide and 5 feet high (5,000 ft³). START personnel observed one pile of steel I-beams (10 beams estimated by START to be 15 feet long) located to the west of monitoring well ERT-8. An additional pile containing approximately 300 tires was observed in the west-central portion of the property.

() Stained Soil:

TRIP REPORT

Site Characteristics Quantities/Extent/Details (Concluded)

(✓) **Sheens:** START personnel observed what appeared to be a petroleum sheen flowing northward from the area of the southeastern garage door of the North Building to a storm drain located in the northeastern portion of the property. START also observed what appeared to be petroleum sheens originating from various locations within the dirt driveway/access to the west of the North Building.

() **Stressed Vegetation:**

(✓) **Landfill:** START personnel observed the western portion of the property, which was formerly used as a landfill. Previous investigations have confirmed the presence of buried drums and containers. The top of the landfill area was flat, with no obvious exposed waste. START noted that the property slopes steeply along the western property boundary to a drainage ditch. Along the slope, START observed exposed waste material. START could not confirm whether the landfill had been capped.

() **Leachate seeps:**

(✓) **Population in Vicinity:** Currently, there are approximately 20 people employed on the Marino Property.

(✓) **Distance to nearest residence:** The nearest residence is located adjacent to the Marino property at 45 Walnut Street, approximately 100 feet east of the South Building.

(✓) **Land use:** () **Industrial** (✓) **Commercial** () **Residential**
 () **Rural** () **Agricultural**

(✓) **Wells:** () **Drinking:**

(✓) **Monitoring:** START observed eight stickup monitoring wells (ERT-1 through ERT-8) throughout the property. The monitoring wells were installed by the EPA Environmental Response Team (ERT) during March 2000 in the overburden aquifer. All the monitoring wells were observed to have steel outer casings, and were locked with padlocks. Two wells, ERT-2 and ERT-3, had broken caps that no longer provide an adequate locking mechanism. Three monitoring wells (ERT-1 through ERT-3) were observed along the northern property boundary within 20 feet of the fence line. Monitoring well ERT-4 was observed along the western boundary of the property among parked vehicles. Monitoring well ERT-5 was observed in the southwestern portion of the property and was surrounded by concrete barriers. Monitoring well ERT-6 was observed in the eastern parking area, across Walnut Street from the North Building. Monitoring well ERT-7 was observed along the northwestern property boundary, adjacent to a pile of fill material. Monitoring well ERT-8 was observed in the central portion of the property, surrounded on two sides by concrete barriers. According to the property owner, the wells have not been sampled since March 2000.

(✓) **Other:** A total of nine 30-gallon containers were observed throughout the property. The 30-gallon containers appeared in various stages of decay. The contents of the 30-gallon containers are unknown to START. In addition, START personnel observed approximately 70 containers of varying sizes and contents located throughout the property, belonging to various owners. Along the southwestern exterior wall of the North Building, START observed two pallets of lead acid batteries. Adjacent to the entrance used by Mulch Seal, START observed a catchbasin, which reportedly is piped to an underground oil/water separator.

TRIP REPORT

On-site/Off-site Receptors Comments/Details

- (✓) **Drinking Water** (✓) **Private:** According to U.S. CENTRACTS data, an estimated 45 people are served by private drinking water supply wells within 1 radial mile of the Marino Property.
- (✓) **Municipal:** The nearest public drinking water supply well is the John S. Roth Well No. 3, located in Middletown, CT, which is operated by the Middletown Water Department. John S. Roth Well No. 3 is located approximately 0.6 miles northeast of the Marino Property and is blended with other drinking water supply wells to serve an estimated 42,000 people. The property is located within a half mile of the John S. Roth Wellfield Source Water Protection Area (SWPA) (ID# 83001).
- (✓) **Groundwater:** The depth to groundwater was recorded by START personnel during the on-site reconnaissance and ranged between 11 and 18 feet below the top of the outer casing.
- (✓) **Unrestricted Access:** Pedestrian access to the Marino Property is unrestricted from River Road and the western property boundary. The fence is discontinuous at the northwestern corner of the property at the entrance to the parking area and in the western boundary along the drainage ditch.
- (✓) **Population in Proximity:** According to U.S. CENTRACTS data, an estimated 1,094 people live within 0.25 radial miles of the Marino Property, and an estimated 6,663 people reside within 1 radial mile of the property.
- (✓) **Sensitive Ecosystem:** An estimated 2.7 acres and 66.1 acres of wetlands exist within 0.25 and 1 radial miles of the Marino Property, respectively. One Clean Water Act (CWA)-protected water body, 3.74 miles of wetland frontage, eight State-listed endangered species habitats, and one fishery exist along the 15-mile downstream surface water pathway.
- (✓) **Other:** There are no known schools or daycare centers located within 200 feet of the Marino Property.

TRIP REPORT

Site Observations/Concerns

Initial On-site Reconnaissance: 22 February 2007

On 22 February 2007, as part of a Site Reassessment (SR), START personnel conducted an on-site reconnaissance of the Marino Property. START personnel, EPA SAM Mr. Millán Ramos, and Mr. Marino toured the two on-site buildings (North and South Building) as well as sections of the exterior portion of the property. The property owner, Mr. Marino, informed START that his business, American Contractors LLC, operates on the property, and that the remaining space is rented to various businesses and private citizens.

START personnel observed the former landfill area on the western portion of the property. There was no evidence of current disposal activities. START could not determine the exact extent of the former landfill but observed the presence of a steep slope at the western boundary of the property. The top of the former landfill is flat. Based on observations made during the reconnaissance, groundwater appears to flow east to west through the landfill area, emptying into the drainage ditch along the side of the property (see Figure 2).

START personnel observed eight monitoring wells throughout the property. Monitoring wells ERT-1, ERT-2, and ERT-3 are located along the northern property boundary among piles of brick, timber, topsoil, and fill material. In the central portion of the property, START observed monitoring well ERT-7, which was surrounded by large concrete pipe structures. To the east of monitoring well ERT-7, across a dirt access roadway, start observed monitoring well ERT-8, which was surrounded by a concrete barrier, a pile of steel beams, and a pile of fill material. Monitoring well ERT-4 was observed to the south of monitoring well ERT-7, among several abandoned vehicles. Monitoring well ERT-5 was observed to the south of monitoring well ERT-4, adjacent to a trailer-mounted AST and surrounded by a concrete barrier. Monitoring well ERT-6 was observed in the eastern portion of the property, in a parking area east of Walnut Street.

Along the northern border of the property, START personnel observed three truck trailers, a boat, a billboard sign, a mobile home, and a truck-mounted refrigerator. At the entrance to the parking area, START observed a petroleum sheen on water flowing into a storm drain. The water with the sheen was observed by START to originate near the garage door on the southwestern corner of the North Building, and flowed north along the parking area. To the west of the storm drain, START personnel also observed piles of brick, timber, topsoil, and fill containing concrete debris, rock, gravel and sand material. These piles continued to the northwestern corner of the property. At the northwest corner of property, behind the largest fill pile, START observed an extended manhole accessway to a 3-foot-diameter combined sewer pipe extending from the corner of the property to the southwest. The pipe appeared to continue to the northeast, connecting to the sewage pumping station located across from the site on River Road. The combined sewer pipe crossed the drainage ditch along the western edge of the property, and a makeshift tarp tent was observed constructed below the pipe where the two meet. This tent appeared to have been formerly used by a homeless person. To the west of the manhole, START personnel observed the location where the drainage ditch discharges to Sumner Brook (see Figure 2).

TRIP REPORT

Site Observations/Concerns

To the south of monitoring well ERT-8, START observed construction equipment and trucks, a portable AST, and a gasoline pump mounted on a concrete slab. START could not determine whether the AST contained liquid and whether the gas pump was operational (see Figure 2).

To the south of ERT-7, START observed numerous abandoned vehicles, a former diner building, and trailers of various length and size. START personnel observed two cylinders (contents unknown) beneath a trailer to the south of monitoring well ERT-4. To the west of the trailers, START personnel observed approximately 300 tires, a 55-gallon steel drum (contents unknown), and several five 5-gallon buckets (contents unknown). To the west of the drum, START observed a steep embankment which leads to the drainage ditch. The drainage ditch begins along the southwestern portion of the property, where a pipe discharges to a sump, which in turn discharges to the drainage ditch flowing along Route 9. The drainage ditch extends north-northwest to Sumner Brook (see Figure 2).

To the southeast of the tire pile, START personnel observed three trailers, a small camper, 18 200-gallon ASTs, and a bus. The ASTs appeared to be empty; and according to Mr. Marino, they belonged to Mulch Seal. Within the bus, START personnel observed five 30-gallon plastic containers of Plasdene-K29/32, five 5-gallon buckets of unknown material, and miscellaneous construction debris (see Figure 2).

To the south of the bus, adjacent to monitoring well ERT-5, START observed a large stainless steel AST mounted on a flatbed construction trailer. According to Mr. Marino, the AST had not been used by its owner, Mulch Seal (see Figure 2).

Along the exterior western wall of the South Building, START observed a portable AST with attached containment basin and an attached DOT placard (1993). START observed three 55-gallon steel drums staged on a pallet, two of which were full with an unknown liquid. START personnel observed a fenced area, which was secured with a chain and lock, containing 24 20-pound/5-gallon propane cylinders and two larger propane cylinders, three unmarked 55-gallon steel drums (contents and volume unknown), and a 500-gallon propane tank. Adjacent to the South Building entrance used by Mulch Seal, START personnel observed three 1-gallon cans of crack sealant, one 500-gallon propane tank, three 5,000- to 8,000-gallon ASTs surrounded by a containment basin, one 55-gallon steel drum (empty and without a cover), and two 5-gallon buckets. According to the property owner, the catchbasin in this area is piped to an underground oil/water separator (see Figure 2).

Along the southwestern wall of the North Building, START observed a tarp-covered trailer which contained potential ACM wrapped in plastic sheeting and sealed with tape, one 55-gallon steel drum (contents and volume unknown), two pallets of lead/acid batteries, and a steel housing which enclosed a fill pipe for a UST. START personnel could not verify the size or contents of the UST or whether it was still operational (see Figure 2).

Along the south wall of the North Building, START observed a propane tank which appeared to be in use. Along the eastern wall of the South Building, START personnel observed a 30-gallon container with unknown contents (see Figure 2).

TRIP REPORT

Site Observations/Concerns

To the east of the North Building, east of Walnut Street, START personnel observed a paved parking area, owned by Mr. J.R. Marino, containing three 55-gallon steel drums, one of which was full of an unknown material while the other two were empty. According to Mr. Marino, the full drum was dropped off illegally on the property. START personnel observed monitoring well ERT-6 in the middle of the parking area (see Figure 2).

The South Building is a two-story brick-and-concrete block building built into a hill on the southern end, with secured entrances on the north, west, and south walls. The central portion of the South Building contains two stories, while the south and north portions are one story tall. The entire southern portion of the South Building is occupied by Final Phaze. The central portion of the first floor is occupied by Mulch Seal, and the northern portion of the first floor by two private citizens. The central section of the second floor is unoccupied. The North Building is a two-story brick building occupied by three businesses: KSR (northern portion), ACES (central portion), and American Contractors LLC (southwestern portion). The second floor of the North Building is used for storage.

The northern portion of the South Building contained six rooms and one large warehouse area. START personnel observed four rooms located in the northwest portion of the building, containing air conditioning units, hay, and a vehicle engine. One of the rooms was a bathroom which did not appear operational. Two bathrooms were observed along the eastern wall, one of which contained a 1-gallon container of polyurethane. The warehouse area is used for storage of miscellaneous household, construction, landscaping, and automotive materials. START estimated the warehouse area to measure roughly 125 feet long by 75 feet wide. The warehouse area was divided by a fence, creating a room which contained a bus, two vehicles, and a front end loader belonging to Mr. Marino. According to Mr. Marino, the northwestern portion of the South Building is rented by a private tenant for storage purposes. START personnel observed various spray cans (WD-40, Gum Out, and paint), two bags of fertilizer (40% sulfur coated urea with iron), two bags of herbicide (Lebanon Treflan* 5G), a 30-gallon container of an unknown liquid, and three 5-gallon buckets labeled as hydraulic fluid. START personnel observed evidence of oil staining in the area (see Figure 3).

START personnel observed oil staining on the ground beneath several vehicle engines located along the eastern wall of the warehouse area. Adjacent to the engines, START observed a ventilated hood area formerly used for painting (see Figure 3).

According to Mr. Marino, the southern section of the warehouse area is rented by a tenant who performs concrete work. START personnel observed five vehicles throughout the southern portion of the South Building. Adjacent to the paint room, START personnel observed three 5-gallon buckets of Crystal Clear sealer produced by the Charger Corporation DOT placard – Flammable 3, two unmarked cylinders, and four 5-gallon buckets of Harris Super X Volatile Organic Compound (VOC) Form Release Agent. In the central section of the southern portion of the warehouse area, START personnel observed 25 5-gallon 5% Silica water repellent, 18 5-gallon buckets of Crystal Clear sealer produced by the Charger Corporation, six 5-gallon buckets of Tremco Tremproof sealant, eight 5-gallon buckets of caulking compound, six 5-gallon buckets of an unknown compound labeled V-500, and three 5-gallon buckets of plastic roof

TRIP REPORT

Site Observations/Concerns

cement. START personnel also observed one 275-gallon oil AST, presumably used for heating oil storage. In the southeastern portion of the storage area, START observed cans of spray paint, tubes of caulking, one 1-gallon container of DX394 1.4 low VOC cleaner, one 1-gallon glass container of muriatic acid (half full), one container of DuPont 227, one 5-gallon container of Fine Line wax and grease remover, one 1-liter container of camping fuel, and one 1-gallon plastic Stop and Shop container with unknown contents (see Figure 3).

The first floor of the central portion of the South Building was investigated from the outside, as the area was locked and secured with an alarm. According to Mr. Marino, the area and adjacent exterior portion of the central section is occupied by Mulch Seal, an asphalt sealant company. Through a window, START observed three tanker trucks used by the Mulch Seal operation (see Figure 3).

The southern portion of the South Building, which is an elevated one-story structure, is operated by Final Phaze. START personnel observed lawn equipment, a Bobcat, two pallets of ice melt, two 55-gallon steel drums of transmission fluid, miscellaneous containers (hydraulic fluid, joint compound, and gas can), two 5-gallon buckets with an unknown black liquid (likely waste oil), and a pile of sand. Air monitoring in the room indicated elevated readings of carbon monoxide (11 units above background), likely due to use of the Bobcat in the enclosed area (see Figure 3).

The north portion of the North Building is occupied by KSR. START personnel were informed that the company is involved in the restoration and preservation of period structures from residential, commercial, or municipal buildings. The company's main office is located on 80 East Main Street in Middletown, CT, and the company rents the space from Mr. Marino to conduct window restoration operations. Lead paint removal is performed in a dedicated room under negative pressure with HEPA filter vacuums and external exhaust. START personnel observed four employees, one of whom was painting wooden window pieces. Air monitoring in the painting area indicated elevated readings on the PID of 15 parts per million (ppm). START personnel observed caulking compound, sealants, paints, epoxy resin, and copper and brass cleaner on a shelf in the area. START personnel observed that the second floor space above KSR was empty (see Figure 4). The KSR office manager provided START with a list of chemicals used for their operation on the property; this list is included as Appendix A of this report [Inventory of Chemicals Used by Kronenberger and Sons Restoration, Inc. on the Marino Property].

The east-central portion of the North Building is occupied by ACES, which performs asbestos and lead paint removal/abatement. START was informed by the Operations Manager, Stanley Stachura, Jr., that some lead removal operations are done on the premises in a dedicated room with a negative pressure HEPA vacuum system. According to Mr. Stachura, the chemicals stored on the property consist of solvents for paint removal, encapsulating and barrier paints, mastics, and household paints. START personnel observed two 55-gallon steel drums of unknown contents, 20 5-gallon buckets of various materials, containers with materials for automotive maintenance (oil and windshield washer fluid), containers of materials used in asbestos and lead paint removal (primer, cleaner, mastic, and paint), and one bottle of insecticide. According to Mr. Stachura, the drums were in the space prior to ACES's occupying

TRIP REPORT

Site Observations/Concerns

the building approximately 10 years earlier. Above the drums, START personnel observed pipe wrapping suspected to be ACM; however, START could not confirm the material contained in the pipe wrap. START personnel observed that the second floor above ACES contained two 55-gallon steel drums (partially full) with unknown contents, five 5-gallon buckets with "Peel" hand written on the lid, one 5-gallon container of Acetic Acid, one 5-gallon container of Zyme Flow, and two 5-gallon containers of encapsulating mix. The remainder of the space was occupied by materials presumably used in the asbestos and lead removal operation (see Figure 4). The ACES operations manager provided START with a list of chemicals used for their operation on the property; this list is included as Appendix B of this report [Inventory of Chemicals Used by A.C.E.S., Inc. on the Marino Property].

The southern portion of the North Building is occupied by American Contractors LLC, the company operated by Mr. Marino. The area contains a large garage area with attached storage rooms and an office area. START personnel observed three 5-gallon gasoline fuel cans in the office area where air monitoring on the FID ranged between 30 and 40 ppm. Within the garage area, START personnel observed one employee in the process of cleaning engine parts in a vat presumably containing gasoline. Air monitoring equipment readings ranged between 40 and 50 ppm on the FID within this area. Portions of the floor had staining indicative of spilled oil. Attached to the large garage area, START personnel observed five storage rooms. Within the storage rooms, START personnel observed two 55-gallon steel drums containing virgin motor oil, three 55-gallon steel drums containing waste motor oil, six 5-gallon buckets of roof sealant, and roughly 20 gasoline fuel containers (contents unknown) (see Figure 4).

In the North Building, to the north of American Contractors LLC, START observed an area once occupied by a tenant who is currently being evicted. START observed one open-top container/tray which appeared to contain waste motor oil. To the south of American Contractors LLC, START observed a vacated area containing one cylinder estimated by START to be 8-inches in diameter and 48 inches high, and labeled as containing Argon gas (see Figure 4).

Report prepared by: Gerald Hornok
Affiliation: Weston Solutions, Inc., START III
Date: 6 April 2007

Appendix A

Inventory of Chemicals Used by Kronenberger and Sons Restoration, Inc. on the Marino Property

Inventory of Chemicals Used by Kronenberger and Sons, Inc.
on the Marino Property

Product Name	Category
Benjamin Moore and Co. Moorgard Latex House Paint	Latex Paint
Pratt and Lambert Enducryl	Acrylic Paint
Pratt and Lambert Enamel Alkyd Gloss White	Enamel Paint
KS Wood Surfaces Stripper	Wood Stripper
Acetone	
Silicone Spray Lubricant	Lubricant
Elmer's Probond Exterior Wood Glue	Adhesive
FIX Professional Wood Filler	Filler
ZRC 221	Zinc Galvanizing Compound
Sure Klean Weather Seal Natural Stone Treatment	Stone Water Repellant
DAP FireStop Sealant	Silicone Sealant
Alex Plus Clear	Acrylic Latex Caulk
Alex Painters Acrylic Latex Caulk	Acrylic Latex Caulk
DAPtex Latex Insulating Foam Sealant	Insulating Foam
DAP Easy Solutions Door & Window Caulk	Acrylic Latex Caulk
Phenoseal Does It Clear	Latex Caulk
Phenoseal Does It All Low VOC Translucent	Vinyl Adhesive Caulk
5F5 Paint and Varnish Remover	Paint/Stain Remover
Fast Orange Wipes	Cleaner
B-I-N Primer Sealer	Primer/Sealer
Ready Patch	Spackling and Patching Compound
Cover Stain	Oil-based Primer/Sealer
CWF-UV	Exterior Wood Finish
Mp-0911 Speedy Metal Primer	Rust Inhibitive Primer
Krylon Quick Dry Alkyd Enamel	Enamel Paint
Synco Super Lube Grease	Lubricant
Sonolastic NP1	Polyurethane Sealant
Thin-X Latex Paint Thinner	Paint Thinner
VM & P Naphtha	Hydrocarbon Solvent
Wood Dust	
Benjamin Moore and Co. Fresh Start All Purpose 100% Acrylic Primer	Primer/Sealer
Color Putty Nailhole Filler	Filler
Contact Cement	Adhesive
Rust Destroyer 999 Alkyd Emulsion Base Primer	Primer/Sealer
Sherwin Williams ACE Rust Stop-1	Paint
Lightweight Body Filler	Filler
Elmer's Carpenters Wood Glue	Adhesive
DAP '33' Glazing Compound	Glazing Compound
Git-Rot Part "A"	Epoxy Resin
Minwax PreStain Wood Conditioner	Primer/Sealer
Minwax High Performance Wood Filler	Filler
WEST SYSTEM 410 Microlight	Filler
WEST SYSTEM 407 Low-Density Filler	Filler
WEST SYSTEM 406 Colloidal Silica	Epoxy Resin Additive
WEST SYSTEM 206 Slow Hardener	Epoxy Resin Additive
WEST SYSTEM 105 Epoxy Resin	Epoxy Resin
WEST SYSTEM 205 Fast Hardener	Epoxy Resin Additive
Denatured Alcohol	
Hydrochloric Acid	
Phenoseal Vinyl Adhesive Caulk 100 Series	Vinyl Adhesive Caulk
PL-200 Construction Adhesive	Adhesive

Inventory of Chemicals Used by Kronenberger and Sons, Inc.
on the Marino Property

<u>Product Name</u>	<u>Category</u>
Windex	Cleaner
Krylon Interior/Exterior Paint	Paint
Marvel Air Tool Oil	Lubricant
Rust Reformer	Primer/Sealer
Bleach	
Liquid Wrench Super Penetrant	Lubricant
Oops! Aerosol Spray	Cleaner
WD-40	Lubricant
Kilz	Primer/Sealer
DIRTEX Spray Cleaner	Cleaner
Silicone Industrial Sealant	Primer/Sealer
White Lightning Contact Trim Adhesive	Adhesive
3M Fire Barrier Watertight Sealant 3000 WT	Sealant
Olympic Penetrating Oil	Stain
Foamaway Carpet Defoamer	Additive
Murphy Oil Soap Liquid	Cleaner
Powers Powerfoam	Adhesive
Wil-Bond	Adhesive
Marine Penetrol	Additive
Sunnyside T.R.P.S.	Solvent
Distilled White Vinegar	
Klean Strip Japan Drier	Paint Additive
Takeoff 2000 Semi-paste Paint and Varnish Remover	Stripper
Takeoff Liquid Paint and Varnish Remover	Stripper
Citristrip	Stripper
Sunnyside Laquer Thinner	Paint Additive
Sunnyside Boiled Linseed Oil	Stain
Ultimate Midgloss	Acrylic Paint
Yellow Primer	Primer/Sealer
Superfinish Semi-gloss	Enamel Paint
Exterior Primer	Primer/Sealer
Ultimate Trim Enamel	Enamel Paint
Polyurethane HG Enamel	Paint
Winter Storm Ice Melter	Ice Melter
Soilax Bathroom Cleaner	Cleaner
Propane Fuel	Fuel
PC- Superepoxy, part A	Epoxy Resin
Bearing Lubricant	Lubricant
3-IN-ONE	Lubricant
Multipurpose Metal Polish	Polish
A-9 Aluminum Cutting Fluid	Cutting Oil
Famowood Wood Filler	Filler
RAID Wasp and Hornet Killer	Insecticide

Appendix B

Inventory of Chemicals Used by A.C.E.S., Inc. on the Marino Property

Inventory of Chemicals Used by A.C.E.S., Inc.
on the Marino Property

<u>Product Name</u>	<u>Category</u>
Fiberlock IAQ 6000	Mold Remediation
Fiberlock IAQ 6100	Mold Remediation
LBC Encapsulant	Lead Encapsulant
Chemsafe 100 Low Odor Mastic Remover	Petroleum Based Mastic/Glue Remover
Chemsafe Orange Cleaner	Citrus Mastic/Glue Remover
Chemsafe 400 Carpet Mastic Remover	Mastic/Glue Remover
Sentinel 747 Mastic Remover	Organic Mastic/Glue Remover
Wood Primer Latex Paint Exterior	Paint/Exterior
Sherwin Williams Interior Latex Paint	Paint/Interior
Behr Plus 10, Stucco Brick, Latex Primer	Primer
Peel Away 1	Lead Paint Remover
Sheet Rock Joint Compound	Joint Compound
Glidden Latex Paint	Latex Paint
Behr Latex Paint	Latex Paint
Pratt and Lambert Latex Paint	Latex Paint
567 Zalkyd Enamel Latex Paint	Latex Paint
Benjamin Moore Latex Paint	Latex Paint
Pratt and Lambert Oil-based Paint	Oil-based Paint
Lilz Oil-based Paint	Oil-based Paint
Krylon Oil-based Paint	Oil-based Paint
Ace Primer	Oil-based Primer
Minwax Stain	Stain
Odor Ban	Odor Remover
Pledge	Wood Polish
Windex	Window Cleaner
Peel Away Marine	Marine Grade Paint Remover
Ortho Hornet & Wasp Spray	Insecticide
Real Kill Ant & Roach Spray	Insecticide
Pro-force Floor Cleaner	Floor Cleaner
Spectracide Insect Control	Insecticide
Squeaky Wood and Floor Cleaner	Floor Cleaner
ZEP Driveway Concrete and Masonry Cleaner	Cleaner
Penetrol Paint Conditioner	Paint Additive
TSP Substitute	Surface Preparation
Kleen Strip	Paint/Stain Remover
Roof Cement Patch	Roof Cement Sealant

Appendix C

Marino Property Site: Tenant List

Marino Property Site: Tenant List (as of 20 April 2009)
50 Walnut Street, Middletown, Connecticut

	Tenant Representative Name	Business Relation/Title	Company Name	Tenant Address	Date EPA Granted Access
1	Tenant Representative 1	Owner	Not Listed	50 Walnut St, Middletown, CT	4/20/2009
2	Tenant Representative 2	Owner	Intentionally Left Blank	50 Walnut St, Middletown, CT	4/16/2009
3	Tenant Representative 3	Owner	Not Listed	50 Walnut St, Middletown, CT	4/17/2009
4	Tenant Representative 4	President	Intentionally Left Blank	50 Walnut St - Rear, Middletown, CT	4/15/2009
5	Tenant Representative 5	Sales	Intentionally Left Blank	50 - B Walnut St, Middletown, CT	4/15/2009
6	Tenant Representative 6	Owner	Not Listed	50 Walnut St, Middletown, CT	4/17/2009
7	Tenant Representative 7	Owner	Not Listed	50 Walnut St, Middletown, CT	4/17/2009
8	Tenant Representative 8	Salesman	Not Listed	50 Walnut St, Middletown, CT	4/15/2009
9	Tenant Representative 9	Owner	Not Listed	50 Walnut St - Rear, Middletown, CT	4/10/2009
10	Tenant Representative 10	Owner	Not Listed	50 Walnut St, Middletown, CT	4/15/2009
11	Tenant Representative 11	Owner	Intentionally Left Blank	50 Walnut St, Middletown, CT	4/20/2009

Appendix D

Photodocumentation Log

PHOTOGRAPHY LOG SHEET
Marino Property Site • Middletown, Connecticut



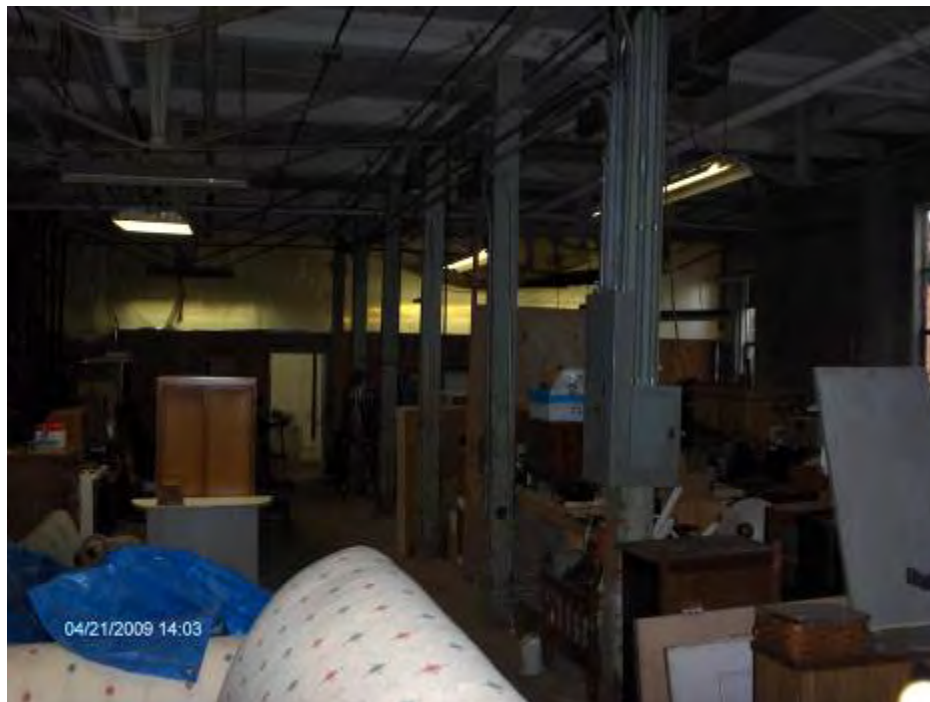
SCENE: View of the auto body shop area within the northern interior portion of Building No. 1 located on the northeastern portion of the Marino Property Site. Note: Date and time stamp on the photograph are incorrect.

DATE: 21 April 2009

TIME: 1400 hours

PHOTOGRAPHER: Gerald Hornok

CAMERA: HP Photosmart M22



SCENE: View of the central interior portion of Building No. 1 located on the northeastern portion of the Marino Property Site.

DATE: 21 April 2009

TIME: 1403 hours

PHOTOGRAPHER: Gerald Hornok

CAMERA: HP Photosmart M22

PHOTOGRAPHY LOG SHEET
Marino Property Site • Middletown, Connecticut



SCENE: View of the central interior portion of Building No. 1 located on the northeastern portion of the Marino Property Site.

DATE: 21 April 2009

PHOTOGRAPHER: Gerald Hornok

TIME: 1408 hours

CAMERA: HP Photosmart M22



SCENE: View of paints and chemicals stored within the central interior portion of Building No. 1 located on the northeastern portion of the Marino Property Site.

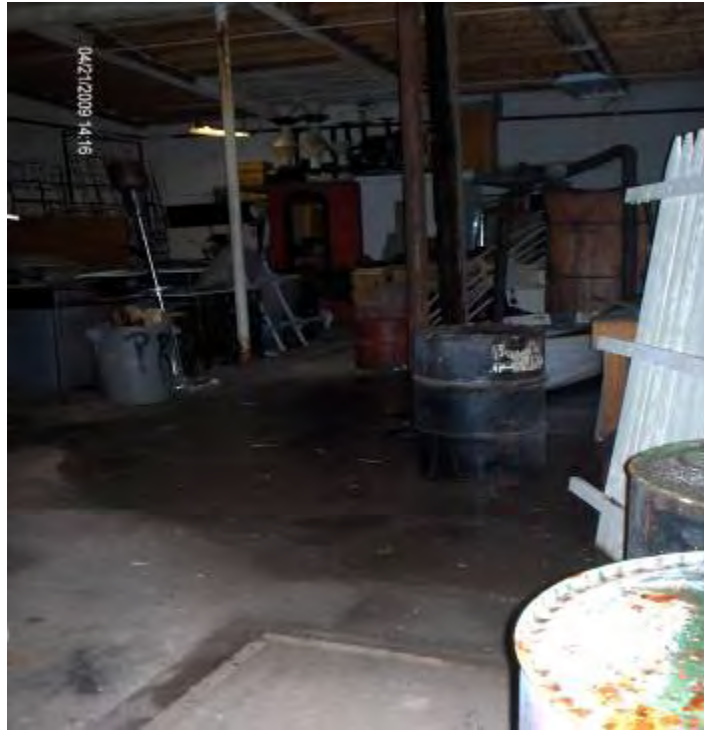
DATE: 21 April 2009

PHOTOGRAPHER: Gerald Hornok

TIME: 1409 hours

CAMERA: HP Photosmart M22

PHOTOGRAPHY LOG SHEET
Marino Property Site • Middletown, Connecticut



SCENE: View of the central interior portion of Building No. 1 located on the northeastern portion of the Marino Property Site.

DATE: 21 April 2009

PHOTOGRAPHER: Gerald Hornok

TIME: 1416 hours

CAMERA: HP Photosmart M22



SCENE: View of the central interior portion of Building No. 1 located on the northeastern portion of the Marino Property Site.

DATE: 21 April 2009

PHOTOGRAPHER: Gerald Hornok

TIME: 1418 hours

CAMERA: HP Photosmart M22

PHOTOGRAPHY LOG SHEET
Marino Property Site • Middletown, Connecticut



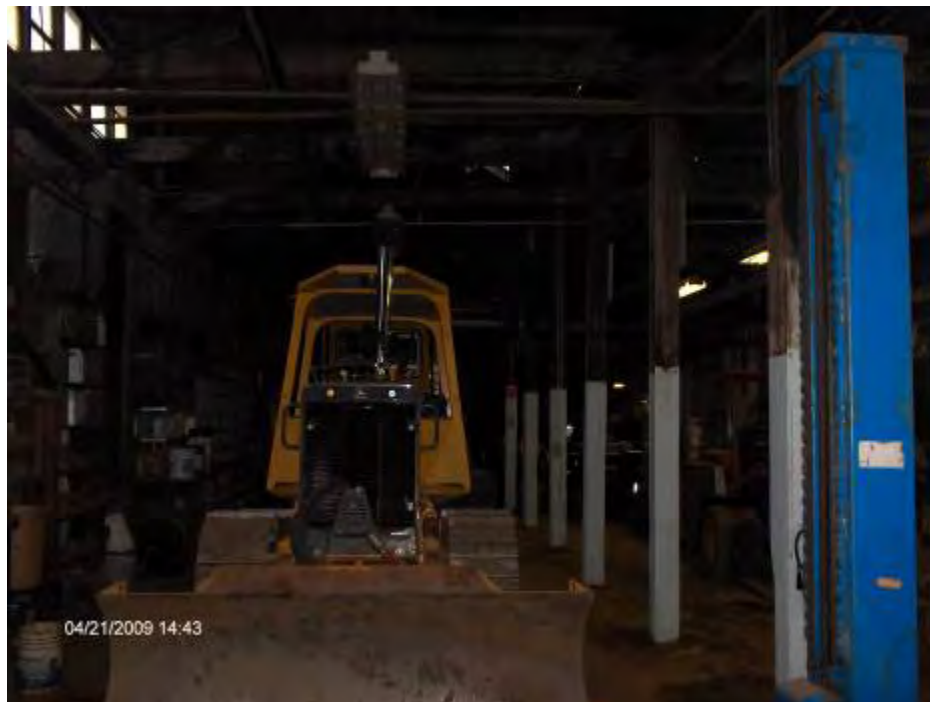
SCENE: View of the interior of the second floor of Building No. 1 located on the northeastern portion of the Marino Property Site. Area is used for storage of various materials by the current property owner.

DATE: 21 April 2009

TIME: 1431 hours

PHOTOGRAPHER: Gerald Hornok

CAMERA: HP Photosmart M22



SCENE: View of the garage area operated by American Contractors within the southern portion of Building No. 1 located on the northeastern portion of the Marino Property Site.

DATE: 21 April 2009

TIME: 1443 hours

PHOTOGRAPHER: Gerald Hornok

CAMERA: HP Photosmart M22

PHOTOGRAPHY LOG SHEET
Marino Property Site • Middletown, Connecticut

TOP



SCENE: View of a storage area operated by American Contractors within the southern portion of Building No. 1 located on the northeastern portion of the Marino Property Site.

DATE: 21 April 2009

PHOTOGRAPHER: Gerald Hornok

TIME: 1446 hours

CAMERA: HP Photosmart M22



SCENE: View of a work area operated by American Contractors within the southern portion of Building No. 1 located on the northeastern portion of the Marino Property Site. Note the petroleum stains on the floor surface.

DATE: 21 April 2009

PHOTOGRAPHER: Gerald Hornok

TIME: 1447 hours

CAMERA: HP Photosmart M22

PHOTOGRAPHY LOG SHEET
Marino Property Site • Middletown, Connecticut



SCENE: View of an oil storage area operated by American Contractors within the southern portion of Building No. 1 located on the northeastern portion of the Marino Property Site.

DATE: 21 April 2009

PHOTOGRAPHER: Gerald Hornok

TIME: 1451 hours

CAMERA: HP Photosmart M22



SCENE: View of the alley way located east of Building No. 2 located on the southeastern portion of the Marino Property Site. Photograph taken facing north.

DATE: 21 April 2009

PHOTOGRAPHER: Gerald Hornok

TIME: 1600 hours

CAMERA: HP Photosmart M22

PHOTOGRAPHY LOG SHEET
Marino Property Site • Middletown, Connecticut



SCENE: View of the northern portion of the Marino Property Site (northern area of Area of Investigation No. 1). Photograph taken facing west.

DATE: 21 April 2009

PHOTOGRAPHER: Gerald Hornok

TIME: 1806 hours

CAMERA: HP Photosmart M22



SCENE: View of the central portion of the Marino Property Site. Photograph taken facing south.

DATE: 21 April 2009

PHOTOGRAPHER: Gerald Hornok

TIME: 1808 hours

CAMERA: HP Photosmart M22

PHOTOGRAPHY LOG SHEET
Marino Property Site • Middletown, Connecticut



SCENE: View of the northern portion of the Marino Property Site. Photograph taken facing east.

DATE: 21 April 2009

PHOTOGRAPHER: Gerald Hornok

TIME: 1809 hours

CAMERA: Hp Photosmart M22



SCENE: View of the western central portion of the Marino Property Site. Photograph taken facing southwest.

DATE: 21 April 2009

PHOTOGRAPHER: Gerald Hornok

TIME: 1809 hours

CAMERA: HP Photosmart M22

PHOTOGRAPHY LOG SHEET
Marino Property Site • Middletown, Connecticut



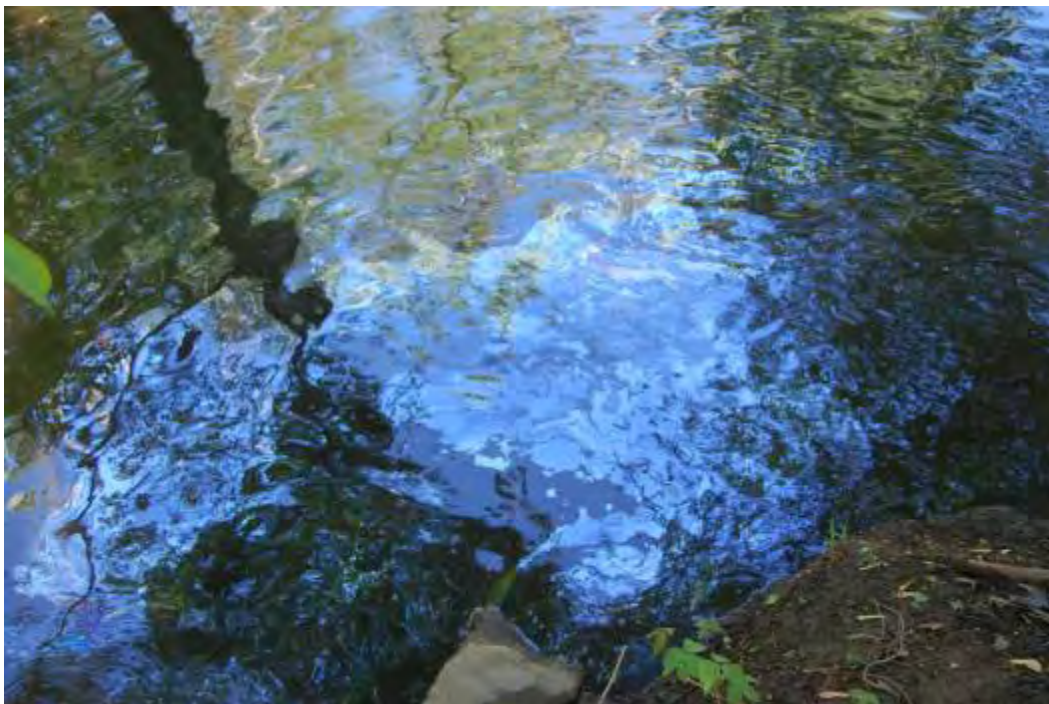
SCENE: View of the eastern central portion of the Marino Property Site. Note Building No. 1 in the background. Photograph taken facing southeast.

DATE: 21 April 2009

PHOTOGRAPHER: Gerald Hornok

TIME: 1810 hours

CAMERA: HP Photosmart M22



SCENE: View of a sheen observed within the northern portion of the drainage ditch located west of the Marino Property Site.

DATE: 21 May 2009

PHOTOGRAPHER: John Kelly

TIME: 0825 hours

CAMERA: NIKON D40

PHOTOGRAPHY LOG SHEET
Marino Property Site • Middletown, Connecticut



SCENE: View of transducer DD-01 located in the piezometer that was installed in the northern portion of the drainage ditch located west of the Marino Property Site. Photograph taken facing northwest.

DATE: 21 May 2009

TIME: 0825 hours

PHOTOGRAPHER: John Kelly

CAMERA: NIKON D40



SCENE: View of the western portion of the Area of Investigation No. 1 located on the northern portion of the Marino Property Site. Photograph taken facing north.

DATE: 24 June 2009

TIME: 1538 hours

PHOTOGRAPHER: George Mavris

CAMERA: HP Photosmart M425

PHOTOGRAPHY LOG SHEET
Marino Property Site • Middletown, Connecticut



SCENE: View of central portion of the Area of Investigation No. 1 located on the northern portion of the Marino Property Site. Photograph taken facing southwest.

DATE: 24 June 2009

PHOTOGRAPHER: George Mavris

TIME: 1539 hours

CAMERA: Hp Photosmart M425



SCENE: View of the northern portion of the Area of Investigation No. 1 located on the northern portion of the Marino Property Site. Photograph taken facing west.

DATE: 24 June 2009

PHOTOGRAPHER: George Mavris

TIME: 1540 hours

CAMERA: HP Photosmart M425

PHOTOGRAPHY LOG SHEET
Marino Property Site • Middletown, Connecticut



SCENE: View of the northern portion of the Area of Investigation No. 1 located on the northern portion of the Marino Property Site. Photograph taken facing east.

DATE: 24 June 2009

PHOTOGRAPHER: George Mavris

TIME: 1543 hours

CAMERA: HP Photosmart M425



SCENE: View of the western portion of the Area of Investigation No. 1 located on the northern portion of the Marino Property Site. Photograph taken facing south.

DATE: 24 June 2009

PHOTOGRAPHER: George Mavris

TIME: 1544 hours

CAMERA: HP Photosmart M425

PHOTOGRAPHY LOG SHEET
Marino Property Site • Middletown, Connecticut



SCENE: View of the southern portion of the Area of Investigation No. 1 located on the northern portion of the Marino Property Site. Photograph taken facing east.

DATE: 24 June 2009

PHOTOGRAPHER: George Mavris

TIME: 1546 hours

CAMERA: HP Photosmart M425



SCENE: View of the top 2 feet of test pit TP-09 located in the central portion of the Area of Investigation No. 1. Photograph taken facing west.

DATE: 25 August 2009

PHOTOGRAPHER: Gerald Hornok

TIME: 1421 hours

CAMERA: HP Photosmart M22

PHOTOGRAPHY LOG SHEET
Marino Property Site • Middletown, Connecticut



SCENE: View of material (including ash, wood, metal, glass, and plastic) excavated from test pit TP-09 located in the central portion of the Area of Investigation No. 1. Photograph taken facing southeast.

DATE: 25 August 2009

TIME: 1434 hours

PHOTOGRAPHER: Gerald Hornok

CAMERA: HP Photosmart M22



TOP

SCENE: View of test pit TP-09 located in the central portion of the Area of Investigation No. 1. Note incinerator ash throughout the excavation.

DATE: 25 August 2009

TIME: 1435 hours

PHOTOGRAPHER: Gerald Hornok

CAMERA: HP Photosmart M22

PHOTOGRAPHY LOG SHEET
Marino Property Site • Middletown, Connecticut



SCENE: View of test pit TP-05/10 located in the western-central portion of the Area of Investigation No. 1. Photograph taken facing east.

DATE: 26 August 2009

TIME: 0953 hours

PHOTOGRAPHER: Gerald Hornok

CAMERA: HP Photosmart M22



SCENE: View of metal debris excavated from test pit TP-05/10 located in the western-central portion of the Area of Investigation No. 1.

DATE: 26 August 2009

TIME: 0954 hours

PHOTOGRAPHER: Gerald Hornok

CAMERA: HP Photosmart M22

PHOTOGRAPHY LOG SHEET
Marino Property Site • Middletown, Connecticut



SCENE: View of material (including ash, metal, and glass) excavated from test pit TP-05/10 located in the western-central portion of the Area of Investigation No. 1. Photograph taken facing east.

DATE: 26 August 2009

TIME: 1142 hours

PHOTOGRAPHER: Gerald Hornok

CAMERA: HP Photosmart M22



SCENE: View of material (including ash, metal, and glass) excavated from test pit TP-05/10 located in the western-central portion of the Area of Investigation No. 1. Material was sampled as location TP-05/10 (14).

DATE: 26 August 2009

TIME: 1207 hours

PHOTOGRAPHER: Gerald Hornok

CAMERA: HP Photosmart M22

PHOTOGRAPHY LOG SHEET
Marino Property Site • Middletown, Connecticut



SCENE: View of material (including ash, metal, glass, and wood) excavated from test pit TP-05/10 located in the western-central portion of the Area of Investigation No. 1. Photograph taken facing north.

DATE: 26 August 2009

TIME: 1211 hours

PHOTOGRAPHER: Gerald Hornok

CAMERA: Hp Photosmart M22



SCENE: View of material (including metal and plastic) excavated from test pit TP-01 located in the southwestern portion of the Area of Investigation No. 1. Photograph taken facing east.

DATE: 27 August 2009

TIME: 0853 hours

PHOTOGRAPHER: Gerald Hornok

CAMERA: HP Photosmart M22

PHOTOGRAPHY LOG SHEET
Marino Property Site • Middletown, Connecticut



SCENE: View of a crushed 55-gallon steel drum excavated from test pit TP-01 located in the southwestern portion of the Area of Investigation No. 1. Material within the drum was sampled as DR-01 (1), and appeared to be soil.

DATE: 27 August 2009

TIME: 0908 hours

PHOTOGRAPHER: Gerald Hornok

CAMERA: HP Photosmart M22



SCENE: View of material (including glass, plastic, and metal) excavated from test pit TP-01 located in the southwestern portion of the Area of Investigation No. 1. Material was sampled as TP-01 (8).

DATE: 27 August 2009

TIME: 0937 hours

PHOTOGRAPHER: Gerald Hornok

CAMERA: HP Photosmart M22

PHOTOGRAPHY LOG SHEET
Marino Property Site • Middletown, Connecticut



SCENE: View of the western portion of test pit TP-01 located in the southwestern portion of the Area of Investigation No. 1. Photograph taken facing east.

DATE: 27 August 2009

PHOTOGRAPHER: Gerald Hornok

TIME: 1053 hours

CAMERA: HP Photosmart M22



SCENE: View of material (including glass and metal) excavated from test pit TP-01 located in the southwestern portion of the Area of Investigation No. 1. Material was sampled as TP-01 (12).

DATE: 27 August 2009

PHOTOGRAPHER: Gerald Hornok

TIME: 1107 hours

CAMERA: HP Photosmart M22

PHOTOGRAPHY LOG SHEET
Marino Property Site • Middletown, Connecticut

TOP



SCENE: View of material (including ash, metal, glass, wood, and plastic) excavated from test pit TP-01 located in the southwestern portion of the Area of Investigation No. 1. Photograph taken facing west.

DATE: 27 August 2009

TIME: 1123 hours

PHOTOGRAPHER: Gerald Hornok

CAMERA: HP Photosmart M22



SCENE: View of material (including glass, ash, and metal) excavated from test pit TP-01 located in the southwestern portion of the Area of Investigation No. 1. Photograph taken facing west.

DATE: 27 August 2009

TIME: 1123 hours

PHOTOGRAPHER: Gerald Hornok

CAMERA: HP Photosmart M22

PHOTOGRAPHY LOG SHEET
Marino Property Site • Middletown, Connecticut



SCENE: View of material (including ash and plastic) excavated from test pit TP-01 located in the southwestern portion of the Area of Investigation No. 1. Photograph taken facing southwest.

DATE: 27 August 2009

PHOTOGRAPHER: Gerald Hornok

TIME: 1140 hours

CAMERA: HP Photosmart M22



SCENE: View of test pit TP-06 located in the southeastern portion of the Area of Investigation No. 1. Metal debris is noted in the wall of the test pit. Photograph taken facing northwest. Note: Date and time stamp are incorrect.

DATE: 27 August 2009

PHOTOGRAPHER: John Kelly

TIME: Unknown

CAMERA: HP Photosmart M22

PHOTOGRAPHY LOG SHEET
Marino Property Site • Middletown, Connecticut



SCENE: View of test pit TP-06 located in the southeastern portion of the Area of Investigation No. 1. Photograph taken facing west. Note: Date and time stamp are incorrect.

DATE: 27 August 2009

PHOTOGRAPHER: John Kelly

TIME: Unknown

CAMERA: HP Photosmart M22



SCENE: View of material (including metal and glass) excavated from test pit TP-06 located in the southeastern portion of the Area of Investigation No. 1. Photograph taken facing west. Note: Date and time stamp are incorrect.

DATE: 27 August 2009

PHOTOGRAPHER: John Kelly

TIME: Unknown

CAMERA: HP Photosmart M22

PHOTOGRAPHY LOG SHEET
Marino Property Site • Middletown, Connecticut



SCENE: View of an automobile gas tank excavated from test pit TP-06 located in the southeastern portion of the Area of Investigation No. 1. Photograph taken facing west. Note: Date and time stamp are incorrect.

DATE: 27 August 2009

TIME: Unknown

PHOTOGRAPHER: John Kelly

CAMERA: HP Photosmart M22



SCENE: View of material (including ash, metal, and glass) excavated from test pit TP-06 located in the southeastern portion of the Area of Investigation No. 1. Photograph taken facing south. Note: Date and time stamp are incorrect.

DATE: 27 August 2009

TIME: Unknown

PHOTOGRAPHER: John Kelly

CAMERA: HP Photosmart M22

PHOTOGRAPHY LOG SHEET
Marino Property Site • Middletown, Connecticut



SCENE: View of a petroleum sheen on groundwater seeping into test pit TP-06 located on the southeastern portion of the Area of Investigation No. 1. Material was sampled as TP-06 (Water for Oil Identifications). Note: Date and time stamp are incorrect.

DATE: 27 August 2009

TIME: Unknown

PHOTOGRAPHER: John Kelly

CAMERA: HP Photosmart M22

TOP



SCENE: View of test pit TP-02/04 located in the northeastern portion of the Area of Investigation No. 1. Photograph taken facing west.

DATE: 28 August 2009

TIME: 0937 hours

PHOTOGRAPHER: Gerald Hornok

CAMERA: Hp Photosmart M22

PHOTOGRAPHY LOG SHEET
Marino Property Site • Middletown, Connecticut

TOP



SCENE: View of test pit TP-02/04 located in the northeastern portion of the Area of Investigation No. 1. Note rubber-like material at less than 2 feet below the ground surface. Photograph taken facing west.

DATE: 28 August 2009

TIME: 0943 hours

PHOTOGRAPHER: Gerald Hornok

CAMERA: HP Photosmart M22

TOP



SCENE: View of test pit TP-02/04 located in the northeastern portion of the Area of Investigation No. 1. Note rubber-like material and what appears to be a vertical polyvinylchloride pipe. Photograph taken facing west.

DATE: 28 August 2009

TIME: 0946 hours

PHOTOGRAPHER: Gerald Hornok

CAMERA: Hp Photosmart M22

PHOTOGRAPHY LOG SHEET
Marino Property Site • Middletown, Connecticut



SCENE: View of a pail and product material excavated from test pit TP-02/04 located in the northeastern portion of the Area of Investigation No. 1.

DATE: 28 August 2009

PHOTOGRAPHER: Gerald Hornok

TIME: 0948 hours

CAMERA: HP Photosmart M22



SCENE: View of product material encountered during the excavation of test pit TP-02/04 located in the northeastern portion of the Area of Investigation No. 1.

DATE: 28 August 2009

PHOTOGRAPHER: Gerald Hornok

TIME: 0955 hours

CAMERA: HP Photosmart M22

PHOTOGRAPHY LOG SHEET
Marino Property Site • Middletown, Connecticut



SCENE: View of material (including rubber-like material and soil) excavated from test pit TP-02/04 located in the northeastern portion of the Area of Investigation No. 1. Material was sampled as part of test pit TP-02/04 (SPC-01), TP-02/04 (SPG-01), and TP-02/04 (SPG-02). Photograph taken facing west.

DATE: 28 August 2009

TIME: 1041 hours

PHOTOGRAPHER: Gerald Hornok

CAMERA: HP Photosmart M22



SCENE: View of material (including rubber-like material and soil) excavated from test pit TP-02/04 located in the northeastern portion of the Area of Investigation No. 1. Material was sampled as part of test pit TP-02/04 (SPC-01), TP-02/04 (SPG-01), and TP-02/04 (SPG-02). Photograph taken facing west.

DATE: 28 August 2009

TIME: 1041 hours

PHOTOGRAPHER: Gerald Hornok

CAMERA: HP Photosmart M22

PHOTOGRAPHY LOG SHEET
Marino Property Site • Middletown, Connecticut



SCENE: View of material excavated from test pit TP-02/04 located in the northeastern portion of the Area of Investigation No. 1. Material was sampled as part of test pit TP-02/04 (Pail-01).

DATE: 28 August 2009

TIME: 1144 hours

PHOTOGRAPHER: John Kelly

CAMERA: Canon PowerShot A40



SCENE: View of material excavated from test pit TP-02/04 located in the northeastern portion of the Area of Investigation No. 1. Material was sampled as part of TP-02/04 (Pail-02).

DATE: 28 August 2009

TIME: 1145 hours

PHOTOGRAPHER: John Kelly

CAMERA: Canon PowerShot A40

PHOTOGRAPHY LOG SHEET
Marino Property Site • Middletown, Connecticut



SCENE: View of material excavated from test pit TP-02/04 located in the northeastern portion of the Area of Investigation No. 1. Material was sampled as part of test pit TP-02/04 (Pail-02).

DATE: 28 August 2009

TIME: 1145 hours

PHOTOGRAPHER: John Kelly

CAMERA: Canon PowerShot A40



SCENE: View of material (including rubber-like material and soil) excavated from test pit TP-02/04 located in the northeastern portion of the Area of Investigation No. 1. Material was sampled as part of test pit TP-02/04 (SPG-01).

DATE: 28 August 2009

TIME: 1145 hours

PHOTOGRAPHER: John Kelly

CAMERA: Canon PowerShot A40

PHOTOGRAPHY LOG SHEET
Marino Property Site • Middletown, Connecticut



SCENE: View of material (including rubber-like material and soil) excavated from test pit TP-02/04 located in the northeastern portion of the Area of Investigation No. 1. Material was sampled as part of test pit TP-02/04 (SPG-02). Photograph taken facing south.

DATE: 28 August 2009

PHOTOGRAPHER: John Kelly

TIME: 1145 hours

CAMERA: Canon PowerShot A40



SCENE: View of staged drums containing overpacked material excavated from test pit TP-02/04. Drum staging area is located adjacent to the southwestern portion of Building No. 1. Photograph taken facing northeast.

DATE: 9 October 2009

PHOTOGRAPHER: Gerald Hornok

TIME: 0833 hours

CAMERA: NIKON D40

PHOTOGRAPHY LOG SHEET
Marino Property Site • Middletown, Connecticut



SCENE: View of the western-central portion of the Marino Property Site. Note the asphalt recycling operations on the western property boundary. Photograph taken facing west.

DATE: 9 October 2009

PHOTOGRAPHER: Gerald Hornok

TIME: 0833 hours

CAMERA: NIKON D40



SCENE: View of surface soil sample location SS-21. Photograph taken facing south.

DATE: 9 October 2009

PHOTOGRAPHER: Gerald Hornok

TIME: 0833 hours

CAMERA: NIKON D40

PHOTOGRAPHY LOG SHEET
Marino Property Site • Middletown, Connecticut



SCENE: View of staged asphalt material located on the southern portion of the Area of Investigation No. 1. Photograph taken facing west.

DATE: 9 October 2009

TIME: 0835 hours

PHOTOGRAPHER: Gerald Hornok

CAMERA: NIKON D40



SCENE: View of surface soil sample location SS-12. Photograph taken facing north.

DATE: 9 October 2009

TIME: 0836 hours

PHOTOGRAPHER: Gerald Hornok

CAMERA: NIKON D40

PHOTOGRAPHY LOG SHEET
Marino Property Site • Middletown, Connecticut



SCENE: View of the central and northern portion of the Area of Investigation No. 1. Photograph taken facing northwest.

DATE: 9 October 2009

PHOTOGRAPHER: Gerald Hornok

TIME: 0838 hours

CAMERA: NIKON D40



SCENE: View of the northern portion of the Area of Investigation No. 1. Photograph taken facing north.

DATE: 9 October 2009

PHOTOGRAPHER: Gerald Hornok

TIME: 0840 hours

CAMERA: NIKON D40

PHOTOGRAPHY LOG SHEET
Marino Property Site • Middletown, Connecticut



SCENE: View of the northeastern portion of the Area of Investigation No. 1 and the location of test pit TP-02/04. Photograph taken facing northeast.

DATE: 9 October 2009

PHOTOGRAPHER: Gerald Hornok

TIME: 0843 hours

CAMERA: NIKON D40



SCENE: View of the eastern-central portion of the Area of Investigation No. 1. Photograph taken facing east.

DATE: 9 October 2009

PHOTOGRAPHER: Gerald Hornok

TIME: 0843 hours

CAMERA: NIKON D40

PHOTOGRAPHY LOG SHEET
Marino Property Site • Middletown, Connecticut



SCENE: View of the southeastern portion of the Area of Investigation No. 1. Note asphalt recycling operations on the western property boundary. Photograph taken facing south.

DATE: 9 October 2009

PHOTOGRAPHER: Gerald Hornok

TIME: 0845 hours

CAMERA: NIKON D40



SCENE: View of the southern portion of the Area of Investigation No. 1. Note the piles of staged asphalt. Photograph taken facing southwest.

DATE: 9 October 2009

PHOTOGRAPHER: Gerald Hornok

TIME: 0846 hours

CAMERA: NIKON D40

PHOTOGRAPHY LOG SHEET
Marino Property Site • Middletown, Connecticut



SCENE: View of the western central portion of the Area of Investigation No. 1. Photograph taken facing northwest.

DATE: 9 October 2009

PHOTOGRAPHER: Gerald Hornok

TIME: 0848 hours

CAMERA: NIKON D40

Appendix E

Sample Descriptions Tables - Marino Property Site, Middletown, Connecticut

TABLE 1

**GROUNDWATER MONITORING WELL HEADSPACE READINGS
MARINO PROPERTY SITE
MIDDLETOWN, CONNECTICUT**

Sample Location	Sample Number	Collection Date	Collection Time	Well Identification	Initial Well Headspace Reading						Sample Collection Well Headspace Reading						Comments
					TVA-Reading		MultiRAE Plus Reading				TVA-Reading		MultiRAE Plus Reading				
					VOC-FID	VOC- PID	VOC	LEL (%)	CO	O ₂ (%)	VOC-FID	VOC- PID	VOC	LEL (%)	CO	O ₂ (%)	
GW-01	R01-09511JT-0001	11-May-09	1445 hrs	ERT-01	0	0	0	0	0	20.9	50	0	0	0	0	20.9	VOC = 0 beyond 6 inches of well opening; possibly methane.
GW-02	R01-09511JT-0002	12-May-09	0950 hrs	ERT-02	2,200	0	0	4.9	0	15	0	0	0	0	0	20.9	N/A
GW-03	R01-09511JT-0003	11-May-09	1415 hrs	ERT-03	3	0	0	0	0	15.2	0	0	0	0	0	20.9	N/A
GW-04	R01-09511JT-0004	12-May-09	1509 hrs	ERT-04	4,000	0	1	Max	0	13.7	11%	0	1	56	0	20.2	VOC = 0 beyond 6 inches of well opening; possibly methane.
GW-05	R01-09511JT-0005	12-May-09	1240 hrs	ERT-05	55%	0.5	0	Low	0	12.2	2,000	0	0	3	0	20.4	VOC = 0 beyond 6 inches of well opening; possibly methane.
GW-06	R01-09511JT-0006	12-May-09	0935 hrs	ERT-06	0	2	0	0	0	16.2	0	0	0	0	0	20.9	N/A
GW-07	R01-09511JT-0007	11-May-09	1640 hrs	ERT-07	3,000	0.5	0	72	0	20.2	1%	0	0	0	0	20.9	VOC = 0 beyond 6 inches of well opening; possibly methane.
GW-08	R01-09511JT-0008	12-May-09	1200 hrs	ERT-08	297	0.5	0	25	0	12.4	0	0	0	0	0	20.9	
GW-09	R01-09511JT-0009	11-May-09	1640 hrs	ERT-07	3,000	0.5	0	72	0	20.2	3,000	0.5	0	72	0	20.2	VOC = 0 beyond 6 inches of well opening; possibly methane.

NOTES:

NA = Not Applicable

VOC = Volatile Organic Compound in ppm units

LEL = Lower Explosive Limit

CO = Carbon Monoxide

O₂ = Oxygen

ppm = Parts Per Million

TVA = TVA 1000 Detector

PID = Photoionization detector

FID = Flame ionization detector

TABLE 2

GROUNDWATER SAMPLE DESCRIPTIONS
MARINO PROPERTY SITE
MIDDLETOWN, CONNECTICUT

Sample Location	Sample Number	Collection Date	Collection Time	Well Location	Sample Type	Purge Rate (mL/minute)	Volume Purged (Liters)	Temperature* (Centigrade)	pH*	Specific Conductivity* (µS/cm)	Dissolved Oxygen* (ppm)	ORP* (mV)	Turbidity* (NTU)
GW-01	R01-09511JT-0001	11-May-09	1445 hrs	ERT-01	Grab	145	10.1	11.4	6.6	459.0	2.52	-58.4	0.87
GW-02	R01-09511JT-0002	12-May-09	0950 hrs	ERT-02	Grab	240	14.4	11.6	7.0	727.0	0.27	-96	2.83
GW-03	R01-09511JT-0003	11-May-09	1415 hrs	ERT-03	Grab	200	12	12.4	6.7	724.0	0.39	-68.6	3.29
GW-04	R01-09511JT-0004	12-May-09	1509 hrs	ERT-04	Grab	240	14.4	11.9	7.0	1778.0	1.65	130	2.57
GW-05	R01-09511JT-0005	12-May-09	1240 hrs	ERT-05	Grab	120	7.2	11.9	6.5	918.0	0.44	-85.5	1.28
GW-06	R01-09511JT-0006	12-May-09	0935 hrs	ERT-06	Grab	200	11	11.6	6.3	485.0	4.6	38.1	0.9
GW-07	R01-09511JT-0007	11-May-09	1640 hrs	ERT-07	Grab	210	12.6	12.4	7.1	1178.0	0.49	-110.1	0.31
GW-08	R01-09511JT-0008	12-May-09	1200 hrs	ERT-08	Grab	200	12	12.9	7.2	748.0	1.81	-128.9	15.5
GW-09	R01-09511JT-0009	11-May-09	1640 hrs	ERT-07	Grab	200	12.7	12.4	7.0	1178.0	0.49	-110.1	0.31

NOTES:

* = Temperature, pH, Specific Conductivity, Dissolved Oxygen, Oxidation Reduction Potential, and Turbidity readings shown in table represent those recorded just prior to sample collection.

mL = Milliliters.

µS/cm = Microsiemens per centimeter.

ppm = Parts per Million.

mV = Millivolts.

ORP = Oxidation-Reduction Potential.

NTU = Nephelometric Turbidity Units.

Dup = Duplicate Sample.

TABLE 3

**SUBSURFACE SOIL SAMPLE DESCRIPTIONS
MARINO PROPERTY SITE
MIDDLETOWN, CONNECTICUT**

Test Pit Identification	Sample Identification	Sample Number	Sample Depth (bgs)	Collection Date	Collection Time	Sample Type	Sample Description
TP-09	N/A	N/A	2-3 ft	25-Aug-09	1416 hrs	N/A	Boulders, cobbles, pieces of plastic and debris.
	N/A	N/A	3-4 ft	25-Aug-09	1425 hrs	N/A	Black material, possibly incinerator waste.
	N/A	N/A	4-8 ft	25-Aug-09	1438 hrs	N/A	Incinerator waste, brick, glass, abundant small metal debris pieces.
	N/A	N/A	8-10 ft	25-Aug-09	1400 hrs	N/A	Incinerator waste, brick, glass, abundant small metal debris.
	N/A	N/A	10 ft	25-Aug-09	1505 hrs	N/A	Box spring, Car door, abundant debris.
	TP-09 (16)	R01-950511JT-0020	16 ft	25-Aug-09	1610 hrs	Grab	Dark brown sandy silt, glass, metal, rubber, springs, cans, and pipes.
TP-05/10	TP-05/10 (2)	R01-950511JT-0023	2 ft.	26-Aug-09	0930 hrs	Grab	Brown medium to coarse sand, lots of cobbles, glass and wood debris
	TP-05/10 (4)	R01-950511JT-0024	4 ft.	26-Aug-09	0942 hrs	Grab	Black clay-like stiff materials, glass and metal debris.
	TP-05/10 (6)	R01-950511JT-0025	6 ft.	26-Aug-09	0948 hrs	Grab	Black c-sand & gravel material, glass and metal debris
	TP-05/10 (8)	R01-950511JT-0026	8 ft.	26-Aug-09	1000 hrs	Grab	Black coarse sand to coarse gravel and metal debris (crushed 5 gal pail)
	TP-05/10 (10)	R01-950511JT-0027	10 ft.	26-Aug-09	1100 hrs	Grab	Black ash waste, bottles, plastic, wood, and metal debris; silty sand, with white to yellow ash material layers.
	TP-05/10 (12)	R01-950511JT-0028	12 ft.	26-Aug-09	1158 hrs	Grab	Black ash, white ash layers, silty sand, bottles, wood, cans, metal, glass, ceramic debris.
	TP-05/10 (14)	R01-950511JT-0029	14 ft.	26-Aug-09	1205 hrs	Grab	Black ash, white ash layers, silty sand, bottles, wood, cans, metal, glass debris (shot gun shell).
	TP-05/10 (16)	R01-950511JT-0021	16 ft.	26-Aug-09	1430 hrs	Grab	Black ash silty sand, white ash, silty sand, metal, glass, cans, plastic bags, wood debris, gravel. Saturated with groundwater entering at base of hole.
TP-01	TP-01 (0.5)	R01-950511JT-0030	0.5 ft	27-Aug-09	0828 hrs	Grab	Brown fine sand and silt; fine to coarse gravel; brick fragments, metal and wood debris; trace organics and cobbles.
	TP-01 (1)	R01-950511JT-0031	1 ft	27-Aug-09	0836 hrs	Grab	Brown fine sand and silt; fine to coarse gravel; brick fragments, metal and wood debris; trace organics and cobbles.
	TP-01 (2)	R01-950511JT-0032	2 ft	27-Aug-09	0853 hrs	Grab	Red to brown silty fine sand [compact (chunks)]; concrete, gravel, and glass debris.
	DR-01 (1)	R01-950511JT-0034	2.5 ft	27-Aug-09	0907 hrs	Grab	Brown fine to coarse sand from within drum opening.
	TP-01 (3)	R01-950511JT-0033	3 ft	27-Aug-09	0914 hrs	Grab	Brown fine to coarse sand; trace silt; fine to coarse gravel; cobbles; burnt material (charcoal-like material).
	TP-01 (4)	R01-950511JT-0035	4 ft	27-Aug-09	0924 hrs	Grab	Red to brown silt and fine sand; trace fine to medium gravel; round cobbles.
	TP-01 (6) East	R01-950511JT-0036	6 ft	27-Aug-09	0934 hrs	Grab	Black ash material; , abundant debris (plastic, bottles, wood, metal).
	TP-01 (6) West	R01-950511JT-0037	6 ft	27-Aug-09	1049 hrs	Grab	Red to brown silt and fine sand; trace fine to medium gravel; round cobbles; and abundant debris.
	TP-01 (8)	R01-950511JT-0038	8 ft	27-Aug-09	1058 hrs	Grab	Dark brown to black ash material; abundant cans and glass debris (soda and beer cans).
	TP-01 (10)	R01-950511JT-0039	10 ft	27-Aug-09	1108 hrs	Grab	Dark grey to black sandy ash material; abundant bottles and metal debris; moist.
	TP-01 (12)	R01-950511JT-0040	12 ft	27-Aug-09	1116 hrs	Grab	Black ash material; debris (including metal, glass, wagon wheel, metal and rods); moist at base of hole.
	TP-01 (14)	R01-950511JT-0022	14 ft	27-Aug-09	1125 hrs	Grab	Black ash material; debris (including metal, and glass). Saturated (water entering side and bottom of hole).

TABLE 3

**SUBSURFACE SOIL SAMPLE DESCRIPTIONS
MARINO PROPERTY SITE
MIDDLETOWN, CONNECTICUT**

Test Pit Identification	Sample Identification	Sample Number	Sample Depth (bgs)	Headspace Screening Results					Comments
				VOC (ppm)	LEL (%)	CO (ppm)	H2S ppm	% O ₂	
TP-09	N/A	N/A	2-3 ft	0	0	0	0	20.9	No sample collected.
	N/A	N/A	3-4 ft	0	0	0	0	20.9	No sample collected.
	N/A	N/A	4-8 ft	4	0	0	0	20.9	No sample collected.
	N/A	N/A	8-10 ft	0	0	4	0	20.9	No sample collected.
	N/A	N/A	10 ft	0	0	1	0	20.9	No sample collected.
	TP-01 (16)	R01-950511JT-0020	16 ft	1.8	0	0	0	20.9	Soil sample for VOC, SVOC, PCB, Metals & Hg, and CN Lab Analyses.
TP-05/10	TP-05/10 (2)	R01-950511JT-0023	2 ft.	0	0	4	0	20.9	Soil sample for PCB and metals (XRF) screening.
	TP-05/10 (4)	R01-950511JT-0024	4 ft.	0	0	4	0	20.9	Soil sample for PCB and metals (XRF) screening.
	TP-05/10 (6)	R01-950511JT-0025	6 ft.	0	0	4	0	20.9	Soil sample for PCB and metals (XRF) screening.
	TP-05/10 (8)	R01-950511JT-0026	8 ft.	0	0	4	0	20.9	Soil sample for PCB and metals (XRF) screening.
	TP-05/10 (10)	R01-950511JT-0027	10 ft.	0	0	4	0	20.9	Soil sample for PCB and metals (XRF) screening.
	TP-05/10 (12)	R01-950511JT-0028	12 ft.	0.2	0	4	0	20.9	Soil sample for PCB and metals (XRF) screening.
	TP-05/10 (14)	R01-950511JT-0029	14 ft.	0	0	4	0	20.9	Soil sample for PCB and metals (XRF) screening.
	TP-05/10 (16)	R01-950511JT-0021	16 ft.	0	0	4	0	20.9	Soil sample for VOC, SVOC, PCB, Metals & Hg, and CN Lab Analyses.
TP-01	TP-01 (0.5)	R01-950511JT-0030	0.5 ft	0	0	0	0	20.9	Soil sample for PCB and metals (XRF) screening.
	TP-01 (1)	R01-950511JT-0031	1 ft	0	0	0	0	20.9	Soil sample for PCB and metals (XRF) screening.
	TP-01 (2)	R01-950511JT-0032	2 ft	0	0	0	0	20.9	Soil sample for PCB and metals (XRF) screening.
	DR-01 (1)	R01-950511JT-0034	2.5ft	0	0	0	0	20.9	Soil sample for PCB and metals (XRF) screening.
	TP-01 (3)	R01-950511JT-0033	3 ft	0	0	0	0	20.9	Soil sample for PCB and metals (XRF) screening.
	TP-01 (4)	R01-950511JT-0035	4 ft	0	0	0	0	20.9	Soil sample for PCB and metals (XRF) screening.
	TP-01 (6) East	R01-950511JT-0036	6 ft	0	0	0	0	20.9	Soil sample for PCB and metals (XRF) screening.
	TP-01 (6) West	R01-950511JT-0037	6 ft	0	0	0	0	20.9	Soil sample for PCB and metals (XRF) screening.
	TP-01 (8)	R01-950511JT-0038	8 ft	0	0	0	0	20.9	Soil sample for PCB and metals (XRF) screening.
	TP-01 (10)	R01-950511JT-0039	10 ft	0	0	0	0	20.9	Soil sample for PCB and metals (XRF) screening.
	TP-01 (12)	R01-950511JT-0040	12 ft	0	0	0	0	20.9	Soil sample for PCB and metals (XRF) screening.
	TP-01 (14)	R01-950511JT-0022	14 ft	10	0	0	0	20.9	Soil sample for VOC, SVOC, PCB, Metals & Hg, and CN Lab Analyses.

TABLE 3

**SUBSURFACE SOIL SAMPLE DESCRIPTIONS
MARINO PROPERTY SITE
MIDDLETOWN, CONNECTICUT**

Test Pit Identification	Sample Identification	Sample Number	Sample Depth (bgs)	Collection Date	Collection Time	Sample Type	Sample Description
TP-06	TP-06 (0.5)	R01-950511JT-0076	0.5 ft	27-Aug-09	1422 hrs	Grab	Brown m-c sand, major gravel, debris - glass, metal wire, plastic, paper, brick fragments, textile /cloth material.
	TP-06 (1)	R01-950511JT-0077	1 ft	27-Aug-09	1430 hrs	Grab	Reddish brown f-c sand, major gravel & cobble, glass fragments, metal, plastic sheeting, minor brick fragments.
	TP-06 (2)	R01-950511JT-0078	2 ft	27-Aug-09	1438 hrs	Grab	Brown to dark gray f-c sand, f-c gravel, major glass fragments (~40%).
	TP-06 (3)	R01-950511JT-0079	3 ft	27-Aug-09	1448 hrs	Grab	Light Brown m-c sand, limited debris (glass & metal).
	TP-06 (4)	R01-950511JT-0080	4 ft	27-Aug-09	1455 hrs	Grab	Light to dark brown m-c sand (gasoline tank noted).
	TP-16 (4)	R01-950511JT-0097	4 ft	27-Aug-09	1455 hrs	Grab	Light to dark brown m-c sand (gasoline tank noted).
	TP-06 (6)	R01-950511JT-0081	6 ft	27-Aug-09	1510 hrs	Grab	Dark brown m-c sand, major plastic, resin material, wood, limited brick and asphalt (construction debris).
	TP-16 (6)	R01-950511JT-0098	6 ft	27-Aug-09	1510 hrs	Grab	Dark brown m-c sand, major plastic, resin material, wood, limited brick and asphalt (construction debris).
	TP-06 (8)	R01-950511JT-0082	8 ft	27-Aug-09	1615 hrs	Grab	Dark brown to black f-m sand, some gravel, major debris (glass, metal wire, brick, wood, bottles, limited plastic).
	TP-06 (10)	R01-950511JT-0083	10 ft	27-Aug-09	1617 hrs	Grab	Black f-sand, major debris (cloth, bake pans, metal, glass, wood, concrete, brick). Cloth part of tennis net.
	TP-06 (12)	R01-950511JT-0084	12 ft	27-Aug-09	1625 hrs	Grab	Dark brown to black f-c sand, some gravel, major debris (brake pad, concrete, metal, plastic, brick, wood, rubber).
	TP-11 (12)	R01-950511JT-0085	12 ft	27-Aug-09	1625 hrs	Grab	Dark brown to black f-c sand, some gravel, major debris (brake pad, concrete, metal, plastic, brick, wood, rubber).
TP-02/04	TP-02/04 (1)	R01-950511JT-0086	1 ft	28-Aug-09	0933 hrs	Grab	Dark brown sand and silt, little gravel.
	TP-02/04 (2)	R01-950511JT-0087	2 ft	28-Aug-09	0953 hrs	Grab	Dark brown sand and rubber mixture, little gravel.
	TP-02/04 (SPC-01)	R01-950511JT-0088	N/A	28-Aug-09	1212 hrs	Composite	Dark brown sandy silt, with major ash, gravel, paint material, and some plastic, metal, brick, and concrete debris. Material had a gooey texture.
	TP-02/04 (SPG-01)	R01-950511JT-0089	N/A	28-Aug-09	1220 hrs	Grab	Dark brown sandy silt, with major ash, and major debris (including nails, plastic, metal, and paint fragments).
	TP-02/04 (SPG-02)	R01-950511JT-0090	N/A	28-Aug-09	1224 hrs	Grab	Dark brown to orange brown, fine-sand and clay, some ash and debris. Very wet material.

TABLE 3
SUBSURFACE SOIL SAMPLE DESCRIPTIONS
MARINO PROPERTY SITE
MIDDLETOWN, CONNECTICUT

Test Pit Identification	Sample Identification	Sample Number	Sample Depth (bgs)	Headspace Screening Results					Comments
				VOC (ppm)	LEL (%)	CO (ppm)	H2S ppm	% O ₂	
TP-06	TP-06 (0.5)	R01-950511JT-0076	0.5 ft	2.3	3	6	0	20.9	Soil sample for PCB and metals (XRF) screening.
	TP-06 (1)	R01-950511JT-0077	1 ft	2.2	3	6	0	20.9	Soil sample for PCB and metals (XRF) screening.
	TP-06 (2)	R01-950511JT-0078	2 ft	2.5	3	6	0	20.9	Soil sample for PCB and metals (XRF) screening.
	TP-06 (3)	R01-950511JT-0079	3 ft	2.3	3	6	0	20.9	Soil sample for PCB and metals (XRF) screening.
	TP-06 (4)	R01-950511JT-0080	4 ft	2.4	3	5	0	20.9	Soil sample for PCB and metals (XRF) screening.
	TP-16 (4)	R01-950511JT-0097	4 ft	2.4	3	5	0	20.9	QA/QC sample. Duplicate of TP-06 (4).
	TP-06 (6)	R01-950511JT-0081	6 ft	2.4	3	4	0.6	20.9	Soil sample for PCB and metals (XRF) screening.
	TP-16 (6)	R01-950511JT-0098	6 ft	2.4	3	4	0.6	20.9	QA/QC sample. Duplicate of TP-06 (4).
	TP-06 (8)	R01-950511JT-0082	8 ft	2.5	3	5	0	20.9	Soil sample for PCB and metals (XRF) screening.
	TP-06 (10)	R01-950511JT-0083	10 ft	NA	NA	NA	NA	NA	Soil sample for PCB and metals (XRF) screening.
	TP-06 (12)	R01-950511JT-0084	12 ft	2.4	2	2	2	20.9	Soil sample for VOC, SVOC, PCB, Metals & Hg, and CN Lab Analyses.
TP-02/04	TP-11 (12)	R01-950511JT-0085	12 ft	2.4	2	2	2	20.9	QA/QC sample. Duplicate of TP-06 (12)
	TP-02/04 (1)	R01-950511JT-0086	1 ft	0	0	0	0	20.9	Soil sample for PCB and metals (XRF) screening.
	TP-02/04 (2)	R01-950511JT-0087	2 ft	2197	4	0	0	20.9	Soil sample for PCB and metals (XRF) screening.
	TP-02/04 (SPC-01)	R01-950511JT-0088	N/A	395	4	0	0	20.9	Soil sample for VOC, SVOC, PCB, Metals & Hg, and CN Lab Analyses.
	TP-02/04 (SPG-01)	R01-950511JT-0089	N/A	904	9	0	0	20.9	Soil sample for VOC, SVOC, PCB, Metals & Hg, and CN Lab Analyses.
	TP-02/04 (SPG-02)	R01-950511JT-0090	N/A	182	0	0	0	20.9	Soil sample for VOC, SVOC, PCB, Metals & Hg, and CN Lab Analyses.

NOTES:

NA = Not Applicable
VOC = Volatile Organic Compound
LEL = Lower Explosive Limit
CO = Carbon Monoxide
H₂S = Hydrogen Sulfide
% O₂ = Percent Oxygen
ppm = Parts Per Million
SVOC = Semivolatile Organic Compound
PCB = Polychlorinated Biphenyl
Hg = Mercury
CN = Cyanide
XRF = X-Ray Fluorescence
bgs = Below Ground Surface
hrs = Hours
ft. = Feet
QA/QC = Quality Assurance / Quality Control

f-c = Fine-to-coarse.
m-c = Medium-to-coarse.
f-m = Fine-to-medium.

TABLE 4
SURFACE SOIL SAMPLE DESCRIPTIONS
MARINO PROPERTY SITE
MIDDLETOWN, CONNECTICUT

Sample Identification	Sample Number	Sample Depth (bgs)	Collection Date	Collection Time	Sample Type	Sample Description	Headspace Screening Results					Comments
							VOC (ppm)	LEL (%)	CO (ppm)	H ₂ S ppm	% O ₂	
SS-01	R01-950511JT-0047	0-6 in.	28-Aug-09	0810 hrs	N/A	Light brown to dark gray fine to medium sand, cobbles, trace debris (brick).	0	0	0	0	20.9	Surface soil sample for PCB and metals (XRF) screening.
SS-02	R01-950511JT-0048	0-6 in.	28-Aug-09	0805 hrs	N/A	Light to dark brown fine to medium sand, debris (brick, concrete), cobbles.	0	0	0	0	20.9	Surface soil sample for PCB and metals (XRF) screening.
SS-03	R01-950511JT-0049	0-6 in.	28-Aug-09	0755 hrs	N/A	Light to orange brown fine sand, major debris (concrete trace and brick), cobbles.	0	0	0	0	20.9	Surface soil sample for PCB and metals (XRF) screening.
SS-04	R01-950511JT-0050	0-6 in.	28-Aug-09	0751 hrs	N/A	Light to orange brown fine sand, major debris (concrete trace and brick), cobbles.	0	0	0	0	20.9	Surface soil sample for PCB and metals (XRF) screening.
SS-05	R01-950511JT-0051	0-6 in.	28-Aug-09	0739 hrs	N/A	Light brown fine to medium sand, trace silt, debris (brick, concrete).	0	0	0	0	20.9	Surface soil sample for PCB and metals (XRF) screening.
SS-06	R01-950511JT-0052	0-6 in.	28-Aug-09	0734 hrs	Grab	Light brown fine to medium sand, trace silt, debris (brick, concrete).	0	0	0	0	20.9	Surface soil sample for PCB and metals (XRF) screening.
SS-07	R01-950511JT-0053	0-6 in.	28-Aug-09	0814 hrs	Grab	Light brown to dark gray fine to medium sand, cobbles, trace debris (brick).	0	0	0	0	20.9	Surface soil sample for PCB and metals (XRF) screening.
SS-08	R01-950511JT-0054	0-6 in.	28-Aug-09	0803 hrs	Grab	Light to orange brown fine sand, major debris (concrete trace and brick), cobbles.	0	0	0	0	20.9	Surface soil sample for PCB and metals (XRF) screening.
SS-09	R01-950511JT-0055	0-6 in.	28-Aug-09	0759 hrs	Grab	Light to orange brown fine sand, major debris (concrete trace and brick), cobbles.	0	0	0	0	20.9	Surface soil sample for PCB and metals (XRF) screening.
SS-10	R01-950511JT-0056	0-6 in.	28-Aug-09	0747 hrs	Grab	Light brown fine to medium sand, trace silt, debris (brick, concrete).	0	0	0	0	20.9	Surface soil sample for PCB and metals (XRF) screening.
SS-11	R01-950511JT-0057	0-6 in.	28-Aug-09	0743 hrs	Grab	Light brown clay, trace fine sand, trace debris (brick), wet.	0	0	0	0	20.9	Surface soil sample for PCB and metals (XRF) screening.
SS-12	R01-950511JT-0058	0-6 in.	28-Aug-09	0832 hrs	Grab	Dark brown to black clayey silt, major gravel, some debris (concrete, brick) trace fine to coarse sand.	0	0	0	0	20.9	Surface soil sample for PCB and metals (XRF) screening.
SS-13	R01-950511JT-0059	0-6 in.	28-Aug-09	0827 hrs	Grab	Light gray sandy silt with major debris (concrete, brick, wood) little medium to coarse sand.	0	0	0	0	20.9	Surface soil sample for PCB and metals (XRF) screening.
SS-14	R01-950511JT-0060	0-6 in.	28-Aug-09	0821 hrs	Grab	Reddish brown clayey silt (compacted/solid), some angular gravel, trace fine to coarse sand and cobbles.	0	0	0	0	20.9	Surface soil sample for PCB and metals (XRF) screening.
SS-15	R01-950511JT-0061	0-6 in.	28-Aug-09	0806 hrs	Grab	Dark brown to gray sandy silt with some gravel, trace debris (concrete, brick, wood, rubber).	0	0	0	0	20.9	Surface soil sample for PCB and metals (XRF) screening.
SS-16	R01-950511JT-0062	0-6 in.	28-Aug-09	0813 hrs	Grab	Reddish brown silt, some gravel, some debris (brick), trace fine to coarse sand.	0	0	0	0	20.9	Surface soil sample for PCB and metals (XRF) screening.
SS-17	R01-950511JT-0063	0-6 in.	28-Aug-09	0753 hrs	Grab	Light brown to dark gray fine to medium sand, trace silt, cobbles, debris (concrete).	0	0	0	0	20.9	Surface soil sample for PCB and metals (XRF) screening.
SS-18	R01-950511JT-0065	0-6 in.	28-Aug-09	0800 hrs	Grab	Light brown medium to coarse sand, trace silt, cobbles, major debris (brick, concrete).	0	0	0	0	20.9	Surface soil sample for PCB and metals (XRF) screening.
SS-19	R01-950511JT-0066	0-6 in.	28-Aug-09	0807 hrs	Grab	Light brown medium to coarse sand, trace silt, cobbles, major debris (brick, concrete).	0	0	0	0	20.9	Surface soil sample for PCB and metals (XRF) screening.
SS-20	R01-950511JT-0067	0-6 in.	28-Aug-09	0811 hrs	Grab	Light brown to black fine to medium sand, some clay, cobbles, major debris (brick, concrete).	0	0	0	0	20.9	Surface soil sample for PCB and metals (XRF) screening.
SS-21	R01-950511JT-0068	0-6 in.	28-Aug-09	0733 hrs	Grab	Rusty brown silt with debris (glass, plastic, metal brick, concrete, wood).	0	0	0	0	20.9	Surface soil sample for PCB and metals (XRF) screening.
SS-22	R01-950511JT-0069	0-6 in.	28-Aug-09	0740 hrs	Grab	Dark brown silt, minor fine to coarse sand, minor gravel.	0	0	0	0	20.9	Surface soil sample for PCB and metals (XRF) screening.
SS-23	R01-950511JT-0070	0-6 in.	28-Aug-09	0759 hrs	Grab	Reddish brown silt, trace fine to coarse sand, trace gravel, cobble and brick fragments.	0	0	0	0	20.9	Surface soil sample for PCB and metals (XRF) screening.
SS-24	R01-950511JT-0071	0-6 in.	28-Aug-09	0754 hrs	Grab	Dark brown silt, trace fine to coarse sand, trace gravel.	0	0	0	0	20.9	Surface soil sample for PCB and metals (XRF) screening.

TABLE 4
SURFACE SOIL SAMPLE DESCRIPTIONS
MARINO PROPERTY SITE
MIDDLETOWN, CONNECTICUT

Sample Identification	Sample Number	Sample Depth (bgs)	Collection Date	Collection Time	Sample Type	Sample Description	Headspace Screening Results					Comments
							VOC (ppm)	LEL (%)	CO (ppm)	H ₂ S ppm	% O ₂	
SS-25	R01-950511JT-0072	0-6 in.	28-Aug-09	0810 hrs	Grab	Light brown to dark gray fine to medium sand, cobbles, trace debris (brick).	0	0	0	0	20.9	Surface soil sample for PCB and metals (XRF) screening.
SS-26	R01-950511JT-0073	0-6 in.	28-Aug-09	0821 hrs	Grab	Reddish brown clayey silt (compacted/solid), some angular gravel, trace fine to coarse sand and cobbles.	0	0	0	0	20.9	Duplicate of SS-14.
SS-27	R01-950511JT-0074	0-6 in.	28-Aug-09	0759 hrs	Grab	Reddish brown silt, trace fine to coarse sand, trace gravel, cobble and brick fragments.	0	0	0	0	20.9	Surface soil sample for PCB and metals (XRF) screening.

NOTES:

NA = Not Applicable
VOC = Volatile Organic Compound
SVOC = Semivolatile Organic Compound
PCB = Polychlorinated Biphenyl
XRF = X-Ray Fluorescence
LEL = Lower Explosive Limit
ppm = parts per million
hrs = Hours
in. = Inches
QA/QC = Quality Assurance / Quality Control
CO = Carbon Monoxide
H₂S = Hydrogen Sulfide
O₂ = Oxygen
bgs = below ground surface

TABLE 5
PRODUCT - CONTAINER SAMPLE DESCRIPTIONS
MARINO PROPERTY SITE
MIDDLETOWN, CONNECTICUT

Test Pit Identification	Sample Identification	Sample Number	Sample Depth (bgs)	Collection Date	Collection Time	Sample Type	Sample Description	Headspace Screening Results					Comments
								VOC (ppm)	LEL (%)	CO (ppm)	H2S ppm	% O ₂	
TP-02/04	TP-02/04 (Pail-01)	R01-950511JT-0091	N/A	28-Aug-09	1154 hrs	Grab	Maroon to red gooeey-texture material, with lumps of solid material.	1400	0	0	0	20.9	Soil sample for VOC, SVOC, PCB, Metals & Hg, and CN Lab Analyses.
	TP-02/04 (Pail-02)	R01-950511JT-0092	N/A	28-Aug-09	1200 hrs	Grab	Beige, gooeey (glue-like), plastic-like material.	700	0	0	0	20.9	Soil sample for VOC, SVOC, PCB, Metals & Hg, and CN Lab Analyses.
	TP-02/04 (Pail-03)	R01-950511JT-0093	N/A	28-Aug-09	1210 hrs	Grab	Hot pink, rubber eraser-like, semi-solid material.	1749	0	0	0	20.9	Soil sample for VOC, SVOC, PCB, Metals & Hg, and CN Lab Analyses.
TP-06	TP-06 (Water)	R01-950511JT-0096	12 ft.	27-Aug-09	1620 hrs	Grab	Groundwater with slight petroleum-like sheen infiltrating test pit	2.4	2	2	2	20.9	Petroleum Hydrocarbon - Oil Identification Lab Analyses.

NOTES:

NA = Not Applicable

VOC = Volatile Organic Compound

LEL = Lower Explosive Limit

CO = Carbon Monoxide

H₂S = Hydrogen Sulfide

% O₂ = Percent Oxygen

SVOC = Semivolatile Organic Compound

PCB = Polychlorinated Biphenyl

Hg = Mercury

CN = Cyanide

ppm = Parts Per Million

hrs = Hours

bgs = below ground surface

Appendix F

Chain-of-Custody Record

PN: 09050017

Marino Property Site

FEDEX Airbill: 867379987765

CHAIN OF CUSTODY RECORD

Site #: R01-090511JT
Janis Tsang
(617) 413-5053

No: R01-090511JT-05/11/09-0001
Coolers: EPAGH001/EPAGH003
US EPA NERL
c/o Doris Guzman

Lab #	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	MS/MS
	R01-090511JT-0001	GW-01	VOCs (\$VOAMW)	Ground Water	5/11/2009	14:45	4	40 mL	HCl	D
	R01-090511JT-0001	GW-01	SVOCs (\$BNAW)	Ground Water	5/11/2009	14:45	2	1 liter amber	4 C	N
	R01-090511JT-0001	GW-01	PCBs (\$PCBW)	Ground Water	5/11/2009	14:45	2	1 liter amber	4 C	N
	R01-090511JT-0001	GW-01	Metals inc. Hg (\$METW, MERCW)	Ground Water	5/11/2009	14:45	1	500 mL poly	HNO3	N
	R01-090511JT-0001	GW-01	Cyanide (CYANW)	Ground Water	5/11/2009	14:45	1	500 mL poly	NaOH	N
	R01-090511JT-0003	GW-03	VOCs (\$VOAMW)	Ground Water	5/11/2009	14:15	4	40 mL	HCl	N
	R01-090511JT-0003	GW-03	SVOCs (\$BNAW)	Ground Water	5/11/2009	14:15	2	1 liter amber	4 C	N
	R01-090511JT-0003	GW-03	PCBs (\$PCBW)	Ground Water	5/11/2009	14:15	2	1 liter amber	4 C	N
	R01-090511JT-0003	GW-03	Metals inc. Hg (\$METW, MERCW)	Ground Water	5/11/2009	14:15	1	500 mL poly	HNO3	N
	R01-090511JT-0003	GW-03	Cyanide (CYANW)	Ground Water	5/11/2009	14:15	1	500 mL poly	NaOH	N
	R01-090511JT-0007	GW-07	VOCs (\$VOAMW)	Ground Water	5/11/2009	16:40	4	40 mL	HCl	N
	R01-090511JT-0007	GW-07	SVOCs (\$BNAW)	Ground Water	5/11/2009	16:40	2	1 liter amber	4 C	N
	R01-090511JT-0007	GW-07	PCBs (\$PCBW)	Ground Water	5/11/2009	16:40	2	1 liter amber	4 C	N
	R01-090511JT-0007	GW-07	Metals inc. Hg (\$METW, MERCW)	Ground Water	5/11/2009	16:40	1	500 mL poly	HNO3	N
	R01-090511JT-0007	GW-07	Cyanide (CYANW)	Ground Water	5/11/2009	16:40	1	500 mL poly	NaOH	N
	R01-090511JT-0009	GW-09	VOCs (\$VOAMW)	Ground Water	5/11/2009	16:40	4	40 mL	HCl	N
	R01-090511JT-0009	GW-09	SVOCs (\$BNAW)	Ground Water	5/11/2009	16:40	2	1 liter amber	4 C	N

Special Instructions: Samples GW-07 and GW-09 contain black particulates that did not settle out of suspension. Please forward results to OSC Janis Tsang [Tsang.Janis@epa.gov]

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Relinquished By	Date	Received by	Date	Time
Samples	Mu a wu	5/11/09	<i>[Signature]</i>	5/12/09	12:20				

cooler 30C

PN 09050017

Marino Property Site

CHAIN OF CUSTODY RECORD

No: R01-090511JT-05/11/09-0001

Site #: R01-090511JT

Coolers: EPAGH001/EPAGH003

Janis Tsang

US EPA NERL

(617) 413-5053

c/o Doris Guzman

FEDEX Airbill: 867379987765

Lab #	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	MS/MS D
	R01-090511JT-0009	GW-09	PCBs (\$PCBW)	Ground Water	5/11/2009	16:40	2	1 liter amber	4 C	N
	R01-090511JT-0009	GW-09	Metals inc. Hg (\$METW, MERCW)	Ground Water	5/11/2009	16:40	1	500 mL poly	HNO3	N
	R01-090511JT-0009	GW-09	Cyanide (CYANW)	Ground Water	5/11/2009	16:40	1	500 mL poly	NaOH	N
	R01-090511JT-0010	RB-01	VOCs (\$VOAMW)	Water	5/11/2009	16:22	4	40 mL	HCl	N
	R01-090511JT-0010	RB-01	SVOCs (\$BNAW)	Water	5/11/2009	16:22	2	1 liter amber	4 C	N
	R01-090511JT-0010	RB-01	PCBs (\$PCBW)	Water	5/11/2009	16:22	2	1 liter amber	4 C	N
	R01-090511JT-0010	RB-01	Metals inc. Hg (\$METW, MERCW)	Water	5/11/2009	16:22	1	500 mL poly	HNO3	N
	R01-090511JT-0010	RB-01	Cyanide (CYANW)	Water	5/11/2009	16:22	1	500 mL poly	NaOH	N
	R01-090511JT-0012	TB-01	VOCs (\$VOAMW)	Water	5/11/2009	06:00	4	40 mL	HCl	N
	R01-090511JT-0014	PE-PW393	VOCs (\$VOAMW)	Performance Evaluation	5/11/2009	06:00	1	ampule	4 C	N
	R01-090511JT-0015	PE-PU226	SVOCs (\$BNAW)	Performance Evaluation	5/11/2009	06:00	1	ampule	4 C	N
	R01-090511JT-0016	PE-AA0137	PCBs (\$PCBW)	Performance Evaluation	5/11/2009	06:00	1	ampule	4 C	N
	R01-090511JT-0017	PE-IS5674	Metals (\$METW)	Performance Evaluation	5/11/2009	06:00	1	30 mL poly	4 C	N
	R01-090511JT-0018	PE-HG5177	Hg (MERCW)	Performance Evaluation	5/11/2009	06:00	1	20 mL poly	4 C	N

Special Instructions: Samples GW-07 and GW-09 contain black particulates that did not settle out of suspension. Please forward results to OSC Janis Tsang [Tsang.Janis@epa.gov]					SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #				
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Items/Reason	Relinquished by	Date	Received by	Date	Relinquished By	Date	Received by	Date	Time
Samples	Ma Wn	5/11/09	<i>[Signature]</i>	5/12/09	12:30				

Coolee 3°C

CHAIN OF CUSTODY RECORD

(617) 413-5053

[illegible]

Special Instructions: Samples GW-07 and GW-09 contain black particulates that did not settle out of suspension. Please forward results to OSC Janis Tsang [Tsang.Janis@epa.gov]

SAMPLES TRANSFERRED FROM	CHAIN OF CUSTODY #

[illegible]

Cooler 3°C

CHAIN OF CUSTODY RECORD

INO: K01-090517J1-05/12/09-0002

Site #: R01-090511JT

US EPA NERL
c/o Doris Guzman

Janis Tsang
(617) 413-5053

Lab #	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	MS/MS D
	R01-090511JT-0002	GW-02	VOCs (\$VOAMW)	Ground Water	5/12/2009	09:50	4	40 mL	HCl	N
	R01-090511JT-0002	GW-02	SVOCs (\$BNAW)	Ground Water	5/12/2009	09:50	2	1 liter amber	4 C	N
	R01-090511JT-0002	GW-02	PCBs (\$PCBW)	Ground Water	5/12/2009	09:50	2	1 liter amber	4 C	N
	R01-090511JT-0002	GW-02	Metals inc. Hg (\$METW, MERCW)	Ground Water	5/12/2009	09:50	1	500 mL poly	HNO3	N
	R01-090511JT-0002	GW-02	Cyanide (CYANW)	Ground Water	5/12/2009	09:50	1	500 mL poly	NaOH	N
	R01-090511JT-0004	GW-04	VOCs (\$VOAMW)	Ground Water	5/12/2009	15:09	4	40 mL	HCl	N
	R01-090511JT-0004	GW-04	SVOCs (\$BNAW)	Ground Water	5/12/2009	15:09	2	1 liter amber	4 C	N
	R01-090511JT-0004	GW-04	PCBs (\$PCBW)	Ground Water	5/12/2009	15:09	2	1 liter amber	4 C	N
	R01-090511JT-0004	GW-04	Metals inc. Hg (\$METW, MERCW)	Ground Water	5/12/2009	15:09	1	500 mL poly	HNO3	N
	R01-090511JT-0004	GW-04	Cyanide (CYANW)	Ground Water	5/12/2009	15:09	1	500 mL poly	NaOH	N
	R01-090511JT-0005	GW-05	VOCs (\$VOAMW)	Ground Water	5/12/2009	12:40	4	40 mL	HCl	N
	R01-090511JT-0005	GW-05	SVOCs (\$BNAW)	Ground Water	5/12/2009	12:40	2	1 liter amber	4 C	N
	R01-090511JT-0005	GW-05	PCBs (\$PCBW)	Ground Water	5/12/2009	12:40	2	1 liter amber	4 C	N
	R01-090511JT-0005	GW-05	Metals inc. Hg (\$METW, MERCW)	Ground Water	5/12/2009	12:40	1	500 mL poly	HNO3	N
	R01-090511JT-0005	GW-05	Cyanide (CYANW)	Ground Water	5/12/2009	12:40	1	500 mL poly	NaOH	N
	R01-090511JT-0006	GW-06	VOCs (\$VOAMW)	Ground Water	5/12/2009	09:35	4	40 mL	HCl	N
	R01-090511JT-0006	GW-06	SVOCs (\$BNAW)	Ground Water	5/12/2009	09:35	2	1 liter amber	4 C	N

**SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #**

Special Instructions: Please forward results to OSC Janis Tsang [Tsang.Janis@epa.gov]

[illegible]

CHAIN OF CUSTODY RECORD

No: R01-090511JT-05/12/09-0002

Site #: R01-090511JT

Janis Tsang

(617) 413-5053

US EPA NERL

c/o Doris Guzman

[illegible]

Special Instructions: Please forward results to OSC Janis Tsang [Tsang.Janis@epa.gov]

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY #

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CHAIN OF CUSTODY RECORD

Site #: R01-090511JT
Janis Tsang
(617) 413-5053

No: R01-090511JT-08/27/09-0003

US EPA NERL
c/o Doris Guzman

Lab #	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	MS/MS D
	R01-090511JT-0020	TP-09 (16 ft)	VOCs (\$VOAHS)	Soil	8/25/2009	16:10	1	40 mL VOA	MeOH	N
	R01-090511JT-0020	TP-09 (16 ft)	Percent Solids (% Solids)	Soil	8/25/2009	16:10	1	40 mL VOA	4 C	N
	R01-090511JT-0020	TP-09 (16 ft)	SVOCs (\$BNAMS)	Soil	8/25/2009	16:10	1	4 oz amber	4 C	N
	R01-090511JT-0020	TP-09 (16 ft)	PCBs (\$PCBMS)	Soil	8/25/2009	16:10	1	4 oz amber	4 C	N
	R01-090511JT-0020	TP-09 (16 ft)	Metals inc. Hg (\$METMS and MERCS)	Soil	8/25/2009	16:10	1	4 oz amber	4 C	N
	R01-090511JT-0020	TP-09 (16 ft)	Cyanide (CYANS)	Soil	8/25/2009	16:10	1	4 oz amber	4 C	N
	R01-090511JT-0021	TP-05/10 (16 ft)	VOCs (\$VOAHS)	Soil	8/26/2009	14:45	1	40 mL VOA	MeOH	N
	R01-090511JT-0021	TP-05/10 (16 ft)	Percent Solids (% Solids)	Soil	8/26/2009	14:45	1	40 mL VOA	4 C	N
	R01-090511JT-0021	TP-05/10 (16 ft)	SVOCs (\$BNAMS)	Soil	8/26/2009	14:45	1	4 oz amber	4 C	N
	R01-090511JT-0021	TP-05/10 (16 ft)	PCBs (\$PCBMS)	Soil	8/26/2009	14:45	1	4 oz amber	4 C	N
	R01-090511JT-0021	TP-05/10 (16 ft)	Metals inc. Hg (\$METMS and MERCS)	Soil	8/26/2009	14:45	1	4 oz amber	4 C	N

Special Instructions: Please forward results to OSC Janis Tsang [Tsang.Janis@epa.gov]	SAMPLES TRANSFERRED FROM
	CHAIN OF CUSTODY #

[illegible]

CHAIN OF CUSTODY RECORD

Site #: R01-090511JT
Janis Tsang
(617) 413-5053

No: R01-090511JT-08/27/09-0003

US EPA NERL
c/o Doris Guzman

Lab #	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	MS/MS D
	R01-090511JT-0021	TP-05/'10 (16 ft)	Cyanide (CYANS)	Soil	8/26/2009	14:45	1	4 oz amber	4 C	N
	R01-090511JT-0022	TP-01 (14 ft)	VOCs (\$VOAHS)	Soil	8/27/2009	11:25	1	40 mL VOA	MeOH	N
	R01-090511JT-0022	TP-01 (14 ft)	Percent Solids (% Solids)	Soil	8/27/2009	11:25	1	40 mL VOA	4 C	N
	R01-090511JT-0022	TP-01 (14 ft)	SVOCs (\$BNAMS)	Soil	8/27/2009	11:25	1	4 oz amber	4 C	N
	R01-090511JT-0022	TP-01 (14 ft)	PCBs (\$PCBMS)	Soil	8/27/2009	11:25	1	4 oz amber	4 C	N
	R01-090511JT-0022	TP-01 (14 ft)	Metals inc. Hg (\$METMS and MERCs)	Soil	8/27/2009	11:25	1	4 oz amber	4 C	N
	R01-090511JT-0022	TP-01 (14 ft)	Cyanide (CYANS)	Soil	8/27/2009	11:25	1	4 oz amber	4 C	N
	R01-090511JT-0023	TP-05/'10 (2 ft)	PCB Screening (#FPCB)	Soil	8/26/2009	09:30	1	4 oz amber	4 C	N
	R01-090511JT-0023	TP-05/'10 (2 ft)	Metals Screening (\$FXRF)	Soil	8/26/2009	09:30	1	4 oz amber	4 C	N
	R01-090511JT-0024	TP-05/'10 (4 ft)	PCB Screening (#FPCB)	Soil	8/26/2009	09:42	1	4 oz amber	4 C	N
	R01-090511JT-0024	TP-05/'10 (4 ft)	Metals Screening (\$FXRF)	Soil	8/26/2009	09:42	1	4 oz amber	4 C	N

Special Instructions: Please forward results to OSC Janis Tsang [Tsang.Janis@epa.gov]	SAMPLES TRANSFERRED FROM
	CHAIN OF CUSTODY #

[illegible]

CHAIN OF CUSTODY RECORD

Site #: R01-090511JT
Janis Tsang
(617) 413-5053

No: R01-090511JT-08/27/09-0003

US EPA NERL
c/o Doris Guzman

Lab #	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	MS/MS D
	R01-090511JT-0025	TP-05/10 (6 ft)	PCB Screening (#FPCB)	Soil	8/26/2009	09:48	1	4 oz amber	4 C	N
	R01-090511JT-0025	TP-05/10 (6 ft)	Metals Screening (\$FXRF)	Soil	8/26/2009	09:48	1	4 oz amber	4 C	N
	R01-090511JT-0026	TP-05/10 (8 ft)	PCB Screening (#FPCB)	Soil	8/26/2009	10:00	1	4 oz amber	4 C	N
	R01-090511JT-0026	TP-05/10 (8 ft)	Metals Screening (\$FXRF)	Soil	8/26/2009	10:00	1	4 oz amber	4 C	N
	R01-090511JT-0027	TP-05/10 (10 ft)	PCB Screening (#FPCB)	Soil	8/26/2009	11:50	1	4 oz amber	4 C	N
	R01-090511JT-0027	TP-05/10 (10 ft)	Metals Screening (\$FXRF)	Soil	8/26/2009	11:50	1	4 oz amber	4 C	N
	R01-090511JT-0028	TP-05/10 (12 ft)	PCB Screening (#FPCB)	Soil	8/26/2009	11:55	1	4 oz amber	4 C	N
	R01-090511JT-0028	TP-05/10 (12 ft)	Metals Screening (\$FXRF)	Soil	8/26/2009	11:55	1	4 oz amber	4 C	N
	R01-090511JT-0029	TP-05/10 (14 ft)	PCB Screening (#FPCB)	Soil	8/26/2009	12:05	1	4 oz amber	4 C	N
	R01-090511JT-0029	TP-05/10 (14 ft)	Metals Screening (\$FXRF)	Soil	8/26/2009	12:05	1	4 oz amber	4 C	N
	R01-090511JT-0030	TP-01 (0.5 ft)	PCB Screening (#FPCB)	Soil	8/27/2009	08:28	1	4 oz amber	4 C	N

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CHAIN OF CUSTODY RECORD

Site #: R01-090511JT

Janis Tsang

(617) 413-5053

No: R01-090511JT-08/27/09-0003

USEPA NERL

c/o Doris Guzman

Lab #	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	MS/MS D
	R01-090511JT-0030	TP-01 (0.5 ft)	Metals Screening (\$FXRF)	Soil	8/27/2009	08:28	1	4 oz amber	4 C	N
	R01-090511JT-0031	TP-01 (1 ft)	PCB Screening (#FPCB)	Soil	8/27/2009	08:36	1	4 oz amber	4 C	N
	R01-090511JT-0031	TP-01 (1 ft)	Metals Screening (\$FXRF)	Soil	8/27/2009	08:36	1	4 oz amber	4 C	N
	R01-090511JT-0032	TP-01 (2 ft)	PCB Screening (#FPCB)	Soil	8/27/2009	08:53	1	4 oz amber	4 C	N
	R01-090511JT-0032	TP-01 (2 ft)	Metals Screening (\$FXRF)	Soil	8/27/2009	08:53	1	4 oz amber	4 C	N
	R01-090511JT-0033	TP-01 (3 ft)	PCB Screening (#FPCB)	Soil	8/27/2009	09:14	1	4 oz amber	4 C	N
	R01-090511JT-0033	TP-01 (3 ft)	Metals Screening (\$FXRF)	Soil	8/27/2009	09:14	1	4 oz amber	4 C	N
	R01-090511JT-0034	Drum-01	PCB Screening (#FPCB)	Soil	8/27/2009	09:07	1	4 oz amber	4 C	N
	R01-090511JT-0034	Drum-01	Metals Screening (\$FXRF)	Soil	8/27/2009	09:07	1	4 oz amber	4 C	N
	R01-090511JT-0035	TP-01 (4 ft)	PCB Screening (#FPCB)	Soil	8/27/2009	09:24	1	4 oz amber	4 C	N
	R01-090511JT-0035	TP-01 (4 ft)	Metals Screening (\$FXRF)	Soil	8/27/2009	09:24	1	4 oz amber	4 C	N
	R01-090511JT-0036	TP-01 (6 ft) East	PCB Screening (#FPCB)	Soil	8/27/2009	09:34	1	4 oz amber	4 C	N
	R01-090511JT-0036	TP-01 (6 ft) East	Metals Screening (\$FXRF)	Soil	8/27/2009	09:34	1	4 oz amber	4 C	N
	R01-090511JT-0037	TP-01 (6 ft) West	PCB Screening (#FPCB)	Soil	8/27/2009	10:49	1	4 oz amber	4 C	N
	R01-090511JT-0037	TP-01 (6 ft) West	Metals Screening (\$FXRF)	Soil	8/27/2009	10:49	1	4 oz amber	4 C	N

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CHAIN OF CUSTODY RECORD

Site #: R01-090511JT
Janis Tsang
(617) 413-5053

No: R01-090511JT-08/27/09-0003

US EPA NERL
c/o Doris Guzman

Lab #	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	MS/MS D
	R01-090511JT-0038	TP-01 (8 ft)	PCB Screening (#FPCB)	Soil	8/27/2009	10:58	1	4 oz amber	4 C	N
	R01-090511JT-0038	TP-01 (8 ft)	Metals Screening (\$FXRF)	Soil	8/27/2009	10:58	1	4 oz amber	4 C	N
	R01-090511JT-0039	TP-01 (10 ft)	PCB Screening (#FPCB)	Soil	8/27/2009	11:08	1	4 oz amber	4 C	N
	R01-090511JT-0039	TP-01 (10 ft)	Metals Screening (\$FXRF)	Soil	8/27/2009	11:08	1	4 oz amber	4 C	N
	R01-090511JT-0040	TP-01 (12 ft)	PCB Screening (#FPCB)	Soil	8/27/2009	11:16	1	4 oz amber	4 C	N
	R01-090511JT-0040	TP-01 (12 ft)	Metals Screening (\$FXRF)	Soil	8/27/2009	11:16	1	4 oz amber	4 C	N
	R01-090511JT-0041	PE-SRS0052	VOCs (\$VOAHS)	Performance Evaluation	8/24/2009	12:00	1	Ampule	4 C	N
	R01-090511JT-0042	PE-SS1120	SVOCs (\$BNAMS)	Performance Evaluation	8/24/2009	12:00	1	2 oz Jar	4 C	N
	R01-090511JT-0043	PE-AS1060	PCBs (\$PCBMS)	Performance Evaluation	8/24/2009	12:00	1	Ampule	4 C	N
	R01-090511JT-0044	PE-IS4998	Metals inc. Hg (\$METMS and MERCS)	Performance Evaluation	8/24/2009	12:00	1	Ampule	4 C	N
	R01-090511JT-0045	PE-CNS1204	Cyanide (CYANS)	Performance Evaluation	8/24/2009	12:00	1	Ampule	4 C	N
	R01-090511JT-0046	TB-03	VOCs (\$VOAHS)	Water	8/24/2009	12:00	1	40 mL VOA	HCl	N

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CHAIN OF CUSTODY RECORD

Site #: R01-090511JT

Janis Tsang

(617) 413-5053

No: R01-090511JT-08/31/09-0004

USEPA NERL

c/o Doris Guzman

Lab #	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	MS/MS D
	R01-090511JT-0047	SS-01	PCB Screening (#FPCB)	Soil	8/28/2009	08:10	1	4 oz amber	4 C	N
	R01-090511JT-0047	SS-01	Metals Screening (\$FXRF)	Soil	8/28/2009	08:10	1	4 oz amber	4 C	N
	R01-090511JT-0048	SS-02	PCB Screening (#FPCB)	Soil	8/28/2009	08:05	1	4 oz amber	4 C	N
	R01-090511JT-0048	SS-02	Metals Screening (\$FXRF)	Soil	8/28/2009	08:05	1	4 oz amber	4 C	N
	R01-090511JT-0049	SS-03	PCB Screening (#FPCB)	Soil	8/28/2009	07:55	1	4 oz amber	4 C	N
	R01-090511JT-0049	SS-03	Metals Screening (\$FXRF)	Soil	8/28/2009	07:55	1	4 oz amber	4 C	N
	R01-090511JT-0050	SS-04	PCB Screening (#FPCB)	Soil	8/28/2009	07:51	1	4 oz amber	4 C	N
	R01-090511JT-0050	SS-04	Metals Screening (\$FXRF)	Soil	8/28/2009	07:51	1	4 oz amber	4 C	N
	R01-090511JT-0051	SS-05	PCB Screening (#FPCB)	Soil	8/28/2009	07:39	1	4 oz amber	4 C	N
	R01-090511JT-0051	SS-05	Metals Screening (\$FXRF)	Soil	8/28/2009	07:39	1	4 oz amber	4 C	N
	R01-090511JT-0052	SS-06	PCB Screening (#FPCB)	Soil	8/28/2009	07:34	1	4 oz amber	4 C	N
	R01-090511JT-0052	SS-06	Metals Screening (\$FXRF)	Soil	8/28/2009	07:34	1	4 oz amber	4 C	N
	R01-090511JT-0053	SS-07	PCB Screening (#FPCB)	Soil	8/28/2009	08:14	1	4 oz amber	4 C	N
	R01-090511JT-0053	SS-07	Metals Screening (\$FXRF)	Soil	8/28/2009	08:14	1	4 oz amber	4 C	N
	R01-090511JT-0054	SS-08	PCB Screening (#FPCB)	Soil	8/28/2009	08:03	1	4 oz amber	4 C	N
	R01-090511JT-0054	SS-08	Metals Screening (\$FXRF)	Soil	8/28/2009	08:03	1	4 oz amber	4 C	N
	R01-090511JT-0055	SS-09	PCB Screening (#FPCB)	Soil	8/28/2009	07:59	1	4 oz amber	4 C	N
	R01-090511JT-0055	SS-09	Metals Screening (\$FXRF)	Soil	8/28/2009	07:59	1	4 oz amber	4 C	N
	R01-090511JT-0056	SS-10	PCB Screening (#FPCB)	Soil	8/28/2009	07:47	1	4 oz amber	4 C	N

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Marino Property Site

CHAIN OF CUSTODY RECORD

Site #: R01-090511JT

Janis Tsang

(617) 413-5053

No: R01-090511JT-08/31/09-0004

US EPA NERL

c/o Doris Guzman

Lab #	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	MS/MS D
	R01-090511JT-0056	SS-10	Metals Screening (\$FXRF)	Soil	8/28/2009	07:47	1	4 oz amber	4 C	N
	R01-090511JT-0057	SS-11	PCB Screening (#FPCB)	Soil	8/28/2009	07:43	1	4 oz amber	4 C	N
	R01-090511JT-0057	SS-11	Metals Screening (\$FXRF)	Soil	8/28/2009	07:43	1	4 oz amber	4 C	N
	R01-090511JT-0058	SS-12	PCB Screening (#FPCB)	Soil	8/28/2009	08:32	1	4 oz amber	4 C	N
	R01-090511JT-0058	SS-12	Metals Screening (\$FXRF)	Soil	8/28/2009	08:32	1	4 oz amber	4 C	N
	R01-090511JT-0059	SS-13	PCB Screening (#FPCB)	Soil	8/28/2009	08:27	1	4 oz amber	4 C	N
	R01-090511JT-0059	SS-13	Metals Screening (\$FXRF)	Soil	8/28/2009	08:27	1	4 oz amber	4 C	N
	R01-090511JT-0060	SS-14	PCB Screening (#FPCB)	Soil	8/28/2009	08:21	1	4 oz amber	4 C	N
	R01-090511JT-0060	SS-14	Metals Screening (\$FXRF)	Soil	8/28/2009	08:21	1	4 oz amber	4 C	N
	R01-090511JT-0061	SS-15	PCB Screening (#FPCB)	Soil	8/28/2009	08:06	1	4 oz amber	4 C	N
	R01-090511JT-0061	SS-15	Metals Screening (\$FXRF)	Soil	8/28/2009	08:06	1	4 oz amber	4 C	N
	R01-090511JT-0062	SS-16	PCB Screening (#FPCB)	Soil	8/28/2009	08:13	1	4 oz amber	4 C	N
	R01-090511JT-0062	SS-16	Metals Screening (\$FXRF)	Soil	8/28/2009	08:13	1	4 oz amber	4 C	N
	R01-090511JT-0063	SS-17	PCB Screening (#FPCB)	Soil	8/28/2009	07:53	1	4 oz amber	4 C	N
	R01-090511JT-0063	SS-17	Metals Screening (\$FXRF)	Soil	8/28/2009	07:53	1	4 oz amber	4 C	N
	R01-090511JT-0064	SS-18	PCB Screening (#FPCB)	Soil	8/28/2009	08:00	1	4 oz amber	4 C	N
	R01-090511JT-0064	SS-18	Metals Screening (\$FXRF)	Soil	8/28/2009	08:00	1	4 oz amber	4 C	N
	R01-090511JT-0065	SS-19	PCB Screening (#FPCB)	Soil	8/28/2009	08:07	1	4 oz amber	4 C	N
	R01-090511JT-0065	SS-19	Metals Screening (\$FXRF)	Soil	8/28/2009	08:07	1	4 oz amber	4 C	N

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US EPA NERL
c/o Doris Guzman

Janis Tsang
(617) 413-5053

Lab #	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	MS/MS D
	R01-090511JT-0066	SS-20	PCB Screening (#FPCB)	Soil	8/28/2009	08:11	1	4 oz amber	4 C	N
	R01-090511JT-0066	SS-20	Metals Screening (\$FXRF)	Soil	8/28/2009	08:11	1	4 oz amber	4 C	N
	R01-090511JT-0069	SS-21	PCB Screening (#FPCB)	Soil	8/28/2009	07:33	1	4 oz amber	4 C	N
	R01-090511JT-0069	SS-21	Metals Screening (\$FXRF)	Soil	8/28/2009	07:33	1	4 oz amber	4 C	N
	R01-090511JT-0070	SS-22	PCB Screening (#FPCB)	Soil	8/28/2009	07:40	1	4 oz amber	4 C	N
	R01-090511JT-0070	SS-22	Metals Screening (\$FXRF)	Soil	8/28/2009	07:40	1	4 oz amber	4 C	N
	R01-090511JT-0071	SS-23	PCB Screening (#FPCB)	Soil	8/28/2009	07:59	1	4 oz amber	4 C	N
	R01-090511JT-0071	SS-23	Metals Screening (\$FXRF)	Soil	8/28/2009	07:59	1	4 oz amber	4 C	N
	R01-090511JT-0072	SS-24	PCB Screening (#FPCB)	Soil	8/28/2009	07:54	1	4 oz amber	4 C	N
	R01-090511JT-0072	SS-24	Metals Screening (\$FXRF)	Soil	8/28/2009	07:54	1	4 oz amber	4 C	N
	R01-090511JT-0073	SS-25	PCB Screening (#FPCB)	Soil	8/28/2009	08:10	1	4 oz amber	4 C	N
	R01-090511JT-0073	SS-25	Metals Screening (\$FXRF)	Soil	8/28/2009	08:10	1	4 oz amber	4 C	N
	R01-090511JT-0074	SS-26	PCB Screening (#FPCB)	Soil	8/28/2009	08:21	1	4 oz amber	4 C	N
	R01-090511JT-0074	SS-26	Metals Screening (\$FXRF)	Soil	8/28/2009	08:21	1	4 oz amber	4 C	N
	R01-090511JT-0075	SS-27	PCB Screening (#FPCB)	Soil	8/28/2009	07:59	1	4 oz amber	4 C	N
	R01-090511JT-0075	SS-27	Metals Screening (\$FXRF)	Soil	8/28/2009	07:59	1	4 oz amber	4 C	N
	R01-090511JT-0076	TP-06 (0.5 ft)	PCB Screening (#FPCB)	Soil	8/27/2009	14:22	1	4 oz amber	4 C	N
	R01-090511JT-0076	TP-06 (0.5 ft)	Metals Screening (\$FXRF)	Soil	8/27/2009	14:22	1	4 oz amber	4 C	N

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US EPA NERL
c/o Doris Guzman

Site #: R01-090511JT
Janis Tsang
(617) 413-5053

Lab #	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	MS/MS D
	R01-090511JT-0077	TP-06 (1 ft)	PCB Screening (#FPCB)	Soil	8/27/2009	14:30	1	4 oz amber	4 C	N
	R01-090511JT-0077	TP-06 (1 ft)	Metals Screening (\$FXRF)	Soil	8/27/2009	14:30	1	4 oz amber	4 C	N
	R01-090511JT-0078	TP-06 (2 ft)	PCB Screening (#FPCB)	Soil	8/27/2009	14:38	1	4 oz amber	4 C	N
	R01-090511JT-0078	TP-06 (2 ft)	Metals Screening (\$FXRF)	Soil	8/27/2009	14:38	1	4 oz amber	4 C	N
	R01-090511JT-0079	TP-06 (3 ft)	PCB Screening (#FPCB)	Soil	8/27/2009	14:48	1	4 oz amber	4 C	N
	R01-090511JT-0079	TP-06 (3 ft)	Metals Screening (\$FXRF)	Soil	8/27/2009	14:48	1	4 oz amber	4 C	N
	R01-090511JT-0080	TP-06 (4 ft)	PCB Screening (#FPCB)	Soil	8/27/2009	14:55	1	4 oz amber	4 C	N
	R01-090511JT-0080	TP-06 (4 ft)	Metals Screening (\$FXRF)	Soil	8/27/2009	14:55	1	4 oz amber	4 C	N
	R01-090511JT-0081	TP-06 (6 ft)	PCB Screening (#FPCB)	Soil	8/27/2009	15:10	1	4 oz amber	4 C	N
	R01-090511JT-0081	TP-06 (6 ft)	Metals Screening (\$FXRF)	Soil	8/27/2009	15:10	1	4 oz amber	4 C	N
	R01-090511JT-0082	TP-06 (8 ft)	PCB Screening (#FPCB)	Soil	8/27/2009	16:05	1	4 oz amber	4 C	N
	R01-090511JT-0082	TP-06 (8 ft)	Metals Screening (\$FXRF)	Soil	8/27/2009	16:05	1	4 oz amber	4 C	N
	R01-090511JT-0083	TP-06 (10 ft)	PCB Screening (#FPCB)	Soil	8/27/2009	16:17	1	4 oz amber	4 C	N
	R01-090511JT-0083	TP-06 (10 ft)	Metals Screening (\$FXRF)	Soil	8/27/2009	16:17	1	4 oz amber	4 C	N
	R01-090511JT-0084	TP-06 (12 ft)	VOCs (\$VOAHS)	Soil	8/27/2009	16:25	1	40 mL VOA	MeOH	N
	R01-090511JT-0084	TP-06 (12 ft)	Percent Solids (% Solids)	Soil	8/27/2009	16:25	1	40 mL VOA	4 C	N

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CHAIN OF CUSTODY RECORD

Site #: R01-090511JT
Janis Tsang
(617) 413-5053

No: R01-090511JT-08/31/09-0004

US EPA NERL
c/o Doris Guzman

Lab #	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	MS/MS D
	R01-090511JT-0084	TP-06 (12 ft)	SVOCs (\$BNAMS)	Soil	8/27/2009	16:25	1	4 oz amber	4 C	N
	R01-090511JT-0084	TP-06 (12 ft)	PCBs (\$PCBMS)	Soil	8/27/2009	16:25	1	4 oz amber	4 C	N
	R01-090511JT-0084	TP-06 (12 ft)	Metals inc. Hg (\$METMS and MERCS)	Soil	8/27/2009	16:25	1	4 oz amber	4 C	N
	R01-090511JT-0084	TP-06 (12 ft)	Cyanide (CYANS)	Soil	8/27/2009	16:25	1	4 oz amber	4 C	N
	R01-090511JT-0085	TP-11 (12 ft)	VOCs (\$VOAHS)	Soil	8/27/2009	16:25	1	40 mL VOA	MeOH	N
	R01-090511JT-0085	TP-11 (12 ft)	Percent Solids (% Solids)	Soil	8/27/2009	16:25	1	40 mL VOA	4 C	N
	R01-090511JT-0085	TP-11 (12 ft)	SVOCs (\$BNAMS)	Soil	8/27/2009	16:25	1	4 oz amber	4 C	N
	R01-090511JT-0085	TP-11 (12 ft)	PCBs (\$PCBMS)	Soil	8/27/2009	16:25	1	4 oz amber	4 C	N
	R01-090511JT-0085	TP-11 (12 ft)	Metals inc. Hg (\$METMS and MERCS)	Soil	8/27/2009	16:25	1	4 oz amber	4 C	N
	R01-090511JT-0085	TP-11 (12 ft)	Cyanide (CYANS)	Soil	8/27/2009	16:25	1	4 oz amber	4 C	N
	R01-090511JT-0086	TP-02/04 (1 ft)	PCB Screening (#FPCB)	Soil	8/28/2009	09:33	1	4 oz amber	4 C	N

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CHAIN OF CUSTODY RECORD

Site #: R01-090511JT

Janis Tsang

(617) 413-5053

No: R01-090511JT-08/31/09-0004

USEPA NERL

c/o Doris Guzman

Lab #	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	MS/MS D
	R01-090511JT-0086	TP-02/04 (1 ft)	Metals Screening (\$FXRF)	Soil	8/28/2009	09:33	1	4 oz amber	4 C	N
	R01-090511JT-0087	TP-02/04 (2 ft)	PCB Screening (#FPCB)	Soil	8/28/2009	09:53	1	4 oz amber	4 C	N
	R01-090511JT-0087	TP-02/04 (2 ft)	Metals Screening (\$FXRF)	Soil	8/28/2009	09:53	1	4 oz amber	4 C	N
	R01-090511JT-0088	TP-02/04 (SPC-01)	VOCs (\$VOAHS)	Soil	8/28/2009	12:12	1	40 mL VOA	MeOH	N
	R01-090511JT-0088	TP-02/04 (SPC-01)	Percent Solids (% Solids)	Soil	8/28/2009	12:12	1	40 mL VOA	4 C	N
	R01-090511JT-0088	TP-02/04 (SPC-01)	SVOCs (\$BNAMS)	Soil	8/28/2009	12:12	1	4 oz amber	4 C	N
	R01-090511JT-0088	TP-02/04 (SPC-01)	PCBs (\$PCBMS)	Soil	8/28/2009	12:12	1	4 oz amber	4 C	N
	R01-090511JT-0088	TP-02/04 (SPC-01)	Metals inc. Hg (\$METMS and MERCs)	Soil	8/28/2009	12:12	1	4 oz amber	4 C	N
	R01-090511JT-0088	TP-02/04 (SPC-01)	Cyanide (CYANS)	Soil	8/28/2009	12:12	1	4 oz amber	4 C	N
	R01-090511JT-0089	TP-02/04 (SPG-01)	VOCs (\$VOAHS)	Soil	8/28/2009	12:20	1	40 mL VOA	MeOH	N
	R01-090511JT-0089	TP-02/04 (SPG-01)	Percent Solids (% Solids)	Soil	8/28/2009	12:20	1	40 mL VOA	4 C	N

Special Instructions: Please forward results to OSC Janis Tsang [Tsang.Janis@epa.gov]	SAMPLES TRANSFERRED FROM
	CHAIN OF CUSTODY #

[illegible]

CHAIN OF CUSTODY RECORD

Site #: R01-090511JT
Janis Tsang
(617) 413-5053

No: R01-090511JT-08/31/09-0004

US EPA NERL
c/o Doris Guzman

Lab #	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	MS/MS D
	R01-090511JT-0089	TP-02/04 (SPG-01)	SVOCs (\$BNAMS)	Soil	8/28/2009	12:20	1	4 oz amber	4 C	N
	R01-090511JT-0089	TP-02/04 (SPG-01)	PCBs (\$PCBMS)	Soil	8/28/2009	12:20	1	4 oz amber	4 C	N
	R01-090511JT-0089	TP-02/04 (SPG-01)	Metals inc. Hg (\$METMS and MERCS)	Soil	8/28/2009	12:20	1	4 oz amber	4 C	N
	R01-090511JT-0089	TP-02/04 (SPG-01)	Cyanide (CYANS)	Soil	8/28/2009	12:20	1	4 oz amber	4 C	N
	R01-090511JT-0090	TP-02/04 (SPG-02)	VOCs (\$VOAHS)	Soil	8/28/2009	12:24	1	40 mL VOA	MeOH	N
	R01-090511JT-0090	TP-02/04 (SPG-02)	Percent Solids (% Solids)	Soil	8/28/2009	12:24	1	40 mL VOA	4 C	N
	R01-090511JT-0090	TP-02/04 (SPG-02)	SVOCs (\$BNAMS)	Soil	8/28/2009	12:24	1	4 oz amber	4 C	N
	R01-090511JT-0090	TP-02/04 (SPG-02)	PCBs (\$PCBMS)	Soil	8/28/2009	12:24	1	4 oz amber	4 C	N
	R01-090511JT-0090	TP-02/04 (SPG-02)	Metals inc. Hg (\$METMS and MERCS)	Soil	8/28/2009	12:24	1	4 oz amber	4 C	N
	R01-090511JT-0090	TP-02/04 (SPG-02)	Cyanide (CYANS)	Soil	8/28/2009	12:24	1	4 oz amber	4 C	N
	R01-090511JT-0091	TP-02/04 (Pail-01)	VOCs	Solid Waste	8/28/2009	11:54	1	4 oz amber	4 C	N

Special Instructions: Please forward results to OSC Janis Tsang [Tsang.Janis@epa.gov]	SAMPLES TRANSFERRED FROM
	CHAIN OF CUSTODY #

[illegible]

CHAIN OF CUSTODY RECORD

Site #: R01-090511JT
Janis Tsang
(617) 413-5053

No: R01-090511JT-08/31/09-0004

US EPA NERL
c/o Doris Guzman

[illegible]

Special Instructions: Please forward results to OSC Janis Tsang [Tsang.Janis@epa.gov]	SAMPLES TRANSFERRED FROM
	CHAIN OF CUSTODY #

[illegible]

Appendix G

Analytical Data - U.S. Environmental Protection Agency, Office of Environmental
Measurement and Evaluation, Laboratory Results

SITE: MARINO PROPERTY
PROJECT NO: 09050017/09050022
LABORATORY: OEME

TABLE 1
VOLATILE ORGANIC COMPOUNDS IN WATER
micrograms/Liter (µg/L)

SAMPLE LOCATION: SAMPLE NUMBER: LABORATORY NUMBER:	GW-01 R01-090511JT-0001 AA93828		GW-02 R01-090511JT-002 AA93892		GW-03 R01-090511JT-003 AA93829		GW-04 R01-090511JT-004 AA93893		GW-05 R01-090511JT-005 AA93894		GW-06 R01-090511JT-006 AA93895		GW-07 R01-090511JT-0007 AA93830	
	RL	Q	RL	Q	RL	Q	RL	Q	RL	Q	RL	Q	RL	Q
COMPOUND														
1,1,1,2-Tetrachloroethane	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
1,1,1-Trichloroethane	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
1,1,2,2-Tetrachloroethane	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
1,1,2-Trichloro-1,2,2-Trifluoroetha	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
1,1,2-Trichloroethane	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
1,1-dichloroethane	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
1,1-Dichloroethylene	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
1,1-Dichloropropene	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
1,2,3-Trichlorobenzene	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
1,2,3-Trichloropropane	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
1,2,4-Trichlorobenzene	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
1,2,4-Trimethylbenzene	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
1,2-Dibromo-3-Chloropropane	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
1,2-Dibromoethane	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
1,2-Dichlorobenzene	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
1,2-Dichloroethane	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
1,2-Dichloropropane	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
1,3,5-Trimethylbenzene	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
1,3-Dichlorobenzene	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
1,3-Dichloropropane	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
1,4-Dichlorobenzene	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
2,2-Dichloropropane	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
2-Butanone (MEK)	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
2-Chlorotoluene	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
2-Hexanone	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
2-Propanone (acetone)	1.9	1.0 J	1.6	1.0 J	3.1	1.0 J	1.8	1.0 J	ND	1.0	1.9	1.0 J	1.8	1.0 J
4-Chlorotoluene	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
4-Methyl-2-Pentanone(MIBK)	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
Acrylonitrile	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
Benzene	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
Bromobenzene	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
Bromochloromethane	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
Bromodichloromethane	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
Bromoform	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
Bromomethane	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
Carbon Disulfide	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
Carbon tetrachloride	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
Chlorobenzene	ND	1.0	ND	1.0	ND	1.0	1.8	1.0	ND	1.0	ND	1.0	ND	1.0
Chloroethane	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
Chloroform	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	3.1	1.0	ND	1.0
Chloromethane	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
Dibromochloromethane	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
Dibromomethane	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
Dichlorodifluoromethane	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
Ethyl Ether	75	1.0	ND	1.0	ND	1.0	1.9	1.0	ND	1.0	ND	1.0	ND	1.0
Ethylbenzene	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
Hexachlorobutadiene	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
Isopropylbenzene	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
DILUTION:	1		1		1		1		1		1		1	
DATE SAMPLED:	05/11/09		05/12/09		05/11/09		05/12/09		05/12/09		05/12/09		05/11/09	
DATE EXTRACTED:	05/13/09		05/13/09		05/13/09		05/13/09		05/13/09		05/13/09		05/13/09	
DATE ANALYZED:	05/13/09		05/13/09		05/13/09		05/13/09		05/13/09		05/14/09		05/13/09	

SITE: MARINO PROPERTY
PROJECT NO: 09050017/09050022
LABORATORY: OEME

TABLE 1
VOLATILE ORGANIC COMPOUNDS IN WATER
micrograms/Liter (µg/L)

SAMPLE LOCATION: SAMPLE NUMBER: LABORATORY NUMBER:			GW-01 R01-090511JT-0001 AA93828			GW-02 R01-090511JT-002 AA93892			GW-03 R01-090511JT-003 AA93829			GW-04 R01-090511JT-004 AA93893			GW-05 R01-090511JT-005 AA93894			GW-06 R01-090511JT-006 AA93895			GW-07 R01-090511JT-0007 AA93830		
COMPOUND	RL	Q	RL	Q		RL	Q		RL	Q		RL	Q		RL	Q		RL	Q		RL	Q	
M/P Xylene	ND	2.0	ND	2.0		ND	2.0		ND	2.0		ND	2.0		ND	2.0		ND	2.0		ND	2.0	
Methylene Chloride	ND	1.0	ND	1.0		ND	1.0		ND	1.0		ND	1.0		ND	1.0		ND	1.0		ND	1.0	
Methyl-t-Butyl Ether	8.7	1.0	1.2	1.0		ND	1.0		ND	1.0		ND	1.0		ND	1.0		ND	1.0		1.3	1.0	
Naphthalene	ND	1.0	ND	1.0		ND	1.0		ND	1.0		ND	1.0		ND	1.0		ND	1.0		ND	1.0	
N-Butylbenzene	ND	1.0	ND	1.0		ND	1.0		ND	1.0		ND	1.0		ND	1.0		ND	1.0		ND	1.0	
N-Propylbenzene	ND	1.0	ND	1.0		ND	1.0		ND	1.0		ND	1.0		ND	1.0		ND	1.0		ND	1.0	
Ortho Xylene	ND	1.0	ND	1.0		ND	1.0		ND	1.0		ND	1.0		ND	1.0		ND	1.0		ND	1.0	
Para-Isopropyltoluene	ND	1.0	ND	1.0		ND	1.0		ND	1.0		ND	1.0		ND	1.0		ND	1.0		ND	1.0	
Sec-Butylbenzene	ND	1.0	ND	1.0		ND	1.0		ND	1.0		ND	1.0		ND	1.0		ND	1.0		ND	1.0	
Styrene	ND	1.0	ND	1.0		ND	1.0		ND	1.0		ND	1.0		ND	1.0		ND	1.0		ND	1.0	
Tert-Butylbenzene	ND	1.0	ND	1.0		ND	1.0		ND	1.0		ND	1.0		ND	1.0		ND	1.0		ND	1.0	
Tetrachloroethylene	ND	1.0	ND	1.0		ND	1.0		ND	1.0		ND	1.0		ND	1.0		ND	1.0		ND	1.0	
Tetrahydrofuran	ND	1.0	1.8	1.0		ND	1.0		74	1.0		ND	1.0		ND	1.0		ND	1.0		21	1.0	
Toluene	ND	1.0	ND	1.0		ND	1.0		ND	1.0		ND	1.0		ND	1.0		ND	1.0		ND	1.0	
Trans-1,2-Dichloroethylene	ND	1.0	ND	1.0		ND	1.0		ND	1.0		ND	1.0		ND	1.0		ND	1.0		ND	1.0	
Trichloroethylene	ND	1.0	ND	1.0		ND	1.0		ND	1.0		ND	1.0		ND	1.0		ND	1.0		ND	1.0	
Trichlorofluoromethane	ND	1.0	ND	1.0		ND	1.0		ND	1.0		ND	1.0		ND	1.0		ND	1.0		ND	1.0	
Vinyl Acetate	ND	1.0	ND	1.0		ND	1.0		ND	1.0		ND	1.0		ND	1.0		ND	1.0		ND	1.0	
Vinyl Chloride	ND	1.0	ND	1.0		ND	1.0		ND	1.0		ND	1.0		ND	1.0		ND	1.0		ND	1.0	
c-1,3-dichloropropene	ND	1.0	ND	1.0		ND	1.0		ND	1.0		ND	1.0		ND	1.0		ND	1.0		ND	1.0	
cis-1,2-Dichloroethylene	ND	1.0	ND	1.0		ND	1.0		ND	1.0		ND	1.0		ND	1.0		ND	1.0		ND	1.0	
t-1,3-Dichloropropene	ND	1.0	ND	1.0		ND	1.0		ND	1.0		ND	1.0		ND	1.0		ND	1.0		ND	1.0	
DILUTION:			1			1			1			1			1			1			1		
DATE SAMPLED:			05/11/09			05/12/09			05/11/09			05/12/09			05/12/09			05/12/09			05/11/09		
DATE EXTRACTED:			05/13/09			05/13/09			05/13/09			05/13/09			05/13/09			05/14/09			05/13/09		
DATE ANALYZED:			05/13/09			05/13/09			05/13/09			05/13/09			05/13/09			05/14/09			05/13/09		

SITE: MARINO PROPERTY
 PROJECT NO: 09050017/09050022
 LABORATORY: OEME

TABLE 1
 VOLATILE ORGANIC COMPOUNDS IN WATER
 micrograms/Liter (µg/L)

SAMPLE LOCATION: GW-08			GW-09		
SAMPLE NUMBER: R01-090511JT-008			R01-090511JT-009		
LABORATORY NUMBER: AA93896			AA93831		
COMPOUND	RL	Q	RL	Q	
1,1,1,2-Tetrachloroethane	ND	1.0	ND	1.0	
1,1,1-Trichloroethane	ND	1.0	ND	1.0	
1,1,1,2,2-Tetrachloroethane	ND	1.0	ND	1.0	
1,1,2-Trichloro-1,2,2-Trifluoroetha	ND	1.0	ND	1.0	
1,1,2-Trichloroethane	ND	1.0	ND	1.0	
1,1-dichloroethane	ND	1.0	ND	1.0	
1,1-Dichloroethylene	ND	1.0	ND	1.0	
1,1-Dichloropropene	ND	1.0	ND	1.0	
1,2,3-Trichlorobenzene	ND	1.0	ND	1.0	
1,2,3-Trichloropropane	ND	1.0	ND	1.0	
1,2,4-Trichlorobenzene	ND	1.0	ND	1.0	
1,2,4-Trimethylbenzene	ND	1.0	ND	1.0	
1,2-Dibromo-3-Chloropropane	ND	1.0	ND	1.0	
1,2-Dibromoethane	ND	1.0	ND	1.0	
1,2-Dichlorobenzene	ND	1.0	ND	1.0	
1,2-Dichloroethane	ND	1.0	ND	1.0	
1,2-Dichloropropane	ND	1.0	ND	1.0	
1,3,5-Trimethylbenzene	ND	1.0	ND	1.0	
1,3-Dichlorobenzene	ND	1.0	ND	1.0	
1,3-Dichloropropane	ND	1.0	ND	1.0	
1,4-Dichlorobenzene	ND	1.0	ND	1.0	
2,2-Dichloropropane	ND	1.0	ND	1.0	
2-Butanone (MEK)	ND	1.0	ND	1.0	
2-Chlorotoluene	ND	1.0	ND	1.0	
2-Hexanone	ND	1.0	ND	1.0	
2-Propanone (acetone)	ND	1.0	2.8	1.0	J
4-Chlorotoluene	ND	1.0	ND	1.0	
4-Methyl-2-Pentanone(MIBK)	ND	1.0	ND	1.0	
Acrylonitrile	ND	1.0	ND	1.0	
Benzene	ND	1.0	ND	1.0	
Bromobenzene	ND	1.0	ND	1.0	
Bromochloromethane	ND	1.0	ND	1.0	
Bromodichloromethane	ND	1.0	ND	1.0	
Bromoform	ND	1.0	ND	1.0	
Bromomethane	ND	1.0	ND	1.0	
Carbon Disulfide	ND	1.0	ND	1.0	
Carbon tetrachloride	ND	1.0	ND	1.0	
Chlorobenzene	ND	1.0	ND	1.0	
Chloroethane	ND	1.0	ND	1.0	
Chloroform	ND	1.0	ND	1.0	
Chloromethane	ND	1.0	ND	1.0	
Dibromochloromethane	ND	1.0	ND	1.0	
Dibromomethane	ND	1.0	ND	1.0	
Dichlorodifluoromethane	ND	1.0	ND	1.0	
Ethyl Ether	1.8	1.0	1.2	1.0	
Ethylbenzene	ND	1.0	ND	1.0	
Hexachlorobutadiene	ND	1.0	ND	1.0	
Isopropylbenzene	ND	1.0	ND	1.0	
DILUTION:	1		1		
DATE SAMPLED:	05/12/09		05/11/09		
DATE EXTRACTED:	05/13/09		05/13/09		
DATE ANALYZED:	05/13/09		05/13/09		

SITE: MARINO PROPERTY
 PROJECT NO: 09050017/09050022
 LABORATORY: OEME

TABLE 1
 VOLATILE ORGANIC COMPOUNDS IN WATER
 micrograms/Liter (µg/L)

SAMPLE LOCATION:		GW-08		GW-09	
SAMPLE NUMBER:		R01-090511JT-008		R01-090511JT-009	
LABORATORY NUMBER:		AA93896		AA93831	
COMPOUND		RL	Q	RL	Q
M/P Xylene		ND	2.0	ND	2.0
Methylene Chloride		ND	1.0	ND	1.0
Methyl-t-Butyl Ether		ND	1.0	1.5	1.0
Naphthalene		ND	1.0	ND	1.0
N-Butylbenzene		ND	1.0	ND	1.0
N-Propylbenzene		ND	1.0	ND	1.0
Ortho Xylene		ND	1.0	ND	1.0
Para-Isopropyltoluene		ND	1.0	ND	1.0
Sec-Butylbenzene		ND	1.0	ND	1.0
Styrene		ND	1.0	ND	1.0
Tert-Butylbenzene		ND	1.0	ND	1.0
Tetrachloroethylene		ND	1.0	ND	1.0
Tetrahydrofuran		11	1.0	22	1.0
Toluene		ND	1.0	ND	1.0
Trans-1,2-Dichloroethylene		ND	1.0	ND	1.0
Trichloroethylene		ND	1.0	ND	1.0
Trichlorofluoromethane		ND	1.0	ND	1.0
Vinyl Acetate		ND	1.0	ND	1.0
Vinyl Chloride		ND	1.0	ND	1.0
c-1,3-dichloropropene		ND	1.0	ND	1.0
cis-1,2-Dichloroethylene		ND	1.0	ND	1.0
t-1,3-Dichloropropene		ND	1.0	ND	1.0
DILUTION:		1		1	
DATE SAMPLED:		05/12/09		05/11/09	
DATE EXTRACTED:		05/13/09		05/13/09	
DATE ANALYZED:		05/13/09		05/13/09	

NOTES

START has reported the data as it was received from the EPA OEME Laboratory. START has not performed data validation of the EPA OEME Laboratory data. An internal data review was performed by EPA OEME Laboratory personnel prior to submittal to the EPA Contracting Officer's Representative (COR).

Sample analysis was conducted following EPA REGION I SOP, EIASOP-VOAGCMS8, via Gas Chromatograph/Mass Spectrometry (GC/MS).

OEME = EPA Office of Environmental Measurement and Evaluation.

µg/L = micrograms per Liter.

ND = Non-Detected.

J = Estimated value.

RL = Reporting Limit.

Q = Qualifier.

SITE: MARINO PROPERTY
PROJECT NO: 09050017/09050022
LABORATORY: OEME

TABLE 2
SEMIVOLATILE ORGANIC COMPOUND IN WATER
micrograms per Liter (µg/L)

SAMPLE LOCATION:		GW-01		GW-02		GW-03		GW-04		GW-05		GW-06		GW-07	
SAMPLE NUMBER:		R01-090511JT-0001		R01-090511JT-0002		R01-090511JT-0003		R01-095511JT-0004		R01-090511JT-0005		R01-090511JT-0006		R01-090511JT-0007	
LABORATORY NUMBER:		AA93828		AA93892		AA93829		AA93893		AA93894		AA93895		AA93830	
COMPOUND	RL	Q	RL	Q	RL	Q	RL	Q	RL	Q	RL	Q	RL	Q	
1,2,4,5-Tetrachlorobenzene	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.8	
1,2,4-Trichlorobenzene	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.8	
1,2-Dichlorobenzene	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.8	
1,3-Dichlorobenzene	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.8	
1,3-Dinitrobenzene	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.8	
1,4-Dichlorobenzene	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.8	
1,4-Naphthoquinone	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.8	
1-Methylnaphthalene	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.8	
2,2'-oxybis(1-Chloropropane)	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.8	
2,3,4,6-Tetrachlorophenol	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.8	
2,4,5-Trichlorophenol	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.8	
2,4,6-Trichlorophenol	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.8	
2,4-Dichlorophenol	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.8	
2,4-Dinitrophenol	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	11.0	
2,4-Dinitrotoluene	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.8	
2,4-dimethylphenol	ND	5.0	ND	5.0	ND	5.0	ND	5.0	ND	5.0	ND	5.0	ND	5.5	
2,6-Dichlorophenol	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.8	
2,6-Dinitrotoluene	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.8	
2-Chloronaphthalene	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.8	
2-Chlorophenol	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.8	
2-Methylnaphthalene	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.8	
2-Methylphenol	790	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.8	
2-Nitroaniline	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.8	
2-Nitrophenol	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.8	
3&4-Methylphenol	ND	5.0	ND	2.5	ND	5.0	ND	5.0	ND	2.5	ND	5.0	ND	5.5	
3,3'-Dichlorobenzidine	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.8	
3-Methylcholanthrene	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.8	
3-Nitroaniline	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.8	
4,6-Dinitro-2-methylphenol	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.8	
4-Bromophenyl-phenylether	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.8	
4-Chloro-3-methylphenol	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.8	
4-Chloroaniline	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.8	
4-Chlorophenyl-phenylether	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.8	
4-Nitroaniline	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.8	
4-Nitrophenol	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.8	
4-nitroquinoline-1-oxide	ND	5.0	ND	5.0	ND	5.0	ND	5.0	ND	5.0	ND	5.0	ND	5.6	
Acenaphthene	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.8	
Acenaphthylene	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.8	
Acetophenone	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.8	
Aniline	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.8	
Anthracene	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.8	
Aramite	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.8	
Azobenzene	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.8	
Benzidine	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.8	
Benzo(a)anthracene	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.8	
Benzo(a)pyrene	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.8	
Benzo(b)fluoranthene	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.8	
Benzo(g,h,i)perylene	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.8	
Benzo(k)fluoranthene	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.8	
Benzoic Acid	ND	2.5	J	ND	2.5	J	ND	2.5	J	ND	2.5	J	ND	2.8	
Benzyl Alcohol	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.8	
DILUTION FACTOR:		1		1		1		1		1		1		1	
DATE SAMPLED:		05/11/09		05/12/09		05/11/09		05/12/09		05/12/09		05/12/09		05/11/09	
DATE EXTRACTED:		05/18/09		05/18/09		05/18/09		05/18/09		05/18/09		05/18/09		05/18/09	
DATE ANALYZED:		05/19/09		05/19/09		05/19/09		05/20/09		05/19/09		05/19/09		05/19/09	

SITE: MARINO PROPERTY
PROJECT NO: 09050017/09050022
LABORATORY: OEME

TABLE 2
SEMIVOLATILE ORGANIC COMPOUND IN WATER
micrograms per Liter (µg/L)

SAMPLE LOCATION:		GW-01		GW-02		GW-03		GW-04		GW-05		GW-06		GW-07	
SAMPLE NUMBER:		R01-090511JT-0001		R01-090511JT-0002		R01-090511JT-0003		R01-095511JT-0004		R01-090511JT-0005		R01-090511JT-0006		R01-090511JT-0007	
LABORATORY NUMBER:		AA93828		AA93892		AA93829		AA93893		AA93894		AA93895		AA93830	
COMPOUND	RL	Q	RL	Q	RL	Q	RL	Q	RL	Q	RL	Q	RL	Q	
Bis(2-Chloroethyl)ether	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	
bis(2-Ethylhexyl)phthalate	ND	2.5	11	2.5	ND	2.5	ND	2.5	ND	2.5	12	2.5	11	2.5	
Butylbenzylphthalate	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	
Carbazole	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	
Chlorobenzilate	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	
Chrysene	710	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	
Di-n-butylphthalate	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	
Di-n-octyl phthalate	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	
Dibenz(a,h)anthracene	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	
Dibenzofuran	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	
Diethylphthalate	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	
Dimethyl phthalate	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	
Dinoseb	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	
Ethyl methanesulfonate	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	
Fluoranthene	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	
Fluorene	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	
Hexachlorobenzene	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	
Hexachlorobutadiene	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	
Hexachlorocyclopentadiene	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	
Hexachloroethane	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	
Hexachloropropene	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	
Indeno(1,2,3-cd)pyrene	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	
Isodrin	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	
Isophorone	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	
Isosafrole	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	
Kepone	ND	5.0	ND	5.0	ND	2.5	ND	5.0	ND	5.0	ND	5.0	ND	5.5	
Methyl methanesulfonate	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	
N-Nitrosodiphenylamine	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	
N-nitroso-di-n-propylamine	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	
N-nitrosodimethylamine	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	
Naphthalene	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	
Nitrobenzene	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	
Pentachlorobenzene	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	
Pentachloronitrobenzene	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	
Pentachlorophenol	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	
Phenacetin	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	
Phenanthrene	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	
Phenol	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	
Pyrene	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	
Pyridine	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	
Safrole	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	
bis-(2-Chloroethoxy)methane	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	
DILUTION FACTOR:		1		1		1		1		125		1		1	
DATE SAMPLED:		05/11/09		05/12/09		05/11/09		05/12/09		08/28/09		05/12/09		05/11/09	
DATE EXTRACTED:		05/18/09		05/18/09		05/18/09		05/18/09		09/02/09		05/18/09		05/18/09	
DATE ANALYZED:		05/19/09		05/19/09		05/19/09		05/20/09		09/21/09		05/19/09		05/19/09	

SITE: MARINO PROPERTY
PROJECT NO: 09050017/09050022
LABORATORY: OEME

TABLE 2
SEMIVOLATILE ORGANIC COMPOUND IN WATER
micrograms per Liter (µg/L)

SAMPLE LOCATION:		GW-08		GW -09	
SAMPLE NUMBER:		R01-090511JT-0008		R01-090511JT-0009	
LABORATORY NUMBER:		AA93896		AA9381	
COMPOUND	RL	Q	RL	Q	
1,2,4,5-Tetrachlorobenzene	ND	2.5	ND	2.5	
1,2,4-Trichlorobenzene	ND	2.5	ND	2.5	
1,2-Dichlorobenzene	ND	2.5	ND	2.5	
1,3-Dichlorobenzene	ND	2.5	ND	2.5	
1,3-Dinitrobenzene	ND	2.5	ND	2.5	
1,4-Dichlorobenzene	ND	2.5	ND	2.5	
1,4-Naphthoquinone	ND	2.5	ND	2.5	
1-Methylnaphthalene	ND	2.5	ND	2.5	
2,2'-oxybis(1-Chloropropane)	ND	2.5	ND	2.5	
2,3,4,6-Tetrachlorophenol	ND	2.5	ND	2.5	
2,4,5-Trichlorophenol	ND	2.5	ND	2.5	
2,4,6-Trichlorophenol	ND	2.5	ND	2.5	
2,4-Dichlorophenol	ND	2.5	ND	2.5	
2,4-Dinitrophenol	ND	10.0	ND	10.0	
2,4-Dinitrotoluene	ND	2.5	ND	2.5	
2,4-dimethylphenol	ND	5.0	ND	5.0	
2,6-Dichlorophenol	ND	2.5	ND	2.5	
2,6-Dinitrotoluene	ND	2.5	ND	2.5	
2-Chloronaphthalene	ND	2.5	ND	2.5	
2-Chlorophenol	ND	2.5	ND	2.5	
2-Methylnaphthalene	ND	2.5	ND	2.5	
2-Methylphenol	ND	2.5	ND	2.5	
2-Nitroaniline	ND	2.5	ND	2.5	
2-Nitrophenol	ND	2.5	ND	2.5	
3&4-Methylphenol	ND	5.0	ND	5.0	
3,3'-Dichlorobenzidine	ND	2.5	ND	2.5	
3-Methylcholanthrene	ND	2.5	ND	2.5	
3-Nitroaniline	ND	2.5	ND	2.5	
4,6-Dinitro-2-methylphenol	ND	2.5	ND	2.5	
4-Bromophenyl-phenylether	ND	2.5	ND	2.5	
4-Chloro-3-methylphenol	ND	2.5	ND	2.5	
4-Chloroaniline	ND	2.5	ND	2.5	
4-Chlorophenyl-phenylether	ND	2.5	ND	2.5	
4-Nitroaniline	ND	2.5	ND	2.5	
4-Nitrophenol	ND	2.5	ND	2.5	
4-nitroquinoline-1-oxide	ND	5.0	ND	5.0	
Acenaphthene	ND	2.5	ND	2.5	
Acenaphthylene	ND	2.5	ND	2.5	
Acetophenone	ND	2.5	ND	2.5	
Aniline	ND	2.5	ND	2.5	
Anthracene	ND	2.5	ND	2.5	
Aramite	ND	2.5	ND	2.5	
Azobenzene	ND	2.5	ND	2.5	
Benzidine	ND	2.5	ND	2.5	
Benzo(a)anthracene	ND	2.5	ND	2.5	
Benzo(a)pyrene	ND	2.5	ND	2.5	
Benzo(b)fluoranthene	ND	2.5	ND	2.5	
Benzo(g,h,i)perylene	ND	2.5	ND	2.5	
Benzo(k)fluoranthene	ND	2.5	ND	2.5	
Benzoic Acid	ND	2.5 J	ND	2.5 J	
Benzyl Alcohol	ND	2.5	ND	2.5	
DILUTION FACTOR:	1		1		
DATE SAMPLED:	05/12/09		05/11/09		
DATE EXTRACTED:	05/18/09		05/19/09		
DATE ANALYZED:	05/19/09		05/19/09		

SITE: MARINO PROPERTY
PROJECT NO: 09050017/09050022
LABORATORY: OEME

TABLE 2
SEMIVOLATILE ORGANIC COMPOUND IN WATER
micrograms per Liter (µg/L)

SAMPLE LOCATION: GW-08
SAMPLE NUMBER: R01-090511JT-0008
LABORATORY NUMBER: AA93896

SAMPLE LOCATION: GW-09
SAMPLE NUMBER: R01-095111JT-0009
LABORATORY NUMBER: AA9381

COMPOUND	RL	Q	RL	Q
Bis(2-Chloroethyl)ether	ND	2.5	ND	2.5
bis(2-Ethylhexyl)phthalate	4.6	2.5	6.7	2.5
Butylbenzylphthalate	ND	2.5	ND	2.5
Carbazole	ND	2.5	ND	2.5
Chlorobenzilate	ND	2.5	ND	2.5
Chrysene	ND	2.5	ND	2.5
Di-n-butylphthalate	ND	2.5	ND	2.5
Di-n-octyl phthalate	ND	2.5	ND	2.5
Dibenz(a,h)anthracene	ND	2.5	ND	2.5
Dibenzofuran	ND	2.5	ND	2.5
Diethylphthalate	ND	2.5	ND	2.5
Dimethyl phthalate	ND	2.5	ND	2.5
Dinoseb	ND	2.5	ND	2.5
Ethyl methanesulfonate	ND	2.5	ND	2.5
Fluoranthene	ND	2.5	ND	2.5
Fluorene	ND	2.5	ND	2.5
Hexachlorobenzene	ND	2.5	ND	2.5
Hexachlorobutadiene	ND	2.5	ND	2.5
Hexachlorocyclopentadiene	ND	2.5	ND	2.5
Hexachloroethane	ND	2.5	ND	2.5
Hexachloropropene	ND	2.5	ND	2.5
Indeno(1,2,3-cd)pyrene	ND	2.5	ND	2.5
Isodrin	ND	2.5	ND	2.5
Isophorone	ND	2.5	ND	2.5
Isosafrole	ND	2.5	ND	2.5
Kepone	ND	2.5	ND	5.0
Methyl methanesulfonate	ND	2.5	ND	2.5
N-Nitrosodiphenylamine	ND	2.5	ND	2.5
N-nitroso-di-n-propylamine	ND	2.5	ND	2.5
N-nitrosodimethylamine	ND	2.5	ND	2.5
Naphthalene	ND	2.5	ND	2.5
Nitrobenzene	ND	2.5	ND	2.5
Pentachlorobenzene	ND	2.5	ND	2.5
Pentachloronitrobenzene	ND	2.5	ND	2.5
Pentachlorophenol	ND	2.5	ND	2.5
Phenacetin	ND	2.5	ND	2.5
Phenanthrene	ND	2.5	ND	2.5
Phenol	ND	2.5	ND	2.5
Pyrene	ND	2.5	ND	2.5
Pyridine	ND	2.5	ND	2.5
Safrole	ND	2.5	ND	2.5
bis(-2-Chloroethoxy)methane	ND	2.5	ND	2.5

DILUTION FACTOR: 1 1
DATE SAMPLED: 05/12/09 05/11/09
DATE EXTRACTED: 05/18/09 05/19/09
DATE ANALYZED: 05/19/09 05/19/09

NOTES:

START has reported the data as it was received from the EPA OEME Laboratory. START has not performed data validation of the EPA OEME Laboratory data. An internal data review was performed by EPA OEME Laboratory personnel prior to submittal to the EPA Contracting Officer's Representative (COR).

Sample analysis was conducted following EPA REGION I SOP, EIASOP-BNAW1, using separatory funnel liquid-liquid extraction and analyzed using high resolution capillary column chromatography and quadrapole mass spectrometry (GC/MS).

OEME = EPA Office of Environmental Measurement and Evaluation.

µg/L = micrograms per Liter.

ND = Non-Detected.

J = Estimated value.

RL = Reporting Limit.

Q = Qualifier.

SITE: MARINO PROPERTY
PROJECT NO: 09050017/090500
LABORATORY: OEME

TABLE 3
POLYCHLORINATED BIPHENYLS IN WATER LOW LEVEL
micrograms per Liter (µg/L)

SAMPLE LOCATION:		GW-01		GW -02		GW-03		GW-04		GW-05		GW-06		GW-07	
SAMPLE NUMBER:		R01-090511JT-0001		R01-090511JT-0002		R01-090511JT-0003		R01-090511JT-0004		R01-090511JT-0005		R01-090511JT-0006		R01-090511JT-0007	
LABORATORY NUMBER:		AA93828		AA93892		AA93829		AA93893		AA93894		AA93895		AA93830	
COMPOUND		RL	Q	RL	Q	RL	Q	RL	Q	RL	Q	RL	Q	RL	Q
Aroclor-1016		ND	0.50	ND	0.50	ND	0.50	ND	0.50	ND	0.50	ND	0.50	ND	0.50
Aroclor-1221		ND	0.50	ND	0.50	ND	0.50	ND	0.50	ND	0.50	ND	0.50	ND	0.50
Aroclor-1232		ND	0.50	ND	0.50	ND	0.50	ND	0.50	ND	0.50	ND	0.50	ND	0.50
Aroclor-1242		ND	0.50	ND	0.50	ND	0.50	ND	0.50	ND	0.50	ND	0.50	ND	0.50
Aroclor-1248		ND	0.50	ND	0.50	ND	0.50	ND	0.50	ND	0.50	ND	0.50	ND	0.50
Aroclor-1254		ND	0.50	ND	0.50	ND	0.50	ND	0.50	ND	0.50	ND	0.50	ND	0.50
Aroclor-1260		ND	0.50	ND	0.50	ND	0.50	ND	0.50	ND	0.50	ND	0.50	ND	0.50
Aroclor-1262		ND	0.50	ND	0.50	ND	0.50	ND	0.50	ND	0.50	ND	0.50	ND	0.50
Aroclor-1268		ND	0.50	ND	0.50	ND	0.50	ND	0.50	ND	0.50	ND	0.50	ND	0.50
DILUTION FACTOR:		1		1		1		1		1		1		1	
DATE SAMPLED:		5/11/2009		5/12/2009		5/11/2009		5/12/2009		5/12/2009		5/12/2009		5/11/2009	
DATE EXTRACTED:		5/15/2009		5/15/2009		5/15/2009		5/15/2009		5/15/2009		5/15/2009		5/15/2009	
DATE ANALYZED:		5/19/2009		5/20/2009		5/19/2009		5/20/2009		5/20/2009		5/20/2009		5/19/2009	

SITE: MARINO PROPERTY
 PROJECT NO: 09050017/090500
 LABORATORY: OEME

TABLE 3
 POLYCHLORINATED BIPHENYLS IN WATER LOW LEVEL
 micrograms per Liter (µg/L)

SAMPLE LOCATION:	GW-08	GW-09
SAMPLE NUMBER:	R01-090511JT-0008	RT01-090511JT-0009
LABORATORY NUMBER:	AA93896	AA93831

COMPOUND		RL	Q		RL	Q
Aroclor-1016	ND	0.50		ND	0.50	
Aroclor-1221	ND	0.50		ND	0.50	
Aroclor-1232	ND	0.50		ND	0.50	
Aroclor-1242	ND	0.50		ND	0.50	
Aroclor-1248	ND	0.50		ND	0.50	
Aroclor-1254	ND	0.50		ND	0.50	
Aroclor-1260	ND	0.50		ND	0.50	
Aroclor-1262	ND	0.50		ND	0.50	
Aroclor-1268	ND	0.50		ND	0.50	

DILUTION FACTOR:	1	1
DATE SAMPLED:	5/12/2009	5/11/2009
DATE EXTRACTED:	5/15/2009	5/015/09
DATE ANALYZED:	5/19/2009	5/19/2009

Notes:

START has reported the data as it was received from the EPA OEME Laboratory. START has not performed data validation of the EPA OEME Laboratory data. An internal data review was performed by EPA OEME Laboratory personnel prior to submittal to the EPA Contracting Officer's Representative (COR).

Samples were analyzed by EPA Region I Standard Operating Procedure (SOP) EIASOP-GCPESWALL6.

OEME = EPA Office of Environmental Measurement and Evaluation.

µg/L = micrograms per Liter.

RL = Reporting Limit

Q = Qualifier

ND = Not Detected

SITE: MARINO PROPERTY
PROJECT NO: 09050017/09050022
LABORATORY: OEME

TABLE 4
INORGANICS IN WATER
micrograms per Liter (µg/L)

SAMPLE LOCATION:		GW-01			GW-02			GW-03			GW-04			GW-05			GW-06			GW-07		
SAMPLE NUMBER:		R01-090511JT-0001			R01-090511JT-0002			R01-0905JT-0003			R01-0905JT-0004			R01-0905JT-0005			R01-090511JT-0006			R01-0905JT-0007		
LABORATORY NUMBER:		AA93828			AA93892			AA9829			AA93893			AA93894			AA93895			AA93830		
DATE SAMPLED:		5/11/09			5/11/09			5/11/09			5/12/09			5/12/09			9/30/2008			5/11/09		
INORGANIC ANALYTES																						
ANALYTES	METHOD	RESULT	RL	Q	RESULT	RL	Q	RESULT	RL	Q	RESULT	RL	Q	RESULT	RL	Q	RESULT	RL	Q	RESULT	RL	Q
ALUMINUM	ICP	120	110		ND	110		ND	110		ND	110		ND	110	20	470	110		ND	110	
ANTIMONY	ICP	ND	20		ND	20		ND	20		ND	20		ND	20		ND	20		ND	20	
ARSENIC	ICP	ND	20		ND	20		ND	20		ND	20		ND	20		110	20		ND	20	
BARIUM	ICP	37	20		570	20		130	20		740	20		170	80	10	ND	20		1100	20	
BERYLLIUM	ICP	ND	8		ND	8		ND	8		ND	8		ND	100		ND	8		ND	8	
CADMIUM	ICP	ND	10		ND	10		ND	10		ND	10		ND	20		ND	10		ND	10	
CALCIUM	ICP	66000	100		98000	100		120000	100		51000	100		90000	20		53000	100		94000	100	
CHROMIUM	ICP	ND	20		ND	20		ND	20		ND	20		ND	20		ND	20		ND	20	
COBALT	ICP	ND	20		ND	20		ND	20		ND	20		ND	40		ND	20		ND	20	
COPPER	ICP	ND	20		ND	20		ND	20		ND	20		ND	20		ND	20		ND	20	
IRON	ICP	770	40		16000	40		17000	40		17000	40		51000	40		460	40		21000	40	
LEAD	ICP	ND	20		ND	20		ND	20		ND	20		ND	20		ND	20		ND	20	
MAGNESIUM	ICP	6900	1000		12000	100		12000	1000		37000	100		19000	100		8600	100		27000	1000	
MANGANESE	ICP	12000	20		240	20		2300	20		160	20		23000	20		700	20		110	20	
NICKEL	ICP	ND	20		ND	20		ND	20		ND	20		ND	20		ND	20		ND	20	
SELENIUM	ICP	ND	40		ND	20		ND	40		ND	20		ND	20		ND	20		ND	40	
SILVER	ICP	ND	10		ND	10		ND	10		ND	10		ND	10		ND	10		ND	10	
THALLIUM	ICP	ND	20		ND	10		ND	20		ND	20		ND	20		ND	20		ND	20	
VANADIUM	ICP	ND	10		ND	10		ND	10		ND	10		ND	10		ND	10		ND	10	
ZINC	ICP	ND	20		ND	20		99	20		ND	20		ND	20		ND	20		ND	20	
MERCURY	CVAA	ND	0.20		ND	0.20		ND	0.20		ND	0.20		ND	0.20		ND	0.20		ND	0.20	
CYANIDE		ND	5.0		ND	5.0		ND	5.0		ND	5.0		11	5.0		ND	5.0		ND	5.0	
DATE PREPARED:		5/28/09			5/12/09			5/28/09			5/28/09			5/28/09			5/28/09			5/28/09		
DATE ANALYZED:		6/04/09			6/04/09			6/4/09			6/04/09			6/4/09			6/4/09			6/4/09		
DILUTION:		1			1			1			1			1			1			1		

SITE: MARINO PROPERTY
 PROJECT NO: 09050017/09050022
 LABORATORY: OEME

TABLE 4
INORGANICS IN WATER
 micrograms per Liter (µg/L)

SAMPLE LOCATION:	GW-08	GW-09
SAMPLE NUMBER:	R01-090511JT0008	R01-090511JT-009
LABORATORY NUMBER:	AA93896	AA93831
DATE SAMPLED:	5/12/09	5/11/09

INORGANIC								
ANALYTES	METHOD	RESULT	RL	Q	RESULT	RL	Q	
ALUMINUM	ICP	220	110		ND	110		
ANTIMONY	ICP	ND	20		ND	20		
ARSENIC	ICP	ND	20		ND	20		
BARIUM	ICP	1100	20		1100	20		
BERYLLIUM	ICP	ND	8		ND	8		
CADMIUM	ICP	ND	10		ND	10		
CALCIUM	ICP	70000	100		100000	100		
CHROMIUM	ICP	ND	20		ND	20		
COBALT	ICP	ND	20		ND	20		
COPPER	ICP	ND	20		ND	20		
IRON	ICP	12000	40		23000	40		
LEAD	ICP	ND	20		ND	20		
MAGNESIUM	ICP	16000	100		29000	100		
MANGANESE	ICP	63	20		120	20		
NICKEL	ICP	ND	20		ND	20		
SELENIUM	ICP	ND	20		ND	40		
SILVER	ICP	ND	10		ND	10		
THALLIUM	ICP	ND	20		ND	20		
VANADIUM	ICP	ND	10		ND	10		
ZINC	ICP	120	20		ND	20		
MERCURY	CVAA	ND	0.20		ND	0.20		
CYANIDE	SAC	ND	5.0		ND	5.0		

DATE PREPARED:	5/28/09	5/28/09
DATE ANALYZED:	6/4/09	6/04/09
DILUTION:	1	1

ANALYTICAL METHOD

ICP = Inductively Coupled Plasma. Samples were analyzed following EPA Region I SOP EIASOP-INGICP7.
 CVAA = Cold Vapor Atomic Absorption. Samples were analyzed following EPA Region I SOP EIASOP-INGMERC8.
 SAC = Semi-Automated Colorimetry. Samples were analyzed following EPA Region 1 SOP EIASOP-INGCN10.

NOTES

START has reported the data as it was received from the EPA OEME Laboratory. START has not performed data validation of the EPA OEME Laboratory data. An internal data review was performed by EPA OEME Laboratory personnel prior to submittal to the EPA Contracting Officer's Representative (COR).
 OEME = EPA Office of Environmental Measurement and Evaluation.
 Results are reported on a Dry Weight Basis.
 RL = Reporting Limit
 Q = Qualifier
 ND = Non-Detected
 mg/Kg = milligrams per Kilogram

SITE: MARINO PROPERTY
PROJECT NO: 09080055/09080059
LABORATORY: OEME

TABLE 5
VOLATILE ORGANIC COMPOUNDS IN SOIL HIGH LEVEL METHOD
micrograms per Kilogram (µg/Kg)

SAMPLE LOCATION: SAMPLE NUMBER: LABORATORY NUMBER:	TP-01 (14ft) R01-090511JT-0022 AA97492			TP-02/04 (SPC-01) R01-090511JT-0088 AA97760			TP-02/04 (SPG-01) R01-090511JT-0089 AA97761			TP-02/04 (SPG-02) R01-090511JT-0090 AA97762			TP-02/04 (Pail-01) R01-090511JT-0091 AA97763			TP-02/04 (Pail-02) R01-090511JT-0091 AA97764			TP-02/04 (Pail-03) R01-090511JT-0093 AA97765		
	RL	Q		RL	Q		RL	Q		RL	Q		RL	Q		RL	Q		RL	Q	
1,1,1,2-Tetrachloroethane	ND	180		ND	13000		ND	14000		ND	99		ND	13000		ND	18000		ND	1100000	
1,1,1-Trichloroethane	ND	180		ND	13000		ND	14000		ND	99		ND	13000		ND	18000		ND	1100000	
1,1,2,2-Tetrachloroethane	ND	180		ND	13000		ND	14000		ND	99		ND	13000		ND	18000		ND	1100000	
1,1,2-Trichloro-1,2,2-Trifluoroetha	ND	180		ND	13000		ND	14000		ND	99		ND	13000		ND	18000		ND	1100000	
1,1,2-Trichloroethane	ND	180		ND	13000		ND	14000		ND	99		ND	13000		ND	18000		ND	1100000	
1,1-dichloroethane	ND	180		ND	13000		ND	14000		ND	99		ND	13000		ND	18000		ND	1100000	
1,1-Dichloroethylene	ND	180		ND	13000		ND	14000		ND	99		ND	13000		ND	18000		ND	1100000	
1,1-Dichloropropene	ND	180		ND	13000		ND	14000		ND	99		ND	13000		ND	18000		ND	1100000	
1,2,3-Trichlorobenzene	ND	180		ND	13000		ND	14000		ND	99		ND	13000		ND	18000		ND	1100000	
1,2,3-Trichloropropane	ND	180		320000	13000		ND	14000		ND	99		ND	13000		ND	18000		ND	1100000	
1,2,4-Trichlorobenzene	ND	180		ND	13000		ND	14000		ND	99		ND	13000		ND	18000		ND	1100000	
1,2,4-Trimethylbenzene	ND	180		89000	13000		360000	14000		34000	990		360000	13000		2900000	1800000		ND	1100000	
1,2-Dibromo-3-Chloropropane	ND	180		ND	13000		ND	14000		ND	99		ND	13000		ND	18000		ND	1100000	
1,2-Dibromoethane	ND	180		ND	13000		ND	14000		ND	99		ND	13000		ND	18000		ND	1100000	
1,2-Dichlorobenzene	ND	180		ND	13000		ND	14000		ND	99		ND	13000		ND	18000		ND	1100000	
1,2-Dichloroethane	ND	180		ND	13000		ND	14000		ND	99		ND	13000		ND	18000		ND	1100000	
1,2-Dichloropropane	ND	180		ND	13000		ND	14000		ND	99		ND	13000		ND	18000		ND	1100000	
1,3,5-Trimethylbenzene	ND	180		340000	13000		140000	14000		6200	99		140000	13000		910000	18000		ND	1100000	
1,3-Dichlorobenzene	ND	180		ND	13000		ND	14000		ND	99		ND	13000		ND	18000		ND	1100000	
1,3-Dichloropropane	ND	180		ND	13000		ND	14000		ND	99		ND	13000		ND	18000		ND	1100000	
1,4-Dichlorobenzene	ND	180		ND	13000		ND	14000		ND	99		ND	13000		ND	18000		ND	1100000	
2,2-Dichloropropane	ND	180		ND	13000		ND	14000		ND	99		ND	13000		ND	18000		ND	1100000	
2-Butanone (MEK)	ND	180		1200000	13000		2300000	140000		13000	990		5600000	1300000		97000000	1800000		5300000	1100000	
2-Chlorotoluene	ND	180		ND	13000		ND	14000		ND	99		ND	13000		ND	18000		ND	1100000	
2-Hexanone	ND	180		ND	13000		ND	14000		ND	99		ND	13000		ND	18000		ND	1100000	
2-Propanone (acetone)	ND	180		120000	13000	J	190000	14000	J	1100	99	J	440000	13000		ND	18000		ND	1100000	
4-Chlorotoluene	ND	180		ND	13000		ND	14000		ND	99		ND	13000		ND	18000		ND	1100000	
4-Methyl-2-Pentanone(MIBK)	ND	180		550000	13000		1800000	140000		2300	99		1140000	13000		11000000	1800000		4800000	1100000	
Acrylonitrile	ND	180		ND	13000		ND	14000		ND	99		ND	13000		ND	18000		ND	1100000	
Benzene	ND	180		35000	13000		170000	14000		1400	99		160000	13000		35000000	1800000		ND	1100000	
Bromobenzene	ND	180		ND	13000		ND	14000		ND	99		ND	13000		ND	18000		ND	1100000	
Bromochloromethane	ND	180		ND	13000		ND	14000		ND	99		ND	13000		ND	18000		ND	1100000	
Bromodichloromethane	ND	180		ND	13000		ND	14000		ND	99		ND	13000		ND	18000		ND	1100000	
Bromoform	ND	180		ND	13000		ND	14000		ND	99		ND	13000		ND	18000		ND	1100000	
Bromomethane	ND	180		ND	13000		ND	14000		ND	99		ND	13000		ND	18000		ND	1100000	
c-1,3-dichloropropene	ND	180		ND	13000		ND	14000		ND	99		ND	13000		ND	18000		ND	1100000	
Carbon Disulfide	ND	180		ND	13000		ND	14000		ND	99		ND	13000		ND	18000		ND	1100000	
Carbon tetrachloride	ND	180		ND	13000		ND	14000		ND	99		ND	13000		ND	18000		ND	1100000	
Chlorobenzene	ND	180		ND	13000		110000	14000		ND	99		ND	13000		ND	18000		ND	1100000	
Chloroethane	ND	180		ND	13000		ND	14000		ND	99		ND	13000		ND	18000		ND	1100000	
Chloroform	ND	180		ND	13000		ND	14000		ND	99		ND	13000		ND	18000		ND	1100000	
Chloromethane	ND	180		ND	13000		ND	14000		ND	99		ND	13000		ND	18000		ND	1100000	
cis-1,2-Dichloroethylene	ND	180		ND	13000		ND	14000		ND	99		ND	13000		ND	18000		ND	1100000	
Dibromochloromethane	ND	180		ND	13000		ND	14000		ND	99		ND	13000		ND	18000		ND	1100000	
Dibromomethane	ND	180		ND	13000		ND	14000		ND	99		ND	13000		ND	18000		ND	1100000	
Dichlorodifluoromethane	ND	180		ND	13000		ND	14000		ND	99		ND	13000		ND	18000		ND	1100000	
Ethyl Ether	ND	180		ND	13000		ND	14000		ND	99		ND	13000		ND	18000		ND	1100000	
Ethylbenzene	ND	180		33000	13000		250000	14000		4600	99		74000	13000		1090000	18000		ND	1100000	
DILUTION:	50			5000			1			50			5000			500			500000		
PERCENT SOLIDS	43			76			55			73			77			66			84		
DATE SAMPLED:	08/27/09			08/28/09			08/26/09			08/28/09			08/28/09			08/28/09			08/28/09		
DATE EXTRACTED:	08/31/09			09/01/09			09/02/09			09/01/09			09/01/09			09/02/09			09/01/09		
DATE ANALYZED:	08/31/09			09/01/09			09/21/09			09/01/09			09/01/09			09/02/09			09/01/09		

SITE: MARINO PROPERTY
PROJECT NO: 09080055/09080059
LABORATORY: OEME

TABLE 5
VOLATILE ORGANIC COMPOUNDS IN SOIL HIGH LEVEL METHOD
micrograms per Kilogram (µg/Kg)

SAMPLE LOCATION:		TP-01 (14ft)		TP-02/04 (SPC-01)		TP-02/04 (SPG-01)		TP-02/04 (SPG-02)		TP-02/04 (Pail-01)		TP-02/04 (Pail-02)		TP-02/04 (Pail-03)			
SAMPLE NUMBER:		R01-090511JT-0022		R01-090511JT-0088		R01-090511JT-0089		R01-090511JT-0090		R01-090511JT-0091		R01-090511JT-0091		R01-090511JT-0093			
LABORATORY NUMBER:		AA97492		AA97760		AA97761		AA97762		AA97763		AA97764		AA97765			
COMPOUND	RL	Q	RL	Q	RL	Q	RL	Q	RL	Q	RL	Q	RL	Q	RL	Q	
Hexachlorobutadiene	ND	180	ND	13000	ND	14000	ND	99	ND	13000	ND	18000	ND	1100000	ND	1100000	
Isopropylbenzene	ND	180	ND	13000	23000	14000	3800	99	20000	13000	120000	18000	ND	1100000	ND	1100000	
M/P Xylene	ND	360	160000	26000	1200000	28000	7100	200	360000	27000	6600000	3600000	1500000	2200000	ND	1100000	
Methylene Chloride	ND	180	ND	13000	ND	14000	ND	99	ND	13000	920000	18000	ND	1100000	ND	1100000	
Methyl-t-Butyl Ether	ND	180	ND	13000	ND	14000	ND	99	ND	13000	ND	18000	ND	1100000	ND	1100000	
Naphthalene	ND	180	ND	13000	17000	14000	2900	99	37000	13000	95000	18000	J	ND	1100000	ND	1100000
N-Butylbenzene	ND	180	16000	13000	72000	14000	8300	990	59000	13000	380000	18000	ND	1100000	ND	1100000	
N-Propylbenzene	ND	180	14000	13000	55000	14000	9400	99	51000	13000	340000	18000	ND	1100000	ND	1100000	
Ortho Xylene	ND	180	41000	13000	300000	14000	ND	99	110000	13000	1200000	18000	ND	1100000	ND	1100000	
Para-Isopropyltoluene	ND	180	ND	13000	38000	14000	3200	99	43000	13000	230000	18000	ND	1100000	ND	1100000	
Sec-Butylbenzene	ND	180	ND	13000	38000	14000	6700	99	32000	13000	170000	18000	ND	1100000	ND	1100000	
Styrene	ND	180	ND	13000	ND	14000	ND	99	ND	13000	ND	18000	ND	1100000	ND	1100000	
t-1,3-Dichloropropene	ND	180	ND	13000	ND	14000	ND	99	ND	13000	ND	18000	ND	1100000	ND	1100000	
Tert-Butylbenzene	ND	180	ND	13000	ND	14000	ND	99	ND	13000	21000	18000	ND	1100000	ND	1100000	
Tetrachloroethylene	ND	180	ND	13000	ND	14000	ND	99	ND	13000	ND	18000	ND	1100000	ND	1100000	
Tetrahydrofuran	ND	180	220000	13000	540000	14000	19000	990	670000	13000	26000000	1800000	ND	1100000	ND	1100000	
Toluene	ND	180	3500000	1300000	8200000	140000	4500	99	11000000	1300000	160000000	1800000	12000000	1100000	ND	1100000	
Trans-1,2-Dichloroethylene	ND	180	ND	13000	ND	14000	ND	99	ND	13000	ND	18000	ND	1100000	ND	1100000	
Trichloroethylene	ND	180	ND	13000	ND	14000	ND	99	ND	13000	30000	18000	ND	1100000	ND	1100000	
Trichlorofluoromethane	ND	180	ND	13000	ND	14000	ND	99	ND	13000	ND	18000	ND	1100000	ND	1100000	
Vinyl Acetate	ND	180	ND	13000	ND	14000	ND	99	ND	13000	ND	18000	ND	1100000	ND	1100000	
Vinyl Chloride	ND	180	ND	13000	ND	14000	ND	99	ND	13000	25000	18000	ND	1100000	ND	1100000	
DILUTION:		50	5000		5000		50		5000		500		500000				
PERCENT SOLIDS		43	76		75		73		77		66		84				
DATE SAMPLED:		08/27/09	08/28/09		08/28/09		08/28/09		08/28/09		08/28/09		08/28/09				
DATE EXTRACTED:		08/31/09	09/01/09		09/01/09		09/01/09		09/01/09		09/01/09		09/01/09				
DATE ANALYZED:		08/31/09	09/01/09		09/01/09		09/01/09		09/01/09		09/02/09		09/01/09				

SITE: MARINO PROPERTY
PROJECT NO: 09080055/09080059
LABORATORY: OEME

TABLE 5
VOLATILE ORGANIC COMPOUNDS IN SOIL HIGH LEVEL METHOD
micrograms per Kilogram (µg/Kg)

COMPOUND	TP-05/10 (16ft)		TP-06 (12ft)		TP-09 (16ft)		TP-11 (12ft)	
	R01-090511JT-0021		R01-090511JT-0084		R01-090511JT-0020		R01-090511JT-0085	
	AA97491		AA97756		AA97490		AA97757	
	RL	Q	RL	Q	RL	Q	RL	Q
1,1,1,2-Tetrachloroethane	ND	100	ND	140	ND	90	ND	160
1,1,1-Trichloroethane	ND	100	ND	140	ND	90	ND	160
1,1,2,2-Tetrachloroethane	ND	100	ND	140	ND	90	ND	160
1,1,2-Trichloro-1,2,2-Trifluoroetha	ND	100	ND	140	ND	90	ND	160
1,1,2-Trichloroethane	ND	100	ND	140	ND	90	ND	160
1,1-dichloroethane	ND	100	ND	140	ND	90	ND	160
1,1-Dichloroethylene	ND	100	ND	140	ND	90	ND	160
1,1-Dichloropropene	ND	100	ND	140	ND	90	ND	160
1,2,3-Trichlorobenzene	ND	100	ND	140	ND	90	170	160 J
1,2,3-Trichloropropane	ND	100	ND	140	ND	90	ND	160
1,2,4-Trichlorobenzene	ND	100	ND	140	ND	90	ND	160
1,2,4-Trimethylbenzene	ND	100	320	140	ND	90	170	160
1,2-Dibromo-3-Chloropropane	ND	100	ND	140	ND	90	ND	160
1,2-Dibromoethane	ND	100	ND	140	ND	90	ND	160
1,2-Dichlorobenzene	ND	100	ND	140	ND	90	ND	160
1,2-Dichloroethane	ND	100	ND	140	ND	90	ND	160
1,2-Dichloropropane	ND	100	ND	140	ND	90	ND	160
1,3,5-Trimethylbenzene	ND	100	170	140	ND	90	ND	160
1,3-Dichlorobenzene	ND	100	ND	140	ND	90	ND	160
1,3-Dichloropropane	ND	100	ND	140	ND	90	ND	160
1,4-Dichlorobenzene	ND	100	ND	140	ND	90	ND	160
2,2-Dichloropropane	ND	100	ND	140	ND	90	ND	160
2-Butanone (MEK)	120	100	650	140	ND	90	610	160
2-Chlorotoluene	ND	100	ND	140	ND	90	ND	160
2-Hexanone	ND	100	ND	140	ND	90	ND	160
2-Propanone (acetone)	190	100 J	230	140 J	ND	90	ND	160
4-Chlorotoluene	ND	100	ND	140	ND	90	ND	160
4-Methyl-2-Pentanone(MIBK)	ND	100	880	140	ND	90	450	160
Acrylonitrile	ND	100	ND	140	ND	90	ND	160
Benzene	ND	100	1500	140	ND	90	2800	160
Bromobenzene	ND	100	ND	140	ND	90	ND	160
Bromochloromethane	ND	100	ND	140	ND	90	ND	160
Bromodichloromethane	ND	100	ND	140	ND	90	ND	160
Bromoform	ND	100	ND	140	ND	90	ND	160
Bromomethane	ND	100	ND	140	ND	90	ND	160
c-1,3-dichloropropene	ND	100	ND	140	ND	90	ND	160
Carbon Disulfide	ND	100	ND	140	ND	90	ND	160
Carbon tetrachloride	ND	100	ND	140	ND	90	ND	160
Chlorobenzene	2300	100	ND	140	ND	90	ND	160
Chloroethane	ND	100	ND	140	ND	90	ND	160
Chloroform	ND	100	ND	140	ND	90	ND	160
Chloromethane	ND	100	ND	140	ND	90	ND	160
cis-1,2-Dichloroethylene	ND	100	ND	140	ND	90	ND	160
Dibromochloromethane	ND	100	ND	140	ND	90	ND	160
Dibromomethane	ND	100	ND	140	ND	90	ND	160
Dichlorodifluoromethane	ND	100	ND	140	ND	90	ND	160
Ethyl Ether	ND	100	ND	140	ND	90	ND	160
Ethylbenzene	ND	100	ND	140	ND	90	ND	160
DILUTION:	50		50		50		50	
PERCENT SOLIDS	65		72		75		68	
DATE SAMPLED:	08/26/09		08/27/09		08/25/09		08/27/09	
DATE EXTRACTED:	08/31/09		09/01/09		08/31/09		09/01/09	
DATE ANALYZED:	08/31/09		09/01/09		08/31/09		09/01/09	

SITE: MARINO PROPERTY
PROJECT NO: 09080055/09080059
LABORATORY: OEME

TABLE 5
VOLATILE ORGANIC COMPOUNDS IN SOIL HIGH LEVEL METHOD
micrograms per Kilogram (µg/Kg)

SAMPLE LOCATION:		TP-05/10 (16ft)		TP-06 (12ft)		TP-09 (16ft)		TP-11 (12ft)	
SAMPLE NUMBER:		R01-090511JT-0021		R01-090511JT-0084		R01-090511JT-0020		R01-090511JT-0085	
LABORATORY NUMBER:		AA97491		AA97756		AA977490		AA97757	
COMPOUND	RL	Q	RL	Q	RL	Q	RL	Q	
Hexachlorobutadiene	ND	100	ND	140	ND	90	ND	160	
Isopropylbenzene	ND	100	ND	140	ND	90	ND	160	
M/P Xylene	ND	210	160	280	ND	180	ND	320	
Methylene Chloride	ND	100	ND	140	ND	90	ND	160	
Methyl-t-Butyl Ether	ND	100	ND	140	ND	90	ND	160	
Naphthalene	ND	100	260	140	ND	90	190	160	
N-Butylbenzene	ND	100	160	140	ND	90	ND	160	
N-Propylbenzene	ND	100	ND	140	ND	90	ND	160	
Ortho Xylene	ND	100	ND	140	ND	90	ND	160	
Para-Isopropyltoluene	ND	100	340	140	ND	90	ND	160	
Sec-Butylbenzene	ND	100	ND	140	ND	90	ND	160	
Styrene	ND	100	ND	140	ND	90	ND	160	
t-1,3-Dichloropropene	ND	100	ND	140	ND	90	ND	160	
Tert-Butylbenzene	ND	100	ND	140	ND	90	ND	160	
Tetrachloroethylene	ND	100	ND	140	ND	90	ND	160	
Tetrahydrofuran	ND	100	2700	140	ND	90	2400	160	
Toluene	ND	100	ND	140	ND	90	ND	160	
Trans-1,2-Dichloroethylene	ND	100	ND	140	ND	90	ND	160	
Trichloroethylene	ND	100	ND	140	ND	90	ND	160	
Trichlorofluoromethane	ND	100	ND	140	ND	90	ND	160	
Vinyl Acetate	ND	100	ND	140	ND	90	ND	160	
Vinyl Chloride	ND	100	ND	140	ND	90	ND	160	
DILUTION:		50	50	50	50	50	50	50	
PERCENT SOLIDS		65	72	75	68	68	68	68	
DATE SAMPLED:		08/26/09	08/27/09	08/25/09	08/27/09	08/25/09	08/27/09	08/27/09	
DATE EXTRACTED:		08/31/09	09/01/09	08/31/09	09/01/09	08/31/09	09/01/09	09/01/09	
DATE ANALYZED:		08/31/09	09/01/09	08/31/09	09/01/09	08/31/09	09/01/09	09/01/09	

NOTES

START has reported the data as it was received from the EPA OEME Laboratory. START has not performed data validation of the EPA OEME Laboratory data. An internal data review was performed by EPA OEME Laboratory personnel prior to submittal to the EPA Contracting Officer's Representative (COR).

Sample analysis was conducted following EPA REGION I SOP, EIASOP-VOAGCMS8, via Gas Chromatograph/Mass Spectrometry (GC/MS).

OEME = EPA Office of Environmental Measurement and Evaluation.

µg/Kg = micrograms per Kilogram.

ND = Non-Detected.

J = Estimated value.

Results are reported on a Dry Weight Basis.

SITE: MARINO PROPERTY
PROJECT NO: 09080055/09080059
LABORATORY: OEME

TABLE 6
SEMIVOLATILE ORGANIC COMPOUND SOIL ANALYSIS
(µg/Kg)

SAMPLE LOCATION:		TP-01 (14ft)		TP-02/04 (SPC-01)		TP-02/04 (SPG-01)		TP-02/04 (SPG-02)		TP-02/04 (Pail-01)		TP-02/04 (Pail-02)		TP-02/04 (Pail-03)	
SAMPLE NUMBER:		R01-090511JT-0022		R01-090511JT-0088		R01-090511JT-0089		R01-090511JT-0090		R01-090511JT-0091		R01-090511JT-0092		R01-090511JT-0093	
LABORATORY NUMBER:		AA97492		AA97760		AA97761		AA97762		AA97763		AA97764		AA97765	
COMPOUND	RL	Q	RL	Q	RL	Q	RL	Q	RL	Q	RL	Q	RL	Q	
1,2,4,5-Tetrachlorobenzene	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
1,2,4-Trichlorobenzene	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
1,2-Dichlorobenzene	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
1,3-Dichlorobenzene	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
1,3-Dinitrobenzene	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
1,4-Dichlorobenzene	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
1,4-Naphthoquinone	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
1-Methylnaphthalene	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
2,2'-oxybis(1-Chloropropane)	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
2,3,4,6-Tetrachlorophenol	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
2,4,5-Trichlorophenol	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
2,4,6-Trichlorophenol	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
2,4-Dichlorophenol	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
2,4-Dinitrophenol	ND	4,200	ND	430,000	ND	120,000	ND	51,000	ND	3,300,000	ND	150,000	ND	15,000,000	
2,4-Dinitrotoluene	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
2,4-dimethylphenol	1,400	1,000	ND	110,000	ND	29,000	ND	13,000	ND	820,000	ND	39,000	ND	3,700,000	
2,6-Dichlorophenol	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
2,6-Dinitrotoluene	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
2-Chloronaphthalene	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
2-Chlorophenol	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
2-Methylnaphthalene	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
2-Methylphenol	790	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
2-Nitroaniline	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
2-Nitrophenol	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
3&4-Methylphenol	2,000	1,000	ND	110,000	ND	29,000	ND	13,000	ND	820,000	ND	39,000	ND	3,700,000	
3,3'-Dichlorobenzidine	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
3-Methylcholanthrene	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
3-Nitroaniline	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
4,6-Dinitro-2-methylphenol	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
4-Bromophenyl-phenylether	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
4-Chloro-3-methylphenol	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
4-Chloroaniline	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
4-Chlorophenyl-phenylether	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
4-Nitroaniline	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
4-Nitrophenol	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
4-nitroquinoline-1-oxide	ND	4,200	ND	430,000	ND	120,000	ND	51,000	ND	3,300,000	ND	150,000	ND	15,000,000	
Acenaphthene	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
Acenaphthylene	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
Acetophenone	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
Aniline	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
Anthracene	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
Aramite	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
Azobenzene	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
Benzidine	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
Benzo(a)anthracene	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
Benzo(a)pyrene	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
Benzo(b)fluoranthene	750	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
Benzo(g,h,i)perylene	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
Benzo(k)fluoranthene	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
Benzoic Acid	ND	1,000	ND	110,000	ND	29,000	ND	13,000	ND	820,000	ND	39,000	ND	3,700,000	
Benzyl Alcohol	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
DILUTION FACTOR:	1		200		5		25		125		50		250		
PERCENT SOLIDS:	46		76		76		84		77		66		84		
DATE SAMPLED:	08/27/09		08/28/09		08/28/09		08/28/09		08/28/09		08/28/09		08/28/09		
DATE EXTRACTED:	09/02/09		09/02/09		09/02/09		09/02/09		09/02/09		09/02/09		09/02/09		
DATE ANALYZED:	09/21/09		09/21/09		09/21/09		09/21/09		09/21/09		09/22/09		09/22/09		

SITE: MARINO PROPERTY
PROJECT NO: 09080055/09080059
LABORATORY: OEME

TABLE 6
SEMIVOLATILE ORGANIC COMPOUND SOIL ANALYSIS
(µg/Kg)

SAMPLE LOCATION:		TP-01 (14ft)		TP-02/04 (SPC-01)		TP-02/04 (SPG-01)		TP-02/04 (SPG-02)		TP-02/04 (Pail-01)		TP-02/04 (Pail-02)		TP-02/04 (Pail-03)	
SAMPLE NUMBER:		R01-090511JT-0022		R01-090511JT-0088		R01-090511JT-0089		R01-090511JT-0090		R01-090511JT-0091		R01-090511JT-0092		R01-090511JT-0093	
LABORATORY NUMBER:		AA97492		AA97760		AA97761		AA97762		AA97763		AA97764		AA97765	
COMPOUND	RL	Q	RL	Q	RL	Q	RL	Q	RL	Q	RL	Q	RL	Q	
Bis(2-Chloroethyl)ether	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
bis(2-Ethylhexyl)phthalate	930	520	4,300,000	270,000	22,000,000	590,000	370,000	32,000	38,000,000	3,200,000	930,000	97,000	ND	1,900,000	
Butylbenzylphthalate	ND	520	40,000	54,000	ND	15,000	ND	6,400	810,000	410,000	22,000	19,000	25,000,000	1,900,000	
Carbazole	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
Chlorobenzilate	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
Chrysene	710	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
Di-n-butylphthalate	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
Di-n-octyl phthalate	ND	520	350,000	54,000	1,600,000	590,000	26,000	6,400	2,100,000	410,000	63,000	19,000	ND	1,900,000	
Dibenz(a,h)anthracene	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
Dibenzofuran	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
Diethylphthalate	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
Dimethyl phthalate	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
Dinoseb	ND	1,000	ND	110,000	ND	29,000	ND	13,000	ND	820,000	ND	39,000	ND	3,700,000	
Ethyl methanesulfonate	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
Fluoranthene	1,000	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
Fluorene	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
Hexachlorobenzene	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
Hexachlorobutadiene	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
Hexachlorocyclopentadiene	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
Hexachloroethane	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
Hexachloropropene	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
Indeno(1,2,3-cd)pyrene	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
Isodrin	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
Isophorone	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
Isosafrole	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
Kepone	ND	1,000 J	ND	110,000 J	ND	29,000 J	ND	13,000 J	ND	820,000 J	ND	39,000 J	ND	3,700,000 J	
Methyl methanesulfonate	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
N-Nitrosodiphenylamine	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
N-nitroso-di-n-propylamine	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
N-nitrosodimethylamine	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
Naphthalene	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
Nitrobenzene	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
Pentachlorobenzene	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
Pentachloronitrobenzene	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
Pentachlorophenol	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
Phenacetin	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
Phenanthrene	920	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
Phenol	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
Pyrene	960	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
Pyridine	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
Safrole	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
bis(-2-Chloroethoxy)methane	ND	520	ND	54,000	ND	15,000	ND	6,400	ND	410,000	ND	19,000	ND	1,900,000	
DILUTION FACTOR:	1		200		5		25		125		50		250		
PERCENT SOLIDS:	46		76		76		84		77		66		84		
DATE SAMPLED:	08/27/09		08/28/09		08/28/09		08/28/09		08/28/09		08/28/09		08/28/09		
DATE EXTRACTED:	09/02/09		09/02/09		09/02/09		09/02/09		09/02/09		09/02/09		09/02/09		
DATE ANALYZED:	09/21/09		09/21/09		09/21/09		09/21/09		09/21/09		09/22/09		09/22/09		

SITE: MARINO PROPERTY
PROJECT NO: 09080055/09080059
LABORATORY: OEME

TABLE 6
SEMIVOLATILE ORGANIC COMPOUND SOIL ANALYSIS
(µg/Kg)

SAMPLE LOCATION:		TP-05/10 (16ft)		TP-06 (12ft)		TP-09 (16ft)		TP-11 (12ft)	
SAMPLE NUMBER:		R01-090511JT-0021		R01-090511JT-0084		R01-090511JT-0020		R01-090511JT-0085	
LABORATORY NUMBER:		AA97491		AA97756		AA97490		AA97757	
COMPOUND		RL	Q	RL	Q	RL	Q	RL	Q
1,2,4,5-Tetrachlorobenzene		ND	460	ND	300	ND	280	ND	280
1,2,4-Trichlorobenzene		ND	460	ND	300	ND	280	ND	280
1,2-Dichlorobenzene		ND	460	ND	300	ND	280	ND	280
1,3-Dichlorobenzene		ND	460	ND	300	ND	280	ND	280
1,3-Dinitrobenzene		ND	460	ND	300	ND	280	ND	280
1,4-Dichlorobenzene		ND	460	ND	300	ND	280	ND	280
1,4-Naphthoquinone		ND	460	ND	300	ND	280	ND	280
1-Methylnaphthalene		580	460	ND	300	810	280	1,200	280
2,2'-oxybis(1-Chloropropane)		ND	460	ND	300	ND	280	ND	280
2,3,4,6-Tetrachlorophenol		ND	460	ND	300	ND	280	ND	280
2,4,5-Trichlorophenol		ND	460	ND	300	ND	280	ND	280
2,4,6-Trichlorophenol		ND	460	ND	300	ND	280	ND	280
2,4-Dichlorophenol		ND	460	ND	300	ND	280	ND	280
2,4-Dinitrophenol		ND	3,600	ND	2,400	ND	2,300	ND	2,200
2,4-Dinitrotoluene		ND	460	ND	300	ND	280	ND	280
2,4-dimethylphenol		ND	910	2,800	610	ND	560	ND	560
2,6-Dichlorophenol		ND	460	ND	300	ND	280	ND	280
2,6-Dinitrotoluene		ND	460	ND	300	ND	280	ND	280
2-Chloronaphthalene		ND	460	ND	300	ND	280	ND	280
2-Chlorophenol		ND	460	ND	300	ND	280	ND	280
2-Methylnaphthalene		660	460	ND	300	890	280	440	280
2-Methylphenol		ND	460	1,900	300	ND	280	ND	280
2-Nitroaniline		ND	460	ND	300	ND	280	ND	280
2-Nitrophenol		ND	460	ND	300	ND	280	ND	280
3&4-Methylphenol		570	910	4,400	610	620	560	ND	560
3,3'-Dichlorobenzidine		ND	460	ND	300	ND	280	ND	280
3-Methylcholanthrene		ND	460	ND	300	ND	280	ND	280
3-Nitroaniline		ND	460	ND	300	ND	280	ND	280
4,6-Dinitro-2-methylphenol		ND	460	ND	300	ND	280	ND	280
4-Bromophenyl-phenylether		ND	460	ND	300	ND	280	ND	280
4-Chloro-3-methylphenol		ND	460	ND	300	ND	280	ND	280
4-Chloroaniline		ND	460	ND	300	ND	280	ND	280
4-Chlorophenyl-phenylether		ND	460	ND	300	ND	280	ND	280
4-Nitroaniline		ND	460	ND	300	ND	280	ND	280
4-Nitrophenol		ND	460	ND	300	ND	280	ND	280
4-nitroquinoline-1-oxide		ND	3,600	ND	2,400	ND	2,300	ND	2,200
Acenaphthene		520	460	ND	300	360	280	ND	280
Acenaphthylene		ND	460	ND	300	ND	280	ND	280
Acetophenone		ND	460	ND	300	ND	280	ND	280
Aniline		ND	460	ND	300	ND	280	ND	280
Anthracene		1,200	460	ND	300	710	280	ND	280
Aramite		ND	460	ND	300	ND	280	ND	280
Azobenzene		ND	460	ND	300	ND	280	ND	280
Benzidine		ND	460	ND	300	ND	280	ND	280
Benzo(a)anthracene		1,900	460	330	300	1,100	280	430	280
Benzo(a)pyrene		1,800	460	ND	300	840	280	450	280
Benzo(b)fluoranthene		2,300	460	370	300	1,100	280	540	280
Benzo(g,h,i)perylene		1,400	460	ND	300	720	280	360	280
Benzo(k)fluoranthene		880	460	ND	300	380	280	ND	280
Benzoic Acid		ND	910	ND	610	ND	560	ND	560
Benzyl Alcohol		ND	460	ND	300	ND	280	ND	280
DILUTION FACTOR:		1		1		5		1	
PERCENT SOLIDS:		55		71		76		76	
DATE SAMPLED:		08/26/09		08/27/09		08/28/09		08/27/09	
DATE EXTRACTED:		09/02/09		09/02/09		09/02/09		09/02/09	
DATE ANALYZED:		09/21/09		09/21/09		09/21/09		09/21/09	

SITE: MARINO PROPERTY
PROJECT NO: 09080055/09080059
LABORATORY: OEME

TABLE 6
SEMIVOLATILE ORGANIC COMPOUND SOIL ANALYSIS
(µg/Kg)

SAMPLE LOCATION:		TP-05/10 (16ft)		TP-06 (12ft)		TP-09 (16ft)		TP-11 (12ft)	
SAMPLE NUMBER:		R01-090511JT-0021		R01-090511JT-0084		R01-090511JT-0020		R01-090511JT-0085	
LABORATORY NUMBER:		AA97491		AA97756		AA97490		AA97757	
COMPOUND	RL	Q	RL	Q	RL	Q	RL	Q	
Bis(2-Chloroethyl)ether	ND	460	ND	300	ND	280	ND	280	
bis(2-Ethylhexyl)phthalate	1,100	460	850	300	46,000	2,800	780	280	
Butylbenzylphthalate	ND	460	ND	300	ND	280	ND	280	
Carbazole	ND	460	ND	300	ND	280	ND	280	
Chlorobenzilate	ND	460	ND	300	ND	280	ND	280	
Chrysene	2,200	460	390	300	1,400	280	510	280	
Di-n-butylphthalate	ND	460	ND	300	ND	280	ND	280	
Di-n-octyl phthalate	ND	460	ND	300	ND	280	ND	280	
Dibenz[a,h]anthracene	ND	460	ND	300	ND	280	ND	280	
Dibenzofuran	ND	460	ND	300	ND	280	ND	280	
Diethylphthalate	ND	460	ND	300	ND	280	ND	280	
Dimethyl phthalate	ND	460	ND	300	ND	280	ND	280	
Dinoseb	ND	910	ND	610	ND	560	ND	560	
Ethyl methanesulfonate	ND	460	ND	300	ND	280	ND	280	
Fluoranthene	4,900	460	850	300	2,900	280	870	280	
Fluorene	970	460	ND	300	690	280	ND	280	
Hexachlorobenzene	ND	460	ND	300	ND	280	ND	280	
Hexachlorobutadiene	ND	460	ND	300	ND	280	ND	280	
Hexachlorocyclopentadiene	ND	460	ND	300	ND	280	ND	280	
Hexachloroethane	ND	460	ND	300	ND	280	ND	280	
Hexachloropropene	ND	460	ND	300	ND	280	ND	280	
Indeno(1,2,3-cd)pyrene	1,200	460	ND	300	440	280	280	280	
Isodrin	ND	460	ND	300	ND	280	ND	280	
Isophorone	ND	460	ND	300	ND	280	ND	280	
Isosafrole	ND	460	ND	300	ND	280	ND	280	
Kepone	ND	910	ND	610	ND	560	ND	560	
Methyl methanesulfonate	ND	460	ND	300	ND	280	ND	280	
N-Nitrosodiphenylamine	ND	460	ND	300	1,200	280	ND	280	
N-nitroso-di-n-propylamine	ND	460	ND	300	ND	280	ND	280	
N-nitrosodimethylamine	ND	460	ND	300	ND	280	ND	280	
Naphthalene	650	460	ND	300	660	280	300	280	
Nitrobenzene	ND	460	ND	300	ND	280	ND	280	
Pentachlorobenzene	ND	460	ND	300	ND	280	ND	280	
Pentachloronitrobenzene	ND	460	ND	300	ND	280	ND	280	
Pentachlorophenol	ND	460	ND	300	ND	280	ND	280	
Phenacetin	ND	460	ND	300	ND	280	ND	280	
Phenanthrene	4,500	460	610	300	3,200	280	710	280	
Phenol	ND	460	510	300	ND	280	ND	280	
Pyrene	4,700	460	710	300	3,000	280	910	280	
Pyridine	ND	460	ND	300	ND	280	ND	280	
Safrole	ND	460	ND	300	ND	280	ND	280	
bis(-2-Chloroethoxy)methane	ND	460	ND	300	ND	280	ND	280	
DILUTION FACTOR:	1		1		5		1		
PERCENT SOLIDS:	55		71		76		76		
DATE SAMPLED:	08/26/09		08/27/09		08/28/09		08/27/09		
DATE EXTRACTED:	09/02/09		09/02/09		09/02/09		09/02/09		
DATE ANALYZED:	09/21/09		09/21/09		09/21/09		09/21/09		

NOTES:

START has reported the data as it was received from the EPA OEME Laboratory. START has not performed data validation of the EPA OEME Laboratory data. An internal data review was performed by EPA OEME Laboratory personnel prior to submittal to the EPA Contracting Officer's Representative (COR).

Sample analysis was conducted following EPA REGION I SOP, EIASOP-BNAS1, via Gas Chromatograph/Mass Spectrometry (GC/MS).

OEME = EPA Office of Environmental Measurement and Evaluation.

µg/Kg = micrograms per Kilogram.

ND = Non-Detected.

J = Estimated value.

Results are reported on a Dry Weight Basis.

SITE: MARINO PROPERTY
PROJECT NO: 09080055/0908005
LABORATORY: OEME

TABLE 7
POLYCHLORINATED BIPHENYL SOLID WASTE AND SOIL ANALYSES
milligrams per Kilogram (mg/Kg)

SAMPLE LOCATION:		TP-01 (14ft)		TP-02/04 (SPC-01)		TP-02/04 (SPG-01)		TP-02/04 (SPG-02)		TP-02/04 (Pail-01)		TP-02/04 (Pail-02)		TP-02/04 (Pail-03)	
SAMPLE NUMBER:		R01-090511JT-0022		R01-090511JT-0088		R01-090511JT-0089		R01-090511JT-0090		R01-090511JT-0091		R01-090511JT-0092		R01-090511JT-0093	
LABORATORY NUMBER:		AA97492		AA97760		AA97761		AA97762		AA7763		AA97764		AA97765	
COMPOUND		RL	Q	RL	Q	RL	Q	RL	Q	RL	Q	RL	Q	RL	Q
Aroclor-1016		ND	0.12	ND	12.00	ND	9.60	ND	0.90	ND	59.00	ND	34.00	ND	420.00
Aroclor-1221		ND	0.12	ND	12.00	ND	9.60	ND	0.90	ND	59.00	ND	34.00	ND	420.00
Aroclor-1232		ND	0.12	ND	12.00	ND	9.60	ND	0.90	ND	59.00	ND	34.00	ND	420.00
Aroclor-1242		ND	0.12	ND	12.00	ND	9.60	ND	0.90	ND	59.00	ND	34.00	ND	420.00
Aroclor-1248		ND	0.12	ND	12.00	ND	9.60	ND	0.90	ND	59.00	ND	34.00	ND	420.00
Aroclor-1254		ND	0.12	ND	12.00	ND	9.60	ND	0.90	ND	59.00	ND	34.00	ND	420.00
Aroclor-1260		ND	0.12	70	12.00	33	9.60	4.2	0.90	230	59.00	420	34.00	8100	420.00
Aroclor-1262		ND	0.12	ND	12.00	ND	9.60	ND	0.90	ND	59.00	ND	34.00	ND	420.00
Aroclor-1268		ND	0.12	ND	12.00	ND	9.60	ND	0.90	ND	59.00	ND	34.00	ND	420.00
DILUTION FACTOR:		1		100		100		10		500		250		4000	
DATE SAMPLED:		8/27/2009		8/28/2009		8/28/2009		8/28/2009		8/28/2009		8/28/2009		8/28/2009	
DATE EXTRACTED:		8/31/2009		9/3/2009		9/3/2009		9/3/2009		9/3/2009		9/3/2009		9/3/2009	
DATE ANALYZED:		9/4/2009		9/10/2009		9/10/2009		9/10/2009		9/10/2009		9/10/2009		9/10/2009	
% SOLIDS:		77		73		78		81		79		66		83	

SITE: MARINO PROPERTY
PROJECT NO: 09080055/0908005
LABORATORY: OEME

TABLE 7
POLYCHLORINATED BIPHENYL SOLID WASTE AND SOIL ANALYSES
milligrams per Kilogram (mg/Kg)

SAMPLE LOCATION:		TP-05/10(16ft)		TP-06 (12ft)		TP-09 (16ft)		TP-11 (12ft)	
SAMPLE NUMBER:		R01-090511JT-0021		RT01-090511JT-0084		RT01-090511JT-0020		RT01-090511JT-0085	
LABORATORY NUMBER:		AA97491		AA97756		AA97490		AA97757	
COMPOUND		RL	Q	RL	Q	RL	Q	RL	Q
Aroclor-1016	ND	0.12		ND	0.12	ND	0.16	ND	0.13
Aroclor-1221	ND	0.12		ND	0.12	ND	0.16	ND	0.13
Aroclor-1232	ND	0.12		ND	0.12	ND	0.16	ND	0.13
Aroclor-1242	ND	0.12		ND	0.12	ND	0.16	ND	0.13
Aroclor-1248	ND	0.12		ND	0.12	ND	0.16	ND	0.13
Aroclor-1254	0.21	0.12		ND	0.12	0.53	0.16	ND	0.13
Aroclor-1260	ND	0.12		ND	0.12	0.19	0.16	ND	0.13
Aroclor-1262	ND	0.12		ND	0.12	ND	0.16	ND	0.13
Aroclor-1268	ND	0.12		ND	0.12	ND	0.16	ND	0.13
DILUTION FACTOR:		1		1		1		1	
DATE SAMPLED:		8/26/2009		8/27/2009		8/25/2009		8/27/2009	
DATE EXTRACTED:		8/31/2009		9/3/2009		8/31/2009		9/3/2009	
DATE ANALYZED:		9/4/2009		9/10/2009		9/4/2009		9/10/2009	
% SOLIDS:		66		74		50		70	

Notes:

START has reported the data as it was received from the EPA OEME Laboratory. START has not performed data validation of the EPA OEME Laboratory data. An internal data review was performed by EPA OEME Laboratory personnel prior to submittal to the EPA Contracting Officer's Representative (COR).

Samples were analyzed by EPA Region I Standard Operating Procedure (SOP) EIASOP-PESTSIL2.SOP, using gas chromatography/electron capture detector (GC/ECD).

OEME = EPA Office of Environmental Measurement and Evaluation.

mg/Kg = milligram per Kilogram

RL = Reporting Limit

Q = Qualifier

% = Percent

P = The confirmation value exceeded 35% difference and is less than 100%. The lower value is reported.

ND = Not Detected

Results are reported on a dry weight basis.

SITE: MARINO PROPERTY
PROJECT NO: 09080055/09080059
LABORATORY: OEME

TABLE 8
METALS IN SOIL AND SOLID WASTE
milligrams per Kilogram (mg/Kg)

SAMPLE LOCATION:		TP-01 (14ft)			TP-02/04 (SPC-01)			TP-02/04 (SPG-01)			TP-02/04 (SPG-02)			TP-02/04 (Pail-01)			TP-02/04 (Pail-02)			TP-02/04 (Pail-03)		
SAMPLE NUMBER:		R01-090511JT-0022			R01-090511JT-0088			R01-090511JT-0089			R01-090511JT-0090			R01-090511JT-0091			R01-090511JT-0092			R01-090511JT-0093		
LABORATORY NUMBER:		AA97492			AA97760			AA97761			AA97762			AA97763			AA97764 *			AA97765		
DATE SAMPLED:		8/27/2009			8/28/2009			8/28/2009			8/28/2009			8/28/2009			8/28/2009			8/28/2009		
INORGANIC																						
ANALYTES	METHOD	RESULT	RL	Q	RESULT	RL	Q	RESULT	RL	Q	RESULT	RL	Q	RESULT	RL	Q	RESULT	RL	Q	RESULT	RL	Q
ALUMINUM	ICP	7,600	44		8,300	33		9,100	32		8,000	11		1,100	11		NA			370	11	
ANTIMONY	ICP	ND	7.9		ND	6.0		8.5	5.9		ND	2.0		ND	2.0		NA			ND	1.9	
ARSENIC	ICP	24	7.9		22	6.0		18	5.9	J3	4.9	2.0		ND	2.0		ND	10	J	ND	1.9	
BARIUM	ICP	650	7.9		540	6.0		910	5.9		210	2.0		1,100	2.0		120	50	J	760	1.9	
BERYLLIUM	ICP	ND	3.2		ND	2.4		ND	2.4		ND	0.80		ND	0.82		NA			ND	0.77	
CADMIUM	ICP	ND	4.0		36	3.0		42	2.9		11	1.0		450	1.0		21	10	J	140	0.96	
CALCIUM	ICP	13,000	40		10,000	30		16,000	29		2,700	10		9,100	10		NA			16,000	9.6	
CHROMIUM	ICP	50	7.9		62	6.0		72	5.9		18	2.0		550	2.0		60	50	J	160	1.9	
COBALT	ICP	11	7.9		13	6.0		11	5.9	J3	5.6	2.0		ND	2.0		NA			ND	1.9	
COPPER	ICP	820	7.9	J3	390	6.0		820	5.9		110	2.0		58	2.0		NA			7.1	1.9	
IRON	ICP	79,000	16	J3	58,000	12		66,000	12		19,000	4.0		6,400	4.1		NA			930	3.8	
LEAD	ICP	840	7.9		800	6.0		1,500	5.9		190	2.0		3,100	2.0		160	5	J,J4	1,000	1.9	
MAGNESIUM	ICP	1,800	40		2,900	30		3,500	29		2,400	10		380	10		NA			140	9.6	
MANGANESE	ICP	460	7.9		540	6.0		540	5.9		340	2.0		40	2.0		NA			8.8	1.9	
NICKEL	ICP	33	7.9		42	6.0		70	5.9		17	2.0		3.7	2.0		NA			ND	1.9	
SELENIUM	ICP	ND	7.9		ND	6.0		ND	5.9		ND	2.0		ND	2.0		ND	20	J	ND	1.9	
SILVER	ICP	6.0	4.0		20	3.0		38	2.9		2.6	1.0		ND	1.0		ND	10	J,J4	ND	0.96	
THALLIUM	ICP	ND	7.9		ND	6.0		ND	5.9		ND	2.0		ND	2.0		NA			ND	1.9	
VANADIUM	ICP	32	16		34	12		31	12		25	4.0		ND	4.1		NA			ND	3.8	
ZINC	ICP	590	7.9		1,800	6.0		2,700	5.9		540	2.0		560	2.0		NA			190	1.8	
MERCURY	CVAA	1.6	0.092		0.82	0.060		0.89	0.062		0.22	0.061		0.083	0.062		ND	10	J	ND	0.061	
CYANIDE	SAS	3.1	0.4		ND	0.30		1.5	0.29		0.25	0.25		ND	0.28		ND	0.20		ND	0.26	
DATE PREPARED:		9/1/2009			9/8/2009			9/8/2009			9/8/2009			9/8/2009			NA			9/8/2009		
DATE ANALYZED:		9/23/2009			9/23/2009			9/23/2009			9/23/2009			9/23/2009			10/14/2008			9/23/2009		
DILUTION:		1			3			3			1			1			NA			1		

SITE: MARINO PROPERTY
PROJECT NO: 09080055/09080059
LABORATORY: OEME

TABLE 8
METALS IN SOIL AND SOLID WASTE
milligrams per Kilogram (mg/Kg)

SAMPLE LOCATION:	TP-05/10 (16ft)	TP-06 (12ft)	TP-09 (16ft)	TP-11 (12ft)
SAMPLE NUMBER:	R01-090511JT-0021	R01-090511JT-0084	R01-090511JT-0020	R01-090511JT-0085
LABORATORY NUMBER:	AA97491	AA97756	AA97490	AA97757
DATE SAMPLED:	8/26/2009	8/27/2009	8/25/2009	8/27/2009

INORGANIC													
ANALYTES	METHOD	RESULT	RL	Q	RESULT	RL	Q	RESULT	RL	Q	RESULT	RL	Q
ALUMINUM	ICP	13,000	33		10,000	110		1,100	33		13,000	65	
ANTIMONY	ICP	ND	6.0		ND	20	J1	ND	6.0	J1	ND	12	
ARSENIC	ICP	13	6.0		25	20		20	6.0		32	12	
BARIUM	ICP	320	6.0		2,500	20		620	6.0		1,800	12	
BERYLLIUM	ICP	ND	2.4		ND	8.0		ND	2.4		ND	4.7	
CADMIUM	ICP	3.5	3.0		17	10		4.3	3.0		22	5.9	
CALCIUM	ICP	7,700	30		30,000	100		14,000	30		28,000	59	
CHROMIUM	ICP	63	6.0		110	20		62	6.0		100	12	
COBALT	ICP	18	6.0		ND	20		14	6.0		18	12	
COPPER	ICP	400	6.0		10,000	20		430	6.0		8,100	12	
IRON	ICP	81,000	12		86,000	40		89,000	12		99,000	24	
LEAD	ICP	430	6.0		1,700	20		1,700	6.0		2,000	12	
MAGNESIUM	ICP	5,600	30		20,000	100		3,700	30		13,000	59	
MANGANESE	ICP	880	6.0		800	20		800	6.0		750	12	
NICKEL	ICP	51	6.0		180	20		58	6.0		140	12	
SELENIUM	ICP	ND	6.0		ND	20		ND	6.0		ND	12	
SILVER	ICP	ND	3.0		24	10		5.7	3.0		33	5.9	
THALLIUM	ICP	ND	6.0		ND	20		ND	6.0		ND	12	
VANADIUM	ICP	47	12		ND	40	J1	36	12		36	24	
ZINC	ICP	670	6.0		26,000	20		2,300	6.0		16,000	12	
MERCURY	CVAA	1.4	0.12		1.6	0.12		0.89	0.062		14	1.2	
CYANIDE	SAS	2.0	0.3		ND	0.29		21	0.28	J1	ND	0.28	

DATE PREPARED:	9/1/2009	9/8/2009	9/1/2009	9/8/2009
DATE ANALYZED:	9/23/2009	9/23/2009	9/23/2009	9/23/2009
DILUTION:	3	10	3	6

ANALYTICAL METHOD

ICP = Inductively Coupled Plasma. Samples were analyzed following EPA Region I SOP EIASOP-INGICP7.
CVAA = Cold Vapor Atomic Absorption. Samples were analyzed following EPA Region I SOP EIASOP-INGMERC8.
SAS = Semi-Automated Colorimetry. Samples were analyzed following EPA Region I SOP EIASOP-INGCN10

NOTES

START has reported the data as it was received from the EPA OEME Laboratory. START has not performed data validation of the EPA OEME Laboratory data. An internal data review was performed by EPA OEME Laboratory personnel prior to submittal to the EPA Contracting Officer's Representative (COR).

* Laboratory Sample Number AA97764 was not amenable to ICP analysis and was analyzed via X-ray fluorescence (XRF) screening analysis.

OEME = EPA Office of Environmental Measurement and Evaluation.

Results are reported on a Dry Weight Basis.

RL = Reporting Limit

Q = Qualifier

ND = Non-Detected

J3= Estimated value due to RPD result outside acceptance criteria.

J1 = Estimated value due to MS (Matrix Spike) Recovery outside acceptance criteria.

mg/Kg = milligrams per Kilogram

SITE: MARINO PROPERTY
PROJECT NO: 09080055/09080059
LABORATORY: OEME

TABLE 9
POLYCHLORINATED BIPHENYL IN SOIL FIELD METHOD
milligrams per Kilogram (mg/Kg)

SAMPLE LOCATION:		TP-01 (0.5 ft)		TP-01 (1 ft)		TP-01 (2 ft)		TP-01 (3 ft)		Drum-01		TP-01 (4 ft)		TP-01 (6 ft) East	
SAMPLE NUMBER:		R01-090511JT-0030		R01-090511JT-0031		R01-090511JT-0032		R01-090511JT-0033		R01-090511JT-0034		R01-090511JT-0035		R01-090511JT-0036	
LABORATORY NUMBER:		AA97500		AA97501		AA97502		AA97503		AA97504		AA97505		AA97506	
COMPOUND		RL	Q	RL	Q	RL	Q	RL	Q	RL	Q	RL	Q	RL	Q
Aroclor-1242		ND	0.20	ND	0.20	ND	0.20	ND	0.18	ND	0.24	ND	0.20	ND	0.34
Aroclor-1248		ND	0.20	ND	0.20	ND	0.20	ND	0.18	ND	0.24	ND	0.20	ND	0.34
Aroclor-1254		ND	0.20	ND	0.20	ND	0.20	ND	0.18	ND	0.24	ND	0.20	ND	0.34
Aroclor-1260		2.7	0.20	0.96	0.20	0.48	0.20	ND	0.18	ND	0.24	ND	0.20	ND	0.34
Aroclor-1262		ND	0.20	ND	0.20	ND	0.20	ND	0.18	ND	0.24	ND	0.20	ND	0.34
Aroclor-1268		ND	0.20	ND	0.20	ND	0.20	ND	0.18	ND	0.24	ND	0.20	ND	0.34

EXTRACT VOLUME:	2 mL	2 mL	2 mL	2 mL	2 mL	2 mL	2 mL
DATE SAMPLED:	8/27/2009	8/27/2009	8/27/2009	8/27/2009	8/27/2009	8/27/2009	8/27/2009
DATE EXTRACTED:	8/31/2009	8/31/2009	8/31/2009	8/31/2009	8/31/2009	8/31/2009	8/31/2009
DATE ANALYZED:	8/31/2009	9/1/2009	9/1/2009	9/1/2009	9/1/2009	9/1/2009	9/1/2009

SAMPLE LOCATION:		TP-01 (6 ft) West		TP-01 (8 ft)		TP-01 (10 ft)		TP-01 (12 ft)		TP-02/04 (1 ft)		TP-02/04 (2 ft)		TP-05/10 (2 ft)	
SAMPLE NUMBER:		R01-090511JT-0037		R01-090511JT-0038		R01-090511JT-0039		R01-090511JT-0040		R01-090511JT-0086		R01-090511JT-0087		R01-090511JT-0023	
LABORATORY NUMBER:		AA97507		AA97508		AA97509		AA97510		AA97758		AA97759		AA97493	
COMPOUND		RL	Q	RL	Q	RL	Q	RL	Q	RL	Q	RL	Q	RL	Q
Aroclor-1242		ND	0.18	ND	0.28	ND	0.32	ND	0.22	ND	10	ND	52	ND	0.20
Aroclor-1248		ND	0.18	ND	0.28	ND	0.32	ND	0.22	ND	10	ND	52	ND	0.20
Aroclor-1254		ND	0.18	ND	0.28	ND	0.32	ND	0.22	ND	10	ND	52	ND	0.20
Aroclor-1260		ND	0.18	ND	0.28	ND	0.32	ND	0.22	8	10 L	740	52	ND	0.20
Aroclor-1262		ND	0.18	ND	0.28	ND	0.32	ND	0.22	ND	10	ND	52	ND	0.20
Aroclor-1268		ND	0.18	ND	0.28	ND	0.32	ND	0.22	ND	10	ND	52	ND	0.20

EXTRACT VOLUME:	2 mL	2 mL	2 mL	2 mL	2 mL	2 mL	2 mL
DATE SAMPLED:	8/27/2009	8/27/2009	8/27/2009	8/27/2009	8/27/2009	8/28/2009	8/26/2009
DATE EXTRACTED:	8/31/2009	8/31/2009	8/31/2009	8/31/2009	8/31/2009	9/1/2009	8/31/2009
DATE ANALYZED:	9/1/2009	9/1/2009	9/1/2009	9/1/2009	9/1/2009	9/11/2009	8/31/2009

SITE: MARINO PROPERTY
PROJECT NO: 09080055/09080059
LABORATORY: OEME

TABLE 9
POLYCHLORINATED BIPHENYL IN SOIL FIELD METHOD
milligrams per Kilogram (mg/Kg)

SAMPLE LOCATION:		TP-05/10 (4 ft)		TP-05/10 (6 ft)		TP-05/10 (8 ft)		TP-05/10 (10 ft)		TP-05/10 (12 ft)		TP-05/10 (14ft)		TP-06 (0.5 ft)	
SAMPLE NUMBER:		R01-090511JT-0024		R01-090511JT-0025		R01-090511JT-0026		R01-090511JT-0027		R01-090511JT-0028		R01-090511JT-0029		R01-090511JT-0076	
LABORATORY NUMBER:		AA97494		AA97495		AA97496		AA97497		AA97498		AA97499		AA97748	
COMPOUND		RL	Q	RL	Q	RL	Q	RL	Q	RL	Q	RL	Q	RL	Q
Aroclor-1242		ND	0.22	ND	0.18	ND	0.22	ND	0.22	ND	0.3	ND	0.20	ND	0.2
Aroclor-1248		ND	0.22	ND	0.18	ND	0.22	ND	0.22	ND	0.3	ND	0.20	ND	0.2
Aroclor-1254		ND	0.22	ND	0.18	ND	0.22	ND	0.22	ND	0.3	ND	0.20	ND	0.2
Aroclor-1260		ND	0.22	ND	0.18	ND	0.22	ND	0.22	ND	0.3	ND	0.20	7.7	0.2
Aroclor-1262		ND	0.22	ND	0.18	ND	0.22	ND	0.22	ND	0.3	ND	0.20	ND	0.2
Aroclor-1268		ND	0.22	ND	0.18	ND	0.22	ND	0.22	ND	0.3	ND	0.20	ND	0.2

EXTRACT VOLUME:	2 mL	2 mL	2 mL	2 mL	2 mL	2 mL	2 mL
DATE SAMPLED:	8/26/2009	8/26/2009	8/26/2009	8/26/2009	8/26/2009	8/26/2009	8/27/2009
DATE EXTRACTED:	8/31/2009	8/31/2009	8/31/2009	8/31/2009	8/31/2009	8/31/2009	9/1/2009
DATE ANALYZED:	8/31/2009	8/31/2009	8/31/2009	8/31/2009	8/31/2009	8/31/2009	9/8/2009

SAMPLE LOCATION:		TP-06 (1 ft)		TP-06 (2 ft)		TP-06 (3 ft)		TP-06 (4 ft)		TP-06 (6 ft)		TP-06 (8 ft)		TP-06 (10 ft)	
SAMPLE NUMBER:		R01-090511JT-0077		R01-090511JT-0078		R01-090511JT-0079		R01-090511JT-0080		R01-090511JT-0081		R01-090511JT-0082		R01-090511JT-0083	
LABORATORY NUMBER:		AA97749		AA97750		AA97751		AA97752		AA97753		AA97754		AA97755	
COMPOUND		RL	Q	RL	Q	RL	Q	RL	Q	RL	Q	RL	Q	RL	Q
Aroclor-1242		ND	0.22	ND	0.24	ND	0.20	ND	0.18	ND	0.22	ND	0.20	ND	0.22
Aroclor-1248		ND	0.22	ND	0.24	ND	0.20	ND	0.18	ND	0.22	ND	0.20	ND	0.22
Aroclor-1254		ND	0.22	ND	0.24	ND	0.20	ND	0.18	ND	0.22	ND	0.20	ND	0.22
Aroclor-1260		ND	0.22	ND	0.24	ND	0.20	ND	0.18	ND	0.22	ND	0.20	ND	0.22
Aroclor-1262		ND	0.22	ND	0.24	ND	0.20	ND	0.18	ND	0.22	ND	0.20	ND	0.22
Aroclor-1268		ND	0.22	ND	0.24	ND	0.20	ND	0.18	ND	0.22	ND	0.20	ND	0.22

EXTRACT VOLUME:	2 mL	2 mL	2 mL	2 mL	2 mL	2 mL	2 mL
DATE SAMPLED:	8/27/2009	8/27/2009	8/27/2009	8/27/2009	8/27/2009	8/27/2009	8/27/2009
DATE EXTRACTED:	9/1/2009	9/1/2009	9/1/2009	9/1/2009	9/1/2009	9/1/2009	9/1/2009
DATE ANALYZED:	9/8/2009	9/8/2009	9/8/2009	9/8/2009	9/8/2009	9/8/2009	9/8/2009

SITE: MARINO PROPERTY
PROJECT NO: 09080055/09080059
LABORATORY: OEME

TABLE 9
POLYCHLORINATED BIPHENYL IN SOIL FIELD METHOD
milligrams per Kilogram (mg/Kg)

SAMPLE LOCATION:		TP-16 (4 ft)		TP-16 (6 ft)		SS-01		SS-02		SS-03		SS-04		SS-05	
SAMPLE NUMBER:		R01-090511JT-0097		R01-090511JT-0098		R01-090511JT-0047		R01-090511JT-0048		R01-090511JT-0049		R01-090511JT-0050		R01-090511JT-0051	
LABORATORY NUMBER:		AA97769		AA97770		AA97721		AA97722		AA97723		AA97724		AA97725	
COMPOUND		RL	Q	RL	Q	RL	Q	RL	Q	RL	Q	RL	Q	RL	Q
Aroclor-1242		ND	0.16	ND	0.22	ND	0.9	ND	0.20	ND	0.20	ND	0.18	ND	0.18
Aroclor-1248		ND	0.16	ND	0.22	ND	0.9	ND	0.20	ND	0.20	ND	0.18	ND	0.18
Aroclor-1254		ND	0.16	ND	0.22	ND	0.9	ND	0.20	ND	0.20	ND	0.18	ND	0.18
Aroclor-1260		ND	0.16	ND	0.22	8	0.9	ND	0.20	ND	0.20	ND	0.18	ND	0.18
Aroclor-1262		ND	0.16	ND	0.22	ND	0.9	ND	0.20	ND	0.20	ND	0.18	ND	0.18
Aroclor-1268		ND	0.16	ND	0.22	ND	0.9	ND	0.20	ND	0.20	ND	0.18	ND	0.18

EXTRACT VOLUME:	2 mL	2 mL	2 mL	2 mL	2 mL	2 mL	2 mL
DATE SAMPLED:	8/28/2009	8/28/2009	8/28/2009	8/28/2009	8/28/2009	8/28/2009	8/28/2009
DATE EXTRACTED:	9/1/2009	9/1/2009	9/1/2009	9/1/2009	9/1/2009	9/1/2009	9/1/2009
DATE ANALYZED:	9/8/2009	9/8/2009	9/2/2009	9/2/2009	9/2/2009	9/2/2009	9/2/2009

SAMPLE LOCATION:		SS-06		SS-07		SS-08		SS-09		SS-10		SS-11		SS-12	
SAMPLE NUMBER:		R01-090511JT-0052		R01-090511JT-0053		R01-090511JT-0054		R01-090511JT-0055		R01-090511JT-0056		R01-090511JT-0057		R01-090511JT-0058	
LABORATORY NUMBER:		AA97726		AA97727		AA97728		AA97729		AA97730		AA97731		AA97732	
COMPOUND		RL	Q	RL	Q	RL	Q	RL	Q	RL	Q	RL	Q	RL	Q
Aroclor-1242		ND	0.22	ND	0.18	ND	0.18	ND	0.20	ND	0.18	ND	0.22	ND	8.4
Aroclor-1248		ND	0.22	ND	0.18	ND	0.18	ND	0.20	ND	0.18	ND	0.22	ND	8.4
Aroclor-1254		ND	0.22	ND	0.18	ND	0.18	ND	0.20	ND	0.18	ND	0.22	ND	8.4
Aroclor-1260		ND	0.22	ND	0.18	ND	0.18	ND	0.20	0.31	0.18	ND	0.22	100.0	8.4
Aroclor-1262		ND	0.22	ND	0.18	ND	0.18	ND	0.20	ND	0.18	ND	0.22	ND	8.4
Aroclor-1268		ND	0.22	ND	0.18	ND	0.18	ND	0.20	ND	0.18	ND	0.22	ND	8.4

EXTRACT VOLUME:	2 mL	2 mL	2 mL	2 mL	2 mL	2 mL	2 mL
DATE SAMPLED:	8/28/2009	8/28/2009	8/28/2009	8/28/2009	8/28/2009	8/28/2009	8/28/2009
DATE EXTRACTED:	9/1/2009	9/1/2009	9/1/2009	9/1/2009	9/1/2009	9/1/2009	9/1/2009
DATE ANALYZED:	9/2/2009	9/2/2009	9/2/2009	9/2/2009	9/2/2009	9/2/2009	9/3/2009

SITE: MARINO PROPERTY
PROJECT NO: 09080055/09080059
LABORATORY: OEME

TABLE 9
POLYCHLORINATED BIPHENYL IN SOIL FIELD METHOD
milligrams per Kilogram (mg/Kg)

SAMPLE LOCATION:		SS-13		SS-14		SS-15		SS-16		SS-17		SS-18		SS-19	
SAMPLE NUMBER:		R01-090511JT-0059		R01-090511JT-0060		R01-090511JT-0061		R01-090511JT-0062		R01-090511JT-0063		R01-090511JT-0064		R01-090511JT-0065	
LABORATORY NUMBER:		AA97733		AA97734		AA97735		AA97736		AA97737		AA97738		AA97739	
COMPOUND		RL	Q	RL	Q	RL	Q	RL	Q	RL	Q	RL	Q	RL	Q
Aroclor-1242		ND	0.20	ND	0.18	ND	0.20	ND	0.20	ND	0.18	ND	0.22	ND	0.18
Aroclor-1248		ND	0.20	ND	0.18	ND	0.20	ND	0.20	ND	0.18	ND	0.22	ND	0.18
Aroclor-1254		ND	0.20	ND	0.18	ND	0.20	ND	0.20	ND	0.18	ND	0.22	ND	0.18
Aroclor-1260		ND	0.20	ND	0.18	ND	0.20	0.54	0.20	1.6	0.18	0.58	0.22	0.33	0.18
Aroclor-1262		ND	0.20	ND	0.18	ND	0.20	ND	0.20	ND	0.18	ND	0.22	ND	0.18
Aroclor-1268		ND	0.20	ND	0.18	ND	0.20	ND	0.20	ND	0.18	ND	0.22	ND	0.18

EXTRACT VOLUME:	2 mL	2 mL	2 mL	2 mL	2 mL	2 mL	2 mL
DATE SAMPLED:	8/28/2009	8/28/2009	8/28/2009	8/28/2009	8/28/2009	8/28/2009	8/28/2009
DATE EXTRACTED:	9/1/2009	9/1/2009	9/1/2009	9/1/2009	9/1/2009	9/1/2009	9/1/2009
DATE ANALYZED:	9/2/2009	9/2/2009	9/2/2009	9/2/2009	9/2/2009	9/2/2009	9/2/2009

SAMPLE LOCATION:		SS-20		SS-21		SS-22		SS-23		SS-24		SS-25		SS-26	
SAMPLE NUMBER:		R01-090511JT-0066		R01-090511JT-0069		R01-090511JT-0070		R01-090511JT-0071		R01-090511JT-0072		R01-090511JT-0073		R01-090511JT-0074	
LABORATORY NUMBER:		AA97740		AA97741		AA97742		AA97743		AA97744		AA97745		AA97746	
COMPOUND		RL	Q	RL	Q	RL	Q	RL	Q	RL	Q	RL	Q	RL	Q
Aroclor-1242		ND	0.22	ND	0.22	ND	0.20	ND	0.22	ND	0.24	ND	0.18	ND	0.20
Aroclor-1248		ND	0.22	ND	0.22	ND	0.20	ND	0.22	ND	0.24	ND	0.18	ND	0.20
Aroclor-1254		ND	0.22	ND	0.22	ND	0.20	ND	0.22	ND	0.24	ND	0.18	ND	0.20
Aroclor-1260		1.4	0.22	0.45	0.22	0.24	0.20	ND	0.22	ND	0.24	1.5	0.18	ND	0.20
Aroclor-1262		ND	0.22	ND	0.22	ND	0.20	ND	0.22	ND	0.24	ND	0.18	ND	0.20
Aroclor-1268		ND	0.22	ND	0.22	ND	0.20	ND	0.22	ND	0.24	ND	0.18	ND	0.20

EXTRACT VOLUME:	2 mL	2 mL	2 mL	2 mL	2 mL	2 mL	2 mL
DATE SAMPLED:	8/28/2009	8/28/2009	8/28/2009	8/28/2009	8/28/2009	8/28/2009	8/28/2009
DATE EXTRACTED:	9/1/2009	9/1/2009	9/1/2009	9/1/2009	9/1/2009	9/1/2009	9/1/2009
DATE ANALYZED:	9/2/2009	9/8/2009	9/8/2009	9/8/2009	9/8/2009	9/8/2009	9/8/2009

SITE: MARINO PROPERTY
PROJECT NO: 09080055/09080059
LABORATORY: OEME

TABLE 9
POLYCHLORINATED BIPHENYL IN SOIL FIELD METHOD
milligrams per Kilogram (mg/Kg)

SAMPLE LOCATION: SS-27
SAMPLE NUMBER: R01-090511JT-0075
LABORATORY NUMBER: AA97747

COMPOUND	RL	Q
Aroclor-1242	ND	1.0
Aroclor-1248	ND	1.0
Aroclor-1254	ND	1.0
Aroclor-1260	6.9	1.0
Aroclor-1262	ND	1.0
Aroclor-1268	ND	1.0

EXTRACT VOLUME: 2 mL
DATE SAMPLED: 8/28/2009
DATE EXTRACTED: 9/1/2009
DATE ANALYZED: 9/8/2009

Notes:

START has reported the data as it was received from the EPA OEME Laboratory. START has not performed data validation of the EPA OEME Laboratory data. An internal data review was performed by EPA OEME Laboratory personnel prior to submittal to the EPA Contracting Officer's Representative (COR).
Samples were analyzed by EPA Region I Standard Operating Procedure (SOP) EIASOP-FLDPCB2.
mg/Kg = milligram per Kilogram
RL = Reporting Limit
Q = Qualifier
ND = Not Detected

Results are reported on a dry weight basis.

SITE: Marino Property Site
 PROJECT NO.: 09080055/09080059
 LABORATORY: OEME

TABLE 10
 METALS BY XRF
 milligrams per Kilogram (mg/Kg)

SAMPLE LOCATION:		TP-01 (0.5 ft)	TP-01 (1 ft)	TP-01 (2 ft)	TP-01 (3 ft)	Drum-01	TP-01 (4 ft)
SAMPLE NUMBER:		R01-090511JT-0030	R01-090511JT-0031	R01-090511JT-0032	R01-090511JT-0033	R01-090511JT-0034	R01-090511JT-0035
LABORATORY NUMBER:		AA97500	AA97501	AA97502	AA97503	AA97504	AA97505
DATE SAMPLED:		8/27/2009	8/27/2009	8/27/2009	8/27/2009	8/27/2009	8/27/2009
DATE ANALYZED:		9/11/2009	9/11/2009	9/11/2009	9/11/2009	9/11/2009	9/11/2009

INORGANIC ANALYTES	METHOD	REPORTING LIMIT	Q	Q	Q	Q	Q	Q
ARSENIC	XRF	20	< 23	< 24	< 10	9	< 12	12
CADMIUM	XRF	30	< 44	< 44	< 41	< 43	< 42	< 43
CHROMIUM	XRF	20	54	69	30	< 28	44	< 24
LEAD	XRF	15	240	280	29	9	57	28
MERCURY	XRF	15	< 10	< 11	< 8	< 9	< 9	< 8
SELENIUM	XRF	3	< 4	< 4	< 3	< 3	< 3	< 4
SILVER	XRF	150	< 33	< 34	< 31	< 33	< 32	< 33

SAMPLE LOCATION:		TP-01 (6 ft) East	TP-01 (6 ft) West	TP-01 (8 ft)	TP-01 (10 ft)	TP-01 (12 ft)	TP-02/04 (1 ft)
SAMPLE NUMBER:		R01-090511JT-0036	R01-090511JT-0037	R01-090511JT-0038	R01-090511JT-0039	R01-090511JT-0040	R01-090511JT-0086
LABORATORY NUMBER:		AA97506	AA97507	AA97508	AA97509	AA97510	AA97758
DATE SAMPLED:		8/27/2009	8/27/2009	8/27/2009	8/27/2009	8/27/2009	8/28/2009
DATE ANALYZED:		9/11/2009	9/11/2009	9/11/2009	9/11/2009	9/11/2009	9/11/2009

INORGANIC ANALYTES	METHOD	REPORTING LIMIT	Q	Q	Q	Q	Q	Q
ARSENIC	XRF	20	< 28	< 16	< 93	110	< 52	< 18
CADMIUM	XRF	30	< 45	< 42	< 61	< 54	< 55	< 44
CHROMIUM	XRF	20	78	26	250	610	240	48
LEAD	XRF	15	370	130	2300	3700	1700	140
MERCURY	XRF	15	< 13	< 9	< 26	< 29	< 4	< 10
SELENIUM	XRF	3	< 5	< 4	< 10	< 10	< 8	< 4
SILVER	XRF	150	< 35	< 32	< 47	< 42	< 42	< 33

SITE: Marino Property Site
 PROJECT NO.: 09080055/09080059
 LABORATORY: OEME

TABLE 10
 METALS BY XRF
 milligrams per Kilogram (mg/Kg)

SAMPLE LOCATION:			TP-02/04 (2 ft)	TP-05/10 (2 ft)	TP-05/10 (4 ft)	TP-05/10 (6 ft)	TP-05/10 (8 ft)	TP-05/10 (10 ft)
SAMPLE NUMBER:			R01-090511JT-0087	R01-090511JT-0023	R01-090511JT-0024	R01-090511JT-0025	R01-090511JT-0026	R01-090511JT-0027
LABORATORY NUMBER:			AA97759	AA97493	AA97494	AA97495	AA97496	AA97497
DATE SAMPLED:			8/28/2009	8/26/2009	8/26/2009	8/26/2009	8/26/2009	8/26/2009
DATE ANALYZED:			9/11/2009	9/11/2009	9/11/2009	9/11/2009	9/11/2009	9/11/2009
INORGANIC ANALYTES	METHOD	REPORTING LIMIT	Q	Q	Q	Q	Q	Q
ARSENIC	XRF	20	< 57	< 13	< 18	< 11	57	< 43
CADMIUM	XRF	30	< 54	< 44	< 45	< 43	< 50	< 54
CHROMIUM	XRF	20	190	< 25	67	< 22	230	61
LEAD	XRF	15	1200	60	120	33	1100	640
MERCURY	XRF	15	< 17	< 8	< 11	< 9	< 17	< 16
SELENIUM	XRF	3	< 7	< 3	< 4	< 3	< 6	< 6
SILVER	XRF	150	< 40	< 33	< 34	< 32	< 38	< 41

SAMPLE LOCATION:			TP-05/10 (12 ft)	TP-05/10 (14ft)	TP-06 (0.5 ft)	TP-06 (1 ft)	TP-06 (2 ft)	TP-06 (3 ft)
SAMPLE NUMBER:			R01-090511JT-0028	R01-090511JT-0029	R01-090511JT-0076	R01-090511JT-0077	R01-090511JT-0078	R01-090511JT-0079
LABORATORY NUMBER:			AA97498	AA97499	AA97748	AA97749	AA97750	AA97751
DATE SAMPLED:			8/26/2009	8/26/2009	8/27/2009	8/27/2009	8/27/2009	8/27/2009
DATE ANALYZED:			9/11/2009	9/11/2009	9/11/2009	9/11/2009	9/11/2009	9/11/2009
INORGANIC ANALYTES	METHOD	REPORTING LIMIT	Q	Q	Q	Q	Q	Q
ARSENIC	XRF	20	< 37	< 36	< 49	< 35	< 19	< 9
CADMIUM	XRF	30	< 48	< 45	< 51	< 47	< 44	< 41
CHROMIUM	XRF	20	130	100	150	110	81	< 20
LEAD	XRF	15	610	630	980	51	160	21
MERCURY	XRF	15	< 14	< 13	< 17	< 14	11	< 8
SELENIUM	XRF	3	< 5	< 5	< 6	< 5	< 4	< 3
SILVER	XRF	150	< 36	< 34	< 39	< 36	< 33	< 31

SITE: Marino Property Site
 PROJECT NO.: 09080055/09080059
 LABORATORY: OEME

TABLE 10
 METALS BY XRF
 milligrams per Kilogram (mg/Kg)

SAMPLE LOCATION:			TP-06 (4 ft)	TP-06 (6 ft)	TP-06 (8 ft)	TP-06 (10 ft)	TP-16 (4 ft)	TP-16 (6 ft)
SAMPLE NUMBER:			R01-090511JT-0080	R01-090511JT-0081	R01-090511JT-0082	R01-090511JT-0083	R01-090511JT-0097	R01-090511JT-0098
LABORATORY NUMBER:			AA97752	AA97753	AA97754	AA97755	AA97769	AA97770
DATE SAMPLED:			8/27/2009	8/27/2009	8/27/2009	8/27/2009	8/28/2009	8/28/2009
DATE ANALYZED:			9/11/2009	9/11/2009	9/11/2009	9/11/2009	9/11/2009	9/11/2009

INORGANIC ANALYTES	METHOD	REPORTING LIMIT	Q	Q	Q	Q	Q	Q
ARSENIC	XRF	20	< 10	< 54	< 73	< 71	< 11	< 32
CADMIUM	XRF	30	< 41	< 50	< 54	< 54	< 43	< 45
CHROMIUM	XRF	20	< 20	210	240	210	29	76
LEAD	XRF	15	23	1200	2000	1700	38	510
MERCURY	XRF	15	< 9	< 18	< 23	< 26	< 9	< 13
SELENIUM	XRF	3	< 3	< 7	< 8	< 9	< 3	< 5
SILVER	XRF	150	< 31	< 38	< 41	< 42	< 33	< 34

SAMPLE LOCATION:			SS-01	SS-02	SS-03	SS-04	SS-05	SS-06
SAMPLE NUMBER:			R01-090511JT-0047	R01-090511JT-0048	R01-090511JT-0049	R01-090511JT-0050	R01-090511JT-0051	R01-090511JT-0052
LABORATORY NUMBER:			AA97721	AA97722	AA97723	AA97724	AA97725	AA97726
DATE SAMPLED:			8/28/2009	8/28/2009	8/28/2009	8/28/2009	8/28/2009	8/28/2009
DATE ANALYZED:			9/11/2009	9/11/2009	9/11/2009	9/11/2009	9/11/2009	9/11/2009

INORGANIC ANALYTES	METHOD	REPORTING LIMIT	Q	Q	Q	Q	Q	Q
ARSENIC	XRF	20	< 11	< 16	< 10	< 14	< 13	< 12
CADMIUM	XRF	30	< 32	< 46	< 44	< 44	< 43	< 43
CHROMIUM	XRF	20	< 16	42	< 25	26	34	< 24
LEAD	XRF	15	99	97	22	74	57	50
MERCURY	XRF	15	< 7	< 10	< 10	< 9	< 9	< 9
SELENIUM	XRF	3	< 2	< 4	< 3	< 3	< 3	< 3
SILVER	XRF	150	< 24	< 34	< 33	< 33	< 33	< 33

SITE: Marino Property Site
 PROJECT NO.: 09080055/09080059
 LABORATORY: OEME

TABLE 10
 METALS BY XRF
 milligrams per Kilogram (mg/Kg)

SAMPLE LOCATION:	SS-07	SS-08	SS-09	SS-10	SS-11	SS-12
SAMPLE NUMBER:	R01-090511JT-0053	R01-090511JT-0054	R01-090511JT-0055	R01-090511JT-0056	R01-090511JT-0057	R01-090511JT-0058
LABORATORY NUMBER:	AA97727	AA97728	AA97729	AA97730	AA97731	AA97732
DATE SAMPLED:	8/28/2009	8/28/2009	8/28/2009	8/28/2009	8/28/2009	8/28/2009
DATE ANALYZED:	9/11/2009	9/11/2009	9/11/2009	9/11/2009	9/11/2009	9/11/2009

INORGANIC ANALYTES	METHOD	REPORTING LIMIT	Q	Q	Q	Q	Q	Q
ARSENIC	XRF	20	< 12	< 11	< 14	< 12	< 14	< 21
CADMIUM	XRF	30	< 45	< 42	< 43	< 44	< 41	< 44
CHROMIUM	XRF	20	< 26	32	37	< 23	42	35
LEAD	XRF	15	46	28	84	46	83	210
MERCURY	XRF	15	< 9	< 9	< 9	< 9	< 9	< 9
SELENIUM	XRF	3	< 3	< 3	< 3	< 3	< 3	< 4
SILVER	XRF	150	< 33	< 32	< 32	< 33	< 31	< 33

SAMPLE LOCATION:	SS-13	SS-14	SS-15	SS-16	SS-17	SS-18
SAMPLE NUMBER:	R01-090511JT-0059	R01-090511JT-0060	R01-090511JT-0061	R01-090511JT-0062	R01-090511JT-0063	R01-090511JT-0064
LABORATORY NUMBER:	AA97733	AA97734	AA97735	AA97736	AA97737	AA97738
DATE SAMPLED:	8/28/2009	8/28/2009	8/28/2009	8/28/2009	8/28/2009	8/28/2009
DATE ANALYZED:	9/11/2009	9/11/2009	9/11/2009	9/11/2009	9/11/2009	9/11/2009

INORGANIC ANALYTES	METHOD	REPORTING LIMIT	Q	Q	Q	Q	Q	Q
ARSENIC	XRF	20	< 13	11	< 20	< 14	< 31	< 14
CADMIUM	XRF	30	< 44	< 45	< 43	< 43	< 50	< 45
CHROMIUM	XRF	20	33	38	31	36	62	35
LEAD	XRF	15	52	16	200	85	360	67
MERCURY	XRF	15	< 10	< 9	< 10	< 9	< 13	< 10
SELENIUM	XRF	3	< 3	< 4	< 4	< 4	< 5	< 4
SILVER	XRF	150	< 33	< 34	< 33	< 32	< 38	< 34

SITE: Marino Property Site
 PROJECT NO.: 09080055/09080059
 LABORATORY: OEME

TABLE 10
 METALS BY XRF
 milligrams per Kilogram (mg/Kg)

SAMPLE LOCATION:	SS-19	SS-20	SS-21	SS-22	SS-23	SS-24
SAMPLE NUMBER:	R01-090511JT-0065	R01-090511JT-0066	R01-090511JT-0069	R01-090511JT-0070	R01-090511JT-0071	R01-090511JT-0072
LABORATORY NUMBER:	AA97739	AA97740	AA97741	AA97742	AA97743	AA97744
DATE SAMPLED:	8/28/2009	8/28/2009	8/28/2009	8/28/2009	8/28/2009	8/28/2009
DATE ANALYZED:	9/11/2009	9/11/2009	9/11/2009	9/11/2009	9/11/2009	9/11/2009

INORGANIC ANALYTES	METHOD	REPORTING LIMIT	Q	Q	Q	Q	Q	Q
ARSENIC	XRF	20	< 13	< 13	< 74	< 18	< 10	< 24
CADMIUM	XRF	30	< 46	< 45	< 58	< 46	< 42	< 45
CHROMIUM	XRF	20	41	45	140	< 29	< 23	80
LEAD	XRF	15	48	49	1600	130	23	270
MERCURY	XRF	15	< 10	< 10	< 23	< 11	< 9	< 11
SELENIUM	XRF	3	< 4	< 4	< 8	< 4	< 3	< 4
SILVER	XRF	150	< 34	< 34	< 45	< 35	< 32	< 34

SAMPLE LOCATION:	SS-25	SS-26	SS-27
SAMPLE NUMBER:	R01-090511JT-0073	R01-090511JT-0074	R01-090511JT-0075
LABORATORY NUMBER:	AA97745	AA97746	AA97747
DATE SAMPLED:	8/28/2009	8/28/2009	8/28/2009
DATE ANALYZED:	9/11/2009	9/11/2009	9/11/2009

INORGANIC ANALYTES	METHOD	REPORTING LIMIT	Q	Q	Q
ARSENIC	XRF	20	< 17	13	< 10
CADMIUM	XRF	30	< 44	< 46	< 42
CHROMIUM	XRF	20	63	34	37
LEAD	XRF	15	130	24	27
MERCURY	XRF	15	< 9	< 10	< 8
SELENIUM	XRF	3	< 4	< 4	< 3
SILVER	XRF	150	< 33	< 35	< 32

NOTES:
 START has reported the data as it was received from the EPA OEME Laboratory. START has not performed data validation of the EPA OEME Laboratory data. An internal data review was performed by EPA OEME Laboratory personnel prior to submittal to the EPA Contracting Officer's Representative (COR).
 Analytical Method = X-Ray Fluorescence (XRF).
 Samples analyzed following EPA SOP EIASOP-INGXRF0.
 mg/Kg = milligrams per Kilogram
 Q = Qualifier

SITE: MARINO PROPERTY
PROJECT NO.: 09090030
LABORATORY: OEME

TABLE 11
POLYCHLORINATED BIPHENYL SOLID WASTE AND SOIL ANALYSES
mg/Kg

SAMPLE LOCATION:		TP-01 (1ft)		TP-01 (2ft)		SS-01		SS-11		SS-21		TP-06 (3 ft)	
SAMPLE NUMBER:		R01-090511JT-0026		R01-090511JT-0032		R01-090511JT-0047		R01-090511JT-0057		R01-090511JT-0069		R01-090511JT-0079	
LABORATORY NUMBER:		AA98326		AA98327		AA98328		AA98329		AA98330		AA98331	
COMPOUND		RL	Q	RL	Q	RL	Q	RL	Q	RL	Q	RL	Q
Aroclor-1016		ND	1.10	ND	0.10	ND	2.00	ND	0.12	ND	0.12	ND	0.10
Aroclor-1221		ND	1.10	ND	0.10	ND	2.00	ND	0.12	ND	0.12	ND	0.10
Aroclor-1232		ND	1.10	ND	0.10	ND	2.00	ND	0.12	ND	0.12	ND	0.10
Aroclor-1242		ND	1.10	ND	0.10	ND	2.00	ND	0.12	ND	0.12	ND	0.10
Aroclor-1248		ND	1.10	ND	0.10	ND	2.00	ND	0.12	ND	0.12	ND	0.10
Aroclor-1254		5.6	1.10	ND	0.10	ND	2.00	ND	0.12	0.96	0.12	ND	0.10
Aroclor-1260		2.6	1.10	0.33	0.10	19	2.00	0.13	0.12	0.77	0.12	ND	0.10
Aroclor-1262		ND	1.10	ND	0.10	ND	2.00	ND	0.12	ND	0.12	ND	0.10
Aroclor-1268		ND	1.10	ND	0.10	ND	2.00	ND	0.12	ND	0.12	ND	0.10
DILUTION FACTOR:		10		1		20		1		1		1	
DATE SAMPLED:		8/27/2009		8/27/2009		8/28/2009		8/28/2009		8/28/2009		8/27/2009	
DATE EXTRACTED:		10/6/2009		10/6/2009		10/6/2009		10/6/2009		10/6/2009		10/6/2009	
DATE ANALYZED:		10/7/2009		10/7/2009		10/7/2009		10/7/2009		10/7/2009		10/7/2009	
% SOLIDS:		83		90		93		74		83		94	

Notes:
START has reported the data as it was received from the EPA OEME Laboratory. START has not performed data validation of the EPA OEME Laboratory data. An internal data review was performed by EPA OEME Laboratory personnel prior to submittal to the EPA Contracting Officer's Representative (COR).
Samples were analyzed by EPA Region I Standard Operating Procedure (SOP) EIASOP-PESTSOIL2.SOP, using gas chromatography/electron capture detector (GC/ECD).
mg/Kg = milligram per Kilogram
RL = Reporting Limit
Q = Qualifier
% = Percent
Results are reported on a dry weight basis.
ND = Not Detected

SITE: MARINO PROPERTY
PROJECT NO. 09090032
LABORATORY: OEME

TABLE 12
METALS IN SOIL AND SOLID WASTE
milligrams per kilogram (mg/Kg)

SAMPLE LOCATION:	TP-05/10 (4ft)	TP-05/10 (12ft)	SS-02	SS-12
SAMPLE NUMBER:	R01-090511JT-0024	R01-090511JT-0026	R-01-090511JT-0048	R-01090511JT0058
LABORATORY NUMBER:	AA98341	AA9842	AA98343	AA983444
DATE SAMPLED:	8/26/2009	8/26/2009	8/28/2009	8/28/2009

INORGANIC

ANALYTES	METHOD	RESULT	RL	Q	RESULT	RL	Q	RESULT	RL	Q	RESULT	RL	Q
ALUMINUM	ICP	18,000	11		9,300	22		11,000	11		8,500	11	
ANTIMONY	ICP	5	2.0	J4	ND	4.0	J4	ND	2.0	J1,J4	ND	1.9	J4
ARSENIC	ICP	4	2.0		8.9	4.0		4	2.0		3.5	1.9	
BARIUM	ICP	240	2.0		440	4.0		120	2.0		170	1.9	
BERYLLIUM	ICP	1.2	0.8		ND	1.6		0.90	0.8		ND	0.77	
CADMIUM	ICP	1.3	1.0	J3	3	2.0		ND	1.0		5.7	1.0	
CALCIUM	ICP	3,700	9.8		15,000	20		5,400	10		11,000	9.6	
CHROMIUM	ICP	45	2.0		47	4.0		20	2.0		23	1.9	
COBALT	ICP	12	2.0		10	4.0		10	2.0		7.7	1.9	
COPPER	ICP	160	2.0		160	4.0		43	2.0		110	1.9	
IRON	ICP	28,000	4		42,000	8		21,000	4		28,000	3.8	
LEAD	ICP	140	2.0		770	4.0		130	2.0	J1	240	1.9	
MAGNESIUM	ICP	6,400	9.8		2,700	20		5,500	10		4,100	9.6	
MANGANESE	ICP	340	2.0		460	4.0		670	2.0		540	1.9	
NICKEL	ICP	36	2.0		38	4.0		19	2.0		18	1.9	
SELENIUM	ICP	ND	2.0		ND	4.0		ND	2.0		ND	1.9	
SILVER	ICP	ND	1.0		2.4	2.0		ND	1.0		ND	0.96	
THALLIUM	ICP	ND	2.0		ND	4.0		ND	2.0		ND	1.9	
VANADIUM	ICP	47	2		35	4		38	2		32	1.9	
ZINC	ICP	420	2.0		1,000	4.0		110	2.0		260	1.9	

DATE PREPARED:	9/23/2009	9/23/2009	9/23/2009	9/23/2009
DATE ANALYZED:	9/30/2009	9/30/2009	9/30/2009	9/30/2009
DILUTION:	1	2	1	1

ANALYTICAL METHOD

ICP = Inductively Coupled Plasma. Samples were analyzed following EPA Region I SOP EIASOP-INGICP7.

NOTES

START has reported the data as it was received from the EPA OEME Laboratory. START has not performed data validation of the EPA OEME Laboratory data. An internal data review was performed by EPA OEME Laboratory personnel prior to submittal to the EPA Contracting Officer's Representative (COR).

OEME = EPA Office of Environmental Measurement and Evaluation.

Results are reported on a Dry Weight Basis.

RL = Reporting Limit

Q = Qualifier

ND = Non-Detected

J1 = Estimated value due to MS (Matrix Spike) Recovery outside acceptance criteria.

J3 = Estimated value due to RPD result outside acceptance criteria.

J4 = Estimated value due to LCS result outside acceptance criteria.

mg/Kg = milligrams per Kilogram

Appendix H

Summary of U.S. Environmental Protection Agency, Office of Environmental
Measurement and Evaluation, Laboratory Results

Table 1 - Groundwater Summary Results
EPA Marino Property Removal PA/SI
START May 2009 Sampling Event

Sample Number Monitoring Well Location	GW-01 ERT-1	GW-02 ERT-2	GW-03 ERT-3	GW-04 ERT-4	GW-05 ERT-5	GW-06 ERT-6	GW-07 ERT-7	GW-08 ERT-8	GW-09 ERT-7	CT DEP GWPC
VOCs										
2-propanone (acetone)	1.9 J µg/L	1.6 J µg/L	3.1 J µg/L	1.8 J µg/L	ND	1.9 J µg/L	1.8 J µg/L	ND	2.8 J µg/L	700 µg/L
Chlorobenzene	ND	ND	ND	1.8 µg/L	ND	ND	ND	ND	ND	100 µg/L
Chloroform	ND	ND	ND	ND	ND	3.1 µg/L	ND	ND	ND	6 µg/L
Ethyl Ether	75 µg/L	ND	ND	1.9 µg/L	ND	ND	ND	1.8 µg/L	1.2 µg/L	NL
Methyl-t-Butyl Ether	8.7 µg/L	1.2 µg/L	ND	ND	ND	ND	1.3 µg/L	ND	1.5 µg/L	100 µg/L
Tetrahydrofuran	ND	1.8 µg/L	ND	74 µg/L	ND	ND	21 µg/L	11 µg/L	22 µg/L	NL
SVOCs										
2-Methylphenol	790 µg/L	ND	ND	ND	ND	ND	ND	ND	ND	NL
Chrysene	710 µg/L	ND	ND	ND	ND	ND	ND	ND	ND	NL
bis(2-Ethylhexyl)phthalate	ND	11 µg/L	ND	ND	12 µg/L	11 µg/L	ND	4.6 µg/L	6.7 µg/L	2 µg/L
Metals										
Aluminum	120 µg/L	ND	ND	ND	ND	470 µg/L	ND	220 µg/L	ND	NL
Barium	37 µg/L	570 µg/L	130 µg/L	740 µg/L	170 µg/L	110 µg/L	1,100 µg/L	1,100 µg/L	1,100 µg/L	1,000 µg/L
Calcium	66,000 µg/L	98,000 µg/L	120,000 µg/L	51,000 µg/L	90,000 µg/L	53,000 µg/L	94,000 µg/L	70,000 µg/L	100,000 µg/L	NL
Iron	770 µg/L	16,000 µg/L	17,000 µg/L	17,000 µg/L	51,000 µg/L	460 µg/L	21,000 µg/L	12,000 µg/L	23,000 µg/L	NL
Magnesium	6,900 µg/L	12,000 µg/L	12,000 µg/L	37,000 µg/L	19,000 µg/L	8,600 µg/L	27,000 µg/L	16,000 µg/L	29,000 µg/L	NL
Manganese	12,000 µg/L	240 µg/L	2,300 µg/L	160 µg/L	23,000 µg/L	700 µg/L	110 µg/L	63 µg/L	120 µg/L	NL
Zinc	ND	ND	99 µg/L	ND	ND	ND	ND	120 µg/L	ND	5,000 µg/L
Cyanide	ND	ND	ND	ND	11 µg/L	ND	ND	ND	ND	200 µg/L

Notes:

VOCs = Volatile organic compounds

SVOCs = Semivolatile organic compounds

J = Estimated value

µg/L = micrograms per Liter

ND = Not detected

CT DEP GWPC = Connecticut Department of Environmental Protection Groundwater Protection Criteria for GA and GAA areas

NL = Not listed

Bolded values exceed CT DEP GWPC for GA and GAA areas.

Table 2 - Volatile Organic Compounds (VOCs) in Soil Results Summary
EPA Marino Property Removal PA/SI
START August 25-28 2009 Sampling Event

Sample ID SCRIBE Sample No.	TP-02/04 (SPC-01) R01-090511JT-0088	TP-02/04 (SPG-01) R01-090511JT-0089	TP-02/04 (SPG-02) R01-090511JT-0090	TP-06 (12 ft) R01-090511JT-0084	TP-11 (12 ft) R01-090511JT-0085	TP-05/10 (16 ft) R01-090511JT-0021	CT DEP GB Mobility Criteria (ppb)
VOC							
1,2,3-Trichloropropane	320,000	ND	ND	ND	ND	ND	NL
1,2,3-Trichlorobenzene	ND	ND	ND	ND	170 J	ND	NL
1,2,4-Trimethylbenzene	89,000	360,000	34,000	320	170	ND	70,000
1,3,5-Trimethylbenzene	34,000	140,000	6,200	170	ND	ND	70,000
2-Butanone (MEK)	1,200,000	2,300,000	13,000	650	610	120	80,000
2-Propanone (acetone)	120,000 J	190,000 J	1,100 J	230 J	ND	190 J	140,000
4-Methyl-2-Pentanone (MIBK)	550,000	1,800,000	2,300	880	450	ND	1,000,000
Benzene	35,000	170,000	1,400	1,500	2,800	ND	200
Chlorobenzene	ND	110,000	ND	ND	ND	2,300	20,000
Ethylbenzene	33,000	250,000	4,600	ND	ND	ND	10,100
Isopropylbenzene	ND	23,000	3,800	ND	ND	ND	132,000
M/P Xylene	160,000	1,200,000	7,100	160	ND	ND	19,500*
N-Butylbenzene	16,000	72,000	8,300	160	ND	ND	14,000
N-Propylbenzene	14,000	55,000	9,400	ND	ND	ND	14,000
Naphthalene	ND	17,000	2,900	260	190	ND	56,000
Ortho Xylene	41,000	300,000	ND	ND	ND	ND	19,500*
Para-Isopropyltoluene	ND	38,000	3,200	340	ND	ND	41,800
Sec-Butylbenzene	ND	38,000	6,700	ND	ND	ND	14,000
Tetrahydrofuran	220,000	540,000	19,000	2,700	2,400	ND	NL
Toluene	3,500,000	8,200,000	4,500	ND	ND	ND	67,000

Notes:

VOC results are listed in micrograms per kilogram (µg/Kg) [equivalent to parts per billion (ppb)].

CT DEP GB Mobility Criteria = Connecticut Department of Environmental Protection GB Pollutant Mobility Criteria for Soil.

Bolded values exceed CT DEP GB Mobility Criteria.

NL = Not listed

J = Data Qualifier indicates Estimated Value

* = The CT DEP GB Mobility Criteria value provided is for Total Xylene.

SCRIBE = US EPA Data Management Software.

ft = feet

No. = number

ND = Not detected

Table 3 - Semivolatile Organic Compounds (SVOCs) in Soil Results Summary
EPA Marino Property Removal PA/SI
START August 25-28 2009 Sampling Event

Sample ID SCRIBE Sample No.	TP-02/04 (SPC-01) R01-090511JT-0088	TP-02/04 (SPG-01) R01-090511JT-0089	TP-02/04 (SPG-02) R01-090511JT-0090	TP-06 (12 ft) R01-090511JT-0084	TP-11 (12 ft) R01-090511JT-0085	TP-09 (16 ft) R01-090511JT-0020	TP-05/10 (16 ft) R01-090511JT-0021	TP-01 (14 ft) R01-090511JT-0022	CT DEP GB Mobility Criteria (ppb)
SVOC									
1-Methylnaphthalene	ND	ND	ND	ND	1,200	810	580	ND	NL
2,4-dimethylphenol	ND	ND	ND	2,800	ND	ND	ND	1,400	28,000
2-Methylnaphthalene	ND	ND	ND	ND	440	890	660	ND	9,800
2-Methylphenol	ND	ND	ND	1,900	ND	ND	ND	790	70,000
3&4-Methylphenol	ND	ND	ND	4,400	ND	620	570	2,000	7,000
Acenaphthene	ND	ND	ND	ND	ND	360	520	ND	84,000
Anthracene	ND	ND	ND	ND	ND	710	1,200	ND	400,000
Benzo(a)anthracene	ND	ND	ND	330	430	1,100	1,900	ND	1,000
Benzo(a)pyrene	ND	ND	ND	ND	450	840	1,800	ND	1,000
Benzo(b)fluoranthene	ND	ND	ND	370	540	1,100	2,300	750	1,000
Benzo(g,h,i)perylene	ND	ND	ND	ND	360	720	1,400	ND	42,000
Benzo(k)fluoranthene	ND	ND	ND	ND	ND	380	880	ND	1,000
bis(2-Ethylhexyl)phthalate	4,300,000	22,000,000	370,000	850	780	46,000	1,100	930	11,000
Butylbenzylphthalate	40,000	17,000	ND	ND	ND	ND	ND	ND	200,000
Chrysene	ND	ND	ND	390	510	1,400	2,200	710	1,000
Di-n-octyl phthalate	350,000	1,600,000	26,000	ND	ND	ND	ND	ND	20,000
Fluoranthene	ND	ND	ND	850	870	2,900	4,900	1,000	56,000
Fluorene	ND	ND	ND	ND	ND	690	970	ND	56,000
Indeno(1,2,3-cd)pyrene	ND	ND	ND	ND	280	440	1,200	ND	1,000
N-Nitrosodiphenylamine	ND	ND	ND	ND	ND	1,200	ND	ND	1,400
Naphthalene	ND	ND	ND	ND	300	660	650	ND	56,000
Phenanthrene	ND	ND	ND	610	710	3,200	4,500	920	40,000
Phenol	ND	ND	ND	510	ND	ND	ND	ND	800,000
Pyrene	ND	ND	ND	710	910	3,000	4,700	960	40,000

Notes:

SVOC results are listed in micrograms per kilogram (µg/Kg) [equivalent to parts per billion (ppb)].

CT DEP GB Mobility Criteria = Connecticut Department of Environmental Protection GB Pollutant Mobility Criteria for Soil.

Bolded values exceed CT DEP GB Mobility Criteria.

NL = Not listed

J = Data Qualifier indicates Estimated Value

SCRIBE = US EPA Data Management Software

ft = feet

No. = Number

ND = Not detected

Table 4 - Polychlorinated Biphenyls (PCBs) in Soil Results Summary
EPA Marino Property Removal PA/SI
START August 25-28 2009 Sampling Event

Sample ID SCRIBE Sample No.	TP-02/04 (SPC-01) R01-090511JT-0088	TP-02/04 (SPG-01) R01-090511JT-0089	TP-02/04 (SPG-02) R01-090511JT-0090	TP-09 (16 ft) R01-090511JT-0020	TP-05/10 (16 ft) R01-090511JT-0021	CT DEP GB Mobility Criteria (ppm)
PCB						
Aroclor-1254	ND	ND	ND	0.53	0.21	NL
Aroclor-1260	70	33	4.2	0.19	ND	NL

Notes:

PCB results are listed in milligrams per kilogram (mg/Kg) [equivalent to parts per million (ppm)].

CT DEP GB Mobility Criteria = Connecticut Department of Environmental Protection GB Pollutant Mobility Criteria for Soil.

SCRIBE = US EPA Data Management Software.

NL = Not listed

ft = feet

No. = Number

ND = Not detected

Table 5 - Total Metals in Soil Results Summary
EPA Marino Property Removal PA/SI
START August 25-28 2009 Sampling Event

Sample ID SCRIBE Sample No.	TP-02/04 (SPC-01) R01-090511JT-0088	TP-02/04 (SPG-01) R01-090511JT-0089	TP-02/04 (SPG-02) R01-090511JT-0090	TP-06 (12 ft) R01-090511JT-0084	TP-11 (12 ft) R01-090511JT-0085	TP-09 (16 ft) R01-090511JT-0020	TP-05/10 (16 ft) R01-090511JT-0021	TP-01 (14 ft) R01-090511JT-0022	CT DEP GB Mobility Criteria (ppm)
Metals									
ALUMINUM	8,300	9,100	8,000	10,000	13,000	1,100	13,000	7,600	NL
ANTIMONY	ND	8.5	ND	ND	ND	ND	ND	ND	NL
ARSENIC	22	18	4.9	25	32	20	13	24	NL
BARIUM	540	910	210	2,500	1,800	620	320	650	NL
CADMIUM	36	42	11	17	22	4.3	3.5	ND	NL
CALCIUM	10,000	16,000	2,700	30,000	28,000	14,000	7,700	13,000	NL
CHROMIUM	62	72	18	110	100	62	63	50	NL
COBALT	13	11	5.6	ND	18	14	18	11	NL
COPPER	390	820	110	10,000	8,100	430	400	820	NL
IRON	58,000	66,000	19,000	86,000	99,000	89,000	81,000	79,000	NL
LEAD	800	1,500	190	1,700	2,000	1,700	430	840	NL
MAGNESIUM	2,900	3,500	2,400	20,000	13,000	3,700	5,600	1,800	NL
MANGANESE	540	540	340	800	750	800	880	460	NL
NICKEL	42	70	17	180	140	58	51	33	NL
SILVER	20	38	2.6	24	33	5.7	ND	6.0	NL
VANADIUM	34	31	25	ND	36	36	47	32	NL
ZINC	1,800	2,700	540	26,000	16,000	2,300	670	590	NL
MERCURY	0.82	0.89	0.22	1.6	14	0.89	1.4	1.6	NL
CYANIDE	ND	1.5	0.25	ND	ND	21	2.0	3.1	NL

Notes:

Metals results are listed in milligrams per kilogram (mg/kg) [equivalent to parts per million (ppm)].

ND = Not detected

CT DEP GB Mobility Criteria = Connecticut Department of Environmental Protection GB Pollutant Mobility Criteria for Soil.

NL = Not listed

SCRIBE = US EPA Data Management Software.

No. = Number

ft = feet

Table 6 - Volatile Organic Compounds (VOCs) in Product Results Summary
EPA Marino Property Removal PA/SI
START August 25-28 2009 Sampling Event

Sample ID SCRIBE Sample No.	TP-02/04 (Pail 1) R01-090511JT-0091	TP-02/04 (Pail 2) R01-090511JT-0092	TP-02/04 (Pail 3) R01-090511JT-0093	CT DEP GB Mobility Criteria (ppb)
VOC				
1,2,4-Trimethylbenzene	360,000	2,900,000	ND	70,000
1,3,5-Trimethylbenzene	140,000	910,000	ND	70,000
2-Butanone (MEK)	5,600,000	97,000,000	5,300,000	80,000
2-Propanone (acetone)	440,000	ND	ND	140,000
4-Methyl-2-Pentanone (MIBK)	1,140,000	11,000,000	4,800,000	14,000
Benzene	160,000	35,000,000	ND	200
Ethylbenzene	74,000	1,090,000	ND	10,100
Isopropylbenzene	20,000	120,000	ND	132,000
M/P Xylene	360,000	6,600,000	1,500,000	19,500*
Methylene Chloride	ND	920,000	ND	1,000
N-Butylbenzene	59,000	380,000	ND	14,000
N-Propylbenzene	51,000	340,000	ND	14,000
Naphthalene	37,000	95,000	ND	56,000
Ortho Xylene	110,000	1,200,000	ND	19,500*
Para-Isopropyltoluene	43,000	230,000	ND	41,800
Sec-Butylbenzene	32,000	170,000	ND	14,000
Tert-Butylbenzene	ND	21,000	ND	14,000
Tetrahydrofuran	670,000	26,000,000	ND	NL
Toluene	11,000,000	160,000,000	12,000,000	67,000
Trichloroethylene	ND	30,000	ND	1,000
Vinyl Chloride	ND	25,000	ND	400

Notes:

VOC results are listed in micrograms per kilogram (µg/Kg) [equivalent to parts per billion (ppb)].

CT DEP GB Mobility Criteria = Connecticut Department of Environmental Protection GB Pollutant Mobility Criteria for Soil.

Bolded values exceed CT DEP GB Mobility Criteria.

NL = Not listed.

J = Data Qualifier indicates Estimated Value.

ND = Not detected

* = The CT DEP GB Mobility Criteria value provided is for Total Xylene.

No. = Number

SCRIBE = US EPA Data Management Software.

Table 7 - Semivolatile Organic Compounds (SVOCs) in Product Results Summary
EPA Marino Property Removal PA/SI
START August 25-28 2009 Sampling Event

Sample ID SCRIBE Sample No.	TP-02/04 (Pail 1) R01-090511JT-0091	TP-02/04 (Pail 2) R01-090511JT-0092	TP-02/04 (Pail 3) R01-090511JT-0093	CT DEP GB Mobility Criteria (ppb)
SVOC				
bis(2-Ethylhexyl)phthalate	38,000,000	930,000	ND	11,000
Butylbenzylphthalate	810,000	22,000	25,000,000	200,000
Di-n-octyl phthalate	2,100,000	63,000	ND	20,000

Notes:

SVOC results are listed in micrograms per kilogram ($\mu\text{g/Kg}$) [equivalent to parts per billion (ppb)].

CT DEP GB Mobility Criteria = Connecticut Department of Environmental Protection GB Pollutant Mobility Criteria for Soil.

Bolded values exceed CT DEP GB Mobility Criteria.

SCRIBE = US EPA Data Management Software

No. = Number

ND = Not detected

Table 8 - Polychlorinated Biphenyls (PCBs) in Product Results Summary
EPA Marino Property Removal PA/SI
START August 25-28 2009 Sampling Event

Sample ID SCRIBE Sample No.	TP-02/04 (Pail 1) R01-090511JT-0091	TP-02/04 (Pail 2) R01-090511JT-0092	TP-02/04 (Pail 3) R01-090511JT-0093	CT DEP GB Mobility Criteria (ppm)
PCB				
Aroclor-1260	230	420	8100	NL

Notes:

PCB results are listed in milligrams per kilogram (mg/Kg) [equivalent to parts per million (ppm)].

CT DEP GB Mobility Criteria = Connecticut Department of Environmental Protection GB Pollutant Mobility Criteria for Soil.

SCRIBE = US EPA Data Management Software.

NL = Not Listed.

No. = Number

Table 9 - Total Metals in Product Results Summary
EPA Marino Property Removal PA/SI
START August 25-28 2009 Sampling Event

Sample ID SCRIBE Sample No.	TP-02/04 (Pail 1) R01-090511JT-0091	TP-02/04 (Pail 2) R01-090511JT-0092 †	TP-02/04 (Pail 3) R01-090511JT-0093	CT DEP GB Mobility Criteria (ppm)
Metal				
ALUMINUM	1,100	NA	370	NL
BARIUM	1,100	120 J	760	NL
CADMIUM	450	21 J	140	NL
CALCIUM	9,100	NA	16,000	NL
CHROMIUM	550	60 J	160	NL
COPPER	58	NA	7.1	NL
IRON	6,400	NA	930	NL
LEAD	3,100	160 J, J4	1,000	NL
MAGNESIUM	380	NA	140	NL
MANGANESE	40	NA	8.8	NL
NICKEL	3.7	NA	ND	NL
ZINC	560	NA	190	NL
MERCURY	0.083	ND J	ND	NL

Notes:

Metals results are listed in milligrams per kilogram (mg/Kg) [equivalent to parts per million (ppm)].

ND = Not detected

CT DEP GB Mobility Criteria = Connecticut Department of Environmental Protection GB Pollutant Mobility Criteria for Soil.

NL = Not listed

SCRIBE = US EPA Data Management Software.

No. = Number

J, J4 = Data Qualifier indicates Estimated Value.

† = Note that sample R01-090511JT-0092 was not amenable to Inductively Coupled Plasma (ICP) analysis and was instead analyzed via X-Ray Fluorescence (XRF) screening analysis.

NA = Not applicable

Table 10 -Test Pit Surface Soil Samples Polychlorinated Biphenyl (PCB) Screening Results
EPA Marino Property Removal PA/SI
START August 25-28 2009 Sampling Event

PCB COMPOUND (AROCOLOR)		Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-1260	Aroclor-1262	Aroclor-1268
TEST PIT SOIL SAMPLES							
Sample ID	SCRIBE Sample No.						
TP-06 (0.5)	-0076	ND	ND	ND	7.7	ND	ND
TP-06 (1)	-0077	ND	ND	ND	ND	ND	ND
TP-06 (2)	-0078	ND	ND	ND	ND	ND	ND
TP-06 (3)	-0079	ND (ND)	ND (ND)	ND (ND)	ND (ND)	ND (ND)	ND (ND)
TP-02/04 (1)	-0086	ND	ND	ND	7.9 L	ND	ND
TP-02/04 (2)	-0087	ND	ND	ND	740	ND	ND
TP-05/10 (2)	-0023	ND	ND	ND	ND	ND	ND
TP-01 (0.5)	-0030	ND	ND	ND	2.7	ND	ND
TP-01 (1)	-0031	ND (ND)	ND (ND)	ND (5.6)	0.96 (2.6)	ND (ND)	ND (ND)
TP-01 (2)	-0032	ND (ND)	ND (ND)	ND (ND)	0.48 (0.33)	ND (ND)	ND (ND)
TP-01 (3)	-0033	ND	ND	ND	ND	ND	ND
CT DEP RSR I/C DEC*:		10	10	10	10	10	10

Notes:

PCB = Polychlorinated biphenyl

Aroclor - Mixture of PCB compounds.

PCB (Aroclor) screening performed by EPA Office of Environmental Measurement and Evaluation (OEME) New England Regional Laboratory (NERL).

Results are listed in parts per million (ppm).

CT DEP = Connecticut Department of Environmental Protection Remediation Standard Regulations Direct Exposure Criteria for Industrial/Commercial soil.

* = The CT DEP RSR I/C DEC value provided is for total PCBs, as criteria for individual Aroclors are not listed in the CT DEP RSR.

Bolded values exceed CT DEP RSR I/C DEC.

ND = Not Detected.

L = Estimated value is below the calibration range.

TP = Test Pit

Sample ID value in parentheses indicates sample depth in feet below the ground surface at each test pit location.

SCRIBE = US EPA Data Management Software.

No. = Number

Note that all SCRIBE nos. are prefixed with the designation "R01-090511JT"

Table 11 -Test Pit Subsurface Soil Samples Polychlorinated Biphenyl (PCB) Screening Results
EPA Marino Property Removal PA/SI
START August 25-28 2009 Sampling Event

PCB COMPOUND (AROCLOR)		Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-1260	Aroclor-1262	Aroclor-1268
TEST PIT SOIL SAMPLES							
Sample ID	SCRIBE Sample No.						
TP-06 (4)	-0080	ND	ND	ND	ND	ND	ND
TP-06 (6)	-0081	ND	ND	ND	ND	ND	ND
TP-06 (8)	-0082	ND	ND	ND	ND	ND	ND
TP-06 (10)	-0083	ND	ND	ND	ND	ND	ND
TP-16 (4)	-0097	ND	ND	ND	ND	ND	ND
TP-16 (6)	-0098	ND	ND	ND	ND	ND	ND
TP-05/10 (4)	-0024	ND	ND	ND	ND	ND	ND
TP-05/10 (6)	-0025	ND	ND	ND	ND	ND	ND
TP-05/10 (8)	-0026	ND	ND	ND	ND	ND	ND
TP-05/10 (10)	-0027	ND	ND	ND	ND	ND	ND
TP-05/10 (12)	-0028	ND	ND	ND	ND	ND	ND
TP-05/10 (14)	-0029	ND	ND	ND	ND	ND	ND
DRUM-01	-0034	ND	ND	ND	ND	ND	ND
TP-01 (4)	-0035	ND	ND	ND	ND	ND	ND
TP-01 (6E)	-0036	ND	ND	ND	ND	ND	ND
TP-01 (6W)	-0037	ND	ND	ND	ND	ND	ND
TP-01 (8)	-0038	ND	ND	ND	ND	ND	ND
TP-01 (10)	-0039	ND	ND	ND	ND	ND	ND
TP-01 (12)	-0040	ND	ND	ND	ND	ND	ND
CT DEP GB Mobility Criteria*:		NL	NL	NL	NL	NL	NL

Notes:

PCB = Polychlorinated biphenyl.

Aroclor - Mixture of PCB compounds.

PCB (Aroclor) screening performed by EPA Office of Environmental Measurement and Evaluation (OEME) New England Regional Laboratory (NERL).

Results are listed in parts per million (ppm).

* CT DEP GB Mobility Criteria = Connecticut Department of Environmental Protection GB Pollutant Mobility Criteria for Soil.

ND = Not Detected

NL = Not Listed.

TP = Test Pit

Sample ID value in parentheses indicates sample depth in feet below the ground surface at each test pit location, except for sample IDs TP-01 (6E) and TP-01 (6W).

SCRIBE = US EPA Data Management Software.

No. = Number

Note that all SCRIBE nos. are prefixed with the designation "R01-090511JT"

Table 12 - Test Pit Surface Soil Samples X-Ray Fluorescence (XRF) Metal Screening Results
EPA Marino Property Removal PA/SI
START August 25-28 2009 Sampling Event

METAL		Arsenic	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
TEST PIT SOIL SAMPLES								
Sample ID	SCRIBE Sample No.							
TP-06 (0.5)	-0076	<49	<51	150	980	<17	<6	<39
TP-06 (1)	-0077	<35	<47	110	510	<14	<5	<36
TP-06 (2)	-0078	<19	<44	81	160	11	<4	<33
TP-06 (3)	-0079	<9	<41	<20	21	<8	<3	<31
TP-02/04 (1)	-0086	<18	<44	48	140	<10	<4	<33
TP-02/04 (2)	-0087	<57	<54	190	1,200	<17	<7	<40
TP-05/10 (2)	-0023	<13	<44	<25	60	<8	<3	<33
TP-01 (0.5)	-0030	<23	<44	54	240	<10	<4	<33
TP-01 (1)	-0031	<24	<44	69	280	<11	<4	<34
TP-01 (2)	-0032	<10	<41	30	29	<8	<3	<31
TP-01 (3)	-0033	9	<43	<28	9	<9	<3	<33
CT DEP RSR I/C DEC:		10	1,000	51,000*	1,000	610	10,000	10,000

Notes:

XRF - X-Ray Fluorescence

Results are listed in parts per million (ppm).

Bolded and shaded values exceed CT DEP RSR I/C DEC.

CT DEP RSR I/C DEC = Connecticut Department of Environmental Protection Remediation Standard Regulations Direct Exposure Criteria for Industrial/Commercial soil.

< = Less than

TP = Test Pit

Sample ID value in parentheses indicates sample depth in feet below the ground surface at each test pit location.

SCRIBE = US EPA Data Management Software.

No. = Number

Note that all SCRIBE nos. are prefixed with the designation "R01-090511JT"

XRF screening was performed by EPA Office of Environmental Measurement and Evaluation (OEME) New England Regional Laboratory (NERL).

* = The CT DEP RSR I/C DEC value provided is for Trivalent Chromium.

Table 13 - Test Pit Subsurface Soil Samples X-Ray Fluorescence (XRF) Metal Screening Results
EPA Marino Property Removal PA/SI
START August 25-28 2009 Sampling Event

METAL		Arsenic	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
TEST PIT SOIL SAMPLES								
Sample ID	SCRIBE Sample No.							
TP-06 (4)	-0080	<10	<41	<20	23	<9	<3	<31
TP-06 (6)	-0081	<54	<50	210	1,200	<18	<7	<38
TP-06 (8)	-0082	<73	<54	240	2,000	<23	<8	<41
TP-06 (10)	-0083	<71	<54	210	1,700	<26	<9	<42
TP-16 (4)	-0097	<11	<43	29	38	<9	<3	<33
TP-16 (6)	-0098	<32	<45	76	510	<13	<5	<34
TP-05/10 (4)	-0024	<18 (4)	<45 (1.3)	67 (45)	120 (140)	<11 (NA)	<4 (ND < 2.0)	<34 (ND < 1.0)
TP-05/10 (6)	-0025	<11	<43	<22	33	<9	<3	<32
TP-05/10 (8)	-0026	57	<50	230	1,100	<17	<6	<38
TP-05/10 (10)	-0027	<43	<54	61	640	<16	<6	<41
TP-05/10 (12)	-0028	<37 (8.9)	<48 (3.0)	130 (47)	610 (770)	<14 (NA)	<5 (ND < 4.0)	<36 (2.4)
TP-05/10 (14)	-0029	<36	<45	100	630	<13	<5	<34
DRUM-01	-0034	<12	<42	44	57	<9	<3	<32
TP-01 (4)	-0035	12	<43	<24	28	<8	<4	<33
TP-01 (6E)	-0036	<28	<45	78	370	<13	<5	<35
TP-01 (6W)	-0037	<16	<42	26	130	<9	<4	<32
TP-01 (8)	-0038	<93	<61	250	2,300	<26	<10	<47
TP-01 (10)	-0039	110	<54	610	3,700	<29	<10	<42
TP-01 (12)	-0040	<52	<55	240	1,700	<24	<8	<42
CT DEP GB Mobility Criteria*		NL	NL	NL	NL	NL	NL	NL

Notes:

XRF - X-Ray Fluorescence

Results are listed in parts per million (ppm).

CT DEP GB Mobility Criteria = Connecticut Department of Environmental Protection GB Pollutant Mobility

< = Less than

TP = Test Pit

Sample ID value in parentheses indicates sample depth in feet below the ground surface at each test pit location, except for sample IDs TP-01 (6E) and TP-01 (6W).

SCRIBE = US EPA Data Management Software.

No. = Number

Note that all SCRIBE nos. are prefixed with the designation "R01-090511JT"

XRF screening was performed by EPA Office of Environmental Measurement and Evaluation (OEME) New England Regional Laboratory (NERL).

* = The CT DEP RSR I/C DEC value provided is for Trivalent Chromium.

Table 14 - Surface Soil Samples Polychlorinated Biphenyl (PCB) Screening Results
EPA Marino Property Removal PA/SI
START August 25-28 2009 Sampling Event

PCB COMPOUND (AROCOLOR)		Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-1260	Aroclor-1262	Aroclor-1268
SURFACE SOIL SAMPLES							
Sample ID	SCRIBE Sample No.						
SS-01	-0047	ND (ND)	ND (ND)	ND (ND)	7.5 (19)	ND (ND)	ND (ND)
SS-02	-0048	ND	ND	ND	ND	ND	ND
SS-03	-0049	ND	ND	ND	ND	ND	ND
SS-04	-0050	ND	ND	ND	ND	ND	ND
SS-05	-0051	ND	ND	ND	ND	ND	ND
SS-06	-0052	ND	ND	ND	ND	ND	ND
SS-07	-0053	ND	ND	ND	ND	ND	ND
SS-08	-0054	ND	ND	ND	ND	ND	ND
SS-09	-0055	ND	ND	ND	ND	ND	ND
SS-10	-0056	ND	ND	ND	0.31	ND	ND
SS-11	-0057	ND (ND)	ND (ND)	ND (ND)	ND (0.31)	ND (ND)	ND (ND)
SS-12	-0058	ND	ND	ND	100	ND	ND
SS-13	-0059	ND	ND	ND	ND	ND	ND
SS-14	-0060	ND	ND	ND	ND	ND	ND
SS-15	-0061	ND	ND	ND	ND	ND	ND
SS-16	-0062	ND	ND	ND	0.54	ND	ND
SS-17	-0063	ND	ND	ND	1.6	ND	ND
SS-18	-0064	ND	ND	ND	0.58	ND	ND
SS-19	-0065	ND	ND	ND	0.33	ND	ND
SS-20	-0066	ND	ND	ND	1.4	ND	ND
SS-21	-0069	ND (ND)	ND (ND)	ND (0.96)	0.45 (0.77)	ND (ND)	ND (ND)
SS-22	-0070	ND	ND	ND	0.24	ND	ND
SS-23	-0071	ND	ND	ND	ND	ND	ND
SS-24	-0072	ND	ND	ND	ND	ND	ND
SS-25	-0073	ND	ND	ND	1.5	ND	ND
SS-26	-0074	ND	ND	ND	ND	ND	ND
SS-27	-0075	ND	ND	ND	6.9	ND	ND
CT DEP RSR I/C DEC*:		10	10	10	10	10	10

Notes:

PCB = Polychlorinated biphenyl

Aroclor = Mixture of PCB compounds.

PCB (Aroclor) screening performed by EPA Office of Environmental Measurement and Evaluation (OEME) New England Regional Laboratory (NERL).

Results are listed in parts per million (ppm).

CT DEP = Connecticut Department of Environmental Protection Remediation Standard Regulations Direct Exposure Criteria for Industrial/Commercial soil.

* = The CT DEP RSR I/C DEC value provided is for total PCBs, as criteria for individual Aroclors are not listed in the CT DEP RSR.

Bolded and shaded values exceed CT DEP RSR I/C DEC.

ND = Not Detected

L = Estimated value is below the calibration range.

SCRIBE = US EPA Data Management Software.

No. = Number

Note that all SCRIBE nos. are prefixed with the designation "R01-090511JT"

Values in parentheses () indicate confirmation sample results.

Table 15 - Surface Soil Samples X-Ray Fluorescence (XRF) Metal Screening Results
EPA Marino Property Removal PA/SI
START August 25-28 2009 Sampling Event

METAL		Arsenic	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
SURFACE SOIL SAMPLES								
Sample ID	SCRIBE Sample No.							
SS-01	-0047	<11	<32	<16	99	<7	<2	<24
SS-02	-0048	<16 (4.0)	<46 (ND < 1.0)	42 (20)	97 (130)	<10 (NA)	<4 (ND < 2.0)	<34 (ND < 1.0)
SS-03	-0049	<10	<44	<25	22	<10	<3	<33
SS-04	-0050	<14	<44	26	74	<9	<3	<33
SS-05	-0051	<13	<43	34	57	<9	<3	<33
SS-06	-0052	<12	<43	<24	50	<9	<3	<33
SS-07	-0053	<12	<45	<26	46	<9	<3	<33
SS-08	-0054	<11	<42	32	28	<9	<3	<32
SS-09	-0055	<14	<43	37	84	<9	<3	<32
SS-10	-0056	<12	<44	<23	46	<9	<3	<33
SS-11	-0057	<14	<41	42	83	<9	<3	<31
SS-12	-0058	<21 (3.5)	<44 (5.7)	35 (23)	210 (240)	<9 (NA)	<4 (ND < 1.9)	<33 (ND < 0.96)
SS-13	-0059	<13	<44	33	52	<10	<3	<33
SS-14	-0060	11	<45	38	16	<9	<4	<34
SS-15	-0061	<20	<43	31	200	<10	<4	<33
SS-16	-0062	<14	<43	36	85	<9	<4	<32
SS-17	-0063	<31	<50	62	360	<13	<5	<38
SS-18	-0064	<14	<45	35	67	<10	<4	<34
SS-19	-0065	<13	<46	41	48	<10	<4	<34
SS-20	-0066	<13	<45	45	49	<10	<4	<34
SS-21	-0069	<74	<58	140	1600	<23	<8	<45
SS-22	-0070	<18	<46	<29	130	<11	<4	<35
SS-23	-0071	<10	<42	<23	23	<9	<3	<32
SS-24	-0072	<24	<45	80	270	<11	<4	<34
SS-25	-0073	<17	<44	63	130	<9	<4	<33
SS-26	-0074	13	<46	34	24	<10	<4	<35
SS-27	-0075	<10	<42	37	27	<8	<3	<32
CT DEP RSR I/C DEC:		10	1,000	51,000*	1,000	610	10,000	10,000

Notes:

XRF - X-Ray Fluorescence

Results are listed in parts per million (ppm).

Bolded and shaded values exceed CT DEP RSR I/C DEC.

CT DEP RSR I/C DEC = Connecticut Department of Environmental Protection Remediation Standard Regulations Direct Exposure Criteria for Industrial/Commercial soil.

< = Less than

SCRIBE = US EPA Data Management Software.

No. = Number

Note that all SCRIBE nos. are prefixed with the designation "R01-090511JT"

XRF screening was performed by EPA Office of Environmental Measurement and Evaluation (OEME) New England Regional Laboratory (NERL).

* = The CT DEP RSR I/C DEC value provided is for Trivalent Chromium.

Values in parentheses () indicate confirmation sample results.

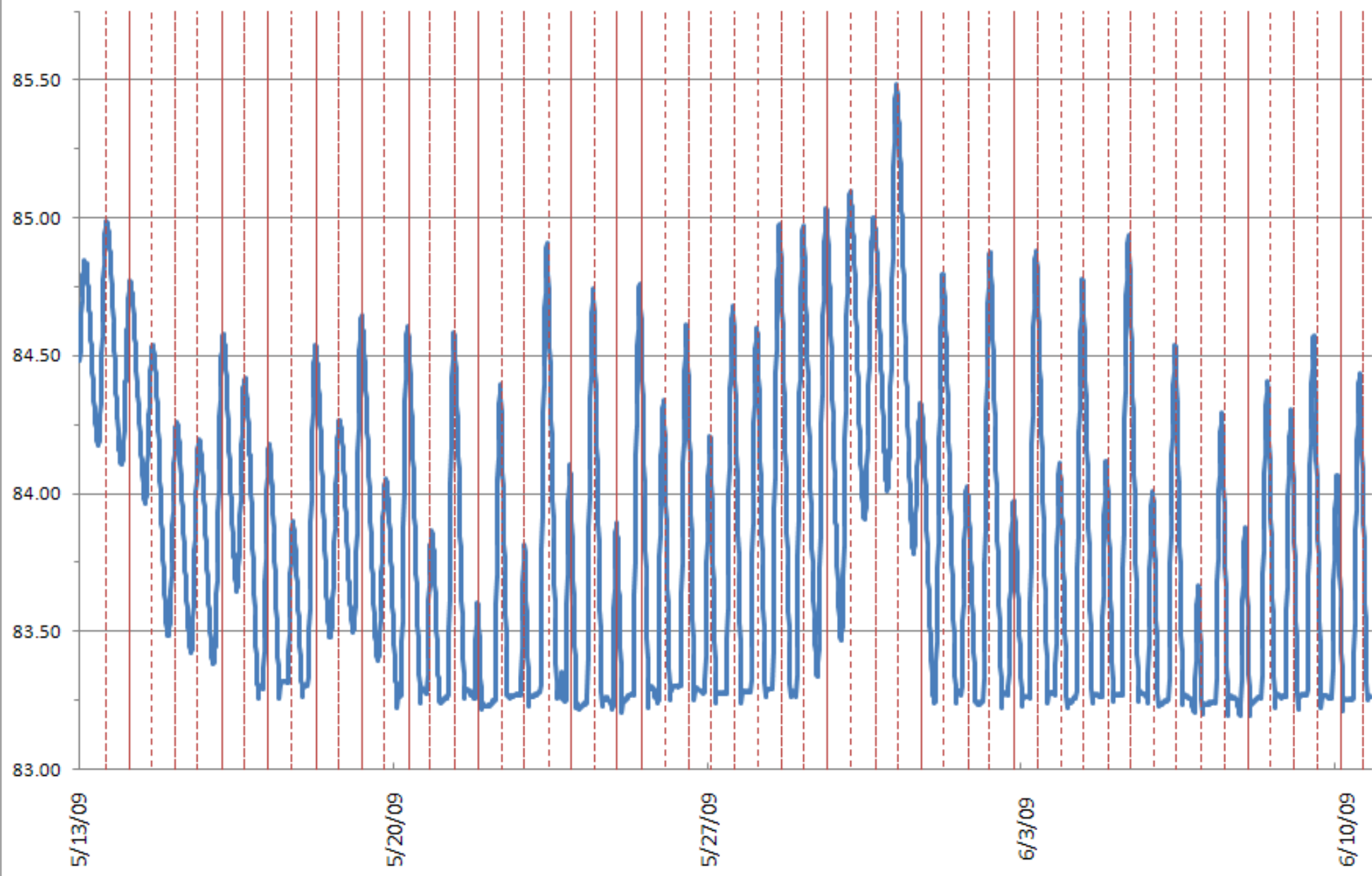
NA = Not Applicable.

Appendix I

Groundwater Elevation Survey Data - Marino Property Site, Middletown, Connecticut

Note: Elevations are based on arbitrary 100 foot elevation line.
Vertical dashed lines indicate approximate high tide.

DD-01



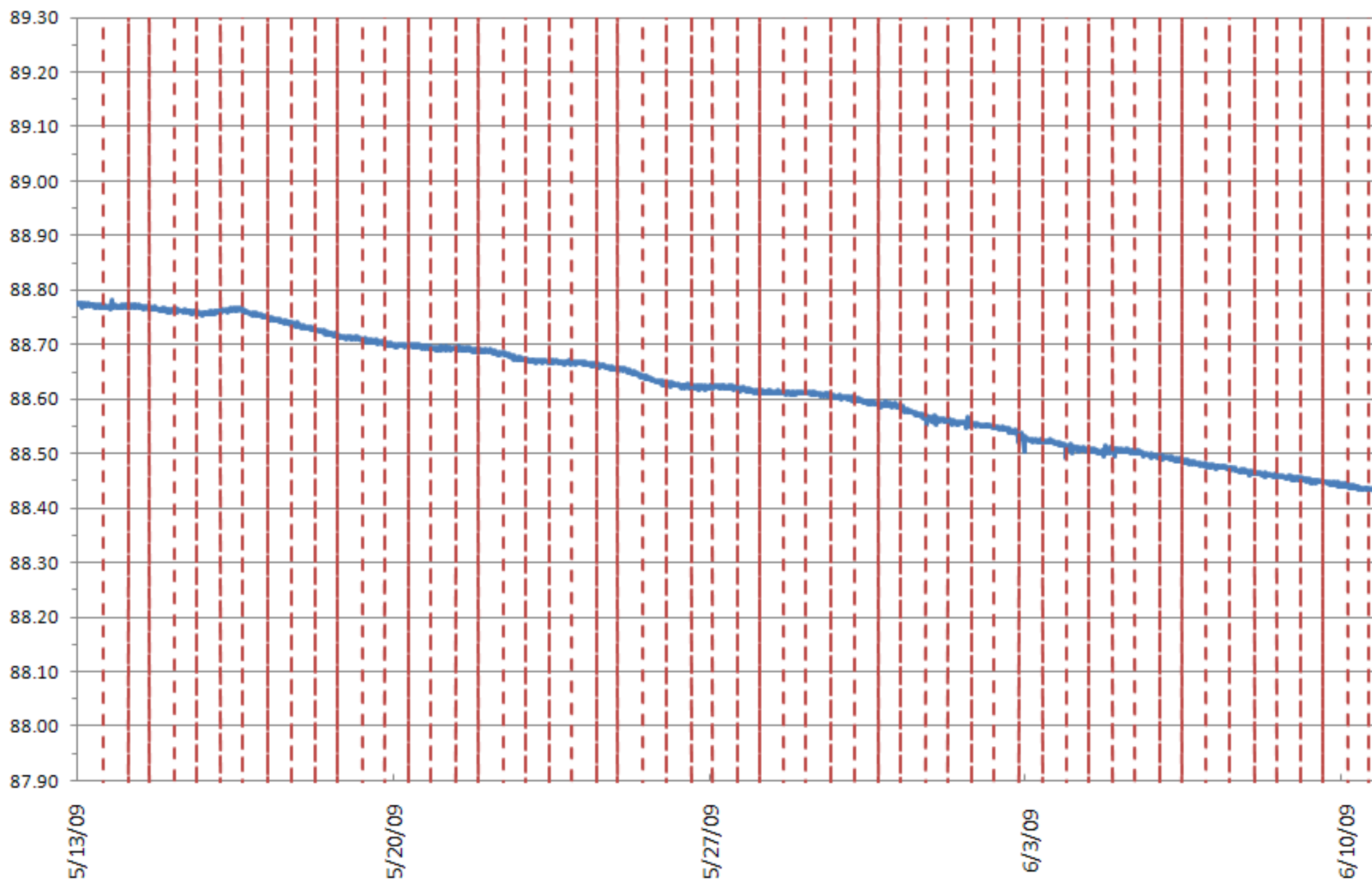
Note: Elevations are based on arbitrary 100 foot elevation line.
Vertical dashed lines indicate approximate high tide.

ERT-8



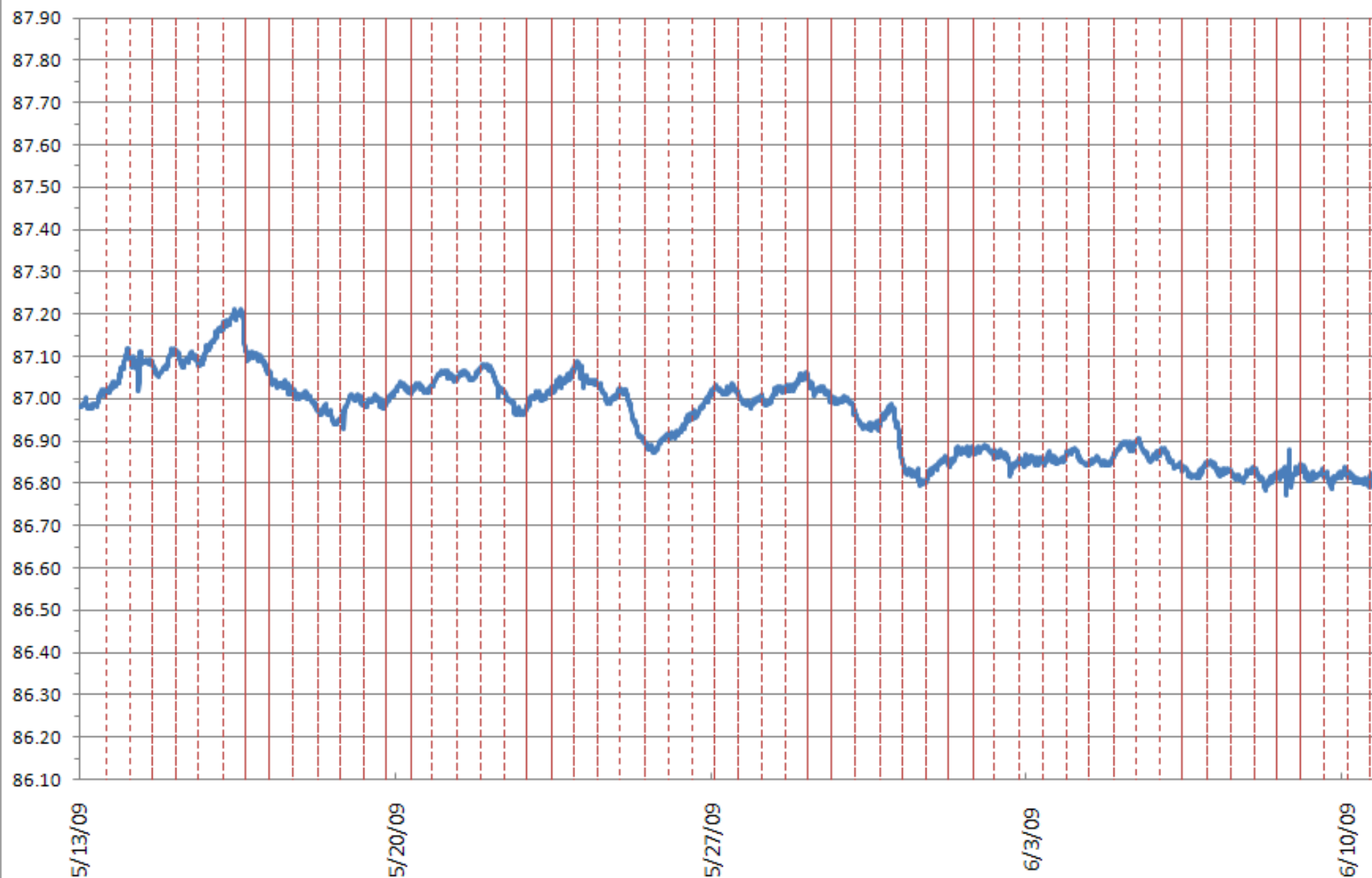
Note: Elevations are based on arbitrary 100 foot elevation line.
Vertical dashed lines indicate approximate high tide.

ERT-3



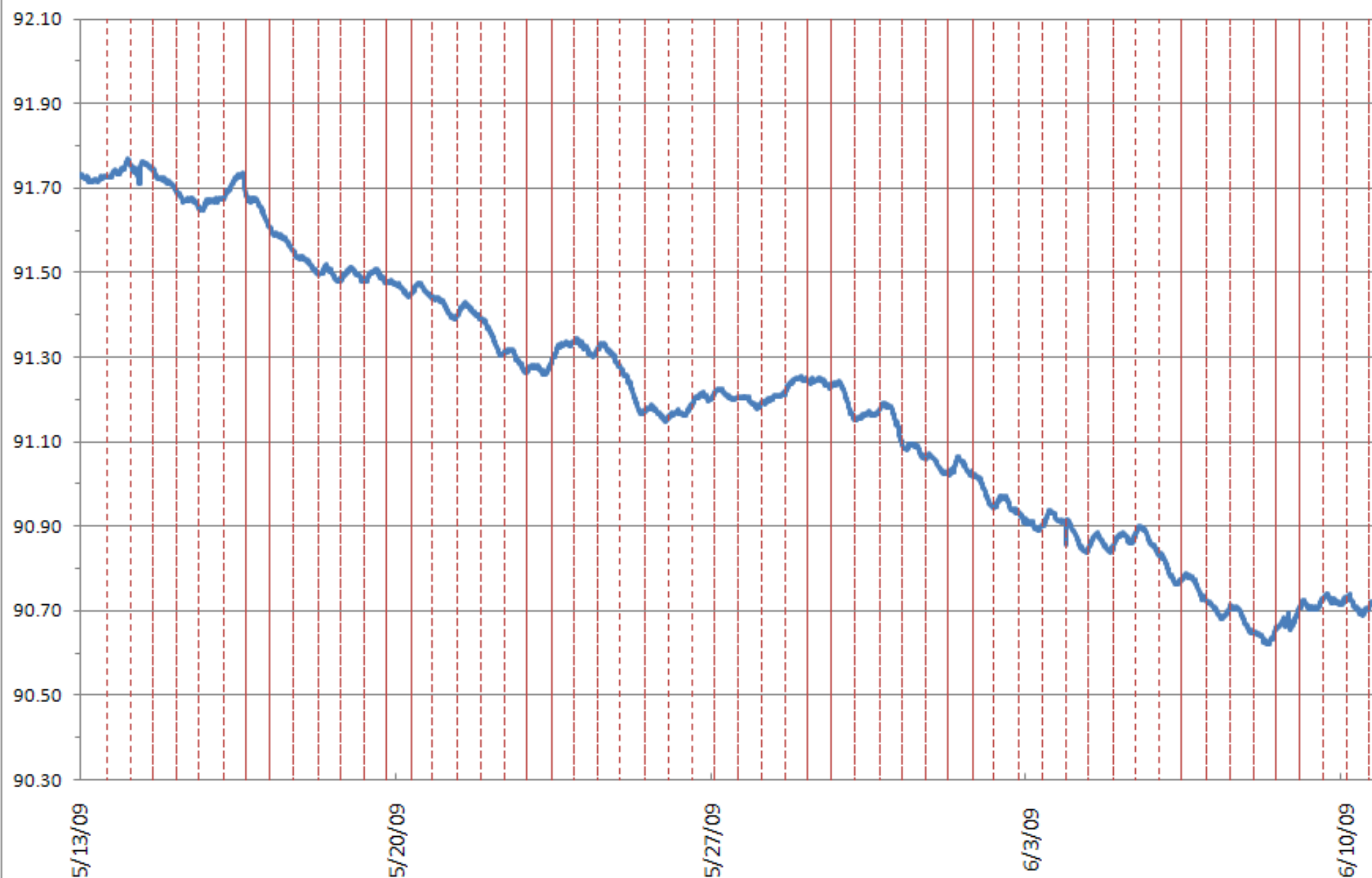
Note: Elevations are based on arbitrary 100 foot elevation line.
Vertical dashed lines indicate approximate high tide.

ERT-4



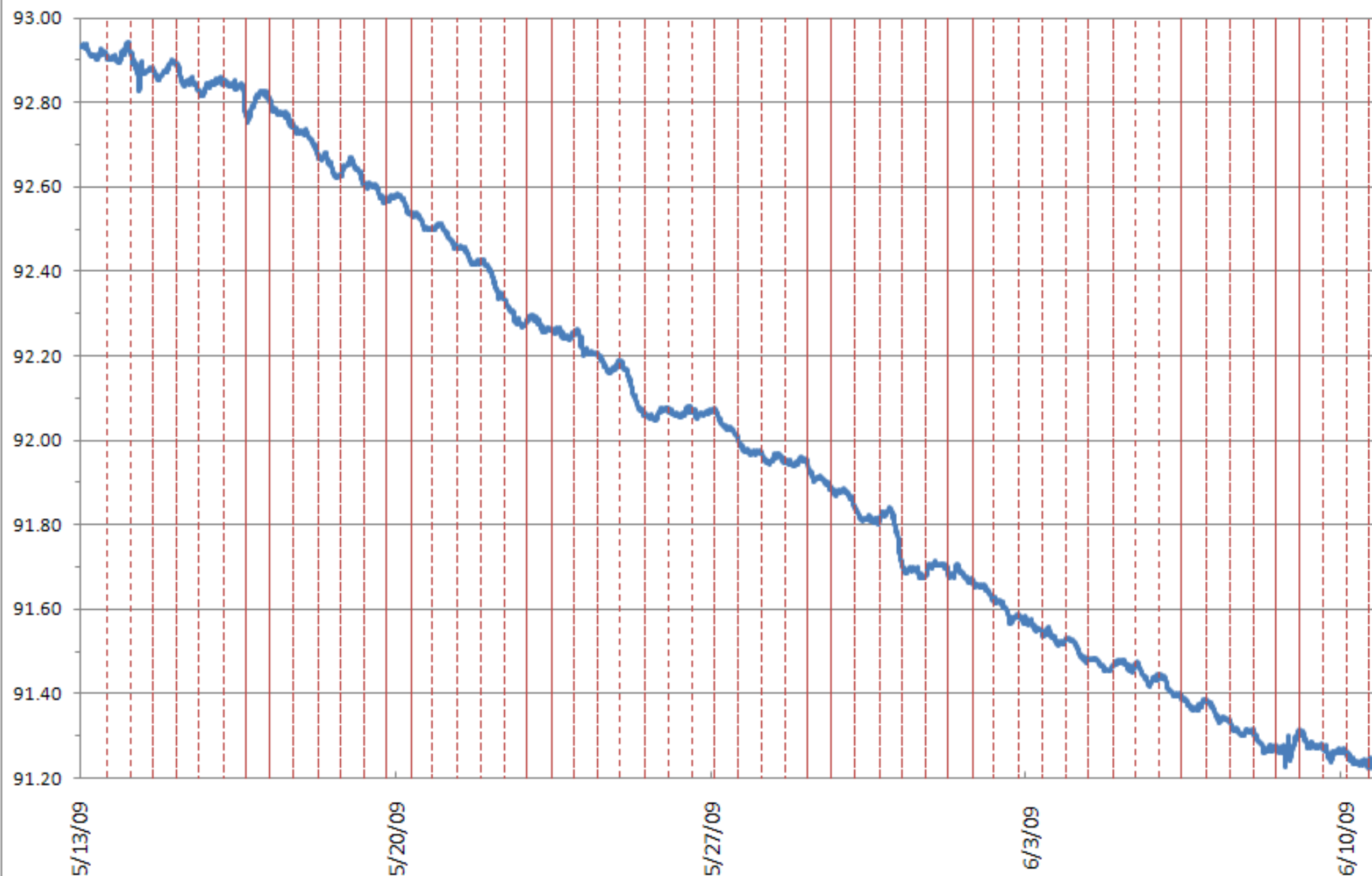
Note: Elevations are based on arbitrary 100 foot elevation line.
Vertical dashed lines indicate approximate high tide.

ERT-5



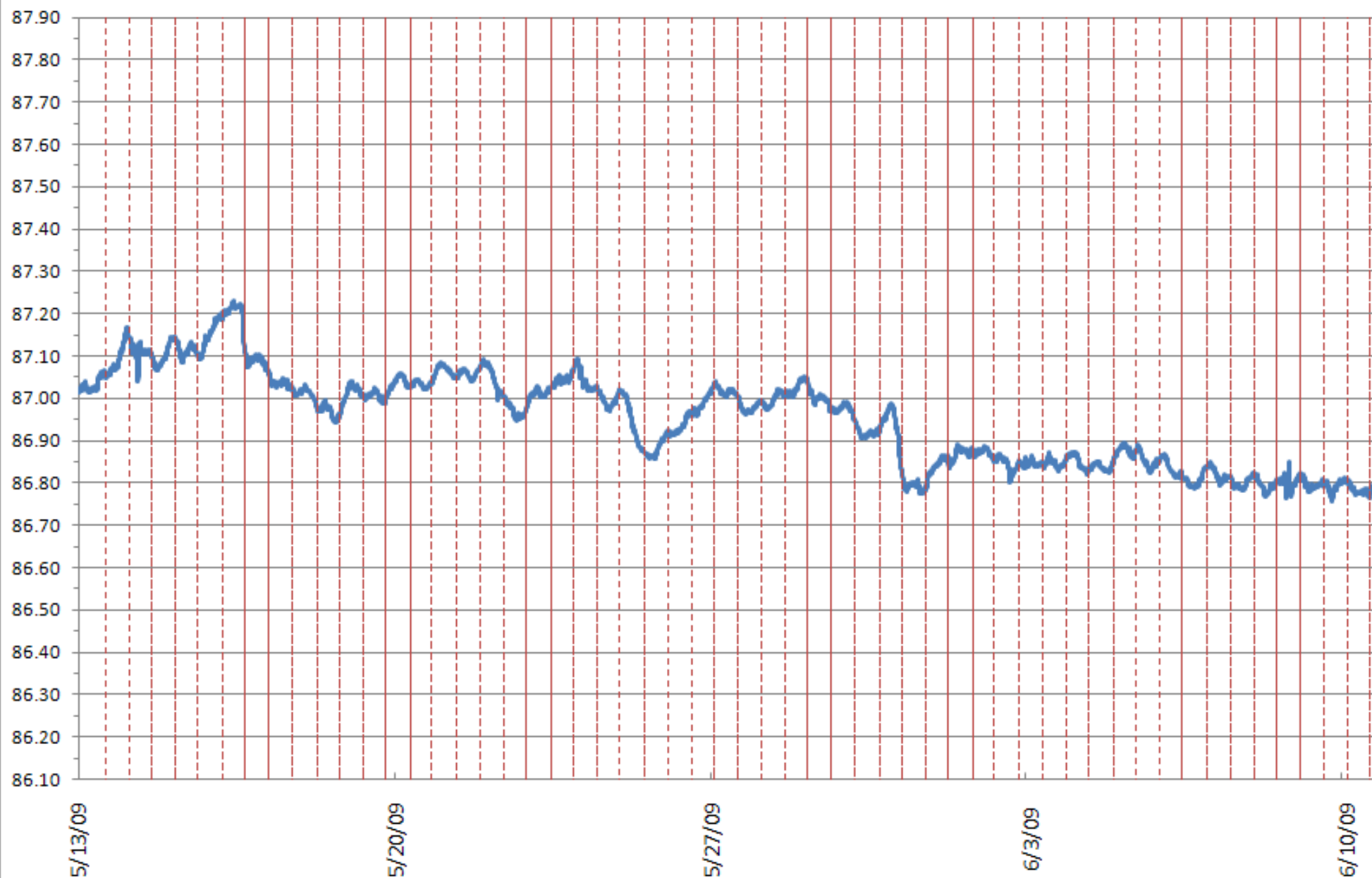
Note: Elevations are based on arbitrary 100 foot elevation line.
Vertical dashed lines indicate approximate high tide.

ERT-6



Note: Elevations are based on arbitrary 100 foot elevation line.
Vertical dashed lines indicate approximate high tide.

ERT-7



Note: Elevations are based on arbitrary 100 foot elevation line.
Vertical dashed lines indicate approximate high tide.

ERT-8




Appendix J

START Memorandum to the Site File, Geophysical Surveys at the Marino Property Site,
Middletown, Connecticut, dated 7 August 2009

MEMORANDUM

TO: Marino Property Site File

cc: Janis Tsang, On-Scene Coordinator, U.S. Environmental Protection Agency

FROM:  George Mavris, Weston Solutions, Inc., Superfund Technical Assessment and Response Team III

DATE: 7 August 2009

RE: Geophysical Surveys at the Marino Property Site, Middletown, Connecticut.
TDD No. 09-03-0004; Task No. 0512; Document Control No. R-5520

1.0 Introduction

A Geonics Limited EM-31 non-contacting terrain conductivity meter (EM-31) and an EG & G Geometrics Proton Precession Magnetometer (G-856) (Magnetometer) were used to conduct subsurface geophysical screening surveys at the Marino Property Site (the site), in Middletown, Middlesex County, Connecticut (see Figure 1, Site Location Map) [1]. The objectives of the geophysical surveys were to: 1) re-locate drums and/or other containers, possibly containing hazardous substances that were excavated by the U.S. Environmental Protection Agency (EPA) in 1991 during a Preliminary Assessment/Site Investigation (PA/SI), and placed back into the subsurface and covered; and 2) to propose test pit locations for excavation to unearth any drums and/or other containers. The area of interest (investigation area) at the site is depicted in Figure 2, Site Diagram [2].

On 23 and 24 June 2009, Weston Solutions, Inc., Superfund Technical Assessment and Response Team (START) members George Mavris and Carolyn Imbres conducted geophysical surveys on site at the request of U.S. Environmental Protection Agency (EPA) On-Scene Coordinator (OSC) Janis Tsang. The geophysical surveys were performed as part of a PA/SI currently being conducted by EPA at the site. To achieve the above objective, EM-31 and magnetometer surveys were conducted over a 5-and 10-square-foot (ft²) grid, respectively, over the investigation area which was cleared of debris and other objects by the property owner (see Figure 2, Site Diagram) [2].

2.0 Electromagnetic Induction Technique

Electromagnetic induction is a geophysical technique designed to measure and locate electrical conductivity and in-phase anomalies that may represent buried metallic materials, such as drums, tanks, etc. The electromagnetic induction method measures electrical properties of subsurface materials (soil, bedrock, groundwater, and/or metal objects) over an area of interest by inducing electrical currents into the ground and measuring the secondary magnetic field produced by these currents [3]. Large fluctuations in instrument response occur when the EM-31 is operated near concentrations of surface or subsurface metal. The EM-31 instrument has a penetration depth of approximately 18 feet when operated in the vertical dipole mode.

The EM-31 instrument operates on the principle of electromagnetic induction. The EM-31 generates an electromagnetic field by sending a low frequency alternating current (AC) along the transmitter wire coil. The AC generates a magnetic dipole perpendicular to the coil and induces an electromagnetic (EM) wave emanating orthogonally to the coil. Based on the orientation of the instrument, the EM-wave propagates through the ground. As the wave moves through the ground, a secondary wave is generated based on the ground properties (e.g., electrical conductivity). A second coil (receiver) on the instrument receives the two EM waves (primary and secondary) and then generates two results [3]. The first result is the quadrature component (out-of-phase with the primary field), which is directly calibrated to the bulk electrical conductivity of the ground and is measured in milliSiemens per meter (mS/m). The second result is the in-phase component (in-phase with the primary field), which is the ratio of the secondary wave to the primary wave amplitude and is measured in parts per thousand (ppt). The in-phase component is primarily used for the detection of buried metallic objects, although metal objects also affect the quadrature phase measurements.

Generally, negative values indicate that the instrument is oriented perpendicular to highly conductive objects, e.g. steel. High positive conductivity values generally indicate that metal objects are aligned parallel to the orientation of the instrument. Anomaly maps generated from the data indicate general ground conductivity, as well as anomalously large or small bulk ground conductivity (quadrature component) and the presence of large metallic conductors (in-phase component).

Prior to conducting the EM-31 survey, the EM-31 instrument was put through a series of equipment functional checks (battery check, zeroing check of transmitter and receiver, and sensitivity check). The functional checks were performed in two separate areas, suspected of being metal free and away from underground utilities and overhead power lines. These checks were performed in two areas because background conductivity readings were higher than anticipated (20 to 26 mS/m). Following these functional checks, which indicated that the instrument was functioning properly, the instrument's response was tested by operating it near metallic objects (surface metal debris and tools) and observing the instrument panel. Once this test was completed, the EM-31 was ready for the on-site survey. Background readings for conductivity ranged from 20 to 26 mS/m and for in-phase from 0 to 0.1 ppt. The MODE switch on the instrument was set to the OPER position, and the COARSE and FINE compensation controls were adjusted so that the in-phase reading was zero. The EM-31 survey was then conducted along points spaced at 5-ft intervals throughout the investigation area.

The conductivity and in-phase data were compiled and contour maps were prepared using SURFER computer software, version 8.05 [4]. These data were contoured using a kriging method. Kriging is a geostatistical gridding method that reveals trends in data. Data points located near metal debris observed on the surface of the site, and which could not be moved, were not used to prepare these contour maps due to interference. The EM-31 results are shown in Table 1 and are discussed in Section 5.0 and 5.1 of this report.

3.0 Magnetometer Technique

The G-856 Proton Precession Magnetometer (Magnetometer) measures the scalar intensity of the local magnetic field by making use of an induction coil to create a strong magnetic field around a hydrogen-rich fluid such as decane [5]. This causes the hydrogen protons to align their spin axis with the newly applied magnetic field, and when the current producing the polarized field is interrupted, the protons begin to align themselves with the earth's magnetic field. In doing so, the

protons will momentarily precess about the earth's field at a specific frequency that is proportional to the ambient magnetic field intensity. This precession generates a small magnetic field that induces an alternating voltage in the induction coil that was previously used to generate the polarization field. When the current is interrupted, the precessing protons induce a very weak signal into the coil, which is connected to an LED console that provides a digital readout of the earth's magnetic field strength in units of nanoTeslas (nT) or gammas. The relationship between the precession frequency of the induced voltage and the strength of the earth's magnetic field is called the proton gyromagnetic ratio and is equal to 0.042576 hertz per nanoTesla (Hz/nT) [5].

The presence of any buried steel material, such as drums or tanks, will result in deviations (positive or negative) from the earth's magnetic field. Small, discrete objects at hazardous waste sites typically have anomalies ranging from one to several hundred nTs. Massive concentrations of buried drums or other large metal objects will produce anomalies ranging from 100 to over 1,000 nTs [5]. Magnetometer readings are dependant on the traverse location and direction with respect buried metallic debris and may vary considerably. Traversing in a north-south direction directly over a target will result in a response showing a positive peak to the north and a negative peak to the south, with the target located just south of the inflection point.

The G-856 Magnetometer is sensitive to one nT unit; however, its response may be affected by diurnal variations in the earth's magnetic field, spatial variations caused by magnetic minerals in the soil or bedrock, geologic structures, and man-made structures. Therefore, prior to conducting the magnetic survey, the instrument was tuned for accuracy and site conditions. Readings were taken in areas adjacent to metal objects on the surface and in areas which appeared to be free of any ferrous metal objects in order to check the instrument's response. The instrument was also tested for repeatability in these areas. Ten background readings were obtained, and an average of 51,976 nT was calculated for the site. A reconnaissance magnetometer survey was then conducted along a system of grid lines, at 10-ft intervals throughout the investigation area.

The magnetometer was operated in the survey mode and readings were taken at every 10-ft grid node (see Table 1). At some locations, two readings were taken to test the instrument for repeatability. The magnetometer data were compiled; background values were subtracted from actual field values; and a residual magnetic contour intensity map was prepared using SURFER computer software, version 8.05 [4]. Data points located near metal debris on the surface which could not be moved were not used to prepare this contour map. These data were also contoured using a kriging method. Magnetometer results are discussed in Section 5.2 of this report.

4.0 Survey Area

A grid system consisting of 5-foot squares was established on the site on 23 and 24 June 2009 using a transit and tape measures. The gridded area was cleared of debris by the owner prior to establishing the grid.

One baseline of the grid system was established in a northeast-southwest direction (N35° east), along the eastern side of the site, and extended from 0 feet to 80 feet southeast of the site. Each 5-foot (ft) interval along this base line was marked using wooden stakes, pin flags, or spray paint. The baseline was labeled as Line 0 (L0) and the 5-ft points along the baseline were labeled as Points 0 (P0) through P80 (Figures 3, 4, and 5, Conductivity Contour Map, In-Phase Map, and Magnetometer Map). A second baseline was established perpendicular to the first baseline (L0) and extended northwestward 270 feet. Fifty-six additional northeast-southwest lines (L1 through L56) were

established across the site, and extended from 0 to 200 feet to the southwest. The differences in the lengths of these lines were a result of the tree line to the west. Each 5-ft interval was also marked along these lines using wooden stakes, pin flags, or spray paint and followed the same labeling nomenclature as before.

On 23 and 24 June 2009, a continuous EM-31 survey was conducted over the entire 5-ft grid system in the investigation area, beginning on Line 0 and proceeding southeast from Point 0 to Point 80, stopping at each 5-ft grid node and recording both conductivity and in-phase measurements. The instrument was rotated 90° at points where either elevated positive or negative readings were noted to check for lateral inhomogeneities. Any metal debris observed on the surface of the site that could potentially interfere with the instrument was moved; however, some larger pieces of metal debris could not be moved. The survey then proceeded to the northwest along Line 1 from Point 85 to Point 0, again stopping at each 5-ft grid node and recording both conductivity and in-phase measurements, and rotating the instrument 90° at points where either elevated positive or negative readings were noted. This procedure was continued for lines (L2 through L56) covering all of the points on each line. The grid system encompassed an area of approximately 44,250 ft² (~1 acre) and conductivity and in-phase readings were recorded at approximately 1,650 points during the survey (see Table 1).

A magnetometer survey was conducted on 24 June 2009 over the grid system at 10-ft intervals, beginning on Line 0 and proceeding southeast from Point 0 to Point 80, stopping at each 10-ft grid node and taking a reading. A second reading was taken at some points where either elevated positive or negative magnetometer readings were noted. The survey then proceeded to the northwest along Line 2 from Point 200 to Point 0, again stopping at each 10-ft grid node and taking a reading. This procedure was continued for all even numbered lines (L4, L6, L8.....L56) covering all points at 10-ft intervals along the entire line. Magnetometer readings were recorded at approximately 418 points during the survey (see Table 1).

5.0 Terrain Conductivity Results

EM-31 conductivity data for the investigation area are presented in Figure 3, Conductivity Contour Map. The contour interval is 1 and 5 mS/m. The conductivity contour map, Figure 3, as well as the contour maps in Figures 4 and 5, were prepared using SURFER computer software, version 8.05.

Generally, very high metallic responses will cause negative values in the conductivity data. Ground conductivity values obtained during the survey ranged from -26.70 to 134 mS/m. This is a wide range of values and represents significant conductivity variations within this area. Conductivity readings recorded near metal debris and stored vehicles on the survey grid were removed from the data used to prepare the contour maps. A large east-west trending positive anomaly, covering approximately 75 percent of the survey area, is shown in Figure 3. This anomaly is located approximately between L7 and L40, and P0 and P200 and has conductivity values ranging between 50 and 95 mS/m. Three small negative anomalies are also shown in Figure 3. These are located near L5, P0; L1, P30, and L33, P185 (Figure 3).

5.1 In-Phase Results

EM-31 in-phase data for the investigation area are presented in Figure 4, In-Phase Contour Map. The contour interval is 1 and 5 ppt. Typical in-phase response for a well-tuned instrument in the absence of surface or subsurface metal should be on the order of +/- 0.20 ppt. The observed in-

phase response ranged from -19.9 to +19.9 ppt, indicating that subsurface metallic objects may be present.

In-phase readings recorded near metal debris and stored vehicles on the survey grid were also removed from the data used to prepare the contour maps.

Several negative and positive anomalous areas were mapped and are shown in Figure 4. These anomalies occur throughout almost half of the investigation area. Two large strong negative anomalies are shown in Figure 4, one centered near L33, P180 and near L3, P60. Two smaller strong negative anomalies are centered near L44, P20 and L44, P40. A large negative anomaly (located between L10 through L40 and between P0 through P180) trends across the center of the site and several strong positive anomalies are located in the northeastern and eastern portions of the site. Less pronounced positive anomalies also occur in the southwestern portion of the site (Figure 4). The two large strong negative anomalies centered near L33, P180 and near L3, P60 coincide with conductivity anomalies and appear to corroborate the anomalies observed in conductivity data, especially the one located at L33, P180.

5.2 Magnetometer Results

Magnetometer data for the investigation area presented in Figure 5 [Magnetometer Contour (Residual) Map]. The magnetometer was operated in the survey mode and readings were noted (see Table 1) at each sample point (10-foot intervals). Repeatability readings were recorded at selected points. Magnetometer data were compiled; background values (51,976) were subtracted from actual field values; and a residual magnetic contour intensity map was prepared. A contour interval of 100 and 500 nT was used to construct these maps. Magnetometer readings ranged from 49,388 to 54,360 nT (with residual values ranging from -2,588 to 2,384 nT), indicating that subsurface metallic objects may be present.

Several negative and positive anomalous areas were mapped and are shown in Figure 5. A large positive anomaly was identified in the center of the site, between L6 through L33, and P60 through P150. A small positive anomaly is centered at L36, P30. A large negative anomaly is located along the eastern portion of the site (Figure 5).

None of the magnetic anomalies appear to coincide with the conductivity data. The large positive magnetic anomaly occupying the center of the site coincides with several in-phase anomalies. The small positive magnetic anomaly centered at L36, P30 coincides with a negative in-phase anomaly and the large negative magnetic anomaly located along the eastern portion of the site coincides with several strong positive in-phase anomalies located in the eastern portions of the site.

Based on the results of the EM-31 and magnetometer surveys, it appears likely that buried metallic objects, possibly drums or metal containers, may be present in the subsurface in several locations throughout the site.

6.0 Conclusions

This investigation has identified geophysical anomalies which may be indicative of buried metallic debris. Several anomalies were identified during the EM-31 and magnetometer surveys throughout the entire site, with the most significant anomalies identified using the in-phase and magnetometer data. The presence of subsurface metallic debris cannot be ruled out without further investigations,

such as test pitting, and removal of any metallic debris found within these areas of interest. The high positive conductivity anomaly occupying the center of the site may be indicative of a disturbed area, such as a landfill. Since the entire area where the geophysical survey was conducted has allegedly been used as a landfill, and surrounding areas have been disturbed during previous road construction and other activities, the elevated conductivity readings are not unexpected. These elevated readings are most likely indicative of disturbed soil, which has a higher porosity than non-disturbed soil, with subsequently higher water content, and therefore higher conductivity values. The in-phase readings are more indicative of buried metal than the conductivity readings.

Suggested test pit locations, to identify any metallic debris in the subsurface, are shown in Figure 6. A phased approach should be used to investigate the anomalies identified during this survey, beginning test-pitting operations at the more pronounced anomalies first, then proceeding to the lesser pronounced anomalies.

7.0 References

- [1] USGS (U.S. Geological Survey). Middletown, Connecticut, 7.5 minute series topographic map. 1963. Photorevised 1984.
- [2] Aerial Map. CLEAR (Center for Land and Education Use and Research). 2004. Black and White Digital Orthophoto Mosaic. Available @ <http://clear.uconn.edu/imagery.html>.
- [3] Geonics Limited, 1994. *EM-31 Operating Manual (for Models with Two Digital Meters)*.
- [4] Golden Software, Inc., 2004. *SURFER, Version 8.05*.
- [5] Geometrics, 2007. *G-856-AX Memory-MagTM Proton Precession Magnetometer, P/N 18101-02 Rev. D, Operation Manual*.

TABLE 1

**MARINO PROPERTY SITE
MIDDLETOWN, CONNECTICUT
GEOPHYSICAL SURVEY FIELD DATA**

Line/ Point No.	X	Y	Conduct- ivity	In- Phase	Conduct- ivity (1)	In- Phase (2)	Magneto- meter	Magneto- meter (3)	Comments
L0, P0	0	0	18.50	14.03	16.10	16.42	52426	-----	
L0, P5	0	-5	11.60	16.28	4.30	19.90	-----	-----	
L0, P10	0	-10	-2.30	11.02	1.80	9.92	52617	-----	
L0, P15	0	-15	1.70	9.65	-2.00	12.29	-----	-----	
L0, P20	0	-20	-4.50	-1.06	13.50	12.71	52790	-----	
L0, P25	0	-25	0.30	14.65	-----	-----	-----	-----	
L0, P30	0	-30	-19.00	11.47	-----	-----	53162	53152	
L0, P35	0	-35	6.60	12.59	-----	-----	-----	-----	
L0, P40	0	-40	11.00	9.46	-----	-----	53027	53041	Near concrete w/metal
L0, P45	0	-45	24.20	14.34	-----	-----	-----	-----	
L0, P50	0	-50	26.00	14.13	30.20	12.42	52780	52786	
L0, P55	0	-55	32.90	15.59	-----	-----	-----	-----	
L0, P60	0	-60	31.50	16.30	37.00	14.48	52431	-----	
L0, P65	0	-65	33.40	17.70	-----	-----	-----	-----	
L0, P70	0	-70	51.50	15.82	-----	-----	51487	51533	6 feet from steel girders
L0, P75	0	-75	65.00	-19.90	75.00	19.18	-----	-----	3 feet from steel girders
L0, P80	0	-80	102.30	-19.90	-----	-----	50314	50285	5 feet from steel girders
L1, P0	-5	0	21.00	16.51	20.00	19.99	-----	-----	
L1, P5	-5	-5	2.60	19.02	-----	-----	-----	-----	
L1, P10	-5	-10	7.20	16.64	-----	-----	-----	-----	
L1, P15	-5	-15	15.10	11.24	-----	-----	-----	-----	
L1, P20	-5	-20	23.80	1.52	-----	-----	-----	-----	
L1, P25	-5	-25	11.90	9.46	-----	-----	-----	-----	
L1, P30	-5	-30	-13.50	17.03	9.50	15.44	-----	-----	
L1, P35	-5	-35	-0.20	13.83	-----	-----	-----	-----	
L1, P40	-5	-40	22.20	7.75	-----	-----	-----	-----	
L1, P45	-5	-45	29.30	12.60	-----	-----	-----	-----	
L1, P50	-5	-50	31.20	14.13	-----	-----	-----	-----	
L1, P55	-5	-55	35.10	17.06	-----	-----	-----	-----	
L1, P60	-5	-60	33.30	16.88	-----	-----	-----	-----	
L1, P65	-5	-65	34.30	16.67	-----	-----	-----	-----	
L1, P70	-5	-70	43.10	12.70	-----	-----	-----	-----	
L1, P75	-5	-75	52.50	11.23	-----	-----	-----	-----	
L1, P80	-5	-80	55.90	19.99	-----	-----	-----	-----	3 feet from steel girders
L1, P85	-5	-85	62.00	18.80	-----	-----	-----	-----	3 feet from rebar
L2, P0	-10	0	15.10	-6.50	-----	-----	52783	-----	
L2, P5	-10	-5	8.80	18.93	-----	-----	-----	-----	
L2, P10	-10	-10	13.30	10.82	-----	-----	52710	-----	
L2, P15	-10	-15	25.70	3.88	-----	-----	-----	-----	
L2, P20	-10	-20	23.30	8.16	-----	-----	52644	-----	
L2, P25	-10	-25	26.10	11.92	-----	-----	-----	-----	
L2, P30	-10	-30	36.50	9.51	24.80	6.09	52817	-----	
L2, P35	-10	-35	40.30	6.47	-----	-----	-----	-----	
L2, P40	-10	-40	44.60	5.58	46.90	5.60	52663	-----	
L2, P45	-10	-45	45.00	7.90	-----	-----	-----	-----	
L2, P50	-10	-50	44.10	2.52	-----	-----	52405	-----	
L2, P55	-10	-55	42.60	-6.71	-----	-----	-----	-----	

TABLE 1

**MARINO PROPERTY SITE
MIDDLETOWN, CONNECTICUT
GEOPHYSICAL SURVEY FIELD DATA**

Line/ Point No.	X	Y	Conduct- ivity	In- Phase	Conduct- ivity (1)	In- Phase (2)	Magneto- meter	Magneto- meter (3)	Comments
L2, P60	-10	-60	49.00	-4.45	-----	-----	52483	-----	
L2, P65	-10	-65	54.00	-7.09	48.80	-7.45	-----	-----	
L2, P70	-10	-70	46.60	-1.49	-----	-----	52289	-----	
L2, P75	-10	-75	49.80	6.96	-----	-----	-----	-----	
L2, P80	-10	-80	56.00	5.62	-----	-----	51641	-----	
L2, P85	-10	-85	62.30	5.11	-----	-----	-----	-----	
L2, P90	-10	-90	59.60	7.09	-----	-----	51438	-----	8 feet from steel
L2, P95	-10	-95	63.50	1.49	-----	-----	-----	-----	
L2, P100	-10	-100	61.20	-5.62	-----	-----	51817	-----	8 feet from steel
L2, P105	-10	-105	58.10	4.48	-----	-----	-----	-----	
L2, P110	-10	-110	63.00	4.06	-----	-----	51977	-----	8 feet from steel
L2, P115	-10	-115	66.50	5.27	-----	-----	-----	-----	
L2, P120	-10	-120	67.70	12.78	-----	-----	52542	-----	8 feet from steel
L2, P125	-10	-125	56.20	2.45	-----	-----	-----	-----	
L2, P130	-10	-130	53.50	1.38	-----	-----	51509	-----	
L2, P135	-10	-135	53.70	1.21	-----	-----	-----	-----	
L2, P140	-10	-140	58.40	3.82	-----	-----	50709	-----	
L2, P145	-10	-145	57.20	4.12	-----	-----	-----	-----	
L2, P150	-10	-150	60.80	4.93	62.90	11.28	49999	-----	10 feet from heavy machinery
L2, P155	-10	-155	54.90	5.94	-----	-----	-----	-----	
L2, P160	-10	-160	48.30	6.71	-----	-----	49584	49621	
L2, P165	-10	-165	45.50	2.38	-----	-----	-----	-----	
L2, P170	-10	-170	47.20	-0.65	-----	-----	49691	-----	
L2, P175	-10	-175	43.00	-0.38	-----	-----	-----	-----	
L2, P180	-10	-180	41.20	3.69	-----	-----	50054	-----	
L2, P185	-10	-185	37.30	9.29	-----	-----	-----	-----	
L2, P190	-10	-190	37.00	9.09	-----	-----	49616	49625	
L2, P195	-10	-195	39.20	10.21	-----	-----	-----	-----	
L2, P200	-10	-200	37.60	12.84	-----	-----	50399	-----	
L3, P0	-15	0	29.90	-1.96	-----	-----	-----	-----	
L3, P5	-15	-5	15.20	11.24	-----	-----	-----	-----	
L3, P10	-15	-10	11.40	14.38	-----	-----	-----	-----	
L3, P15	-15	-15	25.20	4.47	-----	-----	-----	-----	
L3, P20	-15	-20	32.20	4.06	-----	-----	-----	-----	
L3, P25	-15	-25	26.60	8.11	-----	-----	-----	-----	
L3, P30	-15	-30	29.30	11.10	-----	-----	-----	-----	
L3, P35	-15	-35	38.50	6.51	-----	-----	-----	-----	
L3, P40	-15	-40	39.90	4.69	-----	-----	-----	-----	
L3, P45	-15	-45	42.00	5.50	-----	-----	-----	-----	
L3, P50	-15	-50	-26.70	-19.90	-----	-----	-----	-----	
L3, P55	-15	-55	42.30	-19.90	-----	-----	-----	-----	
L3, P60	-15	-60	35.60	-19.90	42.30	-11.36	-----	-----	
L3, P65	-15	-65	48.80	-19.90	56.80	-19.90	-----	-----	
L3, P70	-15	-70	36.60	-19.90	49.00	-7.47	-----	-----	
L3, P75	-15	-75	36.40	-9.53	-----	-----	-----	-----	
L3, P80	-15	-80	49.60	7.78	-----	-----	-----	-----	
L3, P85	-15	-85	46.60	11.63	-----	-----	-----	-----	

TABLE 1

**MARINO PROPERTY SITE
MIDDLETOWN, CONNECTICUT
GEOPHYSICAL SURVEY FIELD DATA**

Line/ Point No.	X	Y	Conduct- ivity	In- Phase	Conduct- ivity (1)	In- Phase (2)	Magneto- meter	Magneto- meter (3)	Comments
L3, P90	-15	-90	37.90	9.61	----	----	----	----	
L3, P95	-15	-95	41.60	7.06	----	----	----	----	
L3, P100	-15	-100	45.40	3.78	----	----	----	----	
L3, P105	-15	-105	53.7	4.1	----	----	----	----	
L3, P110	-15	-110	62.2	0.43	----	----	----	----	
L3, P115	-15	-115	59.40	2.46	----	----	----	----	
L3, P120	-15	-120	57.00	1.92	----	----	----	----	
L3, P125	-15	-125	54.50	-0.56	----	----	----	----	
L3, P130	-15	-130	49.80	1.06	----	----	----	----	
L3, P135	-15	-135	43.00	4.91	----	----	----	----	
L3, P140	-15	-140	40.50	4.06	----	----	----	----	
L3, P145	-15	-145	45.30	1.74	----	----	----	----	
L3, P150	-15	-150	46.60	-0.68	----	----	----	----	
L3, P155	-15	-155	29.60	-0.03	----	----	----	----	
L3, P160	-15	-160	25.30	4.41	----	----	----	----	
L3, P165	-15	-165	34.10	-0.31	----	----	----	----	
L3, P170	-15	-170	37.10	3.02	----	----	----	----	
L3, P175	-15	-175	36.20	4.52	----	----	----	----	
L3, P180	-15	-180	35.20	6.45	----	----	----	----	
L3, P185	-15	-185	43.10	8.89	----	----	----	----	
L3, P190	-15	-190	50.00	8.27	----	----	----	----	
L3, P195	-15	-195	51.30	7.13	----	----	----	----	
L3, P200	-15	-200	48.80	8.02	----	----	----	----	
L4, P0	-20	0	19.90	7.30	----	----	52936	----	
L4, P5	-20	-5	18.00	8.46	----	----	----	----	
L4, P10	-20	-10	27.90	6.81	----	----	52733	----	
L4, P15	-20	-15	33.50	4.87	----	----	----	----	
L4, P20	-20	-20	39.00	2.03	----	----	52397	----	
L4, P25	-20	-25	35.70	4.85	----	----	----	----	
L4, P30	-20	-30	41.00	1.60	----	----	52576	----	
L4, P35	-20	-35	48.00	3.01	----	----	----	----	
L4, P40	-20	-40	56.50	0.35	48.90	2.71	52425	----	
L4, P45	-20	-45	60.00	0.40	----	----	----	----	
L4, P50	-20	-50	57.00	6.00	----	----	52050	----	
L4, P55	-20	-55	59.10	5.11	----	----	----	----	
L4, P60	-20	-60	59.00	5.54	----	----	52145	----	
L4, P65	-20	-65	51.90	6.12	----	----	----	----	
L4, P70	-20	-70	39.90	9.50	----	----	52522	----	
L4, P75	-20	-75	35.00	10.61	----	----	----	----	
L4, P80	-20	-80	35.50	12.22	----	----	52505	----	
L4, P85	-20	-85	32.00	15.81	----	----	----	----	
L4, P90	-20	-90	37.10	8.22	----	----	52514	----	
L4, P95	-20	-95	31.60	8.51	----	----	----	----	
L4, P100	-20	-100	31.90	7.40	----	----	52675	----	
L4, P105	-20	-105	45.00	3.01	----	----	----	----	
L4, P110	-20	-110	54.50	4.88	----	----	52445	----	
L4, P115	-20	-115	51.50	6.10	----	----	----	----	

TABLE 1

**MARINO PROPERTY SITE
MIDDLETOWN, CONNECTICUT
GEOPHYSICAL SURVEY FIELD DATA**

Line/ Point No.	X	Y	Conduct- ivity	In- Phase	Conduct- ivity (1)	In- Phase (2)	Magneto- meter	Magneto- meter (3)	Comments
L4, P120	-20	-120	48.90	1.80	-----	-----	52272	-----	
L4, P125	-20	-125	48.10	4.30	-----	-----	-----	-----	
L4, P130	-20	-130	36.30	7.95	-----	-----	51968	-----	
L4, P135	-20	-135	27.70	10.82	-----	-----	-----	-----	
L4, P140	-20	-140	26.00	8.27	-----	-----	51778	-----	
L4, P145	-20	-145	37.10	5.29	-----	-----	-----	-----	
L4, P150	-20	-150	33.50	-1.23	-----	-----	51170	-----	
L4, P155	-20	-155	6.90	6.90	-----	-----	-----	-----	
L4, P160	-20	-160	24.20	5.51	-----	-----	51101	-----	
L4, P165	-20	-165	31.70	4.91	-----	-----	-----	-----	
L4, P170	-20	-170	29.10	7.16	-----	-----	50957	-----	
L4, P175	-20	-175	35.20	8.94	-----	-----	-----	-----	
L4, P180	-20	-180	33.40	4.22	-----	-----	50644	-----	
L4, P185	-20	-185	47.70	9.45	-----	-----	-----	-----	
L4, P190	-20	-190	41.50	3.30	-----	-----	50206	-----	
L4, P195	-20	-195	49.70	6.22	-----	-----	-----	-----	
L4, P200	-20	-200	35.90	12.40	-----	-----	49571	-----	
L5, P0	-25	0	-7.60	7.56			-----	-----	
L5, P5	-25	-5	3.50	-1.30	1.40	16.25	-----	-----	
L5, P10	-25	-10	33.10	2.20	-----	-----	-----	-----	
L5, P15	-25	-15	43.20	4.01	-----	-----	-----	-----	
L5, P20	-25	-20	48.90	-0.93	-----	-----	-----	-----	
L5, P25	-25	-25	38.90	4.58	-----	-----	-----	-----	
L5, P30	-25	-30	45.90	0.48	-----	-----	-----	-----	
L5, P35	-25	-35	51.60	1.89	-----	-----	-----	-----	
L5, P40	-25	-40	59.50	-0.13	-----	-----	-----	-----	
L5, P45	-25	-45	63.00	1.26	-----	-----	-----	-----	
L5, P50	-25	-50	55.90	6.69	-----	-----	-----	-----	
L5, P55	-25	-55	60.50	4.91	-----	-----	-----	-----	
L5, P60	-25	-60	58.10	10.85	-----	-----	-----	-----	
L5, P65	-25	-65	44.90	17.89	-----	-----	-----	-----	
L5, P70	-25	-70	33.70	19.99	-----	-----	-----	-----	
L5, P75	-25	-75	25.00	19.99	22.10	19.99	-----	-----	
L5, P80	-25	-80	23.00	19.90	26.20	19.99	-----	-----	
L5, P85	-25	-85	37.10	18.06	22.00	17.29	-----	-----	
L5, P90	-25	-90	32.60	2.58	-----	-----	-----	-----	
L5, P95	-25	-95	50.10	9.95	-----	-----	-----	-----	
L5, P100	-25	-100	40.50	10.10	-----	-----	-----	-----	
L5, P105	-25	-105	32.30	9.33	-----	-----	-----	-----	
L5, P110	-25	-110	42.20	6.09	-----	-----	-----	-----	
L5, P115	-25	-115	46.10	4.19	-----	-----	-----	-----	
L5, P120	-25	-120	41.10	4.75	-----	-----	-----	-----	
L5, P125	-25	-125	35.90	4.61	-----	-----	-----	-----	
L5, P130	-25	-130	41.00	6.50	-----	-----	-----	-----	
L5, P135	-25	-135	38.80	4.01	-----	-----	-----	-----	
L5, P140	-25	-140	37.70	9.18	-----	-----	-----	-----	
L5, P145	-25	-145	41.50	7.27	-----	-----	-----	-----	

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**MARINO PROPERTY SITE
MIDDLETOWN, CONNECTICUT
GEOPHYSICAL SURVEY FIELD DATA**

Line/ Point No.	X	Y	Conduct- ivity	In- Phase	Conduct- ivity (1)	In- Phase (2)	Magneto- meter	Magneto- meter (3)	Comments
L5, P150	-25	-150	43.10	8.38	-----	-----	-----	-----	
L5, P155	-25	-155	38.50	9.71	-----	-----	-----	-----	
L5, P160	-25	-160	37.70	7.34	-----	-----	-----	-----	
L5, P165	-25	-165	37.30	8.71	-----	-----	-----	-----	
L5, P170	-25	-170	37.00	7.99	-----	-----	-----	-----	
L5, P175	-25	-175	37.20	5.80	-----	-----	-----	-----	
L5, P180	-25	-180	38.50	6.54	-----	-----	-----	-----	
L5, P185	-25	-185	45.00	11.25	-----	-----	-----	-----	
L5, P190	-25	-190	40.70	8.55	-----	-----	-----	-----	
L5, P195	-25	-195	56.80	9.20	-----	-----	-----	-----	
L5, P200	-25	-200	40.60	8.30	-----	-----	-----	-----	
L6, P0	-30	0	16.90	12.94	-----	-----	52520	-----	
L6, P5	-30	-5	5.50	12.90	-----	-----	-----	-----	
L6, P10	-30	-10	35.80	3.04	-----	-----	52788	-----	
L6, P15	-30	-15	53.60	-2.26	-----	-----	-----	-----	
L6, P20	-30	-20	52.70	1.24	-----	-----	52178	-----	
L6, P25	-30	-25	44.50	5.36	-----	-----	-----	-----	
L6, P30	-30	-30	53.70	1.68	-----	-----	52314	-----	
L6, P35	-30	-35	61.00	-2.16	62.90	-2.31	-----	-----	
L6, P40	-30	-40	70.20	-3.07	-----	-----	52106	-----	
L6, P45	-30	-45	68.40	-1.95	-----	-----	-----	-----	
L6, P50	-30	-50	52.90	6.01	-----	-----	51974	-----	
L6, P55	-30	-55	58.60	4.72	-----	-----	-----	-----	
L6, P60	-30	-60	59.20	7.78	-----	-----	52034	-----	
L6, P65	-30	-65	31.10	16.31	35.80	17.89	-----	-----	
L6, P70	-30	-70	28.50	18.77	-----	-----	52478	-----	
L6, P75	-30	-75	24.10	19.99	-----	-----	-----	-----	
L6, P80	-30	-80	29.10	19.99	-----	-----	52875	-----	
L6, P85	-30	-85	37.60	19.99	26.50	16.99	-----	-----	
L6, P90	-30	-90	40.90	11.44	-----	-----	53036	-----	
L6, P95	-30	-95	42.50	11.80	-----	-----	-----	-----	
L6, P100	-30	-100	39.10	13.80	-----	-----	53093	-----	
L6, P105	-30	-105	27.10	11.14	-----	-----	-----	-----	
L6, P110	-30	-110	39.00	6.95	-----	-----	52958	-----	
L6, P115	-30	-115	42.80	5.17	-----	-----	-----	-----	
L6, P120	-30	-120	29.60	-10.12	32.90	9.28	52535	-----	
L6, P125	-30	-125	25.50	6.39	-----	-----	-----	-----	
L6, P130	-30	-130	36.00	5.85	-----	-----	52420	-----	
L6, P135	-30	-135	41.80	6.69	-----	-----	-----	-----	
L6, P140	-30	-140	46.60	8.37	-----	-----	52265	-----	
L6, P145	-30	-145	40.90	6.84	-----	-----	-----	-----	
L6, P150	-30	-150	44.20	4.54	-----	-----	51921	-----	
L6, P155	-30	-155	37.10	3.82	-----	-----	-----	-----	
L6, P160	-30	-160	28.00	3.21	-----	-----	51596	-----	
L6, P165	-30	-165	29.90	10.36	-----	-----	-----	-----	
L6, P170	-30	-170	41.00	0.38	-----	-----	51625	-----	
L6, P175	-30	-175	39.50	8.99	-----	-----	-----	-----	

TABLE 1

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MIDDLETOWN, CONNECTICUT
GEOPHYSICAL SURVEY FIELD DATA**

Line/ Point No.	X	Y	Conduct- ivity	In- Phase	Conduct- ivity (1)	In- Phase (2)	Magneto- meter	Magneto- meter (3)	Comments
L6, P180	-30	-180	34.10	12.88	-----	-----	51640	-----	
L6, P185	-30	-185	40.70	13.07	36.60	12.94	-----	-----	
L6, P190	-30	-190	56.10	12.26	-----	-----	51461	-----	
L6, P195	-30	-195	62.20	6.84	-----	-----	-----	-----	
L6, P200	-30	-200	52.10	11.38	-----	-----	50745	-----	1 foot from jersey barrier
L7, P0	-35	0	41.20	4.49	-----	-----	-----	-----	
L7, P5	-35	-5	39.20	1.09	-----	-----	-----	-----	
L7, P10	-35	-10	54.20	-3.47	-----	-----	-----	-----	
L7, P15	-35	-15	57.20	-2.65	-----	-----	-----	-----	
L7, P20	-35	-20	53.00	2.41	-----	-----	-----	-----	
L7, P25	-35	-25	46.30	4.79	-----	-----	-----	-----	
L7, P30	-35	-30	50.20	4.18	-----	-----	-----	-----	
L7, P35	-35	-35	60.30	1.67	-----	-----	-----	-----	
L7, P40	-35	-40	66.00	-2.46	-----	-----	-----	-----	
L7, P45	-35	-45	65.10	-2.89	-----	-----	-----	-----	
L7, P50	-35	-50	44.10	7.67	-----	-----	-----	-----	
L7, P55	-35	-55	29.30	11.77	-----	-----	-----	-----	
L7, P60	-35	-60	32.60	11.96	-----	-----	-----	-----	
L7, P65	-35	-65	28.10	15.22	-----	-----	-----	-----	
L7, P70	-35	-70	27.70	15.37	-----	-----	-----	-----	
L7, P75	-35	-75	21.90	18.56	-----	-----	-----	-----	
L7, P80	-35	-80	22.50	19.99	-----	-----	-----	-----	
L7, P85	-35	-85	39.40	19.28	44.60	19.99	-----	-----	
L7, P90	-35	-90	48.20	10.67	-----	-----	-----	-----	
L7, P95	-35	-95	53.50	8.18	-----	-----	-----	-----	
L7, P100	-35	-100	54.80	9.85	-----	-----	-----	-----	
L7, P105	-35	-105	48.30	7.35	-----	-----	-----	-----	
L7, P110	-35	-110	53.50	2.46	-----	-----	-----	-----	
L7, P115	-35	-115	56.40	-2.91	58.10	-2.40	-----	-----	
L7, P120	-35	-120	43.50	-2.39	-----	-----	-----	-----	
L7, P125	-35	-125	38.40	6.40	-----	-----	-----	-----	
L7, P130	-35	-130	42.10	0.71	-----	-----	-----	-----	
L7, P135	-35	-135	45.50	5.26	-----	-----	-----	-----	
L7, P140	-35	-140	40.50	4.01	-----	-----	-----	-----	
L7, P145	-35	-145	44.40	7.58	-----	-----	-----	-----	
L7, P150	-35	-150	47.90	0.57	-----	-----	-----	-----	
L7, P155	-35	-155	47.00	2.08	-----	-----	-----	-----	
L7, P160	-35	-160	50.10	3.66	-----	-----	-----	-----	
L7, P165	-35	-165	48.20	1.09	-----	-----	-----	-----	
L7, P170	-35	-170	51.90	4.96	-----	-----	-----	-----	
L7, P175	-35	-175	30.80	13.32	-----	-----	-----	-----	
L7, P180	-35	-180	34.40	13.34	-----	-----	-----	-----	
L7, P185	-35	-185	45.50	8.63	-----	-----	-----	-----	
L7, P190	-35	-190	56.20	12.57	-----	-----	-----	-----	
L8, P0	-40	0	53.00	-4.01	-----	-----	51813	-----	
L8, P5	-40	-5	49.40	-3.65	-----	-----	-----	-----	
L8, P10	-40	-10	48.40	-3.37	-----	-----	52138	-----	

TABLE 1

**MARINO PROPERTY SITE
MIDDLETOWN, CONNECTICUT
GEOPHYSICAL SURVEY FIELD DATA**

Line/ Point No.	X	Y	Conduct- ivity	In- Phase	Conduct- ivity (1)	In- Phase (2)	Magneto- meter	Magneto- meter (3)	Comments
L8, P15	-40	-15	57.70	-3.71	-----	-----	-----	-----	
L8, P20	-40	-20	55.90	-1.30	-----	-----	52143	-----	
L8, P25	-40	-25	55.20	0.09	-----	-----	-----	-----	
L8, P30	-40	-30	62.80	-2.04	-----	-----	52137	-----	
L8, P35	-40	-35	67.80	-1.10	-----	-----	-----	-----	
L8, P40	-40	-40	71.20	-3.06	-----	-----	52081	-----	
L8, P45	-40	-45	65.80	-1.06	-----	-----	-----	-----	
L8, P50	-40	-50	50.50	1.69	-----	-----	51986	-----	
L8, P55	-40	-55	44.30	3.96	-----	-----	-----	-----	
L8, P60	-40	-60	39.70	8.54	-----	-----	52084	-----	
L8, P65	-40	-65	39.20	12.60	-----	-----	-----	-----	
L8, P70	-40	-70	42.10	9.15	-----	-----	52627	-----	
L8, P75	-40	-75	48.30	10.25	-----	-----	-----	-----	
L8, P80	-40	-80	50.20	10.90	-----	-----	53031	53005	
L8, P85	-40	-85	57.80	8.50	-----	-----	-----	-----	
L8, P90	-40	-90	66.50	3.92	-----	-----	53081	-----	
L8, P95	-40	-95	68.40	1.03	-----	-----	-----	-----	
L8, P100	-40	-100	64.50	1.20	-----	-----	53139	-----	
L8, P105	-40	-105	62.00	0.67	-----	-----	-----	-----	
L8, P110	-40	-110	62.80	-4.28	-----	-----	52821	-----	
L8, P115	-40	-115	62.10	-3.88	-----	-----	-----	-----	
L8, P120	-40	-120	57.60	-2.91	-----	-----	52349	-----	
L8, P125	-40	-125	55.20	-0.18	-----	-----	-----	-----	
L8, P130	-40	-130	51.10	-1.31	-----	-----	52236	-----	
L8, P135	-40	-135	48.90	2.78	-----	-----	-----	-----	
L8, P140	-40	-140	48.60	-0.08	-----	-----	52281	-----	
L8, P145	-40	-145	50.30	0.49	-----	-----	-----	-----	
L8, P150	-40	-150	50.00	0.65	-----	-----	52095	-----	
L8, P155	-40	-155	50.90	2.23	-----	-----	-----	-----	
L8, P160	-40	-160	51.70	-1.10	-----	-----	51882	-----	
L8, P165	-40	-165	53.40	0.27	-----	-----	-----	-----	
L8, P170	-40	-170	53.10	2.44	-----	-----	51761	-----	
L8, P175	-40	-175	52.10	6.82	-----	-----	-----	-----	
L8, P180	-40	-180	55.60	3.91	-----	-----	51976	-----	
L8, P185	-40	-185	61.50	4.14	-----	-----	-----	-----	
L8, P190	-40	-190	61.20	7.38	-----	-----	51798	-----	
L9, P0	-45	0	59.50	-5.96	-----	-----	-----	-----	
L9, P5	-45	-5	59.90	-5.70	-----	-----	-----	-----	
L9, P10	-45	-10	58.80	-6.09	-----	-----	-----	-----	
L9, P15	-45	-15	60.00	-4.63	-----	-----	-----	-----	
L9, P20	-45	-20	55.20	-1.59	-----	-----	-----	-----	
L9, P25	-45	-25	56.80	-2.80	-----	-----	-----	-----	
L9, P30	-45	-30	58.60	-2.11	-----	-----	-----	-----	
L9, P35	-45	-35	61.30	-0.67	-----	-----	-----	-----	
L9, P40	-45	-40	68.60	0.66	-----	-----	-----	-----	
L9, P45	-45	-45	72.00	-5.05	-----	-----	-----	-----	
L9, P50	-45	-50	71.20	-7.25	-----	-----	-----	-----	

TABLE 1

**MARINO PROPERTY SITE
MIDDLETOWN, CONNECTICUT
GEOPHYSICAL SURVEY FIELD DATA**

Line/ Point No.	X	Y	Conduct- ivity	In- Phase	Conduct- ivity (1)	In- Phase (2)	Magneto- meter	Magneto- meter (3)	Comments
L9, P55	-45	-55	76.10	-3.62	71.5	-4.3	----	----	
L9, P60	-45	-60	70.00	2.03	----	----	----	----	
L9, P65	-45	-65	57.00	5.19	----	----	----	----	
L9, P70	-45	-70	49.10	8.80	----	----	----	----	
L9, P75	-45	-75	51.70	6.05	----	----	----	----	
L9, P80	-45	-80	58.20	3.71	----	----	----	----	
L9, P85	-45	-85	60.00	3.45	----	----	----	----	
L9, P90	-45	-90	68.00	-0.19	----	----	----	----	
L9, P95	-45	-95	63.10	0.13	----	----	----	----	
L9, P100	-45	-100	56.50	0.37	----	----	----	----	
L9, P105	-45	-105	60.20	0.24	----	----	----	----	
L9, P110	-45	-110	66.70	-3.86	----	----	----	----	
L9, P115	-45	-115	65.20	-3.49	----	----	----	----	
L9, P120	-45	-120	60.20	-3.15	----	----	----	----	
L9, P125	-45	-125	53.70	-1.69	----	----	----	----	
L9, P130	-45	-130	48.80	0.89	----	----	----	----	
L9, P135	-45	-135	50.40	1.06	----	----	----	----	
L9, P140	-45	-140	51.30	1.49	----	----	----	----	
L9, P145	-45	-145	53.00	0.60	----	----	----	----	
L9, P150	-45	-150	50.40	0.05	----	----	----	----	
L9, P155	-45	-155	51.60	3.77	----	----	----	----	
L9, P160	-45	-160	53.10	-0.29	----	----	----	----	
L9, P165	-45	-165	59.10	0.28	----	----	----	----	
L9, P170	-45	-170	59.90	2.31	----	----	----	----	
L9, P175	-45	-175	57.90	5.56	----	----	----	----	
L9, P180	-45	-180	62.70	6.10	----	----	----	----	
L9, P185	-45	-185	74.70	0.10	----	----	----	----	
L9, P190	-45	-190	78.30	-0.66	----	----	----	----	
L10, P0	-50	0	59.80	-4.83	----	----	51739	----	
L10, P5	-50	-5	56.50	-3.65	----	----	----	----	
L10, P10	-50	-10	59.00	-2.91	----	----	52063	----	
L10, P15	-50	-15	60.70	-2.07	----	----	----	----	
L10, P20	-50	-20	55.50	-2.48	----	----	52245	----	
L10, P25	-50	-25	56.80	-4.91	----	----	----	----	
L10, P30	-50	-30	59.20	-3.94	----	----	52130	----	
L10, P35	-50	-35	65.20	-1.71	----	----	----	----	
L10, P40	-50	-40	71.80	-2.80	----	----	52064	----	
L10, P45	-50	-45	73.00	-7.40	72	-6.23	----	----	
L10, P50	-50	-50	73.50	-5.92	----	----	52052	----	
L10, P55	-50	-55	69.90	-0.99	----	----	----	----	
L10, P60	-50	-60	57.40	3.86	----	----	52257	----	
L10, P65	-50	-65	48.30	6.89	----	----	----	----	
L10, P70	-50	-70	53.90	3.37	----	----	52609	----	
L10, P75	-50	-75	60.00	3.23	----	----	----	----	
L10, P80	-50	-80	59.50	3.49	----	----	52880	----	
L10, P85	-50	-85	61.00	0.33	----	----	----	----	
L10, P90	-50	-90	62.10	1.15	----	----	53070	----	

TABLE 1

**MARINO PROPERTY SITE
MIDDLETOWN, CONNECTICUT
GEOPHYSICAL SURVEY FIELD DATA**

Line/ Point No.	X	Y	Conduct- ivity	In- Phase	Conduct- ivity (1)	In- Phase (2)	Magneto- meter	Magneto- meter (3)	Comments
L10, P95	-50	-95	53.10	4.35	-----	-----	-----	-----	
L10, P100	-50	-100	48.20	3.45	-----	-----	53247	-----	
L10, P105	-50	-105	57.10	-3.67	-----	-----	-----	-----	
L10, P110	-50	-110	61.20	-3.18	-----	-----	-----	-----	
L10, P115	-50	-115	58.50	0.18	-----	-----	-----	-----	
L10, P120	-50	-120	56.00	-0.04	-----	-----	53044	-----	
L10, P125	-50	-125	55.10	3.15	-----	-----	-----	-----	
L10, P130	-50	-130	55.20	3.26	-----	-----	52429	-----	
L10, P135	-50	-135	50.30	1.29	-----	-----	-----	-----	
L10, P140	-50	-140	51.50	2.95	-----	-----	52237	-----	
L10, P145	-50	-145	51.70	-2.34	-----	-----	-----	-----	
L10, P150	-50	-150	51.60	0.18	-----	-----	52431	-----	
L10, P155	-50	-155	52.80	1.52	-----	-----	-----	-----	
L10, P160	-50	-160	53.20	-2.88	-----	-----	52224	-----	
L10, P165	-50	-165	57.10	2.03	-----	-----	-----	-----	
L10, P170	-50	-170	60.60	6.39	-----	-----	51998	-----	
L10, P175	-50	-175	64.20	4.61	-----	-----	-----	-----	
L10, P180	-50	-180	72.80	5.18	-----	-----	51845	-----	
L10, P185	-50	-185	83.10	1.48	-----	-----	-----	-----	
L10, P190	-50	-190	80.10	0.94	-----	-----	51718	-----	
L11, P0	-55	0	63.10	-6.42	-----	-----	-----	-----	
L11, P5	-55	-5	57.10	-1.96	-----	-----	-----	-----	
L11, P10	-55	-10	56.80	-0.40	-----	-----	-----	-----	
L11, P15	-55	-15	61.60	-1.07	-----	-----	-----	-----	
L11, P20	-55	-20	60.40	-3.82	-----	-----	-----	-----	
L11, P25	-55	-25	62.40	-7.44	60.5	-5.47	-----	-----	
L11, P30	-55	-30	63.70	-6.73	-----	-----	-----	-----	
L11, P35	-55	-35	62.20	-4.10	-----	-----	-----	-----	
L11, P40	-55	-40	61.20	-0.20	-----	-----	-----	-----	
L11, P45	-55	-45	70.10	-5.93	-----	-----	-----	-----	
L11, P50	-55	-50	71.80	-4.02	-----	-----	-----	-----	
L11, P55	-55	-55	68.20	1.10	-----	-----	-----	-----	
L11, P60	-55	-60	63.20	1.42	-----	-----	-----	-----	
L11, P65	-55	-65	63.50	1.39	-----	-----	-----	-----	
L11, P70	-55	-70	66.50	0.52	-----	-----	-----	-----	
L11, P75	-55	-75	69.20	0.27	-----	-----	-----	-----	
L11, P80	-55	-80	61.00	1.72	-----	-----	-----	-----	
L11, P85	-55	-85	59.30	5.34	-----	-----	-----	-----	
L11, P90	-55	-90	69.00	1.42	-----	-----	-----	-----	
L11, P95	-55	-95	65.90	1.55	-----	-----	-----	-----	
L11, P100	-55	-100	53.70	3.17	-----	-----	-----	-----	
L11, P105	-55	-105	50.80	1.20	-----	-----	-----	-----	
L11, P110	-55	-110	56.80	-3.75	-----	-----	-----	-----	
L11, P115	-55	-115	61.00	-3.02	-----	-----	-----	-----	
L11, P120	-55	-120	61.80	-0.64	-----	-----	-----	-----	
L11, P125	-55	-125	58.90	1.97	-----	-----	-----	-----	
L11, P130	-55	-130	58.80	0.79	-----	-----	-----	-----	

TABLE 1

**MARINO PROPERTY SITE
MIDDLETOWN, CONNECTICUT
GEOPHYSICAL SURVEY FIELD DATA**

Line/ Point No.	X	Y	Conduct- ivity	In- Phase	Conduct- ivity (1)	In- Phase (2)	Magneto- meter	Magneto- meter (3)	Comments
L11, P135	-55	-135	55.90	-4.83	-----	-----	-----	-----	
L11, P140	-55	-140	49.10	-6.76	-----	-----	-----	-----	
L11, P145	-55	-145	50.10	1.25	-----	-----	-----	-----	
L11, P150	-55	-150	51.70	0.71	-----	-----	-----	-----	
L11, P155	-55	-155	53.20	-1.43	-----	-----	-----	-----	
L11, P160	-55	-160	57.60	-0.61	-----	-----	-----	-----	
L11, P165	-55	-165	66.70	-0.84	-----	-----	-----	-----	
L11, P170	-55	-170	70.70	-1.31	-----	-----	-----	-----	
L11, P175	-55	-175	70.60	2.47	-----	-----	-----	-----	
L11, P180	-55	-180	71.80	5.84	-----	-----	-----	-----	
L11, P185	-55	-185	81.10	-1.44	-----	-----	-----	-----	
L11, P190	-55	-190	84.60	-0.78	-----	-----	-----	-----	
L12, P0	-60	0	69.10	-5.69	-----	-----	51919	-----	
L12, P5	-60	-5	67.30	-3.54	-----	-----	-----	-----	
L12, P10	-60	-10	63.30	-4.52	-----	-----	52197	-----	
L12, P15	-60	-15	61.70	-3.05	-----	-----	-----	-----	
L12, P20	-60	-20	63.00	-5.61	-----	-----	52397	-----	
L12, P25	-60	-25	65.10	-7.75	-----	-----	-----	-----	
L12, P30	-60	-30	64.60	-7.04	-----	-----	52041	-----	
L12, P35	-60	-35	60.50	-2.42	-----	-----	-----	-----	
L12, P40	-60	-40	64.80	-0.80	-----	-----	52041	-----	
L12, P45	-60	-45	74.00	-4.42	-----	-----	-----	-----	
L12, P50	-60	-50	69.00	-1.58	-----	-----	52146	-----	
L12, P55	-60	-55	63.90	0.21	-----	-----	-----	-----	
L12, P60	-60	-60	67.20	-4.18	-----	-----	52312	-----	
L12, P65	-60	-65	74.00	-3.29	-----	-----	-----	-----	
L12, P70	-60	-70	71.20	-3.35	-----	-----	52495	-----	
L12, P75	-60	-75	63.30	-2.06	-----	-----	-----	-----	
L12, P80	-60	-80	57.40	3.84	-----	-----	52768	-----	
L12, P85	-60	-85	62.50	3.26	-----	-----	-----	-----	
L12, P90	-60	-90	68.30	-0.67	-----	-----	53211	-----	
L12, P95	-60	-95	62.10	4.09	-----	-----	-----	-----	
L12, P100	-60	-100	54.70	4.02	-----	-----	53283	-----	
L12, P105	-60	-105	58.40	-1.76	-----	-----	-----	-----	
L12, P110	-60	-110	64.10	-6.80	-----	-----	53056	-----	
L12, P115	-60	-115	68.20	-4.47	-----	-----	-----	-----	
L12, P120	-60	-120	66.80	-0.77	-----	-----	52460	-----	
L12, P125	-60	-125	63.00	4.02	-----	-----	-----	-----	
L12, P130	-60	-130	61.70	3.94	-----	-----	52274	-----	
L12, P135	-60	-135	52.20	-10.09	56.2	-3.9	-----	-----	
L12, P140	-60	-140	49.60	-9.71	-----	-----	52623	-----	
L12, P145	-60	-145	55.90	-5.53	-----	-----	-----	-----	
L12, P150	-60	-150	56.20	-4.62	-----	-----	52312	-----	
L12, P155	-60	-155	59.30	-2.02	-----	-----	-----	-----	
L12, P160	-60	-160	64.10	-4.90	-----	-----	52152	-----	
L12, P165	-60	-165	69.20	-3.03	-----	-----	-----	-----	
L12, P170	-60	-170	74.10	-2.66	-----	-----	51912	-----	

TABLE 1

**MARINO PROPERTY SITE
MIDDLETOWN, CONNECTICUT
GEOPHYSICAL SURVEY FIELD DATA**

Line/ Point No.	X	Y	Conduct- ivity	In- Phase	Conduct- ivity (1)	In- Phase (2)	Magneto- meter	Magneto- meter (3)	Comments
L12, P175	-60	-175	73.50	-2.96	-----	-----	-----	-----	
L12, P180	-60	-180	76.20	1.88	-----	-----	51712	-----	
L12, P185	-60	-185	85.20	2.51	-----	-----	-----	-----	
L12, P190	-60	-190	88.40	19.99	-----	-----	50978	-----	4 feet from truck
L13, P0	-65	0	67.30	-1.08	-----	-----	-----	-----	
L13, P5	-65	-5	69.10	-1.21	-----	-----	-----	-----	
L13, P10	-65	-10	68.20	-2.83	-----	-----	-----	-----	
L13, P15	-65	-15	64.70	-2.20	-----	-----	-----	-----	
L13, P20	-65	-20	59.90	-0.20	-----	-----	-----	-----	
L13, P25	-65	-25	64.20	-7.08	-----	-----	-----	-----	
L13, P30	-65	-30	65.90	-7.92	-----	-----	-----	-----	
L13, P35	-65	-35	58.30	-3.74	-----	-----	-----	-----	
L13, P40	-65	-40	54.30	2.95	-----	-----	-----	-----	
L13, P45	-65	-45	67.20	-0.25	-----	-----	-----	-----	
L13, P50	-65	-50	67.90	-0.60	-----	-----	-----	-----	
L13, P55	-65	-55	62.80	-1.10	-----	-----	-----	-----	
L13, P60	-65	-60	60.20	0.17	-----	-----	-----	-----	
L13, P65	-65	-65	64.10	-2.24	-----	-----	-----	-----	
L13, P70	-65	-70	60.90	-1.80	-----	-----	-----	-----	
L13, P75	-65	-75	64.60	-6.85	-----	-----	-----	-----	
L13, P80	-65	-80	64.00	-3.55	-----	-----	-----	-----	
L13, P85	-65	-85	54.90	5.60	-----	-----	-----	-----	
L13, P90	-65	-90	52.20	0.88	-----	-----	-----	-----	
L13, P95	-65	-95	58.50	6.19	-----	-----	-----	-----	
L13, P100	-65	-100	70.40	-3.37	-----	-----	-----	-----	
L13, P105	-65	-105	83.00	-9.35	-----	-----	-----	-----	
L13, P110	-65	-110	82.10	-7.56	-----	-----	-----	-----	
L13, P115	-65	-115	76.60	-7.71	-----	-----	-----	-----	
L13, P120	-65	-120	70.80	-3.81	-----	-----	-----	-----	
L13, P125	-65	-125	66.50	1.76	-----	-----	-----	-----	
L13, P130	-65	-130	63.30	3.44	-----	-----	-----	-----	
L13, P135	-65	-135	60.00	-6.19	-----	-----	-----	-----	
L13, P140	-65	-140	50.80	-5.93	-----	-----	-----	-----	
L13, P145	-65	-145	56.50	-0.47	-----	-----	-----	-----	
L13, P150	-65	-150	59.70	1.25	-----	-----	-----	-----	
L13, P155	-65	-155	67.00	2.43	-----	-----	-----	-----	
L13, P160	-65	-160	69.40	-2.25	-----	-----	-----	-----	
L13, P165	-65	-165	69.00	2.17	-----	-----	-----	-----	
L13, P170	-65	-170	70.00	-0.51	-----	-----	-----	-----	
L13, P175	-65	-175	71.20	-2.54	-----	-----	-----	-----	
L13, P180	-65	-180	69.50	2.17	-----	-----	-----	-----	
L13, P185	-65	-185	71.60	8.28	-----	-----	-----	-----	
L13, P190	-65	-190	98.20	-19.90	-----	-----	-----	-----	Near truck
L14, P0	-70	0	76.20	-9.00	-----	-----	52075	-----	
L14, P5	-70	-5	66.10	-2.05	-----	-----	-----	-----	
L14, P10	-70	-10	59.90	-0.50	-----	-----	52283	-----	
L14, P15	-70	-15	64.20	-2.39	-----	-----	-----	-----	

TABLE 1

**MARINO PROPERTY SITE
MIDDLETOWN, CONNECTICUT
GEOPHYSICAL SURVEY FIELD DATA**

Line/ Point No.	X	Y	Conduct- ivity	In- Phase	Conduct- ivity (1)	In- Phase (2)	Magneto- meter	Magneto- meter (3)	Comments
L14, P20	-70	-20	66.40	-3.38	-----	-----	52178	-----	
L14, P25	-70	-25	66.80	-9.59	69.10	-6.96	-----	-----	
L14, P30	-70	-30	66.10	-9.98	-----	-----	51839	-----	
L14, P35	-70	-35	58.90	-5.05	-----	-----	-----	-----	
L14, P40	-70	-40	60.10	-0.52	-----	-----	51866	-----	
L14, P45	-70	-45	57.70	-1.15	-----	-----	-----	-----	
L14, P50	-70	-50	58.20	-1.87	-----	-----	52178	-----	
L14, P55	-70	-55	58.30	-2.20	-----	-----	-----	-----	
L14, P60	-70	-60	59.10	0.78	-----	-----	52143	-----	
L14, P65	-70	-65	51.20	2.50	-----	-----	-----	-----	
L14, P70	-70	-70	64.00	-1.25	-----	-----	52327	-----	
L14, P75	-70	-75	69.50	-3.92	-----	-----	-----	-----	
L14, P80	-70	-80	63.70	-1.86	-----	-----	52581	-----	
L14, P85	-70	-85	59.10	6.99	-----	-----	-----	-----	
L14, P90	-70	-90	54.50	6.76	-----	-----	53086	-----	
L14, P95	-70	-95	64.80	1.61	-----	-----	-----	-----	
L14, P100	-70	-100	73.30	-5.08	-----	-----	53318	-----	
L14, P105	-70	-105	70.80	-0.50	-----	-----	-----	-----	
L14, P110	-70	-110	75.70	-0.99	-----	-----	53154	-----	
L14, P115	-70	-115	73.40	-8.02	-----	-----	-----	-----	
L14, P120	-70	-120	70.10	-6.79	-----	-----	52696	-----	
L14, P125	-70	-125	57.70	-7.01	-----	-----	-----	-----	
L14, P130	-70	-130	43.10	-19.90	50.2	-13.26	52511	-----	
L14, P135	-70	-135	43.30	-19.90	41.2	-19.90	-----	-----	
L14, P140	-70	-140	45.90	-11.99	-----	-----	52847	-----	
L14, P145	-70	-145	44.20	5.20	-----	-----	-----	-----	
L14, P150	-70	-150	44.80	6.13	-----	-----	52584	-----	
L14, P155	-70	-155	50.10	0.83	-----	-----	-----	-----	
L14, P160	-70	-160	45.90	3.39	-----	-----	52521	-----	
L14, P165	-70	-165	52.10	4.98	-----	-----	-----	-----	
L14, P170	-70	-170	55.50	1.77	-----	-----	52196	-----	
L14, P175	-70	-175	37.90	2.18	-----	-----	-----	-----	
L14, P180	-70	-180	37.20	15.64	34.1	8.98	51494	-----	
L14, P185	-70	-185	66.80	19.90	-----	-----	-----	-----	Next to truck
L15, P0	-75	0	71.50	-4.79	-----	-----	-----	-----	
L15, P5	-75	-5	59.10	-1.78	-----	-----	-----	-----	
L15, P10	-75	-10	60.10	-2.59	-----	-----	-----	-----	
L15, P15	-75	-15	66.70	-2.79	-----	-----	-----	-----	
L15, P20	-75	-20	70.80	-5.67	-----	-----	-----	-----	
L15, P25	-75	-25	68.90	-6.95	-----	-----	-----	-----	
L15, P30	-75	-30	66.90	-7.67	-----	-----	-----	-----	
L15, P35	-75	-35	62.70	-3.84	-----	-----	-----	-----	
L15, P40	-75	-40	60.10	-3.00	-----	-----	-----	-----	
L15, P45	-75	-45	60.00	-2.30	-----	-----	-----	-----	
L15, P50	-75	-50	59.50	-1.00	-----	-----	-----	-----	
L15, P55	-75	-55	64.50	-3.10	-----	-----	-----	-----	
L15, P60	-75	-60	69.10	-4.32	-----	-----	-----	-----	

TABLE 1

**MARINO PROPERTY SITE
MIDDLETOWN, CONNECTICUT
GEOPHYSICAL SURVEY FIELD DATA**

Line/ Point No.	X	Y	Conduct- ivity	In- Phase	Conduct- ivity (1)	In- Phase (2)	Magneto- meter	Magneto- meter (3)	Comments
L15, P65	-75	-65	67.00	-2.10	-----	-----	-----	-----	
L15, P70	-75	-70	65.40	-1.41	-----	-----	-----	-----	
L15, P75	-75	-75	67.40	-1.56	-----	-----	-----	-----	
L15, P80	-75	-80	68.50	-0.63	-----	-----	-----	-----	
L15, P85	-75	-85	69.60	2.36	-----	-----	-----	-----	
L15, P90	-75	-90	57.20	0.44	-----	-----	-----	-----	
L15, P95	-75	-95	61.60	3.76	-----	-----	-----	-----	
L15, P100	-75	-100	52.70	7.99	-----	-----	-----	-----	
L15, P105	-75	-105	49.10	10.65	-----	-----	-----	-----	
L15, P110	-75	-110	57.50	10.73	55.1	11.6	-----	-----	
L15, P115	-75	-115	68.10	1.58	-----	-----	-----	-----	
L15, P120	-75	-120	72.80	-4.20	-----	-----	-----	-----	
L15, P125	-75	-125	66.10	-1.19	-----	-----	-----	-----	
L15, P130	-75	-130	54.00	3.05	-----	-----	-----	-----	
L15, P135	-75	-135	47.90	1.27	-----	-----	-----	-----	
L15, P140	-75	-140	46.20	-2.98	-----	-----	-----	-----	
L15, P145	-75	-145	42.30	1.55	-----	-----	-----	-----	
L15, P150	-75	-150	32.40	4.88	-----	-----	-----	-----	
L15, P155	-75	-155	39.20	3.25	-----	-----	-----	-----	
L15, P160	-75	-160	40.40	7.01	-----	-----	-----	-----	
L15, P165	-75	-165	42.50	0.54	-----	-----	-----	-----	
L15, P170	-75	-170	52.20	-0.69	-----	-----	-----	-----	
L15, P175	-75	-175	55.10	2.45	-----	-----	-----	-----	
L15, P180	-75	-180	38.10	10.92	-----	-----	-----	-----	
L15, P185	-75	-185	77.10	-19.90	-----	-----	-----	-----	Next to truck and car
L16, P0	-80	0	63.30	-2.96	-----	-----	52101	-----	
L16, P5	-80	-5	52.10	-0.61	-----	-----	-----	-----	
L16, P10	-80	-10	51.20	-1.59	-----	-----	52365	-----	
L16, P15	-80	-15	63.40	-6.71	-----	-----	-----	-----	
L16, P20	-80	-20	65.90	-4.31	-----	-----	52109	-----	
L16, P25	-80	-25	66.00	-5.47	-----	-----	-----	-----	
L16, P30	-80	-30	66.20	-6.33	-----	-----	51849	-----	
L16, P35	-80	-35	64.80	-1.25	-----	-----	-----	-----	
L16, P40	-80	-40	65.10	-4.00	-----	-----	51970	-----	
L16, P45	-80	-45	63.20	-1.79	-----	-----	-----	-----	
L16, P50	-80	-50	62.10	-0.72	-----	-----	52300	-----	
L16, P55	-80	-55	64.70	-3.11	-----	-----	-----	-----	
L16, P60	-80	-60	76.60	-5.85	-----	-----	52248	-----	
L16, P65	-80	-65	72.40	-3.75	-----	-----	-----	-----	
L16, P70	-80	-70	68.30	-0.44	-----	-----	52356	-----	
L16, P75	-80	-75	71.20	-0.13	-----	-----	-----	-----	
L16, P80	-80	-80	73.90	-3.93	-----	-----	52797	-----	
L16, P85	-80	-85	71.70	-1.40	-----	-----	-----	-----	
L16, P90	-80	-90	68.20	0.79	-----	-----	53096	-----	
L16, P95	-80	-95	63.20	3.25	-----	-----	-----	-----	
L16, P100	-80	-100	56.10	8.78	-----	-----	53242	-----	
L16, P105	-80	-105	46.60	14.99	-----	-----	-----	-----	

TABLE 1

**MARINO PROPERTY SITE
MIDDLETOWN, CONNECTICUT
GEOPHYSICAL SURVEY FIELD DATA**

Line/ Point No.	X	Y	Conduct- ivity	In- Phase	Conduct- ivity (1)	In- Phase (2)	Magneto- meter	Magneto- meter (3)	Comments
L16, P110	-80	-110	60.80	6.99	-----	-----	53227	-----	
L16, P115	-80	-115	72.40	-1.40	-----	-----	-----	-----	
L16, P120	-80	-120	70.10	-3.20	-----	-----	52817	-----	
L16, P125	-80	-125	61.10	0.33	-----	-----	-----	-----	
L16, P130	-80	-130	52.10	4.05	-----	-----	52561	-----	
L16, P135	-80	-135	47.90	4.10	-----	-----	-----	-----	
L16, P140	-80	-140	51.10	-2.10	-----	-----	52692	-----	
L16, P145	-80	-145	41.60	0.21	-----	-----	-----	-----	
L16, P150	-80	-150	43.50	4.00	-----	-----	52714	-----	
L16, P155	-80	-155	54.10	1.54	-----	-----	-----	-----	
L16, P160	-80	-160	48.20	1.55	-----	-----	52631	-----	
L16, P165	-80	-165	54.00	-0.21	-----	-----	-----	-----	
L16, P170	-80	-170	43.20	2.96	-----	-----	52442	-----	
L16, P175	-80	-175	57.10	8.10	-----	-----	-----	-----	
L16, P180	-80	-180	62.30	13.98	-----	-----	51658	-----	
L16, P185	-80	-185	79.00	19.90	-----	-----	-----	-----	5 feet from cars
L17, P0	-85	0	71.80	-6.79	-----	-----	-----	-----	
L17, P5	-85	-5	67.50	-5.12	-----	-----	-----	-----	
L17, P10	-85	-10	65.50	-4.33	-----	-----	-----	-----	
L17, P15	-85	-15	66.50	-5.61	-----	-----	-----	-----	
L17, P20	-85	-20	70.10	-5.55	-----	-----	-----	-----	
L17, P25	-85	-25	69.20	-5.91	-----	-----	-----	-----	
L17, P30	-85	-30	67.70	-6.12	-----	-----	-----	-----	
L17, P35	-85	-35	68.10	-3.70	-----	-----	-----	-----	
L17, P40	-85	-40	70.20	-4.48	-----	-----	-----	-----	
L17, P45	-85	-45	71.20	-4.62	-----	-----	-----	-----	
L17, P50	-85	-50	69.80	-3.57	-----	-----	-----	-----	
L17, P55	-85	-55	71.90	-4.17	-----	-----	-----	-----	
L17, P60	-85	-60	80.60	-6.70	-----	-----	-----	-----	
L17, P65	-85	-65	83.50	-5.56	-----	-----	-----	-----	
L17, P70	-85	-70	83.40	-3.23	-----	-----	-----	-----	
L17, P75	-85	-75	82.60	-2.86	-----	-----	-----	-----	
L17, P80	-85	-80	82.00	-2.97	-----	-----	-----	-----	
L17, P85	-85	-85	80.30	-3.23	-----	-----	-----	-----	
L17, P90	-85	-90	75.40	-1.85	-----	-----	-----	-----	
L17, P95	-85	-95	73.70	-1.43	-----	-----	-----	-----	
L17, P100	-85	-100	72.20	-0.56	-----	-----	-----	-----	
L17, P105	-85	-105	71.50	0.36	-----	-----	-----	-----	
L17, P110	-85	-110	72.60	1.77	-----	-----	-----	-----	
L17, P115	-85	-115	74.30	-1.64	-----	-----	-----	-----	
L17, P120	-85	-120	69.40	-5.72	-----	-----	-----	-----	
L17, P125	-85	-125	64.40	-2.97	-----	-----	-----	-----	
L17, P130	-85	-130	60.20	-0.97	-----	-----	-----	-----	
L17, P135	-85	-135	61.20	-2.35	-----	-----	-----	-----	
L17, P140	-85	-140	57.60	-3.63	-----	-----	-----	-----	
L17, P145	-85	-145	54.60	-6.28	-----	-----	-----	-----	
L17, P150	-85	-150	52.80	-2.75	-----	-----	-----	-----	

TABLE 1

**MARINO PROPERTY SITE
MIDDLETOWN, CONNECTICUT
GEOPHYSICAL SURVEY FIELD DATA**

Line/ Point No.	X	Y	Conduct- ivity	In- Phase	Conduct- ivity (1)	In- Phase (2)	Magneto- meter	Magneto- meter (3)	Comments
L17, P155	-85	-155	56.30	-1.72	-----	-----	-----	-----	
L17, P160	-85	-160	54.70	-5.01	-----	-----	-----	-----	
L17, P165	-85	-165	55.00	-0.42	-----	-----	-----	-----	
L17, P170	-85	-170	50.20	1.73	-----	-----	-----	-----	
L17, P175	-85	-175	52.50	1.17	-----	-----	-----	-----	
L17, P180	-85	-180	56.50	4.84	-----	-----	-----	-----	
L17, P185	-85	-185	80.40	19.90	-----	-----	-----	-----	5 feet from cars
L18, P0	-90	0	66.50	-5.62	-----	-----	52188	-----	
L18, P5	-90	-5	67.50	-6.76	-----	-----	-----	-----	
L18, P10	-90	-10	67.90	-3.55	-----	-----	52306	-----	
L18, P15	-90	-15	68.70	-6.83	-----	-----	-----	-----	
L18, P20	-90	-20	71.80	-6.93	-----	-----	52174	-----	
L18, P25	-90	-25	71.60	-6.68	-----	-----	-----	-----	
L18, P30	-90	-30	71.80	-5.12	-----	-----	51942	-----	
L18, P35	-90	-35	73.80	-4.30	-----	-----	-----	-----	
L18, P40	-90	-40	70.60	-4.01	-----	-----	52137	-----	
L18, P45	-90	-45	66.20	-3.56	-----	-----	-----	-----	
L18, P50	-90	-50	67.20	-3.15	-----	-----	52720	-----	
L18, P55	-90	-55	79.60	-6.33	-----	-----	-----	-----	
L18, P60	-90	-60	84.70	-6.97	-----	-----	52656	-----	
L18, P65	-90	-65	83.80	-5.09	-----	-----	-----	-----	
L18, P70	-90	-70	83.30	-5.58	-----	-----	52605	-----	
L18, P75	-90	-75	82.30	-4.12	-----	-----	-----	-----	
L18, P80	-90	-80	82.50	-2.94	-----	-----	52934	-----	
L18, P85	-90	-85	83.80	-4.69	-----	-----	-----	-----	
L18, P90	-90	-90	81.60	-5.07	-----	-----	53115	-----	
L18, P95	-90	-95	78.60	-4.17	-----	-----	-----	-----	
L18, P100	-90	-100	76.50	-2.19	-----	-----	53095	-----	
L18, P105	-90	-105	78.70	0.03	-----	-----	-----	-----	
L18, P110	-90	-110	78.20	0.54	-----	-----	52904	-----	
L18, P115	-90	-115	74.50	-3.07	-----	-----	-----	-----	
L18, P120	-90	-120	67.30	-4.76	-----	-----	52822	-----	
L18, P125	-90	-125	61.80	-2.13	-----	-----	-----	-----	
L18, P130	-90	-130	62.10	-2.16	-----	-----	52802	-----	
L18, P135	-90	-135	60.10	-3.02	-----	-----	-----	-----	
L18, P140	-90	-140	55.60	-5.05	-----	-----	52933	-----	
L18, P145	-90	-145	51.30	-0.03	-----	-----	-----	-----	
L18, P150	-90	-150	51.00	0.12	-----	-----	52793	-----	
L18, P155	-90	-155	56.50	-7.43	-----	-----	-----	-----	
L18, P160	-90	-160	56.50	-6.69	-----	-----	52714	-----	
L18, P165	-90	-165	49.80	-1.18	-----	-----	-----	-----	
L18, P170	-90	-170	46.70	-1.15	-----	-----	52531	-----	
L18, P175	-90	-175	44.40	3.11	-----	-----	-----	-----	
L18, P180	-90	-180	46.80	5.07	-----	-----	51979	-----	Near cars
L18, P185	-90	-185	77.80	19.85	-----	-----	-----	-----	
L19, P0	-95	0	62.90	-3.80	-----	-----	-----	-----	
L19, P5	-95	-5	64.00	-3.70	-----	-----	-----	-----	

TABLE 1

**MARINO PROPERTY SITE
MIDDLETOWN, CONNECTICUT
GEOPHYSICAL SURVEY FIELD DATA**

Line/ Point No.	X	Y	Conduct- ivity	In- Phase	Conduct- ivity (1)	In- Phase (2)	Magneto- meter	Magneto- meter (3)	Comments
L19, P10	-95	-10	66.50	-4.61	-----	-----	-----	-----	
L19, P15	-95	-15	68.10	-4.33	-----	-----	-----	-----	
L19, P20	-95	-20	72.20	-7.00	-----	-----	-----	-----	
L19, P25	-95	-25	75.20	-8.78	-----	-----	-----	-----	
L19, P30	-95	-30	79.10	-8.02	-----	-----	-----	-----	
L19, P35	-95	-35	79.70	-6.03	-----	-----	-----	-----	
L19, P40	-95	-40	72.50	-8.33	-----	-----	-----	-----	
L19, P45	-95	-45	64.60	-5.08	-----	-----	-----	-----	
L19, P50	-95	-50	64.30	-1.58	-----	-----	-----	-----	
L19, P55	-95	-55	75.70	-8.02	-----	-----	-----	-----	
L19, P60	-95	-60	86.90	-7.14	-----	-----	-----	-----	
L19, P65	-95	-65	87.80	-6.10	-----	-----	-----	-----	
L19, P70	-95	-70	87.60	-6.12	-----	-----	-----	-----	
L19, P75	-95	-75	85.20	-6.11	-----	-----	-----	-----	
L19, P80	-95	-80	82.90	-4.71	-----	-----	-----	-----	
L19, P85	-95	-85	86.80	-5.00	-----	-----	-----	-----	
L19, P90	-95	-90	84.20	-4.65	-----	-----	-----	-----	
L19, P95	-95	-95	78.50	-1.40	-----	-----	-----	-----	
L19, P100	-95	-100	84.90	-5.43	-----	-----	-----	-----	
L19, P105	-95	-105	91.50	-6.06	87.8	-4.34	-----	-----	
L19, P110	-95	-110	83.00	-0.48	-----	-----	-----	-----	
L19, P115	-95	-115	73.10	0.08	-----	-----	-----	-----	
L19, P120	-95	-120	69.80	-1.93	-----	-----	-----	-----	
L19, P125	-95	-125	67.10	-5.62	-----	-----	-----	-----	
L19, P130	-95	-130	62.40	-6.94	-----	-----	-----	-----	
L19, P135	-95	-135	54.50	-1.95	-----	-----	-----	-----	
L19, P140	-95	-140	43.20	-0.60	-----	-----	-----	-----	
L19, P145	-95	-145	39.80	0.41	-----	-----	-----	-----	
L19, P150	-95	-150	49.80	-1.35	-----	-----	-----	-----	
L19, P155	-95	-155	60.10	-7.74	-----	-----	-----	-----	
L19, P160	-95	-160	59.00	-7.25	57.7	-7.01	-----	-----	
L19, P165	-95	-165	55.10	-3.02	-----	-----	-----	-----	
L19, P170	-95	-170	50.70	-3.85	-----	-----	-----	-----	
L19, P175	-95	-175	51.80	-1.27	-----	-----	-----	-----	
L19, P180	-95	-180	51.10	-1.23	-----	-----	-----	-----	
L19, P185	-95	-185	61.60	-0.31	-----	-----	-----	-----	
L20, P0	-100	0	62.60	-2.10	-----	-----	52131	-----	
L20, P5	-100	-5	63.20	-3.97	-----	-----	-----	-----	
L20, P10	-100	-10	60.80	-1.08	-----	-----	52186	-----	
L20, P15	-100	-15	64.60	-4.03	-----	-----	-----	-----	
L20, P20	-100	-20	73.60	-7.40	-----	-----	52327	-----	
L20, P25	-100	-25	80.30	-8.93	79.6	-9.16	-----	-----	
L20, P30	-100	-30	83.80	-8.12	-----	-----	52076	-----	
L20, P35	-100	-35	80.60	-7.50	-----	-----	-----	-----	
L20, P40	-100	-40	71.00	-5.80	-----	-----	52279	-----	
L20, P45	-100	-45	70.20	-2.94	-----	-----	-----	-----	
L20, P50	-100	-50	77.50	-5.97	-----	-----	52801	-----	

TABLE 1

**MARINO PROPERTY SITE
MIDDLETOWN, CONNECTICUT
GEOPHYSICAL SURVEY FIELD DATA**

Line/ Point No.	X	Y	Conduct- ivity	In- Phase	Conduct- ivity (1)	In- Phase (2)	Magneto- meter	Magneto- meter (3)	Comments
L20, P55	-100	-55	85.60	-8.23	-----	-----	-----	-----	
L20, P60	-100	-60	89.90	-7.00	-----	-----	52943	-----	
L20, P65	-100	-65	89.90	-6.04	-----	-----	-----	-----	
L20, P70	-100	-70	86.50	-4.04	-----	-----	53033	-----	
L20, P75	-100	-75	83.20	-4.43	-----	-----	-----	-----	
L20, P80	-100	-80	86.50	-5.70	-----	-----	53016	-----	
L20, P85	-100	-85	87.50	-6.80	-----	-----	-----	-----	
L20, P90	-100	-90	80.30	4.00	-----	-----	52999	-----	
L20, P95	-100	-95	76.60	-2.23	-----	-----	-----	-----	
L20, P100	-100	-100	82.40	-5.38	-----	-----	53035	-----	
L20, P105	-100	-105	84.30	-2.67	-----	-----	-----	-----	
L20, P110	-100	-110	75.80	-0.65	-----	-----	52854	-----	
L20, P115	-100	-115	68.50	1.46	-----	-----	-----	-----	
L20, P120	-100	-120	68.90	-3.24	-----	-----	53188	-----	
L20, P125	-100	-125	64.50	-5.00	-----	-----	-----	-----	
L20, P130	-100	-130	56.40	3.89	-----	-----	53205	-----	
L20, P135	-100	-135	49.90	-3.06	-----	-----	-----	-----	
L20, P140	-100	-140	42.10	-2.31	-----	-----	53214	-----	
L20, P145	-100	-145	47.60	-2.66	-----	-----	-----	-----	
L20, P150	-100	-150	52.60	3.48	-----	-----	53093	-----	
L20, P155	-100	-155	60.10	-5.93	-----	-----	-----	-----	
L20, P160	-100	-160	55.60	-5.75	-----	-----	52711	-----	
L20, P165	-100	-165	51.60	-1.28	-----	-----	-----	-----	
L20, P170	-100	-170	56.60	-2.54	-----	-----	52548	-----	
L20, P175	-100	-175	63.50	-5.25	-----	-----	-----	-----	
L20, P180	-100	-180	65.20	-4.23	-----	-----	51828	-----	
L20, P185	-100	-185	65.50	4.43	-----	-----	-----	-----	
L21, P0	-105	0	47.20	1.27	-----	-----	-----	-----	
L21, P5	-105	-5	53.10	-8.75	57.3	-4.44	-----	-----	
L21, P10	-105	-10	36.90	-1.82	-----	-----	-----	-----	
L21, P15	-105	-15	39.80	-8.24	-----	-----	-----	-----	
L21, P20	-105	-20	52.30	-6.10	-----	-----	-----	-----	
L21, P25	-105	-25	65.10	-9.54	-----	-----	-----	-----	
L21, P30	-105	-30	79.60	-7.00	-----	-----	-----	-----	
L21, P35	-105	-35	78.20	-4.43	-----	-----	-----	-----	
L21, P40	-105	-40	68.50	-1.40	-----	-----	-----	-----	
L21, P45	-105	-45	68.60	-4.60	-----	-----	-----	-----	
L21, P50	-105	-50	76.20	-5.17	-----	-----	-----	-----	
L21, P55	-105	-55	78.40	-2.23	-----	-----	-----	-----	
L21, P60	-105	-60	78.60	-2.20	-----	-----	-----	-----	
L21, P65	-105	-65	75.10	-2.70	-----	-----	-----	-----	
L21, P70	-105	-70	73.10	-2.56	-----	-----	-----	-----	
L21, P75	-105	-75	75.00	-2.30	-----	-----	-----	-----	
L21, P80	-105	-80	89.50	-2.36	-----	-----	-----	-----	
L21, P85	-105	-85	94.60	-3.01	-----	-----	-----	-----	
L21, P90	-105	-90	82.70	-1.93	-----	-----	-----	-----	
L21, P95	-105	-95	75.60	1.37	-----	-----	-----	-----	

TABLE 1

**MARINO PROPERTY SITE
MIDDLETOWN, CONNECTICUT
GEOPHYSICAL SURVEY FIELD DATA**

Line/ Point No.	X	Y	Conduct- ivity	In- Phase	Conduct- ivity (1)	In- Phase (2)	Magneto- meter	Magneto- meter (3)	Comments
L21, P100	-105	-100	84.10	-3.80	-----	-----	-----	-----	
L21, P105	-105	-105	84.10	-6.15	-----	-----	-----	-----	
L21, P110	-105	-110	71.20	1.34	-----	-----	-----	-----	
L21, P115	-105	-115	54.50	6.92	-----	-----	-----	-----	
L21, P120	-105	-120	53.50	3.04	-----	-----	-----	-----	
L21, P125	-105	-125	56.60	-0.19	-----	-----	-----	-----	
L21, P130	-105	-130	49.90	0.83	-----	-----	-----	-----	
L21, P135	-105	-135	47.80	-5.76	-----	-----	-----	-----	
L21, P140	-105	-140	51.20	-7.60	-----	-----	-----	-----	
L21, P145	-105	-145	53.30	-4.02	-----	-----	-----	-----	
L21, P150	-105	-150	54.20	-3.65	-----	-----	-----	-----	
L21, P155	-105	-155	53.60	-3.82	-----	-----	-----	-----	
L21, P160	-105	-160	44.30	-0.61	-----	-----	-----	-----	
L21, P165	-105	-165	45.70	-3.27	-----	-----	-----	-----	
L21, P170	-105	-170	54.70	-4.80	-----	-----	-----	-----	
L21, P175	-105	-175	62.50	-5.50	-----	-----	-----	-----	
L21, P180	-105	-180	64.40	-3.04	-----	-----	-----	-----	
L21, P185	-105	-185	60.50	0.91	-----	-----	-----	-----	
L21, P190	-105	-190	64.10	10.71	-----	-----	-----	-----	
L22, P0	-110	0	55.60	-0.84	-----	-----	51919	-----	
L22, P5	-110	-5	55.30	-5.68	-----	-----	-----	-----	
L22, P10	-110	-10	46.10	-6.86	-----	-----	51751	54753	
L22, P15	-110	-15	30.90	-3.64	-----	-----	-----	-----	
L22, P20	-110	-20	39.90	-5.12	-----	-----	52263	-----	
L22, P25	-110	-25	60.30	-8.12	-----	-----	-----	-----	
L22, P30	-110	-30	67.40	-6.71	-----	-----	52327	-----	
L22, P35	-110	-35	68.40	-3.95	-----	-----	-----	-----	
L22, P40	-110	-40	71.70	-3.29	-----	-----	52387	-----	
L22, P45	-110	-45	76.50	-4.90	-----	-----	-----	-----	
L22, P50	-110	-50	83.40	-3.30	-----	-----	52595	-----	
L22, P55	-110	-55	81.00	-2.19	-----	-----	-----	-----	
L22, P60	-110	-60	76.60	-1.40	-----	-----	52954	-----	
L22, P65	-110	-65	68.30	-1.17	-----	-----	-----	-----	
L22, P70	-110	-70	63.50	-1.65	-----	-----	53409	-----	
L22, P75	-110	-75	72.10	-4.30	-----	-----	-----	-----	
L22, P80	-110	-80	86.90	-0.85	-----	-----	53244	-----	
L22, P85	-110	-85	88.40	-0.22	-----	-----	-----	-----	
L22, P90	-110	-90	82.20	-1.44	-----	-----	53077	-----	
L22, P95	-110	-95	82.50	-0.30	-----	-----	-----	-----	
L22, P100	-110	-100	86.20	-2.50	-----	-----	53077	-----	
L22, P105	-110	-105	79.80	-2.39	-----	-----	-----	-----	
L22, P110	-110	-110	62.90	0.22	-----	-----	53101	-----	
L22, P115	-110	-115	55.10	7.05	-----	-----	-----	-----	
L22, P120	-110	-120	56.50	-4.02	-----	-----	53668	-----	
L22, P125	-110	-125	51.50	-4.30	-----	-----	-----	-----	
L22, P130	-110	-130	44.40	-7.10	-----	-----	53582	-----	
L22, P135	-110	-135	42.30	-7.30	-----	-----	-----	-----	

TABLE 1

**MARINO PROPERTY SITE
MIDDLETOWN, CONNECTICUT
GEOPHYSICAL SURVEY FIELD DATA**

Line/ Point No.	X	Y	Conduct- ivity	In- Phase	Conduct- ivity (1)	In- Phase (2)	Magneto- meter	Magneto- meter (3)	Comments
L22, P140	-110	-140	51.80	-5.39	-----	-----	53280	-----	
L22, P145	-110	-145	48.20	-8.60	-----	-----	-----	-----	
L22, P150	-110	-150	58.30	-7.30	-----	-----	52921	-----	
L22, P155	-110	-155	61.30	-6.15	-----	-----	-----	-----	
L22, P160	-110	-160	57.40	-6.45	-----	-----	52666	-----	
L22, P165	-110	-165	60.30	-7.00	-----	-----	-----	-----	
L22, P170	-110	-170	63.50	-5.84	-----	-----	52264	-----	
L22, P175	-110	-175	60.50	-4.29	-----	-----	-----	-----	
L22, P180	-110	-180	52.70	-2.10	-----	-----	51604	-----	
L22, P185	-110	-185	56.00	6.43	-----	-----	-----	-----	
L22, P190	-110	-190	-----	-----	-----	-----	49388	-----	
L23, P0	-115	0	48.90	1.79	-----	-----	-----	-----	
L23, P5	-115	-5	50.40	-0.30	-----	-----	-----	-----	
L23, P10	-115	-10	48.90	-3.68	-----	-----	-----	-----	
L23, P15	-115	-15	43.20	-2.05	-----	-----	-----	-----	
L23, P20	-115	-20	48.20	-5.37	-----	-----	-----	-----	
L23, P25	-115	-25	57.10	-6.10	-----	-----	-----	-----	
L23, P30	-115	-30	64.50	-7.94	-----	-----	-----	-----	
L23, P35	-115	-35	71.80	-4.99	-----	-----	-----	-----	
L23, P40	-115	-40	75.70	-5.70	-----	-----	-----	-----	
L23, P45	-115	-45	85.30	-7.60	-----	-----	-----	-----	
L23, P50	-115	-50	87.00	-5.82	-----	-----	-----	-----	
L23, P55	-115	-55	79.10	-2.35	-----	-----	-----	-----	
L23, P60	-115	-60	65.50	0.29	-----	-----	-----	-----	
L23, P65	-115	-65	54.70	1.79	-----	-----	-----	-----	
L23, P70	-115	-70	58.10	-0.46	-----	-----	-----	-----	
L23, P75	-115	-75	71.60	0.34	-----	-----	-----	-----	
L23, P80	-115	-80	87.30	-3.95	-----	-----	-----	-----	
L23, P85	-115	-85	88.90	0.64	-----	-----	-----	-----	
L23, P90	-115	-90	81.10	2.15	-----	-----	-----	-----	
L23, P95	-115	-95	82.70	-1.62	-----	-----	-----	-----	
L23, P100	-115	-100	82.20	-2.80	-----	-----	-----	-----	
L23, P105	-115	-105	79.60	-2.30	-----	-----	-----	-----	
L23, P110	-115	-110	73.40	-3.30	-----	-----	-----	-----	
L23, P115	-115	-115	66.10	-2.25	-----	-----	-----	-----	
L23, P120	-115	-120	61.60	-2.05	-----	-----	-----	-----	
L23, P125	-115	-125	62.30	-4.22	-----	-----	-----	-----	
L23, P130	-115	-130	61.80	-5.90	-----	-----	-----	-----	
L23, P135	-115	-135	59.80	-4.40	-----	-----	-----	-----	
L23, P140	-115	-140	60.70	-6.23	-----	-----	-----	-----	
L23, P145	-115	-145	65.10	-8.07	-----	-----	-----	-----	
L23, P150	-115	-150	63.30	-7.86	-----	-----	-----	-----	
L23, P155	-115	-155	58.90	-6.50	-----	-----	-----	-----	
L23, P160	-115	-160	58.50	-6.30	-----	-----	-----	-----	
L23, P165	-115	-165	59.20	-5.86	-----	-----	-----	-----	
L23, P170	-115	-170	60.30	-5.27	-----	-----	-----	-----	
L23, P175	-115	-175	60.70	-4.62	-----	-----	-----	-----	

TABLE 1

**MARINO PROPERTY SITE
MIDDLETOWN, CONNECTICUT
GEOPHYSICAL SURVEY FIELD DATA**

Line/ Point No.	X	Y	Conduct- ivity	In- Phase	Conduct- ivity (1)	In- Phase (2)	Magneto- meter	Magneto- meter (3)	Comments
L23, P180	-115	-180	57.90	-1.60	-----	-----	-----	-----	.
L23, P185	-115	-185	62.80	8.40	-----	-----	-----	-----	.
L24, P0	-120	0	56.00	-3.62	-----	-----	51612	-----	Began @ 0830 hrs, June 24
L24, P5	-120	-5	55.30	-2.20	-----	-----	-----	-----	
L24, P10	-120	-10	56.80	-5.49	-----	-----	51622	-----	
L24, P15	-120	-15	60.10	-5.01	-----	-----	-----	-----	
L24, P20	-120	-20	64.60	-2.30	-----	-----	51822	-----	
L24, P25	-120	-25	66.40	-8.00	-----	-----	-----	-----	
L24, P30	-120	-30	77.10	-7.66	-----	-----	52123	-----	
L24, P35	-120	-35	83.50	-6.57	-----	-----	-----	-----	
L24, P40	-120	-40	84.90	-5.10	-----	-----	52353	-----	
L24, P45	-120	-45	89.30	-6.47	-----	-----	-----	-----	
L24, P50	-120	-50	90.80	-7.09	-----	-----	52539	-----	
L24, P55	-120	-55	84.80	-5.56	-----	-----	-----	-----	
L24, P60	-120	-60	76.30	-1.49	-----	-----	52782	-----	
L24, P65	-120	-65	69.00	-2.11	-----	-----	-----	-----	
L24, P70	-120	-70	71.20	-2.24	-----	-----	53615	-----	
L24, P75	-120	-75	82.10	-3.90	-----	-----	-----	-----	
L24, P80	-120	-80	93.50	-5.77	-----	-----	53731	53738	
L24, P85	-120	-85	90.10	-2.78	-----	-----	-----	-----	
L24, P90	-120	-90	86.20	-3.00	-----	-----	53297	-----	
L24, P95	-120	-95	84.00	-5.98	-----	-----	-----	-----	
L24, P100	-120	-100	81.00	-4.01	-----	-----	52944	-----	
L24, P105	-120	-105	78.40	-2.00	-----	-----	-----	-----	
L24, P110	-120	-110	74.80	-2.62	-----	-----	53205	-----	
L24, P115	-120	-115	70.60	-5.19	-----	-----	-----	-----	
L24, P120	-120	-120	69.50	-6.15	-----	-----	53776	-----	
L24, P125	-120	-125	69.70	-6.47	-----	-----	-----	-----	
L24, P130	-120	-130	67.80	-5.00	-----	-----	53869	-----	
L24, P135	-120	-135	65.10	-4.49	-----	-----	-----	-----	
L24, P140	-120	-140	65.30	-6.20	-----	-----	53463	53470	
L24, P145	-120	-145	63.00	-7.60	-----	-----	-----	-----	
L24, P150	-120	-150	61.80	-6.30	-----	-----	52970	-----	
L24, P155	-120	-155	57.30	-5.52	-----	-----	-----	-----	
L24, P160	-120	-160	55.60	-6.00	-----	-----	52620	-----	
L24, P165	-120	-165	56.00	-6.25	-----	-----	-----	-----	
L24, P170	-120	-170	59.00	-5.87	-----	-----	52131	-----	
L24, P175	-120	-175	58.20	-5.00	-----	-----	-----	-----	
L24, P180	-120	-180	57.00	-3.00	-----	-----	51496	-----	.
L24, P185	-120	-185	60.00	6.14	-----	-----	-----	-----	
L24, P190	-120	-190	51.9	-19.9	-----	-----	48678	-----	Next to trailer
L25, P0	-125	0	34.70	1.22	-----	-----	-----	-----	
L25, P5	-125	-5	42.00	2.60	-----	-----	-----	-----	
L25, P10	-125	-10	53.80	0.31	-----	-----	-----	-----	
L25, P15	-125	-15	54.40	-0.88	-----	-----	-----	-----	
L25, P20	-125	-20	52.70	-2.79	-----	-----	-----	-----	
L25, P25	-125	-25	58.30	-0.68	-----	-----	-----	-----	

TABLE 1

**MARINO PROPERTY SITE
MIDDLETOWN, CONNECTICUT
GEOPHYSICAL SURVEY FIELD DATA**

Line/ Point No.	X	Y	Conduct- ivity	In- Phase	Conduct- ivity (1)	In- Phase (2)	Magneto- meter	Magneto- meter (3)	Comments
L25, P30	-125	-30	73.60	-3.21	-----	-----	-----	-----	
L25, P35	-125	-35	83.00	-5.42	-----	-----	-----	-----	
L25, P40	-125	-40	90.40	-6.80	-----	-----	-----	-----	
L25, P45	-125	-45	94.40	-7.50	-----	-----	-----	-----	
L25, P50	-125	-50	94.80	-8.23	-----	-----	-----	-----	
L25, P55	-125	-55	93.40	-8.40	-----	-----	-----	-----	
L25, P60	-125	-60	90.50	-10.48	94.2	-10.43	-----	-----	
L25, P65	-125	-65	85.20	-4.20	-----	-----	-----	-----	
L25, P70	-125	-70	80.90	-3.70	-----	-----	-----	-----	
L25, P75	-125	-75	84.80	-5.00	-----	-----	-----	-----	
L25, P80	-125	-80	90.80	-5.85	86.8	-5.14	-----	-----	
L25, P85	-125	-85	89.60	-4.92	-----	-----	-----	-----	
L25, P90	-125	-90	85.30	-7.32	-----	-----	-----	-----	
L25, P95	-125	-95	82.10	-7.90	-----	-----	-----	-----	
L25, P100	-125	-100	79.80	-5.18	-----	-----	-----	-----	
L25, P105	-125	-105	77.10	-3.85	-----	-----	-----	-----	
L25, P110	-125	-110	74.50	-2.14	-----	-----	-----	-----	
L25, P115	-125	-115	72.50	-3.68	-----	-----	-----	-----	
L25, P120	-125	-120	74.50	-7.06	-----	-----	-----	-----	
L25, P125	-125	-125	74.20	-6.38	-----	-----	-----	-----	
L25, P130	-125	-130	69.80	-5.85	-----	-----	-----	-----	
L25, P135	-125	-135	67.70	-5.12	-----	-----	-----	-----	
L25, P140	-125	-140	66.20	-6.10	-----	-----	-----	-----	
L25, P145	-125	-145	64.50	-7.58	-----	-----	-----	-----	
L25, P150	-125	-150	62.70	-6.46	-----	-----	-----	-----	
L25, P155	-125	-155	58.20	-5.72	-----	-----	-----	-----	
L25, P160	-125	-160	56.20	-5.87	-----	-----	-----	-----	
L25, P165	-125	-165	55.00	-5.72	-----	-----	-----	-----	
L25, P170	-125	-170	57.00	-4.91	-----	-----	-----	-----	
L25, P175	-125	-175	56.50	-4.75	-----	-----	-----	-----	
L25, P180	-125	-180	54.90	-3.92	-----	-----	-----	-----	
L25, P185	-125	-185	59.00	1.93	-----	-----	-----	-----	
L25, P190	-125	-190	76.5	-19.9	-----	-----	-----	-----	Next to trailer
L26, P0	-130	0	46.80	0.02	-----	-----	51402	-----	
L26, P5	-130	-5	45.00	0.38	-----	-----	-----	-----	
L26, P10	-130	-10	53.00	-1.60	-----	-----	51595	-----	
L26, P15	-130	-15	56.00	-3.34	-----	-----	-----	-----	
L26, P20	-130	-20	50.00	-2.91	-----	-----	51585	-----	
L26, P25	-130	-25	61.80	-2.32	-----	-----	-----	-----	
L26, P30	-130	-30	77.10	-4.30	-----	-----	52036	-----	
L26, P35	-130	-35	79.50	-2.94	-----	-----	-----	-----	
L26, P40	-130	-40	99.40	-7.86	100.8	-8.23	52250	-----	
L26, P45	-130	-45	97.20	-7.20	-----	-----	-----	-----	
L26, P50	-130	-50	94.50	-7.75	-----	-----	52568	-----	
L26, P55	-130	-55	95.30	-8.51	-----	-----	-----	-----	
L26, P60	-130	-60	95.50	-10.03	-----	-----	52768	-----	
L26, P65	-130	-65	89.00	-4.31	-----	-----	-----	-----	

TABLE 1

**MARINO PROPERTY SITE
MIDDLETOWN, CONNECTICUT
GEOPHYSICAL SURVEY FIELD DATA**

Line/ Point No.	X	Y	Conduct- ivity	In- Phase	Conduct- ivity (1)	In- Phase (2)	Magneto- meter	Magneto- meter (3)	Comments
L26, P70	-130	-70	87.20	-2.55	-----	-----	53492	-----	
L26, P75	-130	-75	86.20	-3.23	-----	-----	-----	-----	
L26, P80	-130	-80	83.50	-0.80	-----	-----	53874	-----	
L26, P85	-130	-85	85.00	-4.44	-----	-----	-----	-----	
L26, P90	-130	-90	85.40	-8.64	-----	-----	53443	-----	
L26, P95	-130	-95	82.00	-7.17	-----	-----	-----	-----	
L26, P100	-130	-100	78.90	-4.51	-----	-----	52888	-----	
L26, P105	-130	-105	76.20	-5.31	-----	-----	-----	-----	
L26, P110	-130	-110	76.10	-4.70	-----	-----	53004	-----	
L26, P115	-130	-115	75.70	-4.54	-----	-----	-----	-----	
L26, P120	-130	-120	76.00	-5.34	-----	-----	53635	-----	
L26, P125	-130	-125	74.10	-6.72	-----	-----	-----	-----	
L26, P130	-130	-130	68.70	-7.11	-----	-----	54013	54024	
L26, P135	-130	-135	66.10	-5.15	-----	-----	-----	-----	
L26, P140	-130	-140	63.30	-6.21	-----	-----	53819	-----	
L26, P145	-130	-145	63.90	-6.94	-----	-----	-----	-----	
L26, P150	-130	-150	62.10	-5.76	-----	-----	53207	-----	
L26, P155	-130	-155	57.90	-5.38	-----	-----	-----	-----	
L26, P160	-130	-160	54.70	-5.38	-----	-----	52669	-----	
L26, P165	-130	-165	54.50	-5.17	-----	-----	-----	-----	
L26, P170	-130	-170	55.20	-4.76	-----	-----	52151	-----	
L26, P175	-130	-175	54.10	-4.75	-----	-----	-----	-----	
L26, P180	-130	-180	53.40	-3.92	-----	-----	51609	-----	
L26, P185	-130	-185	54.30	-0.04	-----	-----	-----	-----	
L26, P190	-130	-190	61.1	8.45	-----	-----	50462	-----	Near trailer
L27, P0	-135	0	54.60	1.47	-----	-----	-----	-----	
L27, P5	-135	-5	56.20	0.54	-----	-----	-----	-----	
L27, P10	-135	-10	57.20	-0.69	-----	-----	-----	-----	
L27, P15	-135	-15	62.40	0.31	-----	-----	-----	-----	
L27, P20	-135	-20	61.20	-1.71	-----	-----	-----	-----	
L27, P25	-135	-25	61.20	-1.87	-----	-----	-----	-----	
L27, P30	-135	-30	75.10	-2.96	-----	-----	-----	-----	
L27, P35	-135	-35	89.00	-3.80	-----	-----	-----	-----	
L27, P40	-135	-40	99.00	-4.69	-----	-----	-----	-----	
L27, P45	-135	-45	96.00	-4.00	95.8	-3.59	-----	-----	
L27, P50	-135	-50	90.10	-6.28	-----	-----	-----	-----	
L27, P55	-135	-55	87.20	-5.80	-----	-----	-----	-----	
L27, P60	-135	-60	86.80	-3.06	-----	-----	-----	-----	
L27, P65	-135	-65	90.20	-4.37	-----	-----	-----	-----	
L27, P70	-135	-70	90.30	-4.03	-----	-----	-----	-----	
L27, P75	-135	-75	85.10	-0.76	-----	-----	-----	-----	
L27, P80	-135	-80	83.10	0.54	-----	-----	-----	-----	
L27, P85	-135	-85	83.00	-3.82	-----	-----	-----	-----	
L27, P90	-135	-90	81.60	-8.39	-----	-----	-----	-----	
L27, P95	-135	-95	77.80	-6.28	-----	-----	-----	-----	
L27, P100	-135	-100	76.10	-4.66	-----	-----	-----	-----	
L27, P105	-135	-105	76.90	-5.82	-----	-----	-----	-----	

TABLE 1

**MARINO PROPERTY SITE
MIDDLETOWN, CONNECTICUT
GEOPHYSICAL SURVEY FIELD DATA**

Line/ Point No.	X	Y	Conduct- ivity	In- Phase	Conduct- ivity (1)	In- Phase (2)	Magneto- meter	Magneto- meter (3)	Comments
L27, P110	-135	-110	79.10	-6.85	-----	-----	-----	-----	
L27, P115	-135	-115	79.50	-5.86	-----	-----	-----	-----	
L27, P120	-135	-120	79.00	-4.98	-----	-----	-----	-----	
L27, P125	-135	-125	79.80	-2.56	-----	-----	-----	-----	
L27, P130	-135	-130	74.80	-3.04	-----	-----	-----	-----	
L27, P135	-135	-135	67.10	-7.00	-----	-----	-----	-----	
L27, P140	-135	-140	61.10	-5.91	-----	-----	-----	-----	
L27, P145	-135	-145	61.10	-5.03	-----	-----	-----	-----	
L27, P150	-135	-150	64.60	-4.89	-----	-----	-----	-----	
L27, P155	-135	-155	59.90	-4.87	-----	-----	-----	-----	
L27, P160	-135	-160	54.80	-5.36	-----	-----	-----	-----	
L27, P165	-135	-165	54.20	-5.22	-----	-----	-----	-----	
L27, P170	-135	-170	53.00	-4.82	-----	-----	-----	-----	
L27, P175	-135	-175	52.10	-4.79	-----	-----	-----	-----	
L27, P180	-135	-180	51.00	-3.82	-----	-----	-----	-----	
L27, P185	-135	-185	49.20	-2.66	-----	-----	-----	-----	
L27, P190	-135	-190	49.6	-0.74	-----	-----	-----	-----	
L28, P0	-140	0	56.60	1.25	-----	-----	51521	-----	
L28, P5	-140	-5	56.80	-0.97	-----	-----	-----	-----	
L28, P10	-140	-10	59.40	-0.38	-----	-----	51689	-----	
L28, P15	-140	-15	57.60	2.84	-----	-----	-----	-----	
L28, P20	-140	-20	59.90	2.61	-----	-----	51847	-----	
L28, P25	-140	-25	68.90	-2.37	-----	-----	-----	-----	
L28, P30	-140	-30	78.80	-4.46	-----	-----	52232	-----	
L28, P35	-140	-35	88.50	-4.52	-----	-----	-----	-----	
L28, P40	-140	-40	97.00	-2.74	-----	-----	52384	-----	
L28, P45	-140	-45	95.00	-4.10	-----	-----	-----	-----	
L28, P50	-140	-50	90.10	-4.60	-----	-----	52509	-----	
L28, P55	-140	-55	88.10	-4.80	-----	-----	-----	-----	
L28, P60	-140	-60	84.00	-0.32	-----	-----	52714	-----	
L28, P65	-140	-65	88.60	-2.25	-----	-----	-----	-----	
L28, P70	-140	-70	90.20	-3.94	-----	-----	53139	-----	
L28, P75	-140	-75	86.50	-1.44	-----	-----	-----	-----	
L28, P80	-140	-80	85.30	-4.41	-----	-----	53259	-----	
L28, P85	-140	-85	84.80	-8.90	-----	-----	-----	-----	
L28, P90	-140	-90	84.10	-9.40	82.9	-8.13	53040	-----	
L28, P95	-140	-95	80.50	-8.31	-----	-----	-----	-----	
L28, P100	-140	-100	76.80	-6.50	-----	-----	52699	-----	
L28, P105	-140	-105	77.30	-6.12	-----	-----	-----	-----	
L28, P110	-140	-110	78.80	-7.72	-----	-----	52785	-----	
L28, P115	-140	-115	78.10	-5.36	-----	-----	-----	-----	
L28, P120	-140	-120	78.00	-4.10	-----	-----	53247	-----	
L28, P125	-140	-125	77.00	-2.43	-----	-----	-----	-----	
L28, P130	-140	-130	71.60	-3.93	-----	-----	53825	-----	
L28, P135	-140	-135	68.20	-6.22	-----	-----	-----	-----	
L28, P140	-140	-140	64.30	-5.31	-----	-----	53793	-----	
L28, P145	-140	-145	60.90	-4.61	-----	-----	-----	-----	

TABLE 1

**MARINO PROPERTY SITE
MIDDLETOWN, CONNECTICUT
GEOPHYSICAL SURVEY FIELD DATA**

Line/ Point No.	X	Y	Conduct- ivity	In- Phase	Conduct- ivity (1)	In- Phase (2)	Magneto- meter	Magneto- meter (3)	Comments
L28, P150	-140	-150	59.10	-5.52	-----	-----	53316	-----	
L28, P155	-140	-155	57.10	-5.29	-----	-----	-----	-----	
L28, P160	-140	-160	53.90	-4.90	-----	-----	52747	52737	
L28, P165	-140	-165	51.70	-4.45	-----	-----	-----	-----	
L28, P170	-140	-170	50.90	-4.47	-----	-----	52173	-----	
L28, P175	-140	-175	50.60	-4.26	-----	-----	-----	-----	
L28, P180	-140	-180	49.20	-3.49	-----	-----	51815	-----	
L28, P185	-140	-185	48.70	-2.50	-----	-----	-----	-----	
L28, P190	-140	-190	48.9	-1.8	-----	-----	51590	-----	
L29, P0	-145	0	51.50	1.90	-----	-----	-----	-----	
L29, P5	-145	-5	54.80	1.40	-----	-----	-----	-----	
L29, P10	-145	-10	65.00	-1.08	-----	-----	-----	-----	
L29, P15	-145	-15	62.50	3.20	-----	-----	-----	-----	
L29, P20	-145	-20	56.00	6.27	-----	-----	-----	-----	
L29, P25	-145	-25	67.80	1.35	-----	-----	-----	-----	
L29, P30	-145	-30	80.60	-6.30	-----	-----	-----	-----	
L29, P35	-145	-35	83.00	-0.49	-----	-----	-----	-----	
L29, P40	-145	-40	91.70	-2.78	-----	-----	-----	-----	
L29, P45	-145	-45	94.00	-4.90	-----	-----	-----	-----	
L29, P50	-145	-50	93.00	-5.05	-----	-----	-----	-----	
L29, P55	-145	-55	98.00	-7.90	-----	-----	-----	-----	
L29, P60	-145	-60	98.50	-5.95	99.4	-5.7	-----	-----	
L29, P65	-145	-65	93.50	-4.80	92	-6.28	-----	-----	
L29, P70	-145	-70	90.80	-7.40	-----	-----	-----	-----	
L29, P75	-145	-75	86.70	-7.27	-----	-----	-----	-----	
L29, P80	-145	-80	81.70	-6.53	-----	-----	-----	-----	
L29, P85	-145	-85	80.00	-6.58	-----	-----	-----	-----	
L29, P90	-145	-90	77.90	-7.19	-----	-----	-----	-----	
L29, P95	-145	-95	74.80	-6.95	-----	-----	-----	-----	
L29, P100	-145	-100	73.40	-3.90	-----	-----	-----	-----	
L29, P105	-145	-105	75.60	-4.32	-----	-----	-----	-----	
L29, P110	-145	-110	78.00	-6.39	-----	-----	-----	-----	
L29, P115	-145	-115	79.40	-6.01	-----	-----	-----	-----	
L29, P120	-145	-120	79.20	-4.37	-----	-----	-----	-----	
L29, P125	-145	-125	78.10	-4.51	-----	-----	-----	-----	
L29, P130	-145	-130	76.00	-4.47	-----	-----	-----	-----	
L29, P135	-145	-135	71.40	-5.90	-----	-----	-----	-----	
L29, P140	-145	-140	66.40	-5.15	-----	-----	-----	-----	
L29, P145	-145	-145	60.00	-4.07	-----	-----	-----	-----	
L29, P150	-145	-150	58.20	-4.05	-----	-----	-----	-----	
L29, P155	-145	-155	55.10	-7.50	-----	-----	-----	-----	
L29, P160	-145	-160	50.00	-8.00	-----	-----	-----	-----	
L29, P165	-145	-165	48.10	-6.50	-----	-----	-----	-----	
L29, P170	-145	-170	47.30	-3.50	-----	-----	-----	-----	
L29, P175	-145	-175	48.10	-3.52	-----	-----	-----	-----	
L29, P180	-145	-180	47.20	-3.33	-----	-----	-----	-----	
L29, P185	-145	-185	44.70	-4.87	-----	-----	-----	-----	

TABLE 1

**MARINO PROPERTY SITE
MIDDLETOWN, CONNECTICUT
GEOPHYSICAL SURVEY FIELD DATA**

Line/ Point No.	X	Y	Conduct- ivity	In- Phase	Conduct- ivity (1)	In- Phase (2)	Magneto- meter	Magneto- meter (3)	Comments
L29, P190	-145	-190	40.3	-2.36	-----	-----	-----	-----	
L30, P0	-150	0	45.70	-2.25	-----	-----	51867	-----	
L30, P5	-150	-5	38.90	5.99	-----	-----	-----	-----	
L30, P10	-150	-10	47.90	8.96	-----	-----	51887	-----	
L30, P15	-150	-15	55.50	10.57	55.70	9.99	-----	-----	
L30, P20	-150	-20	56.00	8.75	-----	-----	52042	-----	
L30, P25	-150	-25	72.50	-2.90	-----	-----	-----	-----	
L30, P30	-150	-30	72.70	-2.40	-----	-----	52137	-----	
L30, P35	-150	-35	73.40	1.24	-----	-----	-----	-----	
L30, P40	-150	-40	83.40	-0.21	-----	-----	52360	-----	
L30, P45	-150	-45	78.50	4.90	-----	-----	-----	-----	
L30, P50	-150	-50	85.70	-1.28	-----	-----	52538	-----	
L30, P55	-150	-55	102.10	-6.95	107.10	-5.63	-----	-----	
L30, P60	-150	-60	102.60	-6.30	-----	-----	52564	-----	
L30, P65	-150	-65	97.10	-4.93	-----	-----	-----	-----	
L30, P70	-150	-70	94.10	-5.08	-----	-----	52713	-----	
L30, P75	-150	-75	89.50	-6.13	-----	-----	-----	-----	
L30, P80	-150	-80	81.70	-4.96	-----	-----	52746	-----	
L30, P85	-150	-85	77.20	-4.67	-----	-----	-----	-----	
L30, P90	-150	-90	78.00	-5.91	-----	-----	52693	-----	
L30, P95	-150	-95	75.10	-5.74	-----	-----	-----	-----	
L30, P100	-150	-100	73.20	-3.61	-----	-----	52510	-----	
L30, P105	-150	-105	75.50	-4.64	-----	-----	-----	-----	
L30, P110	-150	-110	77.90	-5.32	-----	-----	52529	-----	
L30, P115	-150	-115	80.00	-4.64	-----	-----	-----	-----	
L30, P120	-150	-120	79.10	-5.04	-----	-----	52910	-----	
L30, P125	-150	-125	74.00	-6.63	-----	-----	-----	-----	
L30, P130	-150	-130	71.70	-3.14	-----	-----	53466	-----	
L30, P135	-150	-135	71.30	-5.02	-----	-----	-----	-----	
L30, P140	-150	-140	66.10	-4.29	-----	-----	53520	-----	
L30, P145	-150	-145	59.20	-3.15	-----	-----	-----	-----	
L30, P150	-150	-150	59.20	-3.08	-----	-----	53222	-----	
L30, P155	-150	-155	58.00	-4.37	-----	-----	-----	-----	
L30, P160	-150	-160	55.40	-3.77	-----	-----	52667	-----	
L30, P165	-150	-165	61.80	-3.20	-----	-----	-----	-----	
L30, P170	-150	-170	51.90	-3.26	-----	-----	52194	-----	
L30, P175	-150	-175	53.70	-3.42	-----	-----	-----	-----	
L30, P180	-150	-180	38.60	-4.29	-----	-----	51957	-----	
L30, P185	-150	-185	39.50	-2.68	-----	-----	-----	-----	
L30, P190	-150	-190	38.8	-2.45	-----	-----	52024	-----	
L31, P0	-155	0	36.40	-3.50	43.40	6.7	-----	-----	
L31, P5	-155	-5	63.10	-5.48	-----	-----	-----	-----	
L31, P10	-155	-10	57.40	6.35	-----	-----	-----	-----	
L31, P15	-155	-15	60.10	8.32	69.30	8.4	-----	-----	
L31, P20	-155	-20	66.10	4.49	-----	-----	-----	-----	
L31, P25	-155	-25	71.40	-0.46	-----	-----	-----	-----	
L31, P30	-155	-30	72.80	1.59	-----	-----	-----	-----	

TABLE 1

**MARINO PROPERTY SITE
MIDDLETOWN, CONNECTICUT
GEOPHYSICAL SURVEY FIELD DATA**

Line/ Point No.	X	Y	Conduct- ivity	In- Phase	Conduct- ivity (1)	In- Phase (2)	Magneto- meter	Magneto- meter (3)	Comments
L31, P35	-155	-35	77.00	4.86	----	----	----	----	
L31, P40	-155	-40	86.10	1.07	----	----	----	----	
L31, P45	-155	-45	88.60	-3.70	----	----	----	----	
L31, P50	-155	-50	90.80	-4.72	----	----	----	----	
L31, P55	-155	-55	98.40	-5.10	----	----	----	----	
L31, P60	-155	-60	99.90	-5.74	97.50	-6.32	----	----	
L31, P65	-155	-65	90.70	-4.20	----	----	----	----	
L31, P70	-155	-70	87.00	-3.98	----	----	----	----	
L31, P75	-155	-75	84.00	-5.80	----	----	----	----	
L31, P80	-155	-80	76.30	-5.70	----	----	----	----	
L31, P85	-155	-85	73.30	-4.92	----	----	----	----	
L31, P90	-155	-90	72.90	-6.40	----	----	----	----	
L31, P95	-155	-95	72.20	-5.32	----	----	----	----	
L31, P100	-155	-100	73.40	-4.50	----	----	----	----	
L31, P105	-155	-105	75.90	-5.05	----	----	----	----	
L31, P110	-155	-110	76.60	-4.70	----	----	----	----	
L31, P115	-155	-115	75.20	-4.34	----	----	----	----	
L31, P120	-155	-120	75.00	-4.36	----	----	----	----	
L31, P125	-155	-125	73.80	-3.41	----	----	----	----	
L31, P130	-155	-130	70.30	-1.46	----	----	----	----	
L31, P135	-155	-135	67.90	-4.48	----	----	----	----	
L31, P140	-155	-140	65.80	-5.43	----	----	----	----	
L31, P145	-155	-145	60.60	-4.40	----	----	----	----	
L31, P150	-155	-150	58.20	-4.37	----	----	----	----	
L31, P155	-155	-155	55.80	-4.05	----	----	----	----	
L31, P160	-155	-160	50.60	-4.54	----	----	----	----	
L31, P165	-155	-165	47.50	-3.77	----	----	----	----	
L31, P170	-155	-170	49.00	-3.60	----	----	----	----	
L31, P175	-155	-175	51.20	-4.67	----	----	----	----	
L31, P180	-155	-180	39.60	-8.15	----	----	----	----	
L31, P185	-155	-185	30.90	-2.10	----	----	----	----	
L31, P190	-155	-190	14.5	-3.00	22.70	-10.4	----	----	
L32, P0	-160	0	36.10	7.39	----	----	51982	----	
L32, P5	-160	-5	66.10	-5.30	----	----	----	----	
L32, P10	-160	-10	73.00	4.40	----	----	51824	----	
L32, P15	-160	-15	74.00	3.85	----	----	----	----	
L32, P20	-160	-20	65.10	2.65	----	----	52087	----	
L32, P25	-160	-25	67.00	2.50	----	----	----	----	
L32, P30	-160	-30	79.10	1.97	----	----	52120	----	
L32, P35	-160	-35	95.60	-2.14	----	----	----	----	
L32, P40	-160	-40	101.20	-3.63	89.80	-4.22	52151	----	
L32, P45	-160	-45	97.00	-7.60	----	----	----	----	
L32, P50	-160	-50	92.30	-5.73	----	----	52261	----	
L32, P55	-160	-55	93.90	-4.19	----	----	----	----	
L32, P60	-160	-60	89.60	-3.60	----	----	52551	----	
L32, P65	-160	-65	84.50	-1.99	----	----	----	----	
L32, P70	-160	-70	84.40	-3.03	----	----	52720	----	

TABLE 1

**MARINO PROPERTY SITE
MIDDLETOWN, CONNECTICUT
GEOPHYSICAL SURVEY FIELD DATA**

Line/ Point No.	X	Y	Conduct- ivity	In- Phase	Conduct- ivity (1)	In- Phase (2)	Magneto- meter	Magneto- meter (3)	Comments
L32, P75	-160	-75	78.10	-6.19	-----	-----	-----	-----	
L32, P80	-160	-80	71.70	-5.20	-----	-----	52724	-----	
L32, P85	-160	-85	67.50	-5.35	-----	-----	-----	-----	
L32, P90	-160	-90	70.10	-5.30	-----	-----	52571	-----	
L32, P95	-160	-95	71.20	-4.75	-----	-----	-----	-----	
L32, P100	-160	-100	72.80	-5.10	-----	-----	52349	-----	
L32, P105	-160	-105	72.90	-4.60	-----	-----	-----	-----	
L32, P110	-160	-110	73.20	-5.20	-----	-----	52319	-----	
L32, P115	-160	-115	73.90	-4.60	-----	-----	-----	-----	
L32, P120	-160	-120	74.30	-6.28	-----	-----	52590	-----	
L32, P125	-160	-125	68.70	-2.25	-----	-----	-----	-----	
L32, P130	-160	-130	65.90	-1.21	-----	-----	53154	53145	
L32, P135	-160	-135	67.00	-5.20	-----	-----	-----	-----	
L32, P140	-160	-140	61.70	-4.55	-----	-----	53142	-----	
L32, P145	-160	-145	58.40	-3.78	-----	-----	-----	-----	
L32, P150	-160	-150	56.90	-3.10	-----	-----	52924	-----	
L32, P155	-160	-155	53.90	-3.10	-----	-----	-----	-----	
L32, P160	-160	-160	46.60	-2.97	-----	-----	52677	-----	
L32, P165	-160	-165	44.30	-2.94	-----	-----	-----	-----	
L32, P170	-160	-170	48.50	-3.37	-----	-----	52488	-----	
L32, P175	-160	-175	33.00	-19.90	45.00	-4.27	-----	-----	
L32, P180	-160	-180	20.90	-16.00	15.70	-17.8	52226	-----	
L32, P185	-160	-185	15.50	-7.40	-----	-----	-----	-----	
L32, P190	-160	-190	14.3	-10.63	16.90	-19.9	52405	-----	
L33, P0	-165	0	30.50	9.05	37.90	3.97	-----	-----	
L33, P5	-165	-5	58.90	-2.26	-----	-----	-----	-----	
L33, P10	-165	-10	72.20	-1.48	-----	-----	-----	-----	
L33, P15	-165	-15	45.50	1.85	-----	-----	-----	-----	
L33, P20	-165	-20	47.80	0.90	-----	-----	-----	-----	
L33, P25	-165	-25	61.60	3.60	-----	-----	-----	-----	
L33, P30	-165	-30	75.70	0.19	72.10	-1.50	-----	-----	
L33, P35	-165	-35	85.40	-4.80	-----	-----	-----	-----	
L33, P40	-165	-40	86.80	-4.70	-----	-----	-----	-----	
L33, P45	-165	-45	87.90	-5.53	-----	-----	-----	-----	
L33, P50	-165	-50	89.40	-4.60	-----	-----	-----	-----	
L33, P55	-165	-55	88.70	-3.58	-----	-----	-----	-----	
L33, P60	-165	-60	87.10	-5.26	-----	-----	-----	-----	
L33, P65	-165	-65	84.40	-3.69	-----	-----	-----	-----	
L33, P70	-165	-70	80.50	-3.45	-----	-----	-----	-----	
L33, P75	-165	-75	78.00	-4.20	-----	-----	-----	-----	
L33, P80	-165	-80	72.00	-4.98	-----	-----	-----	-----	
L33, P85	-165	-85	67.80	-3.10	-----	-----	-----	-----	
L33, P90	-165	-90	67.00	-1.75	-----	-----	-----	-----	
L33, P95	-165	-95	69.70	-2.10	-----	-----	-----	-----	
L33, P100	-165	-100	71.30	-3.56	-----	-----	-----	-----	
L33, P105	-165	-105	69.70	-3.45	-----	-----	-----	-----	
L33, P110	-165	-110	67.50	-1.70	-----	-----	-----	-----	

TABLE 1

**MARINO PROPERTY SITE
MIDDLETOWN, CONNECTICUT
GEOPHYSICAL SURVEY FIELD DATA**

Line/ Point No.	X	Y	Conduct- ivity	In- Phase	Conduct- ivity (1)	In- Phase (2)	Magneto- meter	Magneto- meter (3)	Comments
L33, P115	-165	-115	67.60	-2.80	-----	-----	-----	-----	
L33, P120	-165	-120	66.50	-5.56	-----	-----	-----	-----	
L33, P125	-165	-125	56.80	-2.00	-----	-----	-----	-----	
L33, P130	-165	-130	48.40	2.31	-----	-----	-----	-----	
L33, P135	-165	-135	52.60	-7.49	-----	-----	-----	-----	
L33, P140	-165	-140	62.50	-5.30	-----	-----	-----	-----	
L33, P145	-165	-145	58.20	-3.38	-----	-----	-----	-----	
L33, P150	-165	-150	55.20	-4.07	-----	-----	-----	-----	
L33, P155	-165	-155	50.30	-5.30	-----	-----	-----	-----	
L33, P160	-165	-160	42.00	-6.92	-----	-----	-----	-----	
L33, P165	-165	-165	35.10	-9.70	-----	-----	-----	-----	
L33, P170	-165	-170	26.40	-15.90	-----	-----	-----	-----	
L33, P175	-165	-175	10.80	-19.90	-----	-----	-----	-----	
L33, P180	-165	-180	7.50	-17.40	13.80	-8.29	-----	-----	
L33, P185	-165	-185	-15.90	-19.90	-----	-----	-----	-----	
L33, P190	-165	-190	8.50	-19.90	16.40	-15.46	-----	-----	
L34, P0	-170	0	65.20	-2.03	-----	-----	51739	-----	
L34, P5	-170	-5	75.50	-3.55	-----	-----	-----	-----	
L34, P10	-170	-10	75.00	-3.70	-----	-----	51773	-----	
L34, P15	-170	-15	67.10	-2.67	-----	-----	-----	-----	
L34, P20	-170	-20	56.80	-0.81	-----	-----	52096	-----	
L34, P25	-170	-25	69.00	-0.75	-----	-----	-----	-----	
L34, P30	-170	-30	78.60	-3.36	-----	-----	52121	-----	
L34, P35	-170	-35	82.40	-5.00	-----	-----	-----	-----	
L34, P40	-170	-40	84.00	-6.02	-----	-----	51957	-----	
L34, P45	-170	-45	84.60	-5.32	-----	-----	-----	-----	
L34, P50	-170	-50	83.30	-5.00	-----	-----	51970	-----	
L34, P55	-170	-55	83.00	-5.30	-----	-----	-----	-----	
L34, P60	-170	-60	83.00	-6.98	-----	-----	52351	-----	
L34, P65	-170	-65	79.50	-4.95	-----	-----	-----	-----	
L34, P70	-170	-70	73.50	-3.20	-----	-----	52704	-----	
L34, P75	-170	-75	70.00	-4.05	-----	-----	-----	-----	
L34, P80	-170	-80	65.50	-2.90	-----	-----	52725	-----	
L34, P85	-170	-85	63.00	3.90	-----	-----	-----	-----	
L34, P90	-170	-90	62.50	6.00	-----	-----	52617	-----	
L34, P95	-170	-95	64.80	4.40	-----	-----	-----	-----	
L34, P100	-170	-100	67.50	-0.89	-----	-----	52541	-----	
L34, P105	-170	-105	64.00	-1.40	-----	-----	-----	-----	
L34, P110	-170	-110	58.50	0.20	-----	-----	52424	-----	
L34, P115	-170	-115	57.20	-0.43	-----	-----	-----	-----	
L34, P120	-170	-120	57.50	-2.80	-----	-----	52523	-----	
L34, P125	-170	-125	54.70	-0.75	-----	-----	-----	-----	
L34, P130	-170	-130	52.50	-2.35	-----	-----	52809	-----	
L34, P135	-170	-135	56.00	-5.70	-----	-----	-----	-----	
L34, P140	-170	-140	56.50	-3.60	-----	-----	52843	-----	
L34, P145	-170	-145	54.00	-1.00	-----	-----	-----	-----	
L34, P150	-170	-150	50.00	-2.26	-----	-----	52683	-----	

TABLE 1

**MARINO PROPERTY SITE
MIDDLETOWN, CONNECTICUT
GEOPHYSICAL SURVEY FIELD DATA**

Line/ Point No.	X	Y	Conduct- ivity	In- Phase	Conduct- ivity (1)	In- Phase (2)	Magneto- meter	Magneto- meter (3)	Comments
L34, P155	-170	-155	45.00	-1.10	----	----	----	----	
L34, P160	-170	-160	39.50	-2.48	----	----	52486	----	
L34, P165	-170	-165	33.10	-8.18	----	----	----	----	
L34, P170	-170	-170	25.50	-9.80	----	----	52677	----	
L34, P175	-170	-175	19.50	-13.60	----	----	----	----	Near black plastic drain culvert
L34, P180	-170	-180	8.30	-13.00	16	-5.8	52600	----	
L34, P185	-170	-185	7.90	-19.90	20.2	-10	----	----	
L34, P190	-170	-190	19.90	-7.70	----	----	52390	----	
L35, P0	-175	0	58.00	-0.55	----	----	----	----	
L35, P5	-175	-5	65.00	-1.90	----	----	----	----	
L35, P10	-175	-10	67.40	-4.20	----	----	----	----	
L35, P15	-175	-15	64.50	-1.70	----	----	----	----	
L35, P20	-175	-20	70.00	-2.82	----	----	----	----	
L35, P25	-175	-25	72.60	-5.40	----	----	----	----	
L35, P30	-175	-30	74.50	-6.70	----	----	----	----	
L35, P35	-175	-35	76.00	-6.20	----	----	----	----	
L35, P40	-175	-40	79.50	-4.70	----	----	----	----	
L35, P45	-175	-45	75.80	-3.37	----	----	----	----	
L35, P50	-175	-50	79.50	-7.43	----	----	----	----	
L35, P55	-175	-55	77.80	-5.90	----	----	----	----	
L35, P60	-175	-60	74.50	-4.80	----	----	----	----	
L35, P65	-175	-65	65.00	-1.61	----	----	----	----	
L35, P70	-175	-70	57.00	2.10	----	----	----	----	
L35, P75	-175	-75	59.90	-1.04	----	----	----	----	
L35, P80	-175	-80	60.80	2.92	----	----	----	----	
L35, P85	-175	-85	43.00	-19.90	----	----	----	----	Near monitoring well
L35, P90	-175	-90	64.90	17.95	----	----	----	----	Near monitoring well
L35, P95	-175	-95	65.00	19.90	----	----	----	----	Near monitoring well
L35, P100	-175	-100	60.00	19.90	----	----	----	----	Near monitoring well
L35, P105	-175	-105	59.60	14.80	----	----	----	----	Near monitoring well
L35, P110	-175	-110	50.10	4.31	----	----	----	----	
L35, P115	-175	-115	47.80	2.72	----	----	----	----	
L35, P120	-175	-120	46.50	2.30	----	----	----	----	
L35, P125	-175	-125	49.50	-2.99	----	----	----	----	
L35, P130	-175	-130	50.50	-4.31	----	----	----	----	
L35, P135	-175	-135	51.10	-3.40	----	----	----	----	
L35, P140	-175	-140	62.50	11.06	----	----	----	----	
L35, P145	-175	-145	101.00	-19.90	----	----	----	----	
L35, P150	-175	-150	72.10	19.90	----	----	----	----	Near concrete with metal
L35, P155	-175	-155	52.50	11.90	----	----	----	----	
L35, P160	-175	-160	----	----	----	----	----	----	Obstructed by drain culvert pipe
L35, P165	-175	-165	----	----	----	----	----	----	Obstructed by drain culvert pipe
L35, P170	-175	-170	----	----	----	----	----	----	Obstructed by drain culvert pipe
L35, P175	-175	-175	----	----	----	----	----	----	Obstructed by drain culvert pipe
L35, P180	-175	-180	2.70	-2.64	----	----	----	----	
L35, P185	-175	-185	30.60	-2.20	----	----	----	----	
L36, P0	-180	0	55.00	-1.00	----	----	51970	----	

TABLE 1

**MARINO PROPERTY SITE
MIDDLETOWN, CONNECTICUT
GEOPHYSICAL SURVEY FIELD DATA**

Line/ Point No.	X	Y	Conduct- ivity	In- Phase	Conduct- ivity (1)	In- Phase (2)	Magneto- meter	Magneto- meter (3)	Comments
L36, P5	-180	-5	61.50	-2.90	-----	-----	-----	-----	
L36, P10	-180	-10	65.00	-5.30	-----	-----	51924	-----	
L36, P15	-180	-15	64.20	-4.00	-----	-----	-----	-----	
L36, P20	-180	-20	65.50	-1.50	-----	-----	51913	-----	
L36, P25	-180	-25	70.00	-6.60	-----	-----	-----	-----	
L36, P30	-180	-30	71.00	-4.70	-----	-----	51966	-----	
L36, P35	-180	-35	71.00	-6.80	-----	-----	-----	-----	
L36, P40	-180	-40	71.50	-5.00	-----	-----	51883	-----	
L36, P45	-180	-45	72.00	-4.65	-----	-----	-----	-----	
L36, P50	-180	-50	73.00	-5.80	-----	-----	51872	-----	
L36, P55	-180	-55	70.50	-5.80	-----	-----	-----	-----	
L36, P60	-180	-60	63.00	-3.80	-----	-----	52186	-----	
L36, P65	-180	-65	55.00	2.10	-----	-----	-----	-----	
L36, P70	-180	-70	56.50	-0.32	-----	-----	52651	-----	
L36, P75	-180	-75	58.00	-2.90	-----	-----	-----	-----	
L36, P80	-180	-80	57.00	9.88	-----	-----	52632	-----	Near concrete around monitoring well
L36, P85	-180	-85	60.00	-19.90	-----	-----	-----	-----	Near concrete around monitoring well
L36, P90	-180	-90	70.00	19.90	-----	-----	53223	-----	Near concrete around monitoring well
L36, P95	-180	-95	68.00	19.90	-----	-----	-----	-----	Near concrete around monitoring well
L36, P100	-180	-100	144.00	19.90	-----	-----	53178	-----	Near concrete around monitoring well
L36, P105	-180	-105	40.00	15.00	-----	-----	-----	-----	Near concrete around monitoring well
L36, P110	-180	-110	48.20	4.10	-----	-----	52692	-----	
L36, P115	-180	-115	41.30	0.33	-----	-----	-----	-----	
L36, P120	-180	-120	43.80	-0.46	-----	-----	52581	-----	
L36, P125	-180	-125	46.00	-3.57	-----	-----	-----	-----	
L36, P130	-180	-130	46.00	-3.41	-----	-----	52564	-----	
L36, P135	-180	-135	50.50	1.03	-----	-----	-----	-----	
L36, P140	-180	-140	30.00	-10.00	-----	-----	52488	-----	Near concrete
L37, P0	-185	0	48.00	-0.50	-----	-----	-----	-----	
L37, P5	-185	-5	56.50	-3.20	-----	-----	-----	-----	
L37, P10	-185	-10	63.00	-5.80	-----	-----	-----	-----	
L37, P15	-185	-15	62.00	-8.04	-----	-----	-----	-----	
L37, P20	-185	-20	60.00	-3.50	-----	-----	-----	-----	
L37, P25	-185	-25	61.00	-3.82	-----	-----	-----	-----	
L37, P30	-185	-30	67.00	-4.87	-----	-----	-----	-----	
L37, P35	-185	-35	66.50	-5.20	-----	-----	-----	-----	
L37, P40	-185	-40	65.90	-4.80	-----	-----	-----	-----	
L37, P45	-185	-45	66.10	-4.48	-----	-----	-----	-----	
L37, P50	-185	-50	67.70	-6.00	-----	-----	-----	-----	
L37, P55	-185	-55	65.00	-5.68	-----	-----	-----	-----	
L37, P60	-185	-60	59.50	-1.71	-----	-----	-----	-----	
L37, P65	-185	-65	53.60	-3.17	-----	-----	-----	-----	
L37, P70	-185	-70	53.20	-3.45	-----	-----	-----	-----	
L37, P75	-185	-75	49.30	-3.06	-----	-----	-----	-----	
L37, P80	-185	-80	46.20	2.82	-----	-----	-----	-----	
L37, P85	-185	-85	45.00	8.17	-----	-----	-----	-----	
L37, P90	-185	-90	49.90	17.00	-----	-----	-----	-----	

TABLE 1

**MARINO PROPERTY SITE
MIDDLETOWN, CONNECTICUT
GEOPHYSICAL SURVEY FIELD DATA**

Line/ Point No.	X	Y	Conduct- ivity	In- Phase	Conduct- ivity (1)	In- Phase (2)	Magneto- meter	Magneto- meter (3)	Comments
L37, P95	-185	-95	50.60	16.23	-----	-----	-----	-----	Near concrete
L37, P100	-185	-100	46.80	8.80	-----	-----	-----	-----	
L37, P105	-185	-105	41.20	1.80	-----	-----	-----	-----	
L37, P110	-185	-110	42.30	0.70	-----	-----	-----	-----	
L37, P115	-185	-115	44.80	-0.75	-----	-----	-----	-----	
L37, P120	-185	-120	42.60	2.20	-----	-----	-----	-----	
L37, P125	-185	-125	42.80	1.42	-----	-----	-----	-----	
L37, P130	-185	-130	46.80	2.02	-----	-----	-----	-----	
L37, P135	-185	-135	47.00	-5.86	-----	-----	-----	-----	Near concrete with metal
L37, P140	-185	-140	72.00	16.00	-----	-----	-----	-----	Near concrete with metal
L38, P0	-190	0	55.00	-4.27	-----	-----	52025	-----	
L38, P5	-190	-5	60.60	-4.08	-----	-----	-----	-----	
L38, P10	-190	-10	62.60	-6.30	-----	-----	51896	-----	
L38, P15	-190	-15	60.00	-5.92	-----	-----	-----	-----	
L38, P20	-190	-20	58.00	-3.40	-----	-----	51922	-----	
L38, P25	-190	-25	60.50	-3.40	-----	-----	-----	-----	
L38, P30	-190	-30	63.20	-4.41	-----	-----	52004	-----	
L38, P35	-190	-35	62.10	-4.11	-----	-----	-----	-----	
L38, P40	-190	-40	61.00	-3.00	-----	-----	51899	-----	
L38, P45	-190	-45	60.50	-2.37	-----	-----	-----	-----	
L38, P50	-190	-50	60.00	-4.00	-----	-----	51954	-----	
L38, P55	-190	-55	55.00	-3.65	-----	-----	-----	-----	
L38, P60	-190	-60	50.70	-1.92	-----	-----	52213	-----	
L38, P65	-190	-65	52.50	-5.18	-----	-----	-----	-----	
L38, P70	-190	-70	50.00	-3.92	-----	-----	52381	-----	
L38, P75	-190	-75	45.80	-0.45	-----	-----	-----	-----	
L38, P80	-190	-80	47.00	1.12	-----	-----	52474	-----	
L38, P85	-190	-85	49.50	0.07	-----	-----	-----	-----	
L38, P90	-190	-90	47.30	-4.10	-----	-----	52469	-----	
L38, P95	-190	-95	42.00	1.18	-----	-----	-----	-----	
L38, P100	-190	-100	38.00	1.85	-----	-----	52412	-----	
L38, P105	-190	-105	41.50	-1.35	-----	-----	-----	-----	
L38, P110	-190	-110	43.50	0.10	-----	-----	52389	-----	
L38, P115	-190	-115	47.00	4.46	-----	-----	-----	-----	
L38, P120	-190	-120	52.20	7.70	-----	-----	52417	-----	
L39, P0	-195	0	61.20	-3.65	-----	-----	-----	-----	
L39, P5	-195	-5	63.60	-5.23	-----	-----	-----	-----	
L39, P10	-195	-10	63.40	-6.50	-----	-----	-----	-----	
L39, P15	-195	-15	61.00	-4.41	-----	-----	-----	-----	
L39, P20	-195	-20	54.70	-1.73	-----	-----	-----	-----	
L39, P25	-195	-25	56.90	-1.60	-----	-----	-----	-----	
L39, P30	-195	-30	59.50	-4.58	-----	-----	-----	-----	
L39, P35	-195	-35	59.00	-3.52	-----	-----	-----	-----	
L39, P40	-195	-40	52.80	-0.30	-----	-----	-----	-----	
L39, P45	-195	-45	51.90	0.07	-----	-----	-----	-----	
L39, P50	-195	-50	50.50	-1.92	-----	-----	-----	-----	
L39, P55	-195	-55	48.50	-4.10	-----	-----	-----	-----	

TABLE 1

**MARINO PROPERTY SITE
MIDDLETOWN, CONNECTICUT
GEOPHYSICAL SURVEY FIELD DATA**

Line/ Point No.	X	Y	Conduct- ivity	In- Phase	Conduct- ivity (1)	In- Phase (2)	Magneto- meter	Magneto- meter (3)	Comments
L39, P60	-195	-60	40.50	-0.32	-----	-----	-----	-----	
L39, P65	-195	-65	40.90	-2.17	-----	-----	-----	-----	
L39, P70	-195	-70	44.50	-4.55	-----	-----	-----	-----	
L39, P75	-195	-75	45.40	-2.08	-----	-----	-----	-----	
L39, P80	-195	-80	47.80	-4.35	-----	-----	-----	-----	
L39, P85	-195	-85	49.30	-5.58	-----	-----	-----	-----	
L39, P90	-195	-90	47.40	-3.40	-----	-----	-----	-----	
L39, P95	-195	-95	46.20	-1.63	-----	-----	-----	-----	
L39, P100	-195	-100	42.20	-1.13	-----	-----	-----	-----	
L39, P105	-195	-105	41.20	-0.92	-----	-----	-----	-----	
L39, P110	-195	-110	41.20	0.86	-----	-----	-----	-----	
L40, P0	-200	0	59.50	4.27	-----	-----	51956	-----	
L40, P5	-200	-5	58.90	-6.91	-----	-----	-----	-----	
L40, P10	-200	-10	61.90	-7.13	-----	-----	51884	-----	
L40, P15	-200	-15	60.00	-5.00	-----	-----	-----	-----	
L40, P20	-200	-20	52.30	-2.26	-----	-----	51955	-----	
L40, P25	-200	-25	50.00	-0.62	-----	-----	-----	-----	
L40, P30	-200	-30	50.70	-0.16	-----	-----	52114	-----	
L40, P35	-200	-35	50.00	-0.73	-----	-----	-----	-----	
L40, P40	-200	-40	49.00	-1.68	-----	-----	51942	-----	
L40, P45	-200	-45	46.90	-1.03	-----	-----	-----	-----	
L40, P50	-200	-50	50.00	-2.57	-----	-----	51970	-----	
L40, P55	-200	-55	45.00	-2.06	-----	-----	-----	-----	
L40, P60	-200	-60	42.10	-1.65	-----	-----	52174	-----	
L40, P65	-200	-65	42.60	-3.60	-----	-----	-----	-----	
L40, P70	-200	-70	39.50	-0.10	-----	-----	52284	-----	
L40, P75	-200	-75	40.50	-0.17	-----	-----	-----	-----	
L40, P80	-200	-80	45.40	-5.85	-----	-----	52415	-----	
L40, P85	-200	-85	46.00	-4.47	-----	-----	-----	-----	
L40, P90	-200	-90	45.20	-2.33	-----	-----	52207	-----	
L40, P95	-200	-95	43.90	-2.40	-----	-----	-----	-----	
L40, P100	-200	-100	41.70	-1.78	-----	-----	52143	-----	
L40, P105	-200	-105	40.20	0.57	-----	-----	-----	-----	
L40, P110	-200	-110	42.20	3.61	-----	-----	52126	-----	
L40, P115	-200	-115	24.50	-6.00	-----	-----	-----	-----	Near concrete
L40, P120	-200	-120	51.00	14.80	-----	-----	53058	-----	Near concrete
L41, P0	-205	0	49.00	-4.72	-----	-----	-----	-----	
L41, P5	-205	-5	57.00	-5.91	-----	-----	-----	-----	
L41, P10	-205	-10	60.50	-6.00	-----	-----	-----	-----	
L41, P15	-205	-15	57.00	-5.90	57.8	-5.3	-----	-----	
L41, P20	-205	-20	50.50	-3.45	-----	-----	-----	-----	
L41, P25	-205	-25	44.00	0.20	-----	-----	-----	-----	
L41, P30	-205	-30	45.00	-1.25	-----	-----	-----	-----	
L41, P35	-205	-35	46.80	-0.85	-----	-----	-----	-----	
L41, P40	-205	-40	46.20	-1.50	-----	-----	-----	-----	
L41, P45	-205	-45	44.70	-1.95	-----	-----	-----	-----	
L41, P50	-205	-50	43.20	-0.71	-----	-----	-----	-----	

TABLE 1

**MARINO PROPERTY SITE
MIDDLETOWN, CONNECTICUT
GEOPHYSICAL SURVEY FIELD DATA**

Line/ Point No.	X	Y	Conduct- ivity	In- Phase	Conduct- ivity (1)	In- Phase (2)	Magneto- meter	Magneto- meter (3)	Comments
L41, P55	-205	-55	36.50	2.65	-----	-----	-----	-----	
L41, P60	-205	-60	38.00	-2.10	-----	-----	-----	-----	
L41, P65	-205	-65	39.50	-2.00	-----	-----	-----	-----	
L41, P70	-205	-70	38.50	-1.23	-----	-----	-----	-----	
L41, P75	-205	-75	32.80	-0.58	-----	-----	-----	-----	
L41, P80	-205	-80	36.20	-2.83	-----	-----	-----	-----	
L41, P85	-205	-85	42.80	-3.80	-----	-----	-----	-----	
L41, P90	-205	-90	43.00	-3.38	-----	-----	-----	-----	
L41, P95	-205	-95	40.50	-2.58	-----	-----	-----	-----	
L41, P100	-205	-100	40.30	-0.81	-----	-----	-----	-----	
L41, P105	-205	-105	34.90	-1.30	-----	-----	-----	-----	
L42, P0	-210	0	39.00	-3.45	-----	-----	51995	-----	
L42, P5	-210	-5	38.60	2.14	-----	-----	-----	-----	
L42, P10	-210	-10	45.40	1.60	-----	-----	51985	-----	
L42, P15	-210	-15	49.00	-2.54	-----	-----	-----	-----	
L42, P20	-210	-20	42.30	2.29	-----	-----	52036	-----	
L42, P25	-210	-25	33.80	3.65	-----	-----	-----	-----	
L42, P30	-210	-30	36.00	0.61	-----	-----	52092	-----	
L42, P35	-210	-35	35.10	1.66	-----	-----	-----	-----	
L42, P40	-210	-40	30.90	4.99	-----	-----	51958	-----	
L42, P45	-210	-45	35.70	3.48	-----	-----	-----	-----	
L42, P50	-210	-50	32.00	3.07	-----	-----	51974	-----	
L42, P55	-210	-55	26.10	6.58	-----	-----	-----	-----	
L42, P60	-210	-60	32.60	0.50	-----	-----	52155	-----	
L42, P65	-210	-65	35.40	-0.77	-----	-----	-----	-----	
L42, P70	-210	-70	35.10	0.41	-----	-----	52166	-----	
L42, P75	-210	-75	35.40	-0.45	-----	-----	-----	-----	
L42, P80	-210	-80	34.60	-0.40	-----	-----	52270	-----	
L42, P85	-210	-85	37.00	-2.30	-----	-----	-----	-----	
L42, P90	-210	-90	39.20	-1.35	-----	-----	52121	-----	
L42, P95	-210	-95	40.30	-3.60	-----	-----	-----	-----	
L42, P100	-210	-100	42.70	1.89	-----	-----	51975	-----	
L42, P105	-210	-105	36.50	-14.40	-----	-----	-----	-----	2 feet from concrete
L42, P110	-210	-110	-----	-----	-----	-----	51853	-----	
L43, P0	-215	0	29.00	-1.78	-----	-----	-----	-----	
L43, P5	-215	-5	32.00	2.50	-----	-----	-----	-----	
L43, P10	-215	-10	37.70	3.34	-----	-----	-----	-----	
L43, P15	-215	-15	43.50	0.30	-----	-----	-----	-----	
L43, P20	-215	-20	41.30	4.20	-----	-----	-----	-----	
L43, P25	-215	-25	29.50	-0.01	-----	-----	-----	-----	
L43, P30	-215	-30	25.30	-2.99	-----	-----	-----	-----	
L43, P35	-215	-35	27.60	0.60	-----	-----	-----	-----	
L43, P40	-215	-40	26.10	3.19	-----	-----	-----	-----	
L43, P45	-215	-45	28.80	2.20	-----	-----	-----	-----	
L43, P50	-215	-50	22.10	8.76	-----	-----	-----	-----	
L43, P55	-215	-55	28.20	3.69	26	4.0	-----	-----	
L43, P60	-215	-60	36.40	-0.45	-----	-----	-----	-----	

TABLE 1

**MARINO PROPERTY SITE
MIDDLETOWN, CONNECTICUT
GEOPHYSICAL SURVEY FIELD DATA**

Line/ Point No.	X	Y	Conduct- ivity	In- Phase	Conduct- ivity (1)	In- Phase (2)	Magneto- meter	Magneto- meter (3)	Comments
L43, P65	-215	-65	39.00	-1.00	----	----	----	----	
L43, P70	-215	-70	38.10	-1.52	----	----	----	----	
L43, P75	-215	-75	37.00	-1.50	----	----	----	----	
L43, P80	-215	-80	36.10	-2.70	----	----	----	----	
L43, P85	-215	-85	39.70	-0.49	----	----	----	----	
L43, P90	-215	-90	45.10	2.60	----	----	----	----	
L43, P95	-215	-95	51.60	9.20	----	----	----	----	
L44, P0	-220	0	33.90	0.35	----	----	51903	----	
L44, P5	-220	-5	30.60	1.76	----	----	----	----	
L44, P10	-220	-10	31.20	3.86	----	----	51972	----	
L44, P15	-220	-15	38.20	-0.02	----	----	----	----	
L44, P20	-220	-20	13.90	-15.08	27	3.96	51990	----	
L44, P25	-220	-25	26.00	-5.19	----	----	----	----	
L44, P30	-220	-30	36.10	-2.10	----	----	51972	----	
L44, P35	-220	-35	23.00	-19.90	35.8	-1.35	----	----	
L44, P40	-220	-40	21.90	-0.37	----	----	51824	----	
L44, P45	-220	-45	28.50	-3.04	----	----	----	----	
L44, P50	-220	-50	26.70	-0.29	----	----	51950	----	
L44, P55	-220	-55	31.80	2.49	----	----	----	----	
L44, P60	-220	-60	35.50	-2.88	----	----	52045	----	
L44, P65	-220	-65	38.20	-1.99	----	----	----	----	
L44, P70	-220	-70	38.40	0.09	----	----	52047	----	
L44, P75	-220	-75	39.70	-0.47	----	----	----	----	
L44, P80	-220	-80	36.60	-2.30	----	----	52259	----	
L44, P85	-220	-85	39.80	3.96	----	----	----	----	
L44, P90	-220	-90	53.00	9.04	----	----	52165	----	
L44, P95	-220	-95	134.00	19.90	----	----	----	----	
L44, P100	-220	-95	----	----	----	----	52738	----	
L45, P0	-225	0	37.00	-1.10	----	----	----	----	
L45, P5	-225	-5	36.50	1.08	----	----	----	----	
L45, P10	-225	-10	27.80	-2.80	----	----	----	----	
L45, P15	-225	-15	26.10	2.41	----	----	----	----	
L45, P20	-225	-20	25.00	-5.10	----	----	----	----	
L45, P25	-225	-25	34.00	0.80	----	----	----	----	
L45, P30	-225	-30	38.20	2.85	----	----	----	----	
L45, P35	-225	-35	37.10	1.15	----	----	----	----	
L45, P40	-225	-40	35.90	1.28	----	----	----	----	
L45, P45	-225	-45	29.80	1.29	----	----	----	----	
L45, P50	-225	-50	27.90	1.24	----	----	----	----	
L45, P55	-225	-55	31.00	-3.20	----	----	----	----	
L45, P60	-225	-60	33.40	0.74	----	----	----	----	
L45, P65	-225	-65	36.00	-0.35	----	----	----	----	
L45, P70	-225	-70	38.90	3.13	----	----	----	----	Near metal
L45, P75	-225	-75	39.70	9.06	----	----	----	----	
L45, P80	-225	-80	36.90	10.66	----	----	----	----	
L46, P0	-230	0	46.20	-2.60	----	----	51815	----	
L46, P5	-230	-5	44.00	-2.41	----	----	----	----	

TABLE 1

**MARINO PROPERTY SITE
MIDDLETOWN, CONNECTICUT
GEOPHYSICAL SURVEY FIELD DATA**

Line/ Point No.	X	Y	Conduct- ivity	In- Phase	Conduct- ivity (1)	In- Phase (2)	Magneto- meter	Magneto- meter (3)	Comments
L46, P10	-230	-10	39.50	-2.56	-----	-----	52699	52648	
L46, P15	-230	-15	35.40	-4.87	-----	-----	-----	-----	
L46, P20	-230	-20	42.80	-6.68	-----	-----	51955	-----	
L46, P25	-230	-25	41.80	-2.29	-----	-----	-----	-----	
L46, P30	-230	-30	31.70	4.37	-----	-----	51908	-----	
L46, P35	-230	-35	32.00	1.44	-----	-----	-----	-----	
L46, P40	-230	-40	34.40	-0.46	-----	-----	51930	-----	
L46, P45	-230	-45	27.80	0.01	-----	-----	-----	-----	
L46, P50	-230	-50	20.00	5.50	-----	-----	51915	-----	
L46, P55	-230	-55	20.30	2.83	-----	-----	-----	-----	
L46, P60	-230	-60	25.70	7.64	-----	-----	51856	-----	
L46, P65	-230	-65	26.80	0.75	-----	-----	-----	-----	
L46, P70	-230	-70	27.00	-3.00	-----	-----	51575	-----	
L47, P0	-235	0	41.60	-7.10	-----	-----	-----	-----	
L47, P5	-235	-5	42.20	-3.20	-----	-----	-----	-----	
L47, P10	-235	-10	39.10	-4.80	-----	-----	-----	-----	
L47, P15	-235	-15	43.40	-6.87	-----	-----	-----	-----	
L47, P20	-235	-20	51.20	-6.83	-----	-----	-----	-----	
L47, P25	-235	-25	42.50	-3.90	-----	-----	-----	-----	
L47, P30	-235	-30	29.20	2.46	-----	-----	-----	-----	
L47, P35	-235	-35	26.90	3.64	-----	-----	-----	-----	
L47, P40	-235	-40	31.70	0.35	-----	-----	-----	-----	
L47, P45	-235	-45	30.50	1.69	-----	-----	-----	-----	
L47, P50	-235	-50	27.40	2.78	-----	-----	-----	-----	
L47, P55	-235	-55	36.10	14.60	30	13.99	-----	-----	Near concrete
L47, P60	-235	-60	39.40	15.90	-----	-----	-----	-----	
L48, P0	-240	0	41.70	-5.00	-----	-----	52184	-----	
L48, P5	-240	-5	41.50	-3.42	-----	-----	-----	-----	
L48, P10	-240	-10	40.60	-3.62	-----	-----	53487	53456	
L48, P15	-240	-15	43.90	-6.34	-----	-----	-----	-----	
L48, P20	-240	-20	50.50	-5.30	-----	-----	52036	52005	
L48, P25	-240	-25	45.60	-4.17	-----	-----	-----	-----	
L48, P30	-240	-30	34.20	-1.40	-----	-----	51994	-----	
L48, P35	-240	-35	25.00	2.57	-----	-----	-----	-----	
L48, P40	-240	-40	25.20	2.20	-----	-----	52174	-----	
L48, P45	-240	-45	25.50	1.75	-----	-----	-----	-----	
L48, P50	-240	-50	26.10	5.02	-----	-----	-----	-----	
L49, P0	-245	0	35.00	-2.90	-----	-----	-----	-----	
L49, P5	-245	-5	34.70	-2.52	-----	-----	-----	-----	
L49, P10	-245	-10	36.50	-2.50	-----	-----	-----	-----	
L49, P15	-245	-15	37.80	-3.70	-----	-----	-----	-----	
L49, P20	-245	-20	41.90	-4.53	-----	-----	-----	-----	
L49, P25	-245	-25	41.80	-2.75	-----	-----	-----	-----	
L49, P30	-245	-30	33.00	0.85	-----	-----	-----	-----	
L49, P35	-245	-35	22.40	4.99	-----	-----	-----	-----	
L49, P40	-245	-40	11.00	4.01	-----	-----	-----	-----	
L50, P0	-250	0	36.00	-4.40	-----	-----	52427	-----	

TABLE 1

**MARINO PROPERTY SITE
MIDDLETOWN, CONNECTICUT
GEOPHYSICAL SURVEY FIELD DATA**

Line/ Point No.	X	Y	Conduct- ivity	In- Phase	Conduct- ivity (1)	In- Phase (2)	Magneto- meter	Magneto- meter (3)	Comments
L50, P5	-250	-5	32.40	-5.20	-----	-----	-----	-----	
L50, P10	-250	-10	33.00	-6.29	-----	-----	52139	-----	
L50, P15	-250	-15	33.70	-4.88	-----	-----	-----	-----	
L50, P20	-250	-20	33.00	-0.55	-----	-----	51815	-----	
L50, P25	-250	-25	35.10	2.50	-----	-----	-----	-----	
L50, P30	-250	-30	30.50	-1.09	-----	-----	52134	-----	
L50, P35	-250	-35	24.20	-2.37	-----	-----	-----	-----	
L50, P40	-250	-40	20.60	3.44	-----	-----	52546	-----	
L51, P0	-255	0	33.10	-7.98	-----	-----	-----	-----	
L51, P5	-255	-5	27.60	-7.79	-----	-----	-----	-----	
L51, P10	-255	-10	31.00	-8.40	-----	-----	-----	-----	
L51, P15	-255	-15	32.90	-6.57	-----	-----	-----	-----	
L51, P20	-255	-20	34.00	1.70	-----	-----	-----	-----	
L51, P25	-255	-25	32.90	1.57	-----	-----	-----	-----	
L51, P30	-255	-30	28.20	-0.33	-----	-----	-----	-----	
L51, P35	-255	-35	23.00	0.03	-----	-----	-----	-----	
L51, P40	-255	-40	22.40	3.60	-----	-----	-----	-----	
L52, P0	-260	0	34.20	-5.40	-----	-----	54030	54059	
L52, P5	-260	-5	34.20	-2.40	-----	-----	-----	-----	
L52, P10	-260	-10	41.60	-2.50	-----	-----	53426	-----	
L52, P15	-260	-15	52.90	2.70	-----	-----	-----	-----	
L52, P20	-260	-20	-----	-----	-----	-----	52025	-----	
L52, P25	-260	-25	-----	-----	-----	-----	-----	-----	
L52, P30	-260	-30	-----	-----	-----	-----	52487	-----	
L52, P35	-260	-35	-----	-----	-----	-----	-----	-----	
L52, P40	-260	-40	-----	-----	-----	-----	52935	-----	
L53, P0	-265	0	35.30	-4.40	-----	-----	-----	-----	
L53, P5	-265	-5	44.00	-4.32	-----	-----	-----	-----	
L54, P0	-270	0	36.50	-5.86	-----	-----	54360	-----	
L55, P0	-275	0	37.50	-4.31	-----	-----	-----	-----	
L56, P0	-280	0	37.00	-2.41	-----	-----	53881	-----	

Notes:

Conductivity units reported in milliSiemens/meter (mS/m).

In-phase units reported in parts per thousand (ppt).

Magnetometer units reported in nano Teslas (nT).

1 Cond (90) = Conductivity reading where instrument is rotated 90 degrees.

2 In-Phase (90) = In-Phase reading where instrument is rotated 90 degrees.

3 Magnetometer = Second (repeated) magnetometer reading.

----- = No measurements made.

Average background magnetometer readings = 51976 nano Teslas (nT).

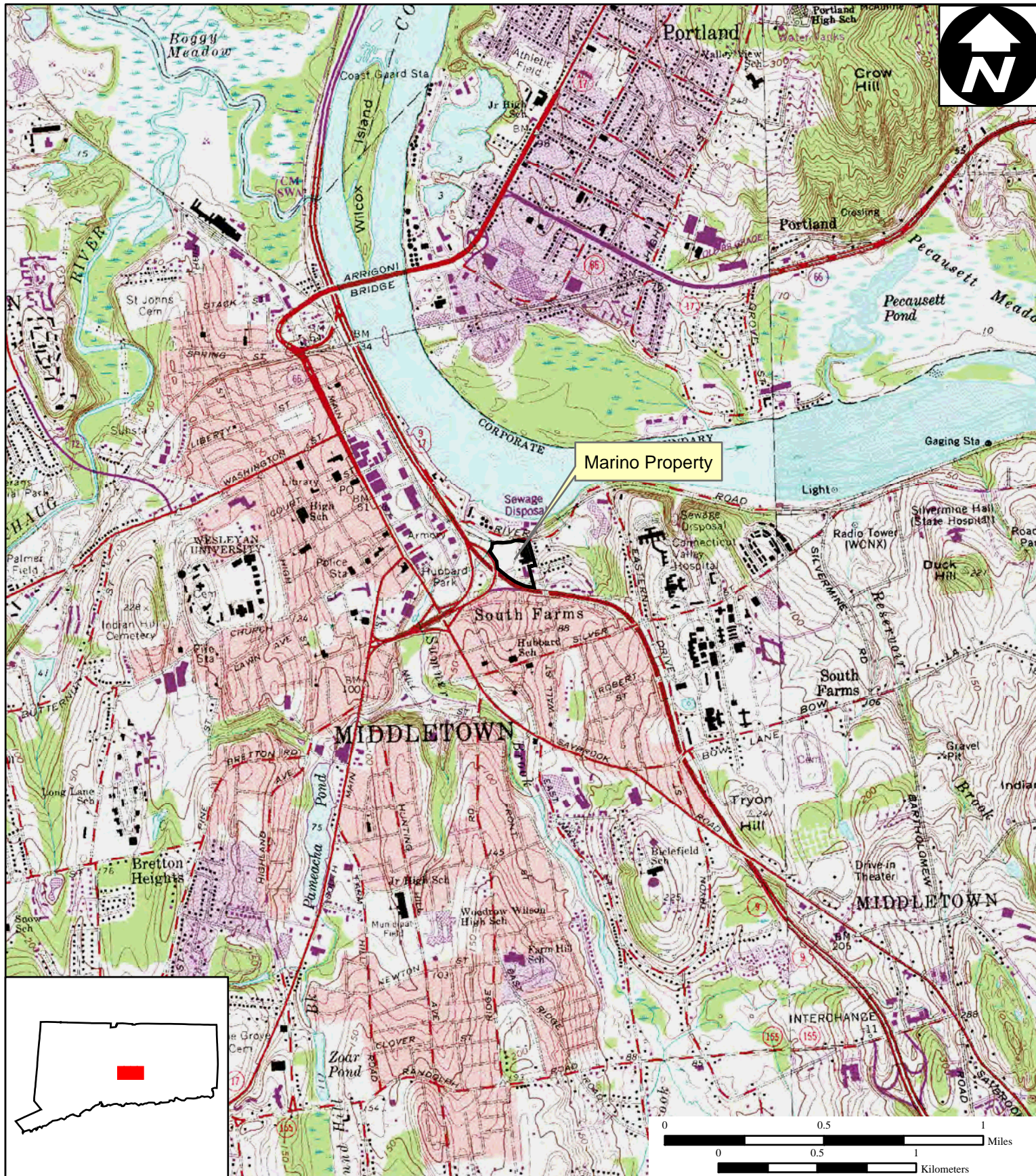


Figure 1

Site Location Map

Marino Property
50 Walnut Street
Middletown, Connecticut

EPA Region I
Superfund Technical Assessment and
Response Team (START) III
Contract No. EP-W-05-042

TDD Number: 09-04-0003
Created by: G. HORNOK
Created on: 8 MARCH 2007
Modified by: G. MAVRIS
Modified on: 24 JULY 2009

Data Sources:

Topos: MicroPath/USGS
 Quadrangle Name(s): Middle Haddam, Middletown
 All other data: START



Figure 2

Site Diagram

Marino Property Site
50 Walnut Street
Middletown, Connecticut

EPA Region I
Superfund Technical Assessment and
Response Team (START) III
Contract No. EP-W-05-042

TDD Number: 09-03-0004




Created by: G. Hornok

Created on: 24 July 2009

Modified by: G. Hornok

Modified on: 27 July 2009

LEGEND

-  Area of Geophysical Investigation
-  Secondary Test Pit Locations
-  Primary Test Pit Locations



0 25 50
Feet

Data Sources:

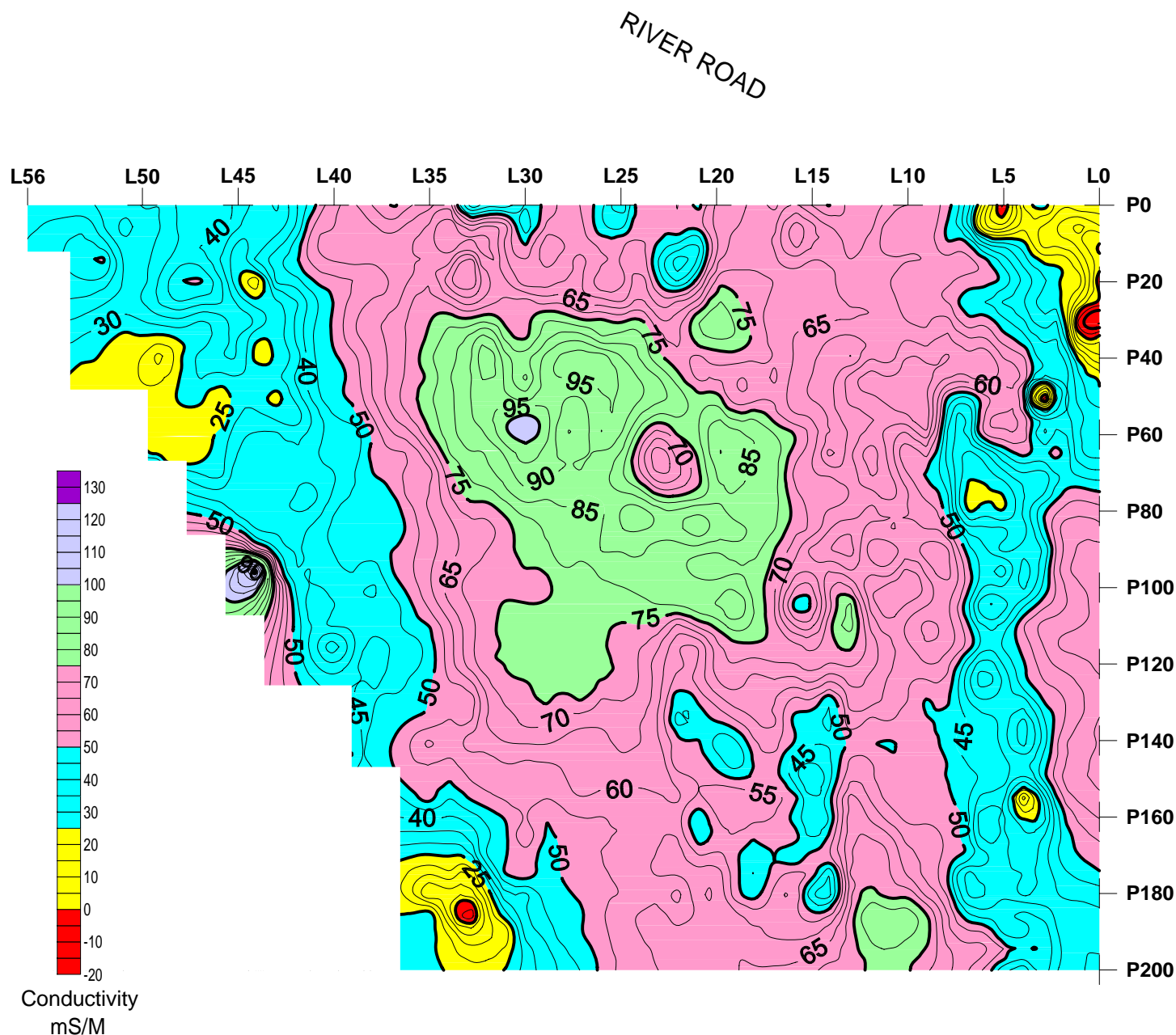
Imagery: CLEAR CT GIS

Topos:

All other data: START GPS

Figure 3

**Conductivity Contour Map
Marino Property Site
Middletown, Connecticut**



EPA Region I
Superfund Technical Assessment
and Response Team (START III)
Contract No. EP-W-05-042

TDD No.: 01-09-03-0004

Created by: George Mavris

Created on: 3 July 2009

Modified by:

Modified on:

LEGEND

1) Contour Interval = 5 milliSiemens per
meter (mS/m)



0 10 20 30 40 50 Feet

Data Sources:

SURFER Ver 8.05



Figure 4

**In-Phase Contour Map
Marino Property Site
Middletown, Connecticut**

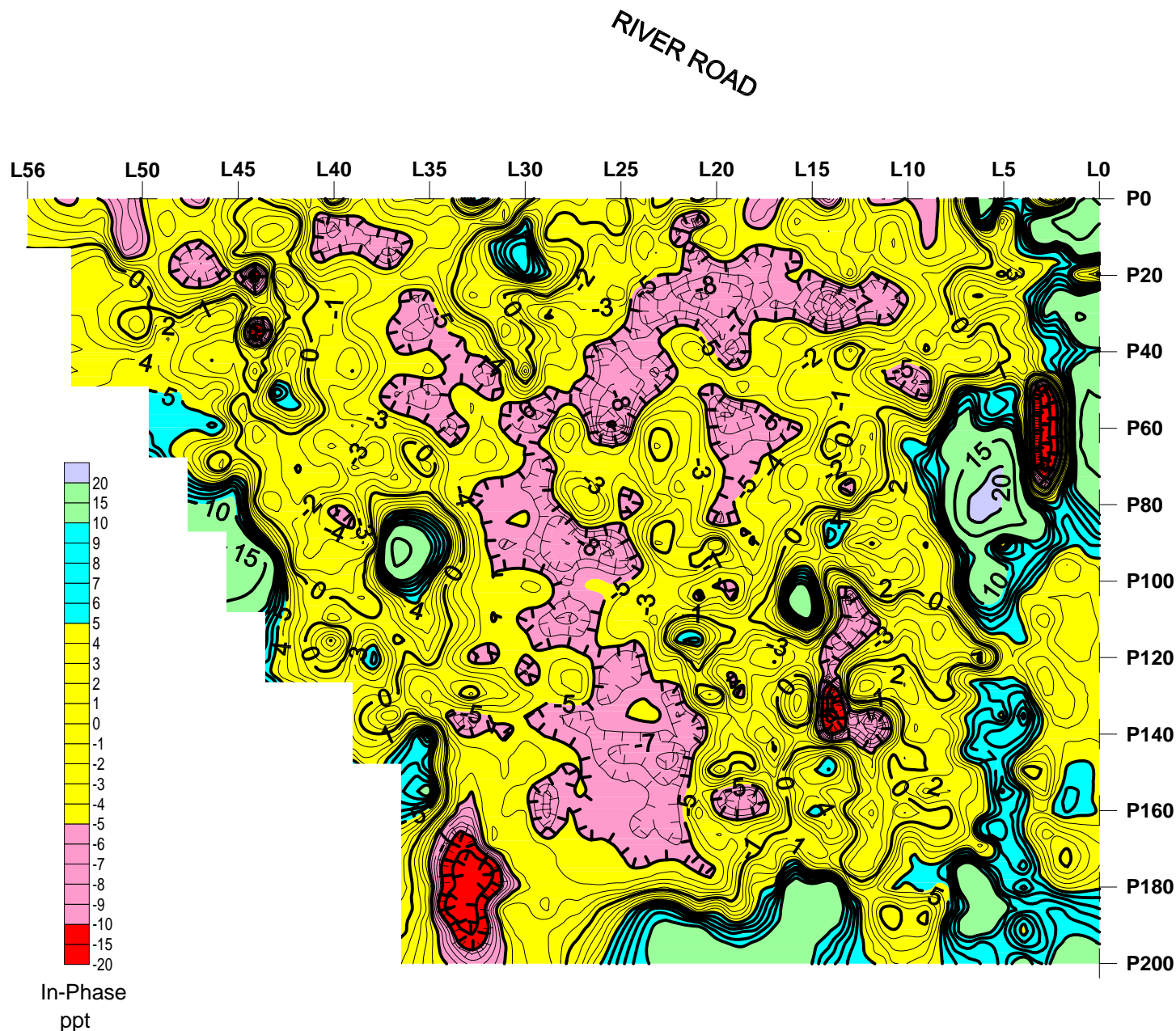
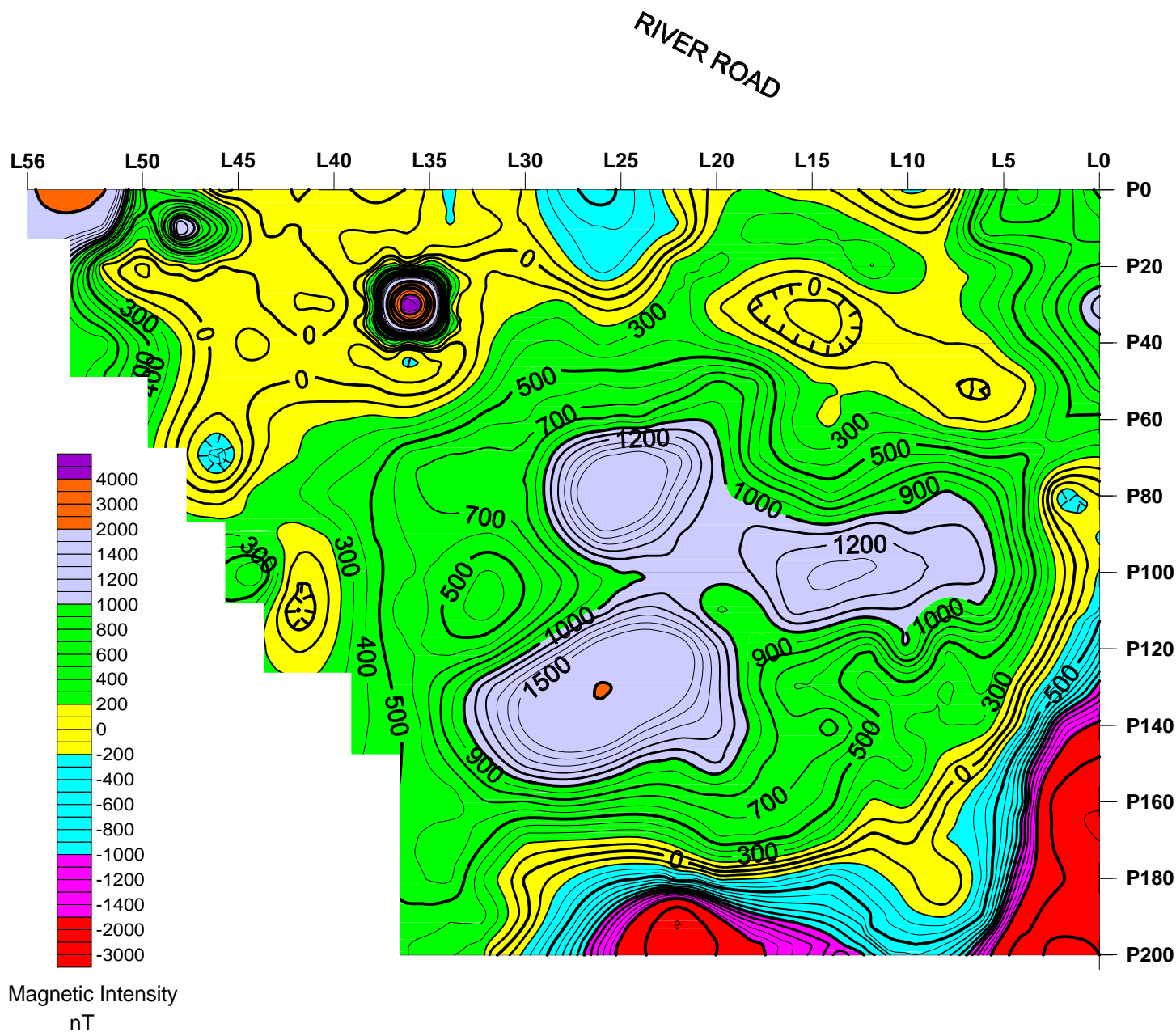


Figure 5

**Magnetometer Contour
Map (Residual)
Marino Property Site
Middletown, Connecticut**



EPA Region I
Superfund Technical Assessment
and Response Team (START III)
Contract No. EP-W-05-042

TDD No.: 01-09-03-0004

Created by: George Mavris

Created on: 3 July 2009

Modified by:

Modified on:

Data Sources:

SURFER Ver 8.05



Figure 6

**Proposed Test Pits
Location Map
Marino Property Site
Middletown, Connecticut**

EPA Region I
Superfund Technical Assessment
and Response Team (START III)
Contract No. EP-W-05-042

TDD No.: 01-09-03-0004

Created by: George Mavris

Created on: 3 July 2009

Modified by:

Modified on:

LEGEND

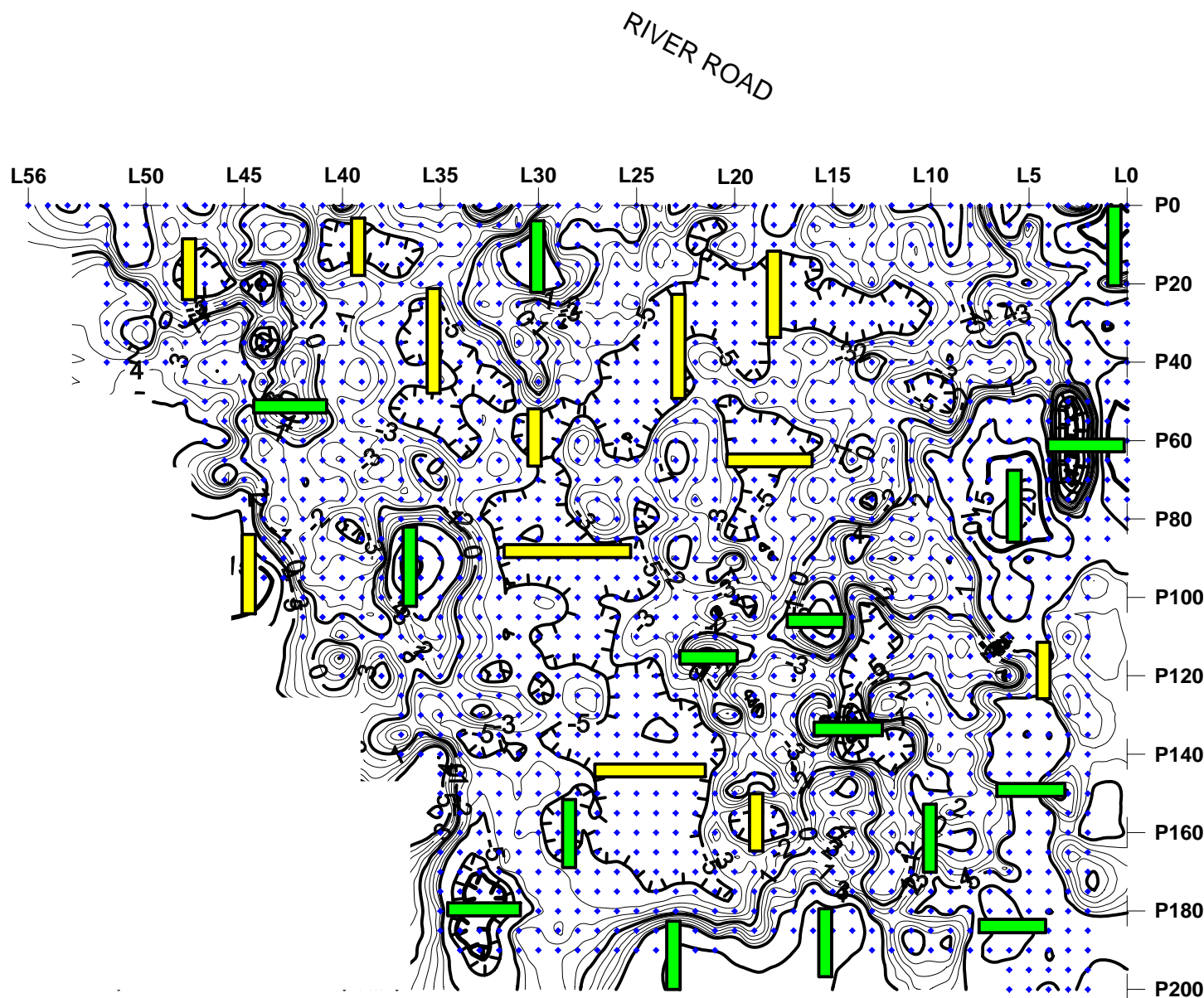
- Major Test Pit Locations
- Secondary Test Pit Locations
- Grid Nodes



0 10 20 30 40 50 Feet

Data Sources:

SURFER Ver 8.05



Appendix K

AreaRAE Air Monitoring Summary - Marino Property Site, Middletown, Connecticut

AreaRAE Air Monitoring Summary Readings - Test Pit Phase I
Marino Property Site
Middletown, Connecticut

Date	Location	Weather Conditions	Unit No.	Data Type	CO (ppm)	VOC (ppm)	H2S (ppm)	LEL (%)	Oxy (%)
8/25/2009	South	80-87 degrees Fahrenheit	5	Range	1.9-5.4	0.0-0.4	0.0-0.2	0	20.5-20.9
	East	Clear & Sunny	6	Average	4.1	0	0.1	---	---
		60-80% humidity		Range	0.0-3.5	0.0-0.3	0.0-0.5	0	20.6-20.9
		Wind out of NW		Average	2.3	0	0.4	---	---
8/26/2009	South	70-90 degrees Fahrenheit	5	Range	0.9-4.1	0.0-0.3	0.0-0.2	0	20.9
	East	Clear & Sunny -slight clouds	6	Average	2.8	0	0.1	---	---
		80-95% humidity		Range	0.0-2.3	0.0-0.1	0.0-0.5	0	20.9
		Wind out of NW		Average	0.9	0	0.2	---	---
8/27/2009	South	65-85 degrees Fahrenheit	5	Range	0.5-2.8	0.0-0.3	0.0-0.2	0	20.9
	East	Clear Sunny	6	Average	2	0	0.1	---	---
		80% humidity		Range	0.0-3.5	0.0-0.3	0.0-0.5	0	20.6-20.9
		Wind out of NW		Average	1.1	0	0.1	---	---
8/28/2009	South	60-65 degrees Fahrenheit	5	Range	0.0-0.7	0.0-0.5	0	0	20.9
	East	Overcast - Rain	6	Average	0.2	0	0	---	---
		65-90% humidity		Range	0.3-0.8	0.0-0.3	0	0	20.9
		Wind out of WNW		Average	0.4	0	0	---	---
Maximum Concentration Ranges	South		5		0.0-5.4	0.0-0.5	0.0-0.2	0	20.5-20.9
	East		6		0.0-3.5	0.0-0.3	0.0-0.5	0	20.6-20.9

NOTES:

NA = Not Applicable

VOC = Volatile Organic Compound

LEL = Lower Explosive Limit

CO = Carbon Monoxide

H₂S = Hydrogen Sulfide

Oxy % = Percent Oxygen

ppm = Parts Per Million

~ = Approximately

No. = Number

% = Percent